File No. 250775 **Committee Item No.** 1
Board Item No. _____

COMMITTEE/BOARD OF SUPERVISORS

AGENDA PACKET CONTENTS LIST

Committee: Government Audit and Oversight **Date:** October 2, 2025
Board of Supervisors Meeting: **Date:** _____

Cmte Board

Cmte	Board	
☐	☐	**Motion**
☒	☐	**Resolution**
☐	☐	**Ordinance**
☐	☐	**Legislative Digest**
☒	☐	**Budget and Legislative Analyst Report**
☐	☐	**Youth Commission Report**
☐	☐	**Introduction Form**
☐	☐	**Department/Agency Cover Letter and/or Report**
☐	☐	**MOU - FY2022-2024 - Clean**
☐	☐	**MOU - FY2022-2024 - Redline**
☐	☐	**Grant Information Form**
☐	☐	**Grant Budget**
☐	☐	**Subcontract Budget**
☐	☐	**Contract / DRAFT Mills Act Agreement**
☐	☐	**Form 126 – Ethics Commission**
☐	☐	**Award Letter**
☐	☐	**Application**
☐	☐	**Public Correspondence**

OTHER

☒	☐	DRAFT MOU
☒	☐	Addendum to EIR-EIS Vista Grande
☒	☐	CEQA Findings and MMRP
☒	☐	FINAL EIR-EIS 0908817
☒	☐	Daly City Reso No. 17-200 121117
☒	☐	Daly City Reso No. 25-82 060925
☒	☐	SFPUC Resolution 25-0113 070825
☒	☐	PUC Cover Ltr 071825
☐	☐	
☐	☐	

Prepared by: Monique Crayton **Date:** September 26, 2025
Prepared by: _____ **Date:** _____
Prepared by: _____ **Date:** _____

[Memorandum of Agreement - City of Daly City - Vista Grande Drainage Basin Improvement Project - Not to Exceed $35,000,000]

Resolution approving and authorizing the General Manager of the San Francisco Public Utilities Commission to execute, on behalf of the City and County of San Francisco, a Memorandum of Agreement with the City of Daly City for the funding, construction, and operation of the Vista Grande Drainage Basin Improvement Project, with a duration of five years starting August 4, 2025, through August 31, 2030, pursuant to Section 9.118 of the Charter.

WHEREAS, The Vista Grande Drainage Improvement Project (Project) will provide a framework for the San Francisco Public Utilities Commission (SFPUC) and the City of Daly City (Daly City) to work collaboratively to alleviate flooding in the Vista Grande Basin within Daly City and the SFPUC's Lake Merced Tract, and will also facilitate augmentation and management of Lake Merced water levels using sustainable supplies of Daly City's stormwater; and

WHEREAS, In 1930, the SFPUC purchased the Lake Merced Tract from the Spring Valley Water Company and has historically used Lake Merced as a potable water supply; and

WHEREAS, Lake Merced is a surface water body that is connected to groundwater within the Westside Groundwater Basin (Basin, California Department of Water Resources Basin No. 2-35) in western San Francisco and northern San Mateo counties; and

WHEREAS, A fraction of surface water inflows to Lake Merced percolates to underground storage in the Basin through the bed of the lake; and

WHEREAS, Today, the SFPUC maintains Lake Merced for the beneficial uses of recreation and wildlife habitat and continues to maintain the capability of using surface water

from the lake as a non-potable emergency water supply through use of the Lake Merced Pump Station; and

WHEREAS, Historical declines in Lake Merced water levels, generally attributable to diversion of stormwater away from Lake Merced following construction of the Vista Grande Canal and Tunnel in 1897, 20th century urban development in San Francisco and Daly City, drought conditions, and regional groundwater pumping, have generated concern regarding the long-term viability of Lake Merced; and

WHEREAS, The Project is intended to route stormwater from the Vista Grande Canal to South Lake Merced as well as to the Pacific Ocean, reduce uncontrolled overflows from the Vista Grande Canal into Lake Merced, achieve sustained increase in Lake Merced lake levels, improve storm water quality, and further the restoration of the drainage basin's natural hydrology; and

WHEREAS, The Project operates to mitigate impacts from SFPUC's implementation of the Regional Groundwater Storage and Recovery and San Francisco Groundwater Project, by increasing water surface elevations in Lake Merced; and

WHEREAS, Both Daly City and the SFPUC wish to memorialize their respective obligations as follows: 1) Daly City to construct and implement the Project, 2) Daly City and SFPUC to share water quality and hydrologic data related to Lake Merced, 3) SFPUC' s financial contribution towards Project construction, and, 4) affirm commitments to sustainably operate the portion of the Basin within their respective jurisdictions while protecting the beneficial uses of Lake Merced; and

WHEREAS, On December 11, 2017, Daly City acting as the California Environmental Quality Act (CEQA) lead agency, certified a Final Environmental Impact Report/Environmental Impact Statement (Final EIR/EIS) for the Project prepared pursuant to CEQA, by

Resolution 17-200, and subsequently prepared and adopted an Addendum to the Final EIR/EIS on June 9, 2025; and

WHEREAS, Daly City has adopted CEQA findings, and mitigation measures included in the Final EIR/EIS to avoid or substantially lessen the significant environmental effects identified in the Final EIR/EIS, as set forth in the Mitigation Monitoring and Reporting Program, and has assumed responsibility for their implementation; and

WHEREAS, Authorization of the Memorandum of Agreement (MOA) is within the scope of the project authorized under the Final EIR/EIS and Addendum to the Final EIR/EIS; and

WHEREAS, Since Daly City adopted the Final EIR/EIS and Addendum to the Final EIR/EIS, there have been no substantial changes in the Project or changes in Project circumstances that would result in new significant environmental effects or an increase in the severity of previously identified significant impacts, and there is no new information of substantial importance that would change the conclusions set forth in the Final EIR/EIS and Addendum to the Final EIR/EIS; and

WHEREAS, The SFPUC has no direct authority or responsibility with respect to the proposed Project or any Project mitigation measures under CEQA other than to enable Daly City, through the MOA, to carry out the proposed Project; and

WHEREAS, The current estimated project construction cost for the Project is $130,000,000, and SFPUC's contribution is $35,000,000 based on the water resource benefits that will accrue to the SFPUC in the form of increased groundwater storage in the Basin and additional emergency water supplies; and

WHEREAS, Construction work is anticipated to begin on August 4, 2025, and end in August 31, 2030, and the total duration of this agreement is five years; and

WHEREAS, Funds for this agreement will be available at the time of award from Project No. CUW30101 Lake Merced Water Level Restoration Project; and

WHEREAS, Charter, Section 9.118(b) requires Board of Supervisors' approval by Resolution of any contract which, when entered into, extends over 10 years, and of any contract which, when entered into, costs the City $10,000,000 or more; and

WHEREAS, The draft MOA contained in File No. 250775, is substantially in final form, with all material terms and conditions included, and only remains to be executed by the parties upon approval of this Resolution; and

WHEREAS, On July 8, 2025, by Resolution No. 25-0113, the SFPUC Commission approved and authorized the General Manager of the SFPUC to execute on behalf of the City and County of San Francisco, the MOA with Daly City for the funding, construction, and operation of the Project, with a duration of five years starting August 4, 2025, through August 31, 2030, pursuant to Section 9.118 of the Charter; now, therefore, be it

RESOLVED, That the Board of Supervisors hereby approves and authorizes the General Manager of the SFPUC to execute on behalf of the City and County of San Francisco, the MOA with Daly City for the funding, construction, and operation of the Project, with a duration of five years starting August 4, 2025, through August 31, 2030; and, be it

FURTHER RESOLVED, That within 30 days of the Agreement being fully executed by all parties, the SFPUC shall provide signed copies to the Clerk of the Board for inclusion in the official file.

CITY AND COUNTY OF SAN FRANCISCO

BOARD OF SUPERVISORS

BUDGET AND LEGISLATIVE ANALYST

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September 26, 2025

TO: Government Audit and Oversight Committee

FROM: Budget and Legislative Analyst

SUBJECT: October 2, 2025 Government Audit and Oversight Committee Meeting

TABLE OF CONTENTS

Item	File		Page
1	25-0775	Memorandum of Agreement - City of Daly City - Vista Grande Drainage Basin Improvement Project - Not to Exceed $35,000,000	1
2 & 3	25-0698	Development Agreement - EQX Jackson SQ Holdco LLC - 530 Sansome Mixed Use Tower and Fire Station 13 Development Project - 530 Sansome Street, 425 Washington	
	25-0803	Hotel and Fire Station Development Incentive Agreement - EQX Jackson SQ Holdco LLC - 530 Sansome Mixed Use Tower and Fire Station 13 Development Project - 530 Sansome Street, 425 Washington Street, 439-445 Washington Street, and 447 Battery Street	8

Item 1 File 25-0775	Department: Public Utilities Commission

EXECUTIVE SUMMARY

Legislative Objectives

- The proposed resolution would approve a Memorandum of Agreement (MOA) between Daly City and the San Francisco Public Utilities Commission (SFPUC) to formally establish the partnership, delineate responsibilities, and commit up to $35 million for funding, construction, and operation of the Vista Grande Drainage Basin Improvement Project. The agreement has a five-year term and is effective upon approval of the proposed resolution.

Key Points

- The Vista Grande Project is a joint effort between Daly City and the SFPUC focused on improving the Vista Grande watershed, canal, and tunnel system which is currently undersized to handle peak storm flows. The systems run from Daly City to Fort Funston.
- Due to increased urban development, ground absorption rates in the area have decreased, resulting in excess runoff entering the canal and tunnel system, causing storm-related flooding and property damage in Daly City and around Lake Merced. This diversion has also contributed to the decreasing Lake Merced water levels and water quality.
- The Vista Grande Drainage Basin Improvement Project will upgrade the canal and tunnel system to improve stormwater flow and potentially divert it to Lake Merced instead of the ocean. The project is currently in pre-construction.

Fiscal Impact

- The proposed MOA would approve SFPUC's contribution of up to $35 million for the $172 million project with Daly City. Daly City is responsible for the remaining project costs.
- No funds have been spent to date toward the $35 million, but the SFPUC did previously contribute $205,500 for planning and design.
- In addition to the $35 million commitment, the SFPUC will spend $3 million to manage required mitigation plantings within the Lake Merced area for five years.

Recommendation

- Approve the proposed resolution.

MANDATE STATEMENT

City Charter Section 9.118(b) states that any contract entered into by a department, board or commission that (1) has a term of more than ten years, (2) requires expenditures of $10 million or more, or (3) requires a modification of more than $500,000 is subject to Board of Supervisors approval.

BACKGROUND

Vista Grande Drainage Basin Improvement Project

The Vista Grande Project is a joint effort between Daly City and the San Francisco Public Utilities Commission (SFPUC) focused on improving the Vista Grande watershed, canal, and tunnel system. The watershed is located primarily in Daly City and unincorporated San Mateo County,[1] with a portion in southern San Francisco around Lake Merced.[2] The canal and tunnel system, built in the 1890s and now operated by Daly City, collects, treats, and diverts stormwater from the watershed to the Pacific Ocean. However, due to increased urban development, ground absorption rates have decreased, resulting in excess runoff entering the system. During storms, this causes storm-related flooding and property damage in adjacent low-lying residential areas in Daly City, as well as uncontrolled overflows from the canal across John Muir Drive into Lake Merced. Exhibit 1 below shows a map of the area.

[1] A watershed is a land area that channels rainfall and snowmelt to creeks, streams, and rivers, and eventually to outflow points such as reservoirs, bays, and the ocean.

[2] The SFPUC maintains Lake Merced for recreation and as a wildlife habitat, while retaining the capability to use the lake as a non-potable emergency water supply.

Exhibit 1: Vista Grande Drainage Basin Improvement Project Area

Source: SFPUC

Additionally, Lake Merced has experienced a decline in water levels. These declines are generally attributed to the diversion of stormwater away from the lake following the construction of the Vista Grande canal and tunnel in 1897, as well as 20th-century urban development, drought conditions, and regional groundwater pumping. Lake Merced is owned and maintained by the SFPUC.

The existing Vista Grande canal serves as the only stormwater outlet for northwestern Daly City. The existing canal and tunnel do not have adequate hydraulic capacity to convey peak storm flows to the Pacific Ocean.[3] Furthermore, at the Pacific Ocean outlet (Fort Funston), coastal erosion has highlighted the existing tunnel structure, necessitating its replacement.

According to SFPUC, concerns over low lake levels led to stakeholder complaints filed with the State Water Resources Control Board in approximately 2009, naming Daly City and the SFPUC, which culminated in the Vista Grande Project.

The Vista Grande Drainage Basin Improvement Project aims to improve stormwater flows in the Vista Grande watershed by upgrading the capacity of the canal and tunnel system and enabling the potential to divert stormwater from the canal to Lake Merced rather than into the ocean. The project is currently in the pre-construction phase.

[3] Currently, the canal can handle 500 Cubic Feet Per Second (CFPS). However, the tunnel can only handle 275 CFPS, leading to overflow during storms.

Environmental Review

On December 11, 2017, Daly City (serving as the lead agency) certified a Final Environmental Impact Report (EIR) for the Vista Grande Drainage Basin Improvement Project under the California Environmental Quality Act (CEQA).

On June 9, 2025, Daly City adopted an Addendum to the Final EIR. The Addendum addressed Project modifications, permit conditions, and construction staging changes, including canal staging, water recirculation, Lake Merced habitat restoration (required by the California Coastal Commission), using the Pacific Rod and Gun Club, and revising Fort Funston as work areas, updating power to diesel generators, using ventilation fans, and removing Ocean Outlet wing walls. Daly City adopted and implemented CEQA findings and mitigation measures.

The EIR/EIS identified significant and unavoidable impacts related to the loss of historic structures (tunnel and canal) and the alteration of coastal landforms. According to SFPUC staff, concerns regarding these impacts have primarily been raised by the California Coastal Commission; however, stakeholders are generally supportive of the project as it addresses long-standing flooding issues and the challenges of managing lake levels. The California Coastal Commission required habit restoration as part of its approval of the project.

On July 8, 2025, the SFPUC Commission approved and authorized the General Manager of the SFPUC to execute a Memorandum of Agreement (MOA) with Daly City.

DETAILS OF PROPOSED LEGISLATION

The proposed resolution would approve a Memorandum of Agreement (MOA) between Daly City and the San Francisco Public Utilities Commission (SFPUC) to formally establish the partnership, delineate responsibilities, and commit up to $35 million for funding, construction, and operation of the Vista Grande Drainage Basin Improvement Project. The agreement has a five-year term and is effective upon approval of the proposed resolution.

This is in addition to the $205,500 that the SFPUC previously provided for planning and design, and the $3 million estimate of internal SFPUC costs for managing the required mitigation plantings within the Lake Merced area in the five years after construction is complete.[4]

Scope of Project

The project will upgrade the drainage system capacity to handle a 25-year storm (a large storm event with a 4 percent chance of occurring in any given year) by upgrading the tunnel capacity to match the canal's and replacing approximately 1,500 feet (42 percent) of the canal's 3,600-foot length with new structures, including a collection box and debris screening device, creating a new

[4] The mitigation plantings include 10 acres of native plant habitat restoration (including arroyo willow riparian, freshwater marsh, and coastal scrub species) mandated by the California Coastal Commission to compensate for the loss of environmentally sensitive habitat areas and coastal wetlands caused by the increase in Lake Merced's water elevation to its former level.

connection to divert treated stormwater into Lake Merced, and restoring 10 acres of habitat (including constructing 2.6 acres of treatment wetland).

The project aims to reduce uncontrolled overflows, enhance stormwater quality, and increase Lake Merced levels to mitigate the impacts of the SFPUC's implementation of the Regional Groundwater Storage and Recovery and San Francisco Groundwater Projects.

Duration and Timeline

Construction for the Project is scheduled to last for five years, from August 4, 2025, to August 31, 2030. This initiative is Phase 1 of the SFPUC's broader "Lake Merced Water Level Restoration Project". Phase 2 was a component of the broader restoration project, which entailed the design and installation of a device to add oxygen to Lake Merced to improve water quality, at a cost of approximately $800,000. Phase 2 construction was completed in 2017 and is not part of the current scope of work. Phase 3 is a future, SFPUC-led initiative that will install a new pipeline to divert highly treated recycled water into Lake Merced to improve water levels and water quality. For five years after the project, SFPUC is responsible for maintaining the mitigation plantings required by the California Coastal Commission.

Memorandum of Agreement Terms

The purpose of the MOA is to identify the Parties' respective obligations for implementing the Project.

Roles and Responsibilities

Daly City

Daly City is responsible for all project capital costs exceeding the SFPUC's $35 million contribution, including real estate acquisition, permits, and California Coastal Commission mitigation measures (design, installation, and the initial five years of a ten-year monitoring and maintenance period for plantings). They will also cover wastewater treatment costs for temporary stormwater diversion during construction, as well as an estimated $200,000 for temporary relocation and support of SFPUC utility infrastructure.

As the lead CEQA agency, Daly City will manage all project contracts and solicit bids for a general contractor upon receipt of the permits. Responsibilities include constructing and operating key infrastructure, managing stormwater diversion to Lake Merced, and implementing water quality monitoring and mitigation measures required by federal and state environmental acts.

SFPUC

The SFPUC will provide up to $35 million (approximately 27 percent of the total estimated project cost) and continue monitoring Lake Merced's water quality. After Daly City's initial five-year management, the SFPUC will manage mitigation planting maintenance for years six through ten, with an estimated cost of $3 million for plant/infrastructure repair, replacement, and staffing. However, Daly City will remain responsible for all required monitoring and reporting to the California Coastal Commission throughout the entire 10-year monitoring and reporting period.

The SFPUC also must share data with Daly City on Lake Merced water levels/quality, groundwater pumping, emergency notices, and lake connection changes.

Consultants

No general contractor is currently in place. Daly City anticipates issuing an open bid in the fall of 2025. The MOA specifies that the selected contractor will be an independent contractor of Daly City, not an agent or employee of the SFPUC. However, Daly City must provide the SFPUC with ten business days to review any proposed modifications or change orders to construction contracts.

FISCAL IMPACT

The proposed MOA would approve SFPUC's contribution of up to $35 million for the $172 million project with Daly City.[5] Daly City is responsible for the remaining project capital. Exhibit 2 below details the project budget.

No funds have been spent to date toward the $35 million, but the SFPUC did previously contribute $205,500 for planning and design. In addition to the $35 million commitment, the SFPUC estimates an internal cost of $3 million for management of the required mitigation plantings within the Lake Merced Tract in years six through ten.

Exhibit 2: Project Budget

Category	Amount
Design	$11,600,000
Environmental	4,700,000
Permitting	2,000,000
Bid and Award	200,000
Construction	141,300,000
Construction Management and Engineering Support	12,200,000
Total	**$172,000,000**

Source: SFPUC

Rationale

The SFPUC determined the $35 million amount based on the estimated volume of water benefit (including diversions to Lake Merced and recharge to the underlying aquifer),[6] evaluated against

[5] The initial construction cost was $130 million. However, on September 18, the SFPUC informed us that Daly City's increased the projected cost to approximately $141 million. The San Francisco Public Utilities Commission's contribution will remain $35 million.

[6] The Vista Grande project is expected to provide an additional 210 acre-feet per year (AFY) of water supply, with approximately 94 AFY flowing into the lake and 116 AFY into the aquifer. The existing water treatment facilities in

the average cost of existing groundwater and recycled water projects over a 30-year capitalization period with escalation.

Ongoing Expenditures

The SFPUC project will spend $3 million for maintaining mitigation plantings for five years, as shown below in Exhibit 3. SFPUC staff indicate that these funds cover internal costs for plant and infrastructure repair/replacement, as well as expenses for SFPUC, Recreation and Park Department staff, and consultants.

Exhibit 3: SFPUC Maintenance Costs

Category	Annual Cost	5-Year Total
Staff Costs (Field World & Project Management)	$400,000	$2,000,000
Equipment, Irrigation & Plant Replacement	$200,000	$1,000,000
Total	**$600,000**	**$3,000,000**

Source: SFPUC

In addition to all project capital costs in excess of SFPUC's contribution amount, Daly City is responsible for other costs, including acquiring Project-related real estate, permits, wastewater treatment costs for the temporary diversion of stormwater during construction, and temporary relocation of SFPUC utility infrastructure, and maintenance of mitigation plantings (years one through five).

Funding Source

Funding is allocated from the Water Enterprise capital revenues, which include customer revenues, revenue bonds, and other government loans and grants.

RECOMMENDATION

Approve the proposed resolution.

San Francisco collectively produce about 9,050 AFY. Over a 30-year capitalization period, the combined cost per acre-foot is estimated at $5,508. This suggests a potential capital cost value of approximately $35 million for the project.

Items 2 & 3 Files 25-0698 & 25-0803	**Department:** Office of Economic and Workforce Development (OEWD), Real Estate Division (RED)

EXECUTIVE SUMMARY

Legislative Objectives

- **File 25-0698** is a proposed ordinance that would approve a Development Agreement between the City and EQX Jackson SQ Holdco LLC (Developer) for development of property at 425 and 439-445 Washington Street, 530 Sansome Street, and 447 Battery Street.
- **File 25-0803** is a proposed ordinance that would approve a Hotel and Fire Station Development Incentive Agreement between the City and the Developer, providing an estimated $68,871,356 in net present value of incentive payments, based on the Transient Occupancy Tax (TOT) generated by the hotel, to the Developer for up to 25 years.

Key Points

- OEWD and the Developer have negotiated a Development Agreement to construct a 41-story tower containing approximately 200 hotel rooms, 400,000 square feet of office space, 10,135 square feet of event space, and 7,400 square feet of restaurant space, a new fire station, and improvements to Merchant Alley. The Developer would deliver the fire station and Merchant Alley improvements before the tower is occupied. The Developer would also be required to make an affordable housing payment of $2.15 million to the City within six months of ordinance approval.
- To help finance construction of the fire station, estimated at approximately $44.2 million, the City would provide incentive payments equal to the General Fund TOT generated by the new hotel, up to $68.9 million in net present value, for up to 25 years. If $68.9 million is paid within the 25-year term of the agreement, the City would make payments equal to half of TOT revenues, up to $86.1 million.

Fiscal Impact

- The City would receive a new fire station, valued at approximately $44.2 million. According to a fiscal analysis of the project, the proposed development would provide net General Fund revenues of approximately $8 million per year compared to the existing land use, after accounting for the TOT incentive payments to the Developer.
- The City would receive approximately $24.1 million in development impact fees, which is $6.2 million less than what would be paid without a Development Agreement. The purpose of the fee reduction is to ensure the project is financially feasible.

Policy Consideration

- The maximum value of the incentive payments and impact fee reductions is greater than the cost of the fire station and Merchant Alley improvements, not including the new ongoing General Fund revenue. The City could finance the construction of the fire station using general obligation bonds, with total debt service of $72.3 million in nominal dollars.

Recommendation

- Because the agreements are consistent with a resolution endorsing the keys of this project approved by the Board of Supervisors in 2024, we recommend approval of both ordinances.

MANDATE STATEMENT

City Charter Section 2.105 states that all legislative acts shall be by ordinance, approved by a majority of the members of the Board of Supervisors.

Administrative Code Chapter 56 provides for the City to enter into development agreements with private developers for housing and mixed-use developments to reduce the risk of large developments for the developer while requiring public benefits as part of the development that exceed those required by existing ordinances and regulations. Section 56.14 provides for Board of Supervisors approval of such development agreements.

BACKGROUND

Fire Station 13 is located on City-owned property at 530 Sansome Street. In 2019, the Real Estate Division (RED) issued a competitive solicitation to develop market rate housing and a new fire station on the property. The revenues were intended to be used to construct affordable housing in a separate development at 772 Pacific Avenue. RED received four proposals, and Related California was deemed the highest scoring proposer. RED could not provide documentation of the competitive process due to staff turnover and poor record keeping.

In April 2019, the Board of Supervisors approved a Conditional Property Exchange Agreement (CPEA) between the City and EQX Jackson SQ Holdco LLC (the Developer, an affiliate of Related California), in which the City would convey 530 Sansome Street to the Developer in exchange for a portion of 425-439 Washington Street (File 19-0419). At the time, the Developer planned to build a 19-story tower with condominiums, a hotel, and a health club. In June 2020, the Board of Supervisors approved an updated CPEA which increased the estimated maximum cost for the new fire station from $25,000,000 to $32,128,429, incorporated design changes requested by the Fire Department, and stipulated that the property exchange would occur after the fire station is completed (File 20-0425). In November 2021, the Board of Supervisors approved an architectural contract, ground lease, construction contract, construction management agreement, completion guaranty, reciprocal easement agreement, and the First Amendment to the CPEA, which extended the deadlines to approve these documents (File 21-1087). In March 2024, the Board of Supervisors retroactively approved the Second Amendment to the CPEA, extending the anticipated initial closing date by three years to December 15, 2026 (File 24-0064).

Due to changing market conditions, the Developer and the City determined that the original project is no longer viable. In 2024, the Developer obtained the right to purchase property at 447 Battery Street to expand the footprint of the project. The developer submitted an application to the Planning Department to revise the project to construct a 41-story tower on the original three parcels and a new fire station at 447 Battery Street, rather than on a portion of 425-439 Washington Street. The tower would include approximately 200 hotel rooms, 400,000 square feet of office space, 10,135 square feet of event space, 7,400 square feet of retail/restaurant space, and three levels of below-grade parking. The new fire station would include three stories and one story of below-grade parking. In November 2024, the Board of Supervisors approved a resolution generally endorsing the key terms for an amended CPEA and new development agreement reflecting the revised project application (File 24-1141).

DETAILS OF PROPOSED LEGISLATION

File 25-0698 is a proposed ordinance that would approve a Development Agreement between the City and the Developer for the development of property at 425 Washington Street, 439-445 Washington Street, 530 Sansome Street, and 447 Battery Street. The ordinance would also:

1. Approve certain impact fees and accept and appropriate a $4,310,710 additional affordable housing payment;
2. Confirm compliance with or waive certain provisions of the Administrative Code, Planning Code, Public Works Code, Labor and Employment Code, and Health Code;
3. Ratify past actions and authorize future actions in furtherance of the ordinance;
4. Adopt findings under the California Environmental Quality Act (CEQA); and
5. Make findings of conformity and public necessity with the General Plan and Planning Code.

File 25-0803 is a proposed ordinance that would approve a Hotel and Fire Station Development Incentive Agreement, providing incentive payments equal to a percentage of Transient Occupancy Tax (TOT) revenues from the new hotel to the developer to help finance the cost of the new fire station and support the feasibility of the new hotel.

To support the proposed Development Agreement, the Office of Economic and Workforce Development (OEWD) has also introduced the following legislation:

- A Planning Code ordinance creating a Special Use District (SUD) for the project, approving zoning map changes, and rescinding landmark designation for the building at 447 Battery Street (File 25-0697);
- A General Plan amendment ordinance revising maps to reflect the SUD and adopting the Planning Commission's CEQA findings and findings of consistency with the General Plan and Planning Code (File 25-0764);
- A Major Encroachment Permit ordinance establishing the Developer's maintenance obligations for the Merchant Street improvements (File 25-0802); and
- An ordinance that would approve an amended and restated conditional property exchange agreement between the City and the Developer for the exchange of 530 Sansome Street and 447 Battery Street and waive appraisal requirements of Chapter 23 of the Administrative Code. The revised CPEA includes a requirement that the fire station be completed within 2.5 years of the start of construction of the tower project. (File 25-0804)

These items will be heard by the Land Use and Transportation Committee.

Development Agreement

The proposed Development Agreement between the City and the developer grants the developer entitlement to develop the project in exchange for providing public benefits that exceed those required under existing City policies and regulations, consistent with Chapter 56 of the City's

Administrative Code. According to the proposed agreement, these benefits include: (a) construction of the new fire station (at the sole cost of the Developer); (b) construction and maintenance of Merchant Street improvements; (c) earlier payment of a portion ($2.15 million) of the project's affordable housing fees compared to what would be required without a development agreement; and (d) workforce requirements.

Project Description

Under the proposed Development Agreement, the Developer would construct a new four-story fire station at 447 Battery Street and a 41-story commercial tower at 530 Sansome Street (both on the same block). The new fire station would include a four-door apparatus bay, day rooms, dormitories, officer suites, locker rooms, a kitchen and dining area, a fitness room, a library, and outdoor terraces. It would also include one level of below-grade parking with 18 parking spaces. The commercial tower would include approximately 345,000-390,000 square feet of office space, 27,000 square feet of office amenity space, 128,000-189,000 square feet of hotel space (approximately 100-200 hotel rooms), 10,100 square feet of event space, and 7,400 square feet of restaurant/retail space. The tower would also include three levels of below-grade parking with approximately 74 parking spaces, 77 bicycle spaces, and utility rooms. Merchant Alley, between Sansome and Battery Streets, would be converted into a pedestrian-oriented alley with widened sidewalks, special paving, raised crosswalks, and street trees and would be maintained by the Developer for the life of the tower.

According to Jonathan Cherry, OEWD Project Manager, if the proposed Development Agreement is approved, the Developer intends to seek building permits in 2026 and potentially break ground in Spring 2027, with a targeted completion date of Spring 2030. The Developer has not secured financing for the project.

Community Benefits Sequencing

The Developer is required to obtain a Temporary Certificate of Occupancy for the new fire station before the tower receives a Temporary Certificate of Occupancy. The tower cannot receive a Final Certificate of Occupancy until the new fire station and Merchant Street improvements are complete.

The Developer would pay half of an additional affordable housing payment ($2.15 million) to the city within six months of approval of the Development Agreement, regardless of whether the project proceeds, and the remaining half ($2.15 million) on or before the issuance of the first construction document for the tower.

City Code Waivers

Exhibit F to the Development Agreement contains a Workforce Agreement, which includes a first source hiring program for construction and operations of the tower, local hiring requirements for the new fire station, a Local Business Enterprise (LBE) utilization program for the tower and fire station and prevailing wages and working conditions for construction. This agreement supersedes Administrative Code sections 14B.20 (LBE requirements in development agreements) and 56.7(c) (non-discrimination/affirmative action requirements in development agreements). In addition, the proposed ordinance waives the following sections related to the construction of the

new fire station and construction and maintenance of the Merchant Alley improvements: Administrative Code Sections 1.51 (procedures for public works improvements), 6 (public works contracting policies and procedures), 82 (local hiring policy for construction), and 83 (first source hiring program), Labor and Employment Code Sections 103.1, 103.3(a)-(d), 103.3 (f), 104.1, 104.2, 104.3, 106.1, 106.2, 106.4, and 106.6 (prevailing wage and apprenticeship requirements), Health Code Article 12C (alternative water sources for non-potable applications), Planning Code Section 138 (privately-owned public open space requirements), and Public Works Code Section 724.1 (fees for temporary occupancy of streets).

Hotel and Fire Station Development Incentive Agreement

According to Jonathan Cherry, OEWD Project Manager, the estimated cost for the new fire station is approximately $44.2 million and subject to further escalation. To help finance the construction, the City has agreed to calculate actual General Fund Transient Occupancy Tax (TOT) revenues from the proposed new hotel and provide quarterly incentive payments to the Developer for a period of up to 25 years, equal to 12.5 percent of hotel room revenues, or approximately 89.3 percent of actual collected TOT revenues (the remaining 10.7 percent of TOT revenues dedicated to arts and culture programming would be unaffected by the agreement).[1] Once the City has paid the Developer a total of $68,871,356 in net present value of incentive payments (using a nine percent annual discount rate), the payment would be reduced in half, or to an amount equal to 6.25 percent of hotel room revenues (44.6 percent of TOT revenues), until the total incentive payments equal a maximum of $86,089,195 in net present value. After paying that amount, or after 25 years, the City would no longer pay the developer incentive payments.

The $86.1 million cap on total payments to the Developer is based on the anticipated project design of between 10 and 12 floors of hotel rooms, for between 100 and 200 rooms. If the number of floors is reduced to be less than 10, the cap would be reduced proportionally.

Conditional Property Exchange Agreement

The proposed amended and restated CPEA allows for the construction of the new fire station on 447 Battery Street, rather than a portion of 425-439 Washington Street. The amended agreement also removes maximum cost provisions which capped the Developer's contribution to the cost of constructing the new fire station at $25.5 million. The 447 Battery Street will be solely owned and controlled by the City and used for the fire station.

Due to the size of the two properties, the 530 Sansome property (8,939 square feet) is of greater value than the 447 Battery Street property (7,178 square feet), as confirmed by appraisals conducted by R. Blum and Associates in April 2025. According to OEWD staff, the ordinance in File 25-0804 waives the appraisal requirements of Chapter 23 of the Administrative Code to avoid costs for appraisal reviews. In addition, the property exchange was negotiated in the context of the proposed development agreement and other project approvals, and RED did not consider a direct comparison of the property values to be necessary.

[1] Per Article 7 of the Business Tax & Regulations Code, the City's transient occupancy tax rate is 14%, including 12.5% for the General Fund and 1.5% for arts and cultural programming.

FISCAL IMPACT

New Fire Station

One of the primary benefits to the City is the construction of a new fire station. According to Mark Corso, Fire Department Deputy Director, the existing Fire Station 13 is over 50 years old and seismically unsafe in the event of an earthquake. Additionally, the floor is inadequate for current apparatus weights, and certain building systems (such as HVAC and electrical) are in need of upgrade or replacement. The new station, which is valued at approximately $44.2 million to construct, would be built to modern safety and energy efficiency standards and provide infrastructure for modern fire service tools and equipment.

General Fund Fiscal Impact

According to a May 2025 fiscal impact report conducted by Economic & Planning Systems, Inc. (EPS) on behalf of the Developer, the proposed development is projected to provide net General Fund revenues of approximately $8 million per year compared to the existing land use. This projection excludes TOT revenues, since incentive payments calculated based on those revenues would be paid to the Developer for up to 25 years to finance the fire station construction and support the feasibility of the new hotel. An overview of General Fund revenues and expenditures is shown in Exhibit 1 below.

Exhibit 1: Annual General Fund Fiscal Impact Estimates, EPS Report

Projected General Fund Revenues	Existing Development	Proposed Project	Net Revenues
Gross Receipts Tax	$0	$6,238,000	$6,238,000
Property Tax	309,000	4,347,000	4,037,000
Property Transfer Tax[2]	144,000	2,019,000	1,875,000
Property Tax in Lieu of VLF	51,000	717,000	666,000
Commercial Rents Tax	12,000	279,000	267,000
Gas, Electric, and Steam Users Tax	14,000	144,000	130,000
Other Taxes[3]	91,000	344,000	253,000
General Fund Revenue Subtotal	*$621,000*	*$14,088,000*	*$13,468,000*
General Fund Baseline Requirements	(178,000)	(4,039,000)	(3,861,000)
General Fund Revenue After Baseline Requirements	**$443,000**	**$10,049,000**	**$9,606,000**

Projected General Fund Expenditures	Existing Development	Proposed Project	Net Expenditures
Police	$52,000	$521,000	$470,000
Fire	35,000	348,000	314,000
Human Welfare & Neighborhood Development	30,000	299,000	270,000
Community Health	21,000	209,000	188,000
Public Works, Transportation, & Commerce	15,000	153,000	138,000
Other Public Protection	12,000	118,000	106,000
Other Expenditures[4]	13,000	135,000	121,000
Total General Fund Expenditures	**$177,000**	**$1,782,000**	**$1,606,000**
Net Annual General Fund Revenues	**$266,000**	**$8,267,000**	**$8,001,000**

Source: EPS fiscal impact report. Some totals may not add due to rounding.

In addition to the General Fund impact, the EPS report estimates that the project would annually generate approximately $881,000 in net revenue to the Municipal Transportation Agency (MTA) Fund and $609,778 in TOT for arts and culture purposes.

TOT Revenue Incentive Payments

The report also estimates that the hotel would generate approximately $5.1 million annually in General Fund TOT, and that incentive payments in an equal amount would be provided to the Developer for 25 years after hotel occupancy to finance the fire station and support the feasibility of the new hotel. This estimate assumes 198 hotel rooms with an average daily room rate of $750 and 75 percent average occupancy. Once the incentive payments expire, the development would

[2] Property Transfer Tax estimates assume that the properties would be sold every 20 years. Annual estimates are equal to five percent of the estimated one-time revenue from the properties being sold at the current and projected assessed valuations.

[3] Other Taxes include Sales Tax, Telephone Users Tax, Water Users Tax, Access Line Tax, Parking Tax, and Business Registration fees.

[4] Other Expenditures include Culture and Recreation, General Administration and Finance, and General City Responsibilities.

provide $11.6 million in net General Fund revenues, including the $5.1 million in annual TOT revenues net of General Fund baseline requirements, plus an additional $1.4 million in net revenue to the MTA Fund.

The report estimates that the resulting incentive payments would total a net present value of $68.9 million at the end of 25 years. If the hotel generates more TOT revenue than projected in the report, then subsequent incentive payments would be reduced by half and net General Fund revenues would increase. The incentive payments calculated based on TOT revenue would expire early if the total cap on the payments (net present value of $86.1 million) is reached. If the hotel generates less than $68.9 million in TOT revenue, the incentive payments would expire 25 years after hotel occupancy, regardless of the amount of incentive payments.

Peer Review

The City contracted with BAE Urban Economics, Inc. to conduct a peer review of the EPS report. BAE found that the EPS report was generally reasonable, but that the Gross Receipts Tax and TOT revenue estimates were speculative. Specifically, the Developer is proposing to target the top end of the office market with Class AA office space, and the Gross Receipts Tax is sensitive to the tenants' industry categories, sizes, and percentage of gross receipts generated in San Francisco. EPS reduced its Gross Receipts Tax estimates from an earlier draft report that BAE had reviewed and provided comments. BAE noted that TOT projections were at the high end of the five-star market and dependent on continued tourism recovery. BAE also found that the project would not be feasible without the TOT incentive, as it would not generate an acceptable rate of return.

Impact Fees

Under the proposed Development Agreement, the Developer would pay required City impact fees, including the Transportation Sustainability Fee, Downtown Park Fee, Jobs-Housing Linkage Fee, and Childcare Impact Fee. The Developer would also pay affordable housing fees that were negotiated with the City, consisting of a negotiated Jobs-Housing Linkage fee that is reduced by 50 percent plus an additional affordable housing payment of $4,310,710, half of which ($2,155,355) would be paid to the City within six months of the effective date of the ordinance approving the development agreement, regardless of whether the project proceeds. Assuming the project creates a net increase of approximately 373,500 square feet of office space compared to the existing land use, the estimated impact fees are shown in Exhibit 2 below.[5]

[5] Under Planning Code Section 406(h), impact fees are temporarily waived for hotel and restaurant developments in certain downtown commercial districts, so the impact fees only apply to the office component of the proposed development.

Exhibit 2: Estimated Development Impact Fees Paid to City

Fee	Amount without DA	Amount under DA	Difference under DA
Transportation Sustainability Fee	$7,679,160	$7,679,160	$0
Downtown Parks Fee	959,895	959,895	0
Jobs-Housing Linkage Fee	21,072,870	10,536,435	(10,536,435)
Child Care Impact Fee	593,865	593,865	0
Additional Affordable Housing Payment	0	4,310,710	4,310,710
Total	**$30,305,790**	**$24,080,065**	**($6,225,725)**

Source: OEWD and BLA estimates using Development Agreement fee schedule.

The amount of the impact fees noted above that would apply without the development agreement includes the 33 percent temporary, three-year fee reduction program approved by the Board of Supervisors in 2023 (File 23-0769). The Development Agreement reduces the Jobs-Housing Linkage Fee, which supports affordable housing production, by an additional 50 percent due to negotiations with the City. In addition to the impact fees, the Developer is required to dedicate 0.67 percent of its construction cost on public art. Assuming an estimated project budget of $700 million, the Developer would contribute approximately $4.7 million to public art.

As shown above, the Developer will pay the City $6.2 million less in fees under the Development Agreement than what would be paid without a Development Agreement. However, $2,155,355 in affordable housing fees would be paid to the City regardless of whether the project proceeds. The Developer would also pay the City more fees (including a $10 million increase in affordable housing fees) under the Development Agreement that would be collected from the 19-story tower that the Developer already has entitled on the site.

General Economic Impact

In addition to the fiscal impact report, EPS conducted an economic impact report in May 2025 on behalf of the developer. The report estimated that the project, when fully built out, would create approximately 1,608 jobs (including part-time) on an ongoing basis and generate $816 million annually in economic output compared to the existing land use. When including indirect effects, such as increased spending at local businesses, the project would create approximately 2,440 jobs and generate $1.12 billion in annual economic output. The report also estimated that development of the project would create approximately 390 jobs annually over a four-year period and generate approximately $520 million in economic output, including multiplier effects. The City did not commission a peer review of this report.

POLICY CONSIDERATION

The terms of the proposed agreements are consistent with the term sheet approved by the Board of Supervisors in November 2024. As provided by the proposed ordinances, the benefits of the project to the City include: (a) construction of a new fire station for the City at an estimated cost of $44.2 million; (b) $2.15 million of the project's affordable housing fees paid to the City within six months of the effective date of the legislation, regardless of whether the project proceeds;

(c) improvements to Merchant Alley, between Sansome and Battery Streets, and ongoing maintenance at an estimated value of $2 million; (d) compliance with City workforce requirements and prevailing wages for all project construction; and (e) $8 million in annual net new General Fund revenue (after accounting for the TOT incentive payments to the Developer). In exchange, the City would: (a) reduce the overall affordable housing fees assessed to the project by $6.2 million; (b) transfer an estimated $68.9 million, and up to a total of $86.1 million, equal to TOT revenues generated by the project to the Developer to finance the project; and (c) exchange a City owned parcel with a Developer owned parcel to facilitate the project.

We note that the maximum value of the TOT incentive payments (up to $86.1 million) and the reduction in the affordable housing fees ($6.2 million) is greater than the cost of the new fire station ($44.2 million), the value of receiving $2.15 million in affordable housing fees in advance regardless of project construction, and the estimated value of the Merchant Street improvements and maintenance ($2 million). Therefore, up to approximately $46 million of the incentive payments will finance a portion of the hotel and office market rate development. However, no TOT revenues will accrue to the City from the project if it is not developed, and the project is not feasible without the revenue transfer (according to the peer review by BAE Urban Economics). The project will generate additional net revenue to the General Fund of $8 million annually, or approximately $200 million[6] over the 25-year period of the incentive payments (in current dollars). In addition, the somewhat smaller 447 Battery Street property the City is receiving in exchange for 530 Sansome is not of equal value to 530 Sansome, as originally intended. Instead, the 447 Battery Street property has a lower appraised value than the 530 Sansome.

Uncertainty of Market Conditions

The proposed ordinances contemplate incentive payments calculated based on actual TOT revenues to ensure delivery of the proposed project, including a commercial tower of office space, hotel space, and other commercial uses. According to the peer review of the project pro forma, the project is financially feasible with the TOT incentive payments and impact fee adjustments and is not financially feasible with private sources alone under current market conditions. However, current market conditions may be temporary. For example, interest rates could decrease to such an extent that the project is feasible without TOT incentive payments. On the other hand, the General Fund impact may be overstated if the project does not attract and retain commercial office tenants and the City's hotel sector does not continue to recover.

Alternative

We estimate that the City could finance the construction of the $44.2 million fire station using general obligation bonds, with total debt service of $72.3 million in nominal dollars (or $53.8 million in 2025 dollars). This is less than the up to $86.1 million the City would pay for the station in TOT incentive payments. However, the City would need to adjust its capital plan to make room for the construction of the new fire station and would not have the other fiscal benefits of the

[6] Approximately $237 million including the estimated additional net MTA revenue and TOT revenue dedicated to arts and culture purposes.

tower projects, such as increased General Fund revenues of $8 million per year and the $24 million development impact fee payments.

Prior Board of Supervisors Actions

In December 2024, the Board of Supervisors approved a resolution that endorsed the key terms of the proposed project, including an incentive payment to the developer based on transit occupancy tax revenues (File 24-1141). Because the agreements and deal terms are consistent with this endorsement from the Board, we recommend approval of both ordinances.

RECOMMENDATION

Approve the proposed ordinances.

MEMORANDUM OF AGREEMENT BY AND BETWEEN
THE CITY OF DALY CITY
AND
THE SAN FRANCISCO PUBLIC UTILITIES COMMISSION
REGARDING OPERATION OF THE
VISTA GRANDE DRAINAGE BASIN IMPROVEMENT PROJECT

THIS Memorandum of Agreement ("MOA") is entered into this __ day of _____, 2025, by and between the City of Daly City ("Daly City") and the San Francisco Public Utilities Commission ("SFPUC") (individually, each a "Party," and collectively referred to as the "Parties") for the purpose of delineating responsibilities for the funding and operation of Daly City's Vista Grande Drainage Basin Improvement Project (the "Vista Grande Project" or the "Project").

WHEREAS, the SFPUC and Daly City are working collaboratively towards Daly City's implementation of the Vista Grande Project to alleviate flooding in the Vista Grande Basin within Daly City and the SFPUC's Lake Merced Tract and also facilitate augmentation and management of Lake Merced water levels using sustainable supplies of Daly City's stormwater; and

WHEREAS, in 1930, the SFPUC purchased the Lake Merced Tract from the Spring Valley Water Company ("Spring Valley"), and historically used Lake Merced as a potable water supply; and

WHEREAS, in 1895, Spring Valley constructed a dam in the outlet of Lake Merced, preventing overflow of the lake into the Pacific Ocean and increasing total water storage capacity by 2.5 billion gallons; and

WHEREAS, Lake Merced is a surface water body that is interconnected to groundwater within the Westside Groundwater Basin ("Basin," California Department of Water Resources Basin No. 2-35) in western San Francisco and northern San Mateo counties, and a fraction of the inflow to Lake Merced percolates to underground storage in the Basin through the bed of the lake; and

WHEREAS, the SFPUC today maintains Lake Merced for the beneficial uses of recreation and wildlife habitat, and continues to maintain the capability of using surface water from the lake as a non-potable emergency water supply through use of the Lake Merced Pump Station; and

WHEREAS, declines in Lake Merced water levels, generally attributable to Spring Valley's diversion of stormwater away from Lake Merced following construction of the Vista Grande Canal and Tunnel in 1897, 20th century urban development in San Francisco and Daly City, drought conditions, and regional groundwater pumping, have generated concern regarding the long-term viability of Lake Merced; and

WHEREAS, the SFPUC and Daly City have a successful history of working cooperatively with citizens' groups and environmental stakeholders regarding efforts to maintain Lake Merced water levels following the filing of a January 29, 2001 petition by California Trout at the California State Water Resources Control Board that sought to reverse declining lake levels following the 1987-94 drought; and

WHEREAS, Daly City and the SFPUC have made significant progress in developing plans and projects for stabilizing Lake Merced water levels, including entering into a March, 2002 Agreement for Purchase and Sale of Recycled Water ("2002 Recycled Water Agreement") between Daly City, the North San Mateo County Sanitation District, the SFPUC, and the Olympic, Lake Merced, and San Francisco Golf Clubs; and

WHEREAS, groundwater monitoring performed following the 2005 delivery of recycled water for irrigation purposes to the Olympic, Lake Merced and San Francisco Golf Clubs under the 2002 Recycled Water Agreement has demonstrated beneficial effects on Lake Merced water levels resulting from the substitution of recycled water for groundwater used for irrigation purposes; and

WHEREAS, Daly City owns and operates the Vista Grande Canal within the SFPUC's Lake Merced tract, and leases the Vista Grande Tunnel from the SFPUC under a lease dated August 14, 2007 authorized under SFPUC Res. No. 07-0145 and Daly City Council Res. No. 07-132 (the "Tunnel Lease"), and Daly City is now a tenant "at will "due to expiration of the Lease term on or about August 14, 2017; and

WHEREAS, the existing Vista Grande Canal and Tunnel do not have adequate hydraulic capacity to convey peak storm flows to the Pacific Ocean; and

WHEREAS, storm-related flooding within the Vista Grande Watershed has resulted in property damage in adjacent low lying residential areas within the northern portion of Daly City; and

WHEREAS, storm-related flooding within the Vista Grande Watershed, particularly uncontrolled overflows into Lake Merced from the Vista Grande Canal across John Muir Drive, has resulted in property damage to John Muir Drive and associated areas; and

WHEREAS, Daly City studied the possible addition of stormwater from the Vista Grande Canal to Lake Merced in a controlled fashion, in an effort to mitigate flooding and reconnect Lake Merced to its historic watershed; addition of stormwater would also avoid the need for periodic additions of imported surface water to Lake Merced by the SFPUC as has occurred historically; and

WHEREAS, on December 11, 2017, Daly City certified the Vista Grande Project environmental impact report and impact statement ("EIR/EIS") under the California Environmental Quality Act ("CEQA") and the National Environmental Policy Act ("NEPA"), and approved the Vista Grande South Lake Merced Alternative described in the Project EIR/EIS via City Council Res. No. 17-200, dated December 11, 2017; and

WHEREAS, under the South Lake Merced Alternative, the Vista Grande Project is intended to route storm water from the Vista Grande Canal to South Lake Merced as well as to the Pacific Ocean, reduce uncontrolled overflows from the Vista Grande Canal into Lake Merced, achieve a sustained increase in Lake Merced Lake levels, improve storm water quality, and further the restoration of the drainage basin's natural hydrology; and

WHEREAS, the SFPUC approved its Water System Improvement Program ("WSIP") on October 30, 2008 in Resolution No. 08-0200, following certification of the WSIP programmatic environmental impact report under CEQA by the San Francisco Planning Commission on October 30, 2008 in its Motion No. 17743; and

WHEREAS, the Phased WSIP adopted by the SFPUC includes the development of 10 million gallons per day ("mgd") of additional water for retail customers in San Francisco through additional water conservation, recycled water, and groundwater development in San Francisco, based on a water supply goal and objective of diversifying water supply options for retail and wholesale water customers during drought and non-drought periods; and

DRAFT

WHEREAS, the Phased WSIP included the Regional Groundwater Storage and Recovery ("RGSR") project to provide greater water supply reliability to the SFPUC's retail and wholesale water customers by substituting additional SFPUC surface water supplies in wet and normal years for groundwater pumping by the California Water Service Company, San Bruno, and Daly City, resulting in potential in lieu storage of up to 61,000 acre-feet of water in the southern portion of the Westside Basin in northern San Mateo County; and

WHEREAS, the Phased WSIP also included the San Francisco Groundwater Project to diversify water supplies available to retail customers, and to provide additional potable emergency water supplies in San Francisco, through the production of up to 4 mgd of groundwater in the northern portion of the Westside Basin in San Francisco; and

WHEREAS, the SFPUC approved the implementation of the San Francisco Groundwater Project on January 14, 2014 in Resolution No. 14-0010, following certification of the project environmental impact report under CEQA by the San Francisco Planning Commission on December 19, 2013, in its Motion No. 19050; and

WHEREAS, to mitigate impacts resulting from the operation of the RGSR and San Francisco Groundwater Projects and their potential adverse impacts on Lake Merced, the WSIP programmatic environmental impact report required the SFPUC to (1) implement Mitigation Measure 5.6-1, Westside Basin Groundwater Monitoring to Determine the Safe Yield of the Westside basin; and (2) Mitigation Measure 5.6-2, implementation of a Lake Level Management Plan for Lake Merced; and

WHEREAS, in its approval of the San Francisco Groundwater Project in its Resolution No. 14-0010, the SFPUC agreed to implement Mitigation Measure M-HY-9, Lake Level Management for Lake Merced, in order to address potentially significant water quality impacts related to changes in Lake Merced water levels caused by project groundwater pumping in the following impact areas: aesthetics (impact AE-4); biological resources (impacts BI-6 and BI-7); hydrology (impact H-9); and cumulative impacts (impacts C-HY-4 & 5). In general, Mitigation Measure M-HY-9 requires the SFPUC to gradually increase project groundwater pumping "in a stepwise manner" while monitoring for excessive declines in Lake Merced water levels, and to redirect or restrict increasing pumping should undesirable effects occur at Lake Merced; and

WHEREAS, San Francisco Groundwater Project Mitigation Measure M-HY-9 anticipated that stormwater from the Vista Grande Project might be available as a "supplemental water source" to maintain Lake Merced water levels, which would further the cooperative efforts of Daly City and the SFPUC to protect Lake Merced while sustainably managing the Westside Groundwater Basin, consistent with the Sustainable Groundwater Management Act, California Water Code §§10720 *et seq*; and

WHEREAS, Daly City's Vista Grande Project operates to mitigate impacts from SFPUC's implementation of the RGSR and San Francisco Groundwater Projects, by increasing water surface elevations in Lake Merced;

WHEREAS, it is in the interests of both Daly City and the SFPUC for Daly City to proceed expeditiously with the implementation of the Vista Grande Project, and to do so in a manner that addresses both historic flooding and the parties' shared goal of sustainably managing Lake Merced water levels and portions of the Westside Groundwater Basin within their respective jurisdictional control; and

WHEREAS, in November 2019, Brown and Caldwell, Inc. and McMillian Jacobs & Associates prepared "Project Plans for Construction of the Vista Grande Drainage Basin Improvements,"

which provides the 100 percent design for the Vista Grande Project ("Project 100 % Design"); and

WHEREAS, Daly City anticipates publishing a call for bids on the Vista Grande Project construction work, upon receipt of all required permits; and

WHEREAS, Daly City has prepared and will be implementing a Lake Management Plan, which will be incorporated into San Francisco Regional Water Quality Control Board permitting for the Vista Grande Project, that details Daly City's water quality monitoring and operational responsibilities to augment water surface elevation in Lake Merced to the stated goal (weather permitting); and

WHEREAS, the SFPUC reviewed and concurs with the terms of the Lake Management Plan, which will assist with SFPUC's mitigation obligations in its approval of the RGSR and San Francisco Groundwater Projects; and

WHEREAS, the SFPUC performs routine quarterly water quality monitoring and undertakes management activities in and around Lake Merced that are not related to the Project;

WHEREAS, both Daly City and the SFPUC wish to memorialize their respective obligations as follows: (1) Daly City to implement the Vista Grande Project; (2) Daly City and SFPUC to share water quality and hydrologic data related to Lake Merced; (3) memorialize the SFPUC's financial contribution towards Project construction; and (4) affirm commitments to sustainably operate the portion of the Westside Basin within their respective jurisdictions while protecting the beneficial uses of Lake Merced.

NOW, THEREFORE, it is mutually understood and agreed as follows:

SECTION 1: AUTHORITY OF PARTIES

1.1 Daly City is a California municipal corporation that owns and operates the Vista Grande Project, which is intended to reconnect Lake Merced with its historic watershed, providing a source of water to increase the water surface elevation of Lake Merced and address localized flooding that periodically occurs across John Muir Drive.

1.2 Daly City Joint Powers Financing Authority ("Authority") is a joint powers financing authority created under Article 1 (commencing with Section 6500) of Chapter 5, Division 7, Title 1 of the Government Code of the State of California created, in part, to assist with funding and financing of the Project.

1.3 The SFPUC is responsible for managing San Francisco's municipal utilities pursuant to the Charter of the City and County of San Francisco ("City"). The SFPUC is also the owner and operator of Lake Merced and the Lake Merced tract, as well as the owner of the Vista Grande Tunnel that is currently leased to Daly City.

SECTION 2: DEFINITIONS

2.1 "Authority" refers to the Daly City Joint Powers Financing Authority.

2.2 "Basin" refers to the Westside Groundwater Basin in Western San Francisco and Northern San Mateo Counties, depicted as Basin No. 2-35 by the California Department of Water Resources.

2.3 "Contractor(s)" refers to the licensed construction contractor(s) retained and approved by Daly City to construct the Project as described in the Project 100% Design, and any subconsultants retained thereby and approved by Daly City, which will be wholly or partially funded by monies provided by the SFPUC.

2.4 "**Daly City"** refers to the City of Daly City.

2.5 "Effective Date" refers to the date that the San Francisco Board of Supervisors adopts a resolution approving this MOA following approval by the SFPUC.

2.6 "Lake Management Plan" refers to the Vista Grande Project Lake Merced Lake Management Plan prepared by Daly City and approved by the San Francisco Bay Regional Water Quality Control Board, a draft of which is attached hereto as **Exhibit A**.

2.7 "Lake Merced Tract" refers to the tract of land designated as SFPUC Parcel No. 55 of San Francisco County Lands, in that certain deed between the Spring Valley Water Company and the City and County of San Francisco, dated and recorded in the office of the County Recorder of the City and County of San Francisco on March 3, 1930 in Liber 2002 of Official Records at Page 1.

2.8 "Parties" means Daly City and the SFPUC.

2.9 "Prior Planning, Design, and Engineering Services Contracts" refers to Vista Grande Project related expenses previously incurred by Daly City, and partially funded by the SFPUC in the amount of $205,500, for planning, design, and engineering expenses, as well as consultant fees for securing those permits necessary for Vista Grande Project implementation.

2.10 "Project" means the proposed construction work to implement the Vista Grande Drainage Improvement Project, including: modifications to the Vista Grande Canal; construction of a diversion structure to divert stormwater from the canal to Impound Lake in accordance with the approved Lake Management Plan; construction of two treatment wetlands over a portion of the reconstructed canal that will use water pumped from the lake during the dry season to maintain the wetlands; reconstruction of the Lake Merced Overflow Outlet to drain water out of Lake Merced where necessary and consistent with the Lake Management Plan; construction of a new Vista Grande Tunnel to the Pacific Ocean; and structural improvements at Daly City's beach outlet structure.

2.11 "SFPUC" or "San Francisco" means the San Francisco Public Utilities Commission.

2.12 "Vista Grande Project" means the Vista Grande Drainage Basin Improvement Project described in the environmental impact report and impact statement under CEQA and "NEPA" by Daly City on December 11, 2017 and as described in the Project 100% Design.

2.13 "Vista Grande Project 100% Design" means the project design attached hereto as **Exhibit B**.

SECTION 3: PURPOSE OF THE MOA

3.1 Purpose.

The purpose of this MOA is to identify the Parties' respective obligations for the implementation of the Vista Grande project. Specifically, under this MOA:

(1) The SFPUC shall provide the Authority with funding in an amount not to exceed $35,000,000, which shall be applied solely to the actual construction costs of the Vista Grande Project.

(2) The Parties shall voluntarily share with each other any and all information generated, and requested by the other Party, regarding the water level and quality of Lake Merced, the quantity and frequency of stormwater diversions from the Vista Grande Canal to Lake Merced, and the quantity and frequency of stormwater withdrawn from Lake Merced and directed back to the Vista Grande Canal and Vista Grande Tunnel for discharge to the Pacific Ocean.

(3) The Parties reserve all rights to initiate or participate in a general adjudication of groundwater rights in the Basin, subject to mutual agreement on certain factual stipulations set forth in Section 5.4 of this MOA, should the Parties participate in a future adjudication.

SECTION 4: FUNDING FOR THE PROJECT

4.1 Funding.

A. Amount of Funding. The SFPUC will reimburse Daly City, via the Authority, for Project construction costs in a total amount not-to-exceed $35,000,000 ("Contribution Amount"). The Contribution Amount excludes any previous sums provided by SFPUC to Daly City for any prior Project-related costs.

B. No SFPUC Liability for Increases in Estimated Construction Costs. Daly City shall be solely responsible for any and all Project capital costs in excess of the Contribution Amount, whether such excess costs are attributable to (1) errors or omissions in Project engineering, design, or construction by Daly City, its Contractor, or the consultants hired by Daly City; (2) unforeseen events beyond the control of Daly City and its Contractor; or (3) any other cause.

4.2 Additional Project Capital Costs Payable by Daly City to SFPUC and San Francisco Department of Public Works; Maintenance of Mitigation Plantings on Lake Merced Tract at SFPUC Expense.

A. Project-Related Real Estate Acquisitions. Daly City shall be solely responsible for paying all costs and fees associated with acquiring Project-related (1) Parcels within the Lake Merced Tract; (2) licenses for temporary use of SFPUC property as construction staging areas; and (3) major encroachment permits from the San Francisco Department of Public Works for Project facilities within public streets. The Parties agree that any Project-related real property conveyances from SFPUC or the City to Daly City will further a proper public purpose.

B. Temporary Support or Relocation of SFPUC Utility Infrastructure Required by Project Construction. Daly City shall be responsible for the costs of temporary support and any necessary relocations of SFPUC water, wastewater and energy facilities affected by Project construction, as well as the metered costs for the temporary diversion of stormwater from the Vista Grande system into the SFPUC's "Westside Transport" sewer transmission main, and associated treatment costs at the SFPUC's Oceanside Wastewater Treatment Plant at then-current SFPUC rates for wastewater treatment and disposal.

C. Transfer of Title to Vista Grande Tunnel under Tunnel Lease. The Parties acknowledge that, pursuant to Section 21.2 of the Tunnel Lease, the City agreed to

transfer title to the Vista Grande Tunnel to Daly City at no cost in the event that Daly City implemented a project or projects to eliminate overflows from the Vista Grande Canal by the end of the Lease term. The Tunnel Lease expired in 2017. Daly City will pay an amount equal to the appraised value, as determined by an independent third-party appraisal and approved by the City's Director of Real Estate, for the Vista Grande Tunnel and associated easement.

D. Allocation of Project Mitigation Costs Imposed by California Coastal Commission (CCC). Daly City shall be solely responsible for payment of all Project capital costs required to comply with any CCC mitigation measures imposed in the Project Coastal Development Permit. With regard to CCC-imposed mitigation measures consisting of removal of non-native vegetation and the planting of willows and other native plant species within the Lake Merced Tract, Daly City's Contractor(s) will design, install, and establish the initial plantings under license from the SFPUC, as well as perform required monitoring and regulatory reporting to the CCC. The SFPUC will be solely responsible for payment of all costs to maintain mitigation-related plantings within the Lake Merced Tract under the terms of the license issued to Daly City. Work performed is further described in Exhibit "C", Mitigation Plantings Maintenance Plan.

E. Cost Estimates for Foregoing Items.

The Parties acknowledge that certain project-related costs incurred by Daly City, including but not limited to easement acquisition, licensing fees, encroachment permits, utility relocations, and CCC mitigation measures, remain subject to refinement and future determination.

To avoid delay in execution of this MOA, the following estimated cost figures are provided by Daly City as good faith estimates for planning and coordination purposes and shall not be construed as a condition precedent to the effectiveness of this MOA or an obligation on the part of Daly City to finalize such costs prior to execution of MOA These estimates may be updated by Daly City through written notice as actual costs are established. When estimates re not available value shall be marked as "TBD" and updated by the parties in good faith.

1. **Estimated Daly City Costs**:

   a. Payment for parcels within the Lake Merced Tract required for Project construction, including the Vista Grande Tunnel and associated easement: $_____ (TBD)

   b. Payment for licenses fees for temporary use of SFPUC property for construction staging: $_____(TBD)

   c. Major encroachment permit fees payable to San Francisco Department of Public Works: $_____(TBD)

   d. Payment for temporary relocation, support, and reinstallation of SFPUC utility facilities: $200,000

e. Unit cost of stormwater treatment at SFPUC Oceanside Wastewater Treatment Plant (first flush and base flows) during construction of the new Vista Grande Tunnel: $10.09/ccf

f. Capital cost for construction of onsite mitigation within the Lake Merced Tract required by the CCC as well as ongoing monitoring and reporting: $____(TBD)

2. **Estimated SFPUC Costs**:

g. Maintenance of mitigation plantings within the Lake Merced Tract required by the CCC over a typical 10 year reporting period. Yearly plant maintenance expenses: up to $10,000 per year. Approximate cost of maintenance over 10 year mitigation period: $3,000,000. (Note: Contractor has a 5-yer performance period, which they are responsible for the maintenance over the 10 year period.

4.3 Administration of Project Construction Contract.

Daly City shall serve as the project manager of the contract(s) for the construction of the Project by Contractor(s) and shall be responsible for managing all such contract(s). Daly City's contract with the Contractor(s) that are funded in whole or in part using SFPUC funds, shall contain language that deems the Contractor(s) to be an independent contractor of Daly City and not an agent or employee of the SFPUC.

4.4 Review of Project Change Orders and Involvement of SFPUC in Daly City's Acceptance of Work upon Project Completion.

Following Daly City's award of the Project construction contract to Contractor, Daly City shall provide the SFPUC ten (10) business days to review any proposed modifications or change orders affecting the Project construction contracts, along with any related plans and specifications. The SFPUC shall have the right to participate in and agree on periodic progress inspections and final walkthrough/ punch list of outstanding work and the acceptance of work by Contractor upon completion of the Project.

4.5 Testing Period Following Completion of Project.

A. Following completion of construction but prior to Project close out, the Parties agree to perform a test run of the entire system, including the pumping of water from the Canal to the constructed treatment wetlands to Lake Merced, and the withdrawal of water from Lake Merced via the Overflow Outlet, assuming there exists adequate flow in the Vista Grande Canal to perform such tests and the water surface elevation in Lake Merced is at least 7.0 feet City and County of San Francisco Datum.

B. If the Vista Grande Canal does not contain adequate flow for a pumping test of water from the Vista Grande Canal to the constructed treatment wetlands, such test shall not be required.

4.6 Fiscal Limitations. Certification of Funds; Budget and Fiscal Provisions; Termination in the Event of Non-Appropriation; Prohibition on Use of Funds for Political Activities.

A. Certification of Funds; Budget and Fiscal Provisions; Termination in the Event of Non- Appropriation. The SFPUC's payments under this MOA are subject to and contingent upon the budget and fiscal provisions of the Charter of the City . Charges will accrue only after prior written authorization certified by the City's Controller, and the amount of the SFPUC's obligation hereunder shall not at any time exceed the amount certified for the purpose and period stated in such advance authorization. The SFPUC's financial obligations under this MOA will terminate without penalty, liability or expense of any kind to City at the end of any fiscal year if funds are not appropriated for the next succeeding fiscal year. If funds are appropriated for a portion of the fiscal year, the SFPUC's financial obligations under this MOA will terminate, without penalty, liability or expense of any kind to City at the end of the term for which funds are appropriated. City has no obligation to make appropriations for this MOA in lieu of appropriations for new or other agreements. City budget decisions are subject to the discretion of the Mayor and the Board of Supervisors.

B. Guaranteed Maximum Costs. The SFPUC's payment obligation to Daly City cannot at any time exceed the amount certified by City's Controller for the purpose and period stated in such certification. Absent an authorized Emergency per the City Charter or applicable Code, no City representative is authorized to offer or promise, nor is the City required to honor, any offered or promised payments to Daly City under this MOA in excess of the certified maximum amount without the Controller having first certified the additional promised amount and, if necessary, the Parties having modified this MOA as provided in Section 6.9 of this MOA.

C. Prohibition on Use of Public Funds for Political Activity. In performing work under this MOA, the recipient of City funds shall comply with San Francisco Administrative Code Chapter 12G, which prohibits funds appropriated by the City for this Agreement as amended from being expended to participate in, support, or attempt to influence any political campaign for a candidate or for a ballot measure. The recipient of City funds is subject to the enforcement and penalty provisions in Chapter 12G.

4.7 Payment.

Daly City shall submit Contractor's monthly invoices, to the SFPUC for approval within thirty (30) days of receipt by Daly City. The Project construction invoices shall set forth in detail the work performed and the expenses incurred and shall identify which Contractor or subcontractor performed the construction work. The SFPUC shall review, approve and pay invoices within thirty (30) calendar days of receipt from Daly City. As explained above in Section 4.1, the SFPUC's total contribution of funding under this Agreement shall not exceed the Contribution Amount.

4.8 Books and Records.

Daly City agrees to maintain all documents and records regarding use of funds received from the SFPUC for payments to Contractor for a minimum period of three (3) years, or for any longer period required by law, from the date of termination or completion of this MOA. Daly City agrees to provide the SFPUC with reasonable access to its books and records for purposes of auditing the use of funds contributed by the SFPUC for Project purposes.

4.9 Insurance.

A. General Liability and Other Insurance; Coverage Amounts: Daly City's contract(s) with its Contractor(s) for work performed that is reimbursed in whole or in part by SFPUC funds shall require all Contractors to maintain in force during the course of the contract insurance in the following amounts and coverages, with insurers satisfactory to San Francisco:

1. Commercial General Liability Insurance with limits not less than $5,000,000 each occurrence Combined Single Limit for Bodily Injury and Property Damage, including Contractual Liability, Personal Injury, Products and Completed Operations;

2. Worker's Compensation in statutory amount including Employer's Liability coverage with limits not less than $1,000,000 for each accident, injury, or illness. The Worker's Compensation policy shall be endorsed with a waiver of subrogation in favor of the City for all work performed by the Contractor, its employees, agents and subcontractors;

3. Automobile Liability Insurance with limits not less than $2,000,000 each occurrence Combined Single Limit for Bodily Injury and Property Damage, including Owned, Non-Owned, and Hired auto coverage, as applicable.

4. Professional Liability Insurance with limits not less than $1,000,000 for each claim with respect to negligent acts, errors, or omissions in connection with professional services (e.g., performing field engineering, surveying, preparing designs, calculations drawings and specifications) to be provided under this Contract. Contractor's professional liability policy shall not have an exclusion for environmental compliance management or construction management professionals; and

5. Pollution Liability Insurance with limits not less than $1,000,000 each occurrence combined single limit (true occurrence form) from bodily injury, property damage, abatement of hazardous or contaminated materials, including coverage for Non- Owned Disposal Site, and on-site or off-site third-party claims. Contractor and its subcontractor(s) performing abatement or disposal of such materials must have insurance coverage and shall do so in accordance with the requirements of the Contract Documents. If any policy includes an aggregate limit or provides that claims investigation or legal defense costs are included in such aggregate limit, the aggregate limit shall be double the occurrence limits specified above.

6. Provide evidence of Builders Risk coverage for the work performed and its full replacement value.

Each policy shall: (i) name as additional insured "the City and County of San Francisco, its officers, agents and employees;" (ii) provide that it is primary to any other insurance available to any additional insured, with respect to any claims arising out of this MOA; (iii) provide that it applies separately to each insured against whom claim is made or suit is brought; (iv) provide for at least thirty (30) calendar days' advance written notice to the SFPUC of cancellation or modification; and (v) provide for a waiver of subrogation in favor of the City.

B. Performance and Payment Bond. Daly City's contract with Contractor shall contain language requiring Contractor to provide surety bonds, each in a sum not less than one hundred percent (100%) of the contract price, to guarantee the faithful performance of the contract ("Performance Bond") and payment to individuals or entities who provide work on the Project under the contract with Contractor or any subcontract for the Project issued by Contractor. The Performance Bond shall cover all warranty and maintenance work required by the contract and any and all work required to correct patent or latent defects.

4.10 Termination Clause.

The Contract shall contain provisions for termination for cause and for convenience by Daly City, including the manner by which termination will be affected and the basis for settlement.

4.11 Indemnity.

The Contracts for work performed that is reimbursed in whole or in part by SFPUC funds shall contain language requiring the Contractor(s) or consultants to indemnify, defend, and hold harmless the City and its officers, agents and employees for any and all claims for bodily injury or property damage arising out of the negligence or willful misconduct of the Contractor during the construction of the Project. Daly City shall include language that incorporates the indemnification requirement referenced above in the Contracts.

4.12 Ownership, Operation and Maintenance of Completed Project.

Following the completion and acceptance of the Project by Daly City, Daly City shall own, operate and maintain the Vista Grande Project. SFPUC will continue to own the Lake Merced drain which will be rehabilitated as part of the Project. Following completion of rehabilitation, the Lake Merced drain will be operated and maintained by Daly City under a long-term license agreement from the SFPUC, with drain operation in accordance with the terms of the agreed upon Lake Management Plan as it may be modified by mutual agreement in the future under Section 5.2.

4.13 Prevailing Wages for Construction Work.

Daly City agrees that any person performing labor in the construction of the Project using funds provided by the SFPUC under this MOA shall be paid not less than the highest prevailing rate of wages and that Daly City shall include in any contract for construction of the Project a requirement that all persons performing labor under such contract shall be paid not less than the highest prevailing rate of wages for the labor so performed. Daly City further agrees that it will comply with the provisions of subsection (b) of San Francisco Charter Section A7.204 and Section 6.22(E) of the San Francisco Administrative Code.

SECTION 5: PROJECT COORDINATION AND OPERATION

5.1 Information Sharing for Project Implementation.

A. Daly City Information Sharing Obligations. Upon request, Daly City shall voluntarily and timely provide to the SFPUC any and all information submitted by Daly City to the San Francisco Bay Regional Water Quality Control Board regarding the Vista Grande Project and any water quality or quantity data generated, but not yet submitted, to the San Francisco Bay Regional Water Quality Control Board. The SFPUC shall have the right to participate in meetings with San Francisco Bay Regional Water Quality Control Board staff regarding Project implementation and operation.

B. SFPUC Information Sharing Obligations. Upon request, SFPUC shall provide to Daly City any and all information regarding Lake Merced water surface elevations and water quality that is developed by, contracted for, or otherwise in the possession of SFPUC. Information pertinent to Lake Merced water surface elevations and water quality shall be interpreted to include available information regarding all four lakes (North Lake, East Lake, South Lake, and Impound Lake) that comprise the entirety of Lake Merced. Such information includes but is not limited to the results of any performed water quality sampling, information regarding groundwater pumping rates in the Westside Groundwater Basin, any emergency notices issued regarding the quality of Lake Merced water, and any information regarding changes to the connections among the four lakes that comprise Lake Merced.

5.2 Daly City Operation of the Vista Grande Project; Indemnification.

Daly City shall at all times operate the Project consistent with the current contents of the Vista Grande Project Lake Management Plan, as approved by the San Francisco Bay Regional Water Quality Control Board. The Lake Management Plan is expected to be adjusted after the effective date of this MOA as a result of adaptive management and the information provided to the San Francisco Bay Regional Water Quality Control Board in annual and five-year reports prescribed by the Lake Management Plan. As the supplier of stormwater to Lake Merced through operation of the Project, Daly City shall have sole responsibility for compliance with all state and federal regulations and permitting requirements that are related to the addition of stormwater to Lake Merced. In the event that Daly City fails to comply with any of its applicable state and federal permits, or SFPUC notifies Daly City of potential negative impacts to lake water quality exclusively due to the diversion of Daly City's stormwater, the SFPUC reserves the right to request that Daly City cease diversion of any stormwater to the lake until such a time as the permit compliance is restored or the impact to the lake is abated.

Daly City agrees to indemnify and defend the City and its officers, agents and employees from any and all liabilities, losses, damages or expenses, including, without limitation, reasonable attorneys' fees ("Claims"), to the extent they arise from or relate in any way to Daly City's acts or omissions concerning the operation of the Vista Grande Project; except that Daly City's foregoing indemnity obligation shall not apply to (i) any and all Claims associated with water quality conditions of Lake Merced, except to the extent a water quality condition arises out of or is in any way related to Daly City's diversion of stormwater into Lake Merced, or (ii) any and all Claims to the extent they arise from the negligence or willful misconduct of the City, its officers, agents or employees.

5.3 Lake Merced Water Quality.

As of the effective date of this MOA, Lake Merced is listed as an impaired water body under Section 303(d) of the Clean Water Act, 33 U.S.C. § 1313(d), for dissolved oxygen (DO) and pH. The Parties agree to coordinate any efforts to change Lake Merced's characterization on the State of California's list of impaired water bodies.

5.4 Water Rights.

A. Each Party agrees that it will not operate its existing and future groundwater wells within the Basin in a manner that causes Undesirable Results to Lake Merced under California Water Code §10721(x)(6) and 23 CCR § 354.28(c)(6).

B. Each Party reserves all rights to initiate or participate in a general adjudication of groundwater rights in and to the Basin, including but not limited to a comprehensive adjudication commenced pursuant to California Code of Civil Procedure section 830 *et seq*. In the event of a Basin adjudication, each Party reserves all rights, positions and defenses except that the following factual stipulations shall be binding on each Party in the Basin adjudication for all purposes:

1. Daly City and the SFPUC each augments the Basin groundwater supply as a result of leakage from water and sewer piping within their respective service areas overlying the Basin. The quantity and other parameters of such augmentation will be determined in the Basin adjudication proceeding.

2. Daly City augments the Basin groundwater supply as a result of the continued delivery of recycled water by Daly City under the 2002 Recycled Water

Agreement between Daly City, the North San Mateo County Sanitation District, the SFPUC, and the Olympic, Lake Merced, and San Francisco Golf Clubs. The quantity and other parameters of such augmentation will be determined in the Basin adjudication proceeding.

3. The augmentation of the Basin groundwater supply as a result of the addition of stormwater to Lake Merced through implementation of the Vista Grande Project shall be credited to the SFPUC as part of the consideration for the SFPUC's contribution towards construction costs of the Vista Grande Project in Section 4.1 of this MOA. The quantity and other parameters of such augmentation will be determined in the Basin adjudication proceeding. This stipulation shall not be interpreted to allocate any responsibility whatsoever to the SFPUC for the quality of any stormwater from the Vista Grande system prior to its addition to Lake Merced, which remains Daly City's sole responsibility under §5.2.

4. SFPUC, as the owner of the Lake Merced Tract purchased from the Spring Valley in 1930, owns riparian water rights to Lake Merced that currently support the beneficial uses of fish and wildlife habitat, recreation, and emergency non-potable water supply. The nature and extent of such riparian rights, and the quantity of water available under such rights, will be determined in the Basin adjudication proceeding.

5. SFPUC augments the Basin groundwater supply to the extent that water percolates to storage in the Basin through the bed and banks of Lake Merced as a result of the 1895 construction of a dam in the outlet of Lake Merced that added 2.5 billion gallons of additional storage capacity. The quantity and other parameters of such augmentation will be determined in the Basin adjudication proceeding.

C. Nothing in this MOA shall be construed as modifying, amending or otherwise affecting the "Agreement for Groundwater Storage and Recovery from the Southern Portion of the Westside Basin by and among the San Francisco Public Utilities Commission, the City of Daly City, the City of San Bruno, and California Water Service Company" ("RGSR Project Operating Agreement").

5.5 Project Construction Timeline.

Once permits for the Project are secured, Daly City shall provide the SFPUC with a schedule or timeline for anticipated start and completion of Project construction. Daly City shall provide to the SFPUC periodic updates to the schedule or timeline.

SECTION 6: GENERAL PROVISIONS

6.1 Term.

The term for completion of Vista Grande Project construction under this MOA shall be sixty (60) months. The obligations of each Party set forth in sections 5.1 to 5.4, inclusive, shall survive the term of this MOA and continue in force as long as the Project is operational. The Parties' respective obligations in section 4.2.D to install and maintain mitigation plantings within the Lake Merced Tract shall survive the term of this MOA and continue in force until the mitigation obligation has been deemed complete under the Project's Coastal Development Permit.

6.2 Invalidity of Any Term Not to Invalidate Entire MOA.

In the event that any of the terms, covenants, or conditions of this MOA or the application of any such term, covenant, or condition shall be held invalid as to any party by any court of competent jurisdiction, all other terms, covenants, or conditions of this MOA and their application shall not be affected thereby, but shall remain in full force and effect unless any such court holds that those provisions are not separable from all other provisions of this MOA.

6.3 Construction of Terms.

This MOA is for the sole benefit of the Parties and shall not be construed as granting rights to or imposing any obligations on any person or entity other than the Parties.

6.4 Incidental, Consequential, and Indirect Damages.

To the extent permitted by law, neither of the Parties shall be liable to the other Party for consequential, indirect, special damages or lost profits.

6.5 Good Faith

The Parties shall use their best efforts and work wholeheartedly and in good faith for the expedited completion of the objectives of this MOA and the satisfactory performance of its terms.

6.6 Conflict of Interest.

Through its execution of this MOA, Daly City acknowledges that it is familiar with the provisions of Section 15.103 of the San Francisco Charter and Sections 87100 et seq. and Sections 1090 et seq. of the Government Code of the State of California and certifies that it does not know of any facts that constitute a violation of said provisions. Daly City agrees that if it becomes aware of any such fact during the term of this MOA, Daly City shall immediately notify the SFPUC.

6.7 Liability of San Francisco.

The SFPUC's obligations under this MOA shall be limited to the payment of the not-to-exceed amount of compensation provided for in Section 4.1 and the actions described in Section 5. Notwithstanding any other provision of this MOA, in no event shall SFPUC be liable, regardless of whether any claim is based on contract or tort, for any special, consequential, indirect or incidental damages, including, but not limited to, lost profits, arising out of or in connection with this MOA or the services performed by Contractor in connection with this MOA.

6.8 Termination for Convenience.

After SFPUC's payment of the not-to-exceed amount of compensation provided for in Section 4.1, the SFPUC may terminate this MOA for San Francisco's convenience and without cause at any time by giving Daly City thirty (30) calendar days written notice of such termination; Daly City may terminate this MOA for Daly City's convenience and without cause at any time by giving the SFPUC thirty (30) calendar days written notice of such termination. In the event of termination, Daly City shall not be obligated to further perform any activities described in this MOA. In the event of termination, SFPUC and Daly City will continue to voluntarily provide the other with the information described in Section 5.1. In no event will the SFPUC be liable for Contract costs incurred after receipt of a notice of termination.

6.9 Amendment.

The Parties may agree to modify the terms of this MOA by written agreement authorized by the governing boards of both Parties.

6.10 Waiver.

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The Parties agree that waiver by either Party of any breach or violation of any term or condition of this MOA will not be deemed to be a waiver of any other term or condition contained herein, or a waiver of any subsequent breach or violation of the same, or any other term or condition. The acceptance of the performance of any work or services by either Party will not be deemed to be a waiver of any term or condition of this MOA.

6.11 Assignment.

This MOA may not be assigned by any of the Parties without the express written consent of the other Party.

DRAFT

6.12 Dispute Resolution.
The Parties shall make good faith efforts to resolve disputes or disagreements arising from this MOA through a meet and confer process. If a dispute or disagreement arises, the Parties shall meet and confer within ten (10) calendar days of receiving written notification from the other Party describing the dispute and shall thereafter schedule and participate in further meetings, if appropriate, in an effort to resolve the dispute or disagreement.

6.13 Ownership of Materials.
All Project plans, specifications, reports, documents, or other materials developed by Daly City or any other person engaged directly or indirectly by Daly City will be and will remain the property of Daly City, without restriction or limitation upon their use. Notwithstanding the above, Daly City will make available to SFPUC copies of all non-privileged and non-confidential plans, specifications, reports, documents, or other materials developed by Daly City pursuant to this MOA for inspection or audit at any time, during regular business hours, upon written request by the SFPUC.

6.14 Entire Agreement.
This MOA sets forth the entire agreement of the Parties and supersedes all other oral or written agreements or understandings related to the design and construction of the Project. This MOA may only be modified by writing executed by both Parties.

6.15 San Francisco Sunshine Ordinance.
Daly City understands and agrees that the San Francisco Sunshine Ordinance (San Francisco Administrative Code Chapter 67) and the California Public Records Act (Govt. Code Section 6250 et seq.) apply to this MOA and any and all records, information, and materials may be subject to public disclosure in accordance with the terms of the ordinance and state law.

6.16 Nondiscrimination.
In the performance of this MOA, Daly City shall not discriminate against any employee, subcontractor, applicant for employment with Daly City, or against any person seeking accommodations, advantages, facilities, privileges, services, or membership in all business, social, or other establishments or organizations, on the basis of the fact or perception of a person's race, color, creed, religion, national origin, ancestry, age, height, weight, sex, sexual orientation, gender identity, domestic partner status, marital status, disability or Acquired Immune Deficiency Syndrome or HIV status ("AIDS/HIV status"), or association with members of such protected classes, or in retaliation for opposition to discrimination against such classes.

6.17 Governing Law.
The Parties agree that the law governing this MOA will be that of the State of California. The Parties will comply with all applicable laws and regulations. As the Party fully responsible for the design, construction, operation, and maintenance of the Project, Daly City will comply with all applicable laws and regulations concerning the design, construction, operation, and maintenance of the Project.

6.18 Notices. All notices and other communications required or permitted to be given under this MOA will be in writing and will be e-mailed, personally served or mailed, postage prepaid and return receipt requested, and addressed to the Parties as follows:

SFPUC: Steve Ritchie
Assistant General Manager, Water
San Francisco Public Utilities Commission
525 Golden Gate Avenue, 13th Floor
San Francisco, CA 94102
SRitchie@sfwater.org

With a copy to: Sheryl Bregman
Utilities General Counsel
1390 Market Street, Suite 418
San Francisco, CA 94102

Sheryl.Bregman@sfcityatty.org

Daly City: Tom Piccolotti, City Manager
Department of Water and Wastewater Resources
153 Lake Merced Blvd.
Daly City, CA 94105
tpiccolotti@dalycity.org

With a copy to: Joshua Cosgrove, Director
Department of Water and Wastewater Resources
153 Lake Merced Blvd.
Daly City, CA 94105
jcosgrove@dalycity.org

Rose Zimmerman
City Attorney
333 90th Street
Daly City, CA 94105
rzimmerman@dalycity.org

Notice will be deemed effective on the date e-mailed, personally delivered, or if mailed, three (3) days after placement in the mail.

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IN WITNESS WHEREOF, the Parties have executed this Memorandum of Agreement by their duly authorized representatives as of the day and year indicated on the first page of this MOA.

CITY AND COUNTY OF SAN FRANCISCO
PUBLIC UTILITIES COMMISSION

By:_____
Dennis Herrera
General Manager

Dated:_____

Authorized by San Francisco Public Commission Resolution No. _____

By:_____
Commission Secretary

APPROVED AS TO FORM

By:_____
Joshua Milstein
Deputy City Attorney

CITY OF DALY CITY

By:_____
Thomas J. Piccolotti
City Manager

Dated:_____

Authorized by City Council Resolution No. _____

By:_____
City Clerk

APPROVED AS TO FORM

By:_____
Rose Zimmerman
City Attorney

DRAFT

EXHIBIT A
VISTA GRANDE PROJECT LAKE MERCED LAKE MANAGEMENT PLAN

DRAFT

EXHIBIT B
100% PROJECT DESIGN DRAWINGS

DRAFT

EXHIBIT C

MITIGATION PLANTINGS, MAINTENANCEPLAN

Daly City and its Contractors will be responsible for:

- Obtaining necessary permits from CCSF, Caltrans, and updated regulatory permits prior to commencement of construction
- Construction mitigation implementation (e.g., pre-construction surveys, worker awareness training, mitigation monitoring) and Mitigation Monitoring and Reporting as required by regulatory permits up to ten year maintenance period.
- Construction of the Restoration Sites per the final restoration site design approved by Daly City and CCSF, and as permitted by CCSF, Caltrans, and regulatory agencies.
- Obtaining a metered water connection from CCSF and bringing water to the site for needed irrigation
- Maintaining recreational access on trails, except during short active construction periods

During the five-year Plant Establishment Maintenance period Daly City will be responsible for:

- Weeding all non-native invasive plants to a level that meets the project's performance criteria in terms of area and species cover
- Maintaining all components of the irrigation system if installed (lines, hoses, emitters, sprayers, tanks, meters, connections, etc.)
- Maintaining and replacing all plants as needed to meet ground cover and other performance criteria
- Eliminating trash
- Monitoring and remediating erosion issues
- Fencing maintenance and repair to keep the plants protected and the sites secure
- Removal of the irrigation system at the end of 3 years

<u>CCSF/SFPUC and its Contractors will be responsible for:</u>

Following completion of the five-year Plant Establishment Maintenance period, SFPUC/CCSF will:

- Perform maintenance of the restoration sites for years six through ten (CCC will define how many additional years, up to ten years total, will be required after the initial five year maintenance period) which would primarily include weeding of non-native invasive plants, reseeding and replacing plants to a level that meet's the project's performance criteria in terms of area and species cover.

VISTA GRANDE DRAINAGE BASIN IMPROVEMENT PROJECT EIR/EIS

Environmental Impact Report/
Environmental Impact Statement Addendum
State clearinghouse NO. 2013032001

Prepared for
City of Daly City
National Park Service

June 2025

ESA

VISTA GRANDE DRAINAGE BASIN IMPROVEMENT PROJECT EIR/EIS

Environmental Impact Report/
Environmental Impact Statement Addendum
State clearinghouse NO. 2013032001

Prepared for
City of Daly City
National Park Service

June 2025

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ESA

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OUR COMMITMENT TO SUSTAINABILITY | ESA helps a variety of public and private sector clients plan and prepare for climate change and emerging regulations that limit GHG emissions. ESA is a registered assessor with the California Climate Action Registry, a Climate Leader, and founding reporter for the Climate Registry. ESA is also a corporate member of the U.S. Green Building Council and the Business Council on Climate Change (BC3). Internally, ESA has adopted a Sustainability Vision and Policy Statement and a plan to reduce waste and energy within our operations. This document was produced using recycled paper.

TABLE OF CONTENTS

Vista Grande Drainage Basin Improvement Project EIR/EIS Addendum

Page

Acronyms and Other Abbreviations ..... **iii**

Section 1. Background and Purpose of the Addendum **1-1**
1.1 Background 1-1
1.2 Summary of Past Analysis 1-1
1.3 Purpose of the Addendum 1-2
1.4 Determination and Addendum Conclusion 1-3

Section 2. Project Description **2-1**
2.1 Prior Project Description 2-1
2.2 Proposed Modifications to the Project 2-3

Section 3. Discussion of Impacts **3-1**
3.1 Aesthetics 3-3
3.2 Air Quality 3-6
3.3 Biological Resources 3-11
3.4 Cultural Resources 3-16
3.5 Geology and Soils 3-18
3.6 Greenhouse Gas Emissions and Climate Change 3-20
3.7 Hydrology and Water Quality 3-23
3.8 Noise and Vibration 3-27
3.9 Recreation 3-31
3.10 Energy Conservation 3-33

Section 4. References and Report Preparers **4-1**
4.1 References 4-1
4.2 Lead Agency 4-3
4.3 Consultant 4-3

List of Figures

Figure 2-1 Modified Project Components (Canal) 2-5
Figure 2-2 Habitat Restoration Sites 2-6
Figure 2-3 Pacific Rod and Gun Club Work Area 2-10
Figure 2-4a Original Fort Funston Work Area 2-12
Figure 2-4b Modified Fort Funston Work Area 2-13
Figure 2-5a Original Ocean Outlet Construction Area 2-15
Figure 2-5b Modified Ocean Outlet Design 2-18

Page

List of Tables

Table 2-1 Restoration Site Locations and Areas (acres) 2-8
Table 3-1 Construction Criteria Pollutant Exhaust Emissions 3-7
Table 3-2 Estimated Project Construction Greenhouse Gas Emissions 3-21
Table 3-3 Typical Noise Levels Produced By Construction Equipment 3-28

Acronyms and Other Abbreviations

BAAQMD	Bay Area Air Quality Management District
Bay Area	San Francisco Bay Area
BMP	best management practice
Canal	Vista Grande Canal
CEQA	California Environmental Quality Act
CO_2e	carbon dioxide equivalent
Coastal Commission	California Coastal Commission
dBA	A-weighted decibels
DPM	diesel particulate matter
District	North San Mateo County Sanitation District
EIR	environmental impact report
EIS	environmental impact statement
ESHA	environmentally sensitive habitat area
GHG	greenhouse gas
hp	horsepower
lb/day	pounds per day
L_{dn}	day-night average sound level
Modified Project	minor revisions and additions to the Vista Grande Drainage Basin Improvement Project that have occurred since Project approval
NOx	oxides of nitrogen
NPS	National Park Service
PG&E	Pacific Gas and Electric Company
$PM_{2.5}$	particulate matter 2.5 micrometers or less in diameter
PM_{10}	particulate matter 10 micrometers or less in diameter
Project	Vista Grande Drainage Basin Improvement Project
ROG	reactive organic gases
SFDPW	San Francisco Department of Public Works
SFPUC	San Francisco Public Utilities Commission
TAC	toxic air contaminant
Tunnel	Vista Grande Tunnel
WSE	water surface elevation

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SECTION 1
Background and Purpose of the Addendum

1.1 Background

This environmental impact report/environmental impact statement (EIR/EIS) addendum has been prepared to address minor revisions and additions to the Vista Grande Drainage Basin Improvement Project (Project). The North San Mateo County Sanitation District (District)—a subsidiary of the City of Daly City, the lead agency responsible for administering the environmental review of the Project under the California Environmental Quality Act (CEQA)—and the National Park Service (NPS), the lead agency under the National Environmental Policy Act, completed an EIR/EIS (State Clearinghouse No. 2013032001) for the Project. The EIR/EIS addresses storm-related flooding that currently occurs in the Vista Grande Drainage Basin and proposes to provide other environmental benefits, including the restoration and management of water levels in Lake Merced.

This addendum describes minor revisions and additions (Modified Project) that have occurred since Project approval, reviews CEQA requirements for preparing an addendum, and substantiates the finding that the Modified Project would not result in new or more severe environmental impacts than previously disclosed in the EIR/EIS.

1.2 Summary of Past Analysis

1.2.1 Draft EIR/EIS

The Draft EIR/EIS, published on April 28, 2016, described the Project, identified the environmental consequences associated with the Project's implementation, and specified mitigation measures to reduce significant and potentially significant impacts. The NPS Notice of Availability for the Draft EIR/EIS was published in the *Federal Register* on April 29, 2016.

1.2.2 Final EIR/EIS

The Final EIR/EIS, published on September 8, 2017, consisted of the Draft EIR/EIS and the response to comments document. The Final EIR/EIS was also published in the *Federal Register* on September 15, 2017.

1.2.3 Notice of Determination/Record of Decision

The City of Daly City certified the EIR/EIS, adopted CEQA findings, and implemented a mitigation monitoring and reporting program on December 11, 2017. Daly City filed the Notice of

Determination with San Mateo County on December 13, 2017. A Record of Determination was adopted by the NPS on July 27, 2018.

All the documents described above are herein incorporated by reference.

1.3 Purpose of the Addendum

The CEQA Guidelines (Sections 15162 and 15164) allow a lead agency to prepare an addendum to a previously certified EIR if some changes or additions to the environmental evaluation of a project are necessary, and the following conditions are met:

1. There are no substantial changes in the project which require major revisions to the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.
2. There are no substantial changes with respect to the circumstances under which the project is undertaken which require major revisions to the previous EIR due to involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects.
3. No new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, which shows any of the following:
    a. The project will have one or more significant effects not discussed in the previous EIR.
    b. Significant effects previously examined will be substantially more severe than disclosed in the previous EIR.
    c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative.
    d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

The District proposes to make the following modifications to the Project:

- Changing the Vista Grande Canal (Canal) staging areas and components.
- Installing a water recirculation pump.
- Adding habitat restoration sites around Lake Merced.
- Using the Pacific Rod and Gun Club as a work area.
- Revising the Fort Funston work area.
- Updating the power source to be used during construction activities.
- Using ventilation fans during work in the Vista Grande Tunnel (Tunnel).
- Removing the wing walls from the final design of the Ocean Outlet at Funston Beach.

See Section 2.1, *Prior Project Description*, for a full description of the Project.

1.4 Determination and Addendum Conclusion

This addendum concludes that the Modified Project would not result in any new significant impacts not previously disclosed in the EIR/EIS, and it would not result in a substantial increase in the magnitude of any significant environmental impact previously identified. Additionally, there is new information that shows that the mitigation measures previously found not to be feasible would in fact be feasible, or that mitigation measures or alternatives considerably different from those analyzed in the previous EIR/EIS would substantially reduce one or more significant effects on the environment. The Modified Project would also be subject to the mitigation measures already adopted as part of the mitigation monitoring and reporting program. Therefore, an addendum to the EIR/EIS is sufficient to meet the requirements of CEQA Section 15164. The addendum to the EIR/EIS serves as documentation that the Modified Project described in Section 1.3, *Purpose of the Addendum*, does not trigger any of the conditions outlined in CEQA Guidelines Section 15162 that would require a subsequent EIR/EIS. Therefore, a subsequent EIR/EIS is not required.

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SECTION 2
Project Description

2.1 Prior Project Description

The following discussion provides a description of the Project construction and operation elements that would be affected by the proposed modifications. Therefore, construction and operation elements that would change under the Modified Project are not discussed further.

2.1.1 Project Location

As described in Section 2.2, *Project Location*, of the EIR/EIS, the Vista Grande Basin (the watershed that drains into the Canal) is located in Daly City and in unincorporated Broadmoor Village in northwestern San Mateo County. This watershed covers approximately 2.5 square miles and is bordered by San Francisco to the north, the Colma Creek watershed to the south and east, and Thornton State Beach and the Pacific Ocean to the west. The Canal and Tunnel are located primarily within the city and county of San Francisco. The Canal alignment runs adjacent to John Muir Drive and the southwestern shoreline of Lake Merced, with a small portion of the beginning of the Canal situated within unincorporated San Mateo County. The Tunnel extends beneath private lands, Skyline Boulevard, and Fort Funston—a former U.S. Army installation now managed by NPS as part of the Golden Gate National Recreation Area. The Tunnel outlet is located at the Pacific Ocean on Fort Funston Beach.

2.1.2 Project Components

As described in Section 2.4, *Proposed Project Components*, of the EIR/EIS, the Project would improve stormwater drainage and minimize flooding risk, provide a water source for Lake Merced management, improve recreational access to and reduce litter deposition at the beach below Fort Funston, and maximize the use of existing infrastructure and rights-of-way. The Project would consist of the following:

- Partially replacing the existing Canal to incorporate a gross solid screening device, a constructed treatment wetland, and diversion and discharge structures. These modifications would route some stormwater (and authorized non-stormwater) flows from the Canal to Lake Merced and allow lake water to be used for summer treatment wetland maintenance. The operation would be implemented in accordance with the initial Vista Grande Operational Plan, which is part of the proposed Lake Management Plan.
- Modifying the existing effluent gravity pipeline to enable year-round conveyance of treated effluent from the nearby District wastewater treatment plant to the existing outlet and diffuser by gravity, while abandoning the force main pipeline.

- Modifying the existing lake overflow structure to include an adjustable weir and siphon that allows water from the lake to flow into the Canal and Tunnel.
- Replacing the existing Tunnel to expand its hydraulic capacity and extend its operating lifetime and replacing the Lake Merced Portal to the Tunnel.
- Replacing the existing Ocean Outlet structure and a portion of the existing 33-inch submarine outfall pipeline that crosses the beach at Fort Funston.
- Implementing a prioritized suite of best management practices (BMPs) within the Vista Grande Basin storm drain system upstream of the Canal or within the Lake Merced watershed.

Operational components of the Project, described further below, would include managing the water surface elevation (WSE) in Lake Merced and implementing a Lake Management Plan (see Appendix A of the EIR/EIS).

Additionally, the Project includes NPS execution of a Special Use Permit for construction activities within Golden Gate National Recreation Area lands and the expansion of the rights-of-way to accommodate the replacement of the Ocean Outlet structure.

2.1.3 Project Construction

As discussed in Section 2.5, *Project Construction*, of the EIR/EIS, the construction phase would require approximately 1,300 kilowatts of electricity, primarily for Tunnel construction activities. For a conventional tunneling operation, the estimated minimum required power connection is about 3,000 kilovolt-amperes. Temporary construction power would be provided in the staging area at Fort Funston via a temporary Pacific Gas and Electric Company (PG&E) service connection. An emergency power supply (generator) with a capacity of 1,000 kilovolt-amperes would be located on-site during construction.

Staging and work areas would be established for each segment of the Project site to store contractors' construction equipment and materials (e.g., vehicles, fuels, lubricants). The staging and work areas may also be used to stockpile excavated soil for eventual reuse during construction. Areas of temporary disturbance would be restored to pre-Project conditions or similar. Staging and work areas described in the EIR/EIS include the following:

- **Box culvert, diversion structure, and Lake Merced Portal:** Staging areas would be adjacent to work areas. Construction and staging areas adjacent to John Muir Drive would be enclosed by chain-link fencing erected along John Muir Drive. These areas have no existing public access.
- **Diversion to Impound Lake—John Muir Drive Crossing:** An internally braced sheet pile excavation would cross John Muir Drive. Chain-link fencing would be placed around the excavation. Traffic and pedestrian access would be temporarily rerouted around the excavation.
- **Shaft staging and shotcrete installation:** The Fort Funston staging area and the area used for shotcrete installation would likely have chain-link fencing around the perimeter. These are the only areas that would be excluded from public use during construction activities.

- **Ocean Outlet:** A U-shaped sheet pile cofferdam around the Ocean Outlet structure would form the barrier to exclude the public, including dogs, from the construction area and to isolate the work area from tidal waters. The cofferdam would extend slightly beyond the seaward extent of the existing outlet structure.

As discussed in Section 2.5.5, *Tree and Vegetation Removal*, of the EIR/EIS, trees would be removed in several areas: adjacent to the Canal to accommodate the Canal improvements, at the wetland treatment cell installation sites, along the portion of the diversion structure on the south side of John Muir Drive, and in Lake Merced Portal's vicinity. No trees would be removed from NPS-managed lands at Fort Funston. Permitting authority and regulations regarding tree and vegetation removal would vary throughout the site depending on the jurisdiction of the area affected.

2.2 Proposed Modifications to the Project

The Modified Project would include the following updates:

- Changing the Canal staging areas and components.
- Installing a water recirculation pump.
- Adding habitat restoration sites around Lake Merced.
- Using the Pacific Rod and Gun Club as a work area.
- Revising the Fort Funston work area.
- Updating the power source for construction activities.
- Using ventilation fans during work in the Tunnel. and
- Removing wing walls from the final design of the Ocean Outlet at Funston Beach.

The proposed Modified Project is described in further detail below.

2.2.1 Vista Grande Canal

As discussed in Section 2.4.1, *Vista Grande Canal Improvements and Diversion of Stormwater to Lake Merced*, and Section 2.5.1, *Canal Improvements and Diversion to Lake Merced*, of the EIR/EIS, the Project includes replacing the upstream portion of the Canal with a collection box, box culvert, debris screening device, and diversion structure that would enable the diversion of Canal flows into Lake Merced. A constructed treatment wetland would be developed in an area between John Muir Drive and the southern edge of the Canal to handle low flows (dry and wet) year-round. From the diversion structure, a box culvert would be constructed under John Muir Drive and a screened outlet structure would be constructed at the edge of Impound Lake. Improvements to the Canal components would be constructed from staging areas adjacent to the work areas.

Construction of the Canal improvements, diversion structure/pipeline, and treatment wetland would require site clearing and removal of vegetation in the area bounded by Lake Merced Boulevard, John Muir Drive, and the southern edge of the Canal. In Table 2-1, *Summary of*

Construction Requirements for Project Components, of the EIR/EIS, the staging area for the Canal portion is approximately 10 acres, with a final footprint of 4 acres. After completion of construction, staging areas, access routes, and other areas temporarily disturbed during construction would be revegetated with a mix of native, low-growing shrub species common to local riparian corridors and coastal scrub habitats.

Under the Modified Project, sites along the Canal that were part of the overall Project footprint but were not likely to be disturbed would be used as a staging area for work on the Canal. The Modified Project would add staging areas adjacent to the Canal between the rehabilitated Lake Merced Portal and Wetland Cell B, with a footprint of 1.24 acres (see **Figure 2-1**). Additionally, a permanent access ramp would be installed to access the areas adjacent to the Canal from the rehabilitated Lake Merced Portal, which would provide access for maintenance and service activities.

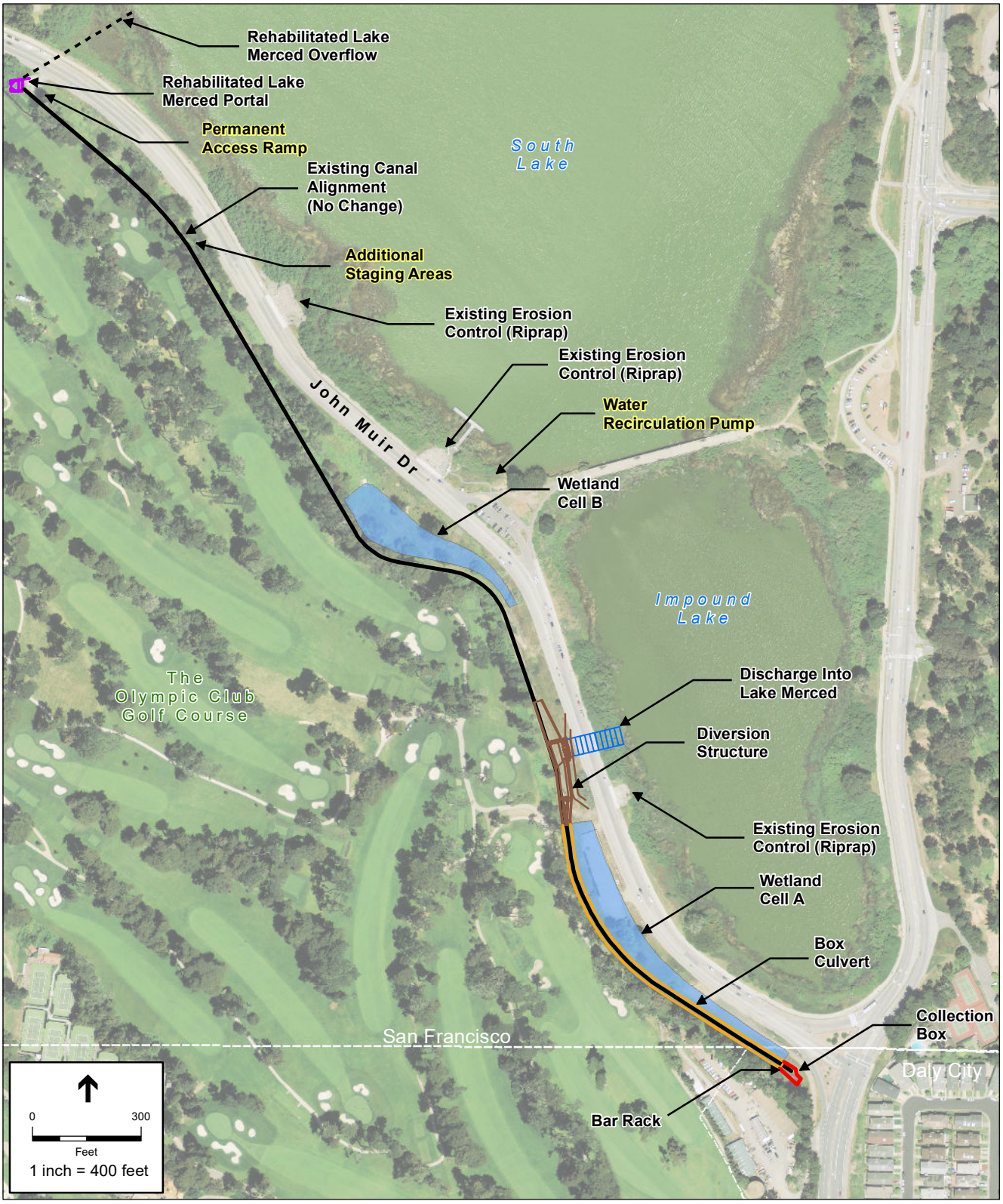
The additional staging areas may require the installation of temporary chain-link fencing around the perimeter to serve as a buffer and screen from public views; however, the proposed staging areas do not provide public access. The proposed staging areas would be restored to pre-Project conditions after completion of construction activities.

2.2.2 Water Recirculation Pump

As discussed above the treatment wetland would be developed along John Muir Drive to treat year-round low flows from the watershed to reduce sediment, suspended solids, metals, and nutrients. Low-volume stormwater flows, authorized non-storm flows, and recirculated lake water would be treated before release to Lake Merced. The wetland consists of two cells: Wetland Cell A, approximately 1.7 acres in size, and Wetland Cell B, 0.9 acre in size, for a total area of 2.6 acres.

To maximize lake water treatment during summer months, a flexible pipeline approximately 18 inches in diameter would be installed underground between South Lake and Impound Lake, as discussed in EIR/EIS Section 2.4.1.3, *Constructed Treatment Wetland*. During periods of high algae growth in South Lake, a skimmer—a floating structure with some wind protection that draws water from the upper few inches of the lake surface—would be used to uptake water with high algae concentrations and route it through the treatment wetland via a flexible pipeline. Although the skimmer and pipeline were discussed in the EIR/EIS, the project description did not identify the need for a water recirculation pump that would draw water from South Lake into the treatment wetlands. The Modified Project includes this pump, which would be installed underground, several feet from the bank of South Lake to pump water through the pipeline from South Lake into the diversion structure, then into the treatment wetland. The location of the proposed water recirculation pump is shown in **Figure 2-2**.

The Modified Project (i.e., pump at South Lake) would include construction activities similar to those described in the EIR/EIS and would be visible from public roadways. Additionally, the South Lake pump's construction would involve ground-disturbing activities similar to that described in the EIR/EIS and within the specified geotechnical conditions.



SOURCE: McMillen Jacobs Associates, 2013

Vista Grande Drainage Basin Improvement Project 200700036.01

Figure 2-1

Modified Project Components (Canal)

SOURCE: ESA, 2025.

Vista Grande Drainage Basin Improvement Project 200700036.01

Figure 2-2
Habitat Restoration Sites

ESA

2.2.3 Habitat Restoration Sites

As discussed in Section 3.4.5, *Impact Analysis (Biological Resources)*, of the EIR/EIS, the direct loss of jurisdictional wetlands and waters would have a potentially significant impact. The EIR/EIS included **Mitigation Measure 3.4-8b**, which requires restoration of temporary disturbance areas to pre-Project conditions, as required by regulatory permits. It would also offset unavoidable permanent impacts on jurisdictional wetlands, waters, and riparian habitat from Project components through compensatory mitigation, helping to ensure no net loss of regulated aquatic resources, as required by regulatory permits.

The EIR/EIS determined that Project operation would not adversely affect wetland habitats and other waters of the United States associated with Lake Merced, as modeling results predicted a net expansion of shoreline wetlands (see EIR/EIS subsection *Impacts of Lake Level Changes on Biological Resources at Lake Merced and Mitigation Measures* in Section 3.4.5).

The EIR/EIS included **Mitigation Measure 3.4-10a** and **Mitigation Measure 3.4-10b**, which would reduce potential impacts on wax myrtle scrub and Vancouver rye grassland resulting from Project implementation to less-than-significant levels. This would be achieved through managing water levels to avoid Project-related losses of sensitive communities or through compensatory mitigation if these losses cannot be avoided. **Mitigation Measure 3.4.10a** required that the overflow weir at South Lake be set no greater than 9 feet city datum to avoid significant impacts on the sensitive natural (upland) communities of wax myrtle scrub, Vancouver rye grassland, and eucalyptus forest, which would otherwise be lost in significant quantities from inundation under the Project. **Mitigation Measure 3.4.10b** required monitoring and compensation through habitat restoration for loss of these communities if the lake WSE would exceed 9 feet city datum for more than 14 days. The Modified Project would identify a WSE that would comply with **Mitigation Measure 3.4.10a** and would incorporate **Mitigation Measure 3.4.10b** if a future scenario required exceedance of 9 feet WSE for more than 14 days.

The EIR/EIS assumed that compensatory mitigation for impacts on regulated aquatic resources would occur at a minimum 1:1 ratio for affected arroyo willow riparian and freshwater marsh (wetland) habitat. It also assumed that this and any additional compensatory mitigation requirements from regulatory agencies issuing permits and authorizations for the Project would be fulfilled through the predicted passive expansion of open water habitat and freshwater marsh from Project operations raising the WSE, making the Project "self-mitigating." The regulatory agencies that issued permits and authorizations for the Project in 2022 and 2023 (the U.S. Army Corps of Engineers, San Francisco Bay Regional Water Quality Control Board, and California Department of Fish and Wildlife) accepted the prediction that the passive expansion of open water habitat and freshwater marsh from the Project's operations raising the WSE would adequately offset the Project's permanent impacts on aquatic habitats, thus making it "self-mitigating." The agencies required post-Project monitoring and reporting to verify success.

The California Coastal Commission (Coastal Commission) has regulatory authority over coastal wetlands and environmentally sensitive habitat areas (ESHAs) in the coastal zone. Much of the shoreline vegetation at Lake Merced was identified as an ESHA during the Project's review by the Coastal Commission for its Coastal Development Permit. As a condition of approval in the

Project's Coastal Development Permit, the Coastal Commission indicated that the Project must compensate for the loss of ESHA and coastal wetlands due to the operational increase of Lake Merced's WSE. The Coastal Commission concluded that these specific types of habitat losses were not offset by the predicted passive expansion of aquatic habitats from Project operations raising the WSE. To address the Coastal Development Permit condition of approval, 10 acres of on-site habitat restoration have been added to the Project. The mitigation sites' locations and areas are listed in **Table 2-1** and depicted in Figure 2-2.

TABLE 2-1
RESTORATION SITE LOCATIONS AND AREAS (ACRES)

Site ID	Area (acres)	Location
1	0.68	North Lake
2	1.00	
3	0.70	
4	0.43	
5	0.29	
6	0.11	
7	0.60	
8	0.07	South Lake–west shore
9	1.88	
10	0.40	
11	2.54	
12	0.48	South Lake–east shore
13	0.28	
14	0.57	East Lake
Tota l*	**10.0**	

NOTE:
* Total is approximate due to rounding.
SOURCE: Data compiled by Environmental Science Associates in 2025

Restoration would include the removal of existing non-native and invasive plant species (including trees), followed by seeding, planting, and installing temporary irrigation. Under the Modified Project, approximately 804 trees around Lake Merced would be removed for the installation of the habitat restoration sites; however, the final number would depend on the final design and acreage of the chosen sites. The trees would consist primarily of blue gum eucalyptus (*Eucalyptus globulus*) and other non-native species, including myoporum (*Myoporum laetum*), Monterey cypress (*Hesperocyparis macrocarpa*), and blackwood acacia (*Acacia melanoxylon*), with several other native and non-native species in less abundance.

The habitat restoration sites would be planted primarily with native arroyo willow (*Salix lasiolepis*) trees to expand willow riparian habitat along the Lake Merced shoreline. Freshwater marsh (wetland) plants, including swamp knotweed (*Persicaria amphibia*) and California bulrush (*Schoenoplectus californicus*), would be planted at the lower elevations of the mitigation sites near the future operational WSE. Native species associated with coastal scrub habitat, such as

Pacific wax myrtle (*Morella californica*), flowering current (*Ribes sanguineum* var. *glutinosum*), California sagebrush (*Artemisia californica*), California blackberry (*Rubus ursinus*), sticky monkeyflower (*Diplacus aurantiacus*), and toyon (*Heteromeles arbutifolia*), would be planted at elevations above the arroyo willow at some sites to create upland fringe habitat. After planting, the willow riparian and coastal scrub habitats would be seeded with a native seed mix of herbaceous understory species.

Restoration plantings would require temporary irrigation during the establishment period of approximately 3 years, sourced from water lines operated by the City and County of San Francisco. The proposed plantings would use approximately 2.5 acre-feet of water per year after initial planting until vegetation is established. Additionally, seeded areas may use up to 3.5 acre-feet of water combined in the months immediately after seeding. The habitat restoration sites may also require the installation of temporary chain-link fencing or other material around the perimeter to serve as a buffer, screen the site from public views, and to discourage herbivory.

2.2.4 Pacific Rod and Gun Club Work Area

As discussed in Section 2.1, *Prior Project Description*, staging and work areas would be established for each segment of the Project site to store contractors' construction equipment and materials (e.g., vehicles, fuels, lubricants). The staging and work areas might also be used to stockpile excavated soil for eventual reuse during construction. Areas of temporary disturbance would be restored to pre-Project conditions or similar.

Since the certification of the EIR/EIS, Daly City and the San Francisco Public Utilities Commission (SFPUC) have discussed temporary use of the portions of the site previously known as the Pacific Rod and Gun Club. The Pacific Rod and Gun Club was closed in 2015, as part of SFPUC's Pacific Rod and Gun Club Upland Soil Remedial Action Project, during which lead and debris-contaminated soils associated with the Pacific Rod and Gun Club's operation were excavated and backfilled with clean material. The site is currently planned for redevelopment as part of an SFPUC and San Francisco Recreation and Parks Department project known as the Lake Merced West Project, which would redevelop the site into a public park and boat launch (SFPUC 2024).

Under the Modified Project, the Pacific Rod and Gun Club would be used as an additional work area (see **Figure 2-3**), located at the southeastern corner of the property along John Muir Drive. The work area would be approximately 1.17 acres in size and would be used for 6 months at a time or until component completion. The site would primarily be used as a work area during the implementation of the compensatory mitigation sites and for the installation of the in-water Project components. Using this site for construction work was not evaluated in the EIR/EIS and would be considered an addition to the Project.

The addition of the site as a construction work area would not require excavation or alteration of the landscape, and areas adjacent to structures within the Pacific Rod and Gun Club site would be avoided. The Pacific Rod and Gun Club work area would be restored to pre-Project conditions or similar after the completion of construction activities through seeding a native grassland seed mix to disturbed areas.

SOURCE: Brown and Caldwell, 2024; Google Earth, 2025

Vista Grande Drainage Basin Improvement Project. 200700036.01

Figure 2-3
Pacific Rod and Gun Club Work Area

2.2.5 Fort Funston Work Area

As discussed in Section 2.5.2, *Vista Grande Tunnel and East and West Portals*, of the EIR/EIS, the replacement Tunnel component would be constructed from a temporary construction shaft located at Fort Funston, in an approximately 4-acre area that would also be used as a construction work area (see **Figure 2-4a**). Most construction activities associated with the Tunnel would take place in this area. The work area would include space for loading and unloading trucks, materials and equipment storage, shop facilities, office trailers, and parking. Existing vegetation in this area would be cleared before the initiation of construction activities.

After certification of the EIR/EIS, modifications were made to the Project design. Under the Modified Project, the Fort Funston work area would be reduced to 2.5 acres, 1.5 acres smaller than originally estimated (see **Figure 2-4b**). The proposed modifications also include a new temporary work area located within the Fort Funston parking lot, 400 feet southwest of the Fort Funston tunnel and shaft work area.

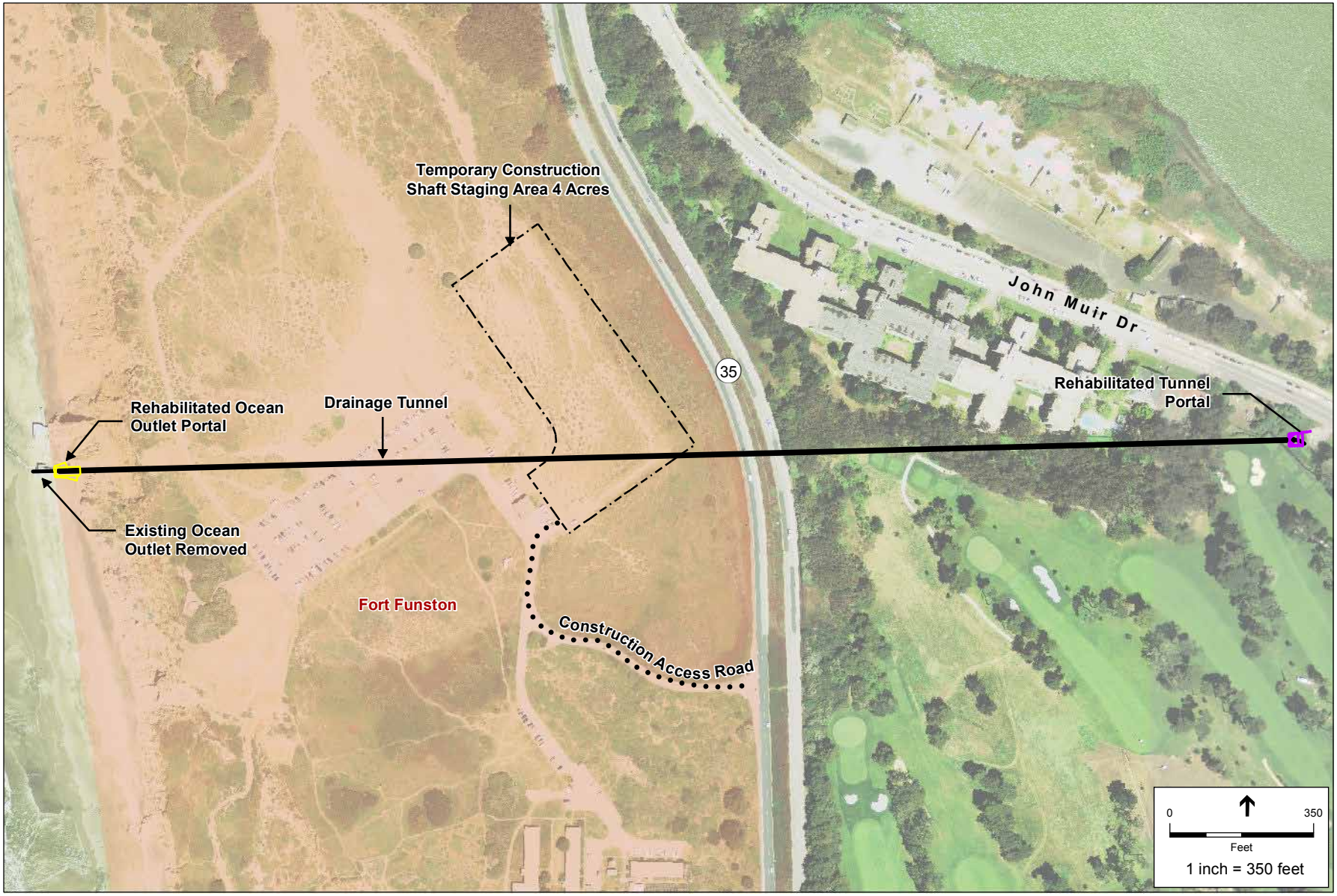
The new work area would be 0.44 acre and would be located in the northwest corner of the Fort Funston parking lot. The work area would be used for concrete fabrication work, with access from Fort Funston Road off Skyline Boulevard. Concrete fabricated at this work area would then be moved to the concrete pump work area to the west, located along the top of the bluffs above the Ocean Outlet location on Funston Beach.

The additional work area may require the installation of temporary chain-link fencing around the perimeter to serve as a buffer and screen the site from public views. After the completion of construction activities, the work areas would be restored to pre-Project conditions or similar, and disturbed areas would be regraded with native soils to match existing profiles. Additionally, the work areas would be revegetated with native coastal dune habitat, including species such as silver dune lupine (*Lupinus chamissonis*), mock heather scrub (*Ericameria ericoides*), and ice plant (*Carpobrotus edulis*).

2.2.6 Use of Diesel Generators

As discussed in Section 2.5.3.4, *Construction Power and Emergency Generators*, of the EIR/EIS, the electricity demand during construction would be 1,300 kilowatts, required solely for the Tunnel work area. This estimate includes equipment such as a road header or mini excavator, and ancillary equipment consisting of shotcrete application equipment, a batch plant, a compressor, pumps, ventilation fans, water treatment facilities, shop equipment, a warehouse, a change house, yard lighting, and office trailers. Temporary construction power would be provided to the work area at Fort Funston via a temporary PG&E service connection or a portable diesel-powered generator. If a temporary PG&E service connection is used, an emergency power supply (generator) with the capacity of 1,000 kilovolt-amperes would be located on-site during construction.

After certification of the EIR/EIS, Daly City determined that the use of a temporary PG&E service connection would not be feasible. Under the Modified Project, construction activities would be powered by seven additional generators ranging from 80 to 200 horsepower (hp). The generators would use diesel fuel and operate 24 hours a day, 5 days a week, until tunneling is

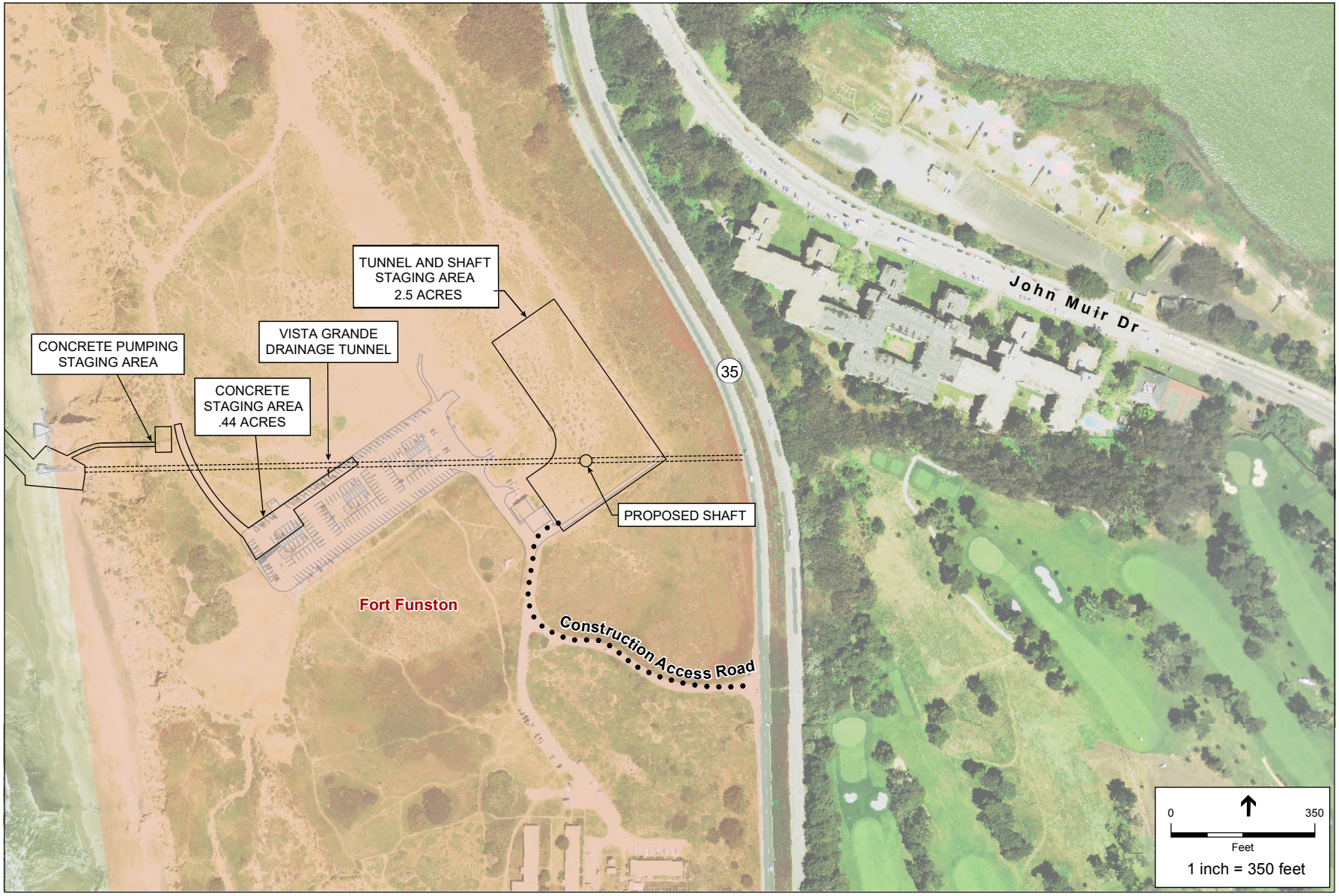


SOURCE: McMillen Jacobs Associates, 2013

Vista Grande Drainage Basin Improvement Project 200700036.01

Figure 2-4a

Original Fort Funston Work Area



SOURCE: Brown and Caldwell, 2024

Vista Grande Drainage Basin Improvement Project 200700036.01

Figure 2-4b
Modified Fort Funston Work Area

complete. The generators would be located within the Tunnel's rehabilitated east portal work area (see Figure 2-1) and the modified Fort Funston tunnel and shaft work area (see Figure 2-4b).

As discussed in *Fort Funston Work Area*, after the completion of construction activities, the work areas would be restored to pre-Project conditions or similar, and disturbed areas would be regraded with native materials to match existing profiles.

2.2.7 Ventilation at Tunnel Portals

As discussed in Section 2.4.2, *Vista Grande Tunnel and East and West Portals*, of the EIR/EIS, the existing Tunnel would be enlarged to increase its capacity to match the Canal's 500 cubic feet per second flow capacity and to extend its operating life by replacing the aging structure. The new Tunnel would have a concrete lining and a final internal diameter of approximately 9 feet. As discussed in Section 2.5.3, *Construction Schedule, Workforce, and Equipment*, a temporary 100 hp ventilation fan would be used for air circulation during the Tunnel construction activities and would be located within the Fort Funston tunnel and shaft work area.

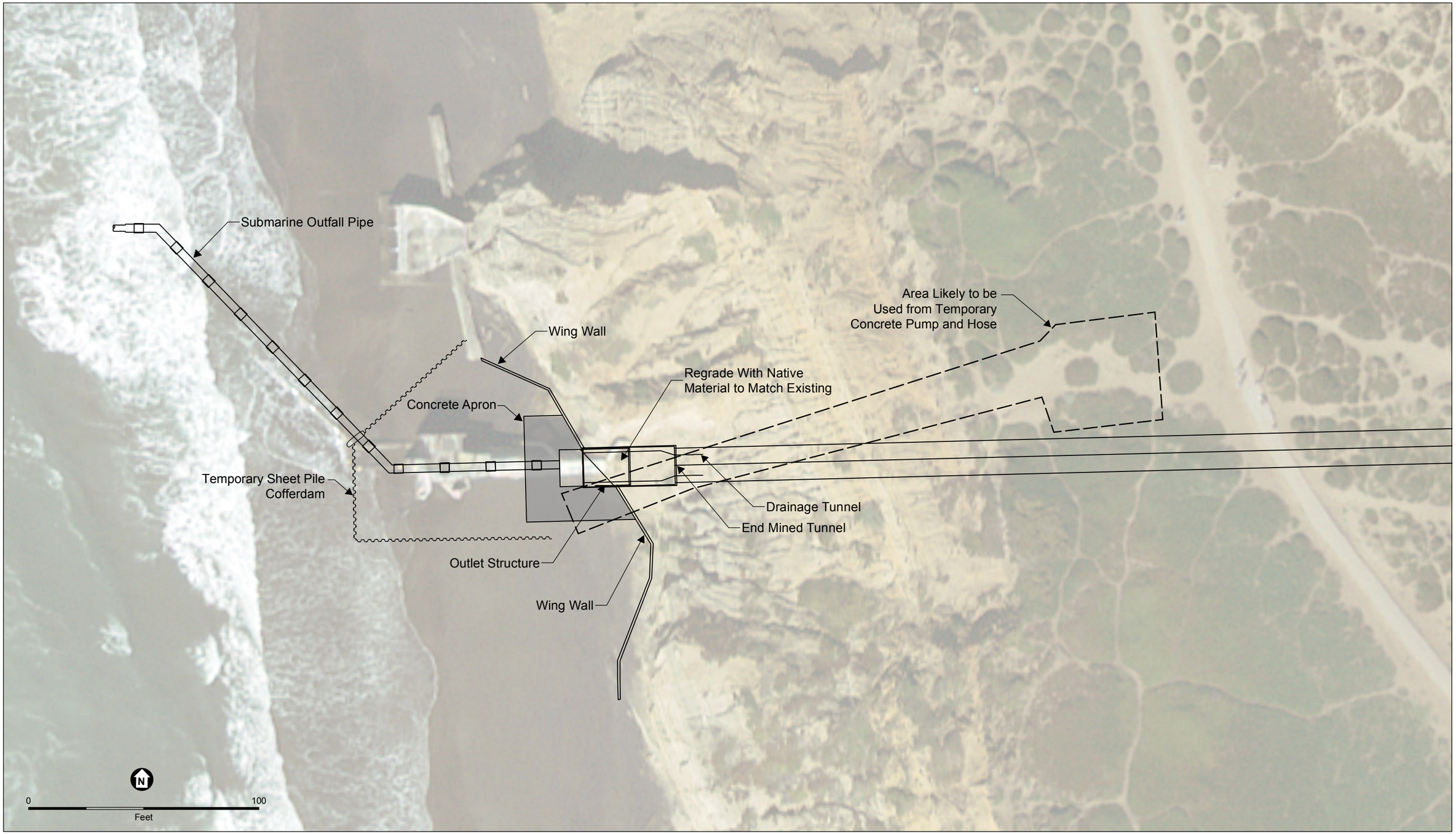
Under the Modified Project, the contractor would use two temporary ventilation fans for the Tunnel construction activities. These ventilation fans would circulate air within the Tunnel during the underground Tunnel construction activities. Each ventilation fan would contain a 100 hp motor powered by seven additional generators ranging from 80 to 200 hp (see *Use of Diesel Generators* above). The ventilation fans and generators would be located within the Tunnel's rehabilitated east portal work area (see Figure 2-1) and the modified Fort Funston tunnel and shaft work area (see Figure 2-4b).

After tunneling construction activities, all disturbed areas would be restored to pre-Project conditions or similar, and disturbed areas would be regraded with native materials to match existing profiles.

2.2.8 Ocean Outlet Design

As discussed in Section 2.4.2, *Vista Grande Tunnel and East and West Portals*, of the EIR/EIS, Daly City's existing Ocean Outlet structure is located on the beach below Fort Funston. This Ocean Outlet structure discharges the Vista Grande Watershed stormwater to the Pacific Ocean either through the submarine outfall pipeline during low flows or across the beach during higher flows. The Ocean Outlet structure, a segment of the Tunnel, and the force main segment are fully exposed to the surf and waves.

The Project would reconfigure these structures to provide protection from the surf and waves, including designing the system to withstand the force of high tides and associated waves. The existing Daly City Ocean Outlet structure would be removed and replaced with a low-profile outlet structure set nearer to the existing cliff face to improve beach access (see **Figure 2-5a**). Wing walls would be constructed to the north and south of the rehabilitated Ocean Outlet. To the north, an approximately 70-foot-long wing wall would be constructed from the Ocean Outlet structure to connect to an existing wing wall that extends south from SFPUC's Lake Merced Sewer tunnel outlet against the cliff face. Additionally, a 100-foot-long wing wall would be constructed to the south of the outlet to protect the cliff face (see Figure 2-5a).



SOURCE: McMillen-Jacobs Associates, 2019

Vista Grande Drainage Basin Improvement Project. 200700036.01

Figure 2-5a

Original Ocean Outlet Construction Area

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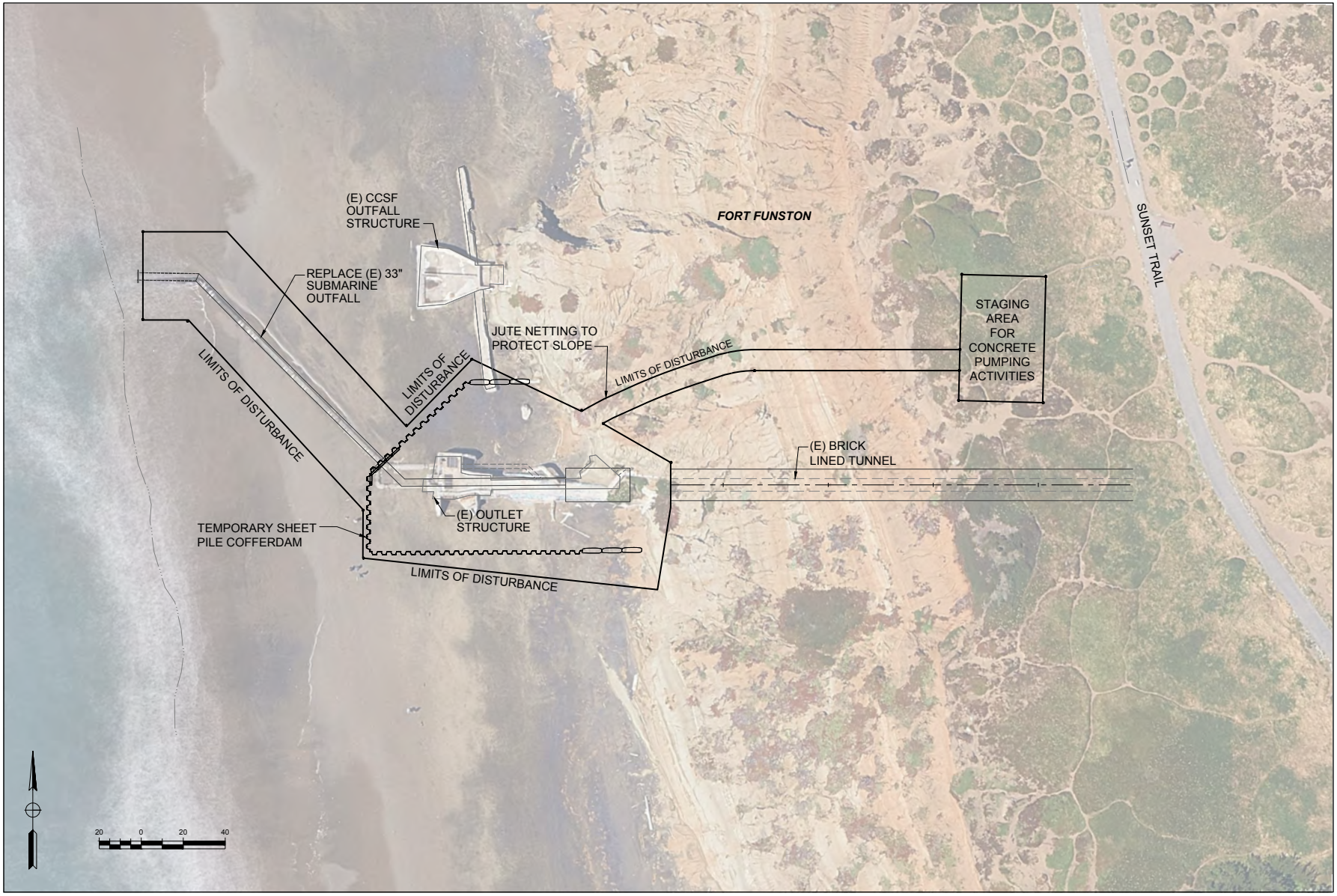
The design of the proposed Ocean Outlet structure, including the wing walls, considers the effects of sea level rise on both the operation of the outlet and the rate of cliff erosion. However, the Coastal Commission concluded that the two wing walls were not permittable as part of Project design. Thus, under the Modified Project, the wing walls would be removed from the final design of the Ocean Outlet (see **Figure 2-5b**).

There would also be other small changes to the design elements shown in the EIR/EIS, including additional supports for the anchor outfall pipe. Additionally, the work area for concrete pumping activities and the overall layout of the disturbed area for construction activities at the Ocean Outlet location would move just north of the disturbed area shown in Figure 2-5a (see Figure 2-5b for comparison). Jute netting would be laid on the cliff face to protect it from any disturbance from concrete pumping activities. After the completion of construction at the Ocean Outlet location, excavations would be backfilled and disturbed areas would be regraded with native soils to match existing profiles.



SOURCE: Brown and Caldwell, 2024
NOTES: CCSF = City and County of San Francisco

Vista Grande Drainage Basin Improvement Project. 200700036.01

Figure 2-5b
Modified Ocean Outlet Design

SECTION 3
Discussion of Impacts

This chapter describes modifications to existing environmental conditions that have occurred in and near the Project area, as well as any changes to environmental impacts due to the Modified Project. Although there have been several modifications to the Project since the certification of the EIR/EIS (see Section 2.2, *Proposed Modifications to the Project*), the overall design and construction details would be similar to those described previously in the certified EIR/EIS. Therefore, this addendum focuses on site-specific resources that may be affected by the Modified Project.

As discussed in Section 3.1.3, *Environmental Topics Removed from Consideration*, of the EIR/EIS, agriculture and forestry resources, mineral resources, and public services were not evaluated because there would be no impacts on these resources from the Project. Under the Modified Project, this would not change, as there would be no major changes to the general area where the Project would occur. The environmental conditions and potential impacts relevant to hazards and hazardous materials, land use and planning, geologic and paleontological resources, transportation and traffic, utilities and service systems, and associated cumulative effects would not change as a result of the Modified Project. This includes minor changes to the design, work and staging areas, access routes, and construction activities because the changes would not affect agriculture and forestry resources or mineral resources, and there would be no changes to land use and planning beyond that described in the EIR/EIS. Additionally, there would be no changes to hazards and hazardous materials, geologic and paleontological resources, or utilities and service systems, given that construction work would generally be the same as previously analyzed. Finally, no changes under the Modified Project would affect transportation and traffic, as the Modified Project would implement a Construction Traffic Management Plan and any other required traffic control measures outlined in Section 3.15, *Transportation and Traffic*, of the EIR/EIS.

The CEQA Guidelines were revised in 2018 to include wildfire as a new environmental topic in its Appendix G. Although an addendum need not consider revisions to the CEQA Guidelines that occur after EIR certification (CEQA Guidelines Section 15007), this addendum notes for informational purposes that the wildfire environmental topic considers whether a project is in or near state responsibility areas or lands classified as very high fire hazard severity zones. If so, it considers whether the Modified Project would include conditions that would exacerbate wildfire risks. The Project site is not located in a state responsibility area and in areas classified as having either a moderate or a very high fire hazard (CAL FIRE 2024). Furthermore, the Modified Project does not include conditions that could exacerbate existing fire risks, such as the creation of slopes or the addition of infrastructure (e.g., roads, power lines, or fuel breaks). Therefore, construction and operation of the Modified Project would not result in a substantial wildfire impact.

The following sections provide analysis of the environmental impacts provided in the EIR/EIS. The impacts have been evaluated to disclose any potential changes that would result from the Modified Project's implementation compared to the certified EIR/EIS and to determine whether these changes would result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects. Based on the analysis provided below, the changes resulting from the Modified Project's implementation would not result in new significant environmental impacts or a substantial increase in the severity of previously identified significant effects.

The following discussion reviews revisions to the setting information provided in the EIR/EIS, discloses the findings, and discusses potential resulting changes in environmental impacts for each remaining resource area.

3.1 Aesthetics

3.1.1 Setting

The aesthetics setting described in Section 3.2, *Aesthetics*, of the EIR/EIS remains applicable to the Modified Project. The section provides an overview of existing aesthetic conditions within the San Francisco Bay Area (Bay Area) and around Lake Merced, presents the associated regulatory framework, and analyzes potential impacts that would result from the construction and operation of the facilities proposed under the Project.

3.1.2 Findings of the EIR/EIS

The EIR/EIS analysis identified that less-than-significant impacts with mitigation incorporated related to aesthetics would occur.

3.1.3 Project Change Analysis

Discussion

The Modified Project includes components that could potentially cause additional impacts on aesthetics in the Project area. These components include additional staging areas along the Canal, installation of habitat restoration sites around Lake Merced, and the use of additional work areas at the Pacific Rod and Gun Club and Fort Funston.

As described in Section 3.2.1, *Affected Environment*, of the EIR/EIS, the study area for aesthetics includes public areas where the Project elements would be visible. The study area includes the Project site, Lake Merced, Fort Funston, and associated open and recreational spaces in the Project site's vicinity. Lake Merced and adjacent areas are closely bounded by the major thoroughfares of Lake Merced Boulevard, John Muir Drive, and Skyline Boulevard. Aside from golf courses, the Lake Merced area is not highly manicured or landscaped. However, it does not have an untouched natural appearance due to the scattered presence of structures, utilities, roads, and a narrow band of vegetation contained by sidewalks and paths that run alongside the roads surrounding the lake.

The overall Lake Merced area is largely undeveloped, with trees, water, and vegetation providing visual variety and a respite from San Francisco's urban setting. Because many of the surrounding roadways and neighborhoods are elevated relative to Lake Merced, the lake and the bordering open space are important visual resources, offering aesthetically pleasing views for motorists, bicyclists, and pedestrians. A portion of the 49-Mile Scenic Drive, a San Francisco designated scenic road tour, partially encircles the lake. It can be reasonably assumed that users of the pedestrian path, in particular, expect a high-quality environment, given that the streets included in the 49-Mile Scenic Drive are recognized for their aesthetic value. Thus, these pedestrians, motorists, and bicyclists are considered sensitive viewers when considering the potential for aesthetic impacts. Nevertheless, the Project site currently has low viewer exposure and can be seen only briefly as viewers pass by.

As discussed in Section 3.2.5, *Impact Analysis*, of the EIR/EIS, the Project would result in temporary construction-related impacts on the visual character of the Project site and surrounding areas. Direct views of the Project site, including views of construction work areas, would occur from public roadways and public areas in residential neighborhoods and outdoor recreational facilities in the area. Construction activities would occur over a 24- to 44-month period or until completion, as described in Section 2.5.3, *Construction Schedule, Workforce, and Equipment*, of the EIR/EIS.

Under the Modified Project, additional work areas would be at Fort Funston and the Pacific Rod and Gun Club, as well as additional staging areas along the Canal and for the habitat restoration sites. However, there would be no significant changes to the duration of Project construction (24–44 months). The additional Project construction areas would include stockpiling construction materials, storing construction equipment, and temporarily storing construction debris. However, the Modified Project would implement **Mitigation Measure 3.2-1**, which requires the contractor to keep Project areas clean and inconspicuous and requires the prompt removal of debris.

Construction work and staging areas would be restored to conditions similar to existing conditions following the completion of construction activities, except for permanent changes associated with the Modified Project. The Fort Funston work areas, Pacific Rod and Gun Club work area, additional Canal staging areas, and other unpaved staging areas would be revegetated and restored to pre-Project conditions. Because the aesthetic effects of construction activities would be temporary, construction activities would not result in a substantial adverse impact on a scenic vista or resource, or on the visual character of a site or its surroundings. Therefore, the impact would remain less than significant with mitigation incorporated.

The Modified Project would include up to 14 habitat restoration sites, restoring 10 acres of habitat around Lake Merced. The habitat restoration sites would include construction activities, tree removal around Lake Merced (see Figure 2-2), and temporary irrigation. Approximately 804 additional trees would be removed to accommodate the 10 acres of proposed habitat restoration sites; however, the final number would depend on the final design and acreage of the chosen sites. Most trees proposed for removal from the habitat restoration sites are non-native, including blue gum eucalyptus, Monterey pine (*Pinus radiata*), Monterey cypress, and myoporum, among several others in less abundance.

The habitat restoration sites would be planted primarily with arroyo willow and native freshwater marsh plantings at the lower elevations near the banks of Lake Merced. The habitat restoration sites would be designed to reflect and restore the character of the native vegetation communities historically located along the shoreline of Lake Merced. The design character of the habitat restoration sites would integrate the selected areas and associated temporary irrigation infrastructure with the existing visual environment of the Project site. The habitat restoration sites could be considered an aesthetic improvement to the area as they would replace non-native forest with native willow riparian, coastal scrub, and wetland habitat.

The installation of the habitat restoration sites would primarily occur at lower elevations compared to the surrounding roads and the pedestrian path encircling the lake, providing a buffer

to direct views of the habitat restoration sites and construction activities. The habitat restoration sites and associated construction activities would be further screened by existing fencing and vegetation at higher elevations of the lake's banks along some portions of Skyline Boulevard, John Muir Drive, and Lake Merced Boulevard, which are part of San Francisco's 49-Mile Scenic Drive. This fencing and vegetation would be retained after the installation of the habitat restoration sites and would continue to screen direct views of the lake from roads and the pedestrian path encircling the lake, similar to existing conditions. Restoration activities would extend up to the roadway and pedestrian path at some sites along Skyline Boulevard and Lake Merced Boulevard, opening up views of the lake where taller nonnative trees would be removed and replace with willow tree species.

Views of the habitat restoration sites and associated construction activities for installation would be visible from the interior of the lake, including direct views from open water areas and users of public recreational facilities along Harding Road. As mentioned previously, the Modified Project would remove up to 804 trees at the 14 chosen habitat restoration sites and would replace non-native forest with riparian, wetland, and coastal scrub habitat. This would enhance the visual landscape of habitat around Lake Merced by restoring it with historical vegetation communities found along its banks. The habitat restoration sites would replace existing non-native habitat, including species such as blue gum eucalyptus, and would take up to 3 years to fully mature. Once fully established, the habitat restoration sites would add to the existing visual variety of species, both native and non-native, found around Lake Merced. Therefore, the impact on scenic resources would be less than significant.

The Modified Project construction may create a new temporary source of nighttime lighting in the immediate area, and the light and glare effects (including potential effects on nighttime sky viewing) from Project construction could be substantial. Therefore, the impact could be significant. **Mitigation Measure 3.4-9**, described in Section 3.4, *Biological Resources*, would require that nighttime illumination be directed downward, helping to ensure that no significant illumination would pass beyond the work area or vertically into the sky. Light deflectors would be erected between traffic and staging areas. Implementation of **Mitigation Measure 3.4-9** would help ensure that impacts associated with light and glare are reduced to a less-than-significant level. The operation phase of the Modified Project would not create a new source of light or glare, as no lighting is proposed. Therefore, there would be no impact associated with Modified Project operation.

Conclusion

Implementation of **Mitigation Measures 3.2-1** and **3.4-9** included in the EIR/EIS would reduce potentially significant impacts on aesthetic resources to a less-than-significant level. The Modified Project would not result in any new or more severe significant impacts than those identified in the certified EIR/EIS. **(Same impact as previously approved project [less than significant with mitigation].)**

3.2 Air Quality

3.2.1 Setting

The air quality setting from Section 3.3, *Air Quality*, of the EIR/EIS remains applicable to the Modified Project. The section provides an overview of existing air quality conditions within the San Francisco Bay Area Air Basin area, presents the associated regulatory framework, and analyzes potential impacts that would result from construction and operation of the facilities proposed under the Project.

3.2.2 Findings of the EIR/EIS

The EIR/EIS identified the potential for less-than-significant impacts with mitigation included related to air quality.

3.2.3 Project Change Analysis

Discussion

The Modified Project includes components that could potentially cause additional impacts on air quality in the Project area. These components include the use of diesel generators to power construction activities, as well as construction activities, including site preparation and ground disturbance in closer proximity to sensitive receptors. This would include the use of additional work and staging areas, the installation of an access ramp near the Canal, the installation of habitat restoration sites around Lake Merced, and the use of the Pacific Rod and Gun Club work area.

As described in Section 3.3.5, *Impact Analysis*, of the EIR/EIS, most Project-related exhaust emissions would be generated on-site due to the use of the heavy-duty off-road equipment. Exhaust emissions would also be generated by heavy-duty diesel material haul trucks, concrete vendor trucks, and, to a lesser extent, construction worker daily commute trips. Criteria pollutant exhaust emissions of reactive organic gases (ROG), oxides of nitrogen (NOx), particulate matter 10 micrometers or less in diameter (PM_{10}), and particulate matter 2.5 micrometers or less in diameter ($PM_{2.5}$) from construction equipment and vehicles would incrementally add to the regional atmospheric loading of these pollutants during Project construction. Impacts related to violating an air quality standard or contributing to an existing or projected air quality violation were assessed by comparing estimated direct and indirect Project exhaust emissions to the significance thresholds, which are average daily emissions of 54 pounds per day (lb/day) for ROG, NOx, and $PM_{2.5}$, and 82 lb/day for PM_{10}.

Project-related construction criteria for pollutant exhaust emissions discussed in the EIR/EIS are outlined in **Table 3-1**.

Under the Modified Project, the use of seven generators ranging from 80 to 100 hp would generate an additional 6 lb/day of NOx during the first 6 months and 8 lb/day during the following 12 months, raising daily NOx emissions up to 40.2 lb/day. However, this would be below the Bay Area Air Quality Management District's (BAAQMD's) NOx emission threshold of 54 lb/day. The

use of diesel generators would also increase the PM_{10} emissions by 50 percent, but this would still be below the BAAQMD threshold of 82 lb/day. Using diesel generators for construction activities would be temporary, lasting 18 months. Additionally, if generators are stationary, Daly City would be required to obtain a BAAQMD permit and comply with any BMPs identified.

TABLE 3-1
CONSTRUCTION CRITERIA POLLUTANT EXHAUST EMISSIONS

Emission Source	Average Daily Construction Emissions (pounds/day)			
	ROG	NOx	PM_{10}	$PM_{2.5}$
Construction Activities	4.9	20.0	0.9	0.9
Vehicle Trips	0.7	12.3	0.3	0.2
Average Daily (pounds/day)	5.6	32.2	1.2	1.2
BAAQMD Significance Threshold	54	54	82	54
Significant Impact?	No	No	No	No

NOTES:

BAAQMD = Bay Area Air Quality Management District; EIR/EIS = Environmental Impact Report/Environmental Impact Statement; EMFAC = EMission FACtors model; NOx = oxides of nitrogen; $PM_{2.5}$ = particulate matter 2.5 micrometers or less in diameter; PM_{10} = particulate matter 10 micrometers or less in diameter; ROG = reactive organic gases.

Emissions were estimated using emission factors from the off-road emissions inventory database and EMFAC 2011. Numbers may not sum due to rounding. See Appendix C of the EIR/EIS for details on the emissions estimates.

SOURCE: ESA 2017

In addition to exhaust emissions, the Modified Project construction activities would generate fugitive dust emissions associated with site preparation, earth disturbance, travel on paved and unpaved roads, and other dust-generating activities. With regard to fugitive dust emissions, BAAQMD recommends that lead agencies focus on implementing dust control measures to help ensure that impacts would be less than significant, rather than comparing estimated levels of fugitive dust to quantitative significance thresholds.

For all areas of the Modified Project construction within the city and county of San Francisco, Daly City would be required to comply with San Francisco's construction Dust Ordinance by submitting a Dust Control Plan to the San Francisco Department of Public Health for approval. The site-specific Dust Control Plan would require Daly City to do the following:

- Water active construction areas sufficiently to prevent dust from becoming airborne.
- Provide as much water as necessary to control dust without creating runoff in disturbed areas.
- Wet-sweep or vacuum streets, sidewalks, paths, and intersections where work is in progress at the end of the workday.
- Cover inactive stockpiles greater than 10 cubic yards or 500 square feet of material.
- Use dust enclosures, curtains, and dust collectors as necessary to control dust in the excavation area.

Daly City also requires that a grading permit applicant submit a Dust Nuisance Control Plan for review and approval. This plan must include both dust suppression through watering or other

techniques and daily sweeping of public streets and sidewalks. Similar to San Francisco requirements, this plan would also represent BMPs identified by BAAQMD for controlling fugitive dust. The Modified Project would also implement **Mitigation Measure 3.3-1** to prepare and implement a Dust Control Plan for construction activities at Fort Funston, which is a federally administered area.

Short-term construction exhaust emissions associated with the Modified Project would not exceed the significance thresholds for ozone precursors or particulate matter. Compliance with the San Francisco Construction Dust Ordinance, Daly City's grading permit Dust Nuisance Control Plan requirements, and **Mitigation Measure 3.3-1** would help ensure that impacts associated with fugitive dust emissions would continue to be less than significant.

Additionally, the BAAQMD recommends that lead agencies assess the incremental risk of toxic air contaminant (TAC) exposure for all sensitive receptors within a 1,000-foot radius of a Project's fence line. Although long-term Project operation would result in no new TAC emissions, construction activities associated with the Modified Project would generate diesel particulate matter (DPM), a TAC. Most DPM exhaust emissions generated during construction would be because of diesel off-road equipment and diesel generators.

The closest sensitive receptors to the Modified Project would be the Lakewood Apartments along the south side of John Muir Drive and north of the Vista Grande Tunnel's east portal. These apartments are located 200 feet from the Pacific Rod and Gun Club work area, 300 feet from the Lake Merced Portal, 300 feet or more from additional Canal components, and 600 feet from the modified work area within Fort Funston. Additional sensitive receptors are near habitat restoration sites, such as Lowell High School and the Lakeshore neighborhood, located at various distances within the 1,000-foot buffer. None of the Modified Project elements or nearby sensitive receptors are located within an Air Pollution Exposure Zone, as designated by the San Francisco Health Department.

As discussed in the EIR/EIS, off-road equipment is a large contributor to DPM emissions in California. However, since 2007, the California Air Resources Board has found that the emissions were substantially lower than previously expected (CARB 2010). Additionally, federal and state regulations require cleaner off-road equipment. Specifically, both the U.S. Environmental Protection Agency and the State of California have set emissions standards for new off-road equipment engines, ranging from Tier 1 to Tier 4. Although the full benefits of these regulations will not be realized for several more years, the U.S. Environmental Protection Agency estimates that by implementing the federal Tier 4 standards, NOx and PM emissions will be reduced by more than 90 percent (EPA 2004).

Furthermore, as a major construction Project[1] within the jurisdiction of the city and county of San Francisco and within 1,000 feet of sensitive receptors, construction work would be subject to the conditions of the City and County of San Francisco's Clean Construction Ordinance, updated in

[1] A *major construction project* is defined as a public work to be performed within the geographic limits of the city that uses off-road equipment and is estimated to require 20 or more cumulative days of work, including non-consecutive days, to complete.

March 2015. The Clean Construction Ordinance requires that such construction projects use only off-road equipment and off-road engines fueled by biodiesel fuel grade (B20). Additionally, the off-road equipment must either meet or exceed Tier 2 standards for off-road engines or operate with the most effective Verified Diesel Emission Control Strategies.

Additionally, due to their temporary and variable nature, construction activities are not suitable for assessing long-term health risks. The BAAQMD's CEQA Air Quality Guidelines (BAAQMD 2022) states the following:

> *Due to the variable nature of construction activity, the generation of TAC emissions in most cases would be temporary, especially considering the short amount of time such equipment is typically within an influential distance that would result in the exposure of sensitive receptors to substantial concentrations. Concentrations of mobile-source diesel PM emissions are typically reduced by 70 percent at a distance of approximately 500 feet (CARB, 2005). In addition, current models and methodologies for conducting health risk assessments are associated with longer-term exposure periods of 9, 40, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities. This results in difficulties with producing accurate estimates of health risk.*

Therefore, Project-level analyses of construction activities tend to produce overestimated assessments of long-term health risks. However, within Air Pollutant Exposure Zones, additional construction activity may negatively affect populations already at a higher risk for adverse long-term health risks from existing air pollution sources. The Modified Project site is not located within any identified Air Pollutant Exposure Zones.

For the Modified Project, additional DPM emissions generated would be limited to 18 months in the Tunnel portals' vicinity where the diesel generators would be in use, and 17–37 months in the Pacific Rod and Gun Club work area's vicinity and in the additional Canal components' vicinity (i.e., staging areas, access ramp, water recirculation pump). Additional DPM emissions would be in the habitat restoration sites' vicinity around Lake Merced for approximately 5 months. All other Modified Project components would be located more than 1,000 feet from sensitive receptors.

Although diesel generators, off-road equipment, and on-road heavy-duty diesel vehicles on designated truck routes would be used during these months of construction, emissions would be temporary and variable and would not be expected to expose sensitive receptors to substantial air pollutants outside Air Pollutant Exposure Zones. Furthermore, the Modified Project would be subject to, and would comply with, California regulations limiting idling to no more than 5 minutes, further reducing exposure of nearby sensitive receptors to temporary and variable DPM emissions. Therefore, the impact would remain less than significant.

Diesel equipment used to construct the Modified Project may emit objectionable odors associated with diesel fuel combustion. However, these emissions would be temporary and intermittent. Therefore, odor impacts associated with diesel combustion during construction activities would remain less than significant.

Conclusion

Implementation of **Mitigation Measure 3.3-1**, as included in the EIR/EIS, would reduce potentially significant impacts on air quality in the Project area to a less-than-significant level. Additionally, the Modified Project would obtain any necessary permits with the City and County of San Francisco, Daly City, or the BAAQMD, and would implement any necessary dust control plans and BMPs as part of those permits. Furthermore, construction activities associated with the Modified Project would be temporary, lasting between 24 and 44 months, as discussed in the EIR/EIS. The Modified Project would not result in any new or more severe significant impacts than those identified in the certified EIR/EIS. **(Same impact as previously approved project [less than significant with mitigation].)**

3.3 Biological Resources

3.3.1 Setting

The sensitive and regulated vegetation communities, habitat types, and plant and animal species described in Section 3.4, *Biological Resources*, of the EIR/EIS remain applicable to the Modified Project. The biological resources in the additional work and staging areas are generally consistent with those described in the EIR/EIS. As discussed in Appendix A of the Lake Merced West Project EIR (SF Planning 2022), the land uses in the Pacific Rod and Gun Club site's vicinity include parks, golf courses, and urban residential and commercial development. Urban development is primarily concentrated on the south side of John Muir Drive and the east side of Lake Merced Boulevard. Although the site is located within a densely developed area of San Francisco, there has been limited human interference on-site since remediation activities in 2016. After completion of remediation activities, the site's vegetation was restored and it continues to be routinely monitored for performance by qualified biologists. Several diverse vegetation communities and habitat types, including perennial grassland, mixed coastal scrub and woodland, arroyo willow riparian scrub, freshwater marsh, and lacustrine, provide refuge for local wildlife among the largely developed upland areas bordering the Lake Merced system.

3.3.2 Findings of the EIR/EIS

The EIR/EIS identified the potential for less-than-significant impacts with mitigation incorporated related to biological resources.

3.3.3 Project Change Analysis

Discussion

The Modified Project includes components that could potentially cause additional impacts on biological resources in the Project area. Additional impacts would primarily be from the restoration and enhancement of habitat restoration sites around Lake Merced, which would require vegetation and tree removal. Other components of the Modified Project may also potentially cause additional impacts on biological resources through vegetation removal and ground disturbance, such as the installation of the water recirculation pump, use of the Pacific Rod and Gun Club work area, use of additional staging areas, and the installation of an access ramp along the Canal.

As described in Section 3.4.5, *Impact Analysis*, of the EIR/EIS, Project construction could have a substantial adverse effect either directly or through habitat modifications on plant and animal species identified as sensitive or special-status in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. Under the Modified Project, construction activities would occur in several areas around Lake Merced and Fort Funston that were not previously considered in the EIR/EIS. These activities would include site preparation, vegetation and tree removal, ground disturbance activities, and temporary irrigation. Increased construction activity, which can cause stress or abandonment of nests and roosts, loss or conversion of habitat, or direct mortality, would be considered significant impacts.

As discussed in the EIR/EIS, these could include impacts on special-status and protected plant, reptile, bird, and bat species, as well as sensitive natural communities (e.g., coastal dune scrub). The Modified Project would be required to implement **Mitigation Measures 3.4-1** through **3.4-5** to reduce impacts on special-status and otherwise protected plant and animal species and sensitive natural communities to less-than-significant levels. Specifically, the Modified Project would implement the following measures:

> **Mitigation Measure 3.4-1:** Requires avoidance, minimization, and compensation for impacts on special-status plants.
>
> **Mitigation Measure 3.4-2a:** Requires construction worker environmental awareness program training**.**
>
> **Mitigation Measure 3.4-2b:** Requires avoidance and minimization measures for western pond turtle.
>
> **Mitigation Measure 3.4-3:** Includes measures to protect nesting birds, addressing potential impacts even though the Modified Project does not include known rookery habitat.
>
> **Mitigation Measure 3.4-4:** Requires avoidance and minimization measures for special-status bats.
>
> **Mitigation Measure 3.4-5:** Requires avoidance, minimization, and compensation for impacts on central dune scrub.

No special-status fish species occur within Lake Merced waters; however, western pond turtles reside in the lake and could be adversely affected by in-water work associated with the Modified Project, including activities required for the construction of components, such as the proposed water recirculation pump. Implementation of **Mitigation Measure 3.4-2b** would reduce potential impacts on the western pond turtle to a less-than-significant level by requiring the installation of terrestrial exclusion fencing around these lakeside construction areas, the installation of a cofferdam around isolated in-water work areas, the completion of preconstruction surveys, and implementation of additional measures during site construction.

Additionally, as discussed in the EIR/EIS, Project construction would have a substantial adverse effect on upland vegetation communities identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. Project construction could affect sensitive communities through the introduction or spread of invasive plants and could have a substantial adverse effect on wetlands and other jurisdictional waters. Under the Modified Project, as discussed throughout Section 2.2, *Proposed Modifications to the Project,* additional construction activities would be required throughout Lake Merced, Fort Funston, and the surrounding areas. These construction activities would include additional work areas, staging areas, and components that would require additional vegetation and tree removal, site preparation, ground-disturbing activities, and temporary irrigation; additional site disturbance could introduce invasive species.

The Modified Project would be required to implement **Mitigation Measures 3.4-6** through **3.4-8b** to reduce impacts on upland areas and wetlands and impacts associated with the spread of invasive

species. As discussed in EIR/EIS Impact 3.4-6, damage or removal of protected trees in areas under San Francisco Department of Public Works (SFDPW) jurisdiction is subject to a SFDPW permit. However, none of the Modified Project areas, or trees that would be damaged or removed, are under SFDPW jurisdiction. It is also noted that the restored willow riparian habitat at Lake Merced would replace non-native trees with native tree species. The Modified Project would implement the following measures:

> **Mitigation Measure 3.4-6:** Requires Daly City to implement tree protection measures that require identification of trees to be removed, trimmed, or retained, and procedures for tree protections during construction.
>
> **Mitigation Measure 3.4-7a:** Requires control measures to reduce the spread of invasive species.
>
> **Mitigation Measure 3.4-7b:** Requires post-construction treatment of upland areas disturbed by construction activities.
>
> **Mitigation Measure 3.4-8a:** Calls for wetland protection and avoidance.
>
> **Mitigation Measure 3.4-8b:** Requires compensation for any impacts on wetlands or riparian habitat.

The Modified Project construction could also interfere substantially with the movement of native resident or migratory species, disrupt established native resident or migratory corridors, or impede the use of nursery sites. This interference would result primarily from the use of nighttime lighting, which may be required for additional construction activities. To mitigate these impacts, the Modified Project would implement **Mitigation Measure 3.4-9**, which would require minimizing nighttime lighting where feasible and calls for measures to reduce impacts when nighttime lighting cannot be avoided.

Additional impacts on biological resources could occur from lake level changes due to the Project's operation. To address these impacts, the Modified Project would be required to implement **Mitigation Measures 3.4-10a** and **3.4-10b**, which would reduce impacts from the Modified Project's operation to less-than-significant levels. These measures would manage water levels to reduce Project-related losses of sensitive communities or provide compensatory mitigation if such losses cannot be avoided.

The proposed habitat restoration sites would remove existing non-native forest habitat, including 804 trees, and restore native arroyo willow riparian and freshwater marsh habitat along the Lake Merced shoreline (above the Modified Project's operational WSE). The trees proposed for removal from the habitat restoration sites are primarily non-native species, such as blue gum eucalyptus, myoporum, Monterey cypress, and blackwood acacia, with other species in less abundance. The habitat restoration sites would be replanted mostly with native willow riparian habitat along the Lake Merced shoreline, freshwater marsh (wetland) plants, and coastal scrub habitat. After planting, the willow riparian and coastal scrub habitats would be seeded with a native seed mix of herbaceous understory species.

Since publication of the EIR/EIS, the U.S. Fish and Wildlife Service proposed listing the monarch butterfly (*Danaus plexippus*) as threatened under the federal Endangered Species Act (USFWS 2024). The western monarch butterfly population migrates from interior breeding areas to the coast in October and November to overwinter until March when they return to breeding areas for spring and summer. Overwintering monarchs aggregate in tree groves typically located within 1.5 miles of the coastline where specific microclimate conditions of high humidity, low winds, mixed sunlight, protection from freezing temperatures, and access to freshwater are present. Monarchs most commonly roost in stands of blue gum eucalyptus trees but also use Monterey pine and Monterey cypress trees (Xerces Society et al. 2025).

A monarch butterfly overwintering site has been documented and tracked by the Xerces Society for Invertebrate Conservation (Xerces Society) since 2008 within the non-native forest at Stern Grove and Pine Lake in San Francisco, located 0.5 mile north of Lake Merced. Four other known overwintering sites in San Francisco are identified within tree stands at 26th Avenue and Fulton Street in Golden Gate Park, Rob Hill in the Presidio, Fort Mason near Building 201, and Telegraph Hill in North Beach. Several other potential overwintering sites being tracked by the Xerces Society are located in Golden Gate Park, Lovers Bridge in the Presidio, and McClaren Park (Xerces Society 2017).

Non-native forest habitat around Lake Merced contains similar tree species composition to the other known or potential sites identified in San Francisco but has not been identified by the Xerces Society as containing known or potential overwintering sites. Through development of the habitat restoration sites, the Modified Project would remove approximately 1.44 acres of non-native forest habitat from around the lake, 31 percent of the total non-native forest habitat (4.62 acres) surrounding the greater Lake Merced system (ESA 2024). Environmental Science Associates conducted surveys to identify monarch use of non-native forest habitat within the habitat restoration sites during the 2024–2025 overwintering season in February 2025, following the Xerces Society's Western Monarch Habitat Assessment Survey protocol (Xerces Society 2024). Biologists experienced in conducting these protocol-level surveys for overwintering monarch populations performed pedestrian surveys of the habitat restoration sites using binoculars to scan tree stands for roosting monarch butterflies. During the surveys, biologists also visited Stern Grove, where roosting aggregates are known to be present. No overwintering monarch roosts were identified during the surveys within the habitat restoration sites (ESA 2025).

Because overwintering roosts are returned to year after year, areas that do not contain suitable conditions are expected to remain absent of monarch butterflies (James 2024). Therefore, it is expected that the trees identified for removal within the habitat restoration sites would not contain overwintering roosts when construction at these locations commences in late summer to fall 2025. Furthermore, tree removal activities that would affect non-native forest habitat within the habitat restoration sites would begin in August or September 2025, preceding the arrival of monarchs to overwintering sites in October and November. Additionally, ongoing disturbance to this habitat type within the mitigation sites throughout October, November, and December would deter monarchs from establishing overwintering roosts in the Lake Merced area, making direct impacts on active overwintering populations from tree removal under the Modified Project unlikely. Because overwintering roosts have not been previously documented in any non-native forest

habitat at Lake Merced, combined with the likely ongoing construction disturbance of the mitigation sites during the arrival period for migrating monarchs, the Modified Project's impact on the proposed threatened monarch butterfly associated with the removal of potential overwintering habitat would be less than significant.

After completion of the Modified Project, work and staging areas would be restored to pre-Project conditions or similar. Most areas would be revegetated with native species associated with freshwater marsh, willow riparian, coastal scrub, or dune species, as appropriate and consistent with surrounding vegetation. With implementation of **Mitigation Measures 3.4-1** through **3.4-10b** and the installation of the proposed habitat restoration sites, impacts on special-status species and lake sensitive habitat would be reduced to less-than-significant levels. This would be similar to other Project areas considered in the EIR/EIS. Therefore, impacts would be consistent with the EIR/EIS and would remain less than significant with mitigation incorporated.

Conclusion

Implementation of **Mitigation Measures 3.4-1** through **3.4-10b** included in the EIR/EIS would reduce any potentially significant impacts, including those on vegetation communities and wildlife habitat, supported special-status plant and animal species, wetlands, and impacts related to potential conflicts with local and regional conservation plans or ordinances protecting biological resources to less-than-significant levels. Impacts on established native resident or migratory wildlife corridors would remain less than significant. The Modified Project would not result in any new or substantially more severe significant impacts than those identified in the certified EIR/EIS. **(Same impact as previously approved project [less than significant with mitigation].)**

3.4 Cultural Resources

3.4.1 Setting

The regional setting and regulatory framework related to cultural and paleontological resources described in Section 3.5, *Cultural Resources*, of the EIR/EIS have not changed and remain applicable to the Modified Project.

The Pacific Rod and Gun Club site has been identified as a historic resource, meeting Criterion 1 of the California Register of Historical Resources for its association with historic events, as detailed in the Lake Merced West Project EIR (SF Planning 2022). The site is significant as an example of the type of sportsmen's gun club that formed in the 1920s and 1930s, reflecting the democratization of hunting and illustrating the social experience connected with the conservation movement. Additionally, the site is notable as the oldest extant skeet facility in the Bay Area and as the only sportsmen's club in the Bay Area to retain its original pre–World War II grounds configuration, skeet field structures, and club buildings.

3.4.2 Findings of the EIR/EIS

The EIR/EIS identified three archeological and architectural resources: the 1882 schooner *Neptune* shipwreck, the Canal, and Fort Funston. No Native American cultural resources or human remains were identified within the Project site in the EIR/EIS. The EIR/EIS determined that there would be significant and unavoidable impacts on the Tunnel and Canal, both of which are eligible for listing in the National Register of Historic Places, and required mitigation measures to reduce impacts to the extent feasible. All or most of the Tunnel and Canal would be affected because the Project would update and modernize the aging structures. All other impacts were determined to have less-than-significant impacts with mitigation incorporated.

3.4.3 Project Change Analysis

Discussion

The Modified Project includes components that could potentially cause additional impacts on cultural resources in the Project area through ground-disturbing activities, including the addition of the Pacific Rod and Gun Club work area, modifications to Canal components, and the installation of the water recirculation pump and habitat restoration sites around Lake Merced.

As described in Section 3.5.5, *Impact Analysis*, of the EIR/EIS, the Project would have an impact on archaeological resources if it would cause a substantial adverse change to a significant archaeological resource, including those that qualify as historical resources according to CEQA Guidelines Section 15064.5, unique archaeological resources as defined in CEQA Section 21083.2(g), and historic properties that meet the National Register of Historic Places listing criteria in Code of Federal Regulations Title 36, Section 60.4.

The Modified Project would include construction activities in areas not discussed in the EIR/EIS, such as the Pacific Rod and Gun Club work area or areas covered under the EIR/EIS that were

not expected to be disturbed. The EIR/EIS found that, while the scenario is unlikely, ground-disturbing activities could expose and cause impacts on unknown archaeological resources or shipwrecks, which would be a potentially significant impact. Similarly, while the scenario is unlikely, there is still the potential for the Modified Project to cause a substantial adverse change in the significance of an archaeological resource.

The Modified Project would also implement **Mitigation Measure 3.5-3**, which requires construction activities to halt if archaeological resources are identified. This measure would allow a qualified archaeologist, or NPS archaeological resources staff if located on federally administered lands, to inspect the find and provide additional recommendations as necessary, with the goal of avoiding, minimizing, or mitigating adverse effects.

Furthermore, no known human burial locations have been identified in the Project area; however, the possibility cannot be entirely discounted. The Modified Project could result in direct impacts on previously undiscovered human remains during earthmoving activities. Impacts on human remains would be potentially significant but could be reduced to a less-than-significant level with the implementation of **Mitigation Measure 3.5-4**, which requires that all work halt in the find's vicinity and that the County Coroner be contacted.

Therefore, the Modified Project would have a less-than-significant impact relative to cultural resources, and substantial physical deterioration of known or undiscovered resources would not occur.

Conclusion

Implementation of **Mitigation Measures 3.5-3 and 3.5-4** included in the EIR/EIS would reduce potentially significant impacts on previously undiscovered cultural resources or human remains to a less-than-significant level. The Modified Project would not result in any new or more severe significant impacts than those identified in the certified EIR/EIS. **(Same impact as previously approved project [significant and unavoidable].)**

3.5 Geology and Soils

3.5.1 Setting

Although part of the Modified Project site would include locations not analyzed in the EIR/EIS, the regional setting and regulatory framework related to geology and soils described in Section 3.6, *Geology and Soils*, of the EIR/EIS have not changed and remain applicable to the Modified Project.

3.5.2 Findings of the EIR/EIS

The EIR/EIS analysis identified less-than-significant impacts with mitigation incorporated related to geology and soils.

3.5.3 Project Change Analysis

Discussion

The Modified Project includes components that could potentially cause additional impacts on geology and soils in the Project area, including the addition of the Pacific Rod and Gun Club work area, modifications to the Fort Funston work area, additional Canal components, and the installation of the water recirculation pump and habitat restoration sites around Lake Merced.

As described in Section 3.6, *Geology and Soils*, of the EIR/EIS, the Project is located in an area susceptible to fault rupture, ground shaking, and seismic-related ground failure. The use of the Pacific Rod and Gun club work area was not discussed in the EIR/EIS. Additionally, sites along the Canal, which were part of the overall Project footprint but were not likely to be disturbed, would be used as a staging area for work on the Canal. The Modified Project would be required to implement **Mitigation Measure 3.6-1a**, which requires that the Project be designed, engineered, and constructed in conformance with engineering practices and geotechnical recommendations to minimize potential structural damage during a seismic event. The Modified Project would also implement **Mitigation Measure 3.6-1b**, which requires inspectors working under the auspices of a California-licensed geotechnical engineer to be present on the Project site during excavation, grading, and general site preparation activities to monitor the implementation of the recommendations specified in this measure. Therefore, the Modified Project would have less-than-significant impacts related to strong seismic ground shaking and/or seismic-related ground failure.

Additionally, construction activities, such as excavating, trenching, and grading, can remove stabilizing vegetation and expose areas of loose soil that, if not properly stabilized during construction, can be subject to erosion by wind and stormwater runoff, potentially resulting in a significant soils impact. The Modified Project would include components that could potentially increase soil erosion through ground disturbance or vegetation removal. The Modified Project would be subject to the requirements of the National Pollutant Discharge Elimination System Construction General Permit, which includes mandatory implementation of BMPs concerning erosion control. The Project would also implement **Mitigation Measure 3.6-2**, which would require inspections of subdrain pipes to monitor water flows and buildup of sediment from

erosion. Compliance with the Construction General Permit, including the implementation of a Stormwater Pollution Prevention Plan, associated BMPs, and mitigation measures, would help ensure that the potential impact of soil erosion or the loss of topsoil from the Modified Project would be less than significant.

Furthermore, natural or constructed slopes could become destabilized during construction-related excavation or grading operations if located on problematic soils. Excavations for components could result in slope instability, potentially triggering slope failures that could result in landslides, slumps, soil creep, or debris flows. Additionally, there is the potential for geologic hazards at the Ocean Outlet along the Fort Funston bluffs. However, the Modified Project would be required to implement **Mitigation Measures 3.6-3a** and **3.6-3b**, which would reduce the impacts associated with landsliding to less-than-significant levels. These measures include adherence to the construction specifications outlined in the geotechnical report, which include measures to reduce effects related to slope instability, landsliding, and lateral earth pressure, as well as additional slope studies before final Project design.

Conclusion

Implementation of **Mitigation Measures 3.6-1a** through **3.6-3b** included in the EIR/EIS would reduce potentially significant impacts related to geology and soils to less-than-significant levels. The Modified Project would not result in any new or more severe significant impacts than those identified in the certified EIR/EIS. **(Same impact as previously approved project [less than significant with mitigation].)**

3.6 Greenhouse Gas Emissions and Climate Change

3.6.1 Setting

The greenhouse gas (GHG) emissions and climate change setting described in Section 3.7, *Greenhouse Gas Emissions and Climate Change*, of the EIR/EIS remain applicable to the Modified Project. The section provides an overview of existing GHG and climate change conditions within the San Francisco Bay Area Air Basin area, presents the associated regulatory framework, and analyzes potential impacts that would result from construction and operation of the facilities proposed under the Project.

3.6.2 Findings of the EIR/EIS

The EIR/EIS analysis identified that there would be no conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs. The EIR/EIS analysis determined that less-than-significant impacts with mitigation incorporated related to GHGs and climate change would occur as part of the Project.

3.6.3 Project Change Analysis

Discussion

The Modified Project includes components that could potentially cause additional impacts on GHG emissions in the Project area, primarily due to the use of diesel generators. However, other components of the Modified Project may also produce an incremental change in GHG emissions.

Construction activities associated with the Modified Project (e.g., installing a water recirculation pump, installing habitat restoration sites), excluding the use of diesel generators, would be the same as construction activities described in the EIR/EIS, just at different locations. These activities would result in a negligible net change in long-term baseline conditions and GHG emissions. Therefore, the impacts from these modifications are not discussed further.

As described in Section 3.7.5, *Impact Analysis*, of the EIR/EIS, Project construction would occur over 24–44 months. Most of the Project-related GHG emissions would be generated off-site from construction worker vehicle trips to and from the site and from heavy-duty haul trucks transporting soil, gravel, and debris. Off-road construction vehicle use, including the use of a crane and excavators, would also contribute to construction GHG emissions.

The BAAQMD's Revised Draft Options and Justification Report (BAAQMD 2009) identifies qualitative and quantitative operations-related thresholds of significance for GHG emissions. For projects other than stationary sources, the qualitative threshold is noncompliance with a qualified climate action plan or qualified general plan. The quantitative threshold is annual operational emissions exceeding 1,100 metric tons of carbon dioxide equivalent (CO_2e). For stationary-source projects, the quantitative threshold is 10,000 metric tons of CO_2e per year. No threshold has been established for GHG emissions generated during construction. In the absence of such thresholds, this analysis applies the BAAQMD's threshold of 1,100 metric tons of CO_2e per year

for non-stationary-source projects. However, the Project would not involve installing a stationary source requiring a BAAQMD permit.

Estimated Project construction GHG emissions are presented in **Table 3-2**.

TABLE 3-2
ESTIMATED PROJECT CONSTRUCTION GREENHOUSE GAS EMISSIONS

Construction Activity Source	Year 1	Year 2	Year 3
Off-road Equipment Emissions	192.4	1,575.8	393.7
Vehicle Emissions	700.7	622.4	41.9
Total Construction Emissions	893.1	2,198.2	435.6
Significance Threshold	1,100.0	1,100.0	1,100.0
Significant Impact?	No	Yes	No

SOURCE: ESA 2017

As indicated in Table 3-2, total short-term Project construction-related GHG emissions would be below BAAQMD's quantitative threshold of 1,100 metric tons of CO_2e per year for non-stationary sources in construction years 1 and 3 but would be above this threshold during year 2. Therefore, GHG emissions from Project construction are considered significant during year 2.

As discussed in Section 2.2, *Proposed Modifications to the Project*, the Modified Project would include the use of diesel generators for construction activities associated with the Tunnel. These generators would be used 24 hours a day, 5 days a week, with demand decreasing by 25 percent after the first 6 months of use, for year 2 of construction. One generator would be located at the Fort Funston work area and the other at the Tunnel's east portal; both would be used to power components related to the Tunnel phase of the Project. Although the addition of the diesel generators would increase GHG emissions, the Modified Project would remain below the federal threshold of 25,000 metric tons of CO_2e for adverse environmental impacts from construction-related GHG emissions. However, GHG emissions would still be above the BAAQMD's threshold of 1,100 metric tons per year. Therefore, this impact would still be considered significant for year 2 of construction activities.

Therefore, the Modified Project would be required to implement **Mitigation Measure 3.7-1**, which requires Daly City and its contractors to implement several measures to reduce GHG emissions. The mitigation measure would include limiting idling, requiring the use of B20 biodiesel (which would reduce GHG emissions from generator operation by 20 percent), and requiring Daly City to purchase carbon offsets for any GHG emissions over the 1,100 metric ton per year threshold.

Conclusion

Implementation of **Mitigation Measure 3.7-1** included in the EIR/EIS would reduce potentially significant impacts from construction and operation to less-than-significant levels. The Modified Project would not result in any new or more severe significant impacts than those identified in the

certified EIR/EIS. **(Same impact as previously approved project [less than significant with mitigation].)**

3.7 Hydrology and Water Quality

3.7.1 Setting

The hydrology and water quality setting described in Section 3.9, *Hydrology and Water Quality*, of the EIR/EIS remains applicable to the Modified Project. The section provides an overview of existing hydrology and water quality conditions within the Bay Area, presents the associated regulatory framework, and analyzes potential impacts that would result from construction and operation of the facilities proposed under the Project.

3.7.2 Findings of the EIR/EIS

The EIR/EIS analysis identified significant and unavoidable impacts related to the alteration of coastal landforms. The Project could have substantial adverse effects on local shoreline sand supply, shoreline processes, and localized rates of erosion, and would continue to prevent the bluffs and shoreline from eroding naturally. All other impacts were determined to be less than significant with mitigation incorporated.

3.7.3 Project Change Analysis

Discussion

The Modified Project includes components that could potentially cause additional impacts on hydrology and water quality in the Project area, including the addition of the Pacific Rod and Gun Club work area, modifications to the Fort Funston work area, the Ocean Outlet design, the Canal components, and the installation of the water recirculation pump and habitat restoration sites around Lake Merced.

These potential impacts would arise from additional construction activities around Lake Merced, such as the use of a cofferdam and dewatering for the installation of the water recirculation pump, vegetation removal and planting for the habitat restoration sites, and the addition of staging areas along the Canal and work areas at the Pacific Rod and Gun Club near the bank of Lake Merced. The Modified Project would also include an additional work area in the Fort Funston parking lot and the removal of wing walls from the Ocean Outlet design; these components would be near Funston Beach and the Pacific Ocean and could potentially affect coastal waters and resources.

As mentioned previously, the Modified Project would include additional staging and work areas around Lake Merced and Fort Funston, soil-disturbing activities, and vegetation removal activities required for the installation of the water recirculation pump and the habitat restoration areas. As a discharger, Daly City must comply with the requirements of Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ, otherwise referred to as the “Construction General Permit.” This would require the implementation of a stormwater pollution prevention plan and BMPs to control Project-related runoff. As discussed in the EIR/EIS, the stormwater pollution prevention plan must be designed to address the following objectives:

- All pollutants and their sources, including sources of sediment associated with construction, construction site erosion, and all other activities associated with construction activity are controlled.
- Where not otherwise required to be under a Regional Water Quality Control Board permit, all non-stormwater discharges are identified and either eliminated, controlled, or treated.
- Site BMPs are effective and result in the reduction or elimination of pollutants in stormwater discharges and authorized non-stormwater discharges from construction activity to the applicable defined standard.
- Calculations and design details as well as BMP controls for site run-on are complete and correct.
- Stabilization BMPs are implemented to reduce or eliminate pollutants after construction is completed.

In addition to the requirements of the Construction General Permit, the Modified Project components constructed in the Canal construction area, served by the SFPUC separate storm sewer system, would be subject to compliance with the SFPUC Stormwater Management Plan's measures to minimize stormwater pollution in areas of San Francisco served by separate storm sewer systems. Additionally, in accordance with Article 4.1 of the San Francisco Public Works Code and consistent with SFPUC's Water Pollution Prevention Program, Daly City would be required to develop and implement an Erosion and Sediment Control Plan specifying measures to prevent stormwater pollution and control runoff at each applicable site.

With the implementation of the measures required by the Construction General Permit, the development and implementation of a Stormwater Management Plan and Erosion and Sediment Control Plan, and the restoration of disturbed areas to pre-Project conditions after completion of construction activities, potential impacts of the Modified Project related to increased erosion and stormwater runoff would remain less than significant and temporary.

As discussed previously, the Modified Project would require dewatering activities for the installation of the water recirculation pump. It is not likely that dewatering would generate contaminated water that would require special handling or disposal; however, the contractor would have the necessary facilities (portable water treatment units located in the staging areas) to collect, handle, and treat flows that may be contaminated with cementitious products, silts and sediments, oil and grease from equipment, and other potential contaminants. Discharge water quality would be tested and maintained in accordance with dewatering discharge permit requirements. All Project-related dewatering discharges would be performed in accordance with regulatory requirements, and any necessary permits would be obtained. Therefore, impacts of the Modified Project related to violating water quality standards or degrading water quality due to groundwater discharges during construction dewatering would be less than significant.

Waters isolated within cofferdam areas have a high potential to contain high concentrations of sediment as a result of the level of ground disturbance within the isolated work area. The direct discharge of such waters from the cofferdam areas to Lake Merced could result in localized increases in suspended sediment and turbidity that could persist for the duration of dewatering activities. If the water from the isolated work areas were discharged directly to Lake Merced,

these discharges could violate water quality standards or substantially degrade water quality, resulting in a potentially significant water quality impact. As discussed previously, the Modified Project would include the use of a cofferdam to install the water recirculation pump. However, **Mitigation Measure 3.9-1** would reduce this potential impact on water quality to a less-than-significant level by requiring the implementation of standard BMPs to remove sediment from the dewatering discharge directed to receiving waters, and to control the rate of discharge to prevent adverse effects related to runoff, flooding, and damage to adjacent structures.

Furthermore, as discussed in the EIR/EIS, the Project could conflict with plans, policies, or regulations related to the alteration of coastal landforms or processes adopted to avoid or mitigate environmental effects, resulting in a significant and unavoidable impact. The Project's construction and operation could alter the existing natural beach dynamics and the coastal environment, thereby resulting in altered bluff erosion rates and patterns. Coastal development in California is regulated by the Coastal Commission pursuant to the California Coastal Act. This law stipulates that new developments that could alter natural shoreline processes shall be permitted when required to serve coastal dependent uses, protect existing structures, and only when designed to eliminate or mitigate adverse impacts on local shoreline sand supply (Public Resources Code Section 30235). This law also states that new development must do the following (Public Resources Code Section 30253[b]):

> *[A]ssure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.*

The Project was designed with wing walls to emulate the reduced bluff recession rates associated with the SFPUC outlet and to reduce the potential for outflanking[2] of the outlet structure. Furthermore, the wing walls were added to address the force of high tides and associated wave action, and other coastal processes, including sea level rise, affecting local beach and bluff erosion rates. However, the Preliminary Coastal Engineering Study did not assess the potential impacts of the recommended wing walls on local coastal processes, such as sediment supply, beach profile alterations, or beach and bluff toe retreat. Although the wing walls would assist with structural integrity, they may substantially alter natural landforms along the bluff face by slowing the rate of erosion (Moffatt and Nichol 2013).

The EIR/EIS concluded, based on the available technical studies, professional opinion, and current projections of sea level rise and coastal erosion, that the Project could have substantial adverse effects on local shoreline sand supply, shoreline processes, and localized rates of erosion, and would continue to prevent the bluffs and shoreline from eroding naturally. Under the Modified Project, based on consultation with the Coastal Commission, the wing walls would be removed from the final design. Additionally, the Modified Project would implement **Mitigation Measure 3.9-2**, which would help ensure that the Project would conform with NPS management policies. This measure would require that the Project design is reasonably assured of surviving its

[2] Basically, going around the side of the structure.

planned lifespan without the need for shoreline control measures. Furthermore, this measure would implement steps to minimize safety hazards and harm to property and natural resources.

However, even with the implementation of **Mitigation Measure 3.9-2** and the removal of the wing walls, the Modified Project may still result in inconsistency with the policies governing local shoreline sand supply and alteration of landforms due to the construction of shoreline protective devices, outlined in California Coastal Act Sections 30235 and 30253. Therefore, this impact would remain significant and unavoidable despite the incorporation of available and feasible mitigation measures. This finding is due in part to the inherent inconsistency between the policies requiring structural integrity with the policy aimed at avoiding shoreline protective devices that would substantially alter natural landforms along bluffs and cliffs.

The Modified Project would also require temporary water supplies to irrigate native plantings for approximately 3 years from water lines operated by the City and County of San Francisco. The proposed plantings would use 2.5 acre-feet of water per year after initial planting until vegetation is established. Additionally, seeded areas may use up to 3.5 acre-feet of water combined in the months immediately after seeding. Given the short-term nature of Project construction and the incremental demand for water during the construction period, the Modified Project would be unlikely to require new water entitlements or new or expanded local water supplies. Therefore, the impact would be less than significant.

Conclusion

Implementation of **Mitigation Measures 3.9-1** and **3.9-2** included in the EIR/EIS would reduce potentially significant impacts from construction and operation. However, impacts would remain significant and unavoidable. The Modified Project would not result in any new or more severe significant impacts than those identified in the certified EIR/EIS. **(Same impact as previously approved project [significant and unavoidable].)**

3.8 Noise and Vibration

3.8.1 Setting

The noise and vibration setting described in Section 3.11, *Noise and Vibration*, of the EIR/EIS remains applicable to the Modified Project. The section provides an overview of existing noise and vibration conditions within the Project area, presents the associated regulatory framework, and analyzes potential impacts that would result from construction and operation of the facilities proposed under the Project.

3.8.2 Findings of the EIR/EIS

The EIR/EIS analysis identified less-than-significant impacts with mitigation incorporated related to noise and vibration would occur.

3.8.3 Project Change Analysis

Discussion

The Modified Project includes components that could potentially cause additional noise and vibration impacts in the Project area, including the use of the Pacific Rod and Gun Club work area, diesel generators, and ventilation fans, and the installation of the water recirculation pump.

As described in Section 3.11.5, *Impact Analysis*, of the EIR/EIS, temporary construction-related noise effects would be significant if any of the following would occur:

- Construction noise audible beyond the property of origin would be generated within Daly City between 10:00 p.m. and 6:00 a.m., as specified in the Daly City Municipal Code.
- Construction activity within San Francisco would generate noise levels in excess of 5 A-weighted decibels (dBA) above the existing ambient noise levels at the nearest property line between the hours of 8:00 p.m. and 7:00 a.m.
- Noise levels from specific non-impact construction equipment operating in San Francisco would exceed 80 dBA at 100 feet.
- Noise levels would exceed 70 dBA (speech interference criterion) at the nearest sensitive receptor (building exterior) for construction activities in one place for more than 2 weeks.
- Construction activities would generate substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project.

Table 3-3 outlines typical noise levels produced by construction equipment that are expected to be in operation during Project construction.

The Modified Project would require the use of seven diesel generators and two ventilation fans. One generator and fan would be located within the Fort Funston work area and another generator and fan would be located near the Tunnel's east portal adjacent to the Lakewood Apartments. Ventilation fans would not be used between 8:00 p.m. and 7:00 a.m., and diesel generators are expected to be used 24 hours a day, 5 days a week, with a 25 percent reduction in demand after

the first 6 months. The generator and fan at the Fort Funston work area would be approximately 600 feet from the nearest sensitive receptor, and the generator and fan located at the Tunnel's east portal would be 380 feet from the nearest sensitive receptor. The Modified Project would be required to implement **Mitigation Measure 3.11-1,** which would require that stationary noise-generating construction equipment be muffled, enclosed within temporary sheds, and that insulation be used to minimize noise without interfering with construction.

TABLE 3-3
TYPICAL NOISE LEVELS PRODUCED BY CONSTRUCTION EQUIPMENT

Construction Equipment	Noise Levels (dBA, L_{eq} at 50 feet)
Excavator	81
Compactor	83
Impact or Vibratory Pile Driver	101
Crane	81
Loader	79
Drill Rig	79
Air Compressor	78
Ventilation Fan	79
Dump Truck	76
Generator	81

NOTES: dBA = A-weighted decibels; L_{eq} = equivalent continuous sound pressure level.
SOURCE: ESA 2017

With this measure, noise from the diesel generators and ventilation fans would be attenuated by approximately 10 decibels. Therefore, the use of diesel generators and ventilation fans would produce noise levels up to 51 dBA at the nearest sensitive receptor. This would not exceed the San Francisco Noise Ordinance threshold of 80 dBA at 100 feet, and therefore, the impact would not be significant under this threshold. This level also would not exceed the 70 dBA speech interference criterion for 2 or more weeks and would not exceed 5 dBA above the existing ambient noise level of 56 dBA (SF Planning 2022). Additionally, local topography and natural barriers, such as fences and trees, would further reduce construction noise exposure at individual residences and would not exceed regulatory significance thresholds. With the incorporation of **Mitigation Measure 3.11-1**, impacts from the use of diesel generators and ventilation fans would be less than significant.

The Modified Project would also include non-impact construction activities, such as the installation of habitat restoration sites and a water recirculation pump, use of the Pacific Rod and Gun Club and Fort Funston work areas, use of additional staging sites, and the installation of an access ramp along the Canal. These components would include similar construction activities already described in the EIR/EIS and shown in Table 3-3. The loudest source of non-impact noise generated from typical construction activities would be an excavator, generating 81 dBA while removing plants or soil. Noise from construction activities generally attenuates at a rate of 6 decibels (dB) per doubling of distance (Caltrans, 2013). Assuming an attenuation rate of 6 dB per doubling of

distance, the loudest non-impact construction equipment would reach up to 75 dBA at 100 feet. This would not exceed the San Francisco Noise Ordinance threshold of 80 dBA at 100 feet, and therefore, the impact would not be significant under this threshold.

The nearest sensitive receptors to the Modified Project site are the residences approximately 200 feet from North Lake where habitat restoration sites 1–7 are located (see Figure 2-2); 250 feet from the Pacific Rod and Gun Club work area, the additional Canal staging areas, and the access ramp construction site; and 1,600 feet from the recirculation pump site (see Figures 2-1 and 2-3). At these locations, ongoing construction activities could generate noise levels between 51 dBA and 69 dBA over a period of more than 2 weeks. Construction-generated noise levels below the 70 dBA speech interference criterion for a period of 2 or more weeks would result in a less-than-significant impact. Construction noise exposure at individual residences would also be further reduced by local topography and natural barriers, such as intervening structures, fences, and trees. There may be occasional work where the noise level generated at some receptors could exceed 5 dBA above the existing ambient noise level of 60 dBA (SF Planning 2009), but these occurrences would be intermittent and would not constitute a significant impact.

Furthermore, the Modified Project would include the operation of a water recirculation pump, which would be permanently installed along the bank of Lake Merced (see Figure 2-1). As discussed in the EIR/EIS, the maximum sound level that can be expected to be generated by the water recirculation pump would be 84 dBA at a distance of 3 feet. The pump would be enclosed in an underground concrete structure to attenuate the noise generated by the pump. As discussed previously, the water recirculation pump would be located approximately 1,500 feet from the nearest sensitive receptor. Assuming a 10 dB attenuation from the concrete pump enclosure, the maximum combined noise level from the water recirculation pump would reach approximately 20 dBA at the nearest residential property boundary and therefore would have a less-than-significant impact.

In addition to regulatory thresholds, this analysis evaluates the potential for the Modified Project to result in a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project. Some land uses are noise-sensitive in ways not addressed by regulatory noise thresholds, such as recreational areas used for passive activities. At Lake Merced and its surrounding recreational amenities, ambient noise levels average between 50 and 60 dBA day-night average sound level (L_{dn}) due to nearby heavily traveled roadways and other urban uses. The ambient noise levels at Fort Funston generally are below 55 dBA L_{dn} (SF Planning 2009). As stated in the EIR/EIS, on-site construction-related activities could result in a significant impact by resulting in a substantial temporary increase in ambient noise levels at Fort Funston above levels existing without the Project. Implementation of **Mitigation Measures 3.11-1** and **3.11-2**, which would require the use of noise control methods and technologies, would reduce this potential impact to a less-than-significant level. However, areas closest to construction staging and work areas could result in a substantial temporary increase above noise levels existing without the Modified Project, which would be a potentially significant impact.

Therefore, on-site construction-related activities could result in a significant impact by creating a substantial temporary increase in ambient noise levels at recreational areas around Lake Merced

and Fort Funston above levels existing without the Project. Implementation of **Mitigation Measures 3.11-1** and **3.11-2**, which would require the use of noise control methods and technologies, would reduce this impact to a less-than-significant level.

The Modified Project may also result in a temporary increase in vibration levels, which would be a potentially significant impact. Non-impact construction activities would occur near homes at the Lakewood Apartments and the Lakeshore neighborhood, which would include the use of a large bulldozer, loaded trucks, excavators, and compactors. These residential receivers would be located 200 feet from the nearest non-impact construction activities. As discussed in the EIR/EIS, at this distance, these receptors would be exposed to vibration levels of up to 60 vibration decibels and 0.004 inch per second peak particle velocity during non-impact construction activities. These vibration levels are below the Federal Transit Administration's construction vibration thresholds for residential land uses and building damage, and therefore, the impact would be less than significant (FTA 2006).

Conclusion

Implementation of **Mitigation Measures 3.11-1** and **3-11.2** included in the EIR/EIS would reduce potentially significant impacts from construction and operation to less-than-significant levels. The Modified Project would not result in any new or more severe significant impacts than those identified in the certified EIR/EIS. **(Same impact as previously approved project [less than significant with mitigation].)**

3.9 Recreation

3.9.1 Setting

The recreation setting from Section 3.13, *Recreation*, of the EIR/EIS remains applicable to the Modified Project. The section provides an overview of existing recreation conditions within the Project area, presents the associated regulatory framework, and analyzes potential impacts that would result from construction and operation of the facilities proposed under the Project.

3.9.2 Findings of the EIR/EIS

The EIR/EIS identified the potential for less-than-significant impacts related to recreational resources.

3.9.3 Project Change Analysis

Discussion

The Modified Project includes components that could potentially cause additional impacts on recreational resources in the Project area, including modifications to the Fort Funston work area, the Ocean Outlet design, and the installation of the habitat restoration sites.

As described in Section 3.13.5, *Impact Analysis*, of the EIR/EIS, the Project would not include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment; this would not change under the Modified Project. The Modified Project does not propose and would not require the construction or expansion of recreational facilities. The Modified Project would not result in a permanent increase in the local population or increased demand for the construction or expansion of recreational facilities due to growth.

The Modified Project may increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. However, it is not expected that many recreationists would be displaced from recreational areas in the Project vicinity and thereby substantially increase the use of other nearby parks or recreational facilities. During Project construction, traffic and pedestrian access would be rerouted, or in some areas, such as along Funston Beach, would be temporarily restricted.

As discussed in the EIR/EIS, the Fort Funston work area would occupy approximately 4 acres of the more than 100 acres available for dog walking, restricting access to 4 percent of the area. However, under the Modified Project, the work area would be reduced from 4 acres to 2.5 acres, or 2.5 percent of the 100 acres available. The addition of a 0.44-acre concrete fabrication work area within the Fort Funston parking lot would temporarily decrease the availability of parking for recreationists in the vicinity.

As discussed in the EIR/EIS, at the Ocean Outlet work area, a U-shaped sheet pile cofferdam would be placed around the beach outlet structure to form a barrier to exclude the public, including dogs, from the Project construction area. The cofferdam would be positioned so that

beach access would be maintained during construction. However, during times when vehicles and equipment are being transported along the beach, and during construction of the portion of the submarine outfall pipeline that would be replaced, recreationists would avoid or be restricted from this portion of the beach.

Under the Modified Project, the 70-foot and the 100-foot wing walls would be removed from the final design of the Ocean Outlet (see Figure 2-5b). There would also be other small changes to the design elements shown in the EIR/EIS, including additional supports to the anchor outfall pipe. The work area for concrete pumping activities and the overall layout of the disturbed area for construction activities at the Ocean Outlet location would move just north of the disturbed area shown in Figure 2-5a. However, beach access for recreationists would be maintained and temporary avoidance or restrictions would be in place only when vehicles and equipment are being transported along the beach and during the construction of the portion of the submarine outfall pipeline.

Additionally, construction activities associated with the installation of the habitat restoration sites may also temporarily affect the use of recreational facilities around Lake Merced. This would include short-term impacts that would limit access to and the use of the pedestrian path encircling Lake Merced and limiting the areas on South Lake where water recreational activities, such as boating, are available. However, the construction activities associated with the habitat restoration sites would be short-term, and the impacts on recreational facilities at Lake Merced would be temporary. Furthermore, work areas for the habitat restoration sites would be close to the shore, and the overall South Lake open water area would remain available for boating.

A number of additional trails, bicycle routes, and other general recreational resources that would be available are within the Project vicinity and in the overall western San Francisco and Daly City area. The temporary increased use of other local or regional recreational resources that may be attributable to the Modified Project construction would not likely result in substantial physical deterioration of recreation resources, or otherwise result in physical degradation of existing recreation resources. The potential impact on these other recreation resources would not be more significant than outlined in the EIR/EIS.

Therefore, the Modified Project would have a less-than-significant impact relative to a potential increase in the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur.

Conclusion

The Modified Project would not result in any new or more severe significant impacts than those identified in the certified EIR/EIS. **(Same impact as previously approved project [less than significant].)**

3.10 Energy Conservation

3.10.1 Setting

The energy conservation setting described in Section 4.2, *Energy Conservation*, of the EIR/EIS remains applicable to the Modified Project. The section provides an overview of existing energy conservation conditions within the Bay Area, presents the associated regulatory framework, and analyzes potential impacts that would result from construction and operation of the facilities proposed under the Project.

3.10.2 Findings of the EIR/EIS

The EIR/EIS analysis identified that no significant impacts related to energy conservation would occur.

3.10.3 Project Change Analysis

Discussion

The Modified Project includes components that could potentially cause additional impacts on energy conservation in the Project area, including the use of diesel generators for construction activities.

As described in Section 4.2.2, *Direct and Indirect Effects*, of the EIR/EIS, the precise amount of petroleum fuel demand that would be required to construct the Project is uncertain. However, it is likely that gasoline and diesel would be used for construction equipment and worker and haul vehicles, comparable to similar construction projects. This consumption would not have a measurable effect on local and regional energy supplies.

As discussed in Section 2.1, *Prior Project Description*, electricity demand during construction would be 1,300 kilowatts, and electricity would be provided to the work area at Fort Funston via a temporary PG&E service connection or by using a portable diesel-powered generator. After certification of the EIR/EIS, Daly City and the NPS determined that the use of a temporary PG&E service connection would not be feasible. Therefore, under the Modified Project, construction activities would be powered by two Tier 4 generators with 80 hp engines. The generators would use diesel fuel and would operate 24 hours a day, 5 days a week, for approximately 18 months, with demand decreasing by 25 percent after the first 6 months.

This energy use would be necessary for the Modified Project, and the use of generators would be short-term and temporary. None of the proposed energy-consuming activities would be wasteful, inefficient, or unnecessary. Additionally, while the EIR/EIS discussed the use of a temporary PG&E service connection, the alternative use of generators was included in Section 2.5.3.4, *Construction Power and Emergency Generators*, of the EIR/EIS. Therefore, the use of these generators would be consistent with previously described activities. The Modified Project would not have a more significant impact on fuel and electrical energy requirements or local and regional energy supplies.

Additionally, the permitting process for the Modified Project would require compliance with all applicable energy-saving policies and standards. As discussed in Section 3.7, *Greenhouse Gas Emissions and Climate Change*, of the EIR/EIS, the California Green Building Standards Code includes a mandatory set of minimum guidelines and more rigorous voluntary measures for energy efficiency and material conservation. Moreover, pursuant to the San Francisco Construction and Demolition Debris Recovery Ordinance, the Modified Project would be required to divert 65 percent of its construction and demolition debris from the landfill. Reusing this diverted debris instead of manufacturing new materials would reduce energy use. Therefore, there would be no impacts on efforts to achieve existing energy standards.

Conclusion

The Modified Project would not result in any new or more severe significant impacts than those identified in the certified EIR/EIS. **(Same impact as previously approved project [no significant impacts].)**

SECTION 4
References and Report Preparers

4.1 References

BAAQMD (Bay Area Air Quality Management District). 2009. *Revised Draft Options and Justification Report California Environmental Quality Act Thresholds of Significance*. October 2009. Available: http://www.baaqmd.gov/~/media/files/planning-and-research/ceqa/revised-draft-ceqa-thresholds-justification-report-oct-2009.pdf?la=en. Accessed January 27, 2025.

BAAQMD (Bay Area Air Quality Management District). 2022. *California Environmental Quality Act Air Quality Guidelines*. Available: https://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines. Accessed April 28, 2024.

CAL FIRE (California Department of Forestry and Fire Protection). 2024. Fire Hazard Severity Zones in State Responsibility Area. Available: https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=988d431a42b242b29d89597ab693d008. Accessed November 14, 2024.

Caltrans (California Department of Transportation). 2013. *Technical Noise Supplement to the Traffic Noise Analysis Protocol*. September 2013. Available: https://www.sandiegocounty.gov/content/dam/sdc/pds/ceqa/Soitec-Documents/Final-EIR-Files/references/rtcref/ch2.6/2014-12-19_Caltrans_TrafficNoiseAnalysisProtocol_Part1.pdf. Accessed January 28, 2025.

CARB (California Air Resources Board). 2010. *Staff Report: Initial Statement of Reasons for Proposed Rulemaking*. October 2010. Available: https://norcalblobstorage.blob.core.windows.net/stonestown/CARB_2010_StaffReportInitialStatementofReasonsforProposedRulemaking.pdf. Accessed January 27, 2025.

EPA (U.S. Environmental Protection Agency). 2004. *Regulatory Announcement: Clean Air Nonroad Diesel Rule*. May 2004. Available: https://nepis.epa.gov/Exe/ZyPDF.cgi/P10001RN.PDF?Dockey=P10001RN.PDF. Accessed January 27, 2025.

ESA (Environmental Science Associates). 2017. *Vista Grande Drainage Basin Improvement Project EIR/EIS, State Clearinghouse No. 2013032001.* Final. Prepared for the City of Daly City. August 2017.

ESA (Environmental Science Associates). 2024. *Vista Grande Drainage Basin Improvement Project Area Baseline Vegetation Mapping*. Prepared for the City of Daly City. September 5, 2024.

ESA (Environmental Science Associates). 2025. *Memorandum: Monarch Butterfly Overwintering Survey of the Vista Grande Drainage Basin Improvement Project Habitat Restoration Sites*. Prepared for the City of Daly City. March 7, 2025.

FTA (Federal Transit Administration). 2006. *Transit Noise and Vibration Impact Assessment (FTA-VA-90-1003-06)*. May 2006. Available: https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/FTA_Noise_and_Vibration_Manual.pdf. Accessed January 28, 2025.

James, D.G. 2024. "Monarch Butterflies in Western North America: A Holistic Review of Population Trends, Ecology, Stressors, Resilience and Adaption." Available: https://www.mdpi.com/2075-4450/15/1/40. Accessed March 4, 2025.

Moffatt and Nichol. 2013. *Vista Grande Drainage Basin Improvements. Preliminary Coastal Engineering Study, San Francisco, California*. Prepared for the City of Daly City. February 22, 2013.

SF Planning (San Francisco Planning). 2009. Map 1: Background Noise Levels – 2009. Available: https://generalplan.sfplanning.org/images/I6.environmental/ENV_Map1_Background_Noise%20Levels.pdf. Accessed January 28, 2025.

SF Planning (San Francisco Planning). 2022. *Lake Merced West Project Public Draft Environmental Impact Report.* Adopted February 13, 2023.

SFPUC (San Francisco Public Utilities Commission). 2024. Lake Merced West Project. Available: https://www.sfpuc.gov/construction-contracts/construction-projects/Lake_Merced_West. Accessed November 18, 2024.

USFWS (U.S. Fish and Wildlife Service). 2024. "Endangered and Threatened Wildlife and Plants; Threatened Species Status with Section 4(d) Rule for Monarch Butterfly and Designation of Critical Habitat." Proposed Rules. Federal Register Volume 89 (Number 239): Pages 100662–1000716. Thursday, December 12, 2024. Available: https://www.govinfo.gov/content/pkg/FR-2024-12-12/pdf/2024-28855.pdf#page=1. Accessed March 4, 2025.

Xerces Society (Xerces Society for Invertebrate Conservation). 2017. Map of Overwintering Sites. Available: https://westernmonarchcount.org/map-of-overwintering-sites/. Accessed March 4, 2025.

Xerces Society (Xerces Society for Invertebrate Conservation). 2024. *Habitat Assessment Survey Instructions: Protocol for the Xerces Society's Western Monarch Count.* Available: https://westernmonarchcount.org/wp-content/uploads/2024/11/WMC_Habitat-Assessment_Protocol_11-22-24.pdf. Accessed March 4, 2025.

Xerces Society et al. (Xerces Society for Invertebrate Conservation, U.S. Fish and Wildlife, Idaho Department of Fish and Game, and Washington Department of Fish and Wildlife). 2025. Western Monarch Milkweed Mapper. Available: https://www.monarchmilkweedmapper.org. Accessed March 4, 2025.

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Vista Grande Drainage Basin Improvement Project

California Environmental Quality Act Findings: Findings of Fact, Evaluation of Mitigation Measures and Alternatives, and Statement of Overriding Considerations

North San Mateo County Sanitation District

The North San Mateo County Sanitation District ("the District") a subsidiary of City of Daly City ("Daly City"), as the lead agency, and the National Park Service ("NPS") as the federal lead agency, prepared a joint Environmental Impact Report/Environmental Impact Statement (EIR/EIS for the Vista Grande Drainage Basin Improvement Project ("Project"). The EIR/EIS was prepared in accordance with the California Environmental Quality Act ("CEQA") and the National Environmental Policy Act ("NEPA") and consists of the Draft EIR/EIS and the Final EIR/EIS. The EIR/EIS analyzes the significant effects of the Project on the environment.

The District makes and adopts the following findings of fact and decisions regarding mitigation measures and alternatives, and the statement of overriding considerations, based on substantial evidence in the whole record of this proceeding and under in accordance with CEQA,(Pub. Resources Code, § 21000 et seq.) and Guidelines for Implementation of CEQA ("CEQA Guidelines") (14 California Cal. Code Regs. § 15000 et seq.) Because these findings are based on the CEQA analysis of the Project, most references to the joint EIR/EIS simply refer to the Draft or Final EIR. The NPS is separately responsible for making a decision on its federal actions based on the EIS and the entire record compiled during the joint CEQA and NEPA evaluation process.

This document is organized as follows:

Section I provides a description of the Project proposed for adoption, the environmental review process for the Project, the approval actions to be taken, and the location of records;

Section II identifies the impacts found not to be significant that do not require mitigation;

Section III identifies potentially significant impacts that can be avoided or reduced to less-than-significant levels through mitigation and describes the disposition of the mitigation measures;

Section IV identifies significant impacts that cannot be avoided or reduced to less-than significant levels and describes any applicable mitigation measures as well as the disposition of the mitigation measures;

Section V evaluates the different Project alternatives and the economic, legal, social, technological, and other considerations that support approval of the Project and the rejection of the alternatives, or elements thereof, analyzed; and

Section VI presents a statement of overriding considerations setting forth specific reasons in support of the District's actions and its rejection of the alternatives not incorporated into the Project.

The Mitigation Monitoring and Reporting Program ("MMRP") for the mitigation measures that have been proposed for adoption is attached to these findings as **Attachment A**. The MMRP is required by Public Resources Code Section 21081.6 and CEQA Guidelines Section 15091. Attachment A provides a table setting forth each mitigation measure listed in the Final EIR for the proposed Project that is required to reduce or avoid a significant adverse impact. Attachment A also specifies the agency responsible for implementation of each measure and establishes monitoring actions and a monitoring schedule. The full text of the mitigation measures is set forth in Attachment A.

These findings are based upon substantial evidence in the entire record before the District. The references set forth in these findings below to certain pages or sections of the Draft EIR or the Response to Comments document ("RTC") in the Final EIR are for ease of reference and are not intended to provide an exhaustive list of the evidence relied upon for these findings.

I. Approval of the Project

A. Project Description

By this action, the District adopts and implements the Project identified as the Vista Grande Drainage Basin Improvement Project, to address storm-related flooding in the Vista Grande Drainage Basin (Basin) while providing the additional benefit of augmenting the water level of Lake Merced. The Vista Grande storm drain system drains the northwestern portion of Daly City and an unincorporated portion of San Mateo County – areas originally within the watershed of Lake Merced. In the 1890s, the Vista Grande Canal and Tunnel were built to divert stormwater away from the lake to an outlet at the Pacific Ocean. The Ocean Outlet and a portion of the Tunnel are located within Fowrt Funston, part of the Golden Gate National Recreation Area ("GGNRA"), which is operated under the authority of the NPS. The existing Canal and Tunnel do not have adequate hydraulic capacity to convey peak storm flows, and this periodically causes backup of Tunnel flows into the Canal and flooding during peak storm events in adjacent low-lying residential areas and along John Muir Drive. The proposed Project would consist of improvements within the Vista Grande Basin storm drain system upstream of the Vista Grande Canal; partial replacement of the existing Canal to incorporate a gross solid screening device, an approximately 2.6-acre constructed treatment wetland, and diversion and discharge structures to route some stormwater (and authorized non-stormwater) flows from the Canal to Lake Merced and to allow lake water to be used for summer treatment wetland maintenance; modification of the existing effluent gravity pipeline so that it may be used year round to convey treated effluent from the nearby Wastewater Treatment Plant owned and operated by the District to the existing outlet and diffuser by gravity, and abandoning the force main pipeline; modification of the existing lake overflow structure to include an adjustable weir and siphon that allows water from the lake to flow into the Canal and Vista Grande Tunnel; replacement of the existing Tunnel to expand its hydraulic capacity and extend its operating lifetime and replacement of the Lake Merced Portal to the Tunnel; and replacement of the existing Ocean Outlet structure and a portion of the existing 33-inch submarine outfall pipeline that crosses the beach at Fort Funston. Operational components of the Project would include management of water surface elevations in Lake Merced and a Lake Management Plan that would include water quality best management

practices, including upstream improvements in the Basin and additional actions, the implementation of which may be triggered during post-Project monitoring. In addition, the Project includes NPS execution of a special use permit for construction activities within GGNRA lands and the expansion of the right-of-way ("ROW") to accommodate the replacement Ocean Outlet structure.

B. Project Objectives

Daly City developed the Project to address the following objectives:

- Improve stormwater drainage of the lower Vista Grande Basin to accommodate peak flows generated by the 25-year design storm;
- Provide a sustainable source of stormwater, establish a target maximum water surface elevation, and implement a Lake Management Plan for management of Lake Merced water quality, groundwater, and surface water elevation;
- Improve recreational access and reduce litter transfer and deposition along the beach below Fort Funston; and
- Maximize use of existing ROWs, easements, and infrastructure to minimize construction-related costs, habitat disturbance, and disruption to recreational users.

C. Environmental Review

In accordance with Sections 15063 and 15082 of the CEQA Guidelines, the City of Daly City, as lead agency, prepared a Notice of Preparation ("NOP") to prepare a joint EIR and EIS for the Project in cooperation with the NPS. The NOP was circulated to local, state, and federal agencies and to other interested parties on February 28, 2013, initiating a public scoping period that extended through June 7, 2013. The NOP provided a general description of the proposed Project, locations, and objectives, and included a preliminary list of the potential environmental impacts related to the following resource topics: aesthetics; air quality; biological resources; cultural and archaeological resources; greenhouse gas emissions; hazards and hazardous materials; hydrology and water quality; land use; noise and vibration; public services and utilities; recreation; socioeconomics and environmental justice; soils, seismicity, and geologic resources; and transportation and traffic.

Pursuant to CEQA Guidelines Section 15083, the City of Daly City held one public scoping meeting on March 28, 2013 at the Doelger Senior Center Café/Kitchen at Westlake Park in Daly City, CA. The purpose of the meeting was to present the proposed Project to the public and receive public input regarding the proposed scope of the EIR analysis. Attendees were provided an opportunity to voice comments or concerns regarding potential effects of the Project.

Three members of the public attended the scoping meeting. In addition to comments received from attendees at the scoping meeting, which were summarized in notes taken by meeting organizers, eight comment letters on the NOP were received via mail, e-mail, or fax. One of the comment letters also attached two prior letters regarding prior alternatives analysis and

preliminary project design-related documents published by the City of Daly City and City and County of San Francisco about the proposed Project; to the extent applicable, these also were treated as scoping comments for the EIR. The comments addressed concerns regarding project description, required permits, aesthetics, biological resources, cultural resources, geology and soils, greenhouse gas emissions and climate change, hazards and hazardous materials and public health, hydrology and water quality, consistency with local plans and policies, odors, recreational impacts, transportation, and cumulative impacts.

Daly City then prepared the Draft EIR, which describes the Project and the environmental setting, identifies potential impacts, presents mitigation measures for impacts found to be significant or potentially significant, and evaluates three alternatives to the Project, including a "No Project" alternative. The EIR also considers the cumulative impact of the Project and alternatives in combination with other past, present, and future projects with potential for impacts on the same resources.

Each environmental issue presented in the Draft EIR is analyzed with respect to significance criteria that are based on CEQA Guidelines Appendix G, with some modifications to ensure that anticipated potential effects, such as interference with local utility corridors, would be addressed.

The Draft EIR was circulated to local, state, and federal agencies and to interested organizations and individuals for review and comment on April 28, 2016 for a 60-day public review period that closed on July 1, 2016. Daly City made the Draft EIR available for download its Project website, the address for which was included in all public notices. Paper copies of the Draft EIR were made available for public review at the following locations: (1) the Daly City Office of the City Clerk, 333 90th Street, Daly City, California; and (2) the Westlake Branch of the Daly City Public Library, 275 Southgate Avenue, Daly City, California. Daly City also distributed notices of availability of the Draft EIR on April 28, 2016; issued a news release on April 29, 2016; and posted notices at locations within the Project area on May 2, 2016.

During the 60-day public review period, Daly City conducted a public meeting to provide an opportunity for the public and regulatory agencies to learn about the project and be informed about how to submit comments on the adequacy and accuracy of the Draft EIR. The public meeting was held on May 26, 2016 at City Council Chambers, 333 90th Street, Daly City. One member of the public attended the public meeting, but no comments addressing the adequacy of the Draft EIR content were raised at the meeting.

During the Draft EIR public review period, Daly City received seven comment letters. Four agencies provided comments: the U.S. Environmental Protection Agency (USEPA), the California State Lands Commission, the California Department of Transportation (Caltrans), and the San Francisco Public Utilities Commission (SFPUC). Three organizations and private entities also commented: California Trout, Golden Gate Audubon Society, and the Olympic Club.

The Final EIR, published on September 8, 2017, included copies of all of the comments received on the Draft EIR as well as individual responses to those comments. The Final EIR provided additional, updated information and clarification on issues raised by commenters, as well as the consultant and the lead and responsible agencies. The District reviewed and considered the Final

EIR, which includes the Draft EIR and the RTC document. In certifying the Final EIR, Daly City determined that the Final EIR does not add significant new information to the Draft EIR that would require recirculation of the EIR under CEQA Guidelines Section 15088.5 because the Final EIR contains no information revealing (1) a new significant environmental impact that would result from the Project or from a new mitigation measure proposed to be implemented, (2) a substantial increase in the severity of a previously identified environmental impact, (3) a feasible project alternative or mitigation measure considerably different from others previously analyzed that would clearly lessen the environmental impacts of the Project, but that was rejected by the Project's proponents, or (4) that the Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded. The District concurs in that determination.

The Final EIR fully analyzed the Project proposed for approval herein. No new impacts have been identified that have not been analyzed in the Final EIR.

D. Approval Actions

1. North San Mateo County Sanitation District Actions

- Certify the Final EIR
- Adopt these CEQA findings, Statement of Overriding Considerations, and the Mitigation Monitoring and Reporting Program
- Approve the Vista Grande Drainage Basin Improvement Project

2. City and County of San Francisco

The City and County of San Francisco is a Responsible Agency for the Project and separately will consider taking the following actions and approvals to implement the aspects of the Project under San Francisco jurisdiction.

San Francisco Board of Supervisors:

- Adopt CEQA findings, Statement of Overriding Considerations, and the Mitigation Monitoring and Reporting Program
- Convey ownership of Vista Grande Tunnel and easement to Daly City

San Francisco Public Utilities Commission:

- Approve the Lake Management Plan, including selecting a target water surface elevation at which to manage the lake
- Approve necessary conveyances (e.g., easements, leases, and land transfers)

Additionally, the SFPUC Wastewater Enterprise, Department of Public Works, Department of Parking and Traffic, Recreation and Parks Department, and the Municipal Transportation Agency MUNI Street Operations Division would rely on the certified EIR for issuance of any discretionary permits or approvals for the Project.

3. State Agencies

Implementation of the Project and mitigation measures will involve consultation with/required approvals by state regulatory agencies, including:

- California Coastal Commission
- State Water Resources Control Board
- San Francisco Bay Regional Water Quality Control Board
- California Department of Fish and Wildlife
- California State Lands Commission
- California Department of Transportation
- State Historic Preservation Officer

E. Record of Proceedings

For purposes of CEQA and these Findings, the Record of Proceedings consists of the following documents, at a minimum:

- The NOP and all other public notices issued by Daly City in conjunction with the proposed Project;
- The Draft EIR and Final EIR, including appendices and technical studies included or referenced in the Draft EIR and Final EIR;
- All comments submitted by agencies or members of the public during the public review period on the Draft EIR;
- All comments and correspondence submitted to Daly City with respect to the proposed Project, in addition to timely comments on the Draft EIR;
- Any minutes and/or transcripts of all information sessions, public meetings, and public hearings held by Daly City in connection with the Project;
- Any documentary or other evidence submitted to Daly City at such information sessions, public meetings, and public hearings;
- The Daly City General Plan and the Daly City Municipal Code provisions cited in materials prepared by or submitted to Daly City;
- Any and all resolutions adopted by Daly City regarding the Project, and all staff reports, analyses, and summaries related to the adoption of those resolutions;
- Matters of common knowledge to Daly City, including but not limited to federal, state, and local laws and regulations;
- Any additional documents expressly cited in the Draft EIR and Final EIR and these findings; and
- Any other materials required for the record of proceedings by Public Resources Code section 21167.6(e).

The District has relied on all of the documents listed above in reaching its decisions on the Project even if not every document was formally presented to the District or Daly City Staff as part of the files generated in connection with the Project.

Without exception, any documents set forth above not found in the Project files fall into one of two categories. Many of them reflect prior planning or legislative decisions with which the District was aware in approving the Project. (See *City of Santa Cruz v. Local Agency Formation Commission* (1978) 76 Cal.App.3d 381, 391-392; *Dominey v. Department of Personnel Administration* (1988) 205 Cal.App.3d 729, 738, fn. 6.) Other documents influenced the expert advice provided to Daly City Staff or consultants, who then provided advice to the District as the final decision-making body. For that reason, such documents form part of the underlying factual basis for the District's decisions relating to approval of the Project. (See Pub. Resources Code, § 21167.6 (e)(10); *Browning-Ferris Industries v. City Council of City of San Jose* (1986) 181 Cal.App.3d 852, 866; *Stanislaus Audubon Society, Inc. v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 153, 155.)

The documents constituting the record of proceedings are available for review by responsible agencies and interested members of the public during normal business hours at the Office of the City Clerk, 333 90th Street, Daly City, California.

F. Certification of EIR

In accordance with CEQA and the CEQA Guidelines the District hereby certifies that the EIR has been completed in compliance with CEQA and the CEQA Guidelines. The District has reviewed and considered the information in the record and the EIR prior to recommending approval of any element of the Project. By making these findings, the District confirms that the EIR is adequate to support the approval of the Project and the District ratifies and adopts the findings and conclusions of the EIR, as supplemented and modified by the findings contained herein.

G. Findings about Significant Environmental Impacts and Mitigation Measures

The following Sections II, III, and IV set forth the District's findings about the Final EIR's determinations regarding significant environmental impacts and the mitigation measures proposed to address them. These findings provide the written analysis and conclusions of the District regarding the environmental impacts of the Project and the mitigation measures included as part of the Final EIR and adopted by the District as part of the Project. To avoid duplication and redundancy, and because the District agrees with, and hereby adopts, the conclusions in the Final EIR, these findings do not repeat the analysis and conclusions in the Final EIR, but instead incorporate them by reference herein and rely upon them as substantial evidence supporting these findings.

In making these findings, the District has considered the opinions of District staff and experts, other agencies, and members of the public. The District finds that the determination of significance thresholds is a judgment decision within the discretion of the City of Daly City; the

significance thresholds used in the EIR are supported by substantial evidence in the record, including the expert opinion of the EIR preparers and City staff; and the significance thresholds used in the EIR provide reasonable and appropriate means of assessing the significance of the adverse environmental effects of the Project. Thus, although, as a legal matter, the District is not bound by the significance determinations in the EIR (see CEQA § 21082.2(e)), the District finds them persuasive and hereby adopts them as its own.

These findings do not attempt to describe the full analysis of each environmental impact contained in the Final EIR. Instead, a full explanation of these environmental findings and conclusions can be found in the Final EIR and these findings hereby incorporate by reference the discussion and analysis in the Final EIR supporting the determination regarding the Project impacts and mitigation measures designed to address those impacts. In making these findings, the District ratifies, adopts, and incorporates in these findings the determinations and conclusions of the Final EIR relating to environmental impacts and mitigation measures, except to the extent any such determinations and conclusions are specifically and expressly modified by these findings.

As set forth below, the District adopts and incorporates all of the mitigation measures set forth in the Final EIR to substantially lessen or avoid the potentially significant and significant impacts of the Project The impact numbers and mitigation measure numbers used in these findings reflect the information contained in the Final EIR.

In the Sections II, III, and IV below, the same findings are made for a category of environmental impacts and mitigation measures. Rather than repeat the identical finding dozens of times to address each and every significant effect and mitigation measure, the initial finding obviates the need for such repetition because in no instance is the District rejecting the conclusions of the Final EIR or the mitigation measures recommended in the Final EIR for the Project.

II. Impacts Found Not to Be Significant and Thus Not Requiring Mitigation

Under CEQA, no mitigation measures are required for impacts that are less than significant. (CEQA, § 21002; CEQA Guidelines, §§ 15126.4 (a)(3), 15091.) The Final EIR identified impacts found not to be significant for each component of the Vista Grande Drainage Basin Improvement Project. Based on the evidence in the whole record of this proceeding, the District finds that implementation of the Project will not result in any significant impacts in the following areas and that these impact areas therefore do not require mitigation. The District notes that NPS, the federal lead agency under NEPA, has discretion to require and adopt mitigation for impacts not found to be significant in the CEQA analysis of the Project. Such mitigation is represented in the MMRP as being required by NPS, and is not relevant to the determination of significance under CEQA of the impacts listed below.

Aesthetics

Impact AES-1: Project construction would not result in a substantial adverse impact on a scenic vista or scenic resource, or on the visual character or quality of the site or its surroundings.

Impact AES-2: Project operation would not result in a substantial adverse impact on a scenic vista, scenic resource, or on the visual character or quality of the site or its surroundings.

Impact AES-4: Project operation would not result in a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Air Quality

Conflict with or obstruct implementation of the applicable air quality plan (no impact).

Impact AIR-3: The Project would not expose sensitive receptors to substantial pollutant concentrations.

Impact AIR-4: The Project would not create objectionable odors affecting a substantial number of people.

Biological Resources

Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan (no impact).

Impact BIO-11: Project operation would not adversely affect species identified as candidate, sensitive, or special-status wildlife species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

Impact BIO-13: Project operation would not adversely affect resident fisheries and fish habitat associated with Lake Merced.

Impact BIO-14: Project operation would not adversely affect wetland habitats and other waters of the United States associated with Lake Merced.

Geology and Soils

Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater (no impact).

Greenhouse Gas Emissions and Climate Change

Conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs (no impact).

Hazards and Hazardous Materials

Emit Hazardous Emissions or Handle Hazardous or Acutely Hazardous Materials, Substances, or Waste Within 0.25 Mile of an Existing or Proposed School (no impact).

Be Located on a Site that is Included on a List of Hazardous Materials Sites Compiled Pursuant to Government Code Section 65962.5 and, as a Result, Create a Significant Hazard to the Public or the Environment (no impact).

Be Located within an Airport Land Use Plan or in the Vicinity of a Private Airstrip (no impact).

Expose People or Structures to a Significant Risk of Loss, Injury, or Death Involving Fires (no impact).

Impact HAZ-1: Project construction could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Impact HAZ-4: Project operation would not increase human exposure to vector-borne diseases as a result of implementation.

Hydrology and Water Quality

Placement of Housing within a 100-Year Flood Zone (no impact).

Exposure to Flooding from Failure of a Levee or Dam (no impact).

Impact HYD-2: The Project could deplete groundwater supplies or interfere substantially with groundwater recharge.

Impact HYD-3: The Project could alter existing drainage patterns, causing downstream erosion or siltation.

Impact HYD-4: The Project would not place within a 100-year flood hazard area structures that would impede or redirect flood flows.

Impact HYD-5: The Project could alter existing drainage patterns and increase the potential for flooding and could expose people or structures to a significant risk of loss, injury or death involving flooding or could result in increased stormwater runoff which would exceed the capacity of existing or planned stormwater drainage systems.

Impact HYD-6: Project maintenance could violate water quality standards and/or waste discharge requirements, provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality in Lake Merced.

Impact HYD-7: The Project would not expose people or structures to a significant risk of loss, injury, or death involving inundation by seiche, tsunami, or mudflow.

Impact HYD-8: Project operation could violate water quality standards, waste discharge requirements, provide substantial additional sources of polluted runoff or otherwise substantially degrade water quality in Lake Merced.

Land Use and Planning

Physically divide an established community (no impact).

Conflict with any applicable habitat conservation plan or natural community conservation plan (no impact).

Noise and Vibration

For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within 2 miles of a public airport or public use airport, expose people residing or working in the area to excessive noise levels (no impact).

For a project located in the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels (no impact).

Impact NOI-3: Project operation would not expose receptors to noise levels in excess of the San Francisco Noise Ordinance; would not expose persons to excessive groundborne vibration or groundborne noise levels; and would not result in a substantial permanent, temporary, or periodic increase in ambient noise levels in the Project vicinity above existing levels.

Recreation

Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment (no impact).

Impact REC-1: Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Population and Housing

Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure) (no impact).

Displace substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere (no impact).

Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere (no impact).

Transportation and Traffic

Conflict with an applicable congestion management program, including but not limited to LOS standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways (no impact).

Result in a change in air traffic patterns, including either an increase in traffic levels or a change in locations that results in substantial safety risks (no impact).

Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (no impact).

Impact TRA-2: Project operation and maintenance would cause some temporary increases in traffic volumes on area roadways, but would not substantially conflict with the performance of the circulation system or with plans, ordinances, or policies pertaining to the performance of the circulation system.

Impact TRA-3: Project construction would not impair access to adjacent roadways and land uses, or impede emergency access.

Impact TRA-4: Project construction would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities.

Utilities and Service Systems

Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects (no impact).

Require or result in the construction of new stormwater drainage facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects (no impact).

Impact UTIL-1: The Project would not exceed wastewater treatment requirements of the San Francisco Regional Water Quality Control Board nor result in a determination by a wastewater treatment provider that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing entitlements.

Impact UTIL-2: The Project would not require more water supply than would be available through existing entitlements and resources, nor would it require new or expanded water supply resources or entitlements.

Impact UTIL-3: Project construction would not result in a substantial adverse effect related to landfill capacity.

Impact UTIL-4: The Project would not result in a substantial adverse effect related to compliance with federal, State, and local statutes and regulations pertaining to solid waste.

Impact UTIL-5: Project construction could result in a substantial adverse effect related to disruption of utility operations or accidental damage to existing utilities.

III. Findings of Potentially Significant Impacts That Can Be Avoided or Reduced to a Less-than-Significant Level through Mitigation, and the Disposition of the Applicable Mitigation Measures

CEQA requires agencies to adopt mitigation measures that would avoid or substantially lessen a project's identified significant impacts or potential significant impacts if such measures are feasible (unless mitigation to such levels is achieved through adoption of a project alternative). The findings in this Section III and in Section IV concern mitigation measures set forth in the EIR. The full text of the mitigation measures is contained in the Final EIR and in Attachment A, the Mitigation Monitoring and Reporting Program. The District recognizes that some of the mitigation measures are partially within the jurisdiction of other agencies, including the SFPUC and NPS. The District urges these agencies to assist in implementing these mitigation measures, and finds that these agencies can and should participate in implementing these mitigation measures.

Aesthetics

Impact AES-3: Project construction could result in a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

It is anticipated that tunneling activities could occur 24 hours per day in two to three shifts, and construction of the replacement pipe section and piers on the beach would necessitate 24-hour work over a period of several days to one week. Construction would create a new temporary source of nighttime lighting in the immediate area and the light and glare effects from Project construction could be substantial.

> **Mitigation Measure 3.4-9: Night Lighting Minimization**
>
> All construction nighttime lighting shall be fully shielded and focused downward to ensure that no significant illumination passes beyond immediate work area or vertically into the sky. Warm colored light shall be used where feasible.

Air Quality

Impact AIR-1: The Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Without appropriate dust controls, dust emissions generated within federally administered areas could contribute to the SFBAAB's existing PM10 and PM2.5 non-attainment status, a potentially significant impact.

> **Mitigation Measure 3.3-1: Dust Control Plan Implementation**
>
> All elements of the Dust Control Plan required for work within San Francisco shall also be implemented for work occurring at Fort Funston. At a minimum this Plan shall include watering of exposed surfaces, covering of haul trucks, and sweeping of visible mud or dirt on adjacent public roads.

Impact AIR-2: The Project could result in a cumulatively considerable net increase of ozone, PM10, or PM2.5 (for which the SFBAAB is in non-attainment), including releasing emissions which exceed quantitative thresholds for ozone precursors. Construction activities would result in cumulatively significant fugitive dust emissions.

See **Mitigation Measure 3.3-1: Dust Control Plan Implementation**

Biological Resources

Impact BIO-1: Project construction could have a substantial adverse effect either directly or through habitat modifications, on plant species identified as sensitive or special-status in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Project construction activities including materials and equipment staging at multiple sites within at Fort Funston associated with the Vista Grande Tunnel and Ocean Outlet replacement, maintenance on and use of the Avalon Canyon Road beach access route, and construction of the Impound Lake discharge structure could result in impacts to special-status plant populations and their supporting vegetation communities.

Mitigation Measure 3.4-1: Avoidance, minimization, and compensation for impacts to special-status plants

A qualified botanist shall conduct appropriately timed floristic preconstruction surveys for special-status plant species with a moderate or high potential to occur in the study area, and for species known to be present in the study area, in all suitable habitat that would be potentially disturbed by the Project within the year of initiation of ground disturbance. If special-status plants are found during surveys, a reporting and avoidance/relocation/compensation program shall be conducted as described in this measure.

Impact BIO-2: Project construction could have a substantial adverse effect either directly or through habitat modifications, on reptile species identified as special-status in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Construction of the Lake Merced overflow structure in South Lake and the outlet structure on the bank and within waters of Impound Lake could adversely affect the western pond turtle by direct mortality, should it be present, which would be a significant impact.

Mitigation Measure 3.4-2: Worker Training Worker Environmental Awareness Program Training

A Project-specific Worker Environmental Awareness Program (WEAP) training shall be developed and implemented by a qualified biologist and attended by all Project personnel prior to beginning work onsite.

Mitigation Measure 3.4-2b: Avoidance and Minimization Measures for Western Pond Turtle

During construction at the Lake Merced overflow structure in South Lake, construction at the outlet structure on the bank and within waters of Impound Lake, and during installation of the in-lake treatment infrastructure a qualified biological monitor shall be present during vegetation removal and the installation of exclusion fencing and cofferdam at Impound Lake.

Impact BIO-3: Project construction could have a substantial adverse effect either directly or through habitat modifications, on migratory birds and/or on bird species identified as special-status in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Construction activities could disrupt birds attempting to nest in the vicinity of the Project site, disrupt parental foraging activity, or displace mated pairs with territories in the Project vicinity.

Mitigation Measure 3.4-3: Nesting Bird Protection Measures

Construction activities that may compromise breeding birds or the success of their nests shall be conducted outside of nesting season. If construction cannot be avoided during nesting season, a qualified wildlife biologist shall conduct preconstruction nesting surveys within 7 days prior to the start or resumption of construction after any breaks of 14 days or more. If active nests are located during the preconstruction bird nesting surveys, a qualified biologist shall conduct an evaluation and monitoring program as described in this measure.

Impact BIO-4: Project construction could have a substantial adverse effect either directly or through habitat modifications, on bats identified as special-status in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Clearing vegetation (including trees) and removing structures in support of Project construction could result in direct mortality of special-status bats roosting in tree cavities, under bark, and in structures within the Project site. Direct mortality of special-status bats would be a significant impact. Additionally, common bats may establish maternity roosts in these same locations which are protected under CEQA.

Mitigation Measure 3.4-4: Avoidance and Minimization Measures for Special-Status Bats

A preconstruction survey for special-status bats shall be conducted by a qualified biologist in advance of tree and structure removal within the project site to characterize potential bat habitat and identify active roost sites. Should the preconstruction survey find no bat habitat or bat roosting sites then no further action is required. Should potential roosting habitat or active bat roosts be found in trees and/or structures to be removed under the project, Daly City shall implement avoidance and minimization measures as described in this measure.

Impact BIO-5: Project construction could have a substantial adverse effect on central dune scrub, a sensitive natural community identified by the CDFW. Impacts to central dune scrub are expected to occur during Project-related improvements to the Avalon Canyon access road and through use of the proposed staging area at Fort Funston where approximately 0.497-acre of central dune scrub is present on the eastern and southern boundaries. In addition, restored central dune scrub has been established near Impound Lake where the outlet structure is proposed; however, the Project facilities are not located in areas where central dune scrub has been mapped.

Mitigation Measure 3.4-5: Avoidance, minimization, and compensation for impacts to central dune scrub.

Concurrent with focused botanical surveys, prior to establishing staging areas or beginning construction activities, areas of central dune scrub vegetation within the Project footprint and within a 50-foot buffer adjacent to the Project footprint shall be

mapped by a qualified botanist. To the extent feasible, Project elements shall be designed to avoid and minimize impacts to central dune scrub as described in this measure.

Impact BIO-6: Project construction would not have a substantial adverse effect on upland vegetation communities identified in local or regional plans, policies, regulations, or by the CDFW or USFWS. Trees that may be impacted by the Project during construction occur in an area managed by the San Francisco Department of Public Works (SFDPW) or located on San Francisco owned land. Such areas are subject to Article 16, Section 808 of the Public Works Code as designated street or significant trees.

Mitigation Measure 3.4-6: Implement Tree Protection Measures and Plant Replacement Trees

A certified arborist shall perform a tree survey of the Project prior to construction to identify trees to be removed, trimmed, or retained and that shall need to be protected during construction. Trees to be trimmed or retained under the Project shall be protected during construction by measures determined by the certified arborist, and trees to be removed shall follow SFDPW tree removal permit process as described in this measure.

Impact BIO-7: Project construction would have a substantial adverse effect on sensitive communities identified in local or regional plans, policies, regulations, or by CDFW or USFWS through the introduction or spread of invasive plants. Project construction activities could contribute to the spread of invasive plants and introduce new invasive plants to the study area through earth moving, transport of vehicles, equipment and materials, and unanticipated sediment dispersal during rain events which would be a significant impact.

Mitigation Measure 3.4-7a: Control Measures for Spread of Invasive Plants

Construction best management practices shall be implemented in all construction areas to prevent the spread of invasive plants, seed, propagules, and pathogens as described in this measure.

Mitigation Measure 3.4-7b: Post-Construction Treatment of Upland Areas

Upon completion of final grading, and in order to prevent the establishment and spread of invasive plant species in upland areas temporarily disturbed by construction activities, hydroseed or broadcast seed of a native plant seed mix shall be applied to upland areas disturbed during construction as described in this measure.

Impact BIO-8: Project construction could have a substantial adverse effect on wetlands and other jurisdictional waters. Project impacts to these potential jurisdictional features would involve temporary and permanent discharges of structures and/or fill within waters and wetlands, and/or alterations of the bed and/or banks of a lake or stream, to accommodate Project activities.

Mitigation Measure 3.4-8a: Wetland Avoidance and Protection

Access roads, work areas, and infrastructure shall be sited to avoid and minimize direct and indirect impacts to wetlands and waters to the extent feasible. Where work will occur on the Project adjacent to state and federal jurisdictional wetlands and waters, protection measures shall be applied to protect these features as described in this measure.

Mitigation Measure 3.4-8b: Compensation for Impacts to Wetlands and Riparian Habitat

To offset temporary impacts, restoration to pre-project conditions shall be conducted, as required by regulatory permits. To offset unavoidable permanent impacts to jurisdictional wetlands, waters, and to riparian habitat, compensatory mitigation shall be provided as required by regulatory permits as described in this measure.

Impact BIO-9: Project construction could impede movement of native resident fish species. A variety of common fish species reside in Lake Merced and could be adversely affected by in-water work at the lake associated with the Project.

See **Mitigation Measure 3.4-2b: Avoidance and Minimization Measures for Western Pond Turtle**

Impact BIO-10: Project construction could interfere substantially with the movement of native resident or migratory species or with established native resident or migratory corridors, or impede the use of nursery sites. Construction activities associated with the Ocean Outlet and the submarine outfall on Ocean Beach and those associated with the Fort Funston tunnel shaft staging and work area could adversely impact birds migrating along the Pacific Flyway and nearby resident wildlife with the introduction of night lighting into an otherwise dark environment.

See **Mitigation Measure 3.4-9: Night Lighting Minimization**

Impact BIO-12: Project operation could adversely affect central dune scrub, thimbleberry, wax myrtle, and canyon live oak scrub, and Vancouver rye grassland associated with Lake Merced. Loss of central dune scrub would be less than 1 percent under the Project and canyon live oak would be unaffected. Wax myrtle scrub would be unaffected by increased lake levels up to 9 feet City Datum but would incur a 12.50 percent loss at a 10 feet City Datum WSE, which would be considered significant. Thimbleberry scrub occurs above 13 feet City Datum and would not be inundated by rising water surface elevations under any scenario. Vancouver rye grassland would incur losses below 10 percent with an increase in lake levels up through 9 feet City Datum but would experience significant impacts at 10 feet where there would be a 46.15 percent loss (i.e., if the target maximum of 9.5 WSE was selected).

Mitigation Measure 3.4-10a: Lake Level Management

The Lake Merced overflow weir in South Lake shall be set at no greater than 9 feet City Datum to prevent lake water surface elevation from having significant effects on wax myrtle scrub, Vancouver rye grassland, and eucalyptus forest. Should an operating WSE above 9 feet City Datum be selected or an extreme storm event requires temporary storage in Lake Merced that would increase WSE above 9 feet City Datum for more than 14 days (at which time vegetation die-off could occur), Mitigation Measure 3.4-10b is required.

Mitigation Measure 3.4-10b: Compensation for Loss of Sensitive Communities at Lake Merced

If 9.5 feet City Datum is selected as the target maximum WSE and Lake Merced water levels are not maintained at or below 9 feet City Datum during normal operations, or a storm event requires storage in Lake Merced that would increase WSE above 9 feet City

Datum for more than 14 days for wax myrtle scrub and Vancouver rye grassland or for more than one month for blue gum eucalyptus forest, a resurvey of these sensitive vegetation communities around the Lake Merced shoreline to which a significant impact is predicted to occur (i.e., more than 10 percent loss) shall be performed post-inundation to determine actual percent loss.

An onsite revegetation and restoration plan as described in Mitigation Measure 3.4-10b shall be prepared to compensate for the affected sensitive vegetation communities and habitat lost (in excess of 10 percent) with a maintained WSE above 9 feet City Datum for 14 days or more for wax myrtle scrub and Vancouver rye grassland and for one month or more for eucalyptus forest.

Impact BIO-15: Project operation could adversely affect native wildlife nursery sites associated with Lake Merced. Water level increases above 9 feet City Datum under the Project that persist for more than one month (i.e., with a target maximum WSE of 9.5 feet) would result in the change in habitat attributed to the Project in excess of 10 percent which would be considered a significant impact on these wildlife nursery sites.

See **Mitigation Measure 3.4-10a: Lake Level Management**

See **Mitigation Measure 3.4-10b: Compensation for Loss of Sensitive Communities at Lake Merced**

Cultural and Paleontological Resources

Impact CUL-2: The Project could cause a substantial adverse change in the significance of an archaeological resource, including shipwrecks. While unlikely, ground-disturbing activities could expose and cause impacts on unknown archaeological resources or shipwrecks, which would be a potentially significant impact. The existing outlet is approximately 900 feet north of the shipwreck remains of the 1882 schooner *Neptune* from 1900.

Mitigation Measure 3.5-3: Inadvertent Discovery of Archaeological Resources or Shipwrecks.

If construction activities result in the inadvertent discovery of an archaeological resource, measures regarding training construction personnel, and notification, inspection, preservation, and treatment requirements are discussed in this measure.

Impact CUL-3: Project construction could disturb human remains. Project construction could result in direct impacts to previously undiscovered human remains during earthmoving activities.

Mitigation Measure 3.5-4: Inadvertent Discovery of Human Remains.

If construction activities result in the inadvertent discovery of human remains, measures associated with compliance of applicable state laws regarding the treatment of such remains are described in this measure.

Geology and Soils

Impact GEO-1: Construction, operation, and maintenance of the Project could expose people or structures to potential substantial adverse effects involving strong seismic ground shaking and/or seismic-related ground failure. Holocene slip was observed in trench exposures of the Serra Fault and geotechnical investigation concluded there is a potential for sympathetic offset within the proposed tunnel alignment as a result of rupture on the nearby San Andreas Fault. Groundshaking during an earthquake in the Project area has the potential to be strong, with peak ground acceleration around 0.6 g, which could result in significant groundshaking effects on the proposed facilities. Also, seismic damage due to liquefaction and related phenomena could occur along the pipeline and at other facilities. In particular, the new tunnel portal and Lake Merced overflow inlet are planned in an area of potentially liquefiable soil.

> **Mitigation Measure 3.6-1a:** Prior to final Project design, a qualified engineer and/or geologist shall perform an inspection to map the size, location, orientation, and patterns of cracks and any crack offsets to provide additional insight into possible tunnel deformation related to faulting, and to help better assess the potential impact of the Serra Fault Zone during future seismic events on the San Andreas Fault.
>
> **Mitigation Measure 3.6-1b:** Daly City and/or its contractor(s) shall retain inspectors working under the auspices of a California-licensed geotechnical engineer to be present on the Project site during excavation, grading, and general site preparation activities to monitor the implementation of the recommendations specified in this measure.
>
> **Mitigation Measure 3.6-1c:** Project foundations in the vicinity of Boring B-3 shall be constructed using cast-in-place drilled piers, micropiles, or another equivalent deep foundation system such as auger-cast or displacement piles or a torqued-in piling system for deep foundations.

Impact GEO-2: The Project could result in substantial soil erosion or the loss of topsoil. Construction activities such as excavating, trenching, and grading can remove stabilizing vegetation and expose areas of loose soil that, if not properly stabilized during construction, can be subject to erosion by wind and stormwater runoff, potentially resulting in a significant impact with respect to soils. Also, during operation of the project, erosion and improper water flow could occur within the retaining wall backdrain systems if they are not properly maintained.

> **Mitigation Measure 3.6-2:** Annual maintenance shall include the following: inspection and flushing to make sure that subdrain pipes are free of debris and are in good working order; and inspection of subdrain outfall locations to verify that introduced water flows freely through the discharge pipes and that no excessive erosion has occurred.

Impact GEO-3: The Project may be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project. The outlet structure is in an area where the potential for shallow or wedge failures up to about 10 to 15 feet thick under static conditions is moderate to high. During large seismic events, the potential for relatively large-scale landsliding is high. In addition, there is landslide potential at Avalon Canyon which would provide beach access during construction of the outlet structure.

Mitigation Measure 3.6-3a: Recommendations regarding site preparation, foundations, retaining walls, seismic design, and other geotechnical aspects provided in the geotechnical report shall be incorporated into this Project and are discussed in this measure.

Mitigation Measure 3.6-3b: Prior to final Project design, additional slope stability studies, including updated geologic mapping and slope stability analysis, shall be performed by a California-licensed geotechnical engineer to evaluate potential for weakened blocks that could become loose during outlet construction or tunneling. Also, stability analyses shall be completed to evaluate the potential impacts of bluff failure on the new outlet structure to be constructed at the base of the cliff. If potential for weakened blocks to become loose or for bluff failure to occur during construction, the study shall include design specifications and construction methods, such as use of temporary structural supports, to avoid such effects. Recommendations from the studies shall be incorporated into the final Project design and construction methods, and implemented by Daly City and/or its contractors.

Impact GEO-4: The proposed Project would not create substantial risks to life or property due to expansive or corrosive soils. Project area soils have a mild to moderate corrosion potential which could be corrosive to micropiles.

Mitigation Measure 3.6-4: Daly City and/or its contractors shall ensure that all micropiles used for the Project are double-corrosion protected.

Greenhouse Gas Emissions and Climate Change

Impact GHG-1: Project construction and operation would generate GHG emissions. Total short-term Project construction-related GHG emissions would be below BAAQMD's quantitative threshold of 1,100 metric tons CO2e per year for non-stationary sources in construction years 1 and 3, but would be above this threshold during year 2. Impacts associated with construction-related GHG emissions would be less than significant if tunnel drives are constructed concurrently, if tunneling occurs on a 24-hour basis, or both.

Mitigation Measure 3.7-1: Greenhouse Gas Emission Reduction

Daly City and/or its contractors shall implement measures associated with on-road vehicle idling times, biodiesel fueling for generators, pre-construction GHG modeling, and the purchase of carbon offsets as described in this measure.

Hazards and Hazardous Materials

Impact HAZ-2: Project construction could result in a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Lead is a known contaminant within 0.25 mile of the Project site. During construction, ground-disturbing activities could unearth unexploded ordnance, which would pose a safety risk to workers on-site.

Mitigation Measure 3.8-1: Health and Safety Plan.

The construction contractor(s) shall prepare and implement a site-specific Health and Safety Plan in accordance with 29 CFR 1910.120 to protect construction workers and the public during all excavation, grading, and construction activities. A description of elements for inclusion in the Health and Safety Plan are described in this measure.

Impact HAZ-3: Project construction would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Construction could affect the availability of travel lanes when construction occurs within or adjacent to John Muir Drive, due to the presence of large, slow-moving trucks that may cause delays. These delays could interfere with implementation of the Emergency Response Plan, which would be a significant impact.

See **Mitigation Measure 3.15-1: Construction Traffic Management Plan**

Hydrology and Water Quality

Impact HYD-1: Project construction could violate water quality standards and/or waste discharge requirements, provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality. Construction of the Lake Merced outlet structure on the bank and within waters of Impound Lake and of the Lake Merced overflow structure in South Lake could result in discharges of pollutants to Lake Merced directly, resulting in substantial water quality effects.

Mitigation Measure 3.9-1: Implement Cofferdam Dewatering BMPs for In-Water Work

If dewatering discharge produced during construction of the Lake Merced outlet and overflow structures is not discharged to the sewer system, a requirement shall be included in construction specifications that requires the construction contractor(s) to implement standard BMPs developed and approved by Daly City for the treatment of sediment-laden water produced during cofferdam dewatering activities. BMPs are described in this measure.

Noise and Vibration

Impact NOI-1: Project construction could temporarily expose persons to or generate noise levels in excess of local noise ordinances or create a substantial temporary increase in ambient noise levels. Construction activities around the Canal and Tunnel, in combination with the impact pile driving at the John Muir Drive crossing and Fort Funston shaft, may have the potential to exceed the 70 dBA L_{eq} speech interference threshold for greater than two weeks. Additionally, Tunnel construction activities would generate substantial continuous noise at Fort Funston, where visitors may value an increased degree of quiet for passive recreational uses.

Mitigation Measure 3.11-1: Construction contractors shall implement noise control measures for equipment and trucks, impact tools, and stationary construction noise sources as described in this measure.

Mitigation Measure 3.11-2: Construction contractors shall address further potential nuisance impacts of Project construction by posting signs at construction site entrances that describe requirements of Mitigation Measure 3.11-1, and include permitted construction days and hours, contact information for the job site and a contact number in the event of problems. An onsite complaint and enforcement manager shall respond to and track complaints and questions related to noise.

Impact NOI-2: Project construction could result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels. The vibration levels at the Missile Assembly Building in Fort Funston would be above the FTA's building damage threshold for susceptible buildings; therefore, this source of ground-borne vibration could result in a significant impact to that building.

Mitigation Measure 3.11-3: To address the vibration impact at the Missile Assembly Building located in Fort Funston, Daly City shall require construction contractors to implement vibration monitoring measures as described in this measure.

Geologic and Paleontological Resources

Impact PAL-1: The Project would directly or indirectly destroy a unique paleontological resource or site or unique geological feature. Because new disturbance would occur within geologic units with moderate to high potential for paleontological resources, potentially significant fossils could be adversely affected during construction, particularly within the Merced Formation. Furthermore, ground-disturbing activities could expose and cause impacts on unknown paleontological resources, which would be a potentially significant impact.

Mitigation Measure 3.12-1: Inadvertent Discovery of Paleontological Resources.

Training, monitoring, evaluation, reporting, treatment, and salvage procedures related to the inadvertent discovery of paleontological resources are discussed in this measure.

Transportation and Traffic

Impact TRA-1: Project construction would cause temporary increases in traffic volumes on area roadways, which could cause substantial conflicts with the performance of the circulation system, but would not conflict with applicable plans, ordinances, or policies pertaining to the performance of the circulation system. The increased local congestion/delay and potential conflicts involving Project trucks is considered to be a significant impact.

Mitigation Measure 3.15-1: Construction Traffic Management Plan

Daly City and/or its contractor(s) shall prepare and implement a Construction Traffic Management Plan in accordance with professional traffic engineering standards to show methods for maintaining traffic flows on roadways and access to recreational resources directly affected by Project construction. Such requirements are discussed in this measure.

Impact TRA-5: Project construction would result in increased wear-and-tear on the designated haul routes. The wear-and-tear effects on road conditions and driving safety is considered to be a

significant impact. Local streets (e.g., Avalon Drive and Fort Funston Road) generally are not built with a pavement thickness that will withstand substantial truck traffic volumes.

> **Mitigation Measure 3.15-2:** Daly City, San Francisco, and the National Park Service shall enter into an agreement prior to construction that shall detail pre-construction conditions and the post-construction requirements of a roadway rehabilitation program. Daly City and/or its contractors shall repair roads damaged by construction to a structural condition equal to that which existed prior to construction activity.

IV. Significant Impacts That Cannot Be Avoided or Reduced to a Less-than-Significant Level

Notwithstanding existing regulations and the mitigation measures set forth for adoption in the MMRP, the impacts discussed in this Section IV cannot be fully mitigated to a less-than-significant level. For each impact that is determined to be significant and unavoidable, a Statement of Overriding Considerations has been prepared for that impact and is set forth in Section VI, below.

Cultural and Paleontological Resources

Impact CUL-1: The Project would cause a substantial adverse change in the significance of a historical resource because it would demolish the majority of the historic The Vista Grande Canal and Tunnel is recommended eligible for listing in the National Register of Historic Places under Criterion A (events) and C (architecture/engineering). As such, the property meets the definition of a historical resource a defined under CEQA Guidelines Section 15064.5. The proposed Project would replace approximately 1,350 feet of the upstream portion of the Canal with a concrete collection box, box culvert, debris screening device, and diversion structure. Replacement of the Canal with a box culvert would support development of a constructed treatment wetland in an area between John Muir Drive and the southern edge of the Canal. The Project also would demolish and later replace 150 feet of the downstream portion of the Canal to accommodate a temporary access ramp for construction of the rehabilitated Lake Merced Portal. The total length of Canal replacement would be approximately 1,500 feet, or approximately 42 percent of its 3,600-foot length.

The proposed Project also would replace the Vista Grande Tunnel in its entirety to increase its flow capacity. The existing brick-lined tunnel would be excavated and a new tunnel with a larger-diameter concrete lining would be constructed in its place. Tunneling would begin from a temporary 30-foot-diameter construction shaft located at Fort Funston. Once completed, two new 24-inch wastewater pipelines would be installed within the tunnel to replace the existing force main. At Fort Funston, the existing Ocean Outlet would also be demolished and replaced with a new outlet structure.

Although approximately 58 percent or about 2,100 feet of the Canal would remain intact after completion of the Project, the Project would demolish the remaining 1,500 feet of the Canal and all of the 3,000-foot-long Tunnel, thereby substantially affecting of the vast majority (69 percent)

of the Vista Grande Canal and Tunnel as an entire drainage system. As the proposed Project would result in the physical demolition of a resource such that the significance of the historical resource would be materially impaired, it would cause a substantial adverse change in the significance of a historical resource, which is considered a *significant* impact.

This impact could be reduced with implementation of **Mitigation Measure 3.5-1** (HABS/HAER Recordation) and **3.5-2** (Public Interpretation). However, even with implementation of **Mitigation Measures 3.5-1** and **3.5-2,** the impact would remain *significant and unavoidable*, as there are no measures available that would avoid the loss of the structure to a *less-than-significant* level.

Mitigation Measure 3.5-1: HABS/HAER Recordation

Prior to initiation of Project construction or demolition, the City of Daly City, in consultation with the NPS, shall record the Vista Grande Canal and Tunnel in accordance with the NPS Historic American Building Survey/Historic American Engineering Record (HABS/HAER) program. This program entails: 1) documentation of the canal and tunnel through large-format black and white photographs (including the interior of the length of the tunnel), 2) preparation of a historic resources report, 3) preparation of measured drawings (or copies of original plans), and 4) archiving of the documentation package at the U.S. Library of Congress, the City of Daly City, Golden Gate park archives, and other local repositories such as public libraries. The specific HABS/HAER requirements of the Vista Canal and Tunnel will be further detailed in consultation with the NPS Pacific Western Region's HABS/HAER coordinator.

Mitigation Measure 3.5-2: Public Interpretation

Prior to the completion of the Project, the City of Daly City, in coordination with the NPS, shall prepare a public interpretation package that may entail interpretive materials, including but not limited to signage, brochures, videos, historical narrative, or other printed or web-based methods of explaining the historical and engineering significance of the Vista Grande Canal and Tunnel to the general public.

Hydrology and Water Quality

Impact HYD-9: The Project could conflict with plans, policies, or regulations related to alteration of coastal landforms or processes adopted for the purpose of avoiding or mitigating an environmental effect.

The Project's construction and operation could alter the existing natural beach dynamics and the coastal environment, thereby resulting in altered bluff erosion rates and patterns. Coastal development in California is regulated by the California Coastal Commission pursuant to the California Coastal Act. For the purposes of CEQA, the impact threshold is defined by conformance to the Coastal Act policies, and related conformance to NPS Management Policies.

The Coastal Act directs that new development that could alter natural shoreline processes shall be permitted when required to serve coastal dependent uses, protect existing structures, and only when designed to eliminate or mitigate adverse impacts on local shoreline sand supply (Public Resources Code Section 30235). The statute also states that new development shall "[a]ssure

stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs" (Public Resources Code Section 30253(b)).

The California Coastal Act directs that new coastal development, such as the Ocean Outlet structure, be designed to ensure that impacts on local shoreline sand supply are eliminated or mitigated (Section 30235) and that the Project not create or contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs (Section 30253(b)). Further, the CCC's 2015 Sea Level Rise Policy Guidance outlines a process for evaluating and expands upon the factors (e.g., avoidance, alternatives, and adaptation) that the CCC will consider in determining whether a proposed shoreline development project is consistent with the Coastal Act.

The wing walls are proposed to promote the stability and structural integrity of the Ocean Outlet structure, reduce erosion directly behind the wing walls, and extend the operating life of the Ocean Outlet. However, the wing walls would potentially result in alterations to coastal processes in a manner that could result in a reduced local sediment supply, an altered seasonal beach profile due to increased scour, and/or increased episodic bluff erosion. The wing walls thus constitute a protective device that has the potential to substantially alter natural landforms along bluffs and cliffs in the Project vicinity. For these reasons, elements of the Project may conflict with Coastal Act Sections 30235 and 30253(b) and CCC's Sea Level Rise Policy Guidance, which would be a significant impact. Even with implementation of **Mitigation Measure 3.9-2 (Avoidance and Minimization of Conflicts with California Coastal Act and NPS Management Policies)**, elements of the Project necessary to ensure structural integrity may still conflict with the policies in Coastal Act Sections 30235 and 30253(b) due to potentially reduced local shoreline sand supply and altered shoreline processes. Therefore, even with implementation of Mitigation Measure 3.9-2, certain Project features associated with the Ocean Outlet structures may still result in inconsistency with the policies governing local shoreline sand supply and alteration of landforms due to the construction of shoreline protective devices, provided in California Coastal Act Sections 30235 and 30253. As a result, Impact HYD-9 could remain significant and unavoidable even after the incorporation of available and feasible mitigation.

Mitigation Measure 3.9-2: Avoidance and Minimization of Conflicts with California Coastal Act and NPS Management Policies

The final design of the Ocean Outlet structures must minimize conflicts with the applicable Coastal Act requirements that new development: 1) be designed to eliminate or mitigate adverse effects on local shoreline sand supply (Section 30235); and 2) assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs (Section 30253). In order to minimize conflicts with these policies, Daly City shall undertake the steps described in this measure.

Land Use and Planning

Impact LU-1: The project could conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

The Project could be inconsistent with some of the sub-policies of the Coastal Act and with portions of the NPS Management Policies regarding coastal processes. Implementation of **Mitigation Measure 3.9 2, Avoidance and Minimization of Conflicts with California Coastal Act and NPS Management Policies**, would require the final Project engineering design to minimize conflicts with the applicable Coastal Act requirements that new development: 1) be designed to eliminate or mitigate adverse effects on local shoreline sand supply and 2) assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs (California Coastal Act Sections 30235 and 30253) and with NPS Management Policies regarding minimization of safety hazards and harm to property and natural resources. However, even with implementation of **Mitigation Measure 3.9-2**, elements of the Project necessary to ensure structural integrity may still conflict with the policies in Coastal Act Sections 30235 and 30253(b) due to potentially reduced local shoreline sand supply and altered shoreline processes and/or with NPS Management Policies. Therefore, even with implementation of Mitigation Measure 3.9-2, certain Project features associated with the Ocean Outlet structures may still result in inconsistency with applicable land use plans and policies of agencies with jurisdiction over the coastal elements of the Project. As a result, Impact HYD-9, and therefore Impact LU-1 as well, could remain significant and unavoidable even after the incorporation of available and feasible mitigation. This finding is due in part to the inherent inconsistency between the policies requiring structural integrity with the policy concerning avoidance of shoreline protective devices that would substantially alter natural landforms along bluffs and cliffs.

> See **Mitigation Measure 3.9-2: Avoidance and Minimization of Conflicts with California Coastal Act and NPS Management Policies**

V. Evaluation of Project Alternatives

This Section V describes the reasons for approving the Project and for rejecting the alternatives. CEQA mandates that an EIR evaluate a reasonable range of alternatives to the Project or the Project location that generally reduce or avoid potentially significant impacts of the Project. CEQA requires that every EIR also evaluate a “No Project” alternative. Alternatives provide a basis of comparison to the Project in terms of their significant impacts and their ability to meet Project objectives. This comparative analysis is used to consider reasonable, potentially feasible options for minimizing environmental consequences of the Project.

A. Reasons for Approval of the Proposed Project

The specific objectives of the Vista Grande Drainage Basin Improvement Project are to:

- Improve stormwater drainage of the lower Vista Grande Basin to accommodate peak flows generated by the 25-year design storm;
- Provide a sustainable source of stormwater, establish a target maximum water surface elevation, and implement a Lake Management Plan for management of Lake Merced water quality, groundwater, and surface water elevation;
- Improve recreational access and reduce litter transfer and deposition along the beach below Fort Funston; and
- Maximize use of existing ROWs, easements, and infrastructure to minimize construction-related costs, habitat disturbance, and disruption to recreational users.

The Project would meet these objectives by responding to and helping Daly City meet the goal of improving stormwater drainage in the lower Vista Grande Basin by enlarging the existing Canal and Tunnel and providing a connection to store stormwater in Lake Merced in order to accommodate the 25-year design storm. It would also meet the objective of providing a sustainable source of water for management of Lake Merced water surface levels and water quality with implementation of the Lake Management Plan. The Project would meet the objective to improve recreational access and reduce litter transfer and deposition along the beach below Fort Funston by removing the portion of the existing Ocean Outlet structure that currently projects from the cliff face onto the beach and by installing debris screens that would remove litter from the stormwater that flows across the beach. Lastly, the Project would use existing easements and reuse some existing infrastructure.

As described in the Final EIR, the Project was proposed after several years of collaborative efforts to define a project that would meet one of the primary objectives of flood control in the Basin. Beginning in 2007, Daly City and its engineering and environmental consultants evaluated 17 alternative engineering concepts for managing stormwater in the Basin to alleviate flooding. The engineering alternatives included various combinations of facilities including different tunnel alignments and capacities, stormwater detention structures, and groundwater recharge facilities. These engineering alternatives were evaluated in a 2007 draft Alternatives Evaluation Report based on their potential for reducing flooding, operational viability, public impacts, environmental benefits, and constructability. The report also considered diversion of stormwater to Lake Merced as an optional element that could be used in combination with a new tunnel alignment or stormwater retention alternative to help address both flooding and water quality management objectives. Daly City held public meetings in 2008 to introduce interested parties to the conceptual engineering alternatives and hear input about the community's concerns. Following further discussions in July 2009 with the public and key stakeholders, Daly City and San Francisco agreed to explore the potential benefits of augmenting the existing infrastructure adjacent to and including Lake Merced to reduce the localized flooding potential within the watershed and simultaneously better manage Lake Merced water levels. This collaborative effort led to the inclusion of the "Lake Merced Alternative" in a revised Alternatives Analysis Report.

A public hearing was held in May 2011 to review the alternatives presented in this revision, and several stakeholders spoke in support of the Lake Merced Alternative. As a result of this evaluation process, Daly City further defined the Lake Merced Alternative, which became the proposed Project. As described below in Section V.B, the alternatives evaluated in the Final EIR were not found to be environmentally superior to the proposed Project, and each would result in additional new environmental impacts. Thus, the proposed Project is the environmentally superior alternative, and is preferred among the alternatives evaluated.

B. Alternatives Rejected and Reasons for Rejection

The District rejects the Alternatives set forth in the Final EIR and listed below because the District finds that there is substantial evidence, including evidence of economic, legal, social, technological, and other considerations described in this Section that make infeasible such Alternatives, and/or that there is substantial evidence that these Alternatives would result in the same or more severe significant environmental impacts compared to the proposed Project. In making these determinations, the District is aware that CEQA defines "feasibility" to mean "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, legal, and technological factors" (CEQA § 21061.1). The District is also aware that under CEQA case law the concept of "feasibility" encompasses (i) the question of whether a particular alternative promotes the underlying goals and objectives of a project (*Sequoyah Hills Homeowners Assn. v. City of Oakland* (1993) 23 cal.App.4th 704, 715) and (ii) the question of whether an alternative is "desirable" from a policy standpoint (*Defend the Bay v. City of Irvine* (2004) 119 Cal.App.4th 1261, 1269-1270; *In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings* (2008) 43 Cal.4th 1143, 1162-1169) to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, legal, and technological factors (*City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 410, 417).

No Project Alternative

CEQA requires an EIR to evaluate a "no project" alternative to allow decision-makers to compare the impacts of approving a proposed project with the impacts of not approving it (CEQA Guidelines § 15126.6(e)). The "no project" analysis evaluates the existing conditions at the time the Notice of Preparation was published as well as what reasonably would be expected to occur in the foreseeable future if the proposed project were not approved, based on current plans, permits and available infrastructure and services.

Under the No Project alternative, no physical component of the proposed Project would be constructed and none of the proposed operational changes to stormwater routing would be made. The Lake Management Plan would not be implemented. The NPS would not grant the Special Use Permit, and no construction could occur within NPS-managed lands.

Annual Canal sediment removal activities would continue, as well as as-needed maintenance activities. Because Canal and Tunnel capacity would not be improved, occasional flooding of the

Canal and associated flooding of John Muir Drive into Lake Merced and in local neighborhoods would continue.

The No Project Alternative would avoid the short-term and long-term impacts associated with implementing the proposed Project, including (for example) traffic and noise impacts from construction, and permanent significant impacts on historic resources.

This alternative would not achieve the project objectives of providing flood and lake level management, nor would it achieve the beneficial effects on recreational access or litter reduction. The District rejects this alternative as infeasible within the meaning of CEQA. This alternative does not include Project components that will enable Daly City to achieve any of the Project objectives.

Tunnel Alignment Alternative

The Tunnel Alignment Alternative would replace the proposed Project's Tunnel improvement and Lake Merced (East) Portal components with an entirely new tunnel up to approximately 50 feet to the south of the existing Tunnel in an alignment to be determined following additional geotechnical investigation, and a different east portal at a location that would be determined by the final alignment. The new tunnel would run west from a new east portal at the existing Canal to a new or rehabilitated Ocean Outlet structure. The components of the Tunnel Alignment Alternative could be paired with the proposed Canal components, or could be paired with the alternative Canal components described for the Canal Configuration Alternative.

The intent of this alternative was to avoid or further reduce some of the impacts on historic resources associated with replacement of the existing Vista Grande Tunnel with a larger tunnel. However, upon evaluation by the District's engineering consultant, it was determined that the existing Vista Grande Tunnel could not, safely and within the terms of existing easements and ROWs, be abandoned in place unless filled with concrete to prevent collapse and subsequent potential for ground subsidence above the tunnel alignment. Thus, even with implementation of Mitigation Measures 3.5-1 and 3.5-2, the impact of the Tunnel Alignment Alternative combined with either the proposed Canal improvements or the Canal Configuration Alternative would remain significant and unavoidable, as there are no measures available which would fully mitigate the loss of the Tunnel and partial loss of the Canal structure to a less-than-significant level. CEQA requires the evaluation of a reasonable range of alternatives that will reduce or avoid any of the significant environmental impacts of the Project. This alternative does not satisfy this requirement.

The District rejects this alternative as infeasible within the meaning of CEQA. This alternative does not include Project components that will enable Daly City to achieve Project objectives for the following reasons:

- **Similar or More Severe Impacts on Cultural Resources.** Daly City considered whether additional feasible mitigation could be implemented to further reduce the impact associated with filling the existing Tunnel with concrete. One option considered was to retain approximately 10 feet of the eastern or western portal of the Tunnel unfilled to allow it to be

viewed by the public and/or used for future study. This measure would reduce the impact, but would not reduce it to a less-than-significant level, as the vast majority of the Tunnel would be substantially altered. Retaining a portion of the eastern portal unfilled was determined to be infeasible for the same safety reasons described above because in this location, the tunnel is closest to the ground surface, and collapse of the retained and abandoned portion could result in a collapse of the ground surface. Additionally, retaining a portion of the western portal unfilled would only be effective temporarily. As the bluff continues to recede after completion of construction, portions of the Tunnel would again become exposed on the beach, and Daly City would need to periodically demolish and remove the exposed portions of its infrastructure. Therefore, within approximately 25 years, the retained portion would be expected to be demolished. Additionally, retention of a portion of the Tunnel for the purposes of public or research-related access could create a safety hazard.

- **Increased Visual Impacts.** If a new ocean outlet location is selected, a third outlet structure (in addition to the existing Ocean Outlet structure and SFPUC's outlet structure) would be present along the beach and toe of the cliff below Fort Funston within an area of approximately 150 feet or less. This would increase the overall level of visual contrast in this location and would not provide the benefit of removing an obstruction to views.

- **Increased Potential for Archaeological Impacts.** The Ocean Outlet structure associated with the Tunnel Alignment Alternative could be slightly closer to the 1882 schooner Neptune that wrecked in 1900 than the proposed Project.

- **Increased Inconsistency with Management Policies.** The development of a new tunnel and potentially a new Ocean Outlet to the south of the existing structures may conflict with NPS Management Policies for coastal processes by introducing new developments in an area subject to wave erosion or active shoreline processes when a practicable alternative (i.e., the proposed Project) is available.

- **Increased Construction Noise.** The nearest vibration-sensitive receiver to the where pile driving activities would take place is the Mission Assembly Building located in Fort Funston. The vibration levels would be above both the FTA's construction vibration and building damage thresholds for historic land uses.

Canal Configuration Alternative

The Canal Configuration Alternative would minimize changes to the existing Canal while still allowing for some discharges to Lake Merced. This alternative would not construct the box culvert replacing the first 1,000 feet of the Canal; rather, the diversion structure described for the proposed Project would be relocated to the southern (upstream) end of the Canal. The box culvert under John Muir Drive also would be relocated and would cross under John Muir Drive close to the southern end of the Canal. The design of the diversion structure, box culvert under John Muir Drive, and Lake Merced Outlet would be approximately the same as for the proposed Project. The diversion structure would replace the first approximately 350 feet of the Canal, and the rest of the Canal would be unchanged except as needed for the Lake Merced Tunnel Portal. Under the Canal Configuration Alternative, one wetland cell of approximately 1.7 acres would be constructed, providing a reduced water treatment capacity compared to the Project. The components of the Canal Configuration Alternative could be paired with the proposed Tunnel or

could be paired with the alternative Tunnel and East Portal components described for the Tunnel Alignment Alternative.

The intent of this alternative was to reduce some of the impacts on historic resources and federally jurisdictional "other waters" associated with replacement of a portion of the existing Vista Grande Canal with a box culvert. This alternative would reduce the portion of the Vista Grande Canal and Tunnel system to be removed by approximately 1,000 feet or 15 percent of the total length of the system. It would reduce the impact on historic resources compared to the proposed Project, though not to a less-than-significant level.

Subsequent to the publication of the Draft EIR, the U.S. Army Corps of Engineers determined that the Vista Grande Canal was not considered to be federally jurisdictional "other waters," due to the age of the channel, the brick and concrete lined invert, and the relatively low physical and biological functions of the channel. Therefore, reducing impacts on this structure for the purposed of reducing impacts on "other waters" is no longer an objective of the alternatives analysis and selection process.

Although the Canal Configuration Alternative would reduce impacts on historic resources and reduce construction-related air quality and traffic impacts because less construction would occur, it would also result in additional significant and unavoidable construction-related impacts compared to the proposed Project.

The District rejects this alternative as infeasible within the meaning of CEQA. This alternative does not include Project components that will enable Daly City to achieve Project objectives for the following reasons:

- **Increased Construction Noise.** This alternative would not construct a collection box and box culvert, which would reduce the duration of construction activity. However, it would decrease the distance between the location of impact pile driving and the nearest residential receptors, resulting in noise levels up to 82 A-weighed decibels ("dBA") and exceeding the 70 dBA Leq speech interference threshold for greater than two weeks. A noise reduction of at least 12 dBA may not be achieved with mitigation, and, therefore noise impacts associated with construction-related activities could remain significant. (Potentially Significant and Unavoidable)

- **Increased Construction Vibration.** Vibration levels at the nearest residential building located approximately 200 feet south-east from the John Muir Drive crossing and diversion structure would remain significant and unavoidable after mitigation. (Significant and Unavoidable)

- **Reduced Benefit to Lake Merced.** A smaller treatment wetland would offer 0.4 acre less area for the treatment of Canal inputs to Lake Merced, as well as recirculation of lake water during low flow periods, providing a reduced benefit to Lake Merced water quality, a key objective of the Project. Additionally, the reduced wetland area would provide less habitat for wildlife than the treatment wetlands proposed under the Project.

VI. Statement of Overriding Considerations

Pursuant to CEQA Section 21081 and CEQA Guidelines Section 15093, the District hereby finds, after consideration of the Final EIR and the evidence in the record, that each of the specific overriding economic, legal, social, technological and other benefits of the Project as set forth below independently and collectively outweighs the significant and unavoidable impacts described in Section IV and is an overriding consideration warranting approval of the Project. Any one of the reasons for approval cited below is sufficient to justify approval of the Project. Thus, even if a court were to conclude that not every reason is supported by substantial evidence, the District will stand by its determination that each individual reason is sufficient. The substantial evidence supporting the various benefits can be found in the preceding findings, which are incorporated by reference into this Section VI.

On the basis of the above findings and the substantial evidence in the whole record of this proceeding, the District specifically finds that there are significant benefits of the proposed Project to support approval of the Project in spite of the unavoidable significant impacts, and therefore makes this Statement of Overriding Considerations. The District further finds that, as part of the process of obtaining Project approval, all significant effects on the environment from implementation of the Project have been eliminated or substantially lessened where feasible. All mitigation measures proposed in the EIR are adopted as part of this approval action. Furthermore, the District has determined that any remaining significant effects on the environment found to be unavoidable are acceptable due to the following specific overriding economic, technical, legal, social and other considerations.

The Project will have the following benefits:

> The Project will meet the Project objectives by addressing flooding potential through simultaneously increasing the Tunnel capacity and providing alternative stormwater detention in Lake Merced, which together are designed to provide protection equivalent to a 25-year, 4-hour event (with peak flows of 1,070 cubic feet per second). It also would provide a source of water to allow management of Lake Merced levels and water quality. Providing a source of water for Lake Merced water management would have the benefit of groundwater recharge to the underlying groundwater basin and increasing lake levels to benefit recreational users and long-term water quality conditions in the Lake, including the 303(d) listings for dissolved oxygen and pH. The project would also resolve the 2001 California Trout, Inc. (Cal Trout) petition to the State Water Resources Control Board. Further, the project would satisfy the Governor's mandate to beneficially reuse water resources, which is especially important during times of drought. Finally, the Project would improve recreational access and reduce litter transfer and deposition along the beach below Fort Funston by improving the Ocean Outfall and debris screening in the stormwater system, and would maximize the use of existing ROWs, easements, and infrastructure to minimize construction-related costs, habitat disturbance, and disruption to recreational users.

Having considered these benefits, including the benefits discussed in Section I above, the District finds that the benefits of the Project outweigh the unavoidable adverse environmental effects, and that the adverse environmental effects are therefore acceptable.

Attachment A
Mitigation Monitoring and Reporting Program

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MITIGATION MONITORING AND REPORTING PROGRAM

Vista Grande Drainage Basin Improvement Project

Introduction

The California Environmental Quality Act (CEQA) requires that when a public agency makes findings pursuant to Public Resource Code Section 21081 before approving a project that would result in one or more significant impacts on the environment, the agency must adopt a reporting or monitoring program for mitigation measures incorporated into a project or imposed as conditions of approval. The program must be designed to ensure compliance during project implementation (Public Resource Code Section 21081.6).

The Council on Environmental Quality has established regulations for implementing the National Environmental Policy Act (NEPA; 40 CFR 1500-1508). NEPA requires mitigation monitoring in 40 CFR 1505.2(c), and the National Park Service (NPS) NEPA Handbook requires that the Record of Decision "state any mitigation measures that are not inherently integral to the selected action's implementation and a summary of any monitoring or enforcement programs associated with the mitigation" (Section 4.7.B).

This Mitigation Monitoring and Reporting Plan (MMRP) for the Vista Grande Drainage Basin Improvement Project (project) will be in place through all phases of the project, including design and construction, and will help ensure that project objectives are achieved. As the CEQA Lead Agency, the City of Daly City (Daly City) is responsible for verifying that the provisions of the MMRP as a whole are carried out, pursuant to Section 15097(a) of the CEQA Guidelines. The NPS, as NEPA Lead Agency and as the administrator of Fort Funston and the use authorizations for construction and operation of a portion of the Vista Grande Tunnel and the Ocean Outlet structure, also will be responsible for administering the mitigation measure compliance and monitoring program and ensuring that all parties comply with their provisions. The NPS also served as the lead federal agency for Section 106 consultation under the National Historic Preservation Act (NHPA) for the project. Daly City may delegate reporting or monitoring responsibilities to a subsidiary public agency or to a private entity such as a project contractor who accepts the delegation; however, until mitigation measures have been completed, Daly City remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the program. Daly City will ensure that monitoring is documented through periodic reports and that deficiencies are promptly corrected, and will coordinate with NPS to ensure that reporting meets the needs of both agencies.

The following table identifies the mitigation measures by resource area. The table also provides the specific mitigation monitoring requirements, including implementation documentation, monitoring activity, timing, and responsible monitoring party. Verification of compliance with each measure is to be indicated by signature of the mitigation monitor, together with date and verification. Daly City and its contractor(s) shall be responsible for implementation of all mitigation measures, unless otherwise noted in the table.

The table that follows presents a compilation of mitigation measures adopted for the project by Daly City, NPS, or both lead agencies. Some mitigation measures apply only to project components outside of the jurisdiction of NPS that are solely the responsibility of Daly City and related to Daly City's CEQA compliance requirements. There are also measures that are not required under CEQA to reduce an impact to a less-than-significant level, but have been required and adopted by NPS as the NEPA lead agency; nonetheless, as project proponent, Daly City is responsible for carrying out these measures per NPS requirements. The purpose of the table is to provide a single comprehensive list of the measures that will be implemented to avoid or reduce impacts of the project on the environment, the timing for their implementation, and related monitoring and reporting requirements.

The following abbreviations are used in the table:

DC	Daly City
CCC	California Coastal Commission
CDFW	California Department of Fish and Wildlife
CSLC	California State Lands Commission
NPS	National Park Service
RWQCB	San Francisco Bay Regional Water Quality Control Board
SamTrans	San Mateo County Transit District
SFDPW	San Francisco Department of Public Works
SFMTA	San Francisco Municipal Transportation Agency
SFRPD	San Francisco Recreation and Parks Department
SFPD	San Francisco Planning Department
SFPUC	San Francisco Public Utilities Commission
USACE	United States Army Corps of Engineers
USFWS	United Stated Fish and Wildlife Service

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
Aesthetics						
AES-3	Project construction could result in a new source of substantial light or glare that would adversely affect day or nighttime views in the area.	**Implement Mitigation Measure 3.4-9: Night Lighting Minimization (see details under Biological Resources, below)**				
NEPA Impact	The Project could generate visual resource impacts to Fort Funston that would contribute to visual change in landscape.	**3.2-1:** The contractor shall ensure that construction-related activity at the Fort Funston staging area is as clean and inconspicuous as practical by storing materials and equipment within the proposed construction staging areas or in areas that are generally away from public view and by removing construction debris promptly at regular intervals. An 8-foot-high green screening fence shall be installed around the perimeter of the staging area. Stockpiled materials shall not exceed 8 feet in height.	1. DC/NPS 2. DC (Construction Contractor) 3. DC/NPS	1. DC/NPS 2. DC/NPS 3. DC/NPS	1. Ensure that the construction contract for work at Fort Funston includes the requirements for minimizing visual impacts. 2. Maintain clean and inconspicuous staging areas and work areas. Install 8-foot-high green screening fence around staging areas and do not stockpile materials higher than 8 feet. 3. Monitor to ensure that contractor(s) implements measures in contract documents. Report non-compliance, and ensure corrective action.	1. Design 2. Preconstruction/ Construction 3. Construction
Air Quality						
AIR-1	The Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.	**3.3-1: Dust Control Plan Implementation.** All elements of the Dust Control Plan required for work within San Francisco shall also be implemented for work occurring at Fort Funston. At a minimum this Plan shall include watering of exposed surfaces, covering of haul trucks, and sweeping of visible mud or dirt on adjacent public roads.	1. DC 2. DC	1. DC 2. DC/NPS	1. Ensure that the construction contract for Fort Funston includes the same Dust Control Plan that is used for San Francisco. 2. Monitor to ensure that contractor(s) implements measures in contract documents. Report non-compliance, and ensure corrective action.	1. Preconstruction 2. Construction
AIR-2	The Project could result in a cumulatively considerable net increase of ozone, PM10, or PM2.5 (for which the SFBAAB is in non-attainment), including releasing emissions which exceed quantitative thresholds for ozone precursors.	**Implement Mitigation Measure 3.3-1: Dust Control Plan Implementation (see details above)**				
Biological Resources						
BIO-1	Construction of the Project could have a substantial adverse effect either directly or through habitat Modifications, on plant species identified as sensitive or special-status in local or regional plans, policies, or regulations, or by the CDFW or USFWS.	**3.4-1: Avoidance, minimization, and compensation for impacts to special-status plants.** A qualified botanist shall conduct appropriately timed floristic preconstruction surveys for special-status plant species with a moderate or high potential to occur in the study area, and for species known to be present in the study area, in all suitable habitat that would be potentially disturbed by the Project within the year of initiation of ground disturbance (e.g., spring/summer 2017 surveys prior to fall 2017 start of construction). Surveys on NPS managed land shall be coordinated with NPS. Surveys shall be conducted following the current CDFW protocol (CDFG, 2009). If no special-status plants are found during focused surveys, the botanist shall document the findings in a letter to CDFW and the Project proponent, and no further mitigation will be required. If special-status plants are found during focused surveys, the following measures shall be implemented:	1. DC (Botanist) 2. DC (Botanist) 3. DC (Botanist) 4. DC (Botanist)	1. DC/NPS/CDFW 2. DC/CDFW/ USFWS/NPS 3. DC/NPS 4. CDFW/USFWS/ NPS	1. Obtain and review résumé or other documentation of consulting botanist's qualifications. Conduct preconstruction surveys for special status plants in accordance with NPS and/or CDFW protocols and reporting requirements. If special status plants are found, implement appropriate measures. 2. Develop relocation plan and/or compensation plan if relocation is not feasible.	1. Preconstruction 2. Preconstruction 3. Preconstruction 4. Post-construction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting			
			Responsible Party	Reviewing and Approval Party	Monitoring and Reporting Actions	Implementation Schedule
Biological Resources (cont.)						
BIO-1 (cont.)		a) Information regarding the special-status plant populations shall be reported to the CNDDB, mapped, and documented in a technical memorandum provided to Daly City. b) No federal- or state-listed plants have been observed or are expected to occur within the Project areas of disturbance; however, if federal- or state-listed species are identified during floristic preconstruction surveys Daly City shall mark these plants for avoidance and comply with the federal and state Endangered Species Acts through consultation with USFWS and CDFW, respectively, as described in items c and d, below. c) If other special-status plant population(s) (i.e., California Rare Plant Ranked or locally significant plants) are identified during floristic preconstruction surveys and can be avoided during Project implementation, it shall be clearly marked in the field by a qualified botanist and avoided during construction activities. Before ground clearing or ground disturbance, all on-site construction personnel shall be instructed as to the species' presence and the importance of avoiding impacts to this species and its habitat. d) If special-status plant populations cannot be avoided, Daly City shall consult with CDFW and/or USFWS as appropriate (and NPS on populations within NPS-managed lands) to coordinate relocation of special-status plants or compensation if relocation is not determined to be a feasible or successful option by a qualified biologist: i. To the extent feasible, special-status plants that would be impacted by the Project shall be relocated within local suitable habitat. This can be done either through salvage and transplanting or by collection and propagation of seeds or other vegetative material. Any plant relocation shall be done under the supervision of a qualified biologist. ii. Compensation for temporary or permanent loss of special-status plant occurrences, in the form of land purchase or restoration, shall be provided to the level acceptable to the resource agencies. Compensatory measures shall be determined on a case-by-case basis in consultation with the resource agencies. Compensation for loss of special-status plant populations typically involves the purchase and permanent stewardship of known occupied habitat or the restoration and reintroduction of populations in degraded, unoccupied habitat. Restoration or reintroduction may be located on- or offsite. In either case the City of Daly City shall prepare a Mitigation and Monitoring Plan for relocated special-status plants or to compensate for the loss of special-status plant species. The plan shall detail relocation methods or appropriate replacement ratios and methods for implementation, success criteria, monitoring and reporting protocols, and contingency measures that shall be implemented if the initial mitigation fails. The plan shall be developed in consultation with the appropriate agencies prior to the start of local construction activities. For special-status plants displaced on NPS-managed lands, the Mitigation and Monitoring Plan shall be coordinated with and approved by NPS. At a minimum, success criteria shall require any mitigation to provide equal or better habitat and populations than the impacted area. e) If more than 2 years elapses between the focused, floristic preconstruction surveys of the Project site and commencement of ground disturbance activities, a final set of appropriately timed focused, floristic preconstruction botanical surveys shall be conducted and populations mapped. The results of these final surveys shall be combined with previous survey results to produce habitat maps showing habitat where the special-status plants have been observed during either of the focused floristic surveys conducted for the Project. Copies of all surveys shall be submitted to NPS for NPS-managed lands and communications with the appropriate agencies shall be coordinated with NPS for NPS-managed lands.			3. Ensure that floristic preconstruction surveys are conducted again if more than 2 years elapses between initial preconstruction survey and commencement of ground disturbance. 4. Maintain and monitor relocation and/or restored areas for 5 years following construction and restoration activities. Submit monitoring reports to appropriate resource agencies according to protocol.	

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Biological Resources (cont.)						
BIO-1 (cont.)		f) If special-status plants are relocated from the Project or compensatory restoration or reintroduction of plants or seed is implemented, Daly City shall maintain and monitor the relocation sites and/or restored areas for 5 years following the completion of construction and restoration activities. Daly City shall submit monitoring reports to the resource agencies at the completion of restoration and for 5 years following restoration implementation. Monitoring reports shall include photo-documentation, planting specifications, a site layout map, descriptions of materials used, and justification for any deviations from the mitigation plan. Success criteria for restored areas after 5 years will be determined by the appropriate agencies that will approve the plans. For mitigation on NPS-managed lands, restoration plans shall be coordinated with and approved by NPS and all plants shall be propagated from material collected and grown according to NPS protocols.				
BIO-2	Construction of the Project could have a substantial adverse effect either directly or through habitat modifications, on reptile species identified as special-status in local or regional plans, policies, or Regulations, or by the CDFW or USFWS.	**3.4-2a: Worker Environmental Awareness Program Training.** A project-specific Worker Environmental Awareness Program (WEAP) training shall be developed and implemented by a qualified biologist and attended by all Project personnel prior to beginning work onsite. The WEAP training shall generally include but not limited to education about the following: a) Applicable State and federal laws, environmental regulations, Project permit conditions, and penalties for non-compliance; b) Special-status plant and animal species with potential to occur at or in the vicinity of the Project site, avoidance measures, and a protocol for encountering such species including a communication chain; c) Preconstruction surveys and biological monitoring requirements associated with each phase of work and at each Project site as biological resources and protection measures will vary depending on the land managers (see f, below); d) Known sensitive resource areas in the Project vicinity that are to be avoided and/or protected as well as approved Project work areas, access roads, and staging areas; e) Best management practices (BMPs) and their location at various Project sites for erosion control, species exclusion, in addition to general housekeeping requirements; and f) Specific requirements sanctioned by NPS that the Project must comply with while working on NPS-managed lands, including but not limited to: i. Preconstruction surveys for and relocation of terrestrial wildlife prior to grading or vegetation removal at Fort Funston; ii. Biological monitoring during Project initiation at each NPS-managed Project location (e.g., Ocean Outlet work area) to identify nearby sensitive biological resources and implement avoidance or protection measures approved by NPS staff; iii. Seasonal work restrictions during wildlife breeding, nesting, or migration periods; and iv. Work area exclusion methods, communication and relocation protocols if wildlife enters a work area(s) while a biological monitor is not onsite.	1. DC 2. DC (Biologist) 3. DC (Biologist) 4. DC	1. DC 2. DC/NPS 3. DC 4. DC	1. Ensure that contract documents include provisions that all project personnel to attend WEAP training prior to the start of onsite work. 2. Ensure that training program complies with NPS requirements, where applicable. 3. Obtain and review résumé or other documentation of consulting biologist's qualifications. Develop worker training program and ensure that all construction personnel participate in the environmental training prior to beginning work at the job site(s). Conduct additional trainings as new workers start project work. Require workers to sign the training program sign-in sheet. Maintain file of training sign-in sheets. 4. Compare list of WEAP attendees with list of contracted workers. Ensure that all workers have attended the WEAP training prior to starting work.	1. Preconstruction 2. Preconstruction 3. Preconstruction/ Construction 4. Preconstruction/ Construction

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Biological Resources (cont.)						
BIO-2 (cont.)		**3.4-2b: Avoidance and Minimization Measures for Western Pond Turtle.** During construction at the Lake Merced overflow structure in South Lake, construction at the outlet structure on the bank and within waters of Impound Lake, and during installation of the in-lake treatment infrastructure a qualified biological monitor shall be present during vegetation removal and the installation of exclusion fencing and cofferdam at Impound Lake. Also, the following measures shall be implemented: a) Within one week before construction commences at these locations, a qualified biologist shall supervise the installation of exclusion fencing along the terrestrial boundaries of the work area, as the biologist deems necessary. This is to prevent western pond turtles and incidental common wildlife from entering the work area from the adjacent riparian and upland grassland habitats. The construction contractor shall install CDFW-approved species exclusion fencing, with a minimum height of 3 feet above ground surface and with an additional 4 to 6 inches of fence material buried such that species cannot crawl under the fence. Any vegetation removal in advance of exclusion fence installation shall be performed under the supervision of a qualified biologist. b) A qualified biologist shall supervise the installation of a cofferdam around the inwater work area which shall be in place throughout the duration of construction on the Lake Merced overflow structure in South Lake and the Lake Merced outlet into Impound Lake (should lake water levels at the time of construction require in-water work to execute construction of either the overflow or the outlet structure). The following measures will be taken to prevent entrapment of western pond turtle and common, resident fish21 within the cofferdam: i. The qualified biologist shall visually survey the area for wildlife where the cofferdam is to be installed and monitor affected waters during installation. ii. As the final cofferdam piece is installed, resulting in isolation of the work zone and potential trapping of turtles and fish, the qualified biologist shall oversee initial dewatering of the area and conduct rescue-relocation effort of potentially isolated turtles and fish. Once a zero catch is recorded for three successive passes of nets, the work area can be declared free of wildlife. iii. The biologist shall monitor final dewatering of the work area and rescue-relocate any final fish that are revealed by drawing water levels all the way down. iv. The isolated work area can now be considered a construction zone and can be managed as such. Memo of rescue-relocation results involving western pond turtles shall be submitted to CDFW, as required by CDFW, and kept on file at construction site (in case of inspections). c) The biological monitor shall monitor the exclusion fencing and inspect the cofferdam weekly to confirm proper maintenance and inspect for turtles. If turtles are found, the contractor shall halt construction in the immediate area and contact the CDFW for instructions on how to proceed. Construction may resume after approval from the CDFW. d) During construction and/or maintenance activities at work sites around Lake Merced, excavations deeper than 6 inches shall have an escape ramp of earth or a wooden plank installed at a 3:1 rise, be completely covered with plywood/metal plates at the end of each day to prevent entrapment, or be surrounded by species exclusion fencing to prevent species entry; openings, such as the ends of pipes, where western pond turtles might seek refuge shall be covered when not in use; and all trash that may attract predators or hide western pond turtles shall be properly contained each day, removed from the worksite, and disposed of regularly. Following site remediation, the construction contractor shall remove all trash and construction debris from the work areas.	1. DC 2. DC (Biologist) 3. DC (Biologist) 4. DC	1. DC 2. DC/CDFW/ USFWS 3. DC 4. DC	1. Ensure that contract documents include applicable avoidance and minimization measures for western pond turtles and incidental, common wildlife, including requirement for exclusion fencings. 2. Obtain and review résumé or other documentation of consulting biologist's qualifications. Conduct preconstruction surveys, species relocation (if appropriate and approved by CDFW and/or USFWS), and monitoring, including weekly fence inspection. Document activities in monitoring logs. 3. Develop worker training program and ensure that all construction personnel participate in the environmental training prior to beginning work at the job site(s). Require workers to sign the training program sign-in sheet. Maintain file of training sign-in sheets. 4. Monitor to ensure that contractor(s) implements measures in contract documents. Report noncompliance, and ensure corrective action.	1. Design 2. Preconstruction/ Construction 3. Preconstruction/ Construction 4. Construction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
Biological Resources (cont.)						
BIO-3	Construction of the Project could have a substantial adverse effect either directly or through habitat modifications, on migratory birds and/or on bird species identified as special-status in local or regional plans, policies, or regulations, or by the CDFW or USFWS.	**3.4-3: Nesting Bird Protection Measures** Nesting birds and their nests shall be protected during construction through the implementation of the following measures: a) To the extent feasible, conduct initial ground disturbance and site grading, vegetation removal, tree removal, pile driving, and other construction activities that may compromise breeding birds or the success of their nests outside of nesting season (i.e., from January 1 – August 15). Timing of pile driving on NPS-managed lands shall be coordinated with NPS biologists. b) If construction activities cannot be fully avoided during bird nesting season (i.e., from January 1 to August 15), a qualified wildlife biologist shall conduct preconstruction nesting surveys within 7 days prior to the start of construction or prior to reinitiating construction after any construction breaks of 14 days or more. Lead agencies and/or responsible agencies may, at their discretion, require shorter preconstruction survey periods as a condition of Project approval (e.g., NPS previously has required that surveys occur within less than 7 days prior to the start or re-initiation of construction in other GGNRA locations). Surveys shall be performed for the Project sites and for suitable habitat within 250 feet of the Project sites in order to locate any active passerine (perching bird) nests and within 500 feet of the Project sites to locate any active raptor (birds of prey) nests or double-crested cormorant or heron rookeries. c) If active nests are located during the preconstruction bird nesting surveys, a qualified biologist shall evaluate if the schedule of construction activities could affect the active nests and if so, the following measures shall apply: i. If construction is not likely to affect the active nest, it may proceed without restriction; however, a biologist shall regularly monitor the nest to confirm there is no adverse effect and may revise their determination at any time during the nesting season. ii. If construction may affect the active nest, the qualified biologist shall establish a no-disturbance buffer around the nest(s) and all Project work shall halt within the buffer until it is determined no longer in use by a qualified biologist. Typically, these buffer distances are 250 feet for passerines and 500 feet for raptors; however, they may be adjusted if 1) determined to not sufficiently avoid or minimize adverse project effects in which case the buffer would be expanded, or 2) an obstruction, such as a building, is within line-of-sight between the nest and construction in which case the buffer could be reduced, if approved by CDFW. Modifying nest buffer distances, allowing certain construction activities within the buffer, modifying construction, and removing or relocating active nests shall be coordinated with the CDFW as appropriate given the nests that are found on the site. Protective measures surrounding nests found on NPS-managed lands shall be coordinated with NPS. iii. Any work that must occur within established no-disturbance buffers (e.g., vegetation removal, grading, work with hand tools, etc.) around active nests shall be monitored by a qualified biologist. If adverse effects in response to Project work within the buffer are observed and could compromise the nest, work shall halt until the nest fledges. d) Any birds that begin nesting within the Project area and survey buffers amid construction activities are assumed to be habituated to construction-related or similar noise and disturbance levels so exclusion zones around nests may be reduced or eliminated in these cases as determined by the qualified biologist in coordination with respective land managers. Work may proceed around these active nests as long as they and their occupants are not directly impacted. Protective buffers may be established around such nests at any time if Project-related adverse effects to bird, nests, or nestlings are observed.	1. DC 2. DC (Biologist) 3. DC (Biologist) 4. DC	1. DC/NPS 2. DC/NPS 3. DC/CDFW/NPS 4. DC/NPS	1. Ensure that construction contract includes provisions to avoid construction disturbance during the nesting season. 2. Obtain and review résumé or other documentation of consulting biologist's qualifications. Conduct preconstruction nesting surveys within 7 days or less prior to start of construction or reinitiation of construction activities. 3. Create construction mitigation and monitoring plan if active nests are located within disturbance range of project area. 4. Monitor to ensure contractor(s) implements measures in contact documents. Report non-compliance and ensure corrective action.	1. Design 2. Preconstruction 3. Preconstruction/ Construction 4. Construction
		Implement Mitigation Measure 3.11-1 (see details under Noise and Vibration, below)				

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Biological Resources (cont.)						
BIO-4	Project construction could have a substantial adverse effect either directly or through habitat modifications, on bats identified as special-status in local or regional plans, policies, or regulations, or by the CDFW or USFWS.	**3.4-4: Avoidance and Minimization Measures for Special-Status Bats.** A preconstruction survey for special-status bats shall be conducted by a qualified biologist in advance of tree and structure removal within the project site to characterize potential bat habitat and identify active roost sites. Should the preconstruction survey find no bat habitat or bat roosting sites then no further action is required. Should potential roosting habitat or active bat roosts be found in trees and/or structures to be removed under the project, Daly City shall implement avoidance and minimization measures. These measures include, but are not limited to, the following, subject to modification by the terms of applicable permits issued by the CDFW: a) Removal of trees and structures shall occur when bats are active, approximately between the periods of March 1 to April 15 and August 15 to October 15; outside of bat maternity roosting season (approximately April 15 – August 31) and outside of months of winter torpor (approximately October 15 – February 28), to the extent feasible. b) If removal of trees and structures during the periods when bats are active is not feasible and active bat roosts being used for maternity or hibernation purposes are found on or in the immediate vicinity of the project site where tree and structure removal is planned, a no disturbance buffer of 100 feet shall be established around these roost sites until they are determined to be no longer active by the qualified biologist. A 100-foot no disturbance buffer is a typical protective buffer distance however may be modified by the qualified biologist depending on existing screening around the roost site (such as dense vegetation or a building) as well as the type of construction activity which would occur around the roost site. c) The qualified biologist shall be present during tree and structure removal if potential bat roosting habitat or active bat roosts are present. Trees and structures with active roosts shall be removed only when no rain is occurring or is forecast to occur for 3 days and when daytime temperatures are at least 50°F. d) Removal of trees with potential bat roosting habitat or active bat roost sites shall follow a two-step removal process: i. On the first day of tree removal and under supervision of the qualified biologist, branches and limbs not containing cavities or fissures in which bats could roost, shall be cut only using chainsaws. ii. On the following day and under the supervision of the qualified biologist, the remainder of the tree may be removed, either using chainsaws or other equipment (e.g., excavator or backhoe). e) Removal of structures containing or suspected to contain potential bat roosting habitat or active bat roosts shall be dismantled under the supervision of the qualified biologist in the evening and after bats have emerged from the roost to forage. Structures shall be partially dismantled to significantly change the roost conditions, causing bats to abandon and not return to the roost.	1. DC 2. DC (Biologist) 3. DC (Biologist)	1. DC/CDFW 2. DC 3. DC/NPS	1. Ensure that contract documents include applicable avoidance and minimization measures for special status bats. 2. Obtain and review resume or other documentation of consulting biologist's qualifications. Conduct pre-construction survey. If roosts are found, implement appropriate measures. Document activities in monitoring logs. 3. Monitor to ensure that contractor(s) implements measures in contract documents. Report noncompliance, and ensure corrective action.	1. Design 2. Preconstruction 3. Construction
BIO-5	Project construction could have a substantial adverse effect on central dune scrub, a sensitive natural community identified by the CDFW.	**3.4-5: Avoidance, minimization, and compensation for impacts to central dune scrub.** a) Concurrent with focused botanical surveys, prior to establishing staging areas or beginning construction activities, areas of central dune scrub vegetation within the Project footprint and within a 50-foot buffer adjacent to the Project footprint shall be mapped by a qualified botanist using a Global Positioning System (GPS) unit with 3-meter accuracy. b) To the extent feasible, Project elements shall be designed to avoid and minimize impacts to central dune scrub. This includes minimizing the Project footprint within central dune scrub or siting Project elements outside of this sensitive community. Where central dune scrub can be avoided, protective fencing shall be installed along the edge of construction areas including temporary and permanent	1. DC 2. DC (Botanist) 3. DC (Ecologist) 4. DC (Botanist) 5. DC (Ecologist)	1. DC 2. DC 3. DC/NPS/ CDFW/CCC 4. DC 5. DC/NPS	1. Ensure that contract documents include applicable avoidance and minimization measures for central dune scrub. 2. Obtain and review resume or other documentation of consulting botanist qualifications. Conduct pre-construction survey and map areas that contain central dune scrub within project area and within a 50-foot buffer adjacent to project footprint.	1. Design 2. Preconstruction 3. Preconstruction 4. Construction 5. Post-construction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
Biological Resources (cont.)						
BIO-5 (cont.)		access roads where construction will occur within 50 feet of the edge of central dune scrub (as determined by a qualified botanist). The location of fencing shall be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications shall contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, trenching, grading, or other surface-disturbing activities outside of the designated construction area. Signs shall be erected along the protective fencing at a maximum spacing of one sign per 25 feet of fencing. The signs shall state: "This area is environmentally sensitive; no construction or other operations may occur beyond this fencing. Violators may be subject to prosecution, fines, and imprisonment." The signs shall be clearly readable at a distance of 20 feet, and shall be maintained for the duration of construction activities in the area. c) In areas where impacts to central dune scrub cannot be avoided, the Project proponent shall prepare and implement an onsite Revegetation and Restoration Plan for Central Dune Scrub, to be submitted to CDFW and CCC for review and approval. For impacts to central dune scrub on NPS-managed lands, the plan shall also be coordinated with and approved by NPS. Restoration and revegetation shall take place onsite following Project completion and will directly restore those areas temporarily impacted. If grading has occurred in these locations to facilitate Project construction, re-contouring of the disturbed areas to pre-project conditions or similar shall be performed prior to restoration. If permanent impacts to central dune scrub occur within the Project footprint, central dune scrub adjacent to the restored areas could be enhanced through (1) removal of invasive plants, (2) planting of local central dune scrub species, and (3) continued monitoring and maintenance to compensate for permanent losses. The revegetation and restoration plan shall be prepared by a qualified restoration ecologist and shall include specifications for seed and propagule26 collection prior to the commencement of construction and at the appropriate phonological stage to capture reproductive structures of target central dune scrub plants. The restoration ecologist shall coordinate with a local native plant restoration nursery and NPS for restoration of central dune scrub on NPS-managed lands to either store the propagules until planting or grow the plants so that they are ready to plant once construction is complete. Restoration areas shall be monitored to assess reestablishment for 5 years or until the sites meet the success criteria determined in the plan. At a minimum, total native vegetation cover, composition, and species richness in the restored areas should be monitored and maintained until comparable with suitable reference sites.			3. Obtain and review resume or other documentation of consulting restoration ecologist qualifications. Prepare and implement onsite Revegetation and Restoration Plan in areas where impacts to Central Dune Scrub cannot be avoided. 4. Monitor to ensure that contractor(s) implements measures in contract documents. Report noncompliance, and ensure corrective action. 5. Monitor restoration areas for 5 years or until the sites meet criteria in restoration plan.	
BIO-6	Project construction would not have a substantial adverse effect on upland vegetation communities identified in local or regional plans, policies, regulations, or by the CDFW or USFWS.	**3.4-6: Implement Tree Protection Measures and Plant Replacement Trees.** 1. A certified arborist shall perform a tree survey of the Project prior to construction to identify trees to be removed, trimmed, or retained and that shall need to be protected during construction. 2. Trees to be trimmed or retained under the Project shall be protected during construction by measures determined by the certified arborist that may include but are not limited to the following: a. Establishing a Tree Protection Zone (TPZ) around any tree or group of trees to be retained. The formula typically used is defined as 1.5 times the radius of the dripline or 5 feet from the edge of any grading, whichever is greater. The TPZ may be adjusted on a case-by-case basis after consultation with a certified arborist. b. Marking the TPZ of any trees to be retained with permanent fencing (e.g., post and wire or equivalent), which shall remain in place for the duration of construction activities in the area. "Keep Out" signs shall be posted on all sides of fencing.	1. DC 2. DC (Arborist) 3. DC 4. DC	1. DC/SFDPW 2. DC 3. SFDPW 4. DC	1. Ensure that contract documents include tree protection and replacement measures. 2. Obtain and review resume or other documentation of certified arborist's qualifications. Conduct preconstruction tree survey to identify trees to be removed, trimmed, retained, and/or protected during construction. 3. Ensure that the contractor implements tree removal and replacement measures in accordance with SFDPW requirements. 4. Monitor to ensure that contractor implements measures in contract documents. Report noncompliance, and ensure corrective action.	1. Design 2. Preconstruction 3. Preconstruction/ Construction 4. Construction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
Biological Resources (cont.)						
BIO-6 (cont.)		c. Prohibiting construction-related activities, including grading, trenching, construction, demolition, or other work within the TPZ; or, if work within the TPZ is necessary, performing the work in a manner that will adequately protect the tree. No heavy equipment or machinery shall be operated within the TPZ. No construction materials, equipment, machinery, or other supplies shall be stored within a TPZ. No wires or signs shall be attached to any tree. Any modifications shall be approved and monitored by a certified arborist. d. Pruning selected trees to provide necessary clearance during construction and to remove any defective limbs or other parts that may pose a failure risk. All pruning shall be completed by a certified arborist or tree worker and adhere to the Tree Pruning Guidelines of the International Society of Arboriculture. 3. Trees to be removed under the Project shall follow the SFDPW tree removal permit process and be replaced on the property from which trees are removed at a 1:1 ratio. Non-native trees removed shall be replaced with native tree species determined suitable for the site by a qualified biologist, horticulturist, landscape architect, or biologist in coordination with the SFDPW. a. Trees shall be replaced within the first year after completion of construction, or as soon as possible in areas where construction has been completed, during a favorable time period for replanting, as determined by a qualified arborist, horticulturist, or landscape architect. b. Selection of replacement sites and installation of replacement plantings shall be supervised by a qualified arborist, horticulturist, landscape architect, or landscape contractor. Irrigation of trees during the initial establishment period (generally for two to four growing seasons) shall be provided as deemed necessary by a qualified arborist, horticulturist, landscape architect, or landscape contractor. c. Trees shall be planted at or in close proximity to removal sites, in locations suitable for the replacement species. The specialist shall work with the SFDPW to determine appropriate nearby off-site locations that are within the same jurisdiction from which the trees are removed if replanting within the well facility sites is precluded. d. A qualified arborist, horticulturist, landscape architect, or landscape contractor shall monitor newly planted trees at least twice a year for five years. Each year, any trees that do not survive shall be replaced and monitored at least twice a year for five years thereafter.				
BIO-7	Construction of the Project would have a substantial adverse effect on sensitive communities identified in local or regional plans, policies, regulations, or by CDFW or USFWS through the introduction or spread of invasive plants.	**3.4-7a: Control Measures for Spread of Invasive Plants.** Construction best management practices shall be implemented in all construction areas to prevent the spread of invasive plants, seed, propagules, and pathogens through the following actions: 1) Avoid driving in or operating equipment in weed-infested areas outside of fenced work areas and restrict travel to established roads and trails whenever possible. 2) Avoid leaving piles of exposed soil or construction materials in areas with the potential for invasive plants (e.g., Fort Funston staging area). Non-active stockpiles shall be covered with plastic or a comparable material. 3) Clean tools, equipment, and vehicles before transporting materials and before entering and leaving worksites (e.g., wheel washing stations at Project site access points). Inspect vehicles and equipment for weed seeds and/or propagules stuck in tire treads or mud on the vehicle to minimize the risk of carrying them to unaffected areas. Designate areas within active construction sites for cleaning and inspections.	1. DC/NPS 2. DC/NPS	1. DC/NPS 2. DC/NPS	1. Ensure that construction contract includes best management practices and control measures for the spread of invasive plants, at all project locations, with additional actions to be implemented at Fort Funston. 2. Monitor to ensure that contractor implements measures in contract documents. Report noncompliance, and ensure corrective action.	1. Design 2. Construction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
Biological Resources (cont.)						
BIO-7 (cont.)		The following additional actions shall be implemented at Fort Funston: 4) An NPS representative shall inspect vehicles and equipment prior to project initiation at any Fort Funston work area work for weed seeds and plant fragments that could colonize within the site. At Project initiation, all construction vehicles must be cleaned to remove soil and plant fragments at the Fort Funston main parking area (or other agreed to location) and vehicles or equipment that are not clean shall be rejected until clear of weed seed and plant fragments. Wheel washing stations or other methods to remove and contain seeds or other plant fragments from vehicles, equipment, boots, and tools shall be performed in designated areas. 5) All equipment and tools involved in soil disturbance at Fort Funston shall be disinfected using a 10% bleach or 70% isopropyl alcohol solution prior to initial use within Fort Funston or prior to returning to Fort Funston if used on another project site. 6) Only certified, weed-free, plastic-free imported erosion control materials (or rice straw in upland areas) shall be used at Fort Funston.				
		3.4-7b: Post-Construction Treatment of Upland Areas. Upon completion of final grading, and in order to prevent the establishment and spread of invasive plant species in upland areas temporarily disturbed by construction activities, hydroseed or broadcast seed of a native plant seed mix shall be applied to upland areas disturbed during construction. This does not include areas of central dune scrub which will be restored according to Mitigation Measure 3.4-5, Avoidance, minimization, and compensation for impacts to central dune scrub. Native plant seed mix composition shall vary between sites and depend on the surrounding vegetation community of each area. Post-construction treatment of upland areas on NPS-managed lands (i.e., disturbed dune scrub) shall be coordinated with and approved by NPS and all seeds and propagules shall be collected and grown according to NPS protocols. Fertilizers shall not be used at Fort Funston post construction as they may favor invasive plant species over native perennial species. Following post construction treatment of these upland areas disturbed during construction (i.e., hydroseeding, broadcast seeding, or planting), monitoring of these areas shall occur quarterly for a minimum of 2 years. If more than 50 percent of the relative plant cover of these areas is composed of invasive plant species, management actions shall be carried out to reduce the invasive plant cover and promote the native species**.**	1. DC/NPS 2. DC	1. DC/NPS 2. DC/NPS	1. Ensure that construction contract includes post-construction treatment of upland areas to prevent spread of invasive plant species. 2. Conduct monitoring program quarterly for a minimum of 2 years following post construction treatment of upland areas.	1. Design 2. Post-construction
BIO-8	Project construction could have a substantial adverse effect on wetlands and other jurisdictional waters.	**3.4-8a: Wetland Avoidance and Protection.** Access roads, work areas, and infrastructure shall be sited to avoid and minimize direct and indirect impacts to wetlands and waters to the extent feasible. Where work will occur on the Project adjacent to state and federal jurisdictional wetlands and waters, protection measures shall be applied to protect these features. These measures shall include the following: 1) A protective barrier (such as silt fencing) shall be erected around adjacent wetland or water features to isolate them from Project activities and reduce the potential for incidental fill, erosion, or other disturbance; 2) Signage shall be installed on the fencing to identify sensitive habitat areas and restrict construction activities beyond fenced limits; 3) No equipment mobilization, grading, clearing, storage of equipment or machinery, or similar activity shall occur at the Project site until a representative of Daly City has inspected and approved the wetland protection fencing; 4) Daly City shall ensure that the temporary fencing is continuously maintained until all remediation is completed;	1. DC 2. DC	1. DC 2. DC	1. Ensure that construction contract includes avoidance and protection measures for wetlands and waters where work occurs adjacent to such locations. 2. Monitor to ensure that contractor(s) implements measures in contract documents. Report noncompliance, and ensure corrective action.	1. Design 2. Construction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
Biological Resources (cont.)						
BIO-8 (cont.)		5) Equipment maintenance and refueling in support of Project implementation shall be performed in designated upland staging areas and work areas, and spill kits shall be available onsite. Maintenance activity and fueling must occur at least 50 feet from jurisdictional wetlands and other waters or farther as specified in the Project permits and authorizations; and 6) Installation of the cofferdam around the existing outfall structure on the beach below Fort Funston and all subsequent work outside of the cofferdam once installed shall be conducted during periods of low tide, out of the Pacific Ocean, and when beach conditions provide accessible areas for equipment mobilization and storage beyond the reach of tides. Drip pans and/or liners shall be stationed beneath all equipment staged on the beach to minimize spill of deleterious materials into jurisdictional waters and spill kits shall be available within the cofferdam for easy accessibility during beach work. A fencing material meeting the requirements of both water quality protection and wildlife exclusion may be used.				
		3.4-8b: Compensation for Impacts to Wetlands and Riparian Habitat. To offset temporary impacts, restoration to pre-project conditions (typically including contours, topsoil, and vegetation) shall be conducted, as required by regulatory permits (e.g., those issued by the Corps, RWQCB, CDFW, and/or CCC). To offset unavoidable permanent impacts to jurisdictional wetlands, waters, and to riparian habitat, compensatory mitigation shall be provided as required by regulatory permits. Compensation may include on-site or off-site creation, restoration, or enhancement of jurisdictional resources, or payment into an approved mitigation bank for in-kind habitat credits, as determined by the permitting agencies. Mitigation bank credits, if available, shall be obtained prior to the start of construction. On-site or off-site creation/restoration/enhancement plans must be prepared by a qualified biologist prior to construction and approved by the permitting agencies. Implementation of creation/restoration/enhancement activities by the permittee shall occur prior to Project impacts, whenever possible, to avoid temporal loss. On- or off-site creation/restoration/enhancement sites shall be monitored by Daly City for at least five (5) years to ensure their success.	1. DC (Biologist) 2. DC (Biologist; Construction) 3. DC	1. DC 2. DC/USACE/ RWQCB/ CDFW/CCC 3. DC	1. Obtain and review résumé or other documentation of consulting biologist's qualifications. Prepare on-site and off-site creation/restoration/enhancement plans. 2. Restore wetlands, waters, and riparian habitat to pre-construction conditions. Ensure that compensatory mitigation measures for unavoidable permanent impacts comply with applicable regulatory permits. 3. Monitor on- or off-site restoration sites for at least 5 years.	1. Design/ Preconstruction 2. Post-construction 3. Post-construction
BIO-9	Construction of the Project could impede movement of native resident fish species.	**Implement Mitigation Measure 3.4-2b: Avoidance and Minimization Measures for Western Pond Turtle (see details above)**				
BIO-10	Construction of the Project could interfere substantially with the movement of native resident or migratory species or with established native resident or migratory corridors, or impede the use of nursery sites.	**3.4-9: Night Lighting Minimization** At construction areas set up for nighttime activity and requiring nighttime lighting, the construction contractor shall implement the following measures as long as the safety of workers is not compromised: a) To the extent feasible, night construction near suitable habitat for nesting and migratory birds and roosting bats (e.g., scrub vegetation, dense wooded areas, unoccupied buildings) shall be avoided during bird nesting season (January 1 – August 15), bat maternity roosting season (approximately April 15 – August 31), and periods of winter torpor (approximately October 15 – February 28). b) All construction-related lighting shall be fully shielded and focused downward to the maximum extent feasible to ensure no significant illumination passes beyond the immediate work area into surrounding habitat (e.g., central dune scrub, bluffs or the Pacific Ocean), or vertically into the sky. Lighting should be positioned around the perimeter of the work area and oriented toward construction activity rather than toward surrounding habitat. A qualified biologist shall be present at the start of nighttime activities when lights are placed to facilitate appropriate light placement and ensure surrounding wildlife habitat is not unnecessarily illuminated. Maps or other information indicating the location(s) of active nests or nesting habitat nearby nighttime work shall be available at the construction site. c) Yellow, orange, or other "warm colored" light shall be used where feasible (e.g., unless required by safety regulations, pre-installed in construction equipment, etc.).	1. DC 2. DC (Biologist) 3. DC (Biologist) 4. DC (Biologist) 5. DC	1. DC 2. DC 3. DC 4. DC/CDFW/ USFWS/NPS 5. DC/NPS	1. Ensure that construction contract documents include requirements for nighttime lighting minimization. 2. Obtain and review résumé or other documentation of consulting biologist's qualifications. Conduct pre-construction surveys for nesting birds and roosting bats within 7 days or less prior to start of construction or reinitiation of construction activities. 3. Ensure that a qualified biologist is present at the start of nighttime activities to ensure that lighting avoids any wildlife habitat. 4. If active nests or roosts are present near nighttime construction areas, monitor for disturbance during night work to determine species tolerance. Create construction mitigation and monitoring plan.	1. Design 2. Preconstruction 3. Construction 4. Construction 5. Construction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
Biological Resources (cont.)						
BIO-10 (cont.)		d) Construction personnel shall reduce the amount of lighting to the minimum necessary to safely accomplish the work. e) Construction areas set-up for nighttime activity are subject to all of the same preconstruction surveys for nesting birds and roosting bats listed in Mitigation Measures 3.4-3 through 3.4-4. f) If active bird nests or bat roosts are identified near nighttime construction areas, a qualified biologist shall monitor nests or roosts for disturbance during night work to determine species tolerance to nearby lights. Illumination methods or shielding shall be modified if disturbance is determined to have potential to compromise the nest or roost. Coordination with CDFW, USFWS, or NPS (on NPS-managed lands) shall occur as appropriate.			5. Monitor to ensure that contractor(s) implements measures in contract documents. Report non-compliance, and ensure corrective action.	
BIO-12	Project operation could adversely affect central dune scrub, thimbleberry, wax myrtle, and canyon live oak scrub, and Vancouver rye grassland associated with Lake Merced.	**3.4-10a: Lake Level Management.** The Lake Merced overflow weir in South Lake shall be set at no greater than 9 feet City Datum to prevent lake water surface elevation from exceeding 9 feet City Datum during normal operations to avoid significant effects on wax myrtle scrub, Vancouver rye grassland, and eucalyptus forest. Lake Merced water levels shall be maintained at no more than 9 feet City Datum during normal operations. Should an operating WSE above 9 feet City Datum be selected or an extreme storm event requires temporary storage in Lake Merced that would increase WSE above 9 feet City Datum for more than 14 days (at which time vegetation die-off could occur), Mitigation Measure 3.4-10b is required.	1. DC (Structural Engineer) 2. SFPUC 3. SFPUC 4.	1. DC 2. DC 3. DC	1. Establish and incorporate design criterion for the overflow weir such that excess flow above 9 feet City Datum within 14 days of an extreme storm event. 2. Ensure that Lake Merced overflow weir in South Lake is set at no greater than 9 feet City Datum during normal operations. 3. Create log for overflow weir that documents daily operational level of weir. Create automatic alert if water level is greater than 9 feet City Datum for more than 14 days, to trigger actions required in Mitigation Measure 3.4-10b.	1. Design 2. Design/ Post-construction 3. Post-construction
		3.4-10b: Compensation for Loss of Sensitive Communities at Lake Merced. a) If 9.5 feet City Datum is selected as the target maximum WSE and Lake Merced water levels are not maintained at or below 9 feet City Datum during normal operations, or a storm event requires storage in Lake Merced that would increase WSE above 9 feet City Datum for more than 14 days for wax myrtle scrub and Vancouver rye grassland or for more than one month for blue gum eucalyptus forest, a resurvey of these sensitive vegetation communities around the Lake Merced shoreline to which a significant impact is predicted to occur (i.e., more than 10 percent loss) shall be performed post-inundation to determine actual percent loss. i. The resurvey shall be performed by qualified botanists and document the postinundation conditions (extent) of the wax myrtle scrub, Vancouver rye grassland, and blue gum eucalyptus around Lake Merced between the new inundation limit (above 9 feet WSE) and 13 feet WSE City Datum. Information on the extent of these sensitive natural communities gathered during this exercise may be applied to subsequent storm events during which WSE exceeds 9 feet WSE or if an operating WSE maintains lake levels above 9 feet WSE, for use in quantifying loss of these sensitive communities at various inundation limits above 9 feet City Datum. ii. Surveyors may use a combination of on-the-ground vegetation community and habitat type mapping with an assessment of current aerial imagery for informing cover estimates, similar to the mapping exercise performed in 2012 that informed the vegetation change analysis for this EIR/EIS. iii. Once the updated vegetation mapping exercise is complete, the new vegetation polygons shall be compared with the 2012 vegetation polygons to quantify change. The polygon comparison shall also consider the new inundation line, to assess whether or not the change in vegetation communities is attributable to inundation or saturation.	1. DC/SFPUC (Botanist) 2. DC/SFPUC (Botanist)	1. DC 2. DC/CDFW/ CCC/SFRPD	1. Obtain and review résumé or other documentation of consulting botanist's qualifications. If water levels are above 9 feet City Datum for more than 14 days, conduct a post-inundation sensitive vegetation survey in communities around the lake shoreline. 2. Prepare restoration plan for any sensitive vegetation communities or loss of habitat as a result of inundation. Submit to CDFW and CCC for approval.	1. Preconstruction/ Post-construction 2. Preconstruction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
Biological Resources (cont.)						
BIO-12 (cont.)		iv. If the updated mapping exercise and comparison assessment determine impacts to wax myrtle scrub, Vancouver rye grassland, or blue gum eucalyptus are less than 10 percent following inundation above 9 feet WSE, no further mitigation is required. v. If the updated mapping exercise and comparison assessment determine impacts to wax myrtle scrub, Vancouver rye grassland, or blue gum eucalyptus vegetation communities are 10 percent or more, an onsite revegetation and restoration plan shall be developed for permanently impacted (inundated/lost) communities and habitat types, as detailed in part b), below. b) An onsite revegetation and restoration plan shall be prepared to compensate for the affected sensitive vegetation communities and habitat lost (in excess of 10 percent) with a maintained WSE above 9 feet City Datum for 14 days or more for wax myrtle scrub and Vancouver rye grassland and for one month or more for eucalyptus forest. The plan shall be submitted to CDFW and CCC for review and approval, as appropriate. Typical compensation ratios for these communities shall be between 1:1 and 3:1 with native plant replacement quantities that shall be determined by the appropriate permitting agencies. Restoration and revegetation shall take place onsite where possible, and occur above the maximum water surface elevation to be maintained at Lake Merced so that future inundation impacts are avoided, and be implemented in coordination with SFRPD. i. The revegetation and restoration plan shall be prepared by a qualified restoration ecologist and shall include specifications for seed and propagule collection prior to the commencement of construction and at the appropriate phonological stage to capture reproductive structures of target plants within each affected sensitive vegetation community or habitat type. The restoration ecologist shall coordinate with a local native plant restoration nursery to either store the propagules until planting or grow the plants so that they are ready to plant once construction is complete. Restoration areas shall be monitored to assess re-establishment for 5 years or until total native vegetation cover, composition, and species richness in the restored areas are similar to suitable reference sites. ii. Individual special-status plants within the affected wax myrtle scrub and Vancouver rye grassland communities shall be mitigated according to the guidelines established in Mitigation Measure 3.4-1, Avoidance, Minimization, and Compensation for Special-Status Plants, items d and f regarding additional compensation location and revegetation and restoration plan performance standard details. Eucalyptus forest communities shall be mitigated according to guidelines established in Mitigation Measure 3.4-6, Implement Tree Protection Measures and Plant Replacement Trees, item 3 regarding appropriate replacement tree types, techniques, and performance standards.				
BIO-15	Project operation could adversely affect native wildlife nursery sites associated with Lake Merced.	**Implement Mitigation Measure 3.4-10a: Lake Level Management and, if necessary, Mitigation Measure 3.4-10b: Compensation for Loss of Sensitive Communities at Lake Merced (see details above)**				
Cultural Resources						
CUL-1	The Project would cause a substantial adverse change in the significance of a historical resource because it would demolish the majority of the historic Vista Grande Canal and Tunnel.	**3.5-1: HABS/HAER Recordation.** Prior to initiation of Project construction or demolition, the City of Daly City, in consultation with the NPS, shall record the Vista Grande Canal and Tunnel in accordance with the NPS Historic American Building Survey/Historic American Engineering Record (HABS/HAER) program. This program entails: 1) documentation of the canal and tunnel through large-format black and white photographs (including the interior of the length of the tunnel), 2) preparation of a historic resources report, 3) preparation of measured drawings (or copies of original plans), and 4) archiving of the documentation package at the U.S. Library of Congress, the City of Daly City, Golden Gate park archives, and other local repositories such as public libraries. The specific HABS/HAER requirements of the Vista Canal and Tunnel will be further detailed in consultation with the NPS Pacific Western Region's HABS/HAER coordinator.	1. DC/NPS	1. NPS	1. Record Vista Grande Canal and Tunnel with the NPS Historic American Building Survey/Historic American Engineering Record (HABS/HAER) program.	1. Preconstruction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
Cultural Resources (cont.)						
CUL-1 (cont.)		**3.5-2: Public Interpretation.** Prior to the completion of the Project, the City of Daly City, in coordination with the NPS, shall prepare a public interpretation package that may entail interpretive materials, including but not limited to signage, brochures, videos, historical narrative, or other printed or web-based methods of explaining the historical and engineering significance of the Vista Grande Canal and Tunnel to the general public.	1. DC/NPS	1. NPS	1. Prepare a public interpretation package explaining the historical and engineering significance of the Vista Grande Canal and Tunnel.	1. Preconstruction/ Construction/ Post-construction
CUL-2	The Project would cause a substantial adverse change in the significance of an archaeological resource, including shipwrecks.	**3.5-3: Inadvertent Discovery of Archaeological Resources or Shipwrecks.** The following measures shall be implemented should construction activities result in the inadvertent discovery of an archaeological resource: a) Prior to construction, a training session on the recognition of the types of archaeological resources that could be encountered and the procedures to be followed if they are found shall be presented to Project construction personnel by a qualified professional archaeologist. If prehistoric or historic-period archaeological resources or shipwrecks are encountered, all construction activities within 50 feet shall halt. If the resource is located within San Francisco, the San Francisco Planning Department also shall be notified. b) If the resource is located on federally administered lands, NPS also shall be notified. Abandoned shipwrecks, archaeological sites, and historic resources in submerged lands of California are under the jurisdiction of the California State Lands Commission (CSLC). In the case of an inadvertent discovery of a submerged archaeological site, shipwreck, or related artifacts, the applicable jurisdictional agency shall also contact and initiate consultation with the CSLC staff within two business days of such discovery. c) The qualified archaeologist shall inspect the find within 24 hours of discovery and consult with the applicable jurisdictional agency and the culturally affiliated Native American group or groups. d) If the find is determined to be a historical resource according to CEQA Guidelines or a historic property that meets the National Register listing criteria at 36 CFR 60.4, the archaeologist, in consultation with the applicable jurisdictional agency and the culturally affiliated Native American group shall determine whether preservation in place is feasible. This may be accomplished through planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement. e) If preservation in place is not feasible, Daly City and the qualified archaeologist shall prepare and implement an Archaeological Research Design and Treatment Plan (ARDTP). Daly City, the qualified archaeologist, agencies with jurisdiction in the location(s) of the discovered resource(s), and the culturally affiliated Native American group(s, if applicable) shall meet to determine the scope of the ARDTP. The ARDTP shall identify a program for the treatment and recovery of important scientific data contained within the portions of the archaeological resources located within the Project Area of Potential Effects (APE); preserve any significant historical information obtained; and identify the scientific/historic research questions applicable to the resources, the data classes the resource is expected to possess, and how the expected data classes shall address the applicable research questions. f) Treatment for most archaeological resources shall consist of (but is not limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource(s) to be impacted by the Project. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories, libraries, and interested professionals. The results of the investigation shall be documented in a technical report that provides a full artifact catalog, analysis of items collected, results of any special studies conducted, and interpretations of the resource(s) within a regional and local context. All technical documents shall be placed on file at the Northwest Information Center of the California Historical Resources Information System.	1. DC 2. DC (Archeologist) 3. DC (Archeologist) 4. DC (Archeologist)	1. DC 2. DC 3. SFPD/NPS/ CSLC/Native American Groups 4. DC/SFPD/NPS/ CSLC/Native American Groups	1. Ensure that the contract documents include measures related to archeological discoveries or shipwrecks. 2. Obtain and review resume of qualified archeologist. Conduct training session with construction crew regarding types of archeological resources that could be encountered and procedures to follow. 3. Inspect any find within 24 hours and notify appropriate jurisdictional authority if archeological resources are discovered. Determine whether find can be preserved in place. 4. Prepare ARDTP if preservation cannot be made in place. Conduct treatment of resource as necessary.	1. Design 2. Preconstruction 3. Construction 4. Construction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
Cultural Resources (cont.)						
CUL-3	Project construction would disturb human remains.	**3.5-4: Inadvertent Discovery of Human Remains.** The following measure shall be implemented should construction activities result in the inadvertent discovery of human remains: The treatment of any human remains and associated or unassociated funerary objects discovered during soil-disturbing activities shall comply with applicable state laws. Such treatment shall include stopping work within 50 feet of the discovery and immediate notification of the County Coroner. In the event of the coroner's determination that the human remains are Native American, the coroner shall notify the Native American Heritage Commission, which shall appoint a Most Likely Descendant (MLD) (Pub. Res. Code §5097.98). The qualified archaeologist, Daly City, the landowner of the property on which the discovery is made, and the MLD shall make all reasonable efforts to develop an agreement for the treatment, with appropriate dignity, of any human remains and associated or unassociated funerary objects (CEQA Guidelines §15064.5[d]). The agreement shall take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects. Public Resources Code Section 5097.98 allows 48 hours to reach agreement on these matters. If the MLD and the other parties do not agree on the reburial method, the landowner of the property on which the discovery is made shall follow Public Resources Code Section 5097.98(b), which states that "the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance."	1. DC 2. DC (Archeologist) 3. DC (Archeologist)	1. DC 2. County Coroner/ Native American Heritage Commission/ Most Likely Descendant 3. DC/NPS	1. Ensure that Contract Documents include measures related to discovery of human remains. 2. If potential human remains are encountered, mobilize an archaeologist to confirm existence of human remains. If human remains are confirmed, perform required coordination and notifications. 3. Monitor to ensure that the contractor implements measures in contract documents including insuring that all potential human remains are reported as required and that contractor suspends work in the vicinity. Report noncompliance and ensure corrective action.	1. Design 2. Construction 3. Construction
Geology and Soils						
GEO-1	Construction, operation, and maintenance of the Project could expose people or structures to potential substantial adverse effects involving strong seismic ground shaking and/or seismic-related ground failure.	**3.6-1a:** Prior to final Project design, a qualified engineer and/or geologist shall perform an inspection to map the size, location, orientation, and patterns of cracks and any crack offsets to provide additional insight into possible tunnel deformation related to faulting, and to help better assess the potential impact of the Serra Fault Zone during future seismic events on the San Andreas Fault, as recommended in the geotechnical investigation conducted by Treadwell & Rollo (2013).	1. DC (Engineer/ Geologist)	1. DC	1. Obtain and review a resume for a qualified engineer/geologist. Inspect tunnel to map details of any cracks or deformation related to faulting.	1. Design
		3.6-1b: Daly City and/or its contractor(s) shall retain inspectors working under the auspices of a California-licensed geotechnical engineer to be present on the Project site during excavation, grading, and general site preparation activities to monitor the implementation of the recommendations specified in this measure. • Project construction shall be in conformance with CBC seismic design requirements and the OSHA Excavation and Trenching standard (29 CFR 1926.650) for the Project area. • When and if needed, the geotechnical engineer shall provide structure-specific geologic and geotechnical recommendations prior to and during construction that shall be documented in a report to be appended to the Project's previous geotechnical reports and approved by the City of San Francisco Department of Building Inspection.	1. DC (Geotechnical engineer) 2. DC (Geotechnical engineer) 3. DC (Geotechnical engineer)	1. DC 2. DC 3. City of San Francisco Department of Building Inspection	1. Obtain and review resume for CA-licensed geotechnical engineer. Monitor excavation and grading and general site preparation activities for seismic requirement standards. 2. Ensure that project construction/project area conforms with CBC seismic design requirements and OSHA Excavation and Trenching standard (29 CFR 1926.650) 3. Prepare report outlining structure specific geologic and geotechnical recommendations made prior to and during construction, if needed.	1. Design/ Preconstruction 2. Construction 3. Post-construction
		3.6-1c: Project foundations in the vicinity of Boring B-3 shall be constructed using cast-in-place drilled piers, micropiles, or another equivalent deep foundation system such as auger-cast or displacement piles or a torqued-in piling system for deep foundations.	1. DC 2. DC	1. DC 2. DC	1. Ensure that construction contract includes the appropriate boring equipment for Boring B-3. 2. Monitor to ensure that contractor(s) implements measures in contract documents. Report non-compliance, and ensure corrective action.	1. Design 2. Construction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
Geology and Soils (cont.)						
GEO-2	The Project could result in substantial soil erosion or the loss of topsoil.	**3.6-2:** Annual maintenance shall include the following: inspection and flushing to make sure that subdrain pipes are free of debris and are in good working order; and inspection of subdrain outfall locations to verify that introduced water flows freely through the discharge pipes and that no excessive erosion has occurred.	1. DC 2. DC (Construction Contractor) 3. DC	1. DC 2. DC 3. DC	1. Ensure that contract documents include requirements for annual maintenance of subdrain pipes and subdrain outfall locations. 2. Prepare annual maintenance logs that include measures to ensure that subdrain pipes are free of debris, are in good working order, that water can flow freely from discharge pipes, and that no excessive erosion has occurred. 3. Review annual maintenance logs and monitor maintenance to ensure that contractor(s) implements measures in contract documents. Report non-compliance, and ensure corrective action.	1. Design 2. Construction/ Post-construction 3. Post-construction
GEO-3	The Project may be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project.	**3.6-3a:** The following recommendations regarding site preparation, foundations, retaining walls, seismic design, and other geotechnical aspects provided in the geotechnical report shall be incorporated into this Project. • Areas that will include improvements, including new below-grade structures, concrete flatwork and slabs-on-grade, shall be cleared and grubbed of all vegetation, and the site shall be stripped of organic topsoil containing over three percent organic matter. Stripped materials shall be removed from the site or stockpiled for later use in landscaped areas, if approved by the architect. • After stripping the existing soil subgrade, areas to receive fill or other improvements shall be scarified, moisture-conditioned, and compacted. The subgrade shall provide a firm, non-yielding surface. The soil subgrade shall be kept moist until it is covered by improvements. If soft or loose soil is encountered after stripping, the unsuitable material shall be excavated and replaced with suitable fill material. • All materials to be used as general engineered fill or backfill, including on-site soil, shall be free of organic material, be non-hazardous and non-corrosive, contain no large rocks or lumps, and have low expansion potential, and be approved by the geotechnical engineer. • Fill shall be placed in horizontal lifts, moisture-conditioned to above the optimum moisture content and compacted. • Fill placed beneath exterior slabs-on-grade/flatwork and other below-grade structures shall also be moisture-conditioned. From a geotechnical standpoint, concrete flatwork/exterior slabs and other below-grade structures can be cast directly on soil subgrade. If Class 2 aggregate base is used beneath flatwork/slabs or structures it shall be compacted as necessary. • Backfill for utility trenches and other excavations is also considered fill, and shall be compacted according to the recommendations previously presented. Jetting of trench backfill shall not be permitted. Special care shall be taken when backfilling utility trenches in pavement areas. • Temporary slopes in loose to medium dense sand shall not be steeper than 2:1 (horizontal to vertical) for slopes up to 15 feet in height. Slopes higher than 15 feet shall be analyzed for stability. Temporary slopes in dense sand shall not be steeper than 1.5:1. If the sides of proposed excavations cannot be sloped back, then shoring shall be provided.	1. DC 2. DC (Construction Contractor) 3. DC (Construction Contractor) 4. DC (Geotechnical Engineer) 5. DC (Shoring Designer) 6. DC (Shoring Designer) 7. DC (Construction Contractor) 8. DC (Geotechnical Engineer) 9. DC (Construction Contractor) 10. DC	1. DC 2. DC 3. DC 4. DC 5. DC 6. DC 7. DC 8. DC 9. DC 10. DC	1. Ensure that contract documents include the recommendations provided in the geotechnical report. 2. Incorporate recommendations regarding site preparation, foundations, retaining walls, seismic design, and other geotechnical aspects from the geotechnical report into the Project. 3. Determine the length of tiebacks. 4. Observe and evaluate tieback testing and test results. 5. Evaluate required penetration depth of soldier piles to ensure they have sufficient axial capacity to support the vertical load acting on the piles. 6. Determine appropriate factor of safety to use an internally braced soil-cement shoring wall. 7. Select and design the dewatering system. 8. Check the design of the proposed dewatering system prior to installation. 9. Monitor for signs of subsidence while dewatering is in progress. 10. Monitor to ensure that contractor(s) implements measures in contract documents. Report non-compliance, and ensure corrective action.	1. Design 2. Design 3. Design/ Preconstruction 4. Preconstruction/ Construction 5. Design/ Preconstruction/ Construction 6. Design/ Preconstruction/ Construction 7. Construction 8. Preconstruction/ Construction 9. Construction 10. Construction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
Geology and Soils (cont.)						
GEO-3 (cont.)		• A flexible shoring system shall be designed to resist lateral earth pressures and other pressures as described in the geotechnical investigations. Traffic or surcharge loads shall be added to the active pressures. • The contractor shall be responsible for determining the actual length of tiebacks required to resist the lateral earth and water pressures imposed on the temporary retaining systems. • The geotechnical engineer shall observe tieback testing. • The geotechnical engineer shall evaluate the tieback test results and determine whether the tiebacks are acceptable. • The shoring designer shall evaluate the required penetration depth of the soldier piles. The soldier piles shall have sufficient axial capacity to support the vertical load acting on the piles, if any. • The geotechnical investigation anticipates an internally braced soil-cement shoring wall may be used for shoring in some areas where tiebacks aren't needed. The shoring designer shall determine the appropriate factor of safety to use. • During excavation, the groundwater shall be lowered and maintained at that level until sufficient structural weight or a foundation system is available to resist the hydrostatic uplift forces on the bottom of the foundation and/or slab-on-grade. The selection and design of the dewatering system shall be the responsibility of the contractor. The geotechnical engineer shall check the design of the proposed dewatering system prior to installation. • Adjacent improvements shall be monitored by the contractor for signs of subsidence including vertical movement and groundwater levels outside the excavation shall be monitored while dewatering is in progress.				
		3.6-3b: Prior to final Project design, additional slope stability studies, including updated geologic mapping and slope stability analysis, shall be performed by a California-licensed geotechnical engineer to evaluate potential for weakened blocks that could become loose during outlet construction or tunneling. Also, stability analyses shall be completed to evaluate the potential impacts of bluff failure on the new outlet structure to be constructed at the base of the cliff. If potential for weakened blocks to become loose or for bluff failure to occur during construction, the study shall include design specifications and construction methods, such as use of temporary structural supports, to avoid such effects. Recommendations from the studies shall be incorporated into the final Project design and construction methods, and implemented by Daly City and/or its contractors.	1. DC (Geotechnical engineer) 2. DC (Geotechnical engineer)	1. DC 2. DC	1. Obtain and review resume of CA-licensed geotechnical engineer. Conduct additional slope stability studies to evaluate potential stability issues during outlet construction and tunneling. 2. Incorporate recommendations from geotechnical slope studies into the final Project design and construction methods.	1. Design 2. Design
GEO-4	The proposed Project would not create substantial risks to life or property due to expansive or corrosive soils.	**3.6-4:** Daly City and/or its contractors shall ensure that all micropiles used for the Project are double-corrosion protected.	1. DC 2. DC (Construction Contractor) 3. DC	1. DC 2. DC 3. DC	1. Ensure that contract documents include provisions for contractors to double-corrosion protect micropiles. 2. Ensure that micropiles are double-corrosion protected. 3. Monitor to ensure that contractor(s) implements measures in contract documents. Report non-compliance, and ensure corrective action.	1. Design 2. Construction 3. Construction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
Greenhouse Gas Emissions and Climate Change						
GHG-1	Project construction and operation would generate GHG emissions.	**3.7-1: Greenhouse Gas Emission Reduction.** Daly City and/or its contractor(s) shall implement the following measures to reduce greenhouse gas emissions from construction: 1) On-road vehicle idling time shall be minimized and shall not exceed a 5-minute maximum. Additionally, off-road engines shall not idle for longer than 5 minutes, per Section 2449(d)(3) of Title 13, Article 4.10, Chapter 9 of the California Code of Regulations. Clear signage of this requirement shall be provided for construction workers at all access points to construction areas. 2) Utilize B20 biodiesel for generator fueling to reduce greenhouse gas emissions of generator operation by approximately 20 percent. 3) Following finalization of project design and construction phasing, but prior to the start of construction activities, Daly City and/or its contractors shall use best available modeling tools to estimate annual greenhouse gas emissions resulting from construction. After accounting for the use of B20 biodiesel as under Item 2, Daly City shall purchase carbon offsets in the amount that construction emissions would exceed the greenhouse gas emissions significance threshold of 1,100 MT/CO2-equivalent per year from an accredited source.	1. DC (Construction Contractor) 2. DC (Construction Contractor) 3. DC	1. DC 2. DC 3. DC	1. Ensure that contract documents include the requirements for reducing greenhouse gases. 2. Ensure that contract documents include the requirements for reducing greenhouse gases. 3. Ensure that the preparer(s) of estimates implement appropriate modeling tool. Ensure that carbon offsets are purchased prior to construction commencement.	1. Design 2. Design 3. Preconstruction
Hazards and Hazardous Materials						
HAZ-2	Project construction could result in a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	**3.8-1: Health and Safety Plan.** The construction contractor(s) shall prepare and implement a site-specific Health and Safety Plan in accordance with 29 CFR 1910.120 to protect construction workers and the public during all excavation, grading, and construction activities. The Health and Safety Plan shall include, but is not limited to, the following elements: • A summary of all potential risks to construction workers and maximum exposure limits for all known and reasonably foreseeable site chemicals; • Training for hazard recognition, including visual and olfactory cues; • Specified personal protective equipment and decontamination procedures, if needed; • Emergency procedures, including route to the nearest hospital; • Procedures to be followed in the event that evidence of potential soil or groundwater contamination (such as soil staining, noxious odors, debris or buried storage containers) is encountered. These procedures shall be in accordance with hazardous waste operations regulations and specifically include, but are not limited to, the following: immediately stopping work in the vicinity of the unknown hazardous materials release, and retaining a qualified environmental firm to perform sampling and remediation.	1. DC 2. DC (Construction Contractor) 3. DC	1. DC 2. DC 3. DC	1. Ensure that contract documents include the requirement for preparing a health and safety plan. 2. Prepare and submit a health and safety plan and verify that it includes information cited in contract documents. 3. Monitor to ensure that the contractor(s) implements measures in the contract documents and health and safety plan. Report noncompliance, and ensure corrective action.	1. Design 2. Preconstruction 3. Preconstruction/ Construction
HAZ-3	Project construction would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	**Implement Mitigation Measure 3.15-1: Construction Traffic Management Plan** (see details under Transportation and Traffic, below)				

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
Hydrology and Water Quality						
HYD-1	Project construction could violate water quality standards and/or waste discharge requirements, provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality.	**3.9-1: Implement Cofferdam Dewatering BMPs for In-Water Work.** If dewatering discharge produced during construction of the Lake Merced outlet and overflow structures is not discharged to the sewer system, a requirement shall be included in construction specifications that requires the construction contractor(s) to implement standard BMPs developed and approved by Daly City for the treatment of sediment-laden water produced during cofferdam dewatering activities. BMPs could include discharging water through filtration media, such as filter bags or a similar filtration device, or allowing the cofferdam dewatering discharge to infiltrate into the soil. If infiltration is used, application of the dewatering discharge shall be conducted at a rate and location that does not allow runoff into Lake Merced or drainage conveyances, such as storm drains, and does not cause flooding or runoff to adjacent properties. The dewatering discharge shall also be conducted at a rate that does not allow ponding, unless the ponding is a result of implementing BMPs to reduce the velocity of the flow and occurs within constructed containment, such as an excavation or berm with no outlet. The discharge must also be applied at a sufficient distance from building foundations or other areas that could be damaged from ground settling or swelling. Alternatively, and if feasible, the filtered dewatering effluent could be used for construction dust suppression. Any BMPs developed and implemented shall remove sediment in a manner sufficient to meet the Water Quality Objective for turbidity as specified in the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan). Specifically, receiving waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses and increases in turbidity related to dewatering discharges shall not be greater than 10 percent in areas where natural turbidity is greater than 50 Nephelometric Turbidity Units (NTU).	1. DC 2. DC 3. DC	1. DC 2. DC 3. DC	1. Ensure that contract documents include measures requiring the implementation of BMPs designed to treat sediment-laden water produced during cofferdam activities if dewatering discharge is not discharged to sewer system. 2. Review contractor's Dewatering Plan to ensure that it meets Water Quality Objectives for turbidity as specified in the Water Quality Control Plant for the Basin Plan. 3. Monitor to ensure that the contractor implements measures in Dewatering Plan, report noncompliance, and ensure corrective action within timelines specified in contract.	1. Design 2. Preconstruction 3. Construction
HYD-9	The Project could conflict with plans, policies, or regulations related to alteration of coastal landforms or processes adopted for the purpose of avoiding or mitigating an environmental effect.	**3.9-2: Avoidance and Minimization of Conflicts with California Coastal Act and NPS Management Policies.** The final design of the Ocean Outlet structures must minimize conflicts with the applicable Coastal Act requirements that new development: 1) be designed to eliminate or mitigate adverse effects on local shoreline sand supply (Section 30235); and 2) assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs (Section 30253). In order to minimize conflicts with these policies, Daly City shall undertake the following steps when developing final engineering designs of the Ocean Outlet structures: 1) A California licensed engineer shall prepare a study consistent with the methods for assessing sea level rise in Coastal Development Permits detailed in the California Coastal Commission's Sea Level Rise Policy Guidance (California Coastal Commission, 2015). The study shall identify Project design elements that may conflict with California Coastal Act Policies (Sections 30235 and 30253) and recommend revisions to bring the final design into conformity with these guidelines and policies (Study). At a minimum, the Study shall: a) Use the range of projections recommended by the CCC's 2015 Sea Level Rise Policy Guidance in evaluating potential sea level rise effects over the Project planning horizon. b) Incorporate, and update as necessary, information concerning baseline conditions at the Ocean Outlet, and future projections (both with and without sea level rise) concerning: i) Bluff erosion rates and patterns; ii) Sand supply sequestering as a result of Project design; iii) Storm effects relating to coastal hazards (e.g., scour, wave runup, flooding; iv) Potential for exposure of Project infrastructure over the Project lifetime, and v) Potential cumulative effects of the Project on the identified coastal process elements above with applicable existing or future projects.	1. DC/NPS 2. DC (Engineer) 3. DC (Engineer) 4. DC (Engineer) 5. DC/NPS	1. DC/NPS 2. DC/NPS/CCC 3. NPS/CCC 4. DC/NPS/CCC 5. DC/NPS	1. Ensure that contract and design documents for the Ocean Outlet minimize conflicts with applicable Coastal Act requirements. 2. Obtain and review resume or other documentation of a CA-licensed engineer's qualifications. Prepare a study that is consistent with the methods for assessing sea level rise in Coastal Development Permits and the CCC's Sea Level Rise Policy Guidance. 3. Prepare report of study's findings and submit final report and design to NPS and CCC for review. 4. Ensure that recommendations made by NPS and CCC are incorporated into design and specifications and implemented during construction, operation, and maintenance of project. 5. Monitor to ensure the contractor(s) implements measures in contract documents. Report noncompliance and ensure corrective action.	1. Design 2. Design 3. Design 4. Design/ Construction/ Post-Construction 5. Construction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
Hydrology and Water Quality (cont.)						
HYD-9 (cont.)		c) Include recommendations for final engineering design, construction methods and materials for all aspects of the Ocean Outlet development, including the site preparation, building foundations, and design, to remedy any identified coastal process or coastal resource related impacts. Also the Study shall identify final engineering design recommendations and alternatives to minimize identified risks relating to hazards, such as geologic instability. Design recommendations and alternatives shall be protective of coastal resources throughout the expected life of the Project and include recommendations to minimize hazard exposure where avoidance is infeasible, including steps to relocate or modify the development as needed to prevent risks to the Project structures or to coastal resources. Such alternatives could include, but would not be limited to, alteration of the proposed wing walls or other outlet structure components to ensure final Project design is consistent with the following California Coastal Act policies to the extent feasible: a. Section 30235 Consistency: Construction of Project features that alter natural shoreline processes shall be approved only if it is determined by the CCC that such a design is required to serve a coastal dependent use or to protect existing structures or public beaches in danger from erosion, and that final design minimizes adverse impacts on local shoreline sand supply as compared to current and future baseline conditions. b. Section 30253 Consistency: Final design shall be approved only if it is determined that such a design minimizes contribution to erosion, geologic instability, or destruction of the site or surrounding area, and if the Project's necessary protective devices minimize the alteration of natural landforms. 2) The Study's findings shall be presented in a report, which shall be reviewed, signed, and stamped by the professional engineer in charge. The report shall be subject to technical review by Daly City, the NPS, SFPUC, and the CCC staff. 3) The report and final design shall be submitted to the NPS and CCC for review and approval to ensure any inconsistencies with NPS and CCC policy requirements are resolved. Recommendations in the approved study shall be incorporated into the design and construction specifications and shall be implemented during construction and operation and maintenance of the Project as applicable.				
Land Use and Planning						
LU-1	The project could conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.	**Implement Mitigation Measure 3.9-2: Avoidance and Minimization of Conflicts with California Coastal Act and NPS Management Policies** (see details under Hydrology and Water Quality, above)				

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
Noise and Vibration						
NOI-1	Project construction could temporarily expose persons to or generate noise levels in excess of local noise ordinances or create a substantial temporary increase in ambient noise levels.	**3.11-1:** The applicant shall require construction contractors to implement the following measures: • Equipment and trucks used for Project construction shall use the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically-attenuating shields or shrouds, wherever feasible). • Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for Project construction shall be hydraulically or electrically powered where feasible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible; this could achieve a reduction of 5 dBA. Quieter procedures, such as use of drills rather than impact tools, shall be used whenever feasible. • Stationary construction noise sources shall be located as far from adjacent residential receptors as possible. Stationary noise-generating construction equipment shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, and/or controlled using other measures to the extent this does not interfere with construction purposes. Specifically, any generator used on site shall be muffled using an acoustical enclosure.	1. DC 2. DC (Construction Contractor) 3. DC	1. DC 2. DC 3. DC	1. Ensure that contract documents include language requiring preparation of a noise control plan that includes best available noise control techniques. 2. Ensure that the noise control plan is prepared in accordance with the contract documents. 3. Monitor to ensure that the contractor(s) implements noise control requirements and ensure corrective action within timelines specified in contract.	1. Design 2. Preconstruction 3. Construction
		3.11-2: To further address potential nuisance impacts of Project construction, construction contractors shall implement the following: • Signs shall be posted at all construction site entrances to the property upon commencement of Project construction, for the purposes of informing all contractors/subcontractors, their employees, agents, material haulers, and all other persons at the applicable construction sites, of the basic requirements of Mitigation Measures 3.11-1. • Signs shall be posted at the construction sites that include permitted construction days and hours, a day and evening contact number for the job site, and a contact number in the event of problems. • An onsite complaint and enforcement manager shall respond to and track complaints and questions related to noise.	1. DC 2. DC (Construction Contractor) 3. DC	1. DC 2. DC 3. DC	1. Ensure that contract documents include requirements for the posting of signs that inform all construction personnel of the requirements of the noise control plan, permitted construction days/hours, and contact information. 2. Designate project liaison responsible for responding to noise complaints and enforcing noise control requirements. Ensure that liaison's name and phone number is included on posted notices. As necessary, develop a reporting program for tracking complaints received and for documenting their resolution. 3. Monitor to ensure that required signs are posted and that complaints are tracked and responded to in a timely manner. Report noncompliance and ensure corrective action.	1. Design 2. Preconstruction 3. Construction
NOI-2	Project construction could result in the exposure of persons to or generation of excessive groundborne Vibration or groundborne noise levels.	**3.11-3:** To address the vibration impact at the Missile Assembly Building located in Fort Funston, Daly City shall require construction contractors to implement the following vibration monitoring measures: 1) A pre-construction visual survey of the Missile Assembly Building shall be conducted and existing conditions shall be documented by use of photography or video. A qualified and licensed structural engineer and architectural historian shall be retained to assess whether the potentially affected structure(s) could withstand a vibration level above the "stop work" threshold of 0.12 in/sec PPV (90 VdB). If this assessment results in a higher threshold for potential damage than 0.12 in/sec PPV (90 VdB), that higher threshold shall be used in lieu of 0.12 in/sec PPV (90 VdB) for purposes of part 2. 2) The construction contractor shall monitor vibration levels during tunnel construction, especially during impact pile driving at the temporary construction shaft. If construction vibration levels measured at the Missile Assembly Building exceed 0.12 in/sec PPV (90 VdB) or the higher threshold determined in part 1 if applicable, construction shall be halted and other feasible construction methods shall be employed to reduce the vibration levels below the standard threshold. Alternative construction methods may include sonic or vibratory pile drivers.	1. DC 2. DC (Structural Engineer; Architectural Historian) 3. DC	1. DC 2. DC 3. DC	1. Ensure contract documents include vibration monitoring measures to address vibration impacts at the Missile Assembly Building located in Fort Funston. 2. Obtain and review resume or other documentation of consulting licensed structural engineer and architectural historian's qualifications. Assess whether vibrations would affect the structure. 3. Monitor to ensure that contractor(s) implements vibration monitoring measures in contract documents. Report noncompliance and ensure corrective action.	1. Design 2. Design 3. Construction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
Geologic and Paleontological Resources						
PAL-1	The Project would directly or indirectly destroy a unique paleontological resource or site or unique geological feature.	**3.12-1: Inadvertent Discovery of Paleontological Resources.** Prior to construction, a training session on the recognition of the types of paleontological resources that could be encountered and the procedures to be followed if they are found shall be presented to Project construction personnel by a qualified professional paleontologist. A qualified paleontologist shall be on call when excavations disturb the Merced and Colma Formations. In the event that potential vertebrate fossils are discovered, work shall cease at the location and a qualified paleontologist shall evaluate the discovery, as described below. For areas of excavation on federally managed lands that would disturb the Merced formation, NPS shall determine the NPS paleontologist or NPS-approved private paleontologist that will perform this monitoring. Consistent with NPS guidance, disturbance within other formations present in Fort Funston shall be monitored for fossils by trained Project construction personnel unless the NPS paleontologist determines that monitoring by a qualified paleontologist is necessary. If potential vertebrate fossils are discovered by construction crews or a paleontological monitor, all earthwork or other types of ground disturbance within 50 feet of the find shall stop immediately and the monitor shall notify Daly City, as well as the NPS if the potential fossil is found on federal lands. Work shall not resume until a qualified professional paleontologist can assess the nature and importance of the find. Based on the scientific value or uniqueness of the find, the qualified paleontologist may record the find and allow work to continue, or recommend salvage and recovery of the fossil. The qualified paleontologist may also propose modifications to the stop-work radius based on the nature of the find, site geology, and the activities occurring on the site. If treatment and salvage is required, recommendations shall be consistent with NPS guidelines (on federal land), SVP 1995 guidelines (on non-federal land), and currently accepted scientific practice, and shall be subject to review and approval by Daly City, and by NPS if the potential fossil is found on federal land. If required, treatment for fossil remains may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection [e.g., the University of California Museum of Paleontology (UCMP)], and may also include preparation of a report for publication describing the finds. Daly City shall ensure that information on the nature, location, and depth of all finds is readily available to the scientific community through university curation or other appropriate means.	1. DC/NPS 2. DC/NPS (Paleontologist) 3. DC/NPS (Paleontologist) 4. DC/NPS	1. DC/NPS 2. DC/NPS 3. DC/NPS 4. DC/NPS	1. Ensure that contract documents include measures related to paleontological discoveries. 2. Obtain and review resume of qualified paleontologist. Conduct training session with construction crew regarding types of paleontological resources that could be encountered and procedures to follow. 3. Evaluate potential discoveries according to jurisdictional requirements, and if confirmed, treat and prepare fossil materials appropriately. Prepare report of find, as necessary. 4. Monitor to ensure contractor(s) implements paleontological measures in contract documents if discovery occurs. Report noncompliance and ensure corrective action.	1. Design 2. Preconstruction 3. Construction 4. Construction
Transportation and Traffic						
TRA-1	Project construction would cause temporary increases in traffic volumes on area roadways, which could cause substantial conflicts with the performance of the circulation system, but would not conflict with applicable plans, ordinances, or policies pertaining to the performance of the circulation system.	**3.15-1: Construction Traffic Management Plan** Daly City and/or its contractor(s) shall prepare and implement a Construction Traffic Management Plan in accordance with professional traffic engineering standards to show methods for maintaining traffic flows on roadways and access to recreational resources directly affected by Project construction, which shall include, at a minimum, the following requirements: a) Develop circulation plans to minimize impacts on local street circulation; use flaggers and/or signage to guide vehicles through and/or around the construction zone (including, as needed, for trucks turning into and out of Fort Funston at the intersection of SR 35 and Fort Funston Road). Circulation plans may be modified during construction, based on observed conditions. b) Identify truck routes and, to the extent possible, use haul routes that minimize truck traffic on local roadways and residential streets. c) Schedule truck trips to minimize trips during the peak morning and evening commute hours, and the peak hours of arrivals and departure from Fort Funston, to the extent possible. d) Provide sufficient staging areas for trucks accessing construction zones to minimize disruption of access to adjacent land uses, particularly within residential neighborhoods. e) Maintain pedestrian and bicycle access and circulation during Project construction where safe to do so. If construction activities encroach on a bicycle lane, post warning signs that indicate bicycles and vehicles are sharing the lane.	1. DC 2. DC (Construction Contractor) 3. DC	1. DC 2. DC/SFMTA/ NPS/SamTrans 3. DC	1. Ensure that contract documents include requirements of Construction Traffic Management Plan. 2. Prepare and implement Construction Traffic Management Plan with requirements cited in contract documents. Coordinate with Caltrans regarding construction traffic use of SR 35. 3. Monitor to ensure the contractor(s) implements measures in the contract documents and Construction Traffic Management Plan. Report noncompliance, and ensure corrective action.	1. Design 2. Preconstruction/ Construction 3. Construction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
Transportation and Traffic (cont.)						
TRA-1 (cont.)		f) Maintain public safety and access on the beach by posting notices and maps at and around the project site and on Golden Gate National Recreation Area's website prior to and during construction, informing the public about when and where public access could be restricted and about alternative access points, if applicable; and incorporate measures on the beach to protect the public during construction activities. g) Store all equipment and materials in designated contractor staging areas on or adjacent to the worksite, in such a manner to minimize obstruction of traffic. h) Implement roadside safety protocols and provide advance "Road Work Ahead" warning signs and speed control (including signs informing drivers of state-legislated double fines for speed infractions in a construction zone) to achieve required speed reductions for safe traffic flow through the work zone. i) Coordinate construction with facility owners or administrators of sensitive land uses such as police and fire stations (including all fire protection agencies), transit stations, hospitals, and schools, as well as Fort Funston. Notify facility owners or operators in advance of the timing, location, and duration of construction activities. j) Provide residents adjacent to Project construction areas (e.g., on Avalon Drive and Westmoor Avenue) with information regarding Project construction in their area, including anticipated start and end of construction activities. k) Coordinate construction with local traffic agencies, SFMTA, NPS, and SamTrans, to minimize disruption and arrange for the temporary relocation of bus stops in work zones as necessary.				
TRA-5	Project construction would result in increased wear-and-tear on the designated haul routes.	**3.15-2:** Daly City, San Francisco, and the National Park Service shall enter into an agreement prior to construction that shall detail pre-construction conditions and the post-construction requirements of a roadway rehabilitation program. Daly City and/or its contractors shall repair roads damaged by construction to a structural condition equal to that which existed prior to construction activity.	1. DC/SF/NPS 2. DC (Construction Contractor) 3. DC/SF/NPS	1. DC/SF/NPS 2. DC 3. DC/SF/NPS	1. Ensure that contract documents include pre-construction conditions and post-construction requirements of a roadway rehabilitation program. 2. Repair roads damaged by construction to a structural quality equal to preconstruction activity. 3. Monitor to ensure the contractor(s) implements measures in the contract documents. Report noncompliance, and ensure corrective action.	1. Design 2. Post-construction 3. Post-construction

VISTA GRANDE DRAINAGE BASIN IMPROVEMENT PROJECT

Final EIR/EIS (Responses to Comments)
SCH No. 2013032001

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City of Daly City
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TABLE OF CONTENTS

Vista Grande Drainage Basin Improvement Project Final EIR/EIS (Responses to Comments)

		Page
	Abstract	
	Executive Summary	**ES-1**
1.	**Introduction**	**1-1**
1.1	Purpose of the Responses to Comments Document	1-1
1.2	Environmental Review Process	1-2
1.3	Agency-Initiated Project Description Revisions	1-3
1.4	Document Organization	1-5
2.	**List of Persons Commenting**	**2-1**
2.1	Federal, State, and Local Agencies and Commissions	2-1
2.2	Organizations	2-1
3.	**Comments and Responses**	**3-1**
3.1	Comments and Responses	3-1
3.2	Response to Comments from United States Environmental Protection Agency	3-3
3.3	Response to Comments from California State Lands Commission	3-27
3.4	Response to Comments from California State Transportation Agency, Department of Transportation	3-41
3.5	Response to Comments from San Francisco Public Utilities Commission	3-45
3.6	Response to Comments from California Trout	3-49
3.7	Response to Comments from Golden Gate Audubon Society	3-53
3.8	Response to Comments from Olympic Club	3-59
4.	**Draft EIR/EIS Revisions**	**4-1**
	Appendices	
	Revised Appendix C – Air Quality	C-1

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Final EIR/EIS (Responses to Comments)

Vista Grande Drainage Basin Improvement Project

The City of Daly City (Daly City), as the Lead Agency under the California Environmental Quality Act (CEQA), and the National Park Service (NPS), as the Lead Agency under the National Environmental Policy Act (NEPA) have prepared a Final Environmental Impact Report (EIR)/Environmental Impact Statement (EIS) evaluating the environmental impacts of, and alternatives to, the proposed Vista Grande Drainage Basin Improvement Project (Project). The Draft EIR/EIS together with this Responses to Comments document constitutes the Final EIR/EIS for the Project in fulfillment of CEQA requirements as consistent with CEQA Guidelines Section 15132, and in fulfillment of NEPA requirements as consistent with Council on Environmental Quality (CEQ) NEPA Regulations Section 1503.4.

Responsible agencies for the proposed Project include the U.S. Army Corps of Engineers, California Department of Fish and Wildlife, California State Lands Commission, California Coastal Commission, San Francisco Bay Regional Water Quality Control Board, County of San Mateo, and City and County of San Francisco.

The proposed Project is located in Daly City in San Mateo County, and in the City and County of San Francisco, as well as in Fort Funston, part of the Golden Gate National Recreation Area unit of NPS. The Project would improve stormwater drainage and minimize flooding risk, provide a water source for Lake Merced management, improve recreational access and reduce litter deposition at the beach below Fort Funston, and maximize the use of existing infrastructure and rights-of-way. In addition to the proposed Project, this EIR/EIS considers two action alternatives consisting of variations of the design and siting of Project components, and one No Project/No Action alternative. Analysis of environmental impacts associated with the proposed Project identified potentially significant impacts in the following areas: aesthetics, air quality, biological resources, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, noise and vibration, paleontological resources, and transportation and traffic. Growth inducement potential and cumulative impacts are also addressed in the Final EIR/EIS. For environmental impacts determined to be significant or potentially significant, mitigation measures have been identified to reduce those impacts. No mitigation would reduce significant and unavoidable impacts on the historic Canal and Tunnel.

FURTHER INFORMATION: For further information about the proposed Project, contact the Project Manager for the CEQA Lead Agency:

City of Daly City, Department of Water and Wastewater Resources
Attention: Patrick Sweetland, Director
153 Lake Merced Blvd.
Daly City, CA 94015
E-mail: psweetland@dalycity.org

DECISION PROCESS: Following the publication of the Final EIR/EIS, Daly City consider whether to certify the EIR and approve the Project or an alternative to the Project. No fewer than 30 days after publication of the Notice of Availability (NOA) for the Final EIR/EIS in the Federal Register, the NPS will issue a Record of Decision (ROD) for the Project.

EXECUTIVE SUMMARY

ES.1 Project Overview and Background

The City of Daly City (Daly City) is proposing the Vista Grande Drainage Basin Improvement Project (Project) to address storm-related flooding in the Vista Grande Drainage Basin (Basin) while providing the additional benefit of augmenting the water level of Lake Merced. The Vista Grande storm drain system drains the northwestern portion of Daly City and an unincorporated portion of San Mateo County – areas originally within the watershed of Lake Merced. In the 1890s, the Vista Grande Canal and Tunnel were built to divert stormwater away from the lake to an outlet at the Pacific Ocean. The Ocean Outlet and a portion of the Tunnel are located within Fort Funston, part of the Golden Gate National Recreation Area (GGNRA), which is operated under the authority of the National Park Service (NPS). The existing Canal and Tunnel do not have adequate hydraulic capacity to convey peak storm flows, and this periodically causes backup of Tunnel flows into the Canal and flooding during peak storm events in adjacent low-lying residential areas and along John Muir Drive.

As noted, the proposed Project has two primary, mutually supporting objectives: to address storm-related flooding that periodically occurs as a result of inadequate storm drainage capacity in Daly City's Vista Grande Canal and Tunnel, and to augment water surface levels and manage water quality in San Francisco's Lake Merced. Both Daly City and San Francisco independently are proposing to address these respective issues. The proposed Project and alternatives meeting these objectives represent an approach that would jointly address both jurisdictions' proposed improvements while minimizing disturbance, maximizing the beneficial reuse of stormwater, and reconnecting a significant portion of the Lake Merced watershed to Lake Merced.

ES.2 Agency Roles and Objectives

ES.2.1 CEQA Project Objectives

Daly City has identified the following objectives for the proposed Project:

- Improve stormwater drainage of the lower Vista Grande Basin to accommodate peak flows generated by the 25-year design storm;
- Provide a sustainable source of stormwater, establish a target maximum water surface elevation, and implement a Lake Management Plan (see Appendix A of the Draft EIR/EIS) for management of Lake Merced water quality, groundwater, and surface water elevation;

- Improve recreational access and reduce litter transfer and deposition along the beach below Fort Funston; and
- Maximize use of existing rights-of-way (ROWs), easements, and infrastructure to minimize construction-related costs, habitat disturbance, and disruption to recreational users.

ES.2.2 National Park Service Federal Action

The federal action NPS is considering is whether to approve, approve with conditions, or deny Daly City's application for a special use permit for construction of the Tunnel and associated structures (e.g., Ocean Outlet and wing walls), and staging areas within NPS land; whether to amend existing easement(s) to accommodate the proposed expanded Tunnel and associated structures within the easement(s) and to clarify the rights and obligations of the parties to the easement(s); and possibly whether to issue a right-of-way permit or other authorization to accommodate any portions of the Project that lie outside of the easement(s) (e.g., wing walls).

The purpose and need for the Project is to alleviate flooding in the Vista Grande Drainage Basin and Canal and provide a sustainable source of water for management of Lake Merced water levels and quality, and to ensure that the portion of the Project within federally managed lands, if authorized, is constructed, operated, and maintained in a manner that is consistent with the protection and enhancement of resources, values, and uses of lands and waters under federal jurisdiction. In considering whether to authorize such activities, the federal government needs to engage in transparent, integrated, and informed decision-making and ensure that any final decision conforms to applicable laws and regulations. In achieving the purpose and need for the Project, NPS's objectives for implementation of the Project include the following:

- Avoid, minimize, or mitigate environmental impacts to park natural and cultural resources;
- During construction, ensure the health and safety of park visitors and staff, maintain access to and through Fort Funston, and minimize impacts to the visitor experience;
- Permanently improve public access along the beach below Fort Funston; and
- Minimize impacts on park assets and sustain or restore all park assets (e.g., facilities, features, grounds) to pre-construction or better conditions.

ES.3 Proposed Project and Alternatives

ES.3.1 Comparison of Alternatives

In addition to the proposed Project, this EIR/EIS considers two action alternatives consisting of variations on the design and siting of Project components, and one No Project/No Action alternative. Each of the following is described in detail in Chapter 2, *Project and Alternatives*:

Proposed Project. The proposed Project would consist of improvements within the Vista Grande Basin storm drain system upstream of the Vista Grande Canal; partial replacement of the existing Canal to incorporate a gross solid screening device, an approximately 2.6-acre constructed

treatment wetland, and diversion and discharge structures to route some stormwater (and authorized non-stormwater) flows from the Canal to Lake Merced and to allow lake water to be used for summer treatment wetland maintenance; modification of the existing effluent gravity pipeline so that it may be used year round to convey treated effluent from the nearby North San Mateo County Sanitation District Wastewater Treatment Plant (WWTP) to the existing outlet and diffuser by gravity, and abandoning the force main pipeline; modification of the existing lake overflow structure to include an adjustable weir and siphon that allows water from the lake to flow into the Canal and Vista Grande Tunnel; replacement of the existing Tunnel to expand its hydraulic capacity and extend its operating lifetime and replacement of the Lake Merced Portal to the Tunnel; and replacement of the existing Ocean Outlet structure and a portion of the existing 33-inch submarine outfall pipeline that crosses the beach at Fort Funston. Operational components of the Project would include management of water surface elevations in Lake Merced and a Lake Management Plan that would include water quality best management practices, including upstream improvements in the Basin and additional actions, the implementation of which may be triggered during post-Project monitoring. In addition, the Project includes NPS execution of a special use permit for construction activities within GGNRA lands and the expansion of the ROW to accommodate the replacement Ocean Outlet structure.

Tunnel Alignment Alternative. The Tunnel Alignment Alternative would replace the proposed Project's Tunnel improvement and Lake Merced (East) Portal components with an entirely new tunnel up to approximately 50 feet to the south of the existing Tunnel in an alignment to be determined following additional geotechnical investigation, and a different east portal at a location that would be determined by the final alignment. The new tunnel would run west from a new east portal at the existing Canal to a new or rehabilitated Ocean Outlet structure. The components of the Tunnel Alignment Alternative could be paired with the proposed Canal components, or could be paired with the alternative Canal components described for the Canal Configuration Alternative.

Canal Configuration Alternative. The Canal Configuration Alternative would minimize changes to the existing Canal while still allowing for some discharges to Lake Merced. This alternative would not construct the box culvert replacing the first 1,000 feet of the Canal; rather, the diversion structure described for the proposed Project would be relocated to the southern (upstream) end of the Canal. The box culvert under John Muir Drive also would be relocated and would cross under John Muir Drive close to the southern end of the Canal. The design of the diversion structure, box culvert under John Muir Drive, and Lake Merced Outlet would be approximately the same as for the proposed Project. The diversion structure would replace the first approximately 350 feet of the Canal, and the rest of the Canal would be unchanged except as needed for the Lake Merced Tunnel Portal. Under the Canal Configuration Alternative, one wetland cell of approximately 1.7 acres would be constructed, providing a reduced water treatment capacity compared to the Project. The components of the Canal Configuration Alternative could be paired with the proposed Tunnel or could be paired with the alternative Tunnel and East Portal components described for the Tunnel Alignment Alternative.

No Project/No Action Alternative. Under the No Project/No Action alternative, no physical component of the proposed Project would be constructed and none of the proposed operational changes to stormwater routing would be made. The Lake Management Plan would not be implemented. The NPS would not grant the special use permit, and no construction could occur within NPS-managed lands. Annual Canal sediment removal activities would continue, as well as as-needed maintenance activities. Because Canal and Tunnel capacity would not be improved, occasional flooding of the Canal and associated flooding of John Muir Drive into Lake Merced and in local neighborhoods would continue.

ES.3.2 CEQA Environmentally Superior Alternative and NEPA Lead Agency Preferred Alternative

CEQA Guidelines Section 15126.6(e)(2) requires an EIR to identify an environmentally superior alternative. If the environmentally superior alternative is the No Project/No Action Alternative, the EIR also must identify an environmentally superior alternative from among the other alternatives. In general, the environmentally superior alternative is defined as that alternative with the least adverse impacts to the project area and its surrounding environment.

The No Project/No Action Alternative would avoid all impacts of the Project and would not create any new significant impacts of its own. However, improvements that address the storm-related flooding in the Vista Grande Drainage Basin would not be implemented. The Basin would continue to flood during storm events, resulting in flooding of residential areas along John Muir Drive. The CEQA Guidelines define the environmentally superior alternative as that alternative with the least adverse impacts to the project area and its surrounding environment. Determining an environmentally superior alternative is difficult because of the many factors that must be balanced. Although this Final EIR/EIS preliminarily identifies an environmentally superior alternative, it is possible that, with additional information received in or developed during the project approval process, Daly City could choose to balance the importance of each impact area differently or reach a different conclusion. Daly City preliminarily has identified the proposed Project as the environmentally superior alternative.

Under NEPA, the “preferred alternative” is a preliminary indication of the Lead Agency’s preference of action among the Proposed Action and alternatives. A NEPA Lead Agency may select a preferred alternative for a variety of reasons, including the agency’s priorities, in addition to the environmental considerations discussed in the EIS. In accordance with NEPA (40 CFR 1502.14(e)) and based on the assessment in the EIR/EIS, NPS has identified the proposed Project as the preferred alternative.

ES.4 Environmental Analysis

Table ES-1 summarizes the environmental impacts of the alternatives compared to those of the proposed Project under CEQA. This table presents the significant impacts of the proposed Project as well as less-than-significant impacts whose severity would be different under the alternatives than under the proposed Project. Table ES-1 does not include less-than-significant impacts of the proposed Project that would have the same significance determination and/or impact severity as

those of the Canal Configuration Alternative or Tunnel Alignment Alternative. Similarly, **Table ES-2** summarizes the environmental impacts that would occur as a result of the proposed Project and alternatives by environmental impact under NEPA. The focus of the table is on moderate to major adverse effects, but also lists some minor and negligible effects as well.

ES.5 Areas of Controversy

Comments were received during the scoping process for the Project. The scoping process is described and public input received during that process is provided in Appendix B, *Scoping Memorandum*. Based on input received from agencies, members of the public and others, areas of controversy related to the Project include:

Aesthetics: Concerns related to changes in views from the beach at Fort Funston associated with the Ocean Outlet structure. The long-term visual effects of the rehabilitated Ocean Outlet structure are expected be beneficial as described in Draft EIR/EIS Section 3.2, Aesthetics.

Biological Resources: Concerns related to impacts on fish in Lake Merced and on special-status plants and wildlife, and impacts associated with raising lake water levels. See Draft EIR/EIS Section 3.4, Biological Resources, as revised per Final EIR/EIS Chapter 4.

Cultural Resources: Concerns associated with the loss of historic structures (e.g., Vista Grande Canal and Tunnel system). See Draft EIR/EIS Section 3.5, Cultural Resources, as revised per Final EIR/EIS Chapter 4.

Hydrology and Water Quality: Concerns associated with water quality in Lake Merced, and with maintaining Lake Merced surface water levels. See Draft EIR/EIS Section 3.9, Hydrology and Water Quality, as revised per Final EIR/EIS Chapter 4. In addition, concerns with maintaining Lake Merced surface water levels under the proposed project, while the SFPUC's San Francisco Groundwater Supply Project and Groundwater Storage and Recovery Project are under operation, influencing the underlying groundwater basin. See Draft EIR/EIS Section 3.9.6.4, discussing the cumulative operational effects of these projects on lake levels.

Recreation: Concerns related to public uses of the Project area, particularly Fort Funston and Lake Merced, and the potential impacts of the Project on public uses such as boating, swimming, surfing, and bird watching. See Draft EIR/EIS Section 3.13, Recreation.

TABLE ES-1
COMPARISON OF SIGNIFICANT IMPACTS OF PROJECT TO IMPACTS OF ALTERNATIVES UNDER CEQA

Impact	Proposed Project	Tunnel Alignment Alternative	Canal Configuration Alternative	No Project/No Action Alternative
Aesthetics				
Day and Nighttime Views	**Impact AES-3:** Project construction could result in a new source of substantial light or glare that would adversely affect day or nighttime views in the area. It is anticipated that tunneling activities could occur 24 hours per day in two to three shifts, and construction of the replacement pipe section and piers on the beach would necessitate 24-hour work over a period of several days to one week. Construction would create a new temporary source of nighttime lighting in the immediate area and the light and glare effects from Project construction could be substantial. (Less than Significant with Mitigation)	**Similar** The Tunnel Alignment Alternative would include the same types of temporary aboveground components and activities during construction as the proposed Project, and the methods and duration required to construct the Tunnel Alignment Alternative would be similar to the Tunnel portion of the proposed Project. (Less than Significant with Mitigation)	**Similar** The methods and duration to construct the Canal Configuration Alternative would not change compared to the proposed Project. (Less than Significant with Mitigation)	**No Impact** No physical component of the proposed Project would be constructed, and there would be no impacts to aesthetic resources. (No Impact)
Scenic Vista, Scenic Resource, Visual Character, and Visual Quality	**Impact AES-2:** Project operation would not result in a substantial adverse impact on a scenic vista, scenic resource, or on the visual character or quality of the site or its surroundings. The design character of the treatment wetland cells would integrate the treatment wetlands and associated infrastructure with the existing visual environment of the Project site. The Project would reduce the contrast of the Ocean Outlet and the surrounding scenery to a moderately low level by reducing the size of the structure and would provide better views of the area. Approximately every 25 years, the Ocean Outlet would be reconstructed and appear similar to the initial rehabilitation of the structure, and long-term impacts would be as described for the proposed structure. (Less than Significant)	**Increased** If a new ocean outlet location is selected, a third outlet structure (in addition to the existing Ocean Outlet structure and SFPUC's outlet structure) would be present along the beach and toe of the cliff below Fort Funston within an area of approximately 150 feet or less. This would increase the overall level of visual contrast in this location and would not provide the benefit of removing an obstruction to views. Visual conditions would remain similar to existing conditions in the vicinity of the existing outlet structure; with an additional outlet that would be moved as bluff erosion continues, as under the proposed Project. (Less than Significant)	**Similar** The design character of the treatment wetland cell would integrate the treatment wetland and associated infrastructure with the existing visual environment of the Project site. (Less than Significant)	**No Impact** Ongoing periodic maintenance activities would not be noticeable or intrude on the visual character and quality of the Project area. Future uncontrolled flood events could damage public facilities and private properties in the vicinity of Lake Merced, which could degrade the visual character and quality of the area. (No Impact)

TABLE ES-1 (Continued)
COMPARISON OF SIGNIFICANT IMPACTS OF PROJECT TO IMPACTS OF ALTERNATIVES UNDER CEQA

Impact	Proposed Project	Tunnel Alignment Alternative	Canal Configuration Alternative	No Project/No Action Alternative
Air Quality				
Air Quality Standards	**Impact AIR-1:** The Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Without appropriate dust controls, dust emissions generated within federally administered areas could contribute to the SFBAAB's existing PM10 and PM2.5 non-attainment status, a potentially significant impact. (Less than Significant with Mitigation)	**Similar** The Tunnel Alignment Alternative would have similar construction characteristics of the Project. The construction methods and duration to construct this alternative would not change compared to the Tunnel portion of the Project, except that a micro tunnel boring machine would be used in place of a mini excavator. (Less than Significant with Mitigation)	**Decreased** The Canal Configuration Alternative would have many similar construction characteristics of the Project. The construction methods for Canal Configuration Alternative would not change compared to the Project, except that the collection box and box culvert would not be constructed. (Less than Significant with Mitigation)	**No Impact** No construction emissions would be generated by this alternative. Regarding operational emissions, there would be no changes to the existing operations of the project site. (No Impact)
Cumulative Emissions Impacts	**Impact AIR-2:** The Project could result in a cumulatively considerable net increase of ozone, PM10, or PM2.5 (for which the SFBAAB is in non-attainment), including releasing emissions which exceed quantitative thresholds for ozone precursors. Construction activities would result in cumulatively significant fugitive dust emissions. (Less than Significant with Mitigation)	**Similar** The Tunnel Alignment Alternative would have similar construction characteristics of the Project. (Less than Significant with Mitigation)	**Similar** The Canal Configuration Alternative would have many similar construction characteristics and nearly identical methods as the Project. (Less than Significant with Mitigation)	**No Impact** No construction emissions would be generated and operational emissions would not change. (No Impact)
Biological Resources				
Special-Status Plant Species	**Impact BIO-1:** Construction of the Project could have a substantial adverse effect either directly or through habitat modifications, on plant species identified as sensitive or special-status in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Project construction activities including materials and equipment staging at multiple sites within at Fort Funston associated with the Vista Grande Tunnel and Ocean Outlet replacement, maintenance on and use of the Avalon Canyon Road beach access route, and construction of the Impound Lake discharge structure could result in impacts to special-status plant populations and their supporting vegetation communities. (Less than Significant with Mitigation)	**Similar** The methods and duration to construct this alternative would not change substantially compared to the proposed Project, and similar impacts on sensitive and special-status plant species and sensitive vegetation communities are expected. Similar to the Project, potential impacts to special-status plants and the sensitive natural community central dune scrub would be significant. (Less than Significant with Mitigation)	**Similar** The methods and duration to construct this alternative would not change substantially compared to the proposed Project, and similar impacts on special-status plant species and sensitive vegetation communities are expected. Like with the Project, potential impacts to special-status plants and the sensitive natural community central dune scrub would be significant. (Less than Significant with Mitigation)	**No Impact** With the No Project/No Action Alternative there would be no change to sensitive natural and special-status plants in the study area. (No Impact)

TABLE ES-1 (Continued)
COMPARISON OF SIGNIFICANT IMPACTS OF PROJECT TO IMPACTS OF ALTERNATIVES UNDER CEQA

Impact	Proposed Project	Tunnel Alignment Alternative	Canal Configuration Alternative	No Project/No Action Alternative
Biological Resources (cont.)				
Special-Status Reptile Species	**Impact BIO-2:** Project construction could have a substantial adverse effect either directly or through habitat modifications, on reptile species identified as special-status in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Construction of the Lake Merced overflow structure in South Lake and the outlet structure on the bank and within waters of Impound Lake could adversely affect the western pond turtle by direct mortality, should it be present, which would be a significant impact. (Less than Significant with Mitigation)	**Similar** The methods and duration to construct this alternative would not change substantially compared to the proposed Project, and similar impacts on special-status animal species are expected. (Less than Significant with Mitigation)	**Similar** The methods and duration to construct this alternative would not change substantially compared to the proposed Project, and similar impacts on special-status animal species are expected. Like the Project, construction of the Lake Merced outlet structure on the bank and within waters of Impound Lake could adversely affect western pond turtle. (Less than Significant with Mitigation)	**No Impact** With the No Project/No Action Alternative there would be no change to special-status reptile species in the study area. (No Impact)
Migratory Bird Species and Special-Status Bird Species	**Impact BIO-3:** Construction of the Project could have a substantial adverse effect either directly or through habitat modifications, on migratory birds and/or on bird species identified as special-status in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Construction activities could disrupt birds attempting to nest in the vicinity of the Project site, disrupt parental foraging activity, or displace mated pairs with territories in the Project vicinity. (Less than Significant with Mitigation)	**Similar** The methods and duration to construct this alternative would not change substantially compared to the proposed Project, and similar impacts on migratory and special-status bird species are expected. Like with the Project, adverse effects on special-status and migratory birds associated with construction during the breeding birds season, the use of nighttime lighting, and increased noise and visual disturbance would be significant. (Less than Significant with Mitigation)	**Similar** The methods and duration to this alternative would not change substantially compared to the proposed Project, and similar impacts on migratory and special-status bird species are expected. Like with the Project, adverse effects on special-status and migratory birds associated with construction during the breeding birds season, the use of nighttime lighting, and increased noise and visual disturbance would be significant. (Less than Significant with Mitigation)	**No Impact** With the No Project/No Action Alternative there would be no change to special-status bird species in the study area. (No Impact)
Special-Status Bat Species	**Impact BIO-4:** Construction of the Project could have a substantial adverse effect either directly or through habitat modifications, on bats identified as special-status in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Clearing vegetation (including trees) and removing structures in support of Project construction could result in direct mortality of special-status bats roosting in tree cavities, under bark, and in structures within the	**Similar** The methods and duration to construct this alternative would not change substantially compared to the proposed Project, and similar impacts on bat species are expected. Adverse effects on special status bats associated with tree removal and structure modification would be similar to the Project. (Less than Significant with Mitigation)	**Similar** The methods and duration to construct this alternative would not change substantially compared to the proposed Project, and similar impacts on bat species are expected. Adverse effects on special-status bats associated with tree removal and structure modification would be similar to the Project. (Less than Significant with Mitigation)	**No Impact** With the No Project/No Action Alternative there would be no change to special-status bat species in the study area. (No Impact)

TABLE ES-1 (Continued)
COMPARISON OF SIGNIFICANT IMPACTS OF PROJECT TO IMPACTS OF ALTERNATIVES UNDER CEQA

Impact	Proposed Project	Tunnel Alignment Alternative	Canal Configuration Alternative	No Project/No Action Alternative
Biological Resources (cont.)				
Special-Status Bat Species (cont.)	Project site. Direct mortality of special-status bats would be a significant impact. Additionally, common bats may establish maternity roosts in these same locations which are protected under CEQA. (Less than Significant with Mitigation)			
Central Dune Scrub	**Impact BIO-5:** Project construction could have a substantial adverse effect on central dune scrub, a sensitive natural community identified by the CDFW. Impacts to central dune scrub are expected to occur during Project-related improvements to the Avalon Canyon access road and through use of the proposed staging area at Fort Funston where approximately 0.497-acre of central dune scrub is present on the eastern and southern boundaries. In addition, restored central dune scrub has been established near Impound Lake where the outlet structure is proposed; however, the Project facilities are not located in areas where central dune scrub has been mapped. (Less than Significant with Mitigation)	**Similar** The methods and duration to construct this alternative would not change substantially compared to the proposed Project, and similar impacts on sensitive vegetation communities are expected. Similar to the Project, removal of central dune scrub vegetation would be considered a significant impact. (Less than Significant with Mitigation)	**Similar** The methods and duration to construct this alternative would not change substantially compared to the proposed Project, and similar impacts on sensitive vegetation communities are expected. Like with the Project, potential impacts to the sensitive natural community central dune scrub would be significant. (Less than Significant with Mitigation)	**No Impact** With the No Project/No Action Alternative there would be no change to a sensitive natural community in the study area. (No Impact)
Upland Vegetation Communities	**Impact BIO-6:** Project construction would not have a substantial adverse effect on upland vegetation communities identified in local or regional plans, policies, regulations, or by the CDFW or USFWS. Trees that may be impacted by the Project during construction occur in an area managed by the San Francisco Department of Public Works (SFDPW) or located on San Francisco owned land. Such areas are subject to Article 16, Section 808 of the Public Works Code as designated street or significant trees. (Less than Significant with Mitigation)	**Similar** The methods and duration to construct this alternative would not change substantially compared to the proposed Project, and similar impacts on upland vegetation communities are expected. (Less than Significant with Mitigation)	**Similar** The methods and duration to construct this alternative would not change substantially compared to the proposed Project, and similar impacts on upland vegetation communities are expected. During construction, trees could be removed within the Project area during construction. (Less than Significant with Mitigation)	**No Impact** With the No Project/No Action Alternative there would be no change to an upland vegetation community in the study area. (No Impact)

TABLE ES-1 (Continued)
COMPARISON OF SIGNIFICANT IMPACTS OF PROJECT TO IMPACTS OF ALTERNATIVES UNDER CEQA

Impact	Proposed Project	Tunnel Alignment Alternative	Canal Configuration Alternative	No Project/No Action Alternative
Biological Resources (cont.)				
Sensitive Communities	**Impact BIO-7:** Construction of the Project would have a substantial adverse effect on sensitive communities identified in local or regional plans, policies, regulations, or by CDFW or USFWS through the introduction or spread of invasive plants. Project construction activities could contribute to the spread of invasive plants and introduce new invasive plants to the study area through earth moving, transport of vehicles, equipment and materials, and unanticipated sediment dispersal during rain events which would be a significant impact. (Less than Significant with Mitigation)	**Similar** The methods and duration to construct this alternative would not change substantially compared to the proposed Project, and similar impacts on sensitive vegetation communities are expected. Like with the Project, work areas, staging areas, and access roads cleared of non-sensitive upland vegetation could contribute to the spread of invasive plants and introduce new invasive plants to the Project study area through earth moving, transport of vehicles, equipment and materials, and unanticipated sediment dispersal during rain events. (Less than Significant with Mitigation)	**Similar** The methods and duration to construct this alternative would not change substantially compared to the proposed Project, and similar impacts on sensitive vegetation communities are expected. (Less than Significant with Mitigation)	**No Impact** With the No Project/No Action Alternative there would be no change to a sensitive community in the study area. (No Impact)
Wetlands and Other Jurisdictional Waters	**Impact BIO-8:** Project construction could have a substantial adverse effect on wetlands and other jurisdictional waters. Project impacts to these potential jurisdictional features would involve temporary and permanent discharges of structures and/or fill within waters and wetlands, and/or alterations of the bed and/or banks of a lake or stream, to accommodate Project activities. (Less than Significant with Mitigation)	**Similar** The methods and duration to construct this alternative would not change substantially compared to the proposed Project, and similar impacts on potential federally jurisdictional wetlands and other waters are expected. As under the Project, there are no impacts to potential jurisdictional features from the tunnel component itself. Impacts to potential jurisdictional waters associated with rehabilitating the existing Ocean Outlet would not exceed those described under the Project. (Less than Significant with Mitigation)	**Decreased** The methods and duration to construct this alternative would not change substantially compared to the proposed Project, and similar impacts on potential federally jurisdictional wetlands and other waters are expected. Impacts to potential jurisdictional wetlands and waters associated with constructing the new facilities at Lake Merced would be less than those described under the Project due to the reduced modifications to the Canal. (Less than Significant with Mitigation)	**No Impact** With the No Project/No Action Alternative there would be no change to wetlands and other jurisdictional waters in the study area. (No Impact)
Native Resident Fish Species	**Impact BIO-9:** Construction of the Project could impede movement of native resident fish species. A variety of common fish species reside in Lake Merced and could be adversely affected by in-water work at the lake associated with the Project. (Less than Significant with Mitigation)	**Similar** The methods and duration to construct this alternative would not change substantially compared to the proposed Project, and similar impacts on fish species are expected. (Less than Significant with Mitigation)	**Similar** The methods and duration to construct this alternative would not change substantially compared to the proposed Project, and similar impacts on fish species are expected. Like the Project, construction of the Lake Merced outlet structure on the bank and within waters of Impound Lake could adversely affect common fish species. (Less than Significant with Mitigation)	**No Impact** With the No Project/No Action Alternative there would be no change to fish species in the study area. (No Impact)

TABLE ES-1 (Continued)
COMPARISON OF SIGNIFICANT IMPACTS OF PROJECT TO IMPACTS OF ALTERNATIVES UNDER CEQA

Impact	Proposed Project	Tunnel Alignment Alternative	Canal Configuration Alternative	No Project/No Action Alternative
Biological Resources (cont.)				
Native Resident or Migratory Species	**Impact BIO-10:** Construction of the Project could interfere substantially with the movement of native resident or migratory species or with established native resident or migratory corridors, or impede the use of nursery sites. Construction activities associated with the Ocean Outlet and the submarine outfall on Ocean Beach and those associated with the Fort Funston tunnel shaft staging and work area could adversely impact birds migrating along the Pacific Flyway and nearby resident wildlife with the introduction of night lighting into an otherwise dark environment. (Less than Significant with Mitigation)	**Similar** The methods and duration to construct this alternative would not change substantially compared to the proposed Project, and similar impacts on resident and migratory species are expected. Like with the Project, adverse effects on special-status and migratory birds associated with construction during the breeding birds season, the use of nighttime lighting, and increased noise and visual disturbance would be significant. (Less than Significant with Mitigation)	**Similar** The methods and duration to construct this alternative would not change substantially compared to the proposed Project, and similar impacts on resident species, migratory species, and wildlife nursery sites are expected. Like with the Project, adverse effects on special-status and migratory birds associated with construction during the breeding bird season, the use of nighttime lighting, and increased noise and visual disturbance would be significant. (Less than Significant with Mitigation)	**No Impact** With the No Project/No Action Alternative there would be no change to resident species, migratory species, and wildlife nursery sites in the study area. (No Impact)
Lake Merced Plant Species	**Impact BIO-12:** Project operation could adversely affect central dune scrub, thimbleberry, wax myrtle, and canyon live oak scrub, and Vancouver rye grassland associated with Lake Merced. Loss of central dune scrub would be less than 1 percent under the Project and canyon live oak would be unaffected. Wax myrtle scrub would be unaffected by increased lake levels up to 9 feet City Datum but would incur a 12.50 percent loss at a 10 feet City Datum WSE, which would be considered significant. Thimbleberry scrub occurs above 13 feet City Datum and would not be inundated by rising water surface elevations under any scenario. Vancouver rye grassland would incur losses below 10 percent with an increase in lake levels up through 9 feet City Datum but would experience significant impacts at 10 feet where there would be a 46.15 percent loss (i.e., if the target maximum of 9.5 WSE was selected). (Less than Significant with Mitigation)	**Similar** The Tunnel Alignment Alternative would not change operational impacts on special-status plant species associated with Project implementation. (Less than Significant with Mitigation)	**Similar** Operation of the Canal Configuration Alternative would result in similar impacts on special-status plant species as the proposed Project. (Less than Significant with Mitigation)	**No Impact** With the No Project/No Action Alternative there would be no change to special-status plant species in the study area. (No Impact)

TABLE ES-1 (Continued)
COMPARISON OF SIGNIFICANT IMPACTS OF PROJECT TO IMPACTS OF ALTERNATIVES UNDER CEQA

Impact	Proposed Project	Tunnel Alignment Alternative	Canal Configuration Alternative	No Project/No Action Alternative
Biological Resources (cont.)				
Lake Merced Wildlife	**Impact BIO-15:** Project operation could adversely affect native wildlife nursery sites associated with Lake Merced. Water level increases above 9 feet City Datum under the Project that persist for more than one month (i.e., with a target maximum WSE of 9.5 feet) would result in the change in habitat attributed to the Project in excess of 10 percent which would be considered a significant impact on these wildlife nursery sites. (Less than Significant with Mitigation)	**Similar** The Tunnel Alignment Alternative would not change operational impacts on wildlife nursery sites associated with Project implementation. (Less than Significant with Mitigation)	**Increased** Operation of the Canal Configuration Alternative would result in similar impacts on wildlife nursery sites as the proposed Project. A smaller treatment wetland would offer 0.4 acre less habitat to wildlife than the treatment wetlands proposed under the Project. (Less than Significant with Mitigation)	**No Impact** With the No Project/No Action Alternative there would be no change to wildlife nursery sites in the study area. (No Impact)
Cultural and Paleontological Resources				
Historical Resource	**Impact CUL-1:** The Project would cause a substantial adverse change in the significance of a historical resource because it would demolish the majority of the historic Vista Grande Canal and Tunnel. Construction would substantially affect the vast majority of the historic Vista Grande Canal and Tunnel as an entire drainage system. (Significant and Unavoidable)	**Decreased** The Canal improvements under the proposed Project paired with the Tunnel Alignment Alternative would adversely affect most of the Vista Grande Canal and Tunnel system as a whole, though less than the proposed Project. The Canal Configuration Alternative paired with the Tunnel Alignment Alternative would adversely affect most of the Vista Grande Canal and Tunnel as a whole. (Significant and Unavoidable)	**Decreased** The Tunnel improvements under the proposed Project paired with the Canal Configuration Alternative would have an adverse impact on most of the Vista Grande Canal and Tunnel system as a whole, though less than the proposed Project. The Canal Configuration Alternative paired with the Tunnel Alignment Alternative would adversely affect most of the Vista Grande Canal and Tunnel as a whole. (Significant and Unavoidable)	**No Impact** No new construction or ground-disturbing activities would occur under the No Project/No Action Alternative. (No Impact)
Archaeological Resource	**Impact CUL-2:** The Project could cause a substantial adverse change in the significance of an archaeological resource, including shipwrecks. While unlikely, ground-disturbing activities could expose and cause impacts on unknown archaeological resources or shipwrecks, which would be a potentially significant impact. The existing outlet is approximately 900 feet north of the shipwreck remains. (Less than Significant with Mitigation)	**Increased** Similar to the proposed Project, ground disturbing activities for the Tunnel Alignment Alternative would have the potential to uncover previously unknown archaeological resources. The Ocean Outlet structure associated with the Tunnel Alignment Alternative could be slightly closer to the 1882 schooner Neptune that wrecked in 1900 than the proposed Project. (Less than Significant with Mitigation)	**Similar** Similar to the proposed Project, ground disturbing activities for the Canal Configuration Alternative would have the potential to uncover previously unknown archaeological resources. (Less than Significant with Mitigation)	**No Impact** No new construction or ground-disturbing activities would occur under the No Project/No Action Alternative. (No Impact)

TABLE ES-1 (Continued)
COMPARISON OF SIGNIFICANT IMPACTS OF PROJECT TO IMPACTS OF ALTERNATIVES UNDER CEQA

Impact	Proposed Project	Tunnel Alignment Alternative	Canal Configuration Alternative	No Project/No Action Alternative
Cultural and Paleontological Resources (cont.)				
Human Remains	**Impact CUL-3:** Project construction could disturb human remains. Project construction could result in direct impacts to previously undiscovered human remains during earthmoving activities. (Less than Significant with Mitigation)	**Similar** Similar to the proposed Project, ground disturbing activities for the Tunnel Alignment Alternative would have the potential to uncover human remains. (Less than Significant with Mitigation)	**Similar** Similar to the proposed Project, ground disturbing activities for the Tunnel Alignment Alternative would have the potential to uncover human remains. (Less than Significant with Mitigation)	**No Impact** No new construction or ground-disturbing activities would occur under the No Project/No Action Alternative. (No Impact)
Geology and Soils				
People and Structures	**Impact GEO-1:** Construction, operation, and maintenance of the Project could expose people or structures to potential substantial adverse effects involving strong seismic ground shaking and/or seismic-related ground failure. Holocene slip was observed in trench exposures of the Serra Fault and geotechnical investigation concluded there is a high potential for rupture as a result of faulting within the proposed tunnels alignment. Groundshaking during an earthquake in the Project area has the potential to be strong, with peak ground acceleration around 0.6 g, which could result in significant groundshaking effects on the proposed facilities. Also, seismic damage due to liquefaction and related phenomena could occur along the pipeline and at other facilities. In particular, the new tunnel portal and Lake Merced overflow inlet are planned in an area of potentially liquefiable soil. (Less than Significant with Mitigation)	**Similar** As with the Project, structural damage to facilities could occur as a result of strong seismic groundshaking. As with the Project, the Tunnel Alignment Alternative also has the potential for seismic-related ground failure resulting from liquefaction and lateral spreading. (Less than Significant with Mitigation)	**Similar** Structural damage to facilities could occur as a result of strong seismic groundshaking and/or seismic-related ground failure. As with the Project, the Canal Configuration Alternative has the potential to encounter liquefaction and lateral spreading. (Less than Significant with Mitigation)	**No Impact** Under the No Project/No Action Alternative, improvements that address the storm-related flooding in the Vista Grande Drainage Basin would not be implemented. The Project site would continue to experience existing levels of geologic and seismic hazards. (No Impact)
Soil Erosion and Loss of Topsoil	**Impact GEO-2:** The Project could result in substantial soil erosion or the loss of topsoil. Construction activities such as excavating, trenching, and grading can remove stabilizing vegetation and expose areas of loose soil that, if not properly stabilized during construction, can be subject to erosion by wind and stormwater runoff, potentially	**Similar** As with the Project, the Tunnel Alignment Alternative construction could result in erosion from wind and stormwater runoff. (Less than Significant with Mitigation)	**Similar** As with the Project, the Canal Configuration Alternative construction could result in erosion from wind and stormwater runoff. (Less than Significant with Mitigation)	**No Impact** Under the No Project/No Action Alternative, improvements that address the storm-related flooding in the Vista Grande Drainage Basin would not be implemented. Daly City would continue to use the existing ocean outlet structure at Fort Funston which would continue to contribute to erosion of the cliff

TABLE ES-1 (Continued)
COMPARISON OF SIGNIFICANT IMPACTS OF PROJECT TO IMPACTS OF ALTERNATIVES UNDER CEQA

Impact	Proposed Project	Tunnel Alignment Alternative	Canal Configuration Alternative	No Project/No Action Alternative
Geology and Soils (cont.)				
Soil Erosion and Loss of Topsoil (cont.)	resulting in a significant impact with respect to soils. Also, during operation of the project, erosion and improper water flow could occur within the retaining wall backdrain systems if they are not properly maintained. (Less than Significant with Mitigation)			face where it is located. The Project site would continue to experience existing levels of geologic and seismic hazards. (No Impact)
Unstable Soil	**Impact GEO-3:** The Project may be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project. The outlet structure is in an area where the potential for shallow or wedge failures up to about 10 to 15 feet thick under static conditions is moderate to high. During large seismic events, the potential for relatively large-scale landsliding is high. In addition, there is landslide potential at Avalon Canyon which would provide beach access during construction of the outlet structure. (Less than Significant with Mitigation)	**Similar** As with the Project, excavations could trigger slope failures that could result in landslides, slumps, soil creep, or debris flows. (Less than Significant with Mitigation)	**Similar** As with the Project, excavations could trigger slope failures that could result in landslides, slumps, soil creep, or debris flows. (Less than Significant with Mitigation)	**No Impact** Under the No Project/No Action Alternative, improvements that address the storm-related flooding in the Vista Grande Drainage Basin would not be implemented. The Project site would continue to experience existing levels of geologic and seismic hazards. (No Impact)
Life and Property	**Impact GEO-4:** The proposed Project would not create substantial risks to life or property due to expansive or corrosive soils. Project area soils have a mild to moderate corrosion potential which could corrode the micropiles. (Less than Significant with Mitigation)	**Similar** Like with the Project, the area soils have a mild to moderate corrosion potential. (Less than Significant with Mitigation)	**Similar** As with the Project, the area soils have a mild to moderate corrosion potential. (Less than Significant with Mitigation)	**No Impact** Under the No Project/No Action Alternative, improvements that address the storm-related flooding in the Vista Grande Drainage Basin would not be implemented. The Project site would continue to experience existing levels of geologic and seismic hazards. (No Impact)
Greenhouse Gas Emissions and Climate Change				
Greenhouse gas emissions during construction	**Impact GHG-1:** Project construction could generate GHG emissions above regulatory thresholds. If tunnel drives are constructed concurrently, and/or if tunneling occurs on a 24-hour basis, total short-term construction-related GHG emissions would be above BAAQMD's quantitative threshold of 1,100 metric tons CO2e for non-stationary sources during construction year 2, a significant impact. (Less than Significant with Mitigation)	**Similar** The Tunnel Alignment Alternative would include similar construction characteristics and any differences in equipment used would result in a similar level of GHG emissions as the proposed Project during Construction year 2. (Less than Significant with Mitigation)	**Similar** Although construction of the collection box and box culvert would be eliminated, thereby reducing GHG emissions compared to the proposed Project, tunnel construction would occur, which would result in a significant impact during construction year 2. (Less than Significant with Mitigation)	**No Impact** No construction emissions would be generated, and operational emissions would not change. (No Impact)

TABLE ES-1 (Continued)
COMPARISON OF SIGNIFICANT IMPACTS OF PROJECT TO IMPACTS OF ALTERNATIVES UNDER CEQA

Impact	Proposed Project	Tunnel Alignment Alternative	Canal Configuration Alternative	No Project/No Action Alternative
Hazards and Hazardous Materials				
Public and Environment	**Impact HAZ-2:** Project construction could result in a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Lead is a known contaminant within 0.25 mile of the Project site. During construction, ground-disturbing activities could unearth UXO, which would pose a safety risk to workers on-site. (Less than Significant with Mitigation)	**Similar** Like with the Project, construction activities could expose the environment, public or construction personnel to contaminated soils or groundwater or to UXO. (Less than Significant with Mitigation)	**Similar** Like with the Project, construction activities could expose the environment, public or construction personnel to contaminated soils, or groundwater. (Less than Significant with Mitigation)	**No Impact** Under the No Project/No Action Alternative, the Project would not be implemented; therefore, no hazards or hazardous materials-related impacts would occur. The Project site would continue to experience existing levels of public safety hazards. (No Impact)
Emergency Response Plan and Emergency Evacuation Plan	**Impact HAZ-3:** Project construction would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Construction could affect the availability of travel lanes when construction occurs within or adjacent to John Muir Drive, due to the presence of large, slow-moving trucks that may cause delays. These delays could interfere with implementation of the Emergency Response Plan, which would be a significant impact. (Less than Significant with Mitigation)	**Similar** Construction activities associated with the Tunnel Alignment Alternative would result in impacts on emergency access similar to those identified for the Project. (Less than Significant with Mitigation)	**Similar** Like the Project, construction could interfere or disrupt the evacuation route along John Muir Drive, as identified in San Francisco's Emergency Response Plan, due to the presence of large, slow-moving trucks that may cause delays. (Less than Significant with Mitigation)	**No Impact** Under the No Project/No Action Alternative, the Project would not be implemented; therefore, no hazards or hazardous materials-related impacts would occur. The Project site would continue to experience existing levels of public safety hazards. (No Impact)
Hydrology and Water Quality				
Water Quality Standards	**Impact HYD-1:** Project construction could violate water quality standards and/or waste discharge requirements, provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality. Construction of the Lake Merced outlet structure on the bank and within waters of Impound Lake and of the Lake Merced overflow structure in South Lake could result in discharges of pollutants to Lake Merced directly, resulting in substantial water quality effects. (Less than Significant with Mitigation)	**Similar** The construction methods and duration to construct this alternative would not substantially differ as compared to the Tunnel portion of the proposed Project, and impacts associated with the Canal portion would either be identical to the proposed Project or the Canal Configuration Alternative. (Less than Significant with Mitigation)	**Similar** As with the proposed Project, construction of the Lake Merced overflow structure in South Lake and the outlet structure on the bank and within waters of Impound Lake could result in discharges of pollutants to Lake Merced directly. (Less than Significant with Mitigation)	**No Impact** Under the No Project/No Action Alternative, the Project would not be implemented; therefore, no construction related water quality impacts would occur. (No Impact)

TABLE ES-1 (Continued)
COMPARISON OF SIGNIFICANT IMPACTS OF PROJECT TO IMPACTS OF ALTERNATIVES UNDER CEQA

Impact	Proposed Project	Tunnel Alignment Alternative	Canal Configuration Alternative	No Project/No Action Alternative
Hydrology and Water Quality (cont.)				
Alteration of Coastal Landforms or Processes	**Impact HYD-9:** The Project could conflict with plans, policies, or regulations related to alteration of coastal landforms or processes adopted for the purpose of avoiding or mitigating an environmental effect. The alteration of coastal processes would result in a potentially significant impact relating to coastal processes such as bluff retreat and alterations to the beach profile. In addition, the proposed Project could conflict with California Coastal Act Sections 30235 and 30253 and/or NPS Management Policies (described in Draft EIR/EIS Section 3.9.2.1) should bluff erosion rates an patterns alter as a result of the proposed d Project, including a local decrease of the sediment availability at the site due to diminished sand supply. (Significant and Unavoidable)	**Similar** Under this alternative, the new tunnel would terminate in a new or rehabilitated Ocean Outlet structure. If the option to connect to the existing Ocean Outlet location is selected, construction and long-term maintenance of the Ocean Outlet structure would be as described for the proposed Project. However, under this alternative, a new tunnel would be constructed to meet the terminus of the existing tunnel at the current extent of the bluff face. As the bluff recedes, both the existing abandoned-in-place tunnel and the new tunnel would become exposed, resulting in an adverse effect related to alterations of coastal landforms and coastal processes. Also, the exposure and rehabilitation of structures under this alternative could conflict with the California Coastal Act Section 30235 and 30253 and/or NPS Management Policies. (Significant and Unavoidable)	**Similar** Impacts associated with the Canal portion would either be identical to the proposed Project or the Tunnel Alignment Alternative. (Significant and Unavoidable)	**No Impact** Under the No Project/No Action Alternative, the Project would not be implemented; therefore, no alteration of coastal processes or conflicts with plans, policies, or regulations would occur. (No Impact)
Land Use				
Land Use Policies	**Impact LU-1:** The Project could be inconsistent with some of the sub-policies of the Coastal Act and with portions of the NPS Management Policies regarding coastal processes. (Significant and Unavoidable)	**Increased** The development of a new tunnel and potentially a new Ocean Outlet to the south of the existing structures may conflict with NPS Management Policies for coastal processes by introducing new developments in an area subject to wave erosion or active shoreline processes when a practicable alternative. (Significant and Unavoidable)	**Similar** Impacts associated with the Canal portion would either be identical to the proposed Project or the Tunnel Alignment Alternative. (Significant and Unavoidable)	**No Impact** Because the Project would not be implemented, no potential conflict with the Coastal Act or NPS Management Policies would occur. (No Impact)
Noise and Vibration				
Temporary Noise	**Impact NOI-1:** Project construction could temporarily expose persons to or generate noise levels in excess of local noise	**Similar** The location of the tunnel shaft would be somewhat farther from the nearest	**Increased** **Impact ALT-NOI-1:** This alternative would not construct a collection box and	**No Impact** Because no new construction would occur under the No Project/No Action Alternative,

TABLE ES-1 (Continued)
COMPARISON OF SIGNIFICANT IMPACTS OF PROJECT TO IMPACTS OF ALTERNATIVES UNDER CEQA

Impact	Proposed Project	Tunnel Alignment Alternative	Canal Configuration Alternative	No Project/No Action Alternative
Noise and Vibration (cont.)				
Temporary Noise (cont.)	ordinances or create a substantial temporary increase in ambient noise levels. (Less than Significant with Mitigation)	sensitive receptor compared to Tunnel portion of the Project. However, the location of the Lake Merced Portal would be farther from the nearest residential receiver than under the proposed Project. (Less than Significant with Mitigation)	box culvert, which would reduce the duration of construction activity. However, it would decrease the distance between the location of impact pile driving and the nearest residential receptors, resulting in noise levels up to 82 dBA and exceeding the 70 dBA Leq speech interference threshold for greater than two weeks. A noise reduction of at least 12 dBA may not be achieved with mitigation, and, therefore noise impacts associated with construction-related activities could remain significant. (Potentially Significant and Unavoidable)	no construction noise would be generated by this alternative, which would result in no impact. (No Impact)
Groundborne Vibration and Noise Levels	**Impact NOI-2:** Project construction could result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels. The vibration levels at the Missile Assembly Building in Fort Funston would be above the FTA's building damage threshold for susceptible buildings. (Less than Significant with Mitigation)	**Increased** The nearest vibration-sensitive receiver to the where pile driving activities would take place is the Mission Assembly Building located in Fort Funston. The vibration levels would be above both the FTA's construction vibration and building damage thresholds for historic land uses. (Less than Significant with Mitigation)	**Increased** **Impact ALT-NOI-2:** Project-related vibration levels at the nearest residential building located approximately 200 feet south-east from the John Muir Drive crossing and diversion structure would remain significant and unavoidable after mitigation. (Significant and Unavoidable)	**No Impact** Because no new construction would occur under the No Project/No Action Alternative, no ground-borne vibration would be generated by this alternative, which would result in no impact. (No Impact)
Paleontological Resources				
Paleontological Resource, Paleontological Site, Unique Geological Feature	**Impact PAL-1:** The Project would directly or indirectly destroy a unique paleontological resource or site or unique geological feature. Because new disturbance would occur within geologic units with moderate to high potential for paleontological resources, potentially significant fossils could be adversely affected during construction, particularly within the Merced Formation. Furthermore, ground-disturbing activities could expose and cause impacts on unknown paleontological resources, which would be a potentially significant impact. (Less than Significant with Mitigation)	**Similar** Similar to the proposed Project, ground disturbing activities for the Tunnel Alignment Alternative would have the potential to uncover previously unknown paleontological resources or damage unique geologic features. (Less than Significant with Mitigation)	**Similar** Similar to the proposed Project, ground disturbing activities for the Canal Configuration Alternative would have the potential to uncover previously unknown paleontological resources or damage unique geologic features. (Less than Significant with Mitigation)	**No Impact** Because no new construction or ground-disturbing activities would occur under the No Project/No Action Alternative, undiscovered paleontological resources would not be encountered. (No Impact)

TABLE ES-1 (Continued)
COMPARISON OF SIGNIFICANT IMPACTS OF PROJECT TO IMPACTS OF ALTERNATIVES UNDER CEQA

Impact	Proposed Project	Tunnel Alignment Alternative	Canal Configuration Alternative	No Project/No Action Alternative
Transportation and Traffic				
Plans, Ordinances, and Policies	**Impact TRA-1:** Project construction would cause temporary increases in traffic volumes on area roadways, which could cause substantial conflicts with the performance of the circulation system, but would not conflict with applicable plans, ordinances, or policies pertaining to the performance of the circulation system. The increased local congestion/delay and potential conflicts involving Project trucks is considered to be a significant impact. (Less than Significant with Mitigation)	**Similar** Similar to the Project, the increase in traffic volume on local roads would be noticeable, especially due to the slower movements of trucks compared to passenger vehicles, and the increased local congestion/delay and potential conflicts involving trucks is considered to be a significant impact. (Less than Significant with Mitigation)	**Decreased** Daily traffic generated by construction workers and haul/delivery trucks accessing the work site would be somewhat less than for the proposed Project. (Less than Significant with Mitigation)	**No Impact** Under the No Project/No Action alternative, no physical component of the proposed Project would be constructed, and there would be no construction-related impacts to existing transportation conditions on area roadways. (No Impact)
Designated Haul Routes	**Impact TRA-5:** Project construction would result in increased wear-and-tear on the designated haul routes. The wear-and-tear effects on road conditions and driving safety is considered to be a significant impact. Local streets (e.g., Avalon Drive and Fort Funston Road) generally are not built with a pavement thickness that will withstand substantial truck traffic volumes. (Less than Significant with Mitigation)	**Similar** Like with the Project, the use of large trucks to transport equipment and material to and from the Project work site(s) for construction could affect road conditions and driving safety on the designated haul routes by increasing the rate of road wear, which would be considered a significant impact. (Less than Significant with Mitigation)	**Similar** Like with the Project, the use of large trucks to transport equipment and material to and from the Project work site(s) for construction could significantly affect road conditions and driving safety on the designated haul routes by increasing the rate of road wear, which would be considered a significant impact. (Less than Significant with Mitigation)	**No Impact** Under the No Project/No Action alternative, no physical component of the proposed Project would be constructed, and there would be no construction-related impacts to existing transportation conditions on area roadways. (No Impact)

TABLE ES-2
COMPARISON OF SIGNIFICANT IMPACTS OF PROJECT TO IMPACTS OF ALTERNATIVES UNDER NEPA

Impact	Proposed Project	Tunnel Alignment Alternative	Canal Configuration Alternative	No Project/No Action Alternative
Aesthetics	The extended presence of construction equipment and activities at the Fort Funston staging area would be readily noticeable from passive recreation areas adjacent to this site and from trails. Also, views of the dunes in this area would be temporarily replaced by equipment and fencing. Furthermore, construction activities on the beach would be visible to hang gliders passing overhead. Mitigation would reduce visual intrusion of construction activities and equipment, so as to result in a short-term, minor adverse effect on scenic quality. The visual impacts from temporary demolition and construction impacts from restoring the Ocean Outlet and Tunnel approximately every 25 years would be similar to those described for initial demolition of the existing structure and construction of the rehabilitated Ocean Outlet.	Tunnel Alignment Alternative visual resource impacts (construction activities, lighting, and permanent structures) would contribute to visual change in the landscape, particularly related to construction activities at the Fort Funston staging area. With mitigation, changes would not appreciably alter important landscape characteristics, and views would change only slightly, so as to result in short-term, minor, adverse effect on scenic quality. Impacts to visual character and views from restoring the Ocean Outlet and Tunnel as well as restoring the abandoned, existing Ocean Outlet would be moderate, site-specific, long-term, and, thus, greater than the proposed Project.	Like the Project, changes would not appreciably alter important landscape characteristics, and views would change only slightly, so as not to negatively affect scenic quality. Thus, there would be a short-term, minor, adverse effect on scenic quality after mitigation.	Under the No Project/No Action alternative, no physical component of the proposed Project would be constructed, and there would be no impacts to aesthetic resources. Ongoing periodic maintenance activities would not be noticeable or intrude on the visual character and quality of the Project area.
Air Quality	Construction emissions of NOx, ROG, and PM2.5 are estimated to be well under the annual de minimis threshold levels applicable to the Project area The Project therefore would be exempt from General Conformity determination requirements and would have a minor adverse impact on air quality.	The Tunnel Alignment Alternative would require a reduced volume of materials to be off-hauled as compared to the Project, which would reduce the number of truck trips required and their associated emissions. Consequently, construction emissions would be well under annual de minimis threshold levels applicable to the SFBAAB, and have a minor adverse impact on air quality.	The Canal configuration Alternative would not construct the collection box and box culvert, which would result in a reduced duration of construction activity. Also, truck transport of 40,000 cubic yards of excavated materials and clean fill would no longer be needed as would be needed for the proposed Project. Consequently, construction emissions would be well under annual de minimis threshold levels applicable to the SFBAAB, and have a minor adverse impact on air quality.	Because no new construction would occur under the No Project/No Action Alternative, no construction emissions would be generated by this alternative.

TABLE ES-2 (Continued)
COMPARISON OF SIGNIFICANT IMPACTS OF PROJECT TO IMPACTS OF ALTERNATIVES UNDER NEPA

Impact	Proposed Project	Tunnel Alignment Alternative	Canal Configuration Alternative	No Project/No Action Alternative
Vegetation	*Construction* Project construction would have short-term, minor adverse impacts on vegetation communities within the Project site. Adverse effects on vegetation would be mitigated through avoidance, minimization, and mitigation measures. *Operation* Project-related lake level increase would have effects on vegetation surrounding Lake Merced that would be measurable or perceptible in elevation at which certain communities are present, but localized in context of the vegetation communities as a whole which surround the lake. Following mitigation, all impacts would be minor, but long-term.	*Construction* Impacts on sensitive natural community plant populations within the Project site are expected to be at most moderate and short-term, and would be minimized with mitigation. *Operation* Same as for the proposed Project.	*Construction* Impacts to vegetation communities within the Project site would be at most minor and short-term, and would be reduced with mitigation. *Operation* Same as for the proposed Project.	With this alternative, there would be no change to vegetation in the study area. Also, the beneficial effects of implementation of the Project or Alternatives on the biological resources of the watershed, resulting from increases to open water habitat under the Project or Alternatives, would not occur.
Potential Federally Jurisdictional Wetlands and Other Waters and Riparian Habitat	*Construction* Moderate temporary permanent impacts to potential federally jurisdictional wetlands and other waters and to riparian habitat would occur as a result of construction of the Lake Merced outlet structure in Impound Lake and installation of the new facilities within the Canal. Temporary impacts would be restored to pre-project conditions. Unavoidable permanent impacts to potentially jurisdictional other waters would include 1,350 linear feet of replacement associated with modifications to the Canal, Unavoidable permanent adverse impacts would be mitigated by on-site or off-site creation, restoration, or enhancement of previously lost or degraded waters, wetlands, and/or riparian habitats, or payment to a mitigation bank for in-kind credits.	*Construction* Same as for the proposed Project. *Operation* Same as for the proposed Project.	*Construction* Moderate temporary permanent impacts to potential federally jurisdictional wetlands and other waters and to riparian habitat would occur as a result of construction of the Lake Merced outlet structure in Impound Lake and installation of the new facilities within the Canal. Temporary impacts would be restored to pre-project conditions. Unavoidable permanent impacts to potentially jurisdictional other waters would include 350 linear feet of replacement associated with modifications to the Canal, Unavoidable permanent adverse impacts would be mitigated as described for the proposed Project. *Operation* Operational impacts related to increasing the water level at Lake Merced would be as described for the proposed Project.	With the No Project/No Action Alternative there would be no change to jurisdictional wetlands or other waters in the study area. Also, the beneficial effects of implementation of the Project or Alternatives on the biological resources of the watershed, resulting from increases to open water habitat under the Project or Alternatives, would not occur.

TABLE ES-2 (Continued)
COMPARISON OF SIGNIFICANT IMPACTS OF PROJECT TO IMPACTS OF ALTERNATIVES UNDER NEPA

Impact	Proposed Project	Tunnel Alignment Alternative	Canal Configuration Alternative	No Project/No Action Alternative
Potential Federally Jurisdictional Wetlands and Other Waters and Riparian Habitat (cont.)	*Operation* Project operations would have minor, long-term effects on wetlands resulting from increasing the water level at Lake Merced above existing conditions to a target WSE of 7.5 to 9.5 feet City Datum. Impacts associated with the periodic removal of the protruding tunnel and outlet and reconstruction of the outlet would be moderate and require similar methods described under construction for the proposed Project.			
Terrestrial Wildlife and Aquatic Wildlife	*Construction* Adverse impacts on common terrestrial wildlife are expected and include temporary disturbance of habitat or perhaps the loss of a limited number of individuals of a common species. With mitigation, adverse impacts on common terrestrial and aquatic wildlife would be minor and short-term. *Operation* There would be negligible or minor effects on terrestrial wildlife and aquatic habitat resulting from operation of the Project. Beneficial effects on aquatic habitat would likely occur as a result of the increased water volume available to Lake Merced fish species and the maintenance or improvement of water quality.	*Construction* Same as for the proposed Project or Canal Configuration Alternative. *Operation* Same as for the proposed Project or Canal Configuration Alternative.	*Construction* Impacts to terrestrial wildlife and aquatic wildlife would be at most minor and short-term, and would be reduced with mitigation. *Operation* The alternative would offer less habitat for local wildlife due to the smaller size of the treatment capacity of the wetland cell compared to the Project; however, the increase in open waters of Lake Merced resulting from implementation of this alternative would be similar to the proposed Project.	With the No Project/No Action Alternative there would be no change to terrestrial wildlife and aquatic wildlife in the study area. Also, the beneficial effects of implementation of the Project or Alternatives on the biological resources of the watershed, resulting from increases to open water habitat under the Project or Alternatives, would not occur.

TABLE ES-2 (Continued)
COMPARISON OF SIGNIFICANT IMPACTS OF PROJECT TO IMPACTS OF ALTERNATIVES UNDER NEPA

Impact	Proposed Project	Tunnel Alignment Alternative	Canal Configuration Alternative	No Project/No Action Alternative
Special-Status Species	*Construction* Impacts to special-status species such as the Northern coastal scrub communities, Western pond turtles, and various resident and migratory birds would be detectable, but they would not be expected to be outside the natural range of variability of species' populations, their habitats, or the natural processes sustaining them. Adverse effects would be short term and minor, and would be avoided, minimized, or offset by mitigation. *Operation* Rising water levels in Lake Merced resulting from operation of the Project would have minor short-term and long-term effects on special-status plants and animal species in the study area.	*Construction* Like the Project, impacts to special-status plant communities and wildlife would be detectable, but they would not be expected to be outside the natural range of variability of species' populations, their habitats, or the natural processes sustaining them. Adverse effects would be reduced with mitigation. Effects would be at most minor and short-term. *Operation* Same as for the proposed Project.	*Construction* Impacts on special-status species would be at most minor and short-term, and would be reduced with mitigation. Like the Project, impacts to special-status species would be detectable, but they would not be expected to be outside the natural range of variability of species' populations, their habitats, or the natural processes sustaining them. *Operation* Same as for the proposed Project.	With the No Project/No Action Alternative there would be no change to special-status plants and animals in the study area. Also, the beneficial effects of implementation of the Project or Alternatives on the biological resources of the watershed, resulting from increases to open water habitat under the Project or Alternatives, would not occur.
Cultural Resources	The Project would have a major adverse impact on a historic property (the Vista Grande Canal and Tunnel), even with mitigation. Construction activities could result in a minor to major impact by modifying or altering previously unknown archaeological resources, but the impact would be reduced with mitigation. Impacts to known archeological resources, including the Neptune shipwreck, would be negligible after mitigation.	The Canal improvements under the proposed Project paired with the Tunnel Alignment Alternative would adversely affect approximately 69 percent of the Vista Grande Canal and Tunnel system as a whole. The Canal Configuration Alternative paired with the Tunnel Alignment Alternative would adversely affect approximately 61 percent of the Vista Grande Canal and Tunnel as a whole. The Ocean Outlet structure associated with the Tunnel Alignment Alternative could be closer to the wreckage of the schooner Neptune than the proposed Project. This alternative would have the same adverse effect determinations as the proposed Project.	The Tunnel improvements under the proposed Project paired with the Canal Configuration Alternative would have an adverse impact on 53 percent of the Vista Grande Canal and Tunnel system as a whole. The Canal Configuration Alternative paired with the Tunnel Alignment Alternative would adversely affect approximately 61 percent of the Vista Grande Canal and Tunnel as a whole. This alternative would have the same adverse effect determinations as the proposed Project.	Under the No Project/No Action alternative, no physical component of the proposed Project would be constructed and the Vista Grande Canal and Tunnel would be retained. Therefore, no impact on historical resources and archeological resources would occur.

TABLE ES-2 (Continued)
COMPARISON OF SIGNIFICANT IMPACTS OF PROJECT TO IMPACTS OF ALTERNATIVES UNDER NEPA

Impact	Proposed Project	Tunnel Alignment Alternative	Canal Configuration Alternative	No Project/No Action Alternative
Geology and Soils	Construction activities would result in exposing areas of loose soil that could be subject to erosion by wind and stormwater runoff, but after mitigation the Project would have minor adverse effects on soil erosion. The Project also has a potential for liquefaction and lateral spreading to occur during seismic events. After mitigation, adverse effects from seismic events would be minor. Furthermore, the potential for landslides in the Project area is relatively high. However, with mitigation, the adverse effects from landslides would be minor.	Same as for the proposed Project.	Same as for the proposed Project.	Under this alternative the Project site would continue to experience existing levels of geologic and seismic hazards.
Greenhouse Gas Emissions and Climate Change	The Project would have a minor adverse impact with regard to construction related GHG emissions. Operational GHG emissions would be negligible.	The Tunnel Alignment Alternative would require a reduced volume of materials to be off-hauled as compared to the Project, which would reduce the number of truck trips required and their associated emissions. Like the Project, this alternative would have a minor adverse impact with regard to GHG emissions during construction, and a negligible impact during operation and maintenance.	Construction emissions under this alternative would be reduced compared to the Project because of the reduced amount of excavation and construction associated with the elimination of the collection box and box culvert. Like the Project, this alternative would have a minor adverse impact with regard to GHG emissions during construction, and a negligible impact during operation and maintenance.	Because no new construction would occur under this alternative, no construction-related GHG emissions would be generated by this alternative, and no changes to existing GHG emissions associated with operation and maintenance activities. Short-term increases in GHG emissions would result from occasional emergency repairs and other activities that would occur during canal flooding.
Hazards and Hazardous Materials	The Project would result in minor adverse effects on public safety after adhering to hazardous materials and stormwater regulations and the NPDES Construction Permit. Following mitigation, safety risks from encountering unexploded ordnance (UXO) and threats to the public from impeding emergency access, including the Fort Funston area and the evacuation route on John Muir Drive, would be minor.	This alternative would result in minor adverse effects on public safety after adhering to hazardous materials and stormwater regulations and the NPDES Construction Permit. Following mitigation, safety risks from encountering UXO would be minor.	This alternative would result in minor adverse effects on public safety after adhering to hazardous materials and stormwater regulations and the NPDES Construction Permit. Similar to the Project, potential human exposure to vector-borne diseases and threats to the public from impeding emergency access, including the evacuation route on John Muir Drive, would be minor.	Under this alternative the Project would not be implemented; therefore, no hazards or hazardous materials-related impacts would occur. The Project site would continue to experience existing levels of public safety hazards.

TABLE ES-2 (Continued)
COMPARISON OF SIGNIFICANT IMPACTS OF PROJECT TO IMPACTS OF ALTERNATIVES UNDER NEPA

Impact	Proposed Project	Tunnel Alignment Alternative	Canal Configuration Alternative	No Project/No Action Alternative
Hydrology and Water Quality	Construction of the Lake Merced outlet structure on the bank and within waters of Impound Lake and the Lake Merced overflow structure in South Lake could result in discharges of pollutants (sediment) to Lake Merced directly. With implementation of mitigation, Project construction would result in short-term, minor effects to water quality. Also, the proposed Project could result in an adverse effect related to alterations of coastal landforms and coastal processes and could conflict with California Coastal Act Sections 30235 and 30253, even after implementation of mitigation. Following mitigation, the impact could remain moderate to major.	Under this alternative, a new tunnel would be constructed to meet the terminus of the existing tunnel at the current extent of the bluff face. As the bluff recedes, both the existing abandoned-in-place tunnel and the new tunnel would become exposed, resulting in an adverse effect related to alterations of coastal landforms and coastal processes. Also, the exposure and rehabilitation of structures under this alternative could conflict with the California Coastal Act Section 30235 and 30253, even after implementation of mitigation. Following mitigation, the impact could remain moderate to major.	As with the proposed Project, construction of the Lake Merced overflow structure in South Lake and the outlet structure on the bank and within waters of Impound Lake could result in discharges of pollutants to Lake Merced directly. With mitigation, construction of the alternative would result in minor adverse effects.	Under the No Project/No Action Alternative, the Project would not be implemented; therefore, no adverse effects on water quality, from altering coastal processes, or from conflicting with plans, policies, or regulations would occur.
Land Use and Planning	The Project would have short-term, minor effects on existing land uses at Fort Funston due to the presence of construction activities in an area used primarily for public recreation. During operation and maintenance, the Project could conflict with the Coastal Act and/or NPS Management Policies related to coastal processes resulting in a moderate to major impact.	Construction of the Tunnel Alignment Alternative would have short-term, minor effects on existing land uses at Fort Funston due to the presence of construction activities in an area used primarily for public recreation. During operation and maintenance, the Project could conflict with the Coastal Act and/or NPS Management Policies related to coastal processes and siting development in areas previously disturbed, resulting in a moderate to major impact.	Same as for the proposed Project or Tunnel Alignment Alternative, depending on the tunnel component selected.	Under this alternative, no physical component of the Project would be constructed. Therefore, there would be no change in land use and no impact to existing land use uses or conflicts with applicable land use plans, policies or regulations.
Noise and Vibration	Noise impacts associated with construction-related activities would result in a short-term, minor adverse impact, and would be reduced with mitigation. After mitigation, vibration impacts associated with construction-related activities, such as at the Missile Assembly Building, would result in a short-term minor adverse impact. Noise impacts associated with operation-related activities would result in a negligible impact.	Like the Project, the Tunnel Alignment Alternative would have a short-term, minor adverse impact with respect to construction noise, and would be reduced with mitigation. Construction vibration impacts and noise impacts associated with operation-related activities from this alternative would have the same impact determination as the proposed Project.	This alternative would have a short-term, minor adverse impact with respect to construction noise. After mitigation, vibration impacts associated with construction-related activities would remain as a short-term, major adverse impact. Noise impacts associated with operation-related activities from this alternative would have the same impact determination as the proposed Project.	Because no new construction would occur under this alternative, no construction noise or ground-borne vibration would be generated by this alternative, which would result in no impact. Noise generated by the operation and maintenance of these components would not change.

TABLE ES-2 (Continued)
COMPARISON OF SIGNIFICANT IMPACTS OF PROJECT TO IMPACTS OF ALTERNATIVES UNDER NEPA

Impact	Proposed Project	Tunnel Alignment Alternative	Canal Configuration Alternative	No Project/No Action Alternative
Geologic and Paleontological Resources	The loss of up to 16,000 cubic feet of soils within the Colma and Merced Formations would be negligible to minor. After mitigation, the inadvertent discovery of a paleontological resource would result in a negligible impact.	The loss of up to 20,000 cubic feet of soils within the Colma and Merced Formations would be negligible to minor. Paleontological resources impacts would be the same as for the proposed Project.	Same as for the proposed Project.	Under the No Project/No Action alternative, no physical component of the proposed Project would be constructed and the Vista Grande Canal and Tunnel would be retained. Therefore, no impact to geologic and paleontological resources would occur.
Recreation	Due to construction activities, the Project would affect a small area (less than 5 percent) of Fort Funston, and would result in short-term, moderate adverse impacts to recreation at Fort Funston. Operation of the Project would result in long-term, minor beneficial impacts to recreation associated with improved beach access provided by the rehabilitated Ocean Outlet structure.	Like the Project, the Tunnel Alignment Alternative would result in short-term, moderate adverse impacts to recreation associated with construction and long-term, minor beneficial impacts to recreation associated with improved beach access provided by the rehabilitated Ocean Outlet structure.	Like the Project, the Canal Configuration Alternative would result in short-term, minor adverse impacts to recreation.	Under this alternative, no physical component of the proposed Project would be constructed, and there would be no impact to recreation.
Environmental Justice	Given the limited nature of construction-related impacts in terms of both duration and intensity, any disproportionate adverse effect on a minority population would be negligible. Furthermore, disproportionate adverse effects on minority populations associated with odors or mosquitoes would be negligible.	Same as for the proposed Project.	Same as for the proposed Project.	Under this alternative, the Project would not be constructed. Therefore, there would be no beneficial effect on minority populations from improved conditions due to reduced flooding and no disproportionate adverse effects on minority populations associated with temporary construction impacts or with odors or mosquitoes due to wetland creation.
Socioeconomics	Any adverse or beneficial socioeconomic effects resulting from reduced flooding due to Project improvements would be minor	Same as for the proposed Project.	Same as for the proposed Project.	Under this alternative, the Project would not be constructed. Therefore, there would be no adverse or beneficial socioeconomic effects as a result of reduced flooding.

TABLE ES-2 (Continued)
COMPARISON OF SIGNIFICANT IMPACTS OF PROJECT TO IMPACTS OF ALTERNATIVES UNDER NEPA

Impact	Proposed Project	Tunnel Alignment Alternative	Canal Configuration Alternative	No Project/No Action Alternative
Transportation and Traffic	With mitigation, the Project would have short-term, minor effects on regional roads, and short-term, moderate effects on local roads. The Project would have short-term, minor effects on access and negligible effects on parking.	With mitigation, the Tunnel Alignment Alternative would have short-term, minor effects on regional roads, and short-term, moderate effects on local roads.	With mitigation, the Canal Configuration Alternative would have short-term, minor effects on regional roads, and short-term, moderate effects on local roads.	Under this alternative, no physical component of the proposed Project would be constructed, and there would be no construction-related impacts to existing transportation conditions on area roadways. However, maintenance activities would continue as well as occasional emergency repairs and other traffic-generating activities when the canal floods.

CHAPTER 1
Introduction

1.1 Purpose of the Responses to Comments Document

This Responses to Comments document completes the Final Environmental Impact Report/Environmental Impact Statement (Final EIR/EIS) analyzing potential environmental effects associated with the proposed Vista Grande Drainage Basin Improvement Project (Project). The Project would improve stormwater drainage and minimize flooding risk, provide a water source for Lake Merced management, and improve recreational access and reduce litter deposition at the beach below Fort Funston. Operational components of the Project would include management of water surface elevations in Lake Merced and a Lake Management Plan that includes operations and water quality monitoring protocols. Project components would be located in northwest Daly City on land managed by the City of Daly City, on the west side of San Francisco on land managed by the San Francisco Public Utilities Commission, and within Fort Funston, part of the Golden Gate National Recreation Area which is operated under the authority of the National Park Service (NPS).

The North San Mateo County Sanitation District, a subsidiary of the City of Daly City (Daly City), the Lead Agency responsible for administering the environmental review of the Project under the California Environmental Quality Act (CEQA), and NPS, the Lead Agency under the National Environmental Policy Act (NEPA), published a Draft EIR/EIS on the proposed Project on April 28, 2016. The public comment period ended on July 1, 2016. Thus, the Draft EIR/EIS review met the CEQA 45-day minimum and NPS's NEPA 60-day minimum public review period (CEQA Guidelines §15105; NPS Director's Order No. 12 Handbook 4.8(c)). This Responses to Comments document provides written responses to comments received during the public review period.

The Draft EIR/EIS together with this Responses to Comments document constitutes the Final EIR/EIS for the Project in fulfillment of CEQA requirements as consistent with CEQA Guidelines Section 15132, and in fulfillment of NEPA requirements as consistent with Council on Environmental Quality (CEQ) NEPA Regulations Section 1503.4. This Responses to Comments document contains the following: (1) a list of persons, organizations, and public agencies commenting on the Draft EIR/EIS; (2) copies of comments received on the Draft EIR/EIS; (3) Daly City's and the NPS's responses to those comments; and (4) revisions to the Draft EIR/EIS to clarify or correct information. See Section 1.3, below, for a description of the overall contents and organization of the Responses to Comments document.

The EIR/EIS has been prepared pursuant to the requirements of CEQA (Pub. Res. Code §21000 et seq.); the CEQA Guidelines (14 Cal. Code Regs. §§15000 to 15387); NEPA (42 USC §4341 et seq.); the CEQ NEPA regulations (40 Code of Federal Regulations [CFR] Parts 1500-1508); and the NPS NEPA Guidelines (Director's Order No.12 and Handbook). The EIR/EIS is an informational document for use by (1) governmental agencies (in addition to Daly City and the NPS) and the public to aid in the planning and decision-making process by disclosing the physical environmental effects of the project and identifying possible ways of reducing or avoiding the potentially significant impacts; and (2) Daly City and the NPS prior to their decision to approve, disapprove, or modify the proposed project. If Daly City approves the proposed project, it would be required to adopt CEQA findings and a mitigation monitoring and reporting program (MMRP) to ensure that mitigation measures identified in the Final EIR are implemented. See Section 1.2, below, for further description of the environmental review process.

In accordance with CEQA and NEPA, the responses to comments address environmental issues raised in public comments that concern the adequacy or accuracy of the Draft EIR/EIS. These issues include physical impacts or changes attributable to the project rather than any social or financial implications of the project. Therefore, this document provides limited responses to comments received during the public review period that do not relate to the adequacy or accuracy of the Draft EIR/EIS.

1.2 Environmental Review Process

1.2.1 Notice of Preparation and Public Scoping

On February 28, 2013, as described in the Draft EIR/EIS, Daly City sent a Notice of Preparation and Notice of Intent to governmental agencies, organizations, and persons interested in the Project (see Appendix B in the Draft EIR/EIS). During the approximately 60-day public scoping period that ended on April 26, 2013, Daly City and the NPS accepted comments from agencies and interested parties identifying environmental issues that should be addressed in the EIR/EIS. Public scoping meetings were held on March 19, 2013 at the General's Residence at Fort Mason and on March 28, 2013 at the Doelger Senior Center to receive oral comments and solicit written comments on the scope of the EIR/EIS.

1.2.2 Draft EIR/EIS Public Review

The Draft EIR/EIS for the Project was published on April 28, 2016 and circulated to federal, state, and local agencies and to interested organizations and individuals for a 60-day public review period that ended on July 1, 2016. Both Daly City and NPS made the Draft EIR/EIS available for download on their respective project websites, the addresses for which were included in each agency's public notices. Paper copies of the Draft EIR/EIS were made available for public review at the following locations: (1) the Daly City Office of the City Clerk, 333 90th Street, Daly City, California; and (2) the Westlake Branch of the Daly City Public Library, 275 Southgate Avenue, Daly City, California. On April 28, 2016, Daly City also distributed notices of availability of the Draft EIR/EIS, published notification of its availability in a newspaper of general circulation in

Daly City and San Francisco, and posted notices at locations within the project area. The United States Environmental Protection Agency (USEPA) and the NPS also published notices of availability (NOAs) in the Federal Register on April 29, 2016 (81 FR 25666; 81 FR 25707).

During the 60-day public review period, Daly City conducted a public meeting to provide an opportunity for the public and regulatory agencies to learn about the Project and be informed about how to submit comments on the adequacy and accuracy of the Draft EIR/EIS. The public meeting was held on May 26, 2016 at City Council Chambers, 333 90th Street, Daly City.

During the Draft EIR/EIS public review period, the lead agencies received four comment letters from public agencies and three from non-governmental organizations.

1.2.3 Responses to Comments and Final EIR/EIS

Daly City and the NPS distributed this Responses to Comments document for review to the North San Mateo County Sanitation District Board of Directors and the USEPA, respectively, as well as to the agencies and organizations that commented on the Draft EIR/EIS. The EIR/EIS is intended to be used by the Sanitation District Board and the NPS, when considering selection and implementation of one of the project alternatives.

Following completion of the Final EIR/EIS, the Sanitation District Board will consider certification of the Final EIR, and will decide whether to approve or deny the proposed project. CEQA also requires the adoption of findings prior to project approval in cases where the certified EIR identifies significant environmental effects (CEQA Guidelines §§15091 and 15092) and a MMRP (§15097). If the EIR identifies significant adverse impacts that cannot be mitigated to less-than-significant levels and the project is approved, the findings must include a statement of overriding considerations for those impacts (CEQA Guidelines §15093[b]). Daly City is required to adopt CEQA findings and the MMRP prior to approving the proposed project.

Concurrent with the distribution of the Responses to Comments document, the NPS will submit the Final EIR/EIS to the USEPA and publish a NOA in the Federal Register. No fewer than 30 days after publication of this NOA, the NPS will issue a Record of Decision (ROD) for the Project documenting its consideration of the Final EIS and its decision whether to approve, deny, or modify the Project.

1.3 Agency-Initiated Project Description Revisions

As described in Draft EIR/EIS Section 2.5.3.4, Construction Power and Emergency Generators, in Chapter 2, Project and Alternatives, “Temporary construction power would be provided to the staging area at Fort Funston via a temporary Pacific Gas & Electric (PG&E) service connection. An emergency power supply (generator) with the capacity to provide 1,000 kVA would be located on-site during construction.” Following publication of the Draft EIR/EIS, Daly City determined that the provision of temporary construction power via a PG&E service connection may be infeasible, for example, if no power distribution lines of adequate voltage are within close enough proximity to the staging area to make a temporary connection. Daly City is continuing to

pursue the opportunity to provide construction power to the Fort Funston staging area via a PG&E electrical service connection. However, to provide flexibility in the event that this is infeasible, Daly City is including an option to provide temporary construction power at the Fort Funston staging area using a portable diesel-powered generator in the description of the proposed Project. This option also would be relevant to construction of the Tunnel Alignment Alternative.

Additional analysis of this option is provided in Chapter 4, Draft EIR/EIS Revisions, in which staff-initiated text changes are shown for Draft EIR/EIS Chapter 2 and Sections 3.3, Air Quality; 3.7, Greenhouse Gas Emissions and Climate Change; 3.11, Noise and Vibration; and 4.2, Energy Conservation.

Briefly, the use of a portable generator would exchange one source of power and type of fuel consumption for another by reducing the need for construction power from PG&E, while increasing the use of diesel fuel on site. A description of the mix of electrical power sources delivered to PG&E retail customers was provided in Draft EIR/EIS Section 4.2.1.2, Local Energy Systems (p. 4-3).

As described in revisions to Section 3.3, Air Quality, on the project site within Fort Funston, this change would increase average daily construction criteria pollutant exhaust emissions, but would not increase emissions of any criteria pollutant to a level that would exceed applicable CEQA significance thresholds or result in increased impact intensity under NEPA for air quality. As described in revisions to Section 3.7, Greenhouse Gas Emissions and Climate Change, the use of a generator also would increase on-site emissions of greenhouse gases during construction such that during the second year of construction, the total emissions would exceed the applicable CEQA significance threshold, resulting in a significant impact. This impact would be reduced to a less-than-significant level with implementation of Mitigation Measure 3.7-1 (see Chapter 4, Draft EIR/EIS Revisions). No change in the impact intensity under NEPA would occur with respect to greenhouse gas emissions. Daly City notes that the use of a generator on-site would result in reduced criteria air pollutant and greenhouse gas emissions from the production of electrical power that would otherwise be needed to serve Project construction. However, the methodologies used in Sections 3.3 and 3.7 focus on quantification of on-site emissions, consistent with applicable CEQA significance thresholds and NEPA impact intensity thresholds for this Project.

As described in revisions to Section 3.11, Noise and Vibration, while the use of a generator within the staging area at Fort Funston would increase the overall construction-related noise at that location, after implementation of Draft EIR/EIS Mitigation Measures 3.11-1 and 3.11-2, combined construction noise levels would not exceed applicable thresholds. Under the requirements of Mitigation Measure 3.11-1, the generator would be enclosed in a noise-attenuating acoustical enclosure. No new significant impact or increased impact intensity would occur with respect to noise.

Additionally, the use of a generator instead of a temporary PG&E connection would exchange the consumption of electricity for on-site consumption of diesel fuel. Revisions to Section 4.2, Energy Conservation, include a revised discussion of the energy consumption requirements of the

Project and alternatives. No new significant impact or increased impact intensity would occur with respect to energy consumption or conservation.

The revisions described above related to the potential use of a generator instead of a temporary PG&E power connection represent a minor change to the analysis in the EIR/EIS and do not constitute significant new information. Although the CEQA significance conclusion with respect to greenhouse gas emissions (Impact GHG-1) has been revised to disclose that a potentially significant impact could occur in the second year of construction, this impact would be reduced to a less-than-significant level with implementation of feasible mitigation measures. Daly City, as the Project proponent, does not decline to adopt this mitigation; rather, Daly City is committed to implementing all feasible mitigation measures required to reduce Project impacts to a level that is less than significant. No new significant and unavoidable impacts have been identified as a result of the minor change in construction equipment described in these staff-initiated revisions.

1.4 Document Organization

This Responses to Comments document consists of four chapters, plus supplemental attachments, as follows:

- **Chapter 1, Introduction.** This chapter summarizes the purpose of the Responses to Comment and the ongoing and environmental review process to date.
- **Chapter 2, List of Persons Commenting.** This chapter summarizes the federal, state, and local agencies, as well as the non-governmental organizations, that commented on the Draft EIR/EIS.
- **Chapter 3, Comments and Responses.** This chapter presents the comment letters received during the Draft EIR/EIS comment period, summarizes the substantive comments, and responds to those comments.
- **Chapter 4, Draft EIR/EIS Revisions.** This chapter displays the changes made to the text of the Draft EIR/EIS in response to comments on the Draft EIR/EIS or included to clarify the Draft EIR/EIS text.

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CHAPTER 2
List of Persons Commenting

This Responses to Comments document is organized to respond to all comments received on the Draft EIR/EIS, including written comments submitted by letter, fax, or email. This section lists all individuals and organizations that submitted comments on the Draft EIR/EIS. Commenters are grouped according to whether they commented as individuals or represented a public agency or non-governmental organization.

2.1 Federal, State, and Local Agencies and Commissions

- United States Environmental Protection Agency; Letter, July 1, 2016
- California State Lands Commission; Letter, July 1, 2016
- California State Transportation Agency, Department of Transportation; Letter, July 1, 2016
- San Francisco Public Utilities Commission; Letter, July 6, 2016

2.2 Organizations

- California Trout; Letter, July 1, 2016
- Golden Gate Audubon Society; Letter, July 1, 2016
- The Olympic Club; Letter, June 30, 2016

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CHAPTER 3
Comments and Responses

3.1 Comments and Responses

This section presents the comment letters received during the Draft EIR/EIS comment period, summarizes the substantive comments, and responses to those comments. The comments and responses are organized as listed in Chapter 2.

Responses have been numbered corresponding to bracketed numbers printed on the comment letters.. Responses are provided to address issues raised in the comment concerning the adequacy or accuracy of the EIR/EIS and to clarify or augment information in the Draft EIR/EIS as appropriate. Revisions to the Draft EIR/EIS are shown as indented text. New or revised text is double underlined; deleted material is shown in ~~strikethrough~~.

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

July 1, 2016

Christine Lehnertz
General Superintendent
Golden Gate National Recreation Area
Fort Mason, Building 201
San Francisco, California 94123

Subject: Draft Environmental Impact Report/Statement (DEIR/EIS) for the Vista Grande Drainage Basin Improvement Project, Golden Gate National Recreation Area, San Francisco and San Mateo Counties, California (CEQ # 20160082)

Dear Ms. Lehnertz:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act.

According to the DEIR/EIS, the proposed project would address storm-related flooding in Daly City by expanding the capacity of the Vista Grande Canal and Tunnel, while allowing for diversion of stormwater to Lake Merced to augment lake water levels. The project includes a Lake Managment Plan that identifies additional in-lake management actions to improve water quality, with a focus on addressing dissolved oxygen and pH levels, since Lake Merced is listed on the Clean Water Act Section 303(d) list of impaired waters for these criteria.

Based on our review, we are rating the Proposed Project and alternatives as *Environmental Concerns – Insufficient Information (EC-2)* (see enclosed "Summary of Rating Definitions"). Our concerns regard the quality of water released into the Lake during the up-to-3-year construction phase, the level of commitment to in-lake management actions to improve water quality, and the adaptive management strategy, which is not well defined. We recommend Scenario 2 be implemented for the construction phase, which would route stormwater to the San Francisco Public Utilities Commission (SFPUC) combined sewer system, and that the capability to treat flows prior to direct release into Lake Merced be included, should the SFPUC system be unable to accommodate larger storm flows or should Scenario 1 be selected. Please see our enclosed detailed comments for additional recommendations for the project and Final EIR/EIS. 1

EPA appreciates the opportunity to review this DEIR/EIS. When the Final EIR/EIS is released for public review, please send one copy to the address above (mail code: ENF-4-2). If you have any 2

questions, please contact me at (415) 972-3521, or contact Karen Vitulano, the lead reviewer for this project, at 415-947-4178 or vitulano.karen@epa.gov.

2

Sincerely,

Kathleen Martyn Goforth, Manager
Environmental Review Section

Enclosure: Summary of EPA Rating Definitions
EPA's Detailed Comments

cc: Xavier Fernandez, S.F. Bay Regional Water Quality Control Board
Patrick Sweetland, City of Daly City Department of Water and Wastewater Resources
Obi Nzewi, San Francisco Public Utilities Commission

SUMMARY OF EPA RATING DEFINITIONS*

This rating system was developed as a means to summarize the U.S. Environmental Protection Agency's (EPA) level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the Environmental Impact Statement (EIS).

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

ADEQUACY OF THE IMPACT STATEMENT

Category "1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category "2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category "3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, Policy and Procedures for the Review of Federal Actions Impacting the Environment.

Water Quality and Hydrology

The project purpose is to reduce storm-related flooding in the Vista Grande Drainage Basin while providing the additional benefit of augmenting the water level of Lake Merced. Once the project is constructed, it would allow diversion of some stormwater to Lake Merced, while maintaining the current discharge of stormwater to the Pacific Ocean via an expanded subterranean tunnel with increased conveyance capacity.

As the DEIR/EIS notes, Lake Merced currently does not meet the Basin Plan Water Quality Objectives for dissolved oxygen (DO) and pH, and, in 2003, EPA included Lake Merced on the Clean Water Act Section 303(d) list of impaired waterbodies for these criteria (p. 3.9-23). Because of this, the project aims to address these water quality impairments while raising lake levels over time (p. 3.9-127).

Construction-phase impacts

According to the DEIR/EIS, construction of the expanded tunnel would take between 17 and 37 months to complete, during which time stormwater and non-stormwater flows (car-washing, irrigation, etc.) would have no discharge conduit. These flows would either all be directed to Lake Merced, untreated (Scenario 1) or, with agreement by the San Francisco Public Utilities Commission (SFPUC), base flows and the first hour of storm flows following a defined antecedent dry period would be routed to the SFPUC combined sewer system (Scenario 2) (p. 3.9-67-69). The DEIR/EIS evaluates both scenarios since Daly City and SFPUC do not have an agreement for such diversions.

The DEIR/EIS provides the results of stormwater sampling that was conducted in the Vista Grande Canal during 2011 and 2012 wet and dry periods to characterize the baseline water quality. These results showed elevated levels of bacteria, certain metals, and nutrients compared to baseline concentrations in the Lake, and it does not appear that stormwater was sampled for other stormwater pollutants, such as pesticides, polychlorinated biphenyls (PCBs), or other metals. We have concerns regarding potential water quality impacts from the discharge of untreated storm flows directly into the Lake, particularly under Scenario 1. Under Scenario 2, this concern would be alleviated by the routing of base flows and first flush stormwater flows to the SFPUC combined sewer system during construction. 3

> *Recommendation:* Provide an update on the diversion agreement between Daly City and SFPUC in the Final EIR/EIS (FEIR/EIS). We strongly recommend Scenario 2 be implemented for the construction phase of the project to address water quality concerns. In addition, we recommend that treatment for solids, via settling tanks, occur to the maximum extent possible, prior to any direct release into the Lake (i.e. the storm flows that discharge to the Lake after the "first flush" under Scenario 2, and all flows under Scenario 1). If Scenario 1 is selected, we also recommend additional sampling occur for the other common stormwater pollutants mentioned above, so that the impacts from Scenario 1 are fully disclosed to decision-makers in the Final EIR/EIS.

Operation-phase impacts

The project includes creation of a small treatment wetland that is predicted to treat base flows and low-volume stormwater flows and reduce levels of bacteria, metals, and nutrient concentrations. The DEIR/EIS concludes that operation of the project would improve Lake Merced water quality over the duration of operations (p. 3.9-106); however, this conclusion depends to a considerable degree on the 4

successful operation of the treatment wetlands and the accuracy of their estimated performance. The water quality impact assessment is based largely on predictive modeling, and clarifications are needed regarding the assumptions used to project wetland performance.

Recommendations: We recommend clarifying information, as discussed below, be included in the FEIR/EIS:

- For the direct algae filtration of Lake surface waters using the treatment wetlands (p. 3.9-103), the DEIR/EIS refers to certain calculations (which are not provided in the document) to assess the feasibility of using the treatment wetlands in such a manner. We recommend that the FEIR/EIS include an appendix that summarizes the feasibility calculations and considerations. It is also not clear whether the algae filtration was included in modeling results, such as those shown in Figure 3.9-19. Page 3.9-106 refers to further improvements in water quality from lake management actions, and such improvements may be above and beyond those displayed in the modeling results; however, this is not clear and should be clarified. 4
- The FEIR/EIS should discuss the assumed removal rates for nitrogen in the treatment wetlands (basic and advanced wetlands) and the basis for those assumptions. 5
- Appendix A (Lake Management Plan) notes that the treatment capacity of the wetlands would be about 1.4 cubic feet per second (cfs). The wetlands would be used to treat "low volume" stormwater flows and, after the initial storm event of the winter season, if screened storm flows meet diversion criteria, flows exceeding the capacity of the treatment wetlands would be routed directly to the Lake. Presumably the capacity limitations of the treatment wetlands were included in the modeling, but this should be clarified in the FEIR/EIS. The Lake Management Plan also indicates that criteria for diverting stormwater into the Lake remain to be developed. The FEIR/EIS should explain the criteria that were used for the modeling, and how the conclusions concerning water quality impacts could be affected if different criteria are ultimately used in the future. 6

Lake Management Plan/Adaptive Management

In general, the conclusions regarding water quality impacts to Lake Merced appear to have substantial uncertainty. The project's Lake Management Plan includes in-lake management actions and an adaptive management strategy. The DEIR/EIS notes that continued analysis and reporting under the Lake Management Plan would reduce uncertainty relating to long-term water quality trends, allow adjustment of operational protocols, and inform BMPs to maximize water quality improvements (p. 3.9-106). This adaptive management approach is an important component of the project, yet there is little information regarding how it would be implemented.

Additionally, it is not clear that the in-lake treatment actions, which are important to address water quality, will definitely occur, since the DEIR/EIS sometimes presents them as optional ("Should the additional in-lake treatment components of the Lake Management Plan be implemented…" p. 3.4-97). These in-lake management actions are important and are presented as part of the basis, along with the treatment wetlands, for a less-than-significant impact determination for water quality in the DEIR/EIS. 7

Recommendation: Include an outline of the adaptive management approach for the Lake Management Plan. Identify general administration/personnel who will implement the Plan, including roles and responsibilities; the financial, technical, and human resources needed to perform the monitoring and respond to the results; funding sources for plan implementation; the

process for altering management decisions based on monitoring results; the data management system; and the process for communicating results.

Include, in the FEIR/EIS, a firm commitment to implement the in-lake treatment actions identified in the DEIR/EIS, including the removal of algae and the flushing of the Lake to reduce the elevated background pH. Coordinate in-lake treatment actions with the Demonstration Aeration Mixing System project described on page 31 of the Lake Management Plan that SFPUC will be implementing in Lake Merced's South Lake. Continue to work closely with the Regional Water Quality Control Board towards approval of the Lake Management Plan. 7

Water Quality Assessment

A Water Quality Assessment (WQA) was prepared for Lake Merced and the Vista Grande Canal to document existing hydrologic and water quality conditions and provide analysis of potential changes to those existing conditions as a result of project operations (p. 3.9-13). The impact assessment references this document over 40 times, however it was not included as an appendix to the DEIR/EIS. The Council on Environmental Quality (CEQ) advises that the appendix should include material that pertains to preparation of the EIS and that lengthy technical discussions of modeling methodology, baseline studies, or other work are appropriately placed here. CEQ indicates that, if at all possible, the appendix should accompany the EIS, or if too voluminous to circulate, should be placed in a conveniently accessible location or furnished upon request. While the WQA was provided upon request, it is not a formal appendix to the DEIR/EIS, nor was it made available on the project websites. 8

Recommendation: We recommend including the WQA in the formal appendices of the FEIR/EIS and making it available on the project websites.

Upstream Watershed BMPs

The project description includes "A prioritized suite of best management practices that may be implemented within the Vista Grande Basin storm drain system upstream of the Vista Grande Canal and/or within the Lake Merced watershed" (p. 2-5), which are described in the Lake Management Plan in Appendix A. These Watershed BMPs include "Detention and Filtration" which involves building infrastructure for stormwater filtration, such as bioretention/rain gardens, vegetated filter strips, sand filters, and vegetated swales throughout the Vista Grande Watershed (App A, p. 24). We agree that adding upstream filtration is valuable and recommend that it be coupled with a BMP to disincentivize actions, such as the replacement of residential lawns with pavement, that increase impervious surfaces in the watershed. Unlike the eliminated Downspout Disconnection BMP, such a BMP would involve Daly City policy and planning actions, and would not be solely dependent upon homeowner participation. 9

Recommendation: Describe, in the FEIS, any existing local or regional policy or planning rule that limits the extent of impervious surfaces on residential and other properties. If no such policy or rule applicable to Daly City or the watershed exists, discuss options for the establishment of same to create disincentives for the addition of impervious surfaces to existing residential and other property in the watershed. Determine and disclose whether other cities in the Bay Area have such a policy or rule. Include, as a BMP in the Lake Management Plan, a measure, such as the establishment of a policy or planning rule, to reduce the addition of new impervious surfaces in the watershed.

Rainwater Harvesting BMP

The Lake Management Plan eliminates the watershed BMP of installing rain barrels and cisterns in the Vista Grande/Lake Merced watershed for rainwater harvesting, which could reduce peak stormwater flows and conserve water for later non-potable use. Rainwater harvesting was eliminated because it could reduce the amount of water available for diversion to the Lake, thus conflicting with the Lake Management Plan's objective of increasing surface water input to the Lake (Appendix A, p. D-3). The DEIR/EIS anticipates that considerable stormwater would still flow through the Vista Grande Tunnel to the Pacific Ocean after project completion. This suggests that sufficient water may be available for diversion to the Lake along with some rainwater harvesting in the watershed, thereby maximizing the reuse potential of the available water. 10

> *Recommendation:* Explain, in the FEIR/EIS, why no rainwater harvesting at all would be feasible, given the anticipated post-construction volume of stormwater flow to the ocean.

Impacts to Wetlands during Construction

The DEIR/EIS states that project construction could have a substantial adverse effect on wetlands and other jurisdictional waters from "temporary and permanent discharges of structures and/or fill within waters and wetlands, and/or alterations of the bed and/or banks of a lake or stream" (p. 3.4-67). The DEIR/EIS does not quantify these construction-phase impacts. It simply references various agency permit requirements, and states that unavoidable impacts to wetlands and other waters will trigger a requirement for compensatory mitigation that will be aimed at creating, restoring, or enhancing similar ecological functions and services as those displaced. It also states that this mitigation (Mitigation Measure 3.4-8b, Compensation for Impacts to Wetlands and Riparian Habitat) would reduce the impacts associated with direct loss to a less-than-significant level (p. 3.4-70). The primary permit for fill to waters of the U.S. is a Clean Water Act Section 404 permit, and it is true that an individual permit would trigger a requirement for compensatory mitigation; however, if the project qualities for a Nationwide General Permit, compensatory mitigation may or may not be required. Because the DEIR/EIS does not quantify impacts, it is not clearly disclosing the proposed mitigation for the project. 11

> *Recommendation:* In the FEIR/EIS, quantify the acreage of impacts, both temporary and permanent, to wetlands and waters of the U.S. from construction of the project. Indicate whether the project is likely to qualify for Nationwide CWA Section 404 permit(s), and if so, which one(s). Update the discussion of mitigation for Impact BIO-8 in the FEIR/EIS as appropriate.

Demolition Waste

The description of project construction quantifies the volume of demolition debris that would be generated by the project and indicates that all of the 600 cubic yards (cy) of concrete and brick canal lining in the canal area, 60 cy of asphaltic concrete at the John Muir Drive crossing, and 50 cy of concrete and brick canal lining at the East Portal would be disposed of at a landfill. It also indicates that the 2,500 cy of brick tunnel lining generated from the tunnel and shaft would "likely be disposed of along with the tunnel spoils at a landfill" (p. 2-26). The 300 cy of brick and shotcrete lined tunnel and concrete outlet structure would be "disposed of", presumably also at a landfill. 12

The DEIR/EIS cites the Daly City Construction and Demolition Recycling Program, which requires a minimum of 60 percent of debris generated by "certain construction and demolition projects" be recycled (p. 3.16-5), and the San Francisco Construction and Demolition Ordinance that mandates the recycling of construction and demolition (C&D) debris generated in the City of San Francisco. This ordinance prohibits any C&D materials from being sent directly to a landfill, with a minimum of 65 percent of the material being diverted at the recycling facility.

Recommendation: Demolition waste from the project should be recycled to the maximum extent, consistent with Daly City and San Francisco diversion goals. Commit to this diversion and update the project description's discussion of the final disposition of these materials in the FEIR/EIS. 12

Additional comments

- The DEIR/EIS indicates stormwater discharges are regulated under the 2009 Municipal Regional Permit (MRP) issued by the San Francisco Bay Regional Board (p. 3-9.1). The FEIR/EIS should be updated to reflect the 2015 reissuance of the MRP. The 2015 MRP is available at: http://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/stormwater/Municipal/index.shtml 13
- The DEIR/EIS states that potential impacts on utilities and services are not considered under NEPA; however, impacts to utilities are frequently evaluated in NEPA documents, especially since overtaxing utilities, especially water and wastewater utilities, can result in significant environmental impacts. It is appropriate to evaluate utilities and public services under NEPA and we do not believe it is accurate to say that these impacts are not considered under NEPA. 14
- The DEIR/EIS states that collected garbage is directed to the Daly City Mussel Rock Transfer Station in Daly City (p. 3.16-4). According to the City of Daly City's website[1], Mussel Rock Transfer Station closed in February 2016. This sentence should be updated in the FEIR/EIS. 15

[1] http://www.dalycity.org/City_Hall/City_News__Announcements/City_News/Mussel_Rock_Transfer_Station_Closure_Feb__1st.htm

3.2 Response to Comments from United States Environmental Protection Agency

USEPA-1 Comment USEPA-1 contains a summary of the USEPA concerns regarding stormwater releases into Lake Merced during project construction and the level of commitments to in-lake management actions. Detailed responses to the overall concerns raised in Comment USEPA-1 are included below.

USEPA-2 The comment requests a copy of the Final EIR/EIS, and provides transmittal instructions. This comment is noted; and a copy of the Responses to Comments document will be provided as instructed.

USEPA-3 The comment summarizes the proposed project approach to stormwater management during tunnel construction, which includes either discharge of all stormwater to Lake Merced (Scenario 1) or discharge of baseflow and stormwater flow following a defined antecedent dry period to the San Francisco Public Utilities Commission (SFPUC) combined sewer system (Scenario 2). The comment further indicates concern with the proposed discharge of stormwater to Lake Merced during the construction phase and associated potential water quality impacts.

The commenter recommends that Daly City and NPS utilize Scenario 2 to address water quality concerns, and requests an update on the proposed diversion agreement between Daly City and SFPUC. This recommendation is noted. Daly City and SFPUC staff continue to discuss a potential diversion agreement and both parties note that use of the SFPUC system for diversion of a portion of stormwater flows during tunnel construction is preferred. However, a formal agreement and permit could not be entered into until after project approval. Thus, the EIR/EIS considers both Scenarios 1 and 2, and finds that potential water quality impacts would be less than significant for both. Potential water quality impacts associated with temporarily diverting storm flows to Lake Merced during the Tunnel construction period are comprehensively assessed in Draft EIR/EIS Section 3.9.5.1 under Impact HYD-1 (p. 3.9 *et seq*.). As noted, potential water quality impacts were assessed for two scenarios: Scenario 1, involving the temporary diversion of all Canal flows to Lake Merced during the tunnel construction period; and, Scenario 2, involving the diversion of base flows and some storm flows that follow a long antecedent dry period to the SFPUC combined sewer system and additional flows to Lake Merced.

The commenter requests that the construction phase include treatment of stormwater for solids via settling tanks for both Scenario 1 (all flows) and Scenario 2 (for stormwater flow following a defined antecedent dry period). As described in Draft EIR/EIS Section 2.5.2 (p. 2-17, *et seq*.), regardless of the diversion scenario employed, all stormwater conveyed to Impound Lake via the debris screening device, which would be completed prior to taking the tunnel out of service. The debris

screening device would remove all particulates greater than 5 mm in diameter from stormwater flows, providing direct treatment of stormwater prior to release into Lake Merced. However, additional recommended settling tanks would not be feasible given the rate and volume of typical stormwater flows requiring conveyance. Further, additional settling would not be necessary to reduce a significant impact related to Lake Merced water quality.

The commenter also recommends that additional water quality sampling be performed under Scenario 1 for pesticides, polychlorinated biphenyls (PCBs), and additional metals. Regarding concerns related to stormwater quality, Appendix B of the Water Quality Assessment, completed in support of the Project impact analysis, contains the complete hydrologic and water quality monitoring plans employed to characterize baseline water quality and hydrology in Lake Merced and the Canal. These plans describe in detail the rationale for the methodologies employed and the water quality constituents selected for monitoring and analysis. The monitoring program was developed in collaboration with Regional Water Quality Control Board staff and was based upon water quality constituents of concern known to be associated with lake water quality issues and related to the Lake Merced 303(d) listing. Additionally, the water quality constituents selected in the monitoring program were based, in part, on past monitoring efforts that have provided characterization of both stormwater quality in the Canal as well as Lake Merced water quality. The complete list of previous studies and water quality assessments reviewed as part of the development of the monitoring methodology and analysis is provided in Appendix F of the Water Quality Assessment. Past water quality analyses (EOA, 2011; Stillwater Sciences, 2008; CH2MHill, 2011; SFPUC, 2006; EDAW, 2004) conducted in both Lake Merced and the Canal have documented and assessed a broad range of water quality constituents under a range of seasonal and hydrologic conditions. The water quality constituents assessed and considered in these studies, in addition to those detailed in the WQA sampling plans, include (but are not limited to) chromium, arsenic, aluminum, boron, barium, chlorinated acid herbicides (via USEPA method 8151A) and organophosphorous pesticides (via USEPA method 8140). As an example (but not intended as an exhaustive list) water quality sampling results (CH2MHill 2004, 2011) for a broad suite of constituents related to herbicides and pesticides in Vista Grande Canal water documented that concentrations were not detectable (i.e. “non-detect”) from laboratory analysis. Based on review and assessment of such results, further sampling and analyses of pesticides was not conducted as part of the WQA. Further, as described in detail in Draft EIR/EIS Section 3.9.1.3 (p-3.9-22 *et seq*.) and in the WQA (Appendix B), the 2011-2012 wet season monitoring program included collection of detailed baseline water quality data within the Canal, including a review of Total Inorganic Nitrogen (TIN), bacteria and other microorganisms, and metals such as lead, copper, nickel, mercury, and zinc. (EIR/EIS, p. 3.9-37 to 3.9-42; WQA Appendix B) In addition, the six-year pilot program conducted by EOA (2011) for the SFPUC during the wet seasons

2003/2004 through 2008/2009 evaluated bacterial, metals (such as lead, iron, and manganese), and nutrients in the Canal stormwater to assess impacts on diversions of the Canal stormwater to the Lake. (EIR/EIS, p. 3.9-68.) Analysis of the water quality samples confirmed that the concentrations of key water quality constituents were generally in the ranges expected for urban stormwater and non-storm runoff. Thus, the general ranges of such constituents were considered as part of the impact analysis described above, and additional sampling would not be required to assess project-specific effects.

USEPA-4 The commenter introduces several comments detailed further and then, in the substantive portion of this comment, requests that Daly City and NPS provide any calculations performed for direct algae filtration of Lake surface waters through the proposed treatment wetlands in an appendix to the EIR/EIS. The commenter also requests clarification as to whether the algae filtration was included in modeling results, such as those shown in Figure 3.9-19.

The assessment of the water quality improvements resulting from the proposed recirculation of lake water for algae removal is provided under Impact HYD-8 and is based on calculations of algae removal rates, hydraulic residence times under various flow scenarios, and wetland design. The analysis related to algae removal rates from the proposed recirculation of lake water through the treatment wetlands is supported by research of similar systems employed in other water bodies. Section 6.4.1 of the Water Quality Assessment, summarized under Impact HYD-8 for the purposes of assessing impacts under CEQA and NEPA, provides details regarding the performance and feasibility of such an in-lake management action to provide additional benefits to Lake Merced water quality above and beyond those realized through implementing Project diversions of stormwater.

The environmental assessment of hydrologic and water quality impacts presented in Section 3.9 (p. 3.9-1, *et seq*.) focuses on the disclosure of potential significant environmental effects of implementing the proposed Project, consistent with the requirements of CEQA and NEPA. As described in detail under Impact HYD-8 (p. 39-80 *et seq*.), Project diversions of urban stormwater and non-storm runoff from the Canal would result in an overall, long-term, water quality improvement to Lake Merced aquatic habitat and water quality; impacts would be less than significant. Further, the assessment under Impact HYD-8 demonstrates that implementation of the in-lake management actions, such as the recirculation of lake water through the treatment wetlands, are not required to maintain or improve existing water quality in Lake Merced in order to address any potential water quality impact of the direct diversion of stormwater; impacts to Lake Merced water quality would be less than significant without such in-lake management actions. As discussed in detail under Impact HYD-8, use of the treatment wetlands could be expanded during periods of low flows (e.g., summer months) to filter and remove algae from lake waters via the recirculation of water from Lake Merced. The use of

the proposed treatment wetlands for such in-lake management was not included in the model analyses of water quality impacts related to implementing the Project. Such a management action would provide additional water quality benefits within Lake Merced, above and beyond the improvements realized as a result of the stormwater diversions.

USEPA-5 The commenter requests that the EIR/EIS discuss the assumed removal rates for nitrogen in the treatment wetlands and the basis for those assumptions. As described in detail under Impact HYD-8 (p. 39-80 *et seq*.), a key purpose of the proposed treatment wetland would be to reduce nutrients (mainly in the form of nitrate) in the diversions. A detailed assessment of the performance of the proposed treatment wetlands related to Lake Merced water quality is provided under Impact HYD-8. This assessment incorporates and summarizes the results of numerous model analyses and associated technical memoranda related to stormwater nutrient inputs, treatment wetland efficacy, and lake processes described in Section 6 of the Water Quality Assessment. The most relevant of these model analyses is provided in Appendix E of the Water Quality Assessment, under "Estimated Net Effects on Water Quality with Increased Water Additions to Lake Merced during Filling and at Steady State" (p. E-43 et. seq.). The report provided in Appendix E of the Water Quality Assessment describes in detail the assumptions and methods for assessing wetland nutrient removal. As described in Appendix E, the model analyses assumed that the constructed treatment wetlands would remove nitrate at a rate of 500 mg N/m2/d in the 7 month warmer seasonal period ($T > 15^{o}C$) and 100 mg N/m2/d in the 5 month cooler seasonal period ($T < 15^{o}C$).

Regarding the question of how the conclusions concerning water quality impacts could be affected if different flow diversion criteria are ultimately used in the future, as described in Section 4.2.2 of the Lake Management Plan (Appendix A of the Draft EIR/EIS) proposed as part of the Project, long-term water quality monitoring would be conducted to assess the efficacy of the treatment wetlands. The assessment of the treatment wetland performance would be part of the adaptive management framework of the Lake Management Plan, as is typical for treatment wetlands. The treatment wetland design and operation (e.g., wetland vegetation composition, operational flows, hydraulic residence time, etc.) would be refined to ensure treatment efficacy is consistent with project goals and objectives as well as predicted performance assumed in the model analyses.

USEPA-6 The commenter asks that Daly City and NPS clarify in the Final EIR/EIS whether the capacity limitations of the treatment wetlands were included in the modeling. As described under Impact HYD-8 (p. 39-80 *et seq*.) and in the Water Quality Assessment, the main purpose of the proposed treatment wetlands would be to reduce nitrate in the diversions. Nitrate removal rates would be highest during summer months (see response USEPA-5 for details). Various model analyses were completed to support the assessment of hydrologic and water quality impacts from

implementation of the Project. These model analyses are presented in detail in the Water Quality Assessment, which is described and summarized in Section 3.9 (p. 3.9-1, et seq.) of the Draft EIR/EIS. Details regarding the model analysis methodology and assumptions are provided in Section 6 (p. 6-1, *et seq*.) and Appendix E (p. E-1, *et seq*.) of the Water Quality Assessment. The key findings of the Water Quality Assessment are incorporated into Impact HYD-8. As described under Impact HYD-8, low volume storm flows would be routed through the proposed treatment wetlands. The primary benefit of routing low volume stormflows through the treatment wetlands would be to facilitate the settling and filtration of suspended sediments. Most pollutants, including metals and microorganisms, tend to be associated with particulates, and as such the processes of physical settling would represent an ongoing removal process during sustained (multi day) diversion events that would improve stormwater quality prior to reaching Lake Merced (see Impact HYD-8 for details). As described in detail under Impact HYD-8 and Appendix E of the Water Quality Assessment, regarding wetland treatment capacity and efficacy, the model analyses were based on an assumed nitrate removal rate of 500 mg N/m2/d in the 7 month warmer period ($T > 15^{o}C$) and 100 mg N/m2/d in the 5 month cooler period ($T < 15^{o}C$) with an assumed wetland area ranging from 1.3 to 7 acres depending on wetland composition and other hydrologic factors. Nutrient effects during the winter (5-month) and summer (7-month) periods were analyzed individually and then combined via model analysis to assess how inputs of nutrients in storm and base flows could affect algal growth in Lake Merced, with and without proposed constructed treatment wetlands.

The commenter notes that the LMP indicates that the criteria for diverting stormwater into the Lake remain to be developed and requests that the Final EIR/EIS explain the criteria that were used for the water quality modeling and how the conclusions concerning water quality impacts could be affected if different diversion criteria are used in the future. The diversion criteria incorporate a necessary degree of flexibility due to the variable nature of seasonal rainfall and storm event precipitation volumes and rates. Because long-term predictions of storm season characteristics, nor what the WSE will be in any given year, are not possible, the diversion criteria provide a range of parameters based on what is possible. As such, the diversion criteria incorporate flexibility for ongoing consideration of (1) precipitation variation within and across storm seasons and (2) variation in seasonal and annual water surface elevations.

The diversion criteria and hydrologic context for the stormwater diversions and supporting model analyses are provided in Section 2.6.1 of the Draft EIR/EIS (p. 2-28, *et seq*.). As noted, while such criteria may be refined following the start of operations, the stormwater routing criteria provided substantially represent the principal operating protocols proposed as part of the Project. Minor refinement of such diversion protocols would be unlikely to alter the conclusions presented for

long-term operations under Impact HYD-8 because the model assessments considered and addressed considerable water quality variability in Canal flows, as well as the volume of storm events in the context of overall lake volume. As such, the model results would not significantly deviate from the range of water quality results presented under Impact HYD-8 due to minor refinement of the diversion protocols. The subsection "Approach to Analysis" (p. 3.9-82, *et seq*.) provides a detailed description of the hydrologic context related to lake level model analysis to determine diversion thresholds necessary to meet WSE management objectives. The water quality model analyses assess potential changes to Lake Merced existing conditions as a result of Project operations, incorporating the hydrologic context of Project operations.

The Draft EIR/EIS's project-level analysis of the range of diversion criteria to be used in any given year conform to CEQA's requirement that an EIR analyze the impacts of a project's reasonably foreseeable consequences (see *Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal.* (1988) 47 Cal.3d 376, 396 [analysis of potential future actions limited by availability of sufficient, reliable data]; *Save Round Valley Alliance v. County of Inyo* (2007) 157 Cal.App.4th 1437, 1449 [uncertain or speculative future actions not required to be analyzed as part of project]). The range of diversion criteria provided in the EIR/EIS represent the reasonably foreseeable criteria to be used to maintain WSE during Project operations.

USEPA-7 The comment expresses concern regarding uncertainty related to water quality impact conclusions, as well as the proposed Lake Management Plan (LMP). The comment appears to link the less-than-significant impact conclusion regarding Lake Merced water quality to implementation of the proposed LMP. This is not the case.

Unlike most projects reviewed under CEQA and NEPA, the core objectives of the Vista Grande Project are to *improve conditions* above baseline. The first Project objective is to increase storm drainage capacity thereby reducing the frequency existing storm-related flooding events and the related environmental effects. Second, the Project seeks to augment the water surface levels of Lake Merced above baseline conditions. The LMP is a project component that directly ties into the second objective. The LMP contains four core elements: (1) an operational plan for diverting stormwater into Lake Merced (i.e. diversion criteria); (2) in-lake treatment improvements that are components of the proposed Project (i.e. constructed treatment wetlands, an overflow structure, and collection box and debris-screening device); (3) lake monitoring; and (4) a suite of proposed BMPs to be implemented by Daly City and SFPUC that could be implemented as project components to *further improve* water quality in Lake Merced, in conjunction with regulatory adjustments to reflect site-specific conditions.

Impact HYD-8 (Draft EIR/EIS pages 3.9-80 to 3.9-109) considers the potential water quality impacts of diversion of Canal flows (screened to remove solids) to Lake Merced based on the range of diversion criteria presented in the LMP. Under the proposed diversion criteria, higher volume stormwater would not go through the constructed treatment wetlands, while lower volume flows and Canal base flow will. As a result, the EIR/EIS evaluated the water quality effects of diversion to the Lake both with and without the use of a constructed wetland. Based on comprehensive and detailed model analysis, utilizing project-specific hydrologic and water quality monitoring data, the EIR/EIS concludes that the inflow to Lake Merced, with use of solids removal and treatment wetlands, would have a less-than-significant impact on Lake Merced water quality.

The Project also includes additional in-lake treatment components (Appendix A, Section 3.2.3) that are intended to provide beneficial water quality impacts improving or maintaining baseline conditions and are not proposed for the purpose of addressing a significant water quality impact. These in-lake treatment components consist of operational actions that would be taken when specific conditions provide opportunities for water quality improvement. As described on page 2-9 of Chapter 2 of the EIR/EIS, Project and Alternatives, direct algae filtration of Lake Merced surface waters using the constructed treatment wetlands would occur during periods of high algae growth. As described on page 2-29, the controlled overflow of Lake Merced water to the Tunnel would occur when Lake Merced is at the target WSE and additional contributions to the lake are available. The infrastructure to achieve these in-lake treatment actions (algae skimmer and flexible piping) would be installed as part of the Project. However, because the frequency with which the necessary conditions would occur cannot be predicted with certainty, the analysis must acknowledge some uncertainty around their implementation. The uncertainty regarding the frequency in-lake management measures may be operated is related to variation in seasonal weather patterns and algal growth dynamics within Lake Merced, seasonal and annual precipitation and stormflow variability and, Lake Merced water levels. Regardless, the water quality analysis does not rely on LMP actions to achieve a less-than-significant impact. In addition to describing the less-than-significant water quality impacts that would result from Project operation, Impact HYD-8 also discusses the water quality improvements that would result from implementation of these in-lake treatment project components (pages 3.9-102 through 3.9-104). The Impact Conclusion section for Impact HYD-8 specifies that while the primary operational components are expected to improve water quality (a less-than-significant impact), “Operation of the in-lake management actions proposed as part of the Project would likely *further improve* water quality within Lake Merced through the removal of algae and the flushing of the Lake to reduce the elevated background pH” (pages 3.9-104 and 3.9-105, emphasis added).

The Project also includes as part of the LMP, monitoring protocols and proposed BMPs to be carried out by both Daly City and the SFPUC to address overall management of Lake Merced (EIR/EIS Appendix A). The monitoring program would satisfy on-going monitoring and reporting requirements to the RWQCB, but is not necessary to mitigate any water quality impact of the Project. The LMP would ensure that further monitoring data is collected to inform adaptive management of the Project and the lake itself to ensure that Lake Merced water quality is maintained and, where feasible, improved, as well as to inform the need and selection of BMPs should adverse water quality trends be identified during long-term monitoring (i.e., as a result of any number of variables that may affect lake water levels and quality). However, as described under Impact HYD-8, implementation of the Project is expected to present a long-term, incremental improvement of water quality in Lake Merced based on the results of modeling informed by robust baseline water quality data collection. Similarly, while implementation of the LMP would reduce uncertainty relating to long-term water quality trends, inform operational protocols and adaptive management of the lake, and potentially determine the need to implement BMPs to maximize anticipated water quality conditions and improvements, the LMP is not required to reduce or avoid significant impacts of the proposed Project.

The adaptive management framework is included in the LMP and would be informed by the results of long-term monitoring and analysis. Such data-driven and evidence-based adaptive management decision making would be employed to inform operational protocols (such as increases, decreases, or temporary curtailment of stormwater diversions or changes to the operation or management of the constructed treatment wetland) in order to maximize identified water quality improvements, not as mitigation for an identified impact. As discussed in the Draft EIR/EIS, implementation of the monitoring proposed as part of the LMP would have no direct impact on Lake Merced water quality. Further, the implementation of BMPs associated with the LMP would ensure Lake Merced water quality is maintained and, where feasible, improved, and would not cause secondary impacts (such as from construction) that could degrade water quality in Lake Merced.

The commenter requests an outline of the adaptive management plan. The adaptive management plan is described in Section 4.4 of the LMP, included as Appendix A of the Draft EIR/EIS. Adaptive management refers to the process that typically involves significant review of the experimental design of a monitoring plan and operates over a longer time cycle than annual monitoring and reporting (i.e., 5 to 10 years). The adaptive management plan proposed as part of the LMP provides an approach for assessing and responding to uncertainty inherent in complex systems such as Lake Merced and related dynamic lake hydrologic and water quality processes. Implementation of the adaptive management plan would enable refinement of and alterations to various operational protocols and would also inform the operation and management of specific Project components towards

achieving the goals and objectives of the Project. As described in detail in the WQA, Lake Merced hydrology and water quality is subject to a diverse range of influencing factors, inputs, and stressors. The LMP, and the adaptive management framework incorporated into the LMP, addresses and considers all such Project and non-Project inputs towards managing Lake Merced hydrology and water quality. As described in the LMP (Section 4.3 *et seq*., p. 20, Appendix A), monitoring, analysis, and reporting includes assessment of the extent to which any measured changes in Lake Merced hydrology and water quality are attributable to controllable factors, including inputs of Canal flows. As such, the LMP includes provisions for assessing water quality trends and the potential for available BMPs to address water quality trends attributable to addition of Canal flows or other identified watershed or lake management factors, and also includes a process for the implementation of response strategies, such as modifications to operational protocols. Specific aspects of the adaptive management plan related to operation of in-lake management actions, treatment wetland use, and monitoring and reporting are detailed in Section 4.4 of the LMP. The adaptive management plan, as proposed as part of the LMP, is assessed under Impact HYD-8.

Finally, as described in Section 1 of the LMP, once defined in more detail after final design and initial implementation of the Project as proposed, the operational plan and LMP would then be incorporated into an Operational Agreement executed between Daly City and SFPUC. This Operational Agreement will address staff roles and responsibilities, decision-making authorities, and funding for long-term implementation of the plan.

USEPA-8 The commenter requests that the Water Quality Assessment (WQA) be included in the formal appendices of the Final EIR/EIS and be made available on the project websites. As noted in the comment, the Council on Environmental Quality indicates that, if at all possible, technical materials should be included as an EIS appendix that accompanies the EIS, or if too voluminous to circulate, should be placed in a conveniently accessible location or furnished upon request. In this case, it was decided that the WQA was too voluminous to circulate and substantially summarized within the EIR/EIS and Lake Management Plan (Draft EIR/EIS Appendix A); and that the WQA should be included in the project administrative record, to be made available upon request. As acknowledged, the WQA was provided upon request to the USEPA. The WQA is also available on the City of Daly City website at:
http://www.dalycity.org/Assets/Departments/Water+and+Wastewater/pdf/ESA+2015+Vista+Grande+WQA.pdf

USEPA-9 The commenter summarizes specific proposed BMPs detailed in the LMP and suggests additional BMPs to be included. The Lake Management Plan proposed as part of the Project, including the associated BMPs linked to long-term hydrologic and water quality monitoring is assessed in detail under Impact HYD-8 (p. 39-80 *et seq*.)

in the Draft EIR/EIS. As described, the BMPs associated with the Lake Management Plan are not required to reduce or avoid significant impacts from implementation of the Project (see Response USEPA-7 for details). Regional and local regulations, plans, and policies relevant to the analysis of hydrologic and water quality impacts from construction and operation of the Project are presented in Section 3.9.2.2 (p. 3.9-55, *et seq*.). Described in Section 3.9.2.2 are the SFPUC and San Mateo County stormwater management plans, which include programs for post-construction stormwater management in new developments and redevelopment areas, such as minimizing impervious areas and increasing stormwater infiltration. A substantial addition of impervious surfaces is not proposed as part of the project and impacts related to the addition of impervious surfaces, such as altered drainage patterns or reduced groundwater recharge, would be less than significant (discussed under Impact HYD-3, p. 3.9-73). As such, the establishment of regional policies or planning rules to create disincentives for the addition of impervious surfaces within the Vista Grande watershed is not necessary to minimize or avoid identified significant impacts related to hydrology and water quality associated with the Project.

USEPA-10 The commenter notes that the LMP does not include a BMP for rainwater harvesting using rain barrels within the Vista Grande Watershed. As described in LMP Appendix D, BMP Screening and Ranking Matrix and Additional Treatment Measures (p. D-3), rainwater harvesting was assessed by the SFPUC and Daly City and was subsequently eliminated from further consideration and potential implementation due to potential conflicts with Project objectives to provide a sustainable source of stormwater for Lake Merced management. As such, a rainwater harvesting BMP has not been assessed as part of the Project in the Draft EIR/EIS and such a BMP is not necessary to minimize or avoid identified significant impacts related to hydrology and water quality associated with the Project.

USEPA-11 The commenter notes that the Draft EIR/EIS does not quantify construction phase impacts to wetlands. At the time of publication of the Final EIS-EIR, the delineation of wetlands and others waters of the United States and the project design were not sufficiently advanced to allow for a calculation of the impacts to jurisdictional wetlands and other waters of U.S. and of the state. However, the preliminary jurisdictional delineation was recently completed in consultation with the U.S. Army Corps of Engineers and more recent conceptual designs now indicate that permanent impacts would be less than 0.5 acre. The Corps of Engineers has indicated its intent to authorize the project under a Nationwide Permit or combination of Nationwide permits, as opposed to an Individual Permit. Nationwide Permits that are likely to authorize the project include NWP #7 (Outfall Structures and Associated Intake Structures), NWP #13 (Bank Stabilization), NWP #33 (Temporary Construction, Access and Dewatering), or NWP #43 (Stormwater Facilities). Text changes have been made in the EIR/EIS to reflect this assumption as provided below. The decision about which permits are

applicable will be made by the Corps based on final project design details to be developed after certification of the EIR/EIS. Even with the small impact area and reliance on Nationwide Permits, compensatory mitigation for permanent impacts (i.e., structural fill for outfalls) to jurisdictional wetlands and other waters is expected to be required. **Mitigation Measures 3.4-8a and 3.4-8b** provide the means by which this compensatory mitigation can be accomplished and the general content requirements of such mitigation, and have not been changed.

As a staff-initiated text change, EIR/EIS page 3.4-19, paragraph 3 has been revised:

> Daly City's environmental consultant (ESA) conducted a formal wetland delineation for federally jurisdictional wetlands and waters in November and December of 2012 (ESA, 2014). The field delineation identified and documented all potentially jurisdictional wetlands and other waters of the U.S. within the delineation study area. This wetland delineation found that within the study area, potential federally jurisdictional features include: Lake Merced, a freshwater lake used for recreational fishing and boating and thus, a Traditionally Navigable Water (TNW), and its adjacent wetlands; ~~Vista Grande Canal, a man-made, brick-lined channel constructed in dry land to capture and divert perennial stormwater and authorized non-storm water flows to the Vista Grande Tunnel and out to the Pacific Ocean (a TNW);~~ and the Pacific Ocean below the high tide line (HTL) at Fort Funston. With the exception of the Vista Grande Canal, which was determined by the Corps to be non-jurisdictional (USACE, 2016), ~~T~~the federal wetland delineation has not yet been verified by the Corps and should be considered preliminary until verification in writing is received from the Corps.

As a staff-initiated text change, EIR/EIS page 3.4-67, paragraphs 4 and 5 have been revised:

> As discussed in Section 3.4.1.5, potential jurisdictional features occur within the Project site, which have not been verified as such by regulatory agencies, with the exception of the Corps disavowing its jurisdiction over Vista Grande Canal. For the purpose of this Project analysis, these features are treated as potentially affected federal jurisdictional wetlands and other waters. Project impacts to these potentially jurisdictional features would involve temporary and permanent discharges of structures and/or fill within waters and wetlands, and/or alterations of the bed and/or banks of a lake or stream, to accommodate Project activities.
>
> Potentially jurisdictional wetlands and other waters would be affected by the placement of permanent or temporary fill material associated with ~~the installation of the collection box and box culvert at the headworks of the Vista Grande Canal, installation of the diversion structure within the Vista Grande Canal,~~ construction of the Lake Merced outlet structure in Impound

Lake, ~~construction of the temporary access ramp at the downstream end of the Canal,~~ replacement of the Lake Merced overflow structure in South Lake, and use of the temporary beach access route. ~~Approximately 1,500 feet of the 3,600-foot Canal(potentially jurisdictional other waters) would be replaced.~~ The total area of permanent impacts is expected to be less than 0.5 acre.

As a staff-initiated text change, EIR/EIS page 3.4-68, paragraph 2 has been revised:

Within the Project area, wetlands and other waters of the U.S. are regulated under Section 404 of the Clean Water Act. Because of the small area of permanent impacts to wetlands and other waters of the U.S. (less than 0.5 acre) the project will be authorized under the Nationwide Permit (NWP) Program, likely under NWP #7 (Outfall Structures and Associated Intake Structures), NWP #13 (Bank Stabilization), NWP #33 (Temporary Construction, Access and Dewatering), or NWP #43 (Stormwater Facilities), or a combination thereof, to be determine by the Corps.~~, and n~~Navigable waters are regulated by a Letter of Permission under Section 10 of the Rivers and Harbors Act. Wetlands and other waters of the state are regulated by the RWQCB under Section 401 of the Clean Water Act and the Porter-Cologne Water Pollution Control Act, and by the City and County and of San Francisco and the CCC under the California Coastal Act. Project activities resulting in the discharge of fill or other disturbance to jurisdictional wetlands and other waters require permit approval from the Corps, a water quality certification and/or waste discharge requirements from the RWQCB, and/or a coastal development permit from the CCC. Project impacts to wetlands and waters would occur within those areas subject to the Western Shoreline Plan Local Coastal Program, and in areas where the CCC has retained jurisdiction, including Lake Merced and its adjacent wetlands, and the Pacific Ocean. Finally, the CDFW has jurisdiction over riparian habitat, including lake and stream bed and banks, pursuant to Sections 1600-1616 of the Fish and Game Code. Any Project activity resulting in an alteration to lake or channel bed or banks, extending to the outer dripline of trees forming the riparian corridor, is subject to CDFW jurisdiction. Construction of the collection box and box culvert at the headworks of the Vista Grande Canal, installation of the diversion structure within the Vista Grande Canal, the discharge structure located at Impound Lake, and potential changes to the South Lake overflow structure would result in disturbance of the bed and bank of these areas, requiring a Lake and Streambed Alteration Agreement (LSAA) from the CDFW.

As a staff-initiated text change, EIR/EIS page 3.4-68, Table 3.4-3 has been revised:

TABLE 3.4-3
IMPACTS TO POTENTIAL FEDERALLY JURISDICTIONAL WETLANDS AND WATERS

Feature Type/Name	Impact Type	Preliminary Regulatory Jurisdiction
Waters		
Lake Merced	Temporary and permanent loss Permanent gain	Corps (Section 404 CWA, Section 10 RHA), RWQCB (Section 401, P-C), CCC jurisdiction, CDFW Section 1600
Vista Grande Canal	Permanent loss	~~Corps (Section 404 CWA),~~ RWQCB (~~Section 401,~~ P-C), CDFW Section 1600
Pacific Ocean	Temporary and permanent loss	Corps (Section 404 CWA, Section 10 RHA), RWQCB (Section 401, P-C), CCC jurisdiction
Beach at Fort Funston	Temporary and permanent loss	Corps (Section 404 CWA, Section 10 RHA), RWQCB (Section 401, P-C), CCC jurisdiction
Wetlands (Lake Merced)		
Bulrush Wetland (BW)	Temporary and possibly permanent loss	Corps, CCC, RWQCB (Section 401, P-C), CDFW Section 1600
Knotweed Wetland (KW)	Temporary and possibly permanent loss	Corps, CCC, RWQCB (Section 401, P-C), CDFW Section 1600
Arroyo Willow Wetland (AWW)	Temporary and possibly permanent loss	Corps, CCC, CDFW Section 1600

SOURCE: ESA, 2014

As a staff-initiated text change, EIR/EIS page 3.4-133 has been revised:

U.S. Army Corps of Engineers (USACE), 2016. Letter Correspondence determination regarding the Vista Grande Canal as a non-jurisdictional feature. Received April 29, 2016.

USEPA-12 This comment requests that the Final EIR/EIS update the project description's discussion of the final disposition of construction and demolition waste according to Daly City and San Francisco waste diversion ordinances. Impact UTIL-3 on page 3.16-9 of the Draft EIR/EIS discusses the impacts that project construction would have on landfill capacity. In addition, UTIL-4 on page 3.16-10 of the Draft EIR/EIS discusses the Project's compliance with government statutes and regulations pertaining to solid waste. It is in these locations that the regulatory setting for Daly City and San Francisco is applied to projected construction waste. Since much of the Project construction activities would occur within San Francisco, this analysis assumes that the Project would comply with San Francisco's C&D ordinance, ensuring that at least 65 percent of excess material (approximately 30,600 cubic yards) would be diverted from landfills and that all C&D material would be sent to a registered facility that reuses or recycles those materials. In addition, the National Park Service has expressed interest in reuse of some construction spoils at Fort Funston (see also Chapter 4, Draft EIR/EIS Text

Revisions). It is also noted that EIR/EIS Chapter 2, Project and Alternatives, acknowledges the City of Daly City waste diversion requirements.

In response to Comment USEPA-12, EIR/EIS page 2-12, paragraph 3 has been revised:

> This section details the construction locations, activities and methods for the proposed project. **Table 2-1** summarizes the proposed construction activities including demolition and tree removal; project component construction or demolition; excavation; spoils[2]storage, waste diversion[3] and disposal, and dewatering activities; and installation of work/staging areas.

[2] "Spoils" refers to soil remaining from an excavation after backfilling is completed.
[3] Diversion requirements set forth under Daly City Municipal Code 15.64.020 and San Francisco Ordinance No. 27-06

USEPA-13 This comment identifies updated information regarding the 2015 reissuance of the Municipal Regional Permit (MRP).

In response to Comment USEPA-13, page 3.9-1, paragraph 3 (continuing on page 3.9-2) has been revised:

> The study area is located within the San Francisco Coastal South Watershed (USEPA, 2015), which extends from western San Francisco to the southern end of San Mateo County. Lake Merced, the major surface freshwater feature in the study area, is a naturally occurring lake located approximately 0.25 mile from the Pacific Ocean in the southwestern corner of San Francisco. The proposed Project components are all located within the Lake Merced urban watershed, one of eight distinct urban watersheds within the City and County of San Francisco (San Francisco). A natural watershed is the land area that drains to a single body of water such as a stream, lake, wetland, or estuary, whereas an urban watershed can replace overland sheet flow to natural tributaries with constructed storm and sewer systems that separately collect and convey flows. Storm and authorized non-storm flows[1] (also referred to as exempt and conditionally exempt discharges under the Municipal Regional Stormwater Permit, RWQCB Order ~~R2-2009-0074~~ R2-2015-0049) within the urban watersheds on the western side of San Francisco, including the Lake Merced urban watershed, flow toward the Pacific Ocean through constructed stormwater conveyance systems.

[1] Authorized non-stormwater discharges (also called exempt and conditionally exempt discharges) are described in detail in Section C.15 of the Municipal Regional Stormwater NPDES Permit, RWQCB Order No. ~~R2-2009-0074~~ R2-2015-0049; detail in Section C.15 of the Municipal Regional Stormwater NPDES Permit, RWQCB Order No. ~~R2-2009-0074~~ R2-2015-0049; examples include pumped groundwater, runoff from landscape irrigation, water from foundation drains, air conditioning condensate, water from residential car washing activities, and the like.

In response to Comment USEPA-13, page 3.9-49, paragraph 4 has been revised:

> Stormwater runoff and authorized non-storm flows (conditionally exempt discharges) from Daly City and the other San Mateo County cities have been regulated under MS4 NPDES permits since 1993. These MS4 permits, including the current Municipal Regional Permit, RWQCB Order No. ~~R2-2009-0074~~ R2-2015-0049 (MRP), re-issued by the Water Board on November 19, 2015, to regulate stormwater discharges from municipalities and local agencies in San Mateo County, have contained increasingly prescriptive requirements, typically in the form of enhanced BMPs.

In response to Comment USEPA-13, page 3.9-87, paragraph 3 has been revised:

> To assess the direct and indirect long-term impacts of Project operations on Lake Merced water quality, a detailed Project-specific WQA was developed (ESA, 2015). The WQA presents analysis of the potential changes to Lake Merced existing conditions as a result of Project operations and incorporates the hydrologic context of Project operations, such as the relative volume of Canal flows as compared to overall lake volume. Additionally, as part of the analysis of potential water quality effects to Lake Merced, the water quality of Canal flows were considered within the context of proposed physical and operational Project elements (such as the screening device, the treatment wetlands, and the diversion protocols), as well as regulatory controls[12] to urban runoff water quality.

[12] As discussed in detail in the WQA and in Section 3.9.2, the existing and proposed diversions of flows from the Vista Grande Canal to Lake Merced are covered under the existing MS4 NPDES permit, called the MRP, RWQCB Order No. ~~R2-2009-0074~~ R2-2015-0049. No additional NPDES permits are needed for Project operation. The operational protocols and the use of in-lake management actions and BMPs proposed as part of the Project are described in Section 2.6.1 and 2.6.2, respectively.

USEPA-14 This comment, stating that it is appropriate and accurate to evaluate utilities and public services under NEPA, is noted. As discussed in Section 3.16 Utilities and Service Systems on page 3.16-1 of the Draft EIR/EIS, utilities and service systems are considered under CEQA, but are not considered by NPS under NEPA. Nevertheless, the effects on water, wastewater, and solid waste utilities and services were all found to be less than significant. As discussed in Impact UTIL-1 on page 3.16-7, since Daly City would comply with SFPUC Wastewater Enterprise's permit conditions for dewatering, the SFPUC Construction Site Runoff and Control Permit, and the Statewide General Construction and /or construction Site Runoff Control Permit, the Project would not exceed wastewater treatment requirements issued by the RWQCB. Furthermore, the SFPUC Oceanside Treatment Plant has adequate capacity to serve the project's temporary incremental increases in wastewater flows. As discussed in Impact UTIL-2 on page 3.16-8, the Project would require water for dust control purposes, but would otherwise have a beneficial impact

on water supply resources. As discussed in Impacts UTIL-3 and UTIL-4 on pages 3.16-9 and 3.16-10, construction and demolition wastes would be diverted from landfill according to local waste diversion ordinances, and the project would therefore not adversely affect landfill capacity; nor would the project conflict with governmental regulations pertaining to waste diversion. Finally, as discussed in Impact UTIL-5 on page 3.16-10, the Project would comply with provisions of the San Francisco Public Works Code, Cal/OSHA requirements, and SFDPW's Envista Utility Coordination tool, therefore effects related to the disruption of utility operations or accidental damage to existing utilities would be less than significant.

USEPA-15 This comment requests that the Final EIR/EIS be updated to reflect Mussel Rock Transfer Station's closure in February 2016.

In response to comment USEPA-15, EIR/EIS page 3.16-4, paragraph 1 has been revised:

Daly City

~~Allied Waste~~ Republic Services provides residential and commercial garbage collection services for Daly City. Collected garbage that is not compostable is directed to ~~the Daly City Mussel Rock Transfer Station located at Skyline Drive and Westline Drive in Daly City, and eventually~~ the Corinda Los Trancos Landfill (formerly Ox Mountain Sanitary Landfill), located 3 miles east of Half Moon Bay off of Highway 92. This facility has a ceased operational date of January 2018 with a permitted capacity of 69 million cubic yards, and total remaining capacity of approximately 26.9 million cubic yards as of May 2011 (Davies, 2014). In 2012, Daly City generated approximately 54,000 tons of solid waste and directed approximately 53,000 tons to the Corinda Los Trancos Landfill (CalRecycle, 2014d).

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Established in 1938

July 1, 2016

File Ref: SCH # 2013032001

Patrick Sweetland
City of Daly City, Department of Water and Wastewater Resources
153 Lake Merced Boulevard
Daly City, CA 94015

Subject: Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Vista Grande Drainage Basin Improvement Project, San Mateo and San Francisco Counties

Dear Mr. Sweetland:

The California State Lands Commission (CSLC) staff has reviewed the Draft EIR/EIS for the Vista Grande Drainage Basin Improvement Project (Project), which is being prepared by the city of Daly City (City). The City, as a public agency proposing to carry out the Project, is the lead agency under the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000 et seq.), and the National Park Service is the lead agency under the National Environmental Policy Act (42 U.S.C. § 4321 et seq.). The CSLC is a CEQA trustee agency for projects that could directly or indirectly affect sovereign lands and their accompanying Public Trust resources or uses. Additionally, because the Project involves work on sovereign lands, the CSLC will act as a responsible agency.

CSLC Jurisdiction and Public Trust Lands

The CSLC has jurisdiction and management authority over all ungranted tidelands and submerged lands, and the beds of navigable lakes and waterways. The CSLC also has certain residual and review authority for tidelands and submerged lands legislatively granted in trust to local jurisdictions (Pub. Resources Code, §§ 6009, subd. (c), 6301, 6306). All tidelands and submerged lands, granted or ungranted, as well as navigable lakes and waterways, are subject to the protections of the common law Public Trust.

As general background, the State of California acquired sovereign ownership of all tidelands and submerged lands and beds of navigable lakes and waterways upon its admission to the United States in 1850. The State holds these lands in trust for the benefit of all people of the State for statewide Public Trust purposes, which include but are not limited to waterborne commerce, navigation, fisheries, water-related recreation,

habitat preservation, and open space. On tidal waterways, the State's sovereign fee ownership extends landward to the mean high tide line (MHTL), except for areas of fill or artificial accretion or where the boundary has been fixed by agreement or a court. Such boundaries may not be readily apparent from present day site inspections.

The existing CSLC lease, PRC 1364.9, would need to be amended for proposed work on the existing ocean outlet structure and 33-inch outfall pipeline located on Pacific Ocean sovereign land. The uplands at this location are located within lands the State acquired and patented under a 500,000-acre federal grant. An easement over sovereign State land at this location was granted in 1962 to North San Mateo County Sanitation District for a sanitary sewer outfall line.

The MHTL remains ambulatory at this location, and so the CSLC has not fixed a precise boundary between State-owned uplands and sovereign Public Trust tide and submerged lands. A MHTL survey is required to determine the exact CSLC jurisdictional boundary and current extent of existing structures on State sovereign land. At a minimum, a Public Trust easement exists on the beach to provide public access. 1

This determination is made for the purpose of comment on the Draft EIR/EIS and is without prejudice to any future assertion of State ownership or public rights, should circumstances change or if additional information comes to our attention. This letter is not intended, nor should it be construed as, a waiver or limitation of any right, title, or interest of the State of California in any lands under its jurisdiction.

Project Description

The Project proposes to address storm water related flooding within the Vista Grande Drainage Basin through improvements to existing storm water conveyance facilities. The Project meets the City's goals and objectives as follows:

- Improve storm water drainage of the lower Vista Grande Basin to accommodate peak flows generated by a 25-year, 4-hour storm;
- Implement a lake management plan to manage water quality and hydrology for Lake Merced;
- Improve recreational access along the beach below Fort Funston;
- Reduce litter transfer and deposition along the beach below Fort Funston; and
- Maximize use of existing right-of-ways, easements, and infrastructure to minimize construction related costs, habitat disturbance, and disruption to recreational users.

From the Project Description, CSLC staff understands that the Project would include the following components:

- Ocean Outlet Structure. Replace the existing ocean outlet structure and a portion of the existing 33-inch submarine outfall pipeline that crosses the beach at Fort Funston by carrying out the following tasks:

- Install and remove cofferdam sheet piles;
- Demolish and remove the existing outlet and exposed portions of the existing Vista Grande Tunnel;
- Create a portal structure;
- Install a new ocean outlet structure of cast-in-place concrete;
- Remove an existing 27-inch force main pipeline;
- Replace approximately 120 feet of the existing 33-inch submarine outfall pipeline that crosses the beach (outside of the cofferdam) with a new 33-inch welded steel pipeline;
- Insert four, 3-foot by 3-foot concrete piers embedded in the beach sand to support the replacement pipeline; and
- Connect a new 33-inch welded steel pipeline to the existing submarine outfall pipeline.

- Make improvements to the existing upland storm drain system, which includes the Vista Grande Canal, Effluent Gravity Pipeline, Lake Overflow Structure, and Vista Grande Tunnel.

The Draft EIR/EIS identifies the proposed Project as the Environmentally Superior Alternative.

Environmental Review

CSLC staff requests that the City consider the following comments on the Project's EIR.

General Comments

1. CSLC Acronym: CSLC staff requests that the EIR/EIS correct the acronym "CSLC" throughout the document (e.g., change from "CLSC" on page 5-2). It is correctly abbreviated in the Acronyms and Abbreviations on page 6-3. 2

2. Structures to be Removed: CSLC staff requests that the following information be provided in the Final EIR/EIS:
   a. Length of 33-Inch Pipeline: CSLC staff requests that the Final EIR/EIS consistently identify the correct length of the 33-inch concrete pipeline proposed to be removed. For example, the Draft EIR/EIS states the pipeline length is 120 feet on page 2-19, and 140 feet on page 2-26. 3
   b. Pipeline Removal Locations: CSLC staff requests that the Final EIR/EIS include a map showing the locations of the pipelines proposed to be removed, so that the reader may better understand possible environmental and potential cumulative impacts resulting from Project-related activities. 4

Biological Resources

3. Use of Impact or Vibratory Pile Driving: CSLC staff requests that the Final EIR/EIS explain when an impact pile driver or a vibratory pile driver would be used for the portion of the Project on the beach. This explanation would help a reader understand 5

why one type of pile driver would be preferred over the other, if both generate the same noise levels as shown in Table 3.11-3 on page 3.11-13. 5

Cultural Resources

4. Cultural Resources Studies: Please be advised that studies proposed on lands under the CSLC's jurisdiction require a permit from the CSLC, and that no resources or artifacts may be removed from their existing location(s) on sovereign land without CSLC approval. 6

5. Mitigation Measure 3.5-3: CSLC staff requests that Mitigation Measure 3.5-3 on page 3.5-36 state that any submerged archaeological site or submerged historic resource that has remained in State waters for more than 50 years is presumed to be significant. 7

Hydrology and Water Quality

6. Spill Prevention and Cleanup Plan: CSLC staff requests that the Spill Prevention and Cleanup Plan referenced on page 3.6-18, be included as a mitigation measure in the Final EIR/EIS, because of work on the beach and equipment being brought to the site from Avalon Canyon Access Road, as seen in Figures 2-1 (page 2-3), 2-4 (page 2-21), 3.2-7 (page 3.2-8), and 3.4-1 (page 3.4-3). The Plan should provide specific, feasible, and enforceable measures to minimize potential for spills and accidents from equipment on the beach, and to explain clean up measures. 8

7. Mitigation Measure Requirements: CSLC staff requests that any existing Spill Prevention and Cleanup Plan or proposed mitigation measures be presented as specific, feasible, enforceable obligations, or be presented as formulas containing performance standards which would mitigate the significant effect of the Project (State CEQA Guidelines, §15126.4). In the event the formulation of specific mitigation measures must be deferred, the EIR should do the following: 9

   - Explain why deferral is necessary
   - Describe potential mitigation strategies or options that could be formulated
   - Describe mitigation performance standards as described above.

Climate Change

8. Sea-Level Rise: A tremendous amount of State-owned lands and resources under the CSLC's jurisdiction will be impacted by rising sea levels. With this in mind, the City should consider discussing in the Final EIR/EIS, whether and how various Project components might be affected by sea-level rise, and whether "resilient" designs have been incorporated. The Project is located in a low-lying, flood-prone area that will be affected by rising sea levels. Additionally, because of their nature and location, the lands and resources in the area of the Project are already vulnerable to a range of natural events, such as storms. As individual projects are designed and evaluated, attention should be given to sea-level rise projections to ensure the structures' designs are sufficient to ensure function, safety, and 10

protection of the environment over the expected life of the structure. Note that the State of California released the final "Safeguarding California: Reducing Climate Risk, an Update to the 2009 California Climate Adaptation Strategy" (Safeguarding Plan) on July 31, 2014, to provide policy guidance for State decision-makers as part of continuing efforts to prepare for climate risks. The Safeguarding Plan sets forth "actions needed" to safeguard ocean and coastal ecosystems and resources as part of its policy recommendations for State decision-makers.

In addition, Governor Brown issued Executive Order B-30-15 in April 2015, which directs State government to fully implement the Safeguarding Plan and factor in climate change preparedness in planning and decision making. Please note that when considering lease applications, CSLC staff will need to do the following: 10

- Request information from applicants concerning the potential effects of sea-level rise on their proposed projects;
- If applicable, require applicants to indicate how they plan to address sea-level rise and what adaptation strategies are planned during the projected life of their projects; and
- Where appropriate, recommend project modifications that would eliminate or reduce potentially adverse impacts from sea-level rise, including adverse impacts on public access.

Recreation

9. Public Access on the Beach: CSLC staff requests that appropriate mitigation measures (stated on page 1-9, but not proposed) be included in the Final EIR/EIS to avoid possible recreational impacts to the public using the beach (Figure 3.2-8 on page 3.2-14). Mitigation measures should include, but not be limited to the following measures:
   - Place notices at and around the Project site on the beach prior to construction, informing the public of when the Project site would have restricted public access; 11
   - Place maps at and around the Project site identifying alternate access points;
   - Place notices on the City and Fort Funston's websites informing the public of when these sites may have restricted public access due to Project construction; and
   - Incorporate measures on the beach to protect the public during construction activities on the beach.

10. Public Hazard on the Beach: CSLC staff requests that the Final EIR/EIS discuss how the exposed outfall pipeline on the beach (Figure 3.2-8 on page 3.2-14) would be addressed to reduce possible hazards when the pipeline is exposed during the winter months. 12

11. Abandoning Pipeline In Place: CSLC staff requests that additional analysis be included in the Final EIR/EIS explaining the location of the force main pipeline, its current conditions, how it would be abandoned in place, and why it would be abandoned in place and not removed. 13

Thank you for the opportunity to comment on the Draft EIR/EIS for the Project. As a responsible and trustee agency, the CSLC will need to rely on the Final EIR/EIS for the issuance of any amended lease as specified above, and therefore, we request that you consider our comments prior to certification of the Final EIR/EIS.

Please send copies of future Project-related documents, including electronic copies of the Final EIR/EIS, Mitigation and Monitoring Program, Notice of Determination, CEQA Findings, and if applicable, Statement of Overriding Considerations when they become available, and refer questions concerning environmental review to Afifa Awan, Environmental Scientist, at (916) 574-1891 or via e-mail at Afifa.Awan@slc.ca.gov. For questions concerning archaeological or historic resources under CSLC jurisdiction, please contact Assistant Chief Counsel Pam Griggs at (916) 574-1854 or via e-mail at Pamela.Griggs@slc.ca.gov. For questions concerning CSLC leasing jurisdiction, please contact Al Franzoia, Public Land Management Specialist, at (916) 574-0992 or via e-mail at Al.Franzoia@slc.ca.gov.

Sincerely,

Cy R. Oggins, Chief
Division of Environmental Planning
and Management

cc: Office of Planning and Research
A. Awan, CSLC
L. Calvo, CSLC
A. Franzoia, CSLC

3.3 Response to Comments from California State Lands Commission

CSLC-1 This comment notes that the existing California State Lands Commission (CSLC) lease, PRC 1364.9 would need to be amended for proposed work on the existing ocean outlet structure and 33-inch outfall pipeline. Draft EIR/EIS Section 2.11, Regulatory Requirements, Permits, and Approvals discusses the construction and other permits for proposed components or improvements and acknowledges that the CSLC has management responsibility of sovereign lands associated with the proposed project and that a lease amendment may be required. To support the regulatory permitting process, the City of Daly City has initiated discussions with the CSLC (see Section 5.1.3, discussing consultation and coordination with the CSLC), and will continue coordination with CSLC regarding potential information needs such as a mean high tide line (MHTL) survey that would determine the exact CSLC jurisdictional boundary and extent of existing, and proposed land on State sovereign land. It is also noted that the CSLC holds a least to NPS that covers land that may be within the project area; thus, the City of Daly City coordination with the CSLC will include participation by the NPS.

CSLC-2 This comment requests that the EIR/EIS correct the acronym “CSLC”. In response to this comment, the following text revision has been made:

5.1.3 CSLC

Daly City staff met with California State Lands Commission (C~~L~~SLC) staff once during preparation of the EIR/EIS. The meeting was conducted via teleconference on October 29, 2014. The purpose of the meeting was to provide C~~L~~SLC staff with an overview of the Project, review the agency’s jurisdiction, identify resource issues that should be considered in the EIR/EIS, and to discuss permitting requirements. The Project schedule was also discussed at the meeting. Of primary interest to C~~L~~SLC staff was determining the landward extent of C~~L~~SLC jurisdiction (given the inland migration of shoreline with bluff erosion) and ensuring that resources within that jurisdiction are protected.

CSLC-3 This comment requests that the Final EIR/EIS consistently identify the correct length of the 33-inch concrete pipeline proposed to be removed. As discussed on pages 2-10 and 2-19, approximately 120 feet of the existing 33-inch submarine outfall pipeline that crosses the beach at Fort Funston, would be replaced at the same elevation as the existing pipeline. However, the exact length of the portion to be replaced will be determined during detailed design that will inform all permit applications.

In response to Comment CSLC-3, EIR/EIS page 2-26, paragraph 6 has been revised:

- **Ocean Outlet structure:** 300 cy of exposed brick and shotcrete lined tunnel and concrete structure to be demolished and disposed of. Approximately ~~140~~ 120 feet of 33-inch concrete pipe from the replacement of the submarine outfall pipeline to be disposed of.

CSLC-4 This comment requests that the Final EIR/EIS include a map showing the locations of the pipelines proposed to be removed. The Project Description is based upon preliminary design drawings and higher level engineering design drawings are being developed that will be available for review as part of the regulatory permit application process, as noted in Draft EIR/EIS Section 2.11, Regulatory Requirements, Permits, and Approvals and discussed above in response to Comment CSLC-1. The locations of the pipelines to be removed, such as the section of the 33-inch wastewater effluent gravity pipeline adjacent to the Canal, the portion of the 33-inch outfall pipe that would be replaced at the beach, and a section of the 27-inch force main at the beach, are all in the immediate vicinity of structures identified in **Figures 2-2a**, **2-2b**, and **2-3b** and within the environmental setting described and analyzed in EIR/EIS Chapter 3, Environmental Analysis.

CSLC-5 This comment requests that the Final EIR/EIS explain when an impact pile driver or a vibratory pile driver would be used for the portion of the Project on the beach. **Table 2-3** in the Project Description, found on page 2-23 of the EIR/EIS, notes that a pile driver would be used for construction related to the Shaft/Ocean Outlet and Tunnel Portal/Canal and Wetlands for a duration of 18 weeks. The type of equipment (pile driver or vibratory pile driver) would be selected by the assigned construction contractor, with the selection likely being made based on which equipment is owned by or available to the contractor. However, it is more likely that a vibratory pile driver would be used on the beach, due to its smaller size compared to an impact driver. As noted, both have the same noise level as shown in **Table 3.11-3** on page 3.11-13.

CSLC-6 This comment notes that studies proposed on CSLC lands require a permit from the CSLC and that no resources or artifacts may be removed from their existing location(s) on such lands without approval. See discussion in comment CSLC-1 for response regarding permits pertaining to the CSLC. As stated in **Mitigation Measure 3.5-3** consultation with the CSLC is required if an archaeological resource or shipwreck is discovered on lands under CSLC jurisdiction.

CSLC-7 This comment requests that **Mitigation Measure 3.5-3** state that any submerged archaeological site or submerged historic resource that has remained in State waters for more than 50 years is presumed to be significant, is noted. As stated in **Mitigation Measure 3.5-3** in the case of an inadvertent discovery of a submerged archaeological site, shipwreck, or related artifacts, the applicable jurisdictional

agency shall also contact and initiate consultation with the CSLC staff within two business days of such discovery. The CSLC will then have the opportunity to make a determination on the historical significance of the find, including a determination based on the length of time a potential cultural resource has been submerged.

CSLC-8 This comment requests that the Spill Prevention and Cleanup Plan referenced on page 3.6-18 of the EIR/EIS include work on the beach and equipment being brought to the site from Avalon Canyon, and include specific, feasible, and enforceable measures to minimize potential for spoils and accidents. The commenter references the description of the mandatory NPDES Construction General Permit regulatory requirements found on EIR/EIS page 3.6-18, However, impacts associated with potential for spills and accidents within the project area to result in soil, water quality, or hazardous materials releases are discussed in the impact analysis sections of Sections 3.6.5 (Geology and Soils); 3.8.5 (Hazards and Hazardous Materials); and 3.9.5 (Hydrology and Water Quality). Impacts from potential spills associated with construction activities in the coastal and beach areas of the Project are comprehensively assessed in Section 3.9.5.1 under Impact HYD-1 (p. 3.9-61 *et seq*.). The analysis presented under Impact HYD-1 includes consideration of the spill prevention and cleanup plan referenced in Section 3.6, Geology and Soils (p. 3.6-18). As noted under Impact HYD-1, while the use of fuels and other chemicals during construction could be spilled, the Project would be required to adhere to the requirements of the Construction General Permit (CGP), including in beach and coastal areas. As described in HYD-1, assessment of application of the CGP to the Project determined that compliance with the CGP, which includes preparation and implementation of a Stormwater Pollution Prevention Plan with associated BMPs (including developing and implementing a spill prevention and cleanup plan, specific methods and materials for controlling sediments, and other erosion control measures) as well as inspection and reporting, would effectively reduce and minimize spill related impacts during construction. The required (non-discretionary) adherence to these requirements, which include specific, feasible, and enforceable requirements under existing regulations, would effectively reduce potential impacts associated with spills or leaks of hazardous materials during construction and impacts at the beach and all construction areas were concluded to be less than significant. Because the actions required are specific, feasible, and enforceable, the suggested additional measures (description of potential strategies and options that could be formulated, and description of performance standards), is not necessary.

CSLC-9 This comment requests that the Final EIR/EIS discusses the impacts that sea-level rise may have on various Project components and whether “resilient” designs have been incorporated, as CSLC lease decisions must consider climate change preparedness in planning and decision making. As discussed in Section 2.6.1, Management of Stormwater Flow, the proposed project responds to climate change by improving stormwater drainage in the lower Vista Grande Basin to

accommodate peak flows generated by the 25-year/4-hour design storm. Storms such as this could be more frequent with climate change. In addition, the hydraulics analysis supporting the 30% project design included climate change projections in the determination of design criteria, including capacity, placement/location, and materials; and the Lake Merced Lake-Level Model, which evaluated the effects of flow diversion from the Vista Grande Project to Lake Merced, also included consideration of expected climate change impacts**.**

As noted in the comment, the Project is located in a coastal area that will be affected by sea-level rise. Baseline conditions and future baseline conditions related to sea-level rise, including flooding and flood risks, beach profile fluctuations, rates of bluff erosion, and consideration of storms and wave run-up events are described in detail in Section 3.9.1.2 of the Draft EIR/EIS under "Coastal Processes and Bluff Erosion Affecting the Vista Grande System" (p. 3.9-15, *et seq*.) and under "Flooding" (p. 3.9-20, *et seq*.). Additionally, regulations related to coastal development, sea-level rise, facility resilience, and adaptation applicable to the Project are described in Section 3.9.2.1 under "California Coastal Act of 1976" (p. 3.9-54, *et seq*.). The potential impacts of the Project related to sea-level rise and coastal flooding are comprehensively assessed, with consideration of applicable regulatory requirements and long-term policy guidance related to sea-level rise and coastal development, under Impact HYD-9 (p. 3.9-109 *et seq*.). The analysis provided under Impact HYD-9 assesses impacts associated with sea-level rise including consideration of defensible sea-level rise projections, proposed Project design in regards to coastal access, public safety, protection of the environment (including bluff erosion rates, beach profile alterations, and landslide hazard). The analysis determined that the Project could have substantial adverse effects on shoreline processes (such as sand supply and bluff erosion) and also could conflict with California Coastal Act requirements. As such, **Mitigation Measure 3.9-2, (Avoidance and Minimization of Conflicts with California Coastal Act and NPS Management Policies)**, requires the final Project engineering design to minimize conflicts with the applicable Coastal Act requirements and be designed to eliminate or mitigate adverse effects on local shoreline processes as well as assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs. **Measure 3.9-2** also requires Daly City to complete a Project-specific coastal engineering study for the final Project design, consistent with the California Coastal Commission's 2015 Sea-Level Rise Policy Guidance and implement study recommendations related to design and sea-level rise requirements. However, while implementation of such measures would reduce potential adverse effects of the Project on coastal resources, the analysis presented in the Draft EIR/EIS concluded that impacts could remain significant and unavoidable. The requirements and recommendations provided regarding CSLC considerations related to assessing lease

agreements are noted and such information would be provided as part of the coastal engineering study required by **Mitigation Measure 3.9-2** (p. 3.9-114, *et seq*.).

CSLC-10 This comment requests that mitigation measures stated to avoid possible recreation impacts on the beach be included in the Final EIR/EIS as proposed mitigation measures.

In response to Comment CSLC-11, EIR/EIS page 3.15-9, paragraph 3 (continuing on page 3.15-10) has been revised:

> **M-3.15-1: Construction Traffic Management Plan**. Daly City and/or its contractor(s) shall prepare and implement a Construction Traffic Management Plan in accordance with professional traffic engineering standards to show methods for maintaining traffic flows on roadways and access to recreational resources directly affected by Project construction, which shall include, at a minimum, the following requirements:
>
> a) Develop circulation plans to minimize impacts on local street circulation; use flaggers and/or signage to guide vehicles through and/or around the construction zone (including, as needed, for trucks turning into and out of Fort Funston at the intersection of SR 35 and Fort Funston Road). Circulation plans may be modified during construction, based on observed conditions.
>
> b) Identify truck routes and, to the extent possible, use haul routes that minimize truck traffic on local roadways and residential streets.
>
> c) Schedule truck trips to minimize trips during the peak morning and evening commute hours, and the peak hours of arrivals and departure from Fort Funston, to the extent possible.
>
> d) Provide sufficient staging areas for trucks accessing construction zones to minimize disruption of access to adjacent land uses, particularly within residential neighborhoods.
>
> e) Maintain pedestrian and bicycle access and circulation during Project construction where safe to do so. If construction activities encroach on a bicycle lane, post warning signs that indicate bicycles and vehicles are sharing the lane.
>
> f) Maintain public safety and access on the beach by posting notices and maps at and around the project site and on the Golden Gate National Recreation Area's website prior to and during construction, informing the public about when and where public access could be restricted and about alternative access points, if applicable; and incorporate measures on the beach to protect the public during construction activities.
>
> ~~f~~g) Store all equipment and materials in designated contractor staging areas on or adjacent to the worksite, in such a manner to minimize obstruction of traffic.

~~g~~h) Implement roadside safety protocols and provide advance "Road Work Ahead" warning signs and speed control (including signs informing drivers of state-legislated double fines for speed infractions in a construction zone) to achieve required speed reductions for safe traffic flow through the work zone.

~~h~~i) Coordinate construction with facility owners or administrators of sensitive land uses such as police and fire stations (including all fire protection agencies), transit stations, hospitals, and schools, as well as Fort Funston. Notify facility owners or operators in advance of the timing, location, and duration of construction activities.

~~i~~j) Provide residents adjacent to Project construction areas (e.g., on Avalon Drive and Westmoor Avenue) with information regarding Project construction in their area, including anticipated start and end of construction activities.

~~j~~k) Coordinate construction with local traffic agencies, SFMTA, NPS, and SamTrans, to minimize disruption and arrange for the temporary relocation of bus stops in work zones as necessary.

CSLC-11 This comment requests that the Final EIR/EIS discuss how the exposed outfall on the beach would be addressed to reduce possible hazards when the pipeline is exposed in the winter.

As discussed in EIR/EIS Section 1.3.1, CEQA Project Objectives, Daly City has identified the following objectives for the proposed Project:

- Improve stormwater drainage of the lower Vista Grande Basin to accommodate peak flows generated by the 25-year/4-hour design storm;
- Provide a sustainable source of stormwater, establish a target maximum water surface elevation, and implement a Lake Management Plan (see Appendix A) for management of Lake Merced water quality, groundwater, and surface water elevation;
- Improve recreational access and reduce litter transfer and deposition along the beach below Fort Funston; and
- Maximize use of existing rights-of-way, easements, and infrastructure to minimize construction-related costs, habitat disturbance, and disruption to recreational users.

While removal and replacement or other methods of reducing exposure of the submarine outfall pipeline would improve recreational access along the beach below Fort Funston, it would not meet the other project objectives, and is not related to the primary objectives of the project (stormwater management and Lake Merced management). Thus, replacement or other methods of reducing exposure of the submarine outfall pipeline are not part of the proposed project. As described in the EIR/EIS at page 3.2-18, the outfall pipeline would continue to be exposed during some times of the year, as currently occurs.

Should replacement or other changes to the submarine outfall pipeline be required in the future, such as due to pipeline failure risk, such an undertaking would be subject to CEQA, NEPA, and regulatory permitting processes. It is noted that replacement of the outfall pipeline at a lower elevation that would avoid beach exposure would require that the entire pipeline, which extends 2,500 feet from the shore would need to be replaced in order a change in elevation at the beach to be accommodated, which would likely be associated with substantial impacts on marine ecology and other natural resources.

CSLC-12 This comment requests that the Final EIR/EIS include additional analysis explaining the location, current conditions, and abandonment procedures of the force main pipeline. The force main pipeline begins at the Daly City Wastewater Treatment Plant at 153 Lake Merced Boulevard in Daly City and crosses under the Olympic Club and Fort Funston until it emerges on the cliff face. Abandonment in place of the pipeline will consist of filling the pipeline with a flowable, stable material, such as cellular concrete. Injection points would be via existing pipeline access points such as manholes and or air/vacuum valves, and would be selected based on accessibility, as well as grade and distance between points. In general, points will be selected approximately 200 to 700 feet apart. Injection would be from the high point of the backfilled reach, and material would flow to the low point. It is likely that cellular concrete would be delivered via a ready mix concrete truck. The truck would deliver a partial load of neat cement grout, and a trailer mounted foam generator plant would inject the desired amount of foam into the concrete truck to create cellular concrete. The mixture would then be pumped or tailgated directly into the forcemain injection point. Abandonment in place of the force main pipeline would have far fewer impacts than removal of the pipeline. Removal of the pipeline would require ground disturbance of approximately 4,500 feet within the Olympic Club and approximately 1,900 feet within Fort Funston, much of it being south of the entrance road. Disturbance of Olympic Club activities and property is discouraged by the Olympic Club. In addition, portions of Fort Funston south of the entrance road include substantial areas of sensitive habitat and NPS has requested that the project avoid this area to the highest extent possible. Therefore, filling the force main and abandoning in place is preferred. As noted in Section 2.4.2, Vista Grande Tunnel and East and West Portals, on pages 2-10 and 2-12, the exposed portion of the 27-inch force main that currently protrudes from the cliff face would be removed back to the cliff face.

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DEPARTMENT OF TRANSPORTATION
DISTRICT 4
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Mr. Patrick Sweetland
Department of Water and Wastewater Resources
City of Daly City
153 Lake Merced Boulevard
Daly City, CA 94015

Dear Mr. Sweetland:

Vista Grande Drainage Basin Improvement Project – Draft Environmental Impact Report and Draft Environmental Impact Statement

Thank you for continuing to include the California Department of Transportation (Caltrans) in the environmental review process for the above-referenced project. Our comments are based on the Draft Environmental Impact Report (DEIR) and Draft Environmental Impact Statement (DEIS). Please also refer to the previous comment letter, dated March 5, 2013, on this project and incorporated herein.

Project Understanding
The proposed project is located at State Route (SR) 35 in Fort Funston, crossing under the State right-of-way (ROW) to the east and west near John Muir Drive. It would improve the Vista Grande Drainage Basin by partially replacing the existing Vista Grande Canal.

Lead Agency
As the lead agency, the City of Daly City (City) is responsible for all project mitigation, including any needed improvements to State highways. The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures. 1

Traffic Impact Fees
Given the project's contribution to area traffic and its proximity to SR 35, the project should contribute fair share traffic impact fees. These contributions would be used to lessen future traffic congestion and improve transit in the project vicinity. 2

Transportation Management Plan

Since it has been determined that traffic restrictions and detours will affect SR 35, the Construction Traffic Management Plan (CTMP) will require approval by Caltrans prior to construction. It must be prepared in accordance with Caltrans' *TMP Guidelines*, including a location map that shows the location of the project ingress and egress off of SR 35. Further information is available for download at the following web address: www.dot.ca.gov/hq/traffops/trafmgmt/tmp_lcs/index.htm. 3

Please ensure that such plans are also prepared in accordance with the TMP requirements of the corresponding jurisdictions. For further TMP assistance, please contact the Caltrans District 4 Office of Traffic Management Operations at (510) 286-4579. 4

Encroachment Permit

Please be advised that any work or traffic control that encroaches onto the State ROW requires an encroachment permit that is issued by Caltrans. To apply, a completed encroachment permit application, environmental documentation, and five (5) sets of plans clearly indicating State ROW must be submitted to: David Salladay, District Office Chief, Office of Permits, California Department of Transportation, District 4, P.O. Box 23660, Oakland, CA 94623-0660. Traffic-related mitigation measures should be incorporated into the construction plans prior to the encroachment permit process. See this website for more information: www.dot.ca.gov/hq/traffops/developserv/permits.

Should you have any questions regarding this letter, please contact Brian Ashurst at (510) 286-5505 or brian.ashurst@dot.ca.gov.

Sincerely,

for PATRICIA MAURICE
District Branch Chief
Local Development - Intergovernmental Review

c: Scott Morgan, State Clearinghouse

3.4 Response to Comments from California State Transportation Agency, Department of Transportation

Caltrans-1 The comment describes the City's responsibilities as lead agency for the project. As discussed in Section 3.15, Traffic and Transportation, in **Mitigation Measures 3.15-1** and **3.15-2**, Daly City will prepare and implement a Construction Traffic Management Plan in accordance with professional traffic engineering standards and will enter into an agreement prior to construction that details a post-construction roadway rehabilitation program. Both mitigation measures indicate the responsibility of the lead agency. In addition, as lead agency, Daly City is responsible for carrying out identified mitigation measures via the Mitigation Monitoring and Reporting Program.

Caltrans-2 The comment requests that the project be conditioned to contribute fair share traffic impact fees. Traffic impact fees apply to land use development that generate on-going traffic increases that would adversely affect traffic conditions, and are used to lessen traffic congestion and to improve transit service. As stated on page 3.15-10 of the Draft EIR/EIS, project operation would only require periodic maintenance-related trips, and is expected to be similar to current operation and maintenance activities, and that on balance, any increases in traffic generated by project operation and maintenance would be minimal compared to existing conditions and would not result in a noticeable increase in traffic on area roads. Therefore, traffic impact fees are not applicable to this project.

Caltrans-3 The comment states that the project's Construction Traffic Management Plan (**Mitigation Measure 3.15-1**, page 3.15-9 of the Draft EIR/EIS) will require approval by Caltrans because of the project's traffic restrictions and detours that will affect State Route 35. Contrary to the commenter's assertion, as stated on pages 3.15-8 and 3.15-9 of the Draft EIR/EIS, the proposed project would not require any lane or road closures (i.e., no traffic restrictions or detours) on any area roads, including SR 35. Therefore, approval of the project's Construction Traffic Management Plan would not be required.

Caltrans-4 The comment notes that an encroachment permit would be required from Caltrans for any work that would encroach onto the State right-of-way. That requirement is acknowledeged, and is understood to apply to activities that would encroach within, under, or over the State rights-of-way. As stated on page 3.15-3 of the Draft EIR/EIS, project construction and maintenance activities would not occur on state highways or highway rights-of-way (state roadways would be used solely as access routes for construction workers and construction vehicles). However, the tunnel portion of the project would be excavated under State Route 35, and the City of Daly City and its contractors would obtain the necessary encroachment permit for that

work. It is noted that no surface effects, including ground vibration, would occur within the State Route 35 right-of-way.

In response to Comment Caltrans-4, page 3.15-3, paragraph 7 (continuing on page 3.15-4) has been revised:

> Caltrans' construction practices require temporary traffic control planning "during any time the normal function of a roadway is suspended" (Caltrans, 2012). Furthermore, Caltrans requires that permits be obtained for transportation of oversized loads and transportation of certain materials, and for construction-related traffic disturbance. Project construction and maintenance activities would not occur on state highways or highway rights-of-way; state roadways would be used solely as access routes for construction workers and construction vehicles. <u>However, the tunnel portion of the project would be excavated under SR 35.</u> Therefore, Caltrans encroachment permits would ~~not~~ be required. Further, oversized vehicles (by weight, height, length, or width) or vehicles carrying hazardous materials that require Caltrans permits would not be used. Caltrans' facilities that are likely to be used as access routes by construction workers and construction vehicles to the planned work sites include: SR 1, SR 35, and I-280 (described above).

San Francisco
Water Power Sewer
Operator of the Hetch Hetchy Regional Water System

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San Francisco, CA 94102
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F 415.554.3161
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July 6, 2016

City of Daly City Department of Water and Wastewater Resources
Attention: Patrick Sweetland, Director
153 Lake Merced Boulevard
Daly City, CA 94015

RE: Comments on Vista Grande Drainage Basin Improvement Project Draft Environmental Impact Report/Environmental Impact Statement.

Dear Mr. Sweetland:

The San Francisco Public Utilities Commission ("SFPUC") received the Draft Environmental Impact Report/Environmental Impact Statement for the Vista Grande Drainage Basin Improvement Project ("Project").

The proposed Project would improve stormwater drainage and minimize flooding risk, provide a water source for Lake Merced management, improve recreational access and reduce litter deposition at the beach below Fort Funston, and maximize the use of existing infrastructure and rights-of-way.

As a responsible agency under the California Environmental Quality Act, the SFPUC offers the general comments attached in Table 1 for informational purposes. We support Daly City's approach for implementing improvements to the drainage basin. 1

Following review of the Draft EIR/EIS the SFPUC has no comments on the adequacy of analysis conducted for the EIR/EIS.

If you have any questions, please contact Obi Nzewi at (415) 554-1876 or onzewi@sfwater.org.

Sincerely,

Steven R. Ritchie
Assistant General Manager, Water

Attachment: Table -1 General Comment Log

Edwin M. Lee
Mayor

Francesca Vietor
President

Anson Moran
Vice President

Ann Moller Caen
Commissioner

Vince Courtney
Commissioner

Ike Kwon
Commissioner

Harlan L. Kelly, Jr.
General Manager

Review of CEQA Documents for Non-SFPUC Projects
San Francisco Public Utilities Commission

Document Name: Vista Grande Drainage Improvements Draft EIR/EIS

SFPUC BEM Coordinator: **Sally Morgan**
Date: **May 6, 2016**

Comment Number	Commenter Name & SFPUC Division	Document Section Title or Section Number	Page Number	Figure Number	Review Comment
1	Jessica Arm- City Distribution Division	2.5	2-15	T 2-1	The 16-inch ductile-iron water main in John Muir Drive must be supported during excavation and construction of the John Muir Drive Crossing and Lake Merced Overflow Structure per SFPUC- CDD Protection of Existing Water and AWSS Facilities specifications (see attached for reference).
2	Jessica Arm- City Distribution Division	2.5.1.4	2-17; 2-60	T 2-8	Emergency access to the low-pressure fire hydrants on John Muir Drive must be maintained during all construction activities. If traffic is rerouted to the west of John Muir Drive in the vegetated area, fire trucks will need access to the existing hydrants.
3	Jessica Arm- City Distribution Division	2.5.1.4	2-17; 2-60	T 2-8	Emergency access to the existing 16-inch gate valve, two (2) 4-inch bypass valves, and the 4-inch blow-off vavle at the southern end of John Muir Drive must be maintained for SFPUC-CDD maintenance and operations during the project's construction.
4	Jessica Arm- City Distribution Division	2.5.4	2-25	na	Construction staging shall not be located above the 16-inch ductile-iron water main in John Muir Drive.
5	Jessica Arm- City Distribution Division	2.4.1.1	2-8	na	The collection box must maintain five (5) feet of clearance with the existing 16-inch gate valve, two (2) 4-inch bypass valves, and the 4-inch blow-off vavle at the southern end of John Muir Drive.
6	Jessica Arm- City Distribution Division	2.5.8	2-27	na	Accumulation of water around water valves poses a contamination threat to the potable water distribution system. During construction, the accumulation of water around the existing water valves on John Muir Drive shall be prevented. Additionally, the completed project shall not create an environment where stormwater accumulates above water valves.
7	Jessica Arm- City Distribution Division	2.4.1.3; 2.7	2-9; 2-40	na	Proposed wetlands that are adjacent to John Muir Drive shall be constructed in a way that prevents seepage and infiltration onto the 16-inch ductile-iron water main. Regular infiltration above water mains increases the risk of corrosion and liquefaction of soil.
8	Jessica Arm- City Distribution Division	2.4.1.3; 2.7	2-9; 2-40	na	Potholing will be required to confirm the location and material of the 16-inch water main and the joints of the water main in John Muir Drive. If it is determined that the water main is cast-iron or if the joints are lead-based, the Project Sponsor may be required, at minimum, to implement safety methods in order to support and work around the water main. If required, it may be necessary for the Project Sponsor to replace the existing water main with ductile iron and/or the existing lead-based joints with restrained joints to prevent pipe movement in saturated soils caused by the project's proximity to wetlands and increased groundwater levels.
9	Jessica Arm- City Distribution Division	2.7.2.2	2-38 to 2-40	T 2-7	The 16-inch ductile-iron water main in John Muir Drive must be supported during excavation and construction of the Rehabilitated Lake Merced Overflow, Wetland Outlet Pipe, and Discharge into Lake Merced per SFPUC- CDD Protection of Existing Water and AWSS Facilities specifications (see attached for reference).
10	Jessica Arm- City Distribution Division	2.9	2-59	T 2-8	Should there be any water-related work that results from this project, SFPUC-CDD may request that the Project Sponsor provide health and safety support services to SFPUC-CDD crews, such as contaminant testing, soil handling/disposal, and relevant PPE provisions.
11	Jessica Arm- City Distribution Division	2.9	2-62	T 2-8	To protect the water facilities against construction-caused groundborne vibrations, the Project Sponsor will be required to follow SFPUC- CDD Protection of Existing Water and AWSS Facilities specifications (see attached for reference).
12	Fan Lau, Water Resources Division	3.3 Air Quality	page 2-25,paragraph 4	N/A	Water used for dust control in San Francisco must be non-potable per Article 21 of the San Francisco Public Works Code. Article 21 is already cited in Section 3.3 Air Quality, page 3.3-14 in the context of air quality. However, it is not clear if this requirement is acknowledged in the description of water consumption.

3.5 Response to Comments from San Francisco Public Utilities Commission

SFPUC-1 The SFPUC indicates that upon review of the Draft EIR/EIS, they have no comments on the adequacy of analysis conducted for the EIR/EIS. SFPUC provided general comments for informational purposes that will further guide construction specifications to be included in the 100 percent design. The general comments do not introduce new environmental issues not considered in the EIR/EIS, nor would they require project description changes or additions, but further expand upon design considerations included in the current Project Description.

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July 1, 2016

Patrick Sweetland, Director
Department of Water and Wastewater Resources
City of Daly City
153 Lake Merced Blvd.
Daly City, CA 94015
pweetland@dalycity.org

Re: Vista Grande Drainage Basin Improvement Project

Dear Mr. Sweetland:

California Trout hereby comments on the Draft Environmental Impact Report/Statement (EIR/S) for this project.

CalTrout supports the project purposes (p. 2-1), which are to address storm-related flooding caused by the Vista Grande Canal and Tunnel, and to raise the level of Lake Merced. We agree (p. 2-72) that the record to date shows that the proposed project is feasible and will not have any significant impacts on environmental quality. We are grateful for the clarity, thoroughness, and quality of the document.

Our only comment is that the document does not fully describe the project component related to operation (p. 2-5). It acknowledges (p. 2-30) that operation, and specifically, the quantity of diverted stormwater, will be driven by choice of Water Surface Elevation (WSE) as management objective for Lake Merced. After explaining that WSE scenarios range from 7.5 to 9.5 feet elevation (City datum), the document reports (App. A, pp. 3-4) that San Francisco Public Utilities Commission (SFPUC) will determine which WSE is the management objective, after completion of the EIR/S. We believe that this EIR/S can and should support the SFPUC's determination for purposes of the California Environmental Quality Act and National Environmental Policy Act. We therefore request that Daly City, in consultation with the SFPUC, address the following questions in the final document. 1

1. What process will the SFPUC use for that determination? When does it expect to make that determination? We believe that the determination should be made as soon as possible after the publication of the final EIR/S, and well before the completion of construction.

2. What are the comparative impacts of WSE scenarios on recreation? While the EIR/S does a very thorough job of comparing the incremental impacts of scenarios on natural resources (see pp. 3.4-83 *et seq*.), we have not located any such analysis for recreation. The discussion in Chapter 3.13 related to operation appears to be limited to the outlet on Ocean Beach. See p. 3.13-17. 2

Thank you for this excellent document, which represents significant progress towards an approvable project. We enthusiastically support the project.

Sincerely,

Curtis Knight
Executive Director,
California Trout

Richard Roos-Collins
Water and Power Law Group PC

Attorney, California Trout

Cc: Steve Ritchie, San Francisco Public Utilities Commission

3.6 Response to Comments from California Trout

TROUT-1 This comment requests that the San Francisco Public Utilities Commission (SFPUC) clarify the process it will use to determine the target water surface elevation (WSE) and when it expects to make the determination. The comment notes that the determination should be made immediately after publication of the Final EIR/EIS, and before the completion of construction. The City of Daly City has solicited SFPUC staff input on their separate approval process. Staff have indicated that SFPUC staff will make their recommendation about a target lake WSE range to the SFPUC Commission following evaluation of potential impacts detailed in this EIR/EIS document. Following Daly City's certification of the Vista Grande EIR/EIS document, the SFPUC Commission will review the potential impacts of various target lake WSE ranges, and will review the staff recommendation for a target Lake Merced WSE range. After considering the certified EIR/EIS and the staff recommendation, the SFPUC Commission would adopt a Lake Merced Management Plan that will specify a target Lake Merced WSE range and implement the plan to manage the level of Lake Merced to the target WSE.

TROUT-2 The commenter requests clarification about the impacts of different WSE scenarios on recreation. As acknowledged in Comment Trout-2, the Draft EIR/EIS considers the impacts of different WSE scenarios on biological resources (pages 3.4-74 to 3.4-101) since WSE increases may adversely affect biological resources differently based upon the rate of increase and total increase. However, there are no expected adverse environmental impacts on recreation resources from any of the WSE scenarios; thus, analysis of the incremental effects of different WSE scenarios on recreational resources is not necessary because it would not inform decision-makers about the effects of one WSE scenario compared to another. As discussed on page 3.13-4 of the Draft EIR/EIS, there is an acknowledgement of an overall improvement in recreational resources from any WSE increase since it would not only potentially improve water quality, but could result in a minor increase in available lake surface areas used for boating. As operational water levels increase, the increase in available lake surface areas also increases. Thus, while not an environmental impact, it is noted the higher the operational WSE target selected, the greater the improvement on recreational resources. In addition, there is no anticipation that increased lake surface could generate additional use that would cause or accelerate the physical deterioration of the lake or recreational areas associated with it.

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July 1, 2016

2945 Ulloa St.
San Francisco, CA 94116

City of Daly City, Department of Water and Wastewater Resources
Attention: Patrick Sweetland, Director
153 Lake Merced Blvd.
Daly City, CA 94015
E-mail: psweetland@dalycity.org

Submitted by e-mail only.

Re: Vista Grande Drainage Basin Improvement Project EIR/EIS

Mr. Sweetland:

The Golden Gate Audubon Society (GGAS) supports the preferred alternative for the Vista Grande Drainage Basin Improvement Project. Our interest in this project stems from almost 100 years of advocating for Lake Merced, providing free field trips there and commenting on various projects that impacted the lake. Since at least the 1980s we have observed floodwaters from the Vista Grande Canal wash across John Muir Dr. and damage the lake's edge as well as infrastructure that benefits the citizens of both Daly City and San Francisco. Over the years we have lost a fishing pier, culverts, paths, parts of John Muir Dr. and freshly restored uplands have been seriously damaged. Erosion to Lake Merced's upper banks between the perimeter path and edge of the marsh has been extreme.

The problem is pretty simple; the Vista Grande Canal can no longer handle the amount of runoff from Daly City. It is not that there is more water in the system itself, it is that Daly City has been urbanized and much less water can percolate into the aquifer than it did when the original canal system functioned at the level for which it was designed. Because storm water now lands on streets, paved yards and parking lots, it remains on the surface to the bottom of the drainage basin where the canal's capacity for peak flow is frequently overwhelmed.

The preferred alternative solves the problem of flooding for up to 25-year flood events. GGAS would prefer seeing a drainage system with a greater capacity, but this should suffice for the vast majority of storm flows. Modification of the three swales along John Muir Dr. that were constructed as temporary emergency structures to permanent overflow swales could reduce impacts of floods that exceed projected 25-year events. We suggest removing rip-rap between the perimeter path and the lake's edge. Insert in its place permanent swales with hard beds perhaps using concrete or minimal rip rap to break the impact of falling water, and use willow, red elderberry and marsh plants at the lake's edge as the primary erosion control measure. Observations of past restoration efforts indicate native plants do in fact hold the sandy banks of Lake Merced if they are given two to three years to establish themselves. It should be recalled that several years ago GGAS agreed with Cal Trout, Daly City and the San Francisco PUC that use of rip-rap lined swales were necessary emergency measures that could reduce infrastructure damage, but we insisted they should be temporary. We trust they will now be adapted to permanent structures that utilize mostly natural features to control flood flows into the lake during peak storm periods. 1

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We agree that water from the Vista Grande can be a positive addition to the waters of Lake Merced. Given the measures stated in the EIR/EIS to assure water quality, this additional water seems like a resource that could successfully stabilize the water level and water quality of the lake. Additionally it will reduce the outflow to the Pacific Ocean and add to the Westside Aquifer. 2

The constructed wetlands offer not only a means of purifying water for Lake Merced and for Ocean discharge, but they offer an opportunity to enhance habitat. In recent years Mallard, Wood Duck, Killdeer, Wilson's Snipe and a number of other species have used the Vista Grande Canal where the wetlands will be constructed. In conjunction with the stated uses for the wetlands, GGAS encourages the use of this area for waterfowl and upland species. We also encourage that the design for this area include either a trail by the wetlands or viewing platforms. This will enable our growing birding community to observe the waterfowl and upland species we expect will use the ponds. Plants used in the ponds and nearby should be consistent with vegetation in Lake Merced and in its environs. The addition of red elderberry and coffeeberry is desirable as they provide important food sources for birds. We encourage continued use of local oaks in the project area. 3

It is of great importance that timing of the project also be considered. Given the presence of significant wildlife populations in this area, including the presence of listed species such as Common Yellowthroat and Tricolored Blackbird, large numbers of blackbirds that use the nearby marshes as winter roosts, Green Heron, Marsh Wren, Song Sparrow and other marsh nesting species, we urge the timing of major project work start at times when it will be least disruptive to our natural resources. For example, parts of the project that require removal of marsh vegetation should not start between February 1 and July 31. Clearing marsh vegetation between August 1 and January 31 should enable the project to progress with minimal disruption to the nesting season. Removal of trees should follow the same schedule, but it should be accompanied by a survey of the trees to determine if they contain hummingbird, raptor or owl nests. We do not anticipate significant problems if measures like this are followed. 4

San Francisco's only known Cliff Swallow colony is located on the north facing side of the concrete bridge that is located just north of the project site. It may be necessary to remove silt from under the bridge to enhance flow between the South Lake and the Impound Lake. Though the colony failed in both 2015 and 2016, any such dredging should take place outside the nesting period for those swallows. If the birds return to the colony site it will be between mid March and the end of July. If they do not it will be obvious by mid May. A simple survey under the bridge will suffice to tell if any nests are present. Since this is not a stated area that should be impacted by the project, we include our concern only if the need for dredging under the bridge is necessary. 5

Thank you for the opportunity to comment on this project. We look forward to working with you in the future.

Very truly yours,

Daniel P. Murphy
San Francisco Conservation Committee

Golden Gate Audubon Society

3.7 Response to Comments from Golden Gate Audubon Society

GGAS-1 This comment suggests creating a drainage system with more capacity that required to accommodate up to 25-year flood events, such as via permanent overflow swales in place of the existing rip-rap between the lake's edge and the perimeter path. The commenter's preference for greater flood control capacity than proposed under the project is noted; however, the proposed objective is to "improve stormwater drainage of the lower Vista Grande Basin to accommodate peak flows generated by the 25-year/4-hour design storm" (see EIR/EIS page 1-4). Regarding the suggestion to replace the existing rip-rap between the lake edge and the perimeter path, it is noted that the structures are under the management of the San Francisco Public Utilities Commission (SFPUC). As discussed in **Table 3.1-1** on page 3.1-10, the John Muir Drive Erosion Control Project, proposed by the SFPUC, was implemented to repair three severely eroded areas adjacent to John Muir Drive along the South Lake Merced shoreline. Installation of the erosion control features referred to by the commenter as rip-rap and repair of eroded areas is complete; removal of erosion control structures (or potential revision of the structure, as suggested by the commenter) would be considered in the future by SFPUC, following completion of Vista Grande Drainage Basin Improvement Project. Any future revisions to these features would be undertaken by the SFPUC.

GGAS-2 This comment, which supports the addition of Vista Grande water to Lake Merced for water quality improvements and groundwater level increase, is acknowledged.

GGAS-3 This comment supports constructed wetlands for water treatment and habitat enhancement and requests that consideration of public access opportunities be included in the treatment wetlands design.

As noted on page 8 of the Lake Management Plan, included as Appendix A in the Draft EIR/EIS, the treatment wetlands would be planted with emergent plants such as cattails or bulrush, which would be consistent with the composition of native vegetation along the shoreline of Lake Merced, and would also provide water quality improvement by intercepting and settling out suspended particulates and providing attachment surfaces for beneficial bacteria. The composition of vegetation within the treatment wetlands is intentionally similar to the shoreline vegetation of Lake Merced, though on a much smaller scale, and would not provide unique habitat for local wildlife. The lake provides a more diverse array of supportive habitats and opportunities for the public to observe wildlife, including bird species noted in this comment, than would be practical at the proposed treatment wetlands.

Public access at or around the treatment wetlands is not included in the design for the proposed project for the following reasons. First, the area that is available for

the treatment wetlands is constrained by John Muir Drive and the Olympic Club, and any area available has been designed to maximize treatment capacity. Second, there is no safe public access point to the location of the treatment wetlands. The closest crosswalk connecting the north and south sides of John Muir Drive is located approximately 2,000 feet north of the bridge separating Impound Lake from South Lake, in the vicinity of the Lakewood Apartment complex and the sidewalk adjacent to the complex ends at the edge of that complex. There is no street parking or sidewalk adjacent to the treatment wetland areas, and no way to safely cross John Muir Drive to access the areas. The inclusion of public access points at the treatment wetlands would introduce safety hazards if people would attempt to cross two lanes of traffic on a road with a speed limit that varies between 30 and 40 mph, plus a bike lane. Daly City welcomes opportunities to explore recreation and education, such as the placement of educational materials at the Lake Merced side of the treatment wetlands and will explore opportunities with the SFPUC and San Francisco Recreation and Parks Department.

GGAS-4 This comment requests that the construction schedule be timed to be least disruptive to wildlife and natural resources. As discussed in Section 3.4.5.1, implementing **Mitigation Measure 3.4-3**, Nesting Bird Protection Measures, which restricts certain construction activities during breeding bird season (e.g., vegetation removal and pile driving), requires preconstruction surveys, and implementation of avoidance measures if active nests are located would reduce potential Project-related impacts on migratory and special-status birds. The restriction of certain construction activities within the breeding bird season is consistent with the suggestions made in Comment GGAS-4. Additionally, adverse effects associated with nighttime construction lighting on the beach at the Ocean Outlet and at the Fort Funston staging area, such as avian entrapment, collisions, or disturbance to nocturnal behavior, would be reduced by implementing **Mitigation Measure 3.4-9**, Night Lighting Minimization. Further, Project workers would be educated about sensitive species and common wildlife found within the Project study area, avoidance measures and procedures to ensure Project impacts on wildlife are minimized, and the regulatory requirements and penalties for noncompliance through implementation of **Mitigation Measure 3.4-2a**, Worker Environmental Awareness Program Training. The environmental training would provide specific protection measures and protocols for encountering wildlife that could occur within or around the Project sites, work and staging areas, and access roads to minimize Project-related disturbance.

GGAS-5 This comment requests that any silt removal required for the Project under the concrete bridge located just north of the Project site be scheduled to avoid the cliff swallow nesting period. The Project does not include any dredging of silt beneath the bridge separating South Lake and Impound Lake, where the cliff swallow colony has been historically located. Nevertheless, as discussed above, Project **Mitigation Measure 3.4-3**, Nesting Bird Protection Measures, would require

preconstruction surveys to identify active nests (including nesting colonies) in the Project vicinity and require implementation of avoidance measures if active nests (or nesting colonies) located within the Project's sphere of influence in order to reduce potential Project-related impacts on migratory and special-status birds.

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THE OLYMPIC CLUB

June 30, 2016

City of Daly City Department of Water and Wastewater Resources
Attention: Patrick Sweetland, Director
153 Lake Merced Boulevard
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Email: psweetland@dalycity.org

General Superintendent
Golden Gate National Recreation Area
Attention: Vista Grande Project
Fort Mason, Building 201
San Francisco, CA 94123
Email: goga_planning@nps.gov

SUBJECT: Comments on Joint Draft Environmental Impact Report and Environmental Impact Statement (EIR/EIS) for the proposed Vista Grande Drainage Basin Improvement Project (Project)

Dear Madame Superintendent and Mr. Sweetland:

In response to the Notice of Availability issued on April 28, 2016, The Olympic Club ("Olympic," or "Club") hereby submits its comments on the Joint Draft Environmental Impact Report and Environmental Impact Statement ("EIR/EIS") for the proposed Vista Grande Drainage Basin Improvement Project ("Project") for which the City of Daly City and the National Park Service ("NPS") are, respectively, the State CEQA law and the Federal NEPA law Lead Agencies. Please be advised that we are simultaneously sending this letter to you via United States mail and by e-mail to the address shown above.

Olympic owns the majority of the real property on, under, or adjacent to which the Project has been proposed. More specifically, other than real property which we understand to be owned by the NPS, and perhaps a small amount of land we understand is owned by San Francisco, Olympic believes it owns all of the land that will be utilized for the proposed Project, and most if not all of the privately held land the Project will in any way affect. The Club has particularly noted over the years that as the principal private property owner affected by the Project, Daly City and other project proponents need to view Olympic as a critical stakeholder, and to take its interests and concerns into account. The Club has appreciated the frequent good faith and open communication and dialog with Daly City and the other interested agencies, particularly including the San Francisco Public Utilities Commission ("SFPUC") over the years, and looks forward to continued and long-term good working relationships. 1

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Olympic has been directly or indirectly involved with the proposed Project, or its direct antecedents, since at least 2006. Club representatives have participated in numerous meetings with officials and agents of both entities, and Olympic has offered comments and observations on a number of previous occasions. We have reviewed some of our past correspondence and find some of it to be relevant to the present Project proposal – particularly three letters which appear in the Appendices to the EIR/EIS, in Attachment C, at pages 174 to 191. They include Olympic's letters of October 19, 2007 to the SFPUC's Manager of Water Resources Planning, and of October 15, 2008 to the City Manager of Daly City. Much of the content of this comment letter parallels that contained in a June 7, 2013 letter from the Club's special counsel to the Superintendent of the Golden Gate National Recreation Area, a copy of which is also in Attachment C. Although each of the three previous letters dealt with a slightly different subject than the EIR/EIS, all three touched on issues which were and which remain of significant concern to the Club. We therefore respectfully incorporate the attached letters by reference as a part of these comments on the current EIR/EIS. This letter reiterates some of what appears there -- the reiteration is solely for emphasis on fundamental facts and concerns.

Olympic owns and operates two world-renowned golf courses along with a 9-hole par three course, and has a large and very active membership which utilizes these courses and the balance of the Club's Lake Merced property to their fullest extent. The Club has played host to the United States Open (i.e., the men's' national championship of American golf, and one of the world's four top annual golf events) on five occasions, the most recent of which was 2012. The Club is a candidate to be selected for another Open in the near future, and it has been particularly honored to be selected to host the 2021 U.S. Women's Open, which has the same worldwide level of high significance and prestige. Olympic hosted the inaugural United States Golf Association ("USGA") Amateur Four-Ball Championship in April 2015, and it has been the site of the U.S. Amateur Championship three times.

When an Open or other USGA event is held at Olympic, it is one of the most significant events of any type that occurs in the Bay Area in that year, with as many as 50,000 attendees per day for the four days of competition, and large numbers of people who attend pre-tournament practice rounds and related activities, many of which are hosted by leading national and international corporations. Television coverage prior to and during these events – especially the Opens -- is extensive, worldwide, and reaches a huge audience. Preparation for a Championship takes a number of years prior to the competition, and if neighboring construction or related activities have the potential to in any way delay or disrupt that work, the USGA may decide that the Championship be held elsewhere. Olympic therefore needs the maximum possible advance notice from the proponents of the proposed Project prior to the commencement of any site preparation or construction activities. 2

The Club has for many years expressed to both Daly City and San Francisco its concern the proposed Project should reflect coordinated and integrated water (and other) resources management by the two Cities, working with the various Federal and State regulatory agencies with which they must interact as well as with the communities, individuals, and other entities that any such undertaking might affect. After reviewing the EIR/EIS, Olympic believes that although Daly City and the SFPUC have made efforts to achieve such integrated planning, we remain somewhat uncertain as to whether it has been done in a comprehensive and completed manner. For example, we note that although the EIR/EIS contains a Lake Management Plan (Appendix A) which is said (in Para. 2.6.4 at page 2-31) to have been developed and agreed upon by the two Cities, and contains significant discussion of the 3

Lake Merced water surface elevation ("WSE") resulting from the proposed Project. But there also is reference in the document to a separate and subsequent determination of the actual WSE range to be made at some indefinite future time by the SFPUC (which owns and operates the Lake), and which reportedly will not occur until after the current EIR/EIS is completed (see, e.g., Para. 2.6.3 on page 2-30). That separate and subsequent determination will purportedly take into account the input of other San Francisco departments, the details of which are undisclosed and therefor currently unknown to readers of the EIR/EIS; one aspect of this uncertainty is Olympic does not now know whether the SFPUC or any other San Francisco department may need to do subsequent environmental analysis. The EIR/EIS is at least ambiguous as to whether and how the SFPUC will take this EIR/EIS and the Project proposal into account. Since the EIR/EIS focuses so heavily on how the proposed Project will be operated with regard to the resultant WSE, it is not clear whether the EIR/EIS accurately and completely discloses the environmental effects of the proposed Project. In environmental law terms, this appears to be a potential cumulative impacts disclosure matter. 3

Similarly, the Club is aware that the SFPUC is separately pursuing a water supply project involving conjunctive use of surface water and groundwater in areas generally south and east of Olympic's property. Daly City is certainly involved in that project effort, because it uses groundwater and water it purchases from the SFPUC's Hetch Hetchy system as the municipal water supply for its water service customers. That project, which is currently at least partially under construction (and which was the subject of an entirely separate environmental review), reportedly has the potential to have an impact on the WSE of Lake Merced. The EIR/EIS for the current Project is at least ambiguous as to whether the proposed Project has fully taken the conjunctive use project into account; e.g., if for some (perhaps not fully foreseen) reason the conjunctive use project's impacts on Lake Merced's WSE are less or greater than anticipated, might that require some modification in the Project operations described in the EIR/EIS in order to either put more or less water through the proposed treatment wetlands or to otherwise route more or less water through the Project into the Lake? Should something like that occur, Olympic is concerned that it is not quite sure to whom to turn if it has questions or concerns about the modified operations of facilities located on or immediately adjacent to its property. The EIR/EIS does little to dispel this type of uncertainty. 4

The proposed Project will involve the partial replacement of the Vista Grande Canal, construction of a "treatment wetlands" in or above a portion of the Canal, and replacement of the Vista Grande Tunnel. The Canal is on Olympic-owned property, over which San Francisco owns an easement we understand has been assigned to Daly City. It is immediately adjacent to large portions of the Club's Lake Course, the golf course used for the U.S. Open and the other significant tournaments. Olympic has concerns about both the Canal and wetlands aspects of the proposed Project.

During the construction phase of the proposed Project, the Club is not quite sure what it can expect in terms of the duration and extent of potential interference with its use and enjoyment, and that of its members and guests, of its property – particularly the Lake Course. It is Olympic's understanding the proposed Project's design has been completed to the 30% level, according to the designer who spoke at the May 26, 2016 meeting at Daly City's Council Chamber. Although we have reviewed those portions of the EIR/EIS that deal with the "footprint" of the proposed Project and anticipated construction techniques and impacts, the Club remains very concerned about details of how the 5

project will be built, how it will be isolated or screened from users of Club property. Areas of special concern insofar as Canal construction work is concerned include the work at the uppermost and lowest reaches of the Canal, where the most extensive work is likely to occur along the Canal, together with the other areas in which connections to other infrastructure will occur, and especially the area of the proposed wetlands. For example, where the connection between the modified Canal and the new Tunnel will take place at or near the downstream end of the Canal, we understand the EIR/EIS to suggest that the work areas involved may actually encroach into the golf course, but the extent and duration of any such encroachment is essentially unknown. 5

For those portions of construction of elements of the proposed Project that will be located on, under, or adjacent to Club property, Olympic believes that since the proposed Project is being solely undertaken by others, the Project proponents should bear full financial responsibility for a construction monitor or monitors to work on behalf of and at the direction of the Club. The purpose for this requirement is so that Olympic will have and independent trained presence to observe those aspects of construction that have potential to impact the Club. The details of any such arrangement will need to be worked out via negotiations, but Olympic believes that if Daly City's City Council decides to approve the Project, in so doing it should expressly commit to a working arrangement of this nature, at Daly City's expense. 6

Olympic remains particularly concerned about the wetlands element of the proposed Project. Olympic still does not have a clear picture of what it will mean to have a large constructed "treatment wetlands" on or adjacent to its property at the edge of its property.. Comments have periodically been made about concerns about aesthetics, odors, and insects, largely because Olympic is still unable to thoroughly describe to its members what this new facility would look (or smell) like. Olympic prides itself on being an excellent steward of the lands it owns, and has been recognized for that ethic and for vigorously implementing it – e.g., it has received certification by the International Audubon Society for its environmentally sensitive management practices. One component of such certification deals with use of best management practices with regard to safe and protective use of fertilizers and pesticides as a part of a successful golf course; Olympic is concerned that construction of the proposed wetlands immediately adjacent to its golf course not adversely restrict or otherwise impact its operations in this or any other regard. Establishment of a new sensitive habitat or facility on or adjacent to Olympic's property should not expressly or implicitly create any new form of liability, responsibility, or any other form of obligation for Olympic. Olympic would object to inclusion of provision for public access into its property as part of any treatment wetlands element of the proposed Project, primarily for safety, security, and environmental protection reasons. 7 8

Similarly, if the proposed wetlands should provide new or enhanced habitat for animal or plant species not now present on or adjacent to Olympic's property, the Club should not bear any responsibility whatsoever for such species, and the proponents of the proposed Project should expressly acknowledge and agree to permanently assume all such responsibility. The proponents should also be made expressly responsible for preventing any spread or migration of attracted species onto Olympic's property. Olympic should not have any responsibility for provision or establishment of any form of buffer between the proposed wetlands and Olympic's golf course, nor for any aspect of the physical, biological, chemical, hydrological or any other form of security for the wetlands or for any other portion of the Canal. For example, Olympic has its principal maintenance facility near the 9

uppermost portion of the Canal, and should not be limited or restricted in its use, maintenance, or replacement of its facilities as a result of the proposed wetlands or any other element of the proposed Project. 9

It is Olympic's understanding the proposed Project is intended to be able to cope with stormwater resulting from a storm that can be statistically predicted to occur once every 25 years, with the most concentrated rainfall coming in a 4-hour period. As it has noted several times in the past, Olympic is quite concerned about what will happen in a more severe storm, particularly in light of what Olympic understands to be the current scientific consensus about the types, magnitudes, and frequency of recurrence of storms that might be predicted as a result of climate change. In marked contrast to the 25-year storm design criterion, Olympic understands the 2004 storm event that resulted in significant flooding near the site of the proposed Project is believed by some experts to have been a 1000-year event. Olympic is aware the current Project proposal calls for construction of the proposed wetlands above the Canal, so that it would purportedly not be impacted by even the highest anticipated stormflows. In spite of this aspect of the current Project proposal, the Club still needs to know what is predicted to happen to the wetlands, the Canal, and Olympic's adjacent property if the facilities in the proposed Project are subjected to a more severe storm than the design criteria. The project proponents should expressly assume all responsibility for any impacts of stormflows that exceed the design criteria. The post-storm-wetlands are critical among Olympic's concerns (e.g., what will it look and smell like, and for how long?), and Olympic believes the proponents of the proposed Project must expressly accept all responsibility for cleaning up, restoring or remediating the site after any flood or similar incident affecting the proposed Project. In addition, the Club should be indemnified for damage to any other property damaged as a result of the damage that may occur. 10

Both the existing and proposed new Tunnel are/will be located under Olympic-owned property in which San Francisco owns an easement. The Club understands that easement was leased to Daly City in 2007, so that it could continue to operate and maintain the Tunnel, and the lease will expire in 2017. We are not aware of the details of the land transaction(s) between the two Cities intended to provide the necessary land rights to Daly City for the proposed Projects, or how it might impact Olympic. 11

Daly City's wastewater system also includes a treated wastewater "force main" 30 inches in diameter andoccupies still another easement under Olympic-owned property. Unlike the Canal and the Tunnel which are generally on, under, or adjacent to the periphery of Olympic's property, the force main crosses it diagonally. We understand the existing force main will be abandoned as part of the proposed Project, but we are now aware of whether that means it will be entirely abandoned in place, whether any portions of it may be removed or filled with sand, slurry, or some other material to reduce the chance of land subsidence should the abandoned pipeline collapse over time, or if/how surface features (e.g., air valves, access structures) of the existing line will be abandoned or removed. 12

Olympic is aware that Daly City is pursuing various governmental approvals and/or permits for the proposed Project, and is in that regard interacting with entities including (but certainly not limited to) the U.S. Army Corps of Engineers ("COE"), the Regional Water Quality Control Board, and the California Coastal Commission. Since several of those approvals/permits have not yet been issued, 13

Olympic is concerned that the ultimate actions might in some way imp-act the Club's interest, particularly with regard to its continued use and enjoyment of its property, including but now limited to its golf courses, without interruption or disruption. One example is the COE "wetlands delineation," which is important to understanding whether COE will assert jurisdiction over the proposed Project and the lands it will occupy or involve. We are aware that the COE determination of no jurisdiction was made in a letter received by Daly City in late April, 2016. However, by its terms, the letter made it clear that the COE determination is subject to revision after 5 years from the letter's date – since the letter was undated, the ambiguity and uncertainty that creates both for the Project proponents and for Olympic is quite obvious. Because of the inherent uncertainties, the Club has no choice but to reiterate that it anticipates that the Project proponents will expressly assume all responsibility for any changes in Project details or implementation that result from governmental approvals or permits that have not yet been issued. 13

Olympic is similarly aware that Daly City is now starting into the process of seeking funding sources for the proposed Project. In particular, at Daly City's request, the Club has indicated it will send a letter of support for Daly City's application for State bond funds for at least the planning stage of the proposed Project. Olympic hereby respectfully requests it be kept regularly informed with regard to Daly City's anticipated effort to obtain additional funding from either State or Federal sources. 14

We offer these comments in the spirit of cooperation, as part of the community directly affected by the on-going Vista Grande issues, and efforts to address them. Olympic appreciates the opportunity to provide these comments on the Joint Draft EIR/EIS. Olympic will continue to track and monitor Project planning and environmental documentation work, and reserves the right to make further comments when and if it deems that to be necessary.

Sincerely,

Patrick R. Finlen

Patrick R. Finlen
General Manager
The Olympic Club

PF/cp

3.8 Response to Comments from Olympic Club

Olympic-1 This comment asserts that the Olympic Club owns the majority of the real property on, under, or adjacent to which the project has been proposed, and that the Club is the principal private property owner affected by the Project. It is acknowledged that the Canal and a portion of land adjacent to the Canal is on a parcel of land owned by the Olympic Club, over which San Francisco owns an easement that has been assigned to Daly City. The land between the Olympic Club owned parcel, John Muir Drive, and Lake Merced are owned by the City and County of San Francisco. The City of Daly City will coordinate with the Olympic Club regarding any real estate interests or agreements necessary to implement the project, beyond those measures described in the EIR/EIS to avoid or reduce environmental effects, as further discussed in this response to comments.

Olympic-2 This comment requests maximum advanced notice prior to commencement of any site preparation or construction activities. The project proponent has an extensive history of engaging with stakeholders with regards to general project information, scoping, public outreach, and opportunities for comment since 2007 and will continue to hold public meetings and communicate with interested parties during project implementation. Construction of the proposed project is expected to begin in late 2017. As noted in **Table 2-2** on page 2-22 of the Draft EIR/EIS, construction of the Canal and its various components is expected to occur over 26 months. In addition, as discussed in **Mitigation Measure 3.15-1** on page 3.15-9, Daly City and/or its contractors would implement a Construction Traffic Management Plan that requires them to provide residents and/or facility owners adjacent to project construction areas with information in advance of the timing, location, and duration of construction activities in their area. The continuation of the overall stakeholder engagement process and required notification via **Mitigation Measure 3.15-1** would ensure maximum advanced notice prior to commencement of any site preparation or construction activities, as requested.

Olympic-3 This comment asks whether the SFPUC and other San Francisco departments would need to do subsequent environmental analysis to determine the target water surface elevation (WSE) for Lake Merced and how the SFPUC will take the Draft EIR/EIS into account in its determination.

The City of Daly City has solicited SFPUC staff input on their separate approval process. They indicate that no additional environmental review would be required by the SFPUC prior to selecting a target lake level range. SFPUC staff will make its recommendation to the SFPUC Commission regarding target lake levels following evaluation of potential impacts detailed in the Draft EIR/EIS. Following Daly City's certification of the Final EIR, the SFPUC as a responsible agency will review and consider the EIR/EIS, review the potential impacts of various target lake level ranges, and will review the staff recommendation for Lake Merced level range. After

considering the certified EIR/EIS and the staff recommendation, the SFPUC Commission would adopt and implement a Lake Merced Management Plan to manage the level of Lake Merced to the target water surface elevation.

Olympic-4 The comment states that it is unclear to the Olympic Club whether the EIR/EIS properly discloses the environmental effects of the proposed Project or whether potentially cumulative impacts are being disclosed in the document. See the response to Comment Trout-2 regarding environmental effects associated with operation of the proposed project at a range of Lake Merced water surface elevations. As discussed in that response, the effects of operations at any water surface elevation under consideration was assessed as part of the proposed project (rather than a cumulative action). Thus, the effects of operations at any anticipated water surface elevation have been disclosed as part of this EIR/EIS.

Olympic-5 This comment requests clarity regarding whether the proposed project has fully taken into account the impacts that SFPUC's current water supply project involving conjunctive use of surface water and groundwater could have on Lake Merced WSEs in terms of the modification of the volume of water routed into the lake. If operations are modified, the Olympic Club requests clarity regarding which entity to contact with questions or concerns. The Regional Groundwater Storage and Recovery (GSR) Project and the SFPUC Ground Water Supply Project (GSP) are identified in the Draft EIR/EIS as having the potential to cause impacts related to hydrology and water quality within Lake Merced. The potential for the GSR and GSP to cause impacts relating to hydrology and water quality within Lake Merced in a manner that could combine with those of the Project are analyzed and discussed in detail in the Draft EIR/EIS in Section 3.9.6, Cumulative Effects.

As described in detail in Section 3.9.6.4 (p. 3.9-130, *et seq*.), a model analysis for the cumulative scenario for the SFPUC projects and this project was completed that comprehensively assessed the cumulative effects on lake levels of adding consistent pumping in western San Francisco and the in-lieu recharge and pumping of the GSP and GSR Projects, respectively. The model analysis was based on a representative period of historical climatic conditions, including consideration of major droughts, to evaluate future WSEs in Lake Merced following implementation of the GSP and GSR projects both with and without diversions implemented as part of the Project. The model analysis was conducted in a manner that reasonably anticipated the range of potential WSEs that could occur in Lake Merced during long-term project operations, including major climatic variations (i.e., major drought and above average hydrologic years). The cumulative effect of the combined projects is generally lower lake levels than observed for the proposed Project alone, but still higher than the No Project Scenario (i.e., if no diversions to Lake Merced were implemented under the Project).

Additionally, as described in the Draft EIR/EIS and presented in full in Appendix A (p. A-1, *et seq*.), a Lake Management Plan is proposed as part of the Project that establishes a long-term hydrology and water quality monitoring, analysis, and reporting plan for Lake Merced that is integrated with Project operations. As part of the Lake Management Plan, WSE monitoring would be conducted to inform adaptive management planning and further actions (such as assessing diversion thresholds for stormwater diversions to Lake Merced from Vista Grande Canal) that may be implemented related to water quality and WSE objectives for Lake Merced. Hydrologic impacts to Lake Merced related to operation of the GSP and the GSR projects are assessed in detail in the San Francisco Groundwater Supply Project Final EIR (San Francisco, 2013) and the Groundwater Storage and Recovery Project Final EIR (San Francisco, 2014). As SFPUC manages Lake Merced as a whole, any concern regarding future operational changes associated with water surface elevation should be referred to SFPUC.

Olympic-6 This comment requests clarity regarding the extent and duration of construction that would be directly adjacent to or encroach onto Olympic Club property, and clarity on details of how project construction would be isolated or screened from Club users, in particular the areas of the uppermost and lower reaches of the Canal, and the constructed treatment wetlands. As shown in **Table 2-2** on page 2-22 of the EIR/EIS, construction of the Canal and its various components is expected to occur over 26 months, including 4.5 months of construction for the constructed treatment wetland and 4 months of construction time for the Lake Merced Portal. Construction is expected to begin in late 2017. As discussed in response to Comment Olympic-2, the project proponent will continue to hold public meetings and other outreach opportunities with interested parties during project implementation. The Draft EIR/EIS Project Description is based upon preliminary 30 percent design drawing and higher level design drawings are being developed that will be available for review as part of the regulatory permit application process, as noted in Draft EIR/EIS Section 2.11, Regulatory Requirements, Permits, and Approvals. This information will also be used in any required discussions regarding real estate interests or other agreements required for construction of project elements within the Olympic Club owned parcel (see response to Comment Olympic-1).

Regarding the question of how project construction would be isolated or screened from Club users, see EIR/EIS impact AES-1. As discussed, construction areas would be visible as viewers move past the project construction site; however, their viewing period would be brief as they move past the site. The same would be expected of Club users. Further, the golf course areas adjacent to the Canal are at a higher elevation than the Canal; and include trees that partially screen views to the north. No tree removal between the Canal and golf course is included as part of the project.

Olympic-7 This comment requests that the project proponents assume full financial responsibility for construction monitors who work on behalf of and at the direction of the Club in order to retain a presence to observe construction impacts to the Club. As discussed on page 1-3 of the EIR/EIS, the joint EIR/EIS is an informational document intended to inform both the decision makers and the public of the potentially significant environmental effects associated with the construction, operation, and long-term maintenance of the proposed stormwater management Project. As lead agency, Daly City is responsible for the scope, content, and legal adequacy of the document, and its role is to identify project objectives, potential impacts, and carry out identified mitigation measures via the Mitigation Monitoring and Reporting Program (MMRP). The EIR/EIS (and MMRP) require survey and monitoring of certain resources during project construction to ensure that substantial environmental impacts are avoided or reduced, such as, but not limited to, **Mitigation Measures 3.3-1** (Dust Control Plan Implementation) which requires monitoring during construction to ensure the watering of exposed surfaces, covering of trucks, and sweeping of visible mud or dirt onto adjacent public roads; **Mitigation Measures 3.4-6** (Implement Tree Protection Measures and Plant Replacement Trees), which requires the establishment of a tree protection zone by a certified arborist and monitoring during construction; **Mitigation Measures 3.4-7a** (Control Measures for Spread of Invasive Plants), which requires monitoring during construction to ensure that soil stockpiles are covered and that tools and equipment are cleaned; and **Mitigation Measures 3.11-1** which requires monitoring during construction to ensure that equipment and vehicles use best available noise-control techniques. In terms of any additional monitoring for purposes beyond protection of environmental resources, such as real estate interests, see the response to Comment Olympic-1.

Olympic-8 This comment requests clarity regarding the possible aesthetics, odors, and insect impacts that the treatment wetlands could have on the Olympic Club's property. As described in Section 3.2, Aesthetics on page 3.2-9, and shown in Photos 1 and 2 in **Figure 3.2-3**, Wetland Cell A would be located on the western side of John Muir Drive, in a currently unimproved area with a few shrubs. Wetland Cell B would be located on the western side of John Muir Drive in an open area with weedy vegetation (grasses) with utility poles and scattered trees and shrubs (see Photo 4 in **Figure 3.2-4**). As noted in Section 2.4.1.3, Constructed Treatment Wetland on page 2-9, the wetlands would be planted with emergent reeds such as cattails or bulrush. As discussed in on page 3.3-23, Impact AIR-4 concludes that the project would have a less than significant impact with regard to objectionable odors. The constructed wetlands would be operated using a recirculating pump, which would prevent water from stagnating in the treatment wetland cells. In addition, as discussed in Section 2.6.5, Project Maintenance, operation of the treatment wetlands would require mosquito control using bacterial methods and trash removal on an annual basis, harvesting of biomass approximately every 5 years,

and removal of silt and other organic material every 10 to 20 years. Therefore substantial decomposed organic material would not be present.

Overall, the wetlands are designed to be treatment wetlands for the purposes of stormwater and lake water treatment. They would not be considered jurisdictional waters or new areas of sensitive biological resources habitat. See the response to Comment Olympic-1 regarding other real estate interests, such as the Olympic Club's existing use of fertilizers and pesticides, creation of any form of obligation or liability, and continued use of existing facilities as currently occurs.

Olympic-9 This comment, discussing the Olympic Club's objection to the provision of public access into its property as part of any treatment wetlands element, is noted. No public use of the treatment wetlands is proposed, as discussed in response to Comment GGAS-3.

Olympic-10 This comment requests that the Olympic Club not be held responsible for any new animal or plant species that are not currently present on or adjacent to Olympic Club property that could become established as a result of the proposed wetlands, that the project proponents should permanently assume all such responsibility, and that existing use of facilities in the vicinity of the project be allowed to continue. See response to Comment GGAS-3, discussing the types of plants that would be included in the treatment wetlands and indicating composition of vegetation within the treatment wetlands is intentionally similar to the shoreline vegetation of Lake Merced, though on a much smaller scale, and would not provide unique habitat for local wildlife.

Olympic-11 This comment requests clarity regarding potential effects if the proposed project facilities are subject to a storm more severe than the 25-year, 4-hour storm design criteria. As discussed in Section 2.6.1, Management of Stormwater Flow, on pages 2-28 and 2-29 of the Draft EIR/EIS, the proposed project is conservatively sized to more than accommodate peak flows generated by the 25-year design storm, which is approximately 1,070 cfs. The box culvert alone would be designed to accommodate a minimum of 1,070 cfs, the Canal between the diversion structure and Tunnel portal would have a capacity of approximately 500 cfs, and the Tunnel would have a capacity of at least 500 cfs. The capacity leading up to the diversion structure is 1070 cfs, and the total capacity beyond the diversion structure is 1570 cfs. In addition, for storms exceeding the 25-year, 4-hour criteria, if screened storm flows meet diversion criteria after the initial storm event, flows exceeding the capacity of the treatment wetlands would be routed to Impound Lake. The treatment wetlands would have a negligible drainage basin, therefore large storms would have a negligible impact on the wetlands. If stormwater flows from the Vista Grande watershed exceed the combined capacity of Lake Merced and the Canal and Tunnel, Canal flows would overtop the Canal and the wetlands and flow across John Muir Drive to Lake Merced, as occurs under current conditions. Flows would

cross the existing hardscape areas (riprap) between John Muir Driver and South Lake. Inflows to the lake would result in overflows back to the Tunnel as capacity is available and would be discharged via the Ocean Outlet. This could temporarily raise lake levels above the target WSE, providing short-term storage during major storm events to reduce flooding in the Vista Grande Basin

As noted in comments Olympic-7 and Olympic-10, as the project proponent, Daly City is responsible for implementing the proposed project according to the provisions of required regulatory permits and CEQA and NEPA guidelines regarding the identification of construction and operational impacts to the environment, and the implementation of mitigation measures via the MMRP. Daly City therefore bears responsibility for the operation and maintenance of the proposed project and its components. See also the response to Comment Olympic-1.

Olympic-12 This comment requests clarity regarding the details of land transactions between San Francisco and Daly City with regards to the easement owned by San Francisco and leased to Daly City for the Olympic Club's land where the Tunnel is/would be located. The comment does not raise any issue concerning the adequacy or accuracy of the Draft EIR/DEIS. The comment is noted. As discussed in Section 2.4.2 Vista Grande Tunnel and East and West Portals on page 2-10 in the Draft EIR/EIS, San Francisco holds the tunnel easement and leases it to Daly City. As part of the Project, San Francisco would convey this easement to Daly City subject to a reserved drainage easement for Lake Merced. Daly City would replace the Tunnel within the easement, as amended and clarified through agreement with NPS. Daly City would also potentially seek a right-of-way permit or other authorization from NPS to accommodate any portions of the Project that lie outside of the easement(s). These easement updates and potential right-of-way permit or other authorization are within the scope of the Project.

Olympic-13 This comment requests clarity regarding how the 30-inch treated wastewater "force main" that runs diagonally under Olympic Club property will be abandoned and whether portions will be removed or filled to reduce the chance of subsidence (or settlement) in case of collapse. The force main is a 27-inch pipeline, as opposed to a 30-inch pipeline. The 27-inch force main pipeline that crosses under the Olympic Club will be abandoned in place and filled from available access points with materials to prevent collapse or settlement. This is preferable to replacement as it minimizes disruption. See also the response to Comment CSLC-13.

Olympic-14 This comment requests that project proponents assume all responsibility for changes in project details or implementation that could result from governmental approvals or permits that have not yet been issued. As noted in comments Olympic-6, Olympic-10, and Olympic-121, as the project proponent, Daly City is responsible for implementing the proposed project according to the provisions of required regulatory permits and CEQA and NEPA guidelines regarding the

identification of construction and operational impacts to the environment, and the implementation of mitigation measures via the MMRP. Daly City therefore bears responsibility for changes that could result from government approvals or permits that have not yet been issued. See also the response to Comment Olympic-1.

Olympic-15 This comment, requesting that the Olympic Club be kept informed of any efforts by the project proponents to obtain funding for the project from State or Federal sources, is noted. As discussed in comment Olympic-2, Daly City will continue to hold public meetings and engage in communication with interested parties throughout the project's lifetime, including updates regarding project schedule and funding.

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CHAPTER 4
Draft EIR/EIS Revisions

The following changes to the text of the Draft EIR/EIS are made in response to comments on the Draft EIR/EIS or are included to clarify the Draft EIR/EIS text. For each change, new language is double underlined, while deleted text is shown in ~~strikethough~~.

Executive Summary

As a staff-initiated text change, EIR/EIS Table ES-1, Comparison of Significant Impacts of Project to Impacts of Alternatives Under CEQA, has been revised:

Impact	Proposed Project	Tunnel Alignment Alternative	Canal Configuration Alternative	No Project/No Action Alternative
Greenhouse Gas Emissions and Climate Change				
Greenhouse gas emissions during construction	**Impact GHG-1:** Project construction could generate GHG emissions above regulatory thresholds. If tunnel drives are constructed concurrently, and/or if tunneling occurs on a 24-hour basis, total short-term construction-related GHG emissions would be above BAAQMD's quantitative threshold of 1,100 metric tons CO2e for non-stationary sources during construction year 2, a significant impact. (Less than Significant with Mitigation)	**Similar** The Tunnel Alignment Alternative would include similar construction characteristics and any differences in equipment used would result in a similar level of GHG emissions as the proposed Project during Construction year 2. (Less than Significant with Mitigation)	**Similar** Although construction of the collection box and box culvert would be eliminated, thereby reducing GHG emissions compared to the proposed Project, tunnel construction would occur, which would result in a significant impact during construction year 2. (Less than Significant with Mitigation)	**No Impact** No construction emissions would be generated, and operational emissions would not change. (No Impact)

Chapter 2, Project and Alternatives

In response to Comment USEPA-12, EIR/EIS page 2-12, paragraph 3 has been revised:

> This section details the construction locations, activities and methods for the proposed project. **Table 2-1** summarizes the proposed construction activities including demolition and tree removal; project component construction or demolition; excavation; spoils[2]

storage, waste diversion[3] and disposal, and dewatering activities; and installation of work/staging areas.

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2 "Spoils" refers to soil remaining from an excavation after backfilling is completed.
3 Diversion requirements set forth under Daly City Municipal Code 15.64.020 and San Francisco Ordinance No. 27-06.

As a staff-initiated change, EIR/EIS page 2-23, Table 2-3 has been revised:

TABLE 2-3
CONSTRUCTION EQUIPMENT USAGE BY PROJECT COMPONENT

Equipment	Construction Usage			
	Project Component	**Number**	**Duration of Use (weeks)**	**Daily Use (hours/day)**
Compactor (CAT 563)	Canal and Wetlands	1	26	6
Excavator with hammer (750 Hitachi)	Canal and Wetlands	1	~~18~~6	6
Excavator to clean ditch (CAT 320E L)	Canal and Wetlands	1	~~18~~30	6
Excavator (CAT 320E L)	Shaft/Ocean Outlet and Tunnel Portal	1	18	6
Loader (CAT 966 or 950)	Ocean Outlet and Tunnel Portal/Canal and Wetlands	1	20	8
Pile Driver	Shaft/Ocean Outlet and Tunnel Portal/Canal and Wetlands	1	18	8
Drill Rig	Ocean Outlet and Tunnel Portal	1	2	6
Concrete pump (75 HP)	Ocean Outlet	1	1	3
Loader (CAT 966 or 950)	Tunnel	1	72 to 160	8
Road Header (Alpine EBZ132) or mini-excavator	Tunnel	2 or 1[a]	28 to 112[a]	8 to16
Crane (150 ton)	Tunnel	1	72 to 160	12 to 24
Air Compressor	Tunnel	1	72 to 160	12 to 24
Ventilation Fan (100 HP)	Tunnel	2	72 to 160	12 to 24

NOTE:
[a] If tunnel drives are completed sequentially, one road header or mini excavator would be used for a total duration of 56 weeks (24-hour tunneling) or 112 weeks (daytime tunneling only). If tunnel drives are completed concurrently, two would be used for a duration of 28 weeks (24-hour tunneling) or 56 weeks (daytime tunneling only).

As a staff-initiated text change, EIR/EIS page 2-24, paragraph 2 has been revised:

Electricity demand during construction would be approximately 1,300 kilowatts (kW) and would be required for the shaft staging area only. For a conventional tunneling operation, the estimated minimum required power connection is about 3,000 kVA. Equipment included in this estimate includes roadheader or mini-excavator per tunnel drive; and

ancillary equipment consisting of shotcrete application equipment, a batch plant, a compressor, pumps, ventilation fans, water treatment facilities, shop equipment and warehouse, a change house, yard lighting, and office trailers. Temporary construction power would be provided to the staging area at Fort Funston via a temporary Pacific Gas & Electric (PG&E) service connection, or by using a portable diesel-powered generator. If a temporary PG&E service connection is used, a~~A~~n emergency power supply (generator) with the capacity to provide 1,000 kVA would be located on-site during construction.

In response to Comment CSLC-3, EIR/EIS page 2-26, paragraph 6 has been revised:

- **Ocean Outlet structure:** 300 cy of exposed brick and shotcrete lined tunnel and concrete structure to be demolished and disposed of. Approximately ~~140~~ 120 feet of 33-inch concrete pipe from the replacement of the submarine outfall pipeline to be disposed of.

As a staff-initiated text change, EIR/EIS page 2-72, paragraph 3 has been revised:

2.10 Lead Agency Preferred Alternative

Under NEPA, the "preferred alternative" is a preliminary indication of the Lead Agency's preference of action among the proposed action and alternatives. A NEPA Lead Agency may select a preferred alternative for a variety of reasons, including the agency's priorities, in addition to the environmental considerations discussed in the EIS. ~~Although the Lead Agency may identify a preferred alternative in the Draft EIS, the NPS has not yet identified its preference of action among the Proposed Action and alternatives, and will identify the preferred alternative in the Final EIR/EIS i~~In accordance with NEPA (40 CFR 1502.14(e)) and based on the assessment in this EIR/EIS, NPS has identified the proposed Project as the preferred alternative.

Section 3.3, Air Quality

As a staff-initiated text change, EIR/EIS page 3.3.19, Table 3.3-4 has been revised:

TABLE 3.3-4
CONSTRUCTION CRITERIA POLLUTANT EXHAUST EMISSIONS

Emissions Source	Average Daily Construction Emissions (pounds/day)			
	ROG	NOx	PM10	PM2.5
Construction Activities	~~2.8~~4.9	~~23.1~~20.0	~~1.5~~0.9	~~1.5~~0.9
Vehicle Trips	~~1.1~~0.7	~~21.5~~12.3	~~0.5~~0.3	~~0.4~~0.2
Average Daily (pounds/day)	**~~3.9~~5.6**	**~~44.6~~32.2**	**~~1.9~~1.2**	**~~1.9~~1.2**
BAAQMD Significance Threshold	54	54	82	54
Significant Impact?	No	No	No	No

NOTES: Emissions were estimated using emission factors from the Off-road emissions inventory database and EMFAC 2011. Numbers may not sum due to rounding. Refer to Appendix C for details on the emissions estimates.

As a staff-initiated text change, EIR/EIS page 3.3-24, Table 3.3-5 has been revised:

TABLE 3.3-5
NEPA-RELEVANT CONSTRUCTION CRITERIA POLLUTANT EMISSIONS OF THE PROPOSED PROJECT

Emissions Source	Total Annual Construction Emissions (tons/year)*			
	ROG	NOx	PM2.5	CO
Year 1				
Construction Activities	~~0.2~~0.1	~~1.8~~0.8	~~0.1~~0.0	~~1.1~~0.0
Vehicle Trips	~~0.1~~0.1	~~2.5~~2.2	~~0.0~~0.0	~~0.9~~0.0
Total Annual	**~~0.4~~0.3**	**~~4.3~~2.9**	**~~0.2~~0.1**	**~~2.0~~0.1**
De Minimis Level	100	100	100	100
Exceeds De Minimis Level?	No	No	No	No
Year 2				
Construction Activities	~~0.5~~1.1	~~4.1~~4.3	~~0.3~~0.2	~~2.8~~0.2
Vehicle Trips	~~0.2~~0.1	~~3.5~~1.6	~~0.1~~0.0	~~1.4~~0.0
Total Annual	**~~0.7~~1.2**	**~~7.5~~5.8**	**~~0.3~~0.2**	**~~4.2~~0.2**
De Minimis Level	100	100	100	100
Exceeds De Minimis Level?	No	No	No	No
Year 3				
Construction Activities	~~0.1~~0.3	~~1.2~~1.0	~~0.1~~0.0	~~0.8~~0.0
Vehicle Trips	~~0.0~~0.0	~~0.6~~0.0	~~0.0~~0.0	~~0.2~~0.0
Total Annual	**~~0.2~~0.3**	**~~1.8~~1.1**	**~~0.1~~0.0**	**~~1.0~~0.0**
De Minimis Level	100	100	100	100
Exceeds De Minimis Level?	No	No	No	No

* NOTE: numbers may not sum due to rounding. These annual construction emissions were estimated based on the conservative assumption that construction activities would commence in early 2016. Although this construction schedule no longer is feasible, the estimated emissions are conservative because construction in later years will benefit from a cleaner fleet of off-road equipment as a result of CARB's In-Use Offroad Diesel Vehicle Regulation, and the New Offroad Compression Ignition Diesel Engines and Equipment Program.

As a staff-initiated text change, EIR/EIS page 3.3-25, paragraph 4 has been revised:

> The Tunnel Alignment Alternative would have similar construction characteristics of the Project. The construction methods and duration to construct this alternative would not change compared to the Tunnel portion of the Project, as described in Chapter 2, except that a digger shield or micro tunnel boring machine would be used in place of a mini excavator. From an air quality perspective, this would represent replacing one type of equipment ~~diesel engine~~ with another, and the power requirements and resulting criteria pollutant emissions would be similar. Both types of equipment engines would operate over the same construction phase duration and have similar engine load factors and would not meaningfully change the emissions estimated for the proposed Project which are primarily determined by these characteristics.

Section 3.4, Biological Resources

As a staff-initiated text change, EIR/EIS page 3.4-19, paragraph 3 has been revised:

> Daly City's environmental consultant (ESA) conducted a formal wetland delineation for federally jurisdictional wetlands and waters in November and December of 2012 (ESA, 2014). The field delineation identified and documented all potentially jurisdictional wetlands and other waters of the U.S. within the delineation study area. This wetland delineation found that within the study area, potential federally jurisdictional features include: Lake Merced, a freshwater lake used for recreational fishing and boating and thus, a Traditionally Navigable Water (TNW), and its adjacent wetlands; ~~Vista Grande Canal, a man-made, brick-lined channel constructed in dry land to capture and divert perennial stormwater and authorized non-storm water flows to the Vista Grande Tunnel and out to the Pacific Ocean (a TNW);~~ and the Pacific Ocean below the high tide line (HTL) at Fort Funston. With the exception of the Vista Grande Canal, which was determined by the Corps to be non-jurisdictional (USACE, 2016), ~~T~~the federal wetland delineation has not yet been verified by the Corps and should be considered preliminary until verification in writing is received from the Corps.

As a staff-initiated text change, EIR/EIS page 3.4-67, paragraphs 4 and 5 have been revised:

> As discussed in Section 3.4.1.5, potential jurisdictional features occur within the Project site, which have not been verified as such by regulatory agencies, with the exception of the Corps disavowing its jurisdiction over Vista Grande Canal. For the purpose of this Project analysis, these features are treated as potentially affected federal jurisdictional wetlands and other waters. Project impacts to these potentially jurisdictional features would involve temporary and permanent discharges of structures and/or fill within waters and wetlands, and/or alterations of the bed and/or banks of a lake or stream, to accommodate Project activities.
>
> Potentially jurisdictional wetlands and other waters would be affected by the placement of permanent or temporary fill material associated with ~~the installation of the collection box and box culvert at the headworks of the Vista Grande Canal, installation of the diversion structure within the Vista Grande Canal,~~ construction of the Lake Merced outlet structure in Impound Lake, ~~construction of the temporary access ramp at the downstream end of the Canal,~~ replacement of the Lake Merced overflow structure in South Lake, and use of the temporary beach access route. ~~Approximately 1,500 feet of the 3,600-foot Canal(potentially jurisdictional other waters) would be replaced.~~ The total area of permanent impacts is expected to be less than 0.5 acre.

As a staff-initiated text change, EIR/EIS page 3.4-68, paragraph 2 has been revised:

> Within the Project area, wetlands and other waters of the U.S. are regulated under Section 404 of the Clean Water Act. Because of the small area of permanent impacts to wetlands and other waters of the U.S. (less than 0.5 acre) the project will be authorized under the

Nationwide Permit (NWP) Program, likely under NWP #7 (Outfall Structures and Associated Intake Structures), NWP #13 (Bank Stabilization), NWP #33 (Temporary Construction, Access and Dewatering), or NWP #43 (Stormwater Facilities), or a combination thereof, to be determine by the Corps.~~, and n~~ Navigable waters are regulated by a Letter of Permission under Section 10 of the Rivers and Harbors Act.

As a staff-initiated text change, EIR/EIS page 3.4-68, Table 4.3-3 has been revised:

TABLE 3.4-3
IMPACTS TO POTENTIAL FEDERALLY JURISDICTIONAL WETLANDS AND WATERS

Feature Type/Name	Impact Type	Preliminary Regulatory Jurisdiction
Waters		
Lake Merced	Temporary and permanent loss Permanent gain	Corps (Section 404 CWA, Section 10 RHA), RWQCB (Section 401, P-C), CCC jurisdiction, CDFW Section 1600
Vista Grande Canal	Permanent loss	~~Corps (Section 404 CWA),~~ RWQCB (~~Section 401,~~ P-C), CDFW Section 1600
Pacific Ocean	Temporary and permanent loss	Corps (Section 404 CWA, Section 10 RHA), RWQCB (Section 401, P-C), CCC jurisdiction
Beach at Fort Funston	Temporary and permanent loss	Corps (Section 404 CWA, Section 10 RHA), RWQCB (Section 401, P-C), CCC jurisdiction
Wetlands (Lake Merced)		
Bulrush Wetland (BW)	Temporary and possibly permanent loss	Corps, CCC, RWQCB (Section 401, P-C), CDFW Section 1600
Knotweed Wetland (KW)	Temporary and possibly permanent loss	Corps, CCC, RWQCB (Section 401, P-C), CDFW Section 1600
Arroyo Willow Wetland (AWW)	Temporary and possibly permanent loss	Corps, CCC, CDFW Section 1600

SOURCE: ESA, 2014

As a staff-initiated text change, EIR/EIS page 3.4-133 has been revised:

U.S. Army Corps of Engineers (USACE), 2016. Letter Correspondence determination regarding the Vista Grande Canal as a non-jurisdictional feature. Received April 29, 2016.

Section 3.5, Cultural Resources

As a staff-initiated text change, EIR/EIS page 3.5-34, paragraph 3 has been revised:

Although approximately 58 percent or about 2,100 feet of the Canal would remain intact after completion of the Project, the Project would demolish the remaining 1,500 feet of the Canal and all of the 3,000-foot-long Tunnel, thereby substantially affecting of the vast majority (69~~8~~ percent) of the Vista Grande Canal and Tunnel as an entire drainage system.

Section 3.6, Geology and Soils

A discussion of the California Building Code (CBD) begins on page 3.6-16 of the EIR/EIS. It is acknowledged that the ASCE/SEI has updated their seismic standards since the publishing of the Draft EIR/EIS from ASCE 7-10 to ASCE 7-16. The 2016 edition of the CBD was published by the California Building Standards Commission on July 1, 2016, effective January 1, 2017.

Section 3.7, Greenhouse Gas Emissions and Climate Change

As a staff-initiated text change, EIR/EIS page 3.7-10, paragraph 2 has been revised:

> During Project construction, construction equipment, trucks, worker vehicles, and ground-disturbing activities would generate GHG emissions directly. The construction equipment inventory and use assumptions input to estimate construction emissions were developed based on the assumed weekly construction schedule for the Project combined with equipment types and duration of use information provided by Daly City. Construction of the Canal is expected to occur ~~for almost the full 28 months of total Project construction~~over approximately the first year of Project construction. Tunnel construction would occur for ~~21~~ 17 to 37 months and would occur concurrently with construction of the Ocean Outlet, which is expected to last 5.5 months. Construction activities would include site demolition, tree and vegetation removal, excavation, tunneling, grading, pile driving, drilling, backfilling, and material loading.

As a staff-initiated text change, EIR/EIS page 3.7-10, Impact GHG-1 has been revised:

a) Impact GHG-1: Project construction and operation would generate GHG emissions. (Less than Significant with Mitigation)

As a staff-initiated text change, EIR/EIS page 3.7-11, Table 3.7-2 has been revised:

TABLE 3.7-2
CONSTRUCTION-RELATED GHG EMISSIONS (METRIC TONS CO_2E)

Construction Activity Source	Year 1	Year 2	Year 3
Off-road Equipment Emissions	~~175.1~~192.4	~~436.0~~1,575.8	~~119.5~~393.7
Vehicle Emissions	~~845.3~~700.7	~~550.1~~622.4	~~97.9~~41.9
Total Construction Emissions	~~1,020.4~~893.1	~~986.1~~**2,198.2**	~~217.3~~435.5
Significance Threshold	1,100.0	1,100.0	1,100.0
Significant Impact?	**No**	**~~No~~Yes**	**No**

As a staff-initiated text change, EIR/EIS page 3.7-11, paragraphs 3 and 4 have been revised and a mitigation measure has been added:

> As indicated in Table 3.7-2, total short-term Project construction-related GHG emissions would be ~~at most 1,020 metric tons CO2e per year, which is lower than~~below BAAQMD's quantitative threshold of 1,100 metric tons CO2e per year for non-stationary sources in construction years 1 and 3, but would be above this threshold during year 2. Therefore, GHG emissions from Project construction are considered ~~*less than*~~ *significant* during year 2.
>
> The estimates provided in Table 3.7-2 reflect the most intensive construction schedule among the possible options related to tunneling (i.e., concurrent tunnel drive construction, 24 hours per day). Some of the emissions estimated to occur in year~~s 1 and~~ 2 ~~likely~~ would be displaced into year 3 and potentially a fourth year of construction if the tunnel drives were constructed sequentially and/or if tunnel construction was limited to between 7:00 a.m. and 7:00 p.m. because construction would be spread out over a greater number of months (up to 44 months in total; see Table 2-2). The overall total construction emissions would be similar, but less intensive construction would result in lower annual emissions. If the least intensive construction schedule is implemented (i.e., subsequent tunnel drive construction, 12 hours per day), annual emissions would be below the annual threshold during each construction year and would be less than significant. ~~Under all circumstances, i~~Impacts associated with construction-related GHG emissions would be ~~*less than*~~ *significant* if tunnel drives are constructed concurrently, if tunneling occurs on a 24-hour basis, or both. ~~.~~Implementation of Mitigation Measure 3.7-1 would reduce the impact associated with construction-related GHG emissions to a *less-than-significant* level.
>
> **Mitigation Measure 3.7-1: Greenhouse Gas Emission Reduction**
>
> Daly City and/or its contractor(s) shall implement the following measures to reduce greenhouse gas emissions from construction:
>
> 1. On-road vehicle idling time shall be minimized and shall not exceed a 5-minute maximum. Additionally, off-road engines shall not idle for longer than 5 minutes, per Section 2449(d)(3) of Title 13, Article 4.10, Chapter 9 of the California Code of Regulations. Clear signage of this requirement shall be provided for construction workers at all access points to construction areas.
>
> 2. Utilize B20 biodiesel for generator fueling to reduce greenhouse gas emissions of generator operation by approximately 20 percent.
>
> 3. Following finalization of project design and construction phasing, but prior to the start of construction activities, Daly City and/or its contractors shall use best available modeling tools to estimate annual greenhouse gas emissions resulting from construction. After accounting for the use of B20 biodiesel as under Item 2, Daly City shall purchase carbon offsets in the amount that construction emissions would exceed the greenhouse gas emissions significance threshold of 1,100 MT/CO2-equivalent per year from an accredited source.

As a staff-initiated text change, EIR/EIS page 3.7-11, paragraph 5 (continuing on page 3.7-12) has been revised:

> Once construction is complete, the Project would result in negligible new sources of GHG emissions. GHG emissions would result from the use of a vacuum truck to clean the debris screening device, from vehicles required during other annual maintenance activities, from electricity used to pump water to the wetlands, and from periodic replacement of the Ocean Outlet (approximately 25 years) as bluff erosion proceeds. However, the Project also would allow Daly City to discontinue pumping treated effluent from the Wastewater Treatment Plant through the force main during wet weather because it would accommodate the use of the gravity pipeline during wet weather. This would eliminate the GHG emissions associated with electricity used to power the pumps that supply water to the force main when needed. Additionally, the LMP includes an operational plan for the proposed Vista Grande diversions, a water quality monitoring plan, and best management practices that could result in occasional maintenance vehicle trips. Therefore, there would be a negligible net change in long-term baseline conditions as a result of the Project, and the long-term operational impact with respect to GHG emissions would be *less than significant.*
>
> **Significance after Mitigation:** Less than significant.
>
> ~~**Mitigation**: None required.~~

As a staff-initiated text change, on EIR/EIS page 3.7-12, the first full paragraph has been revised:

> The 25,000 metric tons CO2e threshold for adverse environmental impacts is described in Section 3.7.3.2. As shown in Table 3.7-2, construction-related GHG emissions would be below this federal reporting threshold for all years (up to ~~4~~ 9 percent of the threshold in the ~~first~~ second year). Therefore, the Project would have a minor adverse impact with regard to construction related GHG emissions. As described above, operational GHG emissions which would result from the use of electricity to power seasonal pump and diversion gate operations and from occasional vehicle trips to perform maintenance operations would not be a daily occurrence and would generate negligible GHG emissions (less than 1 percent of the threshold). Therefore the Project would have a negligible impact with regard to operational GHG emissions.

As a staff-initiated text change, on EIR/EIS page 3.7-12, the third full paragraph (continuing on page 3.7-13) has been revised:

> The Tunnel Alignment Alternative would have many similar construction characteristics of the Project. The general construction methods and duration required to construct the Tunnel Alignment Alternative would not change compared to the Tunnel portion of the proposed Project, as described in Chapter 2. The details of the construction activities and methods for the Project, which would be the substantially similar to those of the Tunnel Alignment Alternative with the exception that a digger shield or micro tunnel boring

machine would be used in place of a mini excavator, are summarized in Table 2-1 and include demolition; alternative component construction or demolition; excavation; spoils storage, diversion, and disposal and dewatering activities; and installation of work/staging areas. From a GHG emission perspective, use of a digger shield or micro tunnel boring machine in place of a mini excavator would represent replacing one type of ~~diesel engine~~equipment with another, and the power requirements and resulting greenhouse gas emissions would be similar. Both types of equipment engines would operate over the same construction phase duration and have similar engine load factors and would not meaningfully change the GHG emissions estimated for the proposed Project which are primarily determined by these characteristics.

As a staff-initiated text change, on EIR/EIS page 3.7-13, the first full paragraph has been revised:

The Tunnel Alignment Alternative would require a reduced volume of materials to be off-hauled as compared to the Project, which would reduce the number of truck trips required and their associated GHG emissions. However, this reduction in the number of truck trips would not reduce GHG emissions in construction year 2 to below ~~Like the Project, the Tunnel Alignment Alternative would have annual construction-related GHG emissions that would not exceed~~ the BAAQMD's significance threshold, and the Tunnel Alignment Alternative would result in a significant impact during construction year 2, like the proposed Project~~s~~. Mitigation Measure 3.7-1 would be required for construction of the Tunnel Alignment Alternative. ~~Therefore,~~With implementation of mitigation, construction-related GHG emissions associated with the Tunnel Alignment Alternative would be *less than significant*.

As a staff-initiated text change, on EIR/EIS page 3.7-13, the fourth full paragraph has been revised:

The Tunnel Alignment Alternative would require a reduced volume of materials to be off-hauled as compared to the Project, which would reduce the number of truck trips required and their associated emissions. Like the Project, the Tunnel Alignment Alternative would have annual construction-related GHG emissions that would be below the federal reporting threshold for all years (up to 9 ~~4~~ percent of the 25,000-ton reporting threshold). Operational GHG emissions resulting from the use of electricity to power seasonal pump and diversion gate operations and from occasional vehicle trips to perform maintenance operations would not be a daily occurrence and would generate negligible GHG emissions (less than 1 percent of the 25,000-ton reporting threshold). Therefore, this alternative would have a minor adverse impact with regard to GHG emissions during construction, and a negligible impact during operation and maintenance.

As a staff-initiated text change, on EIR/EIS page 3.7-14, the first full paragraph has been revised:

The construction methods and duration to construct this alternative would not change substantially compared to the Project, as described in Chapter 2 except that the collection box and box culvert would not be installed. This would result in reduced duration of

construction activity as removal of approximately 1,500 feet of the canal structure and installation of box culverts described for the proposed Project would not occur, resulting in fewer annual emissions. Additionally, truck transport of excavated materials and clean fill associated with the box culvert would not be required under this alternative that would occur under the proposed Project, also reducing annual emissions. ~~Like the Project,~~ Because the Canal Configuration Alternative would be paired with either the proposed tunnel construction or construction of the Tunnel Alignment Alternative, it would be a component of the overall construction that would result in a significant impact during construction year 2, like the proposed Project. Mitigation Measure 3.7-1 would be required to reduce ~~have annual construction-related GHG emissions that would not exceed the BAAQMD's significance thresholds. Therefore,~~ construction-related GHG emissions associated with the ~~Tunnel Alignment~~Canal Configuration Alternative and either tunnel option to~~would be~~ *less than significant*.

As a staff-initiated text change, on EIR/EIS page 3.7-14, the third full paragraph has been revised:

The construction methods and duration to construct the Canal Configuration Alternative would not change compared to the Project. Construction emissions under the Canal Configuration Alternative would be reduced compared to those presented in Table 3.7-3 for the Project because of the reduced amount of excavation and construction associated with the elimination of the collection box and box culvert. Consequently, like the Project, the Canal Configuration Alternative would have annual construction-related GHG emissions that would be below the federal reporting threshold for all years (less than 9~~4~~ percent of the 25,000-ton reporting threshold). Operational GHG emissions resulting from the use of electricity to power seasonal pump and diversion gate operations and from occasional vehicle trips to perform maintenance operations would not be a daily occurrence and would generate negligible GHG emissions (less than 1 percent of the 25,000-ton reporting threshold). Therefore, this alternative would have a minor adverse impact with regard to GHG emissions during construction, and a negligible impact during operation and maintenance.

As a staff-initiated text change, EIR/EIS page 3.7-15, paragraph 2 has been revised:

GHG emissions are inherently a cumulative concern because it is the accumulation of GHG emissions in the atmosphere around the earth that results in global climate change; therefore, the geographic scope of cumulative impacts related to GHG emissions and climate change is global. The Project would result in ~~minor~~ short-term GHG emissions during construction that would ~~be below~~exceed the applicable CEQA threshold~~s developed by BAAQMD~~during construction year 2, but would be reduced to below this threshold with implementation of Mitigation Measure 3.7-1, and would have negligible long-term GHG emissions during operation. The Project would not conflict with the state's GHG reduction goals, and as described in Section 3.7.3.3, Criteria and Thresholds with No Impact or Not Applicable, would support the goals of the Climate Change Scoping Plan. The Tunnel Alignment Alternative and Canal Configuration Alternative

would result in reduced construction emissions, but would still exceed the applicable CEQA threshold during construction year 2 and require implementation of Mitigation Measure 3.7-1. ~~and~~These alternatives would have substantially similar operation and maintenance emissions compared to the Project. Therefore, they would not conflict with the state's GHG reduction goals, and they would support the Climate Change Scoping Plan. The No Project/No Action alternative would not result in substantial GHG emissions. All of the cumulative projects described in Table 3.1-1 in Section 3.1, *Introduction and Overview*, could contribute to global warming due to the generation of short-term and/or long-term GHG emissions. If GHG emissions continue globally such that climate change results in the impacts described in Section 3.7.1.1, the overall global cumulative impact would be *significant* and adverse. However, the Project's and the alternatives' contributions to this impact would not be cumulatively considerable because implementation of Mitigation Measure 3.7-1 would reduce emissions to below all applicable thresholds.

Section 3.9, Hydrology and Water Quality

In response to Comment USEPA-13, EIR/EIS page 3.9-1, paragraph 3 (continuing on page 3.9-2) has been revised:

The study area is located within the San Francisco Coastal South Watershed (USEPA, 2015), which extends from western San Francisco to the southern end of San Mateo County. Lake Merced, the major surface freshwater feature in the study area, is a naturally occurring lake located approximately 0.25 mile from the Pacific Ocean in the southwestern corner of San Francisco. The proposed Project components are all located within the Lake Merced urban watershed, one of eight distinct urban watersheds within the City and County of San Francisco (San Francisco). A natural watershed is the land area that drains to a single body of water such as a stream, lake, wetland, or estuary, whereas an urban watershed can replace overland sheet flow to natural tributaries with constructed storm and sewer systems that separately collect and convey flows. Storm and authorized non-storm flows[1] (also referred to as exempt and conditionally exempt discharges under the Municipal Regional Stormwater Permit, RWQCB Order ~~R2-2009-0074~~ R2-2015-0049) within the urban watersheds on the western side of San Francisco, including the Lake Merced urban watershed, flow toward the Pacific Ocean through constructed stormwater conveyance systems.

[1] Authorized non-stormwater discharges (also called exempt and conditionally exempt discharges) are described in detail in Section C.15 of the Municipal Regional Stormwater NPDES Permit, RWQCB Order No. ~~R2-2009-0074~~ R2-2015-0049; detail in Section C.15 of the Municipal Regional Stormwater NPDES Permit, RWQCB Order No. ~~R2-2009-0074~~ R2-2015-0049; examples include pumped groundwater, runoff from landscape irrigation, water from foundation drains, air conditioning condensate, water from residential car washing activities, and the like.

In response to Comment USEPA-13, EIR/EIS page 3.9-49, paragraph 4 has been revised:

> Stormwater runoff and authorized non-storm flows (conditionally exempt discharges) from Daly City and the other San Mateo County cities have been regulated under MS4 NPDES permits since 1993. These MS4 permits, including the current Municipal Regional Permit, RWQCB Order No. ~~R2-2009-0074~~ R2-2015-0049 (MRP), re-issued by the Water Board on November 19, 2015, to regulate stormwater discharges from municipalities and local agencies in San Mateo County, have contained increasingly prescriptive requirements, typically in the form of enhanced BMPs.

In response to Comment USEPA-13, EIR/EIS page 3.9-87, paragraph 3 has been revised:

> To assess the direct and indirect long-term impacts of Project operations on Lake Merced water quality, a detailed Project-specific WQA was developed (ESA, 2015). The WQA presents analysis of the potential changes to Lake Merced existing conditions as a result of Project operations and incorporates the hydrologic context of Project operations, such as the relative volume of Canal flows as compared to overall lake volume. Additionally, as part of the analysis of potential water quality effects to Lake Merced, the water quality of Canal flows were considered within the context of proposed physical and operational Project elements (such as the screening device, the treatment wetlands, and the diversion protocols), as well as regulatory controls[12] to urban runoff water quality.

[12] As discussed in detail in the WQA and in Section 3.9.2, the existing and proposed diversions of flows from the Vista Grande Canal to Lake Merced are covered under the existing MS4 NPDES permit, called the MRP, RWQCB Order No. ~~R2-2009-0074~~ R2-2015-0049. No additional NPDES permits are needed for Project operation. The operational protocols and the use of in-lake management actions and BMPs proposed as part of the Project are described in Section 2.6.1 and 2.6.2, respectively.

As a staff-initiated text change, EIR/EIS page 3.9-112, a new second paragraph has been included:

> Altering erosion rates and patterns, increasing local scour, and reducing the vertical beach profile at and beyond the project site as a result of reflected wave energy from the proposed wing walls (as described above) could further adversely affect the efforts of ongoing beach nourishment projects being conducted in the project vicinity. The SFPUC, in cooperation with the NPS, is conducting annual sand management activities at south Ocean Beach in an area between Sloat Boulevard and Fort Funston to address severe coastal erosion threatens local highway infrastructure and public access (NPS, 2016; CCC, 2015b). Such beach nourishment efforts have involved the annual placement of up to 100,000 cubic yards of sand. Additionally, the USACE, in cooperation with the City of San Francisco and the U.S. Geologic Survey, has been beneficially reusing dredge material (sand only) in the vicinity of Sloat Boulevard to reduce ongoing severe erosion along southern Ocean Beach (USACE, 2011, 2013). As part of this effort, the USACE has placed dredge material along southern Ocean Beach directly and off shore in the near shore area in the vicinity of the Sloat Boulevard parking area. Such beach nourishment efforts are continuing and predicted to continue for the foreseeable future. The proposed

wing walls would be constructed approximately 0.75 miles from sand placement locations associated with local beach nourishment efforts and could locally alter erosion rates as well as sand transport and distribution patterns in a manner that reduces the efficacy of such efforts aimed at reducing local severe coastal erosion rates.

As a staff-initiated text change, EIR/EIS page 3.9-133, paragraph 1 has been revised:

One project was identified as having the potential to cause impacts relating to coastal processes and erosion that could combine with those of the Project: the Ocean Beach Master Plan. The Ocean Beach Master Plan presents recommendations for the management and protection of San Francisco's Ocean Beach, a 3.5-mile stretch of beach north of Fort Funston. The plan includes recommendations for rerouting the Great Highway behind the San Francisco Zoo via Sloat and Skyline Boulevards and restoring dunes through sand replenishment. Prior to implementation of the Ocean Beach Master Plan, beach nourishment efforts, involving the placement of sand at locations along south Ocean Beach (approximately 0.75 miles from the proposed wing walls), have occurred and continue as an interim solution for the erosion issues at Ocean Beach (described in detail under Impact HYD-9). As described under Impact HYD-9, the proposed Project could result in the alteration of coastal processes that would result in a potentially *significant and unavoidable* coastal erosion impact. Additionally, the proposed Project wing wall structure could increase reflected wave energy resulting in increased local scour and subsequent reduction of the beach vertical profile as well as alteration of local sand transport rates and patterns. The Project's contribution to this potentially *significant* cumulative impact would be cumulatively considerable because the Project could exacerbate the effects of coastal erosion as a result of alterations to the local shoreline proposed as part of the Ocean Beach Master Plan. However, **Mitigation Measure 3.9-2, Comprehensive Coastal Engineering Investigation and Implementation of Recommendations**, ~~would reduce this potential impact to a *less than significant* level by requiring~~ require Daly City to complete and implement the recommendations of a Project-specific coastal engineering study consistent with the requirements of California Coastal Commission draft policy guidance relating to sea-level rise as relevant to coastal development. Such a study would require a site-specific hazard analysis that includes assessment of the cumulative effects of the Project on coastal process elements, such as erosion and wave reflection, with applicable existing or future projects, including (at a minimum) the adjacent SFPUC structures, the Ocean Beach Master Plan, and other existing outfall structures in the area. With implementation of Mitigation Measure 3.9-2, the Project's contribution to the cumulative impact on coastal erosion would not be cumulatively considerable.

As a staff-initiated text change, the following references have been added to Section 3.9, Hydrology and Water Quality:

California Coastal Commission, 2015b. Staff Report (Th14b), application number 2-15-1357 for annual movement of up to 100,000 cubic yards of sand from North Ocean Beach to South Ocean Beach.

NPS, 2016. Ocean Beach Erosion Protection Measures – Immediate Action Plan. [https://parkplanning.nps.gov/projectHome.cfm?parkID=303&projectID=59587] Accessed October 12, 2016.

U.S. Army Corps of Engineers (USACE), 2011. Report of Dredging and Placement of Dredged Material in San Francisco Bay in 2010. Dredged Material Management Office (DMMO), Long Term Management Strategy.

USACE, 2013. Dredging and Placement of Dredged Material in San Francisco Bay. Dredged Material Management Office (DMMO), Long Term Management Strategy. January-December 2012 Report.

Section 3.11, Noise and Vibration

As a staff-initiated text change, EIR/EIS page 3.11-13, Table 3.11-3 has been revised:

TABLE 3.11-3
TYPICAL NOISE LEVELS FROM CONSTRUCTION EQUIPMENT

Construction Equipment	Noise Level[a] (dBA, L_{eq} at 50 Feet)
Excavator	81
Compactor	83
Impact or Vibratory Pile Driver	101
Crane	81
Loader	79
Drill Rig	79
Air Compressor	78
Ventilation Fan	79
Dump truck	76
Generator	81

dBA = A-weighted decibels, Lmax = maximum noise exposure level for the given time period

[a] Maximum noise levels correspond to a distance of 50 feet from the noisiest piece of equipment associated with a given piece of construction equipment.

SOURCE: FHWA, 2006

As a staff-initiated text change, EIR/EIS page 3.11-15, paragraph 1 has been revised:

> The Project's ongoing non-impact Tunnel construction activities occurring over a period of approximately 17 to 37 months would result in noise levels up to ~~77~~ 80 dBA immediately outside the staging area fence line, decreasing to approximately ~~71~~ 73 dBA along the Sunset Trail extending south from the parking lot, and to ~~59~~ 62 dBA or lower along the portion of the Sunset Trail extending north from the parking lot. Non-impact construction noise would attenuate such that it is indistinguishable from ambient noise from Battery Davis northward, but may be audible above ambient noise in other portions of Fort Funston. For areas closest to the construction staging area, this could result in a substantial temporary increase above noise levels existing without the Project, a potentially significant impact.

As a staff-initiated text change, EIR/EIS page 3.11-15, the third bullet point of Mitigation Measure 3.11-1 has been revised:

- Stationary construction noise sources shall be located as far from adjacent residential receptors as possible. Stationary noise-generating construction equipment shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, and/or controlled using other measures to the extent this does not interfere with construction purposes. Specifically, any generator used on site shall be muffled using an acoustical enclosure.

Section 3.15, Transportation and Traffic

In response to Comment Caltrans-4, EIR/EIS page 3.15-3, paragraph 7 (continuing on page 3.15-4) has been revised:

> Caltrans' construction practices require temporary traffic control planning "during any time the normal function of a roadway is suspended" (Caltrans, 2012). Furthermore, Caltrans requires that permits be obtained for transportation of oversized loads and transportation of certain materials, and for construction-related traffic disturbance. Project construction and maintenance activities would not occur on state highways or highway rights-of-way; state roadways would be used solely as access routes for construction workers and construction vehicles. However, the tunnel portion of the project would be excavated under SR 35. Therefore, Caltrans encroachment permits would ~~not~~ be required. Further, oversized vehicles (by weight, height, length, or width) or vehicles carrying hazardous materials that require Caltrans permits would not be used. Caltrans' facilities that are likely to be used as access routes by construction workers and construction vehicles to the planned work sites include: SR 1, SR 35, and I-280 (described above).

In response to Comment CSLC-11, Mitigation Measure 3.15-1 on EIR/EIS page 3.15-9 (continuing on page 3.15-10) has been revised:

> **Mitigation Measure 3.15-1: Construction Traffic Management Plan**. Daly City and/or its contractor(s) shall prepare and implement a Construction Traffic Management Plan in accordance with professional traffic engineering standards to show methods for maintaining traffic flows on roadways and access to recreational resources directly affected by Project construction, which shall include, at a minimum, the following requirements:
>
> a) Develop circulation plans to minimize impacts on local street circulation; use flaggers and/or signage to guide vehicles through and/or around the construction zone (including, as needed, for trucks turning into and out of Fort Funston at the intersection of SR 35 and Fort Funston Road). Circulation plans may be modified during construction, based on observed conditions.
>
> b) Identify truck routes and, to the extent possible, use haul routes that minimize truck traffic on local roadways and residential streets.

c) Schedule truck trips to minimize trips during the peak morning and evening commute hours, and the peak hours of arrivals and departure from Fort Funston, to the extent possible.

d) Provide sufficient staging areas for trucks accessing construction zones to minimize disruption of access to adjacent land uses, particularly within residential neighborhoods.

e) Maintain pedestrian and bicycle access and circulation during Project construction where safe to do so. If construction activities encroach on a bicycle lane, post warning signs that indicate bicycles and vehicles are sharing the lane.

f) Maintain public safety and access on the beach by posting notices and maps at and around the project site and on Golden Gate National Recreation Area's website prior to and during construction, informing the public about when and where public access could be restricted and about alternative access points, if applicable; and incorporate measures on the beach to protect the public during construction activities.

~~f~~g) Store all equipment and materials in designated contractor staging areas on or adjacent to the worksite, in such a manner to minimize obstruction of traffic.

~~g~~h) Implement roadside safety protocols and provide advance "Road Work Ahead" warning signs and speed control (including signs informing drivers of state-legislated double fines for speed infractions in a construction zone) to achieve required speed reductions for safe traffic flow through the work zone.

~~h~~i) Coordinate construction with facility owners or administrators of sensitive land uses such as police and fire stations (including all fire protection agencies), transit stations, hospitals, and schools, as well as Fort Funston. Notify facility owners or operators in advance of the timing, location, and duration of construction activities.

~~i~~j) Provide residents adjacent to Project construction areas (e.g., on Avalon Drive and Westmoor Avenue) with information regarding Project construction in their area, including anticipated start and end of construction activities.

~~j~~k) Coordinate construction with local traffic agencies, SFMTA, NPS, and SamTrans, to minimize disruption and arrange for the temporary relocation of bus stops in work zones as necessary.

Section 3.16, Utilities and Service Systems

In response to comment USEPA-15, EIR/EIS page 3.16-4, paragraph 1 has been revised:

Daly City

~~Allied Waste~~ Republic Services provides residential and commercial garbage collection services for Daly City. Collected garbage that is not compostable is directed to ~~the Daly City Mussel Rock Transfer Station located at Skyline Drive and Westline Drive in Daly City, and eventually~~ the Corinda Los Trancos Landfill (formerly Ox Mountain Sanitary Landfill), located 3 miles east of Half Moon Bay off of Highway 92. This facility has a ceased operational date of January 2018 with a permitted capacity of 69 million cubic yards, and total remaining capacity of approximately 26.9 million cubic yards as of

> May 2011 (Davies, 2014). In 2012, Daly City generated approximately 54,000 tons of solid waste and directed approximately 53,000 tons to the Corinda Los Trancos Landfill (CalRecycle, 2014d).

As a staff-initiated text change, EIR/EIS page 3.16-9, paragraph 4 has been revised:

> As described in Section 3.16.3, Local Regulatory Setting, Daly City's Recycling and Diversion of Construction and Demolition Debris Ordinance requires that at least 60 percent of waste tonnage is recycled. San Francisco's 2006 C&D ordinance requires that a minimum of 65 percent of the material be diverted from the landfill. Since much of the Project construction activities would occur within San Francisco, this analysis assumes that the Project would comply with San Francisco's C&D ordinance, ensuring that at least 65 percent of the excess material (approximately 30,600 cubic yards) is diverted from landfills and that all C&D material is sent to a registered facility that reuses or recycles those materials. Approved facilities that accept mixed C&D debris include the following: Blue Line Transfer Inc. in South San Francisco, San Bruno Garbage Co, Inc., Allied San Carlos Transfer Station in San Carlos, and Recology's transfer station. As a result, the receiving landfill would receive up to 16,500 cubic yards of C&D materials over the construction period. The National Park Service has also expressed interest in potential reuse of some construction spoils at Fort Funston. The Project's contribution to the receiving landfill would be equal to less than 0.06 percent of the remaining capacity of the Corinda Los Trancos Landfill. However, as described in Section 3.16.1.6, operation of the Corinda Los Trancos Landfill is scheduled to be closed in January 2018, and Project construction could extend through mid-2018. Therefore, Daly City would need to find an alternative landfill for disposal of any additional construction waste generated from January 2018 through the end of the Project construction phase. It is possible that some Project-related waste could be off-hauled to the landfill that gets selected (possibly the Recology Ostrom Road Landfill in Yuba County). Other landfills in the San Francisco Bay Area that could accept waste include the Keller Canyon Landfill, which is located in Pittsburg and has an estimated remaining capacity of 63,408,410 cubic yards, and the Acme Landfill, which is located in Martinez and has a remaining capacity of approximately 175,000 cubic yards (CalRecycle, 2014e and 2014f). Because adequate capacity exists at the Corinda Los Trancos Landfill and because any additional construction waste generated beyond 2018 could be accommodated by other Bay Area landfills, potential impacts related to exceeding permitted landfill capacity during construction would be *less than significant.*

Chapter 4, Other CEQA/NEPA Considerations

As a staff-initiated text change, Section 4.2.2.1, Energy Consumption and Effects on Local and Regional Energy Supplies, on EIR/EIS page 4-3 (continuing on page 4-4) has been revised:

> Direct energy use would include the consumption of petroleum fuel for vehicles and the use of electricity for equipment and facilities. Indirect energy use includes the energy required to make the materials and components used in construction of the Project. This

includes energy used for extraction of raw materials, manufacturing, and transportation associated with manufacturing.

Although construction-related energy consumption would occur temporarily during the construction period, it would represent irreversible consumption of finite natural energy resources. Construction-related energy expenditures would include direct uses of energy in the form of fuel (typically diesel fuel for trucks and on-site equipment, and gasoline for commuter vehicles). The precise amount of petroleum fuel demand that would be required to construct the Project is uncertain; however, for the purposes of this analysis, fuel usage in terms of gasoline and diesel have been estimated based on greenhouse gas (GHG) emission estimates for the Project (see Section 3.7, *Greenhouse Gas Emissions and Climate Change*) and The Climate Registry fuel use emission factors (The Climate Registry, 2015). Based on the projected GHG emissions shown in Section 3.7, it is estimated that the Project would use approximately 100,000 gallons of gasoline and 260,000 gallons of diesel during the entire 24- to 44-month construction period. Under the most intensive construction schedule (24 months), the annual construction fuel consumption would be 50,000 gallons of gasoline and 130,000 gallons of diesel. Combined, this annual fuel consumption would represent less than 0.001 percent of statewide annual petroleum fuel use. ~~it is anticipated that gasoline and diesel would be used for construction equipment and worker and haul vehicles~~The use of petroleum fuels during construction would be comparable to similar construction projects, and ~~that~~ this consumption would not have a measurable effect on local and regional energy supplies. If construction power is provided by a temporary PG&E connection instead of a diesel-powered generator, the overall amount of diesel fuel consumed would be substantially lower. The temporary PG&E power connection would not have a significant impact on local or regional electricity supplies because it would be infeasible to provide a temporary connection that would create localized shortages or require additional energy procurement. However, to the extent that electrical power from PG&E comes from non-renewable sources (see Table 4-1), this use of energy would represent an irreversible consumption of those resources (e.g., natural gas).

The primary material used in construction of the Project would be the concrete needed for the collection box, box culvert, diversion structure, Lake Merced portal, tunnel, and Ocean Outlet structure. The use of concrete and other construction materials would result in indirect energy consumption as a result of the energy required to produce them. Daly City's Recycling and Diversion of Construction and Demolition Debris Ordinance requires that at least 60 percent of waste tonnage is recycled. San Francisco's 2006 Construction and Demolition Debris ordinance requires that a minimum of 65 percent of the material be diverted from the landfill. Required compliance with these ordinances would ensure that most of the concrete and other materials to be removed from construction sites would be recycled, contributing to indirect energy conservation by putting these materials to use instead of new materials.

During operation, consumption of diesel and/or gasoline would be limited to infrequent maintenance trips to empty the gross solids screening device, periodic maintenance of the constructed treatment wetlands, and removal and reconstruction of the Ocean Outlet structure (assumed to occur at approximately 25-year intervals). This removal and reconstruction would use a fraction of the amount of fuel required for Project construction because it would be comparable to construction of the proposed Ocean Outlet structure, which is a relatively small portion of the overall Project construction effort.

~~and generators~~Electricity would be used to operate the new diversion structure pumps and gates. However, the Project also would allow Daly City to discontinue pumping treated effluent from the Wastewater Treatment Plant through the force main during wet weather because it would accommodate the use of the gravity pipeline during wet weather. This would eliminate the need for energy consumption to power the existing pumps that currently convey water to the force main.

This energy use would be necessary to implement the Project, and none of the proposed energy-consuming activities associated with each phase would be a wasteful, inefficient, or unnecessary use of energy. The Project would not have a significant impact with respect to fuel and electrical energy requirements or on local or regional energy supplies.

The Tunnel Alignment Alternative and Canal Configuration Alternative would result in similar energy consumption patterns compared to the proposed Project. The Canal Configuration Alternative would use less concrete than the proposed Project because it would omit the box culvert portion of the canal improvements. The Tunnel Alignment Alternative would use a similar amount of concrete compared to the proposed tunnel improvements.

Mitigation: None required.

A reference has been added to EIR/EIS page 4-10:

The Climate Registry, 2015. Table 13.1 US Default CO2 Emission Factors for Transport Fuels. [https://www.theclimateregistry.org/wp-content/uploads/2016/03/2015-TCR-Default-EFs.pdf]

Chapter 5, Consultation and Coordination

In response to Comment CSLC-2, EIR/EIS page 5-2, paragraph 2 has been revised:

5.1.3 CSLC

Daly City staff met with California State Lands Commission (C~~L~~SLC) staff once during preparation of the EIR/EIS. The meeting was conducted via teleconference on October 29, 2014. The purpose of the meeting was to provide C~~L~~SLC staff with an overview of the

Project, review the agency's jurisdiction, identify resource issues that should be considered in the EIR/EIS, and to discuss permitting requirements. The Project schedule was also discussed at the meeting. Of primary interest to C~~L~~SLC staff was determining the landward extent of C~~L~~SLC jurisdiction (given the inland migration of shoreline with bluff erosion) and ensuring that resources within that jurisdiction are protected.

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APPENDIX C (REVISED)

Air Quality

Summary

Summary of Criteria Pollutants Emissions (CEQA)

Average Daily Construction-related Emissions (lbs/day)

	ROG	CO	NOX	SOX	PM2.5	PM10
Off-road	4.9	84.8	20.0	0.0	0.9	0.9
On-road	0.7	5.4	12.3	N/A	0.2	0.3
Combined	**5.6**	**90.1**	**32.2**	**0.0**	**1.2**	**1.2**

Annual Construction Related Emissions (MT/year)

	Year 1	**Year 2**	**Year 3**	All Years
	CO2e	CO2e	CO2e	CO2e
Off-road	192.4	1,575.8	393.7	2,161.9
On-road	700.7	622.4	41.9	1,365.0
Combined	**893.1**	**2,198.2**	**435.5**	**3,526.8**

Summary of Criteria Pollutants Emissions (NEPA)

Year 1

	ROG	CO	NOX	SOX	PM2.5	PM10
Off-road	0.1	2.1	0.8	0.0	0.0	0.0
On-road	0.1	0.6	2.2	N/A	0.0	0.0
Combined	**0.3**	**2.7**	**2.9**	**0.0**	**0.1**	**0.1**

Year 2

	ROG	CO	NOX	SOX	PM2.5	PM10
Off-road	1.1	19.0	4.3	0.0	0.2	0.2
On-road	0.1	0.8	1.6	N/A	0.0	0.0
Combined	**1.2**	**19.8**	**5.8**	**0.0**	**0.2**	**0.2**

Year 3

	ROG	CO	NOX	SOX	PM2.5	PM10
Off-road	0.3	4.8	1.0	0.0	0.0	0.0
On-road	0.0	0.2	0.0	N/A	0.0	0.0
Combined	**0.3**	**5.0**	**1.1**	**0.0**	**0.0**	**0.0**

Construction Equipment Usage by Project Component

Provided by Project Applicant

Equipment	**Construction Usage**				
	Project Component	**Number**	**Duration of Use (weeks)**	**Daily Use (hours/day)**	
Crane (150 ton)	Tunnel	1	90	24	
Excavator (CAT 320E L)	Shaft/Ocean Outlet and Tunnel Portal	1	6	6	
Excavator with hammer (750 Hitachi)	Canal and Wetlands	1	30	6	
Excavator to clean ditch (CAT 320E L)	Canal and Wetlands	1	18	6	
Road Header (Alpine EBZ132) or mini-excavator	Tunnel Drive (each)	1a	28a	16	ON GENERATOR
Loader (CAT 966 or 950)	Tunnel/Ocean Outlet and Tunnel Portal/Canal and Wetlands	1	110	8	
Pile Driver	Shaft/Ocean Outlet and Tunnel Portal/Canal and Wetlands	1	18	8	
Drill Rig	Ocean Outlet and Tunnel Portal	1	2	6	
Compactor (CAT 563)	Canal and Wetlands	1	26	6	
Air Compressor	Tunnel	1	90	24	ON GENERATOR
Ventilation Fan (100 HP)	Tunnel	2	90	24	ON GENERATOR

Note: Equipment use hours split up evenly between project components, when applicable.

Off-road Equipment Inventory

Project Equipment Use Summary — Year 1

Equipment	total hours	Total workdays
Excavator with hammer (750 Hitachi)	180	30
Excavator to clean ditch (CAT 320E L)	900	150
Crane (150 ton)	560	40
Loader (CAT 966 or 950)	352	44
Air Compressor	0	40
Ventilation Fan (100 HP)	0	20
Excavator (CAT 320E L)	390	65
Drill Rig	40	10
Pile Driver	120	30
Compactor (CAT 563)	780	130
Generator	560	40
See tables below for details		

Project Equipment Use Summary — Year 2

Equipment	total hours	Total workdays
~~Compactor (CAT 563)~~		
Crane (150 ton)	3,052	218
Road Header (Alpine EBZ132) or mini-excavator	0	140
Loader (CAT 966 or 950)	2,086	261
Pile Driver	120	30
Drill Rig	40	10
Air Compressor	0	261
Ventilation Fan (100 HP)	0	261
Generator	5,529	261
See tables below for details		

Project Equipment Use Summary — Year 3

Equipment	total hours	Total workdays
Crane (150 ton)	910	65
Loader (CAT 966 or 950)	160	20
Air Compressor	0	65
Ventilation Fan (100 HP)	0	30
Generator	1,394	66
See tables below for details		

Vista Grande Canal

Equipment	No.	hours/day	days/location	total hours	Total days	Year*	
Excavator with hammer (750 Hitachi)	1	6	30	180	30	Year 1	Assuming occurs in first phases of construction activity, in Year 1
Excavator to clean ditch (CAT 320E L)	1	6	150	900	150	Year 1	Assuming occurs in first phases of construction activity, in Year 1
Compactor (CAT 563)	1	6.0	130	780	130	Year 1	Assuming occurs in first phases of construction activity, in Year 1
Pile Driver	1	4.0	30	120	30	Year 1	Assuming occurs in first phases of construction activity, in Year 1

Vista Grande Tunnel

Equipment	No.	hours/day	days/location	total hours	Total days	Year*	
Crane (150 ton)	1	14.0	40	560	40	Year 1	
Crane (150 ton)	1	14.0	218	3,052	218	Year 2	
Crane (150 ton)	1	14.0	65	910	65	Year 3	
Loader (CAT 966 or 950)	1	8.0	44	352	44	Year 1	Loader emissions assigned to Tunnel only, for simplicity
Loader (CAT 966 or 950)	1	8.0	261	2,086	261	Year 2	Loader emissions assigned to Tunnel only, for simplicity
Loader (CAT 966 or 950)	1	8.0	20	160	20	Year 3	Loader emissions assigned to Tunnel only, for simplicity
Pile Driver	1	4	30	120	30	Year 2	Assuming occurs in middle phases of construction activity, in Year 2
Drill Rig	1	4	10	40	10	Year 2	Assuming occurs in middle phases of construction activity, in Year 2
Generator (daytime)	1	14	40	560	40	Year 1	Shaft Excavation and support
Generator (daytime)	1	14	73	1,020	73	Year 2	Shaft Excavation and support
Generator (24h)	1	24	188	4,509	188	Year 2	Excavate and support tunnel, Install final lining and contact grout
Generator (24h)	1	24	46	1,114	46	Year 3	Install final lining and contact grout
Generator (daytime)	1	14	20	280	20	Year 3	Shaft backfill

Ocean Outlet

Equipment	No.	hours/day	days/location	total hours	Total days	Year*	
Excavator (CAT 320E L)	1	6	65	390	65	Year 1	Assuming occurs in first phases of construction activity, in Year 1
Drill Rig	1	4	10	40	10	Year 1	Assuming occurs in first phases of construction activity, in Year 1

All equipment designated to each project component, by year, based on project parameters provided by the applicant, unless otherwise noted.

Year 1

Emission Source	Off-road: Construction Emissions (pounds)					
	ROG	CO	NOX	SOX	PM	CO2
Excavator with hammer (750 Hitachi)	3.52	23.99	38.43	0.05	1.89	4,927.96
Excavator to clean ditch (CAT 320E L)	17.62	119.96	192.14	0.24	9.45	24,639.78
Crane (150 ton)	15.11	60.65	171.08	0.12	7.76	12,146.20
Loader (CAT 966 or 950)	10.22	42.37	98.87	0.09	5.51	9,012.91
Excavator (CAT 320E L)	7.63	51.98	83.26	0.10	4.10	10,677.24
Drill Rig	0.92	9.55	13.30	0.02	0.39	2,377.52
Pile Driver	4.45	15.82	37.26	0.03	2.92	2843.70
Compactor (CAT 563)	12.41	99.06	148.78	0.18	6.91	18348.00
Generator	205.38	3783.33	724.24	0.00	32.43	339242.46
Sum (pounds):	**277**	**4,207**	**1,507**	**1**	**71**	**424,215.8**
Sum (metric tons):						**192.4**

Year 2

Emission Source	Off-road: Construction Emissions (pounds)					
	ROG	CO	NOX	SOX	PM	CO2
Crane (150 ton)	74.12	330.63	840.74	0.63	37.48	66,210.05
Loader (CAT 966 or 950)	55.85	251.10	531.59	0.51	29.62	53,412.37
Pile Driver	4.30	15.82	36.05	0.03	2.82	2,843.79
Drill Rig	0.83	9.55	11.55	0.02	0.33	2,376.63
Generator	2,027.61	37,350.69	7,149.99	0.00	320.15	3,349,152.49
Sum (pounds):	**2,163**	**37,958**	**8,570**	**1**	**390**	**3,473,995**
Sum (metric tons):						**1,575.8**

Year 3

Emission Source	Off-road: Construction Emissions (pounds)					
	ROG	CO	NOX	SOX	PM	CO2
Crane (150 ton)	22.10	98.58	250.68	0.19	11.18	19,741.53
Loader (CAT 966 or 950)	3.89	17.33	44.08	0.03	1.96	3,471.04
Generator	511.36	9,419.71	1,803.20	0.00	80.74	844,644.25
Sum (pounds):	**537**	**9,536**	**2,098**	**0**	**94**	**867,857**
Sum (metric tons):						**393.7**
Total Sum for all years (pounds)	2,977	51,700	12,175	2	556	4,766,068
Total Sum for all years (MT)						2,162
Average pounds/day	**4.88**	**84.75**	**19.96**	**0.00**	**0.91**	**7,813.23**

On-road Criteria Pollutant Emissions

Note: All trips are round trips

Construction Vehicle ROUND Trips PER DAY

Provided by the Project Applicant

Trip Type	Tunnel / Staging Area	Project Component: Ocean Outlet and Tunnel Portals	Canal and Wetlands
Concrete Truck*	30	2	5
Haul Truck**	17	3	40
Worker Vehicle	70	5	10
Maximum Total	**117**	**10**	**55**

*Concrete Truck Staging Area trips would occur for 30 days, according to the project applicant, and are assumed to occur in 2019. Concrete trucks for Ocean Outlet would occur over 80 days

**Haul truck staging area trips would occur for 165 days, according to the project applicant, and are assumed to occur in 2019.

All other trips are assumed to occur for the full length of the project component, for each year construction is expected to occur.

Construction Vehicle Round Trips **Year 1**

Calculated

Trip Type	Tunnel / Staging Area	Project Component: Ocean Outlet and Tunnel Portals	Canal and Wetlands	Totals
Concrete Truck	-		1,198	1,198
Haul Truck	-		9,586	9,586
Worker Vehicle	1,525		2,396	3,921
Totals	1,525	-	13,180	

Construction Vehicle Round Trips **Year 2**

Calculated

Trip Type	Tunnel / Staging Area	Project Component: Ocean Outlet and Tunnel Portals	Canal and Wetlands	Totals
Concrete Truck	900	160	436	1,496
Haul Truck	2,805	231	3,486	6,522
Worker Vehicle	15,700	386	871	16,957
Totals	19,405	777	4,793	

Construction Vehicle Round Trips **Year 3**

Calculated

Trip Type	Tunnel / Staging Area	Project Component: Ocean Outlet and Tunnel Portals	Canal and Wetlands	Totals
Concrete Truck	-	131		131
Haul Truck	-	-		-
Worker Vehicle	3,950	329		4,279
Totals	3,950	460	-	

Total Workdays per year: 261

Emission Factors

Vehicle Type	Units	Running Exhaust Emission Factors: ROG	NOx	PM10	PM2.5	CO	CO2
Light duty truck (LDT2 gas)*	g/mile	0.04	0.20	0.00	0.00	1.63	411.65
Light duty truck (LDT2 gas)	lb/mile	0.00	0.00	0.00	0.00	0.00	0.91
Light duty truck (LDT2 diesel)*	g/mile	0.04	0.59	0.03	0.03	0.23	293.27
Light duty truck (LDT2 diesel)	lb/mile	0.00	0.00	0.00	0.00	0.00	0.65
Heavy duty truck (T7 diesel)*	g/mile	0.25	4.80	0.10	0.09	1.21	1657.64
Heavy duty truck (T7 diesel)	lb/mile	0.00	0.01	0.00	0.00	0.00	3.65

* Emission factor obtained online from EMFAC 2011 for 2016, San Mateo County, average model years, and average speed.

Year 1 Total Worker and Material Delivery/Haul-off Trips Criteria Pollutant Emissions

Vehicle Type	Trips/year	miles/trip	ROG	NOx	PM10	PM2.5	CO
Light duty truck (gas)	1,961	24.8	4.5	21.8	0.2	0.2	174.4
Light duty truck (diesel)	1,961	24.8	4.5	63.0	3.5	3.2	24.8
Heavy duty truck - Haul	9,586	40.0	208.4	4053.6	82.3	75.7	1022.9
Heavy duty truck - Vendor	1,198	14.6	9.5	184.9	3.8	3.5	46.7
Total Annual Emissions (pounds/year)			**227**	**4,323**	**90**	**83**	**1,269**
Average 2018 Daily Emissions (lbs/day)			**0.87**	**16.58**	**0.34**	**0.32**	**4.87**

Year 2 Total Worker and Material Delivery/Haul-off Trips Criteria Pollutant Emissions

Vehicle Type	Trips/year	miles/trip	ROG	NOx	PM10	PM2.5	CO
Light duty truck (gas)	8,479	24.8	19.5	94.3	0.9	0.8	754.0
Light duty truck (diesel)	8,479	24.8	19.3	272.2	15.2	14.0	107.2
Heavy duty truck - Haul	6,522	40.0	141.8	2758.1	56.0	51.5	696.0
Heavy duty truck - Vendor	1,496	14.6	11.9	230.9	4.7	4.3	58.3
Total Annual Emissions (pounds/year)			**181**	**3,125**	**72**	**66**	**1,615**
Average 2019 Daily Emissions (lbs/day)			**0.69**	**11.98**	**0.28**	**0.25**	**6.20**

Year 3 Total Worker and Material Delivery/Haul-off Trips Criteria Pollutant Emissions

Vehicle Type	Trips/year	miles/trip	ROG	NOx	PM10	PM2.5	CO
Light duty truck (gas)	2,139	24.8	4.9	23.8	0.2	0.2	190.2
Light duty truck (diesel)	2,139	24.8	4.9	23.8	0.2	0.2	190.2
Heavy duty truck - Haul	0	40.0	0.0	0.0	0.0	0.0	0.0
Heavy duty truck - Vendor	131	14.6	0.2	20.3	0.4	0.4	5.1
Total Annual Emissions (pounds/year)			**10**	**48**	**0**	**0**	**386**
Average 2020 Daily Emissions (lbs/day)			**0.04**	**0.18**	**0.00**	**0.00**	**1.48**

Total Construction Period - Total Worker and Material Delivery/Haul-off Trips Criteria Pollutant Emissions

	ROG	NOx	PM10	PM2.5	CO
Average Daily Emissions (lbs/day)	**0.68**	**12.29**	**0.27**	**0.24**	**5.36**

All trips per day are round-trips. The light-duty truck trips represent employee commute trips. Trips lengths based on CalEEMod v2103.2.2 defaults for San Mateo County.

It is assumed that half of total trips would be associated with light-duty diesel vehicles and half would be associated with light-duty gasoline vehicles.

On-road GHG Emissions

CH4 and N2O Emission Factors

Vehicle Type	Running Exhaust Emission Factors (pounds/mile)	
	CH4***	N2O***
Light duty truck (gas)	0.0001	0.0001
Light duty truck (diesel)	0.0001	0.0001
Heavy duty truck	0.0000	0.0000
Total	0.0003	0.0002

** Emission factor obtained online from EMFAC 2011, for San Mateo County, average model years, and average speed.

*** California Climate Action Registry, General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009. Tables C.3 and C.6.

Year 1 Worker and Material Delivery/Off-haul Trips GHG Emissions

Vehicle Type	Trips/year	miles/trip	CO2	CH4	N2O	CO2e
Light duty truck (gas)	1,961	24.8	20.02	0.00	0.00	20.60
Light duty truck (diesel)	1,961	24.8	14.26	0.00	0.00	14.85
Heavy duty truck - Haul	9,586	40	635.59	0.00	0.00	636.21
Heavy duty truck - Vendor	1,198	14.6	29.00	0.00	0.00	29.03
Total (metric tons)	**NA**	**NA**	**698.87**	**0.01**	**0.01**	**700.69**

Year 2 Worker and Material Delivery/Off-haul Trips GHG Emissions

Vehicle Type	Trips/year	miles/trip	CO2	CH4	N2O	CO2e
Light duty truck (gas)	8,479	24.8	86.6	0.0	0.0	89.1
Light duty truck (diesel)	8,479	24.8	61.7	0.0	0.0	64.2
Heavy duty truck - Haul	6,522	40	432.5	0.0	0.0	432.9
Heavy duty truck - Vendor	1,496	14.6	36.2	0.0	0.0	36.2
Total (metric tons)	**NA**	**NA**	**616.88**	**0.03**	**0.02**	**622.41**

Year 3 Worker and Material Delivery/Off-haul Trips GHG Emissions

Vehicle Type	Trips/year	miles/trip	CO2	CH4	N2O	CO2e
Light duty truck (gas)	2,139	24.8	21.8	0.0	0.0	22.5
Light duty truck (diesel)	2,139	24.8	15.6	0.0	0.0	16.2
Heavy duty truck - Haul	0	40	0.0	0.0	0.0	0.0
Heavy duty truck - Vendor	131	14.6	3.2	0.0	0.0	3.2
Total (metric tons)	**NA**	**NA**	**40.58**	**0.01**	**0.00**	**41.86**

Total Construction Period - Total Worker and Material Delivery/Haul-off Trips Criteria Pollutant Emissions

	CO2	CH4	N2O	CO2e
Total (metric tons)	**1,356.33**	**0.04**	**0.03**	**1,364.97**
Average Daily Emissions (lbs/day)	**4,902**	**0.00**	**0.00**	**4,902**

All trips per day are round-trips. The light-duty truck trips represent employee commute trips. Trips lengths based on CalEEMod v2103.2.2 vehicles.

Notes: 0.907194 metric tons = 1 ton; 2000 pounds = 1 ton; 2204.6 pounds = 1 metric ton.
Global Warming Potential for CH4 = 23; GWP for N2O = 296.

Gasoline emission factors for GHG

0.0563 g CH4/mile (CCAR, 2009)
0.03639 g NO2/mile (CCAR, 2009)

Diesel emission factors for GHG (CCAR, 2009)

0.0048 g CH4/mile (CCAR, 2009)
0.0051 g NO2/mile (CCAR, 2009)

Reference:

California Climate Action Registry, General Reporting Protocol, Reporting Entity-Wide Greenhouse Gas Emissions, Version 3.1, January 2009. Tables C.3 and C.6.

Off-road Output

Emission factors below are provided by the SMAQMD Road Construction Emissions Model Version 7.1.5.1, which is based off of OffRoad 2011 Model factors.

Year 1

			ROG	CO	NOX	SOX	PM	CO2	Load Factors	ROG	CO	NOX	SOX	PM	CO2	
Equipment Type	**Horsepower**	**Max HP**	**g/hp/hr**							**g/hr**						gal/hr
Crane	226.2	250	0.188	0.754	2.126	0.001	0.096	150.967	0.288	**12.2**	**49.1**	**138.6**	**0.1**	**6.3**	**9,838**	
Excavator	162.7	175	0.143	0.973	1.559	0.002	0.077	199.859	0.382	**8.9**	**60.5**	**96.8**	**0.1**	**4.8**	**12,418**	
Rubber Tired Loader	170	175	0.214	0.888	2.072	0.002	0.116	188.830	0.362	**13.2**	**54.6**	**127.4**	**0.1**	**7.1**	**11,614**	
Trencher (proxy for Pile Driver)	80.8	120	0.414	1.473	3.468	0.003	0.272	264.741	0.503	**16.8**	**59.8**	**140.8**	**0.1**	**11.0**	**10,749**	
Bore/Drill Rigs	205.8	250	0.101	1.047	1.458	0.002	0.043	260.705	0.503	**10.5**	**108.3**	**150.8**	**0.3**	**4.4**	**26,961**	
Roller (Compactor)	145	175	0.133	1.059	1.590	0.002	0.074	196.123	0.375	**7.2**	**57.6**	**86.5**	**0.1**	**4.0**	**10,670**	
Air Compressor	105.7	120	0.367	1.837	2.353	0.003	0.197	272.784	0.480	**18.6**	**93.2**	**119.4**	**0.2**	**10.0**	**13,840**	
Ventilation Fan	100	120	0.464	2.617	3.388	0.005	0.248	420.542	0.740	**34.3**	**193.7**	**250.7**	**0.4**	**18.4**	**31,120**	
Generator	1089	1089	0.255	4.690	0.898	0.000	0.040	420.542	0.600	**166.4**	**3064.4**	**586.6**	**0.0**	**26.3**	**274,782**	

Year 2

			ROG	CO	NOX	SOX	PM	CO2	Load Factors	ROG	CO	NOX	SOX	PM	CO2
Equipment Type	**Horsepower**	**Max HP**	**g/hp/hr**							**g/hr**					
Crane	226.2	250	0.169	0.754	1.917	0.001	0.085	150.998	0.288	**11.0**	**49.1**	**125.0**	**0.1**	**5.6**	**9,840**
Excavator	162.7	175	0.133	0.973	1.413	0.002	0.070	199.819	0.382	**8.3**	**60.4**	**87.8**	**0.1**	**4.3**	**12,416**
Rubber Tired Loader	170	175	0.197	0.888	1.880	0.002	0.105	188.858	0.362	**12.1**	**54.6**	**115.6**	**0.1**	**6.4**	**11,616**
Trencher (proxy for Pile Driver)	80.8	120	0.401	1.473	3.356	0.003	0.263	264.749	0.503	**16.3**	**59.8**	**136.3**	**0.1**	**10.7**	**10,749**
Bore/Drill Rigs	205.8	250	0.091	1.047	1.267	0.002	0.036	260.607	0.503	**9.4**	**108.3**	**131.0**	**0.3**	**3.8**	**26,951**
Roller (Compactor)	145	175	0.123	1.059	1.453	0.002	0.068	196.072	0.375	**6.7**	**57.6**	**79.1**	**0.1**	**3.7**	**10,667**
Air Compressor	105.7	120	0.340	1.831	2.215	0.003	0.179	272.784	0.480	**17.3**	**92.9**	**112.4**	**0.2**	**9.1**	**13,840**
Ventilation Fan	100	120	0.426	2.606	3.196	0.005	0.227	420.542	0.740	**31.5**	**192.8**	**236.5**	**0.4**	**16.8**	**31,120**
Generator	1089	1089	0.255	4.690	0.898	0.000	0.040	420.542	0.600	**166.4**	**3064.4**	**586.6**	**0.0**	**26.3**	**274,782**

Year 3

			ROG	CO	NOX	SOX	PM	CO2	Load Factors	ROG	CO	NOX	SOX	PM	CO2
Equipment Type	**Horsepower**	**Max HP**	**g/hp/hr**							**g/hr**					
Crane	226.2	250	0.146	0.754	1.663	0.001	0.072	150.973	0.288	**9.5**	**49.1**	**108.4**	**0.1**	**4.7**	**9,839**
Excavator	162.7	175	0.109	0.973	1.117	0.002	0.054	199.828	0.382	**6.8**	**60.4**	**69.4**	**0.1**	**3.4**	**12,416**
Rubber Tired Loader	170	175	0.170	0.888	1.580	0.002	0.088	188.862	0.362	**10.4**	**54.6**	**97.2**	**0.1**	**5.4**	**11,616**
Trencher (proxy for Pile Driver)	80.8	120	0.346	1.472	2.972	0.003	0.226	264.562	0.503	**14.1**	**59.8**	**120.7**	**0.1**	**9.2**	**10,742**
Bore/Drill Rigs	205.8	250	0.081	1.043	1.082	0.002	0.031	259.656	0.503	**8.4**	**107.9**	**111.9**	**0.3**	**3.2**	**26,852**
Roller (Compactor)	145	175	0.104	1.059	1.194	0.002	0.055	196.125	0.375	**5.7**	**57.6**	**64.9**	**0.1**	**3.0**	**10,670**
Air Compressor	105.7	120	0.312	1.825	2.073	0.003	0.160	272.784	0.480	**15.9**	**92.6**	**105.2**	**0.2**	**8.1**	**13,840**
Ventilation Fan	100	120	0.387	2.595	2.999	0.005	0.204	420.542	0.740	**28.6**	**192.0**	**222.0**	**0.4**	**15.1**	**31,120**
Generator	1089	1089	0.255	4.690	0.898	0.000	0.040	420.542	0.600	**166.4**	**3064.4**	**586.6**	**0.0**	**26.3**	**274,782**

	ROG	CO	NOX	SOX	PM	CO2
	g/kW-hr					
Generator Emission Factors (Tier 4)	0.190	3.500	0.670		0.030	

ROG	CO	NOX	SOX	PM	CO2
g/hp-hr					
0.255	4.690	0.898	0.000	0.040	Use Default

Road Dust Calculations

Source: AP-42 Handbook, Chapter 13.2.1, page 5

Equation:

E equals $[k\ (sL)^{0.91} \times (W)^{1.02}]*(1-P/4N)$

where:

k	=	particle size multiplier for particle size range and units of interest. k = particle size multiplier. The AP-42 value for PM10 is 1.00 g/mile and that for PM2.5 is 0.25 g/mile.
sL	=	road surface silt loading (grams per square meter)
W	=	average weight (tons) of *all the vehicles* traveling the road (2.4 tons)
P	=	number of "wet" days with at least 0.254 mm (0.01 in) of precipitation during the averaging period, and
N	=	number of days in the averaging period (e.g., 365 for annual, 91 for seasonal, 30 for monthly)

For the Existing Scenario (San Francisco Bay Area):

For PM_{10}			**For $PM_{2.5}$**		
k	=	1	k	=	0.25
sL	=	0.1	sL	=	0.1
W	=	2.4	W	=	2.4
P	=	64	P	=	64
N	=	365	N	=	365
Therefore:			Therefore:		
E	=	**0.287308**	E	=	**0.071827**

2016 Road Dust

Miles Travelled =	498173.9			
PM10 Emissions =	143129.5 gm/yr	=	0.157773 ton/yr	
PM2.5 Emissions =	35782.36 gm/yr	=	0.039443 ton/yr	

Fugitive Dust Calculations

1.Truck Loading

Processes such as truck dumping on the pile or loading out from the pile to a truck with a front-end loader also cause fugitive dust emissions.
Calculated emissions use the methodology described in Section 13.2, Introduction to Fugitive Dust Sources, of USEPA AP-42.
The emission factor that is based on the material moisture content and mean wind speed is calculated using the following formula:

A. Emission factors

EF = k x (0.0032) x ((u/5)^1.3/(M/2)^1.4)

Where:
EF = Emission factor (lb/ton)
k = particle size multiplier (AP-42)
U = mean wind speed (mph)
M = material moisture content (%)

k =	0.35	pm10
	0.053	pm2.5
U =	10.3	mph (SFO)
M =	12	% (cover)
EF_{pm10} =	2.33E-04	lb/ton
$EF_{pm2.5}$ =	3.53E-05	lb/ton

B. Emissions

Emissions = EF x throughput (tons)

i. Year 1

Truck trips =	9,586	daily round trips (loads)
Assume 18 cy/truck =	172542.9	cy/year
Annual thoughput =	172542.9	cy/year
Loam density =	1.264	tons/cy (CalEEmod)
Annual throughput =	218094.2	tons

PM10 emissions =	50.87	lb/yr	=	0.025436 ton/yr
PM2.5 emission =	7.70	lb/yr	=	0.003852 ton/yr

ii. Year 2

Truck trips =	6,522	daily round trips (loads)
Assume 18 cy/truck =	117398.6	cy/year
Annual thoughput =	117398.6	cy/year
Loam density =	1.264	tons/cy (CalEEmod)
Annual throughput =	148391.8	tons

PM10 emissions =	34.61	lb/yr	=	0.017307 ton/yr
PM2.5 emission =	5.24	lb/yr	=	0.002621 ton/yr

iii. Year 3

Truck trips =	0	daily round trips (loads)
Assume 18 cy/truck =	0	cy/year
Annual thoughput =	0	cy/year
Loam density =	1.264	tons/cy (CalEEmod)
Annual throughput =	0	tons

PM10 emissions =	0.00	lb/yr	=	0 ton/yr
PM2.5 emission =	0.00	lb/yr	=	0 ton/yr

RESOLUTION NO. 17-200

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF DALY CITY ADOPTING CERTIFICATION OF FINAL ENVIRONMENTAL IMPACT REPORT/ENVIRONMENTAL IMPACT STATEMENT AND ADOPTING THE FINDINGS OF FACT, A STATEMENT OF OVERRIDING CONSIDERATIONS AND A MITIGATION MONITORING AND REPORTING PROGRAM FOR THE VISTA GRAND DRAINAGE IMPROVEMENT PROJECT

(Vista Grande Drainage Basin Improvement Project)

WHEREAS, the City of Daly City ("City") constructed the Vista Grande Canal and Tunnel in the 1890's in order to divert storm water away from the lake to an outlet at the Pacific Ocean;

WHEREAS, the Vista Grande Canal and Tunnel drains the northwestern portion of Daly City and an unincorporated portion of San Mateo County – areas originally within the watershed of Lake Merced;

WHEREAS, the Ocean Outlet and a portion of the Tunnel are located within Fort Funston, part of the Golden Gate National Recreation Area ("GGNRA"), which is operated under the authority of the National Parks Service ("NPS");

WHEREAS, the existing Canal and Tunnel do not have adequate hydraulic capacity to convey peak storm flows, and this periodically causes backup of Tunnel flows into the Canal and flooding during peak storm events in adjacent low-lying residential areas and along John Muir Drive;

WHEREAS, Daly City has developed the proposed Vista Grande Drainage Basin Improvement Project ("Project") to address the deficiencies of the basin as outlined above;

WHEREAS, the Improvement Project consists of partial replacement of the existing Canal to incorporate a gross solid screening device, an approximately 2.6-acre constructed treatment wetland, and diversion and discharge structures to route some storm water (and authorized non-storm water) flows from the Canal to Lake Merced and to allow lake water to be used for summer treatment wetland maintenance;

WHEREAS, the Improvement Project also consists of the following: (1) Modification of the existing effluent gravity pipeline so that it may be used year-round to convey treated effluent from the nearby Wastewater Treatment Plant owned and operated by the District to the existing outlet and diffuser by gravity, and abandoning the force main pipeline; (2) Modification of the existing lake overflow structure to include an adjustable weir and siphon that allows water from the lake to flow into the Canal and Vista Grande Tunnel; (3) Replacement of the existing Tunnel to expand its hydraulic capacity and extend its operating lifetime and replacement of the Lake Merced Portal to the Tunnel; and (4) Replacement of the existing Ocean Outlet structure and a portion of the existing 33-inch submarine outfall pipeline that crosses the beach at Fort Funston;

WHEREAS, the Project requires review pursuant to the California Environmental Quality Act ("CEQA") (Pub. Resources Code, section 21000 *et seq.*), and the City, as Lead Agency under CEQA, and the NPS, as Lead Agency under the National Environmental Policy Act ("NEPA") prepared a Joint Environmental Impact Report ("EIR") and Environmental Impact Statement ("EIS");

WHEREAS, a Notice of Preparation was released for public and public agency review and comment on February 28, 2013, During the approximately 60-day public scoping period that ended on April 26, 2013, Daly City and the NPS accepted comments from agencies and interested parties identifying environmental issues that should be addressed in the EIR/EIS. Public scoping meetings were held on March 19, 2013 and on March 28, 2013 to receive oral comments and solicit written comments on the scope of the EIR/EIS;

WHEREAS, the City distributed a Notice of Availability for the Draft EIR/EIS on April 29, 2016, which started a 45-day public review period, ending on July 1. 2016. During the 60-day public review period, the City conducted a public meeting on May26, 2016 to provide an opportunity for the public and regulatory agencies to learn about the Project and be informed about how to submit comments on the adequacy and accuracy of the Draft EIR/EIS.

WHEREAS, the Draft EIR/EIS was also submitted to the State Clearinghouse for state agency review (State Clearinghouse No. 2013032001);

WHEREAS, the Final EIR/EIS was released for agency review on September 8, 2017; and

WHEREAS, the City Council held a public hearing on December 11, 2017 to review the Final EIR/EIS for certification; and

WHEREAS, the City Council reviewed all evidence presented both orally and in writing and intends to make certain findings in compliance with CEQA, which are more fully set forth in this Resolution;

NOW, THEREFORE, BE IT RESOLVED by the City Council as follows:

<u>Findings</u>

The City Council hereby makes the following findings of fact:

1. In accordance with the California Environmental Quality Act (CEQA), the City issued a Notice of Completion for a Draft Environmental Impact Report (DEIR) prepared to evaluate the environmental impacts that could result from the General Plan's implementation. The DEIR was submitted to the State Clearinghouse for public dissemination on May 26, 2016.

2. The DEIR was circulated for comment for at least 45 days (from April 29, 2016 to July 1, 2016) in accordance with the requirements of CEQA, and the acceptance of written comments for the required statutory period.

3. During the 60-day public review period, the City conducted a public meeting on May26, 2016 to provide an opportunity for the public and regulatory agencies to learn about the Project and be informed about how to submit comments on the adequacy and accuracy of the Draft EIR.

3. The Final EIR/EIS, incorporating all of the comments and responses to comments was released for agency review on September 8, 2017.

4. According to CEQA Guidelines Section 15093(b), a lead agency may allow the occurrence of significant, unmitigated effects if the Lead Agency finds, in writing, reasons to support the action based on the information in the FEIR. CEQA guidelines further state that in the case of finding there are overriding considerations, the Lead Agency should consider the balance of the benefits of the proposed project against its environmental risks.

5. The City Council finds that the Proposed Project has two primary, mutually supporting objectives to address the storm-related flooding that periodically occurs as a result of inadequate storm drainage capacity in Daly City's Vista Grande Canal and Tunnel, and to augment water surface levels and manage water quality in San Francisco's Lake Merced.

6. The City Council finds that the benefits of the Project in terms addressing storm-related flooding and water levels and water quality in Lake Merced as a whole outweigh the potential unmitigatable impacts cited in the FEIR. This finding is based, on the facts contained in the Statement of Facts Supporting Findings and Statement of Overriding Considerations for the Vista Grande Drainage Basin Improvement Project EIR/EIS as stated in the report titled the *Vista Grande Drainage Basin Improvement Project California Environmental Quality Act Findings: Findings of Fact, Evaluation of Mitigation Measures and Alternatives, and Statement of Overriding Considerations City of Daly City*, as set forth attached as Attachment "A", and hereby incorporated by reference to this Resolution.

BE IT FURTHER RESOLVED by the City Council as follows, based on substantial evidence in the administrative record:

1. Certification:

   a. The Final EIR/EIS has been completed in compliance with the requirements of CEQA and the CEQA Guidelines. (CEQA Guidelines §15090(a)(1))

b. That there was adequate public review of the Draft EIR/EIS, and that the City has considered all comments on the Draft EIR/EIS and responses to comments, and that the Final EIR/EIS adequately discusses all significant issues.

c. The Final EIR/EIS reflects the independent judgment and analysis of the City. (CEQA Guidelines §15090(a)(3))

d. The Final EIR/EIS was presented to the City Council on December 11,2 107, and the City Council has reviewed and considered the information contained in the Final EIR/EIS in the decision-making process. (CEQA Guidelines §15090(a)(2))

e. Therefore, the City Council finds that the Final EIR/EIS has been completed in compliance with the requirements of CEQA and the CEQA Guidelines. (CEQA Guidelines §15090(a)(1)).

2. Significant Impacts:

a. The Final EIR/EIS identifies potentially significant environmental impacts of the proposed Project that can be mitigated to a less-than-significant level. The City Council makes the findings with respect to these significant impacts as set forth in Attachment A. (CEQA Guidelines §15191)

b. The Final EIR/EIS identifies potentially significant environmental impacts of the proposed Project that cannot be mitigated to a less-than-significant level and are thus considered significant and unavoidable. The City Council makes the findings with respect to these significant impacts as set forth in attached Attachment A. (CEQA Guidelines §15191)

c. All other potential impacts identified in the Final EIR/EIS would be less than significant without mitigation. Therefore, further findings are not required for those impacts.

3. Alternatives:

The Final EIR/EIS includes two project alternatives, including the mandatory No Project Alternative. These alternatives are found to be infeasible based on the findings set forth in attached Attachment A. (CEQA Guidelines §15091)

4. Statement of Overriding Considerations:

The adoption of all feasible mitigation measures will not avoid or reduce to a less-than-significant level all potentially significant adverse environmental efforts

caused by the proposed Project. However, the City Council finds that the proposed Project's benefits override and outweigh its unavoidable impacts on the environment, and adopt a Statement of Overriding Considerations, as set forth in attached Attachment A. (CEQA Guidelines §15049 and 15093)

5. Mitigation Monitoring and Reporting Program:

The City Council adopts the Mitigation Monitoring and Reporting Program set forth in the Final EIR, Appendix A-1, as set forth in the attached Attachment A. (CEQA Guidelines §15097).

6. Other Findings and Information:

The documents and other materials which constitute the administrative record of proceedings upon which the City Council bases its recommendations with respect to the Project are located at City Hall, 333 90th Street, Daly City, CA. The custodians of these documents are the City Clerk and Director of Water and Wastewater. (CEQA Guidelines §15091(e))

BE IT FURTHER RESOLVED by the City Council that it certifies the Final EIR/EIS, adopts the Statement of Overriding Consideration and adopts the MMRP, and approves the Vista Grande Basin Improvement Project, based on the findings set forth in this Resolution.

I hereby certify the foregoing to be a true copy of a Resolution adopted by the City Council of Daly City, California, at a regular meeting thereof held on the 11th day of December, 2017, by the following vote of the members thereof:

AYES, and in favor thereof, Councilmembers: Buenaventura, Christensen, Sylvester, Manalo

NOES, Councilmembers: None

Absent, Councilmembers: Guingona

K. Annette Ikpona
CITY CLERK OF THE CITY OF DALY CITY

APPROVED:

JUSLYN C. MANALO
MAYOR OF THE CITY OF DALY CITY

ATTACHMENT "A"

Vista Grande Drainage Basin Improvement Project
California Environmental Quality Act Findings: Findings of Fact, Evaluation of Mitigation Measures and Alternatives, and Statement of Overriding Considerations
City of Daly City

The City of Daly City ("Daly City" or "the City"), as the lead agency, and the National Park Service ("NPS") as the federal lead agency, prepared a joint Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Vista Grande Drainage Basin Improvement Project ("Project"). The EIR/EIS was prepared in accordance with the California Environmental Quality Act ("CEQA") and the National Environmental Policy Act ("NEPA") and consists of the Draft EIR/EIS and the Final EIR/EIS. The EIR/EIS analyzes the significant effects of the Project on the environment.

Daly City makes and adopts the following findings of fact and decisions regarding mitigation measures and alternatives, and the statement of overriding considerations, based on substantial evidence in the whole record of this proceeding and under in accordance with CEQA, (Pub. Resources Code, § 21000 et seq.) and Guidelines for Implementation of CEQA ("CEQA Guidelines") (14 California Cal. Code Regs. § 15000 et seq.). Because these findings are based on the CEQA analysis of the Project, most references to the joint EIR/EIS simply refer to the Draft or Final EIR. The NPS is separately responsible for making a decision on its federal actions based on the EIS and the entire record compiled during the joint CEQA and NEPA evaluation process.

This document is organized as follows:

Section I provides a description of the Project proposed for adoption, the environmental review process for the Project, the approval actions to be taken, and the location of records;

Section II identifies the impacts found not to be significant that do not require mitigation;

Section III identifies potentially significant impacts that can be avoided or reduced to less-than-significant levels through mitigation and describes the disposition of the mitigation measures;

Section IV identifies significant impacts that cannot be avoided or reduced to less-than significant levels and describes any applicable mitigation measures as well as the disposition of the mitigation measures;

Section V evaluates the different Project alternatives and the economic, legal, social, technological, and other considerations that support approval of the Project and the rejection of the alternatives, or elements thereof, analyzed; and

Section VI presents a statement of overriding considerations setting forth specific reasons in support of the City's actions and its rejection of the alternatives not incorporated into the Project.

The Mitigation Monitoring and Reporting Program ("MMRP") for the mitigation measures that have been proposed for adoption is attached to these findings as **Attachment A-1**. The MMRP is required by Public Resources Code Section 21081.6 and CEQA Guidelines Section 15091. Attachment A-1 provides a table setting forth each mitigation measure listed in the Final EIR for the proposed Project that is required to reduce or avoid a significant adverse impact. Attachment A-1 also specifies the agency responsible for implementation of each measure and establishes monitoring actions and a monitoring schedule. The full text of the mitigation measures is set forth in Attachment A-1.

These findings are based upon substantial evidence in the entire record before the City. The references set forth in these findings below to certain pages or sections of the Draft EIR or the Response to Comments document ("RTC") in the Final EIR are for ease of reference and are not intended to provide an exhaustive list of the evidence relied upon for these findings.

I. Approval of the Project

A. Project Description

By this action, Daly City adopts and implements the Project identified as the Vista Grande Drainage Basin Improvement Project, to address storm-related flooding in the Vista Grande Drainage Basin (Basin) while providing the additional benefit of augmenting the water level of Lake Merced. The Vista Grande storm drain system drains the northwestern portion of Daly City and an unincorporated portion of San Mateo County – areas originally within the watershed of Lake Merced. In the 1890s, the Vista Grande Canal and Tunnel were built to divert stormwater away from the lake to an outlet at the Pacific Ocean. The Ocean Outlet and a portion of the Tunnel are located within Fort Funston, part of the Golden Gate National Recreation Area ("GGNRA"), which is operated under the authority of the NPS. The existing Canal and Tunnel do not have adequate hydraulic capacity to convey peak storm flows, and this periodically causes backup of Tunnel flows into the Canal and flooding during peak storm events in adjacent low-lying residential areas and along John Muir Drive. The proposed Project would consist of improvements within the Vista Grande Basin storm drain system upstream of the Vista Grande Canal; partial replacement of the existing Canal to incorporate a gross solid screening device, an approximately 2.6-acre constructed treatment wetland, and diversion and discharge structures to route some stormwater (and authorized non-stormwater) flows from the Canal to Lake Merced

and to allow lake water to be used for summer treatment wetland maintenance; modification of the existing effluent gravity pipeline so that it may be used year round to convey treated effluent from the nearby Wastewater Treatment Plant owned and operated by the North San Mateo County Sanitation District to the existing outlet and diffuser by gravity, and abandoning the force main pipeline; modification of the existing lake overflow structure to include an adjustable weir and siphon that allows water from the lake to flow into the Canal and Vista Grande Tunnel; replacement of the existing Tunnel to expand its hydraulic capacity and extend its operating lifetime and replacement of the Lake Merced Portal to the Tunnel; and replacement of the existing Ocean Outlet structure and a portion of the existing 33-inch submarine outfall pipeline that crosses the beach at Fort Funston. Operational components of the Project would include management of water surface elevations in Lake Merced and a Lake Management Plan that would include water quality best management practices, including upstream improvements in the Basin and additional actions, the implementation of which may be triggered during post-Project monitoring. In addition, the Project includes NPS execution of a special use permit for construction activities within GGNRA lands and the expansion of the right-of-way ("ROW") to accommodate the replacement Ocean Outlet structure.

B. Project Objectives

Daly City developed the Project to address the following objectives:

- Improve stormwater drainage of the lower Vista Grande Basin to accommodate peak flows generated by the 25-year design storm;
- Provide a sustainable source of stormwater, establish a target maximum water surface elevation, and implement a Lake Management Plan for management of Lake Merced water quality, groundwater, and surface water elevation;
- Improve recreational access and reduce litter transfer and deposition along the beach below Fort Funston; and
- Maximize use of existing ROWs, easements, and infrastructure to minimize construction-related costs, habitat disturbance, and disruption to recreational users.

C. Environmental Review

In accordance with Sections 15063 and 15082 of the CEQA Guidelines, Daly City, as lead agency, prepared a Notice of Preparation ("NOP") to prepare a joint EIR and EIS for the Project in cooperation with the NPS. The NOP was circulated to local, state, and federal agencies and to other interested parties on February 28, 2013, initiating a public scoping period that extended through June 7, 2013. The NOP provided a general description of the proposed Project, locations, and objectives, and included a preliminary list of the potential environmental impacts related to the following resource topics: aesthetics; air quality; biological resources; cultural and archaeological resources; greenhouse gas emissions; hazards and hazardous materials; hydrology and water quality; land use; noise and vibration; public services and utilities; recreation; socioeconomics and environmental justice; soils, seismicity, and geologic resources; and transportation and traffic.

Pursuant to CEQA Guidelines Section 15083, Daly City held one public scoping meeting on March 28, 2013 at the Doelger Senior Center Café/Kitchen at Westlake Park in Daly City, California. The purpose of the meeting was to present the proposed Project to the public and receive public input regarding the proposed scope of the EIR analysis. Attendees were provided an opportunity to voice comments or concerns regarding potential effects of the Project.

Three members of the public attended the scoping meeting. In addition to comments received from attendees at the scoping meeting, which were summarized in notes taken by meeting organizers, eight comment letters on the NOP were received via mail, e-mail, or fax. One of the comment letters also attached two prior letters regarding prior alternatives analysis and preliminary project design-related documents published by Daly City and the City and County of San Francisco about the proposed Project; to the extent applicable, these also were treated as scoping comments for the EIR. The comments addressed concerns regarding project description, required permits, aesthetics, biological resources, cultural resources, geology and soils, greenhouse gas emissions and climate change, hazards and hazardous materials and public health, hydrology and water quality, consistency with local plans and policies, odors, recreational impacts, transportation, and cumulative impacts.

Daly City then prepared the Draft EIR, which describes the Project and the environmental setting, identifies potential impacts, presents mitigation measures for impacts found to be significant or potentially significant, and evaluates three alternatives to the Project, including a "No Project" alternative. The EIR also considers the cumulative impact of the Project and alternatives in combination with other past, present, and future projects with potential for impacts on the same resources.

Each environmental issue presented in the Draft EIR is analyzed with respect to significance criteria that are based on CEQA Guidelines Appendix G, with some modifications to ensure that anticipated potential effects, such as interference with local utility corridors, would be addressed.

The Draft EIR was circulated to local, state, and federal agencies and to interested organizations and individuals for review and comment on April 28, 2016 for a 60-day public review period that closed on July 1, 2016. Daly City made the Draft EIR available for download its Project website, the address for which was included in all public notices. Paper copies of the Draft EIR were made available for public review at the following locations: (1) the Daly City Office of the City Clerk, 333 90th Street, Daly City, California; and (2) the Westlake Branch of the Daly City Public Library, 275 Southgate Avenue, Daly City, California. Daly City also distributed notices of availability of the Draft EIR on April 28, 2016; issued a news release on April 29, 2016; and posted notices at locations within the Project area on May 2, 2016.

During the 60-day public review period, Daly City conducted a public meeting to provide an opportunity for the public and regulatory agencies to learn about the project and be informed about how to submit comments on the adequacy and accuracy of the Draft EIR. The public meeting was held on May 26, 2016 at City Council Chambers, 333 90th Street, Daly City. One member of the public attended the public meeting, but no comments addressing the adequacy of the Draft EIR content were raised at the meeting.

During the Draft EIR public review period, Daly City received seven comment letters. Four agencies provided comments: the U.S. Environmental Protection Agency (USEPA), the California State Lands Commission, the California Department of Transportation (Caltrans), and the San Francisco Public Utilities Commission (SFPUC). Three organizations and private entities also commented: California Trout, Golden Gate Audubon Society, and the Olympic Club.

The Final EIR, published on September 8, 2017, included copies of all of the comments received on the Draft EIR as well as individual responses to those comments. The Final EIR provided additional, updated information and clarification on issues raised by commenters, as well as the consultant and the lead and responsible agencies. The City reviewed and considered the Final EIR, which includes the Draft EIR and the RTC document. In certifying the Final EIR, Daly City determined that the Final EIR does not add significant new information to the Draft EIR that would require recirculation of the EIR under CEQA Guidelines Section 15088.5 because the Final EIR contains no information revealing (1) a new significant environmental impact that would result from the Project or from a new mitigation measure proposed to be implemented, (2) a substantial increase in the severity of a previously identified environmental impact, (3) a feasible project alternative or mitigation measure considerably different from others previously analyzed that would clearly lessen the environmental impacts of the Project, but that was rejected by the Project's proponents, or (4) that the Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

The Final EIR fully analyzed the Project proposed for approval herein. No new impacts have been identified that have not been analyzed in the Final EIR.

D. Approval Actions

1. City of Daly City Actions

- Certify the Final EIR
- Adopt these CEQA findings, Statement of Overriding Considerations, and the Mitigation Monitoring and Reporting Program
- Approve the Vista Grande Drainage Basin Improvement Project
- Authorize the North San Mateo County Sanitation District to implement wastewater-related components of the Project

2. North San Mateo County Sanitation District

The North San Mateo County Sanitation District is a Responsible Agency for the Project and its Board of Directors will separately consider taking the following actions and approvals to implement the aspects of the Project under its jurisdiction.

- Adopt CEQA findings, Statement of Overriding Considerations, and the Mitigation Monitoring and Reporting Program
- Approve wastewater-related components of Project

3. City and County of San Francisco

The City and County of San Francisco is a Responsible Agency for the Project and separately will consider taking the following actions and approvals to implement the aspects of the Project under San Francisco jurisdiction.

San Francisco Board of Supervisors:

- Adopt CEQA findings, Statement of Overriding Considerations, and the Mitigation Monitoring and Reporting Program
- Convey ownership of Vista Grande Tunnel and easement to Daly City

San Francisco Public Utilities Commission:

- Approve the Lake Management Plan, including selecting a target water surface elevation at which to manage the lake
- Approve necessary conveyances (e.g., easements, leases, and land transfers)

Additionally, the SFPUC Wastewater Enterprise, Department of Public Works, Department of Parking and Traffic, Recreation and Parks Department, and the Municipal Transportation Agency MUNI Street Operations Division would rely on the certified EIR for issuance of any discretionary permits or approvals for the Project.

4. State Agencies

Implementation of the Project and mitigation measures will involve consultation with/required approvals by state regulatory agencies, including:

- California Coastal Commission
- State Water Resources Control Board
- San Francisco Bay Regional Water Quality Control Board
- California Department of Fish and Wildlife
- California State Lands Commission
- California Department of Transportation
- State Historic Preservation Officer

E. Record of Proceedings

For purposes of CEQA and these Findings, the Record of Proceedings consists of the following documents, at a minimum:

- The NOP and all other public notices issued by Daly City in conjunction with the proposed Project;
- The Draft EIR and Final EIR, including appendices and technical studies included or referenced in the Draft EIR and Final EIR;

- All comments submitted by agencies or members of the public during the public review period on the Draft EIR;
- All comments and correspondence submitted to Daly City with respect to the proposed Project, in addition to timely comments on the Draft EIR;
- Any minutes and/or transcripts of all information sessions, public meetings, and public hearings held by Daly City in connection with the Project;
- Any documentary or other evidence submitted to Daly City at such information sessions, public meetings, and public hearings;
- The Daly City General Plan and the Daly City Municipal Code provisions cited in materials prepared by or submitted to Daly City;
- Any and all resolutions adopted by Daly City regarding the Project, and all staff reports, analyses, and summaries related to the adoption of those resolutions;
- Matters of common knowledge to Daly City, including but not limited to federal, state, and local laws and regulations;
- Any additional documents expressly cited in the Draft EIR and Final EIR and these findings; and
- Any other materials required for the record of proceedings by Public Resources Code section 21167.6(e).

The City has relied on all of the documents listed above in reaching its decisions on the Project even if not every document was formally presented to Daly City Staff as part of the files generated in connection with the Project.

Without exception, any documents set forth above not found in the Project files fall into one of two categories. Many of them reflect prior planning or legislative decisions with which the City Council was aware in approving the Project. (See *City of Santa Cruz v. Local Agency Formation Commission* (1978) 76 Cal.App.3d 381, 391-392; *Dominey v. Department of Personnel Administration* (1988) 205 Cal.App.3d 729, 738, fn. 6.) Other documents influenced the expert advice provided to Daly City Staff or consultants, who then provided advice to the City Council as the final decision-making body. For that reason, such documents form part of the underlying factual basis for the Council's decisions relating to approval of the Project. (See Pub. Resources Code, § 21167.6 (e)(10); *Browning-Ferris Industries v. City Council of City of San Jose* (1986) 181 Cal.App.3d 852, 866; *Stanislaus Audubon Society, Inc. v. County of Stanislaus* (1995) 33 Cal.App.4th 144, 153, 155.)

The documents constituting the record of proceedings are available for review by responsible agencies and interested members of the public during normal business hours at the Office of the City Clerk, 333 90th Street, Daly City, California.

F. Certification of EIR

In accordance with CEQA and the CEQA Guidelines, Daly City hereby certifies that the EIR has been completed in compliance with CEQA and the CEQA Guidelines. The City has reviewed and

considered the information in the record and the EIR prior to recommending approval of any element of the Project. By making these findings, the City confirms that the EIR is adequate to support the approval of the Project and the City ratifies and adopts the findings and conclusions of the EIR, as supplemented and modified by the findings contained herein.

G. Findings about Significant Environmental Impacts and Mitigation Measures

The following Sections II, III, and IV set forth Daly City's findings about the Final EIR's determinations regarding significant environmental impacts and the mitigation measures proposed to address them. These findings provide the written analysis and conclusions of the City regarding the environmental impacts of the Project and the mitigation measures included as part of the Final EIR and adopted by the City as part of the Project. To avoid duplication and redundancy, and because the City agrees with, and hereby adopts, the conclusions in the Final EIR, these findings do not repeat the analysis and conclusions in the Final EIR, but instead incorporate them by reference herein and rely upon them as substantial evidence supporting these findings.

In making these findings, the City has considered the opinions of City staff and experts, other agencies, and members of the public. The City finds that the determination of significance thresholds is a judgment decision within the discretion of the City of Daly City; the significance thresholds used in the EIR are supported by substantial evidence in the record, including the expert opinion of the EIR preparers and City staff; and the significance thresholds used in the EIR provide reasonable and appropriate means of assessing the significance of the adverse environmental effects of the Project. Thus, although, as a legal matter, the City is not bound by the significance determinations in the EIR (see CEQA § 21082.2(e)), the City finds them persuasive and hereby adopts them as its own.

These findings do not attempt to describe the full analysis of each environmental impact contained in the Final EIR. Instead, a full explanation of these environmental findings and conclusions can be found in the Final EIR and these findings hereby incorporate by reference the discussion and analysis in the Final EIR supporting the determination regarding the Project impacts and mitigation measures designed to address those impacts. In making these findings, the City ratifies, adopts, and incorporates in these findings the determinations and conclusions of the Final EIR relating to environmental impacts and mitigation measures, except to the extent any such determinations and conclusions are specifically and expressly modified by these findings.

As set forth below, the City adopts and incorporates all of the mitigation measures set forth in the Final EIR to substantially lessen or avoid the potentially significant and significant impacts of the Project. The impact numbers and mitigation measure numbers used in these findings reflect the information contained in the Final EIR.

In the Sections II, III, and IV below, the same findings are made for a category of environmental impacts and mitigation measures. Rather than repeat the identical finding dozens of times to address each and every significant effect and mitigation measure, the initial finding obviates the

need for such repetition because in no instance is the City rejecting the conclusions of the Final EIR or the mitigation measures recommended in the Final EIR for the Project.

II. Impacts Found Not to Be Significant and Thus Not Requiring Mitigation

Under CEQA, no mitigation measures are required for impacts that are less than significant. (CEQA, § 21002; CEQA Guidelines, §§ 15126.4 (a)(3), 15091.) The Final EIR identified impacts found not to be significant for each component of the Vista Grande Drainage Basin Improvement Project. Based on the evidence in the whole record of this proceeding, Daly City finds that implementation of the Project will not result in any significant impacts in the following areas and that these impact areas therefore do not require mitigation. The City notes that NPS, the federal lead agency under NEPA, has discretion to require and adopt mitigation for impacts not found to be significant in the CEQA analysis of the Project. Such mitigation is represented in the MMRP as being required by NPS, and is not relevant to the determination of significance under CEQA of the impacts listed below.

Aesthetics

Impact AES-1: Project construction would not result in a substantial adverse impact on a scenic vista or scenic resource, or on the visual character or quality of the site or its surroundings.

Impact AES-2: Project operation would not result in a substantial adverse impact on a scenic vista, scenic resource, or on the visual character or quality of the site or its surroundings.

Impact AES-4: Project operation would not result in a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

Air Quality

Conflict with or obstruct implementation of the applicable air quality plan (no impact).

Impact AIR-3: The Project would not expose sensitive receptors to substantial pollutant concentrations.

Impact AIR-4: The Project would not create objectionable odors affecting a substantial number of people.

Biological Resources

Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan (no impact).

Impact BIO-11: Project operation would not adversely affect species identified as candidate, sensitive, or special-status wildlife species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

Impact BIO-13: Project operation would not adversely affect resident fisheries and fish habitat associated with Lake Merced.

Impact BIO-14: Project operation would not adversely affect wetland habitats and other waters of the United States associated with Lake Merced.

Geology and Soils

Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater (no impact).

Greenhouse Gas Emissions and Climate Change

Conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs (no impact).

Hazards and Hazardous Materials

Emit Hazardous Emissions or Handle Hazardous or Acutely Hazardous Materials, Substances, or Waste Within 0.25 Mile of an Existing or Proposed School (no impact).

Be Located on a Site that is Included on a List of Hazardous Materials Sites Compiled Pursuant to Government Code Section 65962.5 and, as a Result, Create a Significant Hazard to the Public or the Environment (no impact).

Be Located within an Airport Land Use Plan or in the Vicinity of a Private Airstrip (no impact).

Expose People or Structures to a Significant Risk of Loss, Injury, or Death Involving Fires (no impact).

Impact HAZ-1: Project construction could create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Impact HAZ-4: Project operation would not increase human exposure to vector-borne diseases as a result of implementation.

Hydrology and Water Quality

Placement of Housing within a 100-Year Flood Zone (no impact).

Exposure to Flooding from Failure of a Levee or Dam (no impact).

Impact HYD-2: The Project could deplete groundwater supplies or interfere substantially with groundwater recharge.

Impact HYD-3: The Project could alter existing drainage patterns, causing downstream erosion or siltation.

Impact HYD-4: The Project would not place within a 100-year flood hazard area structures that would impede or redirect flood flows.

Impact HYD-5: The Project could alter existing drainage patterns and increase the potential for flooding and could expose people or structures to a significant risk of loss, injury or death involving flooding or could result in increased stormwater runoff which would exceed the capacity of existing or planned stormwater drainage systems.

Impact HYD-6: Project maintenance could violate water quality standards and/or waste discharge requirements, provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality in Lake Merced.

Impact HYD-7: The Project would not expose people or structures to a significant risk of loss, injury, or death involving inundation by seiche, tsunami, or mudflow.

Impact HYD-8: Project operation could violate water quality standards, waste discharge requirements, provide substantial additional sources of polluted runoff or otherwise substantially degrade water quality in Lake Merced.

Land Use and Planning

Physically divide an established community (no impact).

Conflict with any applicable habitat conservation plan or natural community conservation plan (no impact).

Noise and Vibration

For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within 2 miles of a public airport or public use airport, expose people residing or working in the area to excessive noise levels (no impact).

For a project located in the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels (no impact).

Impact NOI-3: Project operation would not expose receptors to noise levels in excess of the San Francisco Noise Ordinance; would not expose persons to excessive groundborne vibration or groundborne noise levels; and would not result in a substantial permanent, temporary, or periodic increase in ambient noise levels in the Project vicinity above existing levels.

Recreation

Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment (no impact).

Impact REC-1: Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

Population and Housing

Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure) (no impact).

Displace substantial numbers of existing housing units, necessitating the construction of replacement housing elsewhere (no impact).

Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere (no impact).

Transportation and Traffic

Conflict with an applicable congestion management program, including but not limited to LOS standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways (no impact).

Result in a change in air traffic patterns, including either an increase in traffic levels or a change in locations that results in substantial safety risks (no impact).

Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (no impact).

Impact TRA-2: Project operation and maintenance would cause some temporary increases in traffic volumes on area roadways, but would not substantially conflict with the performance of the circulation system or with plans, ordinances, or policies pertaining to the performance of the circulation system.

Impact TRA-3: Project construction would not impair access to adjacent roadways and land uses, or impede emergency access.

Impact TRA-4: Project construction would not conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities.

Utilities and Service Systems

Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects (no impact).

Require or result in the construction of new stormwater drainage facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects (no impact).

Impact UTIL-1: The Project would not exceed wastewater treatment requirements of the San Francisco Regional Water Quality Control Board nor result in a determination by a wastewater treatment provider that it has inadequate capacity to serve the Project's projected demand in addition to the provider's existing entitlements.

Impact UTIL-2: The Project would not require more water supply than would be available through existing entitlements and resources, nor would it require new or expanded water supply resources or entitlements.

Impact UTIL-3: Project construction would not result in a substantial adverse effect related to landfill capacity.

Impact UTIL-4: The Project would not result in a substantial adverse effect related to compliance with federal, State, and local statutes and regulations pertaining to solid waste.

Impact UTIL-5: Project construction could result in a substantial adverse effect related to disruption of utility operations or accidental damage to existing utilities.

III. Findings of Potentially Significant Impacts That Can Be Avoided or Reduced to a Less-than-Significant Level through Mitigation, and the Disposition of the Applicable Mitigation Measures

CEQA requires agencies to adopt mitigation measures that would avoid or substantially lessen a project's identified significant impacts or potential significant impacts if such measures are feasible (unless mitigation to such levels is achieved through adoption of a project alternative). The findings in this Section III and in Section IV concern mitigation measures set forth in the EIR. The full text of the mitigation measures is contained in the Final EIR and in Attachment A-1, the Mitigation Monitoring and Reporting Program. Daly City recognizes that some of the mitigation measures are partially within the jurisdiction of other agencies, including the SFPUC and NPS. The City urges these agencies to assist in implementing these mitigation measures, and finds that these agencies can and should participate in implementing these mitigation measures.

Aesthetics

Impact AES-3: Project construction could result in a new source of substantial light or glare that would adversely affect day or nighttime views in the area.

It is anticipated that tunneling activities could occur 24 hours per day in two to three shifts, and construction of the replacement pipe section and piers on the beach would necessitate 24-hour work over a period of several days to one week. Construction would create a new temporary source of nighttime lighting in the immediate area and the light and glare effects from Project construction could be substantial.

> **Mitigation Measure 3.4-9: Night Lighting Minimization**
>
> All construction nighttime lighting shall be fully shielded and focused downward to ensure that no significant illumination passes beyond immediate work area or vertically into the sky. Warm colored light shall be used where feasible.

Air Quality

Impact AIR-1: The Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation. Without appropriate dust controls, dust emissions generated within federally administered areas could contribute to the SFBAAB's existing PM10 and PM2.5 non-attainment status, a potentially significant impact.

> **Mitigation Measure 3.3-1: Dust Control Plan Implementation**
>
> All elements of the Dust Control Plan required for work within San Francisco shall also be implemented for work occurring at Fort Funston. At a minimum this Plan shall include watering of exposed surfaces, covering of haul trucks, and sweeping of visible mud or dirt on adjacent public roads.

Impact AIR-2: The Project could result in a cumulatively considerable net increase of ozone, PM10, or PM2.5 (for which the SFBAAB is in non-attainment), including releasing emissions which exceed quantitative thresholds for ozone precursors. Construction activities would result in cumulatively significant fugitive dust emissions.

> See **Mitigation Measure 3.3-1: Dust Control Plan Implementation**

Biological Resources

Impact BIO-1: Project construction could have a substantial adverse effect either directly or through habitat modifications, on plant species identified as sensitive or special-status in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Project construction activities including materials and equipment staging at multiple sites within at Fort Funston associated with the Vista Grande Tunnel and Ocean Outlet replacement, maintenance on and use of the Avalon Canyon Road beach access route, and construction of the Impound Lake discharge structure could result in impacts to special-status plant populations and their supporting vegetation communities.

Mitigation Measure 3.4-1: Avoidance, minimization, and compensation for impacts to special-status plants

A qualified botanist shall conduct appropriately timed floristic preconstruction surveys for special-status plant species with a moderate or high potential to occur in the study area, and for species known to be present in the study area, in all suitable habitat that would be potentially disturbed by the Project within the year of initiation of ground disturbance. If special-status plants are found during surveys, a reporting and avoidance/relocation/compensation program shall be conducted as described in this measure.

Impact BIO-2: Project construction could have a substantial adverse effect either directly or through habitat modifications, on reptile species identified as special-status in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Construction of the Lake Merced overflow structure in South Lake and the outlet structure on the bank and within waters of Impound Lake could adversely affect the western pond turtle by direct mortality, should it be present, which would be a significant impact.

Mitigation Measure 3.4-2: Worker Training Worker Environmental Awareness Program Training

A Project-specific Worker Environmental Awareness Program (WEAP) training shall be developed and implemented by a qualified biologist and attended by all Project personnel prior to beginning work onsite.

Mitigation Measure 3.4-2b: Avoidance and Minimization Measures for Western Pond Turtle

During construction at the Lake Merced overflow structure in South Lake, construction at the outlet structure on the bank and within waters of Impound Lake, and during installation of the in-lake treatment infrastructure a qualified biological monitor shall be present during vegetation removal and the installation of exclusion fencing and cofferdam at Impound Lake.

Impact BIO-3: Project construction could have a substantial adverse effect either directly or through habitat modifications, on migratory birds and/or on bird species identified as special-status in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Construction activities could disrupt birds attempting to nest in the vicinity of the Project site, disrupt parental foraging activity, or displace mated pairs with territories in the Project vicinity.

Mitigation Measure 3.4-3: Nesting Bird Protection Measures

Construction activities that may compromise breeding birds or the success of their nests shall be conducted outside of nesting season. If construction cannot be avoided during nesting season, a qualified wildlife biologist shall conduct preconstruction nesting surveys within 7 days prior to the start or resumption of construction after any breaks of 14 days or more. If active nests are located during the preconstruction bird nesting surveys, a qualified biologist shall conduct an evaluation and monitoring program as described in this measure.

Impact BIO-4: Project construction could have a substantial adverse effect either directly or through habitat modifications, on bats identified as special-status in local or regional plans, policies, or regulations, or by the CDFW or USFWS. Clearing vegetation (including trees) and removing structures in support of Project construction could result in direct mortality of special-status bats roosting in tree cavities, under bark, and in structures within the Project site. Direct mortality of special-status bats would be a significant impact. Additionally, common bats may establish maternity roosts in these same locations which are protected under CEQA.

> **Mitigation Measure 3.4-4: Avoidance and Minimization Measures for Special-Status Bats**
>
> A preconstruction survey for special-status bats shall be conducted by a qualified biologist in advance of tree and structure removal within the project site to characterize potential bat habitat and identify active roost sites. Should the preconstruction survey find no bat habitat or bat roosting sites then no further action is required. Should potential roosting habitat or active bat roosts be found in trees and/or structures to be removed under the project, Daly City shall implement avoidance and minimization measures as described in this measure.

Impact BIO-5: Project construction could have a substantial adverse effect on central dune scrub, a sensitive natural community identified by the CDFW. Impacts to central dune scrub are expected to occur during Project-related improvements to the Avalon Canyon access road and through use of the proposed staging area at Fort Funston where approximately 0.497-acre of central dune scrub is present on the eastern and southern boundaries. In addition, restored central dune scrub has been established near Impound Lake where the outlet structure is proposed; however, the Project facilities are not located in areas where central dune scrub has been mapped.

> **Mitigation Measure 3.4-5: Avoidance, minimization, and compensation for impacts to central dune scrub.**
>
> Concurrent with focused botanical surveys, prior to establishing staging areas or beginning construction activities, areas of central dune scrub vegetation within the Project footprint and within a 50-foot buffer adjacent to the Project footprint shall be mapped by a qualified botanist. To the extent feasible, Project elements shall be designed to avoid and minimize impacts to central dune scrub as described in this measure.

Impact BIO-6: Project construction would not have a substantial adverse effect on upland vegetation communities identified in local or regional plans, policies, regulations, or by the CDFW or USFWS. Trees that may be impacted by the Project during construction occur in an area managed by the San Francisco Department of Public Works (SFDPW) or located on San Francisco owned land. Such areas are subject to Article 16, Section 808 of the Public Works Code as designated street or significant trees.

> **Mitigation Measure 3.4-6: Implement Tree Protection Measures and Plant Replacement Trees**
>
> A certified arborist shall perform a tree survey of the Project prior to construction to identify trees to be removed, trimmed, or retained and that shall need to be protected during construction. Trees to be trimmed or retained under the Project shall be protected

during construction by measures determined by the certified arborist, and trees to be removed shall follow SFDPW tree removal permit process as described in this measure.

Impact BIO-7: Project construction would have a substantial adverse effect on sensitive communities identified in local or regional plans, policies, regulations, or by CDFW or USFWS through the introduction or spread of invasive plants. Project construction activities could contribute to the spread of invasive plants and introduce new invasive plants to the study area through earth moving, transport of vehicles, equipment and materials, and unanticipated sediment dispersal during rain events which would be a significant impact.

Mitigation Measure 3.4-7a: Control Measures for Spread of Invasive Plants

Construction best management practices shall be implemented in all construction areas to prevent the spread of invasive plants, seed, propagules, and pathogens as described in this measure.

Mitigation Measure 3.4-7b: Post-Construction Treatment of Upland Areas

Upon completion of final grading, and in order to prevent the establishment and spread of invasive plant species in upland areas temporarily disturbed by construction activities, hydroseed or broadcast seed of a native plant seed mix shall be applied to upland areas disturbed during construction as described in this measure.

Impact BIO-8: Project construction could have a substantial adverse effect on wetlands and other jurisdictional waters. Project impacts to these potential jurisdictional features would involve temporary and permanent discharges of structures and/or fill within waters and wetlands, and/or alterations of the bed and/or banks of a lake or stream, to accommodate Project activities.

Mitigation Measure 3.4-8a: Wetland Avoidance and Protection

Access roads, work areas, and infrastructure shall be sited to avoid and minimize direct and indirect impacts to wetlands and waters to the extent feasible. Where work will occur on the Project adjacent to state and federal jurisdictional wetlands and waters, protection measures shall be applied to protect these features as described in this measure.

Mitigation Measure 3.4-8b: Compensation for Impacts to Wetlands and Riparian Habitat

To offset temporary impacts, restoration to pre-project conditions shall be conducted, as required by regulatory permits. To offset unavoidable permanent impacts to jurisdictional wetlands, waters, and to riparian habitat, compensatory mitigation shall be provided as required by regulatory permits as described in this measure.

Impact BIO-9: Project construction could impede movement of native resident fish species. A variety of common fish species reside in Lake Merced and could be adversely affected by in-water work at the lake associated with the Project.

See **Mitigation Measure 3.4-2b: Avoidance and Minimization Measures for Western Pond Turtle**

Impact BIO-10: Project construction could interfere substantially with the movement of native resident or migratory species or with established native resident or migratory corridors, or impede the use of nursery sites. Construction activities associated with the Ocean Outlet and the submarine outfall on Ocean Beach and those associated with the Fort Funston tunnel shaft staging and work area could adversely impact birds migrating along the Pacific Flyway and nearby resident wildlife with the introduction of night lighting into an otherwise dark environment.

See **Mitigation Measure 3.4-9: Night Lighting Minimization**

Impact BIO-12: Project operation could adversely affect central dune scrub, thimbleberry, wax myrtle, and canyon live oak scrub, and Vancouver rye grassland associated with Lake Merced. Loss of central dune scrub would be less than 1 percent under the Project and canyon live oak would be unaffected. Wax myrtle scrub would be unaffected by increased lake levels up to 9 feet City Datum but would incur a 12.50 percent loss at a 10 feet City Datum WSE, which would be considered significant. Thimbleberry scrub occurs above 13 feet City Datum and would not be inundated by rising water surface elevations under any scenario. Vancouver rye grassland would incur losses below 10 percent with an increase in lake levels up through 9 feet City Datum but would experience significant impacts at 10 feet where there would be a 46.15 percent loss (i.e., if the target maximum of 9.5 WSE was selected).

Mitigation Measure 3.4-10a: Lake Level Management

The Lake Merced overflow weir in South Lake shall be set at no greater than 9 feet City Datum to prevent lake water surface elevation from having significant effects on wax myrtle scrub, Vancouver rye grassland, and eucalyptus forest. Should an operating WSE above 9 feet City Datum be selected or an extreme storm event requires temporary storage in Lake Merced that would increase WSE above 9 feet City Datum for more than 14 days (at which time vegetation die-off could occur), Mitigation Measure 3.4-10b is required.

Mitigation Measure 3.4-10b: Compensation for Loss of Sensitive Communities at Lake Merced

If 9.5 feet City Datum is selected as the target maximum WSE and Lake Merced water levels are not maintained at or below 9 feet City Datum during normal operations, or a storm event requires storage in Lake Merced that would increase WSE above 9 feet City Datum for more than 14 days for wax myrtle scrub and Vancouver rye grassland or for more than one month for blue gum eucalyptus forest, a resurvey of these sensitive vegetation communities around the Lake Merced shoreline to which a significant impact is predicted to occur (i.e., more than 10 percent loss) shall be performed post-inundation to determine actual percent loss.

An onsite revegetation and restoration plan as described in Mitigation Measure 3.4-10b shall be prepared to compensate for the affected sensitive vegetation communities and habitat lost (in excess of 10 percent) with a maintained WSE above 9 feet City Datum for 14 days or more for wax myrtle scrub and Vancouver rye grassland and for one month or more for eucalyptus forest.

Impact BIO-15: Project operation could adversely affect native wildlife nursery sites associated with Lake Merced. Water level increases above 9 feet City Datum under the Project that persist

for more than one month (i.e., with a target maximum WSE of 9.5 feet) would result in the change in habitat attributed to the Project in excess of 10 percent which would be considered a significant impact on these wildlife nursery sites.

See **Mitigation Measure 3.4-10a: Lake Level Management**

See **Mitigation Measure 3.4-10b: Compensation for Loss of Sensitive Communities at Lake Merced**

Cultural and Paleontological Resources

Impact CUL-2: The Project could cause a substantial adverse change in the significance of an archaeological resource, including shipwrecks. While unlikely, ground-disturbing activities could expose and cause impacts on unknown archaeological resources or shipwrecks, which would be a potentially significant impact. The existing outlet is approximately 900 feet north of the shipwreck remains of the 1882 schooner *Neptune* from 1900.

Mitigation Measure 3.5-3: Inadvertent Discovery of Archaeological Resources or Shipwrecks.

If construction activities result in the inadvertent discovery of an archaeological resource, measures regarding training construction personnel, and notification, inspection, preservation, and treatment requirements are discussed in this measure.

Impact CUL-3: Project construction could disturb human remains. Project construction could result in direct impacts to previously undiscovered human remains during earthmoving activities.

Mitigation Measure 3.5-4: Inadvertent Discovery of Human Remains.

If construction activities result in the inadvertent discovery of human remains, measures associated with compliance of applicable state laws regarding the treatment of such remains are described in this measure.

Geology and Soils

Impact GEO-1: Construction, operation, and maintenance of the Project could expose people or structures to potential substantial adverse effects involving strong seismic ground shaking and/or seismic-related ground failure. Holocene slip was observed in trench exposures of the Serra Fault and geotechnical investigation concluded there is a potential for sympathetic offset within the proposed tunnel alignment as a result of rupture on the nearby San Andreas Fault. Groundshaking during an earthquake in the Project area has the potential to be strong, with peak ground acceleration around 0.6 g, which could result in significant groundshaking effects on the proposed facilities. Also, seismic damage due to liquefaction and related phenomena could occur along the pipeline and at other facilities. In particular, the new tunnel portal and Lake Merced overflow inlet are planned in an area of potentially liquefiable soil.

Mitigation Measure 3.6-1a: Prior to final Project design, a qualified engineer and/or geologist shall perform an inspection to map the size, location, orientation, and patterns of cracks and any crack offsets to provide additional insight into possible tunnel

deformation related to faulting, and to help better assess the potential impact of the Serra Fault Zone during future seismic events on the San Andreas Fault.

Mitigation Measure 3.6-1b: Daly City and/or its contractor(s) shall retain inspectors working under the auspices of a California-licensed geotechnical engineer to be present on the Project site during excavation, grading, and general site preparation activities to monitor the implementation of the recommendations specified in this measure.

Mitigation Measure 3.6-1c: Project foundations in the vicinity of Boring B-3 shall be constructed using cast-in-place drilled piers, micropiles, or another equivalent deep foundation system such as auger-cast or displacement piles or a torqued-in piling system for deep foundations.

Impact GEO-2: The Project could result in substantial soil erosion or the loss of topsoil. Construction activities such as excavating, trenching, and grading can remove stabilizing vegetation and expose areas of loose soil that, if not properly stabilized during construction, can be subject to erosion by wind and stormwater runoff, potentially resulting in a significant impact with respect to soils. Also, during operation of the project, erosion and improper water flow could occur within the retaining wall backdrain systems if they are not properly maintained.

Mitigation Measure 3.6-2: Annual maintenance shall include the following: inspection and flushing to make sure that subdrain pipes are free of debris and are in good working order; and inspection of subdrain outfall locations to verify that introduced water flows freely through the discharge pipes and that no excessive erosion has occurred.

Impact GEO-3: The Project may be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project. The outlet structure is in an area where the potential for shallow or wedge failures up to about 10 to 15 feet thick under static conditions is moderate to high. During large seismic events, the potential for relatively large-scale landsliding is high. In addition, there is landslide potential at Avalon Canyon which would provide beach access during construction of the outlet structure.

Mitigation Measure 3.6-3a: Recommendations regarding site preparation, foundations, retaining walls, seismic design, and other geotechnical aspects provided in the geotechnical report shall be incorporated into this Project and are discussed in this measure.

Mitigation Measure 3.6-3b: Prior to final Project design, additional slope stability studies, including updated geologic mapping and slope stability analysis, shall be performed by a California-licensed geotechnical engineer to evaluate potential for weakened blocks that could become loose during outlet construction or tunneling. Also, stability analyses shall be completed to evaluate the potential impacts of bluff failure on the new outlet structure to be constructed at the base of the cliff. If potential for weakened blocks to become loose or for bluff failure to occur during construction, the study shall include design specifications and construction methods, such as use of temporary structural supports, to avoid such effects. Recommendations from the studies shall be incorporated into the final Project design and construction methods, and implemented by Daly City and/or its contractors.

Impact GEO-4: The proposed Project would not create substantial risks to life or property due to expansive or corrosive soils. Project area soils have a mild to moderate corrosion potential which could be corrosive to micropiles.

> **Mitigation Measure 3.6-4:** Daly City and/or its contractors shall ensure that all micropiles used for the Project are double-corrosion protected.

Greenhouse Gas Emissions and Climate Change

Impact GHG-1: Project construction and operation would generate GHG emissions. Total short-term Project construction-related GHG emissions would be below BAAQMD's quantitative threshold of 1,100 metric tons CO2e per year for non-stationary sources in construction years 1 and 3, but would be above this threshold during year 2. Impacts associated with construction-related GHG emissions would be less than significant if tunnel drives are constructed concurrently, if tunneling occurs on a 24-hour basis, or both.

> **Mitigation Measure 3.7-1: Greenhouse Gas Emission Reduction**
>
> Daly City and/or its contractors shall implement measures associated with on-road vehicle idling times, biodiesel fueling for generators, pre-construction GHG modeling, and the purchase of carbon offsets as described in this measure.

Hazards and Hazardous Materials

Impact HAZ-2: Project construction could result in a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Lead is a known contaminant within 0.25 mile of the Project site. During construction, ground-disturbing activities could unearth unexploded ordnance, which would pose a safety risk to workers on-site.

> **Mitigation Measure 3.8-1: Health and Safety Plan.**
>
> The construction contractor(s) shall prepare and implement a site-specific Health and Safety Plan in accordance with 29 CFR 1910.120 to protect construction workers and the public during all excavation, grading, and construction activities. A description of elements for inclusion in the Health and Safety Plan are described in this measure.

Impact HAZ-3: Project construction would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Construction could affect the availability of travel lanes when construction occurs within or adjacent to John Muir Drive, due to the presence of large, slow-moving trucks that may cause delays. These delays could interfere with implementation of the Emergency Response Plan, which would be a significant impact.

> See **Mitigation Measure 3.15-1: Construction Traffic Management Plan**

Hydrology and Water Quality

Impact HYD-1: Project construction could violate water quality standards and/or waste discharge requirements, provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality. Construction of the Lake Merced outlet structure on the bank and within waters of Impound Lake and of the Lake Merced overflow structure in South Lake could result in discharges of pollutants to Lake Merced directly, resulting in substantial water quality effects.

> **Mitigation Measure 3.9-1: Implement Cofferdam Dewatering BMPs for In-Water Work**
>
> If dewatering discharge produced during construction of the Lake Merced outlet and overflow structures is not discharged to the sewer system, a requirement shall be included in construction specifications that requires the construction contractor(s) to implement standard BMPs developed and approved by Daly City for the treatment of sediment-laden water produced during cofferdam dewatering activities. BMPs are described in this measure.

Noise and Vibration

Impact NOI-1: Project construction could temporarily expose persons to or generate noise levels in excess of local noise ordinances or create a substantial temporary increase in ambient noise levels. Construction activities around the Canal and Tunnel, in combination with the impact pile driving at the John Muir Drive crossing and Fort Funston shaft, may have the potential to exceed the 70 dBA L_{eq} speech interference threshold for greater than two weeks. Additionally, Tunnel construction activities would generate substantial continuous noise at Fort Funston, where visitors may value an increased degree of quiet for passive recreational uses.

> **Mitigation Measure 3.11-1**: Construction contractors shall implement noise control measures for equipment and trucks, impact tools, and stationary construction noise sources as described in this measure.
>
> **Mitigation Measure 3.11-2:** Construction contractors shall address further potential nuisance impacts of Project construction by posting signs at construction site entrances that describe requirements of Mitigation Measure 3.11-1, and include permitted construction days and hours, contact information for the job site and a contact number in the event of problems. An onsite complaint and enforcement manager shall respond to and track complaints and questions related to noise.

Impact NOI-2: Project construction could result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels. The vibration levels at the Missile Assembly Building in Fort Funston would be above the FTA's building damage threshold for susceptible buildings; therefore, this source of ground-borne vibration could result in a significant impact to that building.

> **Mitigation Measure 3.11-3:** To address the vibration impact at the Missile Assembly Building located in Fort Funston, Daly City shall require construction contractors to implement vibration monitoring measures as described in this measure.

Geologic and Paleontological Resources

Impact PAL-1: The Project would directly or indirectly destroy a unique paleontological resource or site or unique geological feature. Because new disturbance would occur within geologic units with moderate to high potential for paleontological resources, potentially significant fossils could be adversely affected during construction, particularly within the Merced Formation. Furthermore, ground-disturbing activities could expose and cause impacts on unknown paleontological resources, which would be a potentially significant impact.

> **Mitigation Measure 3.12-1: Inadvertent Discovery of Paleontological Resources.**
>
> Training, monitoring, evaluation, reporting, treatment, and salvage procedures related to the inadvertent discovery of paleontological resources are discussed in this measure.

Transportation and Traffic

Impact TRA-1: Project construction would cause temporary increases in traffic volumes on area roadways, which could cause substantial conflicts with the performance of the circulation system, but would not conflict with applicable plans, ordinances, or policies pertaining to the performance of the circulation system. The increased local congestion/delay and potential conflicts involving Project trucks is considered to be a significant impact.

> **Mitigation Measure 3.15-1: Construction Traffic Management Plan**
>
> Daly City and/or its contractor(s) shall prepare and implement a Construction Traffic Management Plan in accordance with professional traffic engineering standards to show methods for maintaining traffic flows on roadways and access to recreational resources directly affected by Project construction. Such requirements are discussed in this measure.

Impact TRA-5: Project construction would result in increased wear-and-tear on the designated haul routes. The wear-and-tear effects on road conditions and driving safety is considered to be a significant impact. Local streets (e.g., Avalon Drive and Fort Funston Road) generally are not built with a pavement thickness that will withstand substantial truck traffic volumes.

> **Mitigation Measure 3.15-2:** Daly City, San Francisco, and the National Park Service shall enter into an agreement prior to construction that shall detail pre-construction conditions and the post-construction requirements of a roadway rehabilitation program. Daly City and/or its contractors shall repair roads damaged by construction to a structural condition equal to that which existed prior to construction activity.

IV. Significant Impacts That Cannot Be Avoided or Reduced to a Less-than-Significant Level

Notwithstanding existing regulations and the mitigation measures set forth for adoption in the MMRP, the impacts discussed in this Section IV cannot be fully mitigated to a less-than-significant level. For each impact that is determined to be significant and unavoidable, a

Statement of Overriding Considerations has been prepared for that impact and is set forth in Section VI, below.

Cultural and Paleontological Resources

Impact CUL-1: The Project would cause a substantial adverse change in the significance of a historical resource because it would demolish the majority of the historic structures of the existing Vista Grande Canal and Tunnel. The Vista Grande Canal and Tunnel is recommended eligible for listing in the National Register of Historic Places under Criterion A (events) and C (architecture/engineering). As such, the property meets the definition of a historical resource as defined under CEQA Guidelines Section 15064.5. The proposed Project would replace approximately 1,350 feet of the upstream portion of the Canal with a concrete collection box, box culvert, debris screening device, and diversion structure. Replacement of the Canal with a box culvert would support development of a constructed treatment wetland in an area between John Muir Drive and the southern edge of the Canal. The Project also would demolish and later replace 150 feet of the downstream portion of the Canal to accommodate a temporary access ramp for construction of the rehabilitated Lake Merced Portal. The total length of Canal replacement would be approximately 1,500 feet, or approximately 42 percent of its 3,600-foot length.

The proposed Project also would replace the Vista Grande Tunnel in its entirety to increase its flow capacity. The existing brick-lined tunnel would be excavated and a new tunnel with a larger-diameter concrete lining would be constructed in its place. Tunneling would begin from a temporary 30-foot-diameter construction shaft located at Fort Funston. Once completed, two new 24-inch wastewater pipelines would be installed within the tunnel to replace the existing force main. At Fort Funston, the existing Ocean Outlet would also be demolished and replaced with a new outlet structure.

Although approximately 58 percent or about 2,100 feet of the Canal would remain intact after completion of the Project, the Project would demolish the remaining 1,500 feet of the Canal and all of the 3,000-foot-long Tunnel, thereby substantially affecting of the vast majority (69 percent) of the Vista Grande Canal and Tunnel as an entire drainage system. As the proposed Project would result in the physical demolition of a resource such that the significance of the historical resource would be materially impaired, it would cause a substantial adverse change in the significance of a historical resource, which is considered a *significant* impact.

This impact could be reduced with implementation of **Mitigation Measure 3.5-1** (HABS/HAER Recordation) and **3.5-2** (Public Interpretation). However, even with implementation of **Mitigation Measures 3.5-1** and **3.5-2,** the impact would remain *significant and unavoidable*, as there are no measures available that would avoid the loss of the structure to a *less-than-significant* level.

Mitigation Measure 3.5-1: HABS/HAER Recordation

Prior to initiation of Project construction or demolition, the City of Daly City, in consultation with the NPS, shall record the Vista Grande Canal and Tunnel in accordance with the NPS Historic American Building Survey/Historic American Engineering Record (HABS/HAER) program. This program entails: 1) documentation of the canal and tunnel

through large-format black and white photographs (including the interior of the length of the tunnel), 2) preparation of a historic resources report, 3) preparation of measured drawings (or copies of original plans), and 4) archiving of the documentation package at the U.S. Library of Congress, the City of Daly City, Golden Gate park archives, and other local repositories such as public libraries. The specific HABS/HAER requirements of the Vista Canal and Tunnel will be further detailed in consultation with the NPS Pacific Western Region's HABS/HAER coordinator.

Mitigation Measure 3.5-2: Public Interpretation

Prior to the completion of the Project, the City of Daly City, in coordination with the NPS, shall prepare a public interpretation package that may entail interpretive materials, including but not limited to signage, brochures, videos, historical narrative, or other printed or web-based methods of explaining the historical and engineering significance of the Vista Grande Canal and Tunnel to the general public.

Hydrology and Water Quality

Impact HYD-9: The Project could conflict with plans, policies, or regulations related to alteration of coastal landforms or processes adopted for the purpose of avoiding or mitigating an environmental effect.

The Project's construction and operation could alter the existing natural beach dynamics and the coastal environment, thereby resulting in altered bluff erosion rates and patterns. Coastal development in California is regulated by the California Coastal Commission pursuant to the California Coastal Act. For the purposes of CEQA, the impact threshold is defined by conformance to the Coastal Act policies, and related conformance to NPS Management Policies.

The Coastal Act directs that new development that could alter natural shoreline processes shall be permitted when required to serve coastal dependent uses, protect existing structures, and only when designed to eliminate or mitigate adverse impacts on local shoreline sand supply (Public Resources Code Section 30235). The statute also states that new development shall "[a]ssure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs" (Public Resources Code Section 30253(b)).

The California Coastal Act directs that new coastal development, such as the Ocean Outlet structure, be designed to ensure that impacts on local shoreline sand supply are eliminated or mitigated (Section 30235) and that the Project not create or contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs (Section 30253(b)). Further, the CCC's 2015 Sea Level Rise Policy Guidance outlines a process for evaluating and expands upon the factors (e.g., avoidance, alternatives, and adaptation) that the CCC will consider in determining whether a proposed shoreline development project is consistent with the Coastal Act.

The wing walls are proposed to promote the stability and structural integrity of the Ocean Outlet structure, reduce erosion directly behind the wing walls, and extend the operating life of the Ocean Outlet. However, the wing walls would potentially result in alterations to coastal processes in a manner that could result in a reduced local sediment supply, an altered seasonal beach profile due to increased scour, and/or increased episodic bluff erosion. The wing walls thus constitute a protective device that has the potential to substantially alter natural landforms along bluffs and cliffs in the Project vicinity. For these reasons, elements of the Project may conflict with Coastal Act Sections 30235 and 30253(b) and CCC's Sea Level Rise Policy Guidance, which would be a significant impact. Even with implementation of **Mitigation Measure 3.9-2 (Avoidance and Minimization of Conflicts with California Coastal Act and NPS Management Policies)**, elements of the Project necessary to ensure structural integrity may still conflict with the policies in Coastal Act Sections 30235 and 30253(b) due to potentially reduced local shoreline sand supply and altered shoreline processes. Therefore, even with implementation of Mitigation Measure 3.9-2, certain Project features associated with the Ocean Outlet structures may still result in inconsistency with the policies governing local shoreline sand supply and alteration of landforms due to the construction of shoreline protective devices, provided in California Coastal Act Sections 30235 and 30253. As a result, Impact HYD-9 could remain significant and unavoidable even after the incorporation of available and feasible mitigation.

> **Mitigation Measure 3.9-2: Avoidance and Minimization of Conflicts with California Coastal Act and NPS Management Policies**
>
> The final design of the Ocean Outlet structures must minimize conflicts with the applicable Coastal Act requirements that new development: 1) be designed to eliminate or mitigate adverse effects on local shoreline sand supply (Section 30235); and 2) assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs (Section 30253). In order to minimize conflicts with these policies, Daly City shall undertake the steps described in this measure.

Land Use and Planning

Impact LU-1: The project could conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

The Project could be inconsistent with some of the sub-policies of the Coastal Act and with portions of the NPS Management Policies regarding coastal processes. Implementation of **Mitigation Measure 3.9 2, Avoidance and Minimization of Conflicts with California Coastal Act and NPS Management Policies**, would require the final Project engineering design to minimize conflicts with the applicable Coastal Act requirements that new development: 1) be designed to eliminate or mitigate adverse effects on local shoreline sand supply and 2) assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs

and cliffs (California Coastal Act Sections 30235 and 30253) and with NPS Management Policies regarding minimization of safety hazards and harm to property and natural resources. However, even with implementation of **Mitigation Measure 3.9-2**, elements of the Project necessary to ensure structural integrity may still conflict with the policies in Coastal Act Sections 30235 and 30253(b) due to potentially reduced local shoreline sand supply and altered shoreline processes and/or with NPS Management Policies. Therefore, even with implementation of Mitigation Measure 3.9-2, certain Project features associated with the Ocean Outlet structures may still result in inconsistency with applicable land use plans and policies of agencies with jurisdiction over the coastal elements of the Project. As a result, Impact HYD-9, and therefore Impact LU-1 as well, could remain significant and unavoidable even after the incorporation of available and feasible mitigation. This finding is due in part to the inherent inconsistency between the policies requiring structural integrity with the policy concerning avoidance of shoreline protective devices that would substantially alter natural landforms along bluffs and cliffs.

> See **Mitigation Measure 3.9-2: Avoidance and Minimization of Conflicts with California Coastal Act and NPS Management Policies**

V. Evaluation of Project Alternatives

This Section V describes the reasons for approving the Project and for rejecting the alternatives. CEQA mandates that an EIR evaluate a reasonable range of alternatives to the Project or the Project location that generally reduce or avoid potentially significant impacts of the Project. CEQA requires that every EIR also evaluate a "No Project" alternative. Alternatives provide a basis of comparison to the Project in terms of their significant impacts and their ability to meet Project objectives. This comparative analysis is used to consider reasonable, potentially feasible options for minimizing environmental consequences of the Project.

A. Reasons for Approval of the Proposed Project

The specific objectives of the Vista Grande Drainage Basin Improvement Project are to:

- Improve stormwater drainage of the lower Vista Grande Basin to accommodate peak flows generated by the 25-year design storm;
- Provide a sustainable source of stormwater, establish a target maximum water surface elevation, and implement a Lake Management Plan for management of Lake Merced water quality, groundwater, and surface water elevation;
- Improve recreational access and reduce litter transfer and deposition along the beach below Fort Funston; and
- Maximize use of existing ROWs, easements, and infrastructure to minimize construction-related costs, habitat disturbance, and disruption to recreational users.

The Project would meet these objectives by responding to and helping Daly City meet the goal of improving stormwater drainage in the lower Vista Grande Basin by enlarging the existing Canal and Tunnel and providing a connection to store stormwater in Lake Merced in order to

accommodate the 25-year design storm. It would also meet the objective of providing a sustainable source of water for management of Lake Merced water surface levels and water quality with implementation of the Lake Management Plan. The Project would meet the objective to improve recreational access and reduce litter transfer and deposition along the beach below Fort Funston by removing the portion of the existing Ocean Outlet structure that currently projects from the cliff face onto the beach and by installing debris screens that would remove litter from the stormwater that flows across the beach. Lastly, the Project would use existing easements and reuse some existing infrastructure.

As described in the Final EIR, the Project was proposed after several years of collaborative efforts to define a project that would meet one of the primary objectives of flood control in the Basin. Beginning in 2007, Daly City and its engineering and environmental consultants evaluated 17 alternative engineering concepts for managing stormwater in the Basin to alleviate flooding. The engineering alternatives included various combinations of facilities including different tunnel alignments and capacities, stormwater detention structures, and groundwater recharge facilities. These engineering alternatives were evaluated in a 2007 draft Alternatives Evaluation Report based on their potential for reducing flooding, operational viability, public impacts, environmental benefits, and constructability. The report also considered diversion of stormwater to Lake Merced as an optional element that could be used in combination with a new tunnel alignment or stormwater retention alternative to help address both flooding and water quality management objectives. Daly City held public meetings in 2008 to introduce interested parties to the conceptual engineering alternatives and hear input about the community's concerns. Following further discussions in July 2009 with the public and key stakeholders, Daly City and San Francisco agreed to explore the potential benefits of augmenting the existing infrastructure adjacent to and including Lake Merced to reduce the localized flooding potential within the watershed and simultaneously better manage Lake Merced water levels. This collaborative effort led to the inclusion of the "Lake Merced Alternative" in a revised Alternatives Analysis Report. A public hearing was held in May 2011 to review the alternatives presented in this revision, and several stakeholders spoke in support of the Lake Merced Alternative. As a result of this evaluation process, Daly City further defined the Lake Merced Alternative, which became the proposed Project. As described below in Section V.B, the alternatives evaluated in the Final EIR were not found to be environmentally superior to the proposed Project, and each would result in additional new environmental impacts. Thus, the proposed Project is the environmentally superior alternative, and is preferred among the alternatives evaluated.

B. Alternatives Rejected and Reasons for Rejection

Daly City rejects the Alternatives set forth in the Final EIR and listed below because the City finds that there is substantial evidence, including evidence of economic, legal, social, technological, and other considerations described in this Section that make infeasible such Alternatives, and/or that there is substantial evidence that these Alternatives would result in the same or more severe significant environmental impacts compared to the proposed Project. In making these determinations, the City is aware that CEQA defines "feasibility" to mean "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, legal, and technological factors" (CEQA § 21061.1).

The City is also aware that under CEQA case law the concept of "feasibility" encompasses (i) the question of whether a particular alternative promotes the underlying goals and objectives of a project (*Sequoyah Hills Homeowners Assn. v. City of Oakland* (1993) 23 cal.App.4th 704, 715) and (ii) the question of whether an alternative is "desirable" from a policy standpoint (*Defend the Bay v. City of Irvine* (2004) 119 Cal.App.4th 1261, 1269-1270; *In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings* (2008) 43 Cal.4th 1143, 1162-1169) to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, legal, and technological factors (*City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 410, 417).

No Project Alternative

CEQA requires an EIR to evaluate a "no project" alternative to allow decision-makers to compare the impacts of approving a proposed project with the impacts of not approving it (CEQA Guidelines § 15126.6(e)). The "no project" analysis evaluates the existing conditions at the time the Notice of Preparation was published as well as what reasonably would be expected to occur in the foreseeable future if the proposed project were not approved, based on current plans, permits and available infrastructure and services.

Under the No Project alternative, no physical component of the proposed Project would be constructed and none of the proposed operational changes to stormwater routing would be made. The Lake Management Plan would not be implemented. The NPS would not grant the Special Use Permit, and no construction could occur within NPS-managed lands.

Annual Canal sediment removal activities would continue, as well as as-needed maintenance activities. Because Canal and Tunnel capacity would not be improved, occasional flooding of the Canal and associated flooding of John Muir Drive into Lake Merced and in local neighborhoods would continue.

The No Project Alternative would avoid the short-term and long-term impacts associated with implementing the proposed Project, including (for example) traffic and noise impacts from construction, and permanent significant impacts on historic resources.

This alternative would not achieve the project objectives of providing flood and lake level management, nor would it achieve the beneficial effects on recreational access or litter reduction. The City rejects this alternative as infeasible within the meaning of CEQA. This alternative does not include Project components that will enable Daly City to achieve any of the Project objectives.

Tunnel Alignment Alternative

The Tunnel Alignment Alternative would replace the proposed Project's Tunnel improvement and Lake Merced (East) Portal components with an entirely new tunnel up to approximately 50 feet to the south of the existing Tunnel in an alignment to be determined following additional geotechnical investigation, and a different east portal at a location that would be determined by the final alignment. The new tunnel would run west from a new east portal at the existing Canal

to a new or rehabilitated Ocean Outlet structure. The components of the Tunnel Alignment Alternative could be paired with the proposed Canal components, or could be paired with the alternative Canal components described for the Canal Configuration Alternative.

The intent of this alternative was to avoid or further reduce some of the impacts on historic resources associated with replacement of the existing Vista Grande Tunnel with a larger tunnel. However, upon evaluation by the Project's engineering consultant, it was determined that the existing Vista Grande Tunnel could not, safely and within the terms of existing easements and ROWs, be abandoned in place unless filled with concrete to prevent collapse and subsequent potential for ground subsidence above the tunnel alignment. Thus, even with implementation of Mitigation Measures 3.5-1 and 3.5-2, the impact of the Tunnel Alignment Alternative combined with either the proposed Canal improvements or the Canal Configuration Alternative would remain significant and unavoidable, as there are no measures available which would fully mitigate the loss of the Tunnel and partial loss of the Canal structure to a less-than-significant level. CEQA requires the evaluation of a reasonable range of alternatives that will reduce or avoid any of the significant environmental impacts of the Project. This alternative does not satisfy this requirement.

The City rejects this alternative as infeasible within the meaning of CEQA. This alternative does not include Project components that will enable Daly City to achieve Project objectives for the following reasons:

- **Similar or More Severe Impacts on Cultural Resources.** Daly City considered whether additional feasible mitigation could be implemented to further reduce the impact associated with filling the existing Tunnel with concrete. One option considered was to retain approximately 10 feet of the eastern or western portal of the Tunnel unfilled to allow it to be viewed by the public and/or used for future study. This measure would reduce the impact, but would not reduce it to a less-than-significant level, as the vast majority of the Tunnel would be substantially altered. Retaining a portion of the eastern portal unfilled was determined to be infeasible for the same safety reasons described above because in this location, the tunnel is closest to the ground surface, and collapse of the retained and abandoned portion could result in a collapse of the ground surface. Additionally, retaining a portion of the western portal unfilled would only be effective temporarily. As the bluff continues to recede after completion of construction, portions of the Tunnel would again become exposed on the beach, and Daly City would need to periodically demolish and remove the exposed portions of its infrastructure. Therefore, within approximately 25 years, the retained portion would be expected to be demolished. Additionally, retention of a portion of the Tunnel for the purposes of public or research-related access could create a safety hazard.

- **Increased Visual Impacts.** If a new ocean outlet location is selected, a third outlet structure (in addition to the existing Ocean Outlet structure and SFPUC's outlet structure) would be present along the beach and toe of the cliff below Fort Funston within an area of approximately 150 feet or less. This would increase the overall level of visual contrast in this location and would not provide the benefit of removing an obstruction to views.

- **Increased Potential for Archaeological Impacts.** The Ocean Outlet structure associated with the Tunnel Alignment Alternative could be slightly closer to the 1882 schooner Neptune that wrecked in 1900 than the proposed Project.

- **Increased Inconsistency with Management Policies.** The development of a new tunnel and potentially a new Ocean Outlet to the south of the existing structures may conflict with NPS Management Policies for coastal processes by introducing new developments in an area subject to wave erosion or active shoreline processes when a practicable alternative (i.e., the proposed Project) is available.

- **Increased Construction Noise.** The nearest vibration-sensitive receiver to the where pile driving activities would take place is the Mission Assembly Building located in Fort Funston. The vibration levels would be above both the FTA's construction vibration and building damage thresholds for historic land uses.

Canal Configuration Alternative

The Canal Configuration Alternative would minimize changes to the existing Canal while still allowing for some discharges to Lake Merced. This alternative would not construct the box culvert replacing the first 1,000 feet of the Canal; rather, the diversion structure described for the proposed Project would be relocated to the southern (upstream) end of the Canal. The box culvert under John Muir Drive also would be relocated and would cross under John Muir Drive close to the southern end of the Canal. The design of the diversion structure, box culvert under John Muir Drive, and Lake Merced Outlet would be approximately the same as for the proposed Project. The diversion structure would replace the first approximately 350 feet of the Canal, and the rest of the Canal would be unchanged except as needed for the Lake Merced Tunnel Portal. Under the Canal Configuration Alternative, one wetland cell of approximately 1.7 acres would be constructed, providing a reduced water treatment capacity compared to the Project. The components of the Canal Configuration Alternative could be paired with the proposed Tunnel or could be paired with the alternative Tunnel and East Portal components described for the Tunnel Alignment Alternative.

The intent of this alternative was to reduce some of the impacts on historic resources and federally jurisdictional "other waters" associated with replacement of a portion of the existing Vista Grande Canal with a box culvert. This alternative would reduce the portion of the Vista Grande Canal and Tunnel system to be removed by approximately 1,000 feet or 15 percent of the total length of the system. It would reduce the impact on historic resources compared to the proposed Project, though not to a less-than-significant level.

Subsequent to the publication of the Draft EIR, the U.S. Army Corps of Engineers determined that the Vista Grande Canal was not considered to be federally jurisdictional "other waters," due to the age of the channel, the brick and concrete lined invert, and the relatively low physical and biological functions of the channel. Therefore, reducing impacts on this structure for the purposed of reducing impacts on "other waters" is no longer an objective of the alternatives analysis and selection process.

Although the Canal Configuration Alternative would reduce impacts on historic resources and reduce construction-related air quality and traffic impacts because less construction would occur, it would also result in additional significant and unavoidable construction-related impacts compared to the proposed Project.

The City rejects this alternative as infeasible within the meaning of CEQA. This alternative does not include Project components that will enable Daly City to achieve Project objectives for the following reasons:

- **Increased Construction Noise.** This alternative would not construct a collection box and box culvert, which would reduce the duration of construction activity. However, it would decrease the distance between the location of impact pile driving and the nearest residential receptors, resulting in noise levels up to 82 A-weighed decibels ("dBA") and exceeding the 70 dBA Leq speech interference threshold for greater than two weeks. A noise reduction of at least 12 dBA may not be achieved with mitigation, and, therefore noise impacts associated with construction-related activities could remain significant. (Potentially Significant and Unavoidable)

- **Increased Construction Vibration.** Vibration levels at the nearest residential building located approximately 200 feet south-east from the John Muir Drive crossing and diversion structure would remain significant and unavoidable after mitigation. (Significant and Unavoidable)

- **Reduced Benefit to Lake Merced.** A smaller treatment wetland would offer 0.4 acre less area for the treatment of Canal inputs to Lake Merced, as well as recirculation of lake water during low flow periods, providing a reduced benefit to Lake Merced water quality, a key objective of the Project. Additionally, the reduced wetland area would provide less habitat for wildlife than the treatment wetlands proposed under the Project.

VI. Statement of Overriding Considerations

Pursuant to CEQA Section 21081 and CEQA Guidelines Section 15093, Daly City hereby finds, after consideration of the Final EIR and the evidence in the record, that each of the specific overriding economic, legal, social, technological and other benefits of the Project as set forth below independently and collectively outweighs the significant and unavoidable impacts described in Section IV and is an overriding consideration warranting approval of the Project. Any one of the reasons for approval cited below is sufficient to justify approval of the Project. Thus, even if a court were to conclude that not every reason is supported by substantial evidence, the City will stand by its determination that each individual reason is sufficient. The substantial evidence supporting the various benefits can be found in the preceding findings, which are incorporated by reference into this Section VI.

On the basis of the above findings and the substantial evidence in the whole record of this proceeding, the City specifically finds that there are significant benefits of the proposed Project to support approval of the Project in spite of the unavoidable significant impacts, and therefore makes this Statement of Overriding Considerations. The City further finds that, as part of the process of obtaining Project approval, all significant effects on the environment from implementation of the Project have been eliminated or substantially lessened where feasible. All mitigation measures proposed in the EIR are adopted as part of this approval action. Furthermore, the City has determined that any remaining significant effects on the environment found to be unavoidable are acceptable due to the following specific overriding economic, technical, legal, social and other considerations.

The Project will have the following benefits:

> The Project will meet the Project objectives by addressing flooding potential through simultaneously increasing the Tunnel capacity and providing alternative stormwater detention in Lake Merced, which together are designed to provide protection equivalent to a 25-year, 4-hour event (with peak flows of 1,070 cubic feet per second). It also would provide a source of water to allow management of Lake Merced levels and water quality. Providing a source of water for Lake Merced water management would have the benefit of groundwater recharge to the underlying groundwater basin and increasing lake levels to benefit recreational users and long-term water quality conditions in the Lake, including the 303(d) listings for dissolved oxygen and pH. The project would also resolve the 2001 California Trout, Inc. (Cal Trout) petition to the State Water Resources Control Board. Further, the project would satisfy the Governor's mandate to beneficially reuse water resources, which is especially important during times of drought. Finally, the Project would improve recreational access and reduce litter transfer and deposition along the beach below Fort Funston by improving the Ocean Outfall and debris screening in the stormwater system, and would maximize the use of existing ROWs, easements, and infrastructure to minimize construction-related costs, habitat disturbance, and disruption to recreational users.

Having considered these benefits, including the benefits discussed in Section I above, the City finds that the benefits of the Project outweigh the unavoidable adverse environmental effects, and that the adverse environmental effects are therefore acceptable.

Attachment A-1
Mitigation Monitoring and Reporting Program

MITIGATION MONITORING AND REPORTING PROGRAM

Vista Grande Drainage Basin Improvement Project

Introduction

The California Environmental Quality Act (CEQA) requires that when a public agency makes findings pursuant to Public Resource Code Section 21081 before approving a project that would result in one or more significant impacts on the environment, the agency must adopt a reporting or monitoring program for mitigation measures incorporated into a project or imposed as conditions of approval. The program must be designed to ensure compliance during project implementation (Public Resource Code Section 21081.6).

The Council on Environmental Quality has established regulations for implementing the National Environmental Policy Act (NEPA; 40 CFR 1500-1508). NEPA requires mitigation monitoring in 40 CFR 1505.2(c), and the National Park Service (NPS) NEPA Handbook requires that the Record of Decision "state any mitigation measures that are not inherently integral to the selected action's implementation and a summary of any monitoring or enforcement programs associated with the mitigation" (Section 4.7.B).

This Mitigation Monitoring and Reporting Plan (MMRP) for the Vista Grande Drainage Basin Improvement Project (project) will be in place through all phases of the project, including design and construction, and will help ensure that project objectives are achieved. As the CEQA Lead Agency, the City of Daly City (Daly City) is responsible for verifying that the provisions of the MMRP as a whole are carried out, pursuant to Section 15097(a) of the CEQA Guidelines. The NPS, as NEPA Lead Agency and as the administrator of Fort Funston and the use authorizations for construction and operation of a portion of the Vista Grande Tunnel and the Ocean Outlet structure, also will be responsible for administering the mitigation measure compliance and monitoring program and ensuring that all parties comply with their provisions. The NPS also served as the lead federal agency for Section 106 consultation under the National Historic Preservation Act (NHPA) for the project. Daly City may delegate reporting or monitoring responsibilities to a subsidiary public agency or to a private entity such as a project contractor who accepts the delegation; however, until mitigation measures have been completed, Daly City remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the program. Daly City will ensure that monitoring is documented through periodic reports and that deficiencies are promptly corrected, and will coordinate with NPS to ensure that reporting meets the needs of both agencies.

The following table identifies the mitigation measures by resource area. The table also provides the specific mitigation monitoring requirements, including implementation documentation, monitoring activity, timing, and responsible monitoring party. Verification of compliance with each measure is to be indicated by signature of the mitigation monitor, together with date and verification. Daly City and its contractor(s) shall be responsible for implementation of all mitigation measures, unless otherwise noted in the table.

The table that follows presents a compilation of mitigation measures adopted for the project by Daly City, NPS, or both lead agencies. Some mitigation measures apply only to project components outside of the jurisdiction of NPS that are solely the responsibility of Daly City and related to Daly City's CEQA compliance requirements. There are also measures that are not required under CEQA to reduce an impact to a less-than-significant level, but have been required and adopted by NPS as the NEPA lead agency; nonetheless, as project proponent, Daly City is responsible for carrying out these measures per NPS requirements. The purpose of the table is to provide a single comprehensive list of the measures that will be implemented to avoid or reduce impacts of the project on the environment, the timing for their implementation, and related monitoring and reporting requirements.

The following abbreviations are used in the table:

DC	Daly City
CCC	California Coastal Commission
CDFW	California Department of Fish and Wildlife
CSLC	California State Lands Commission
NPS	National Park Service
RWQCB	San Francisco Bay Regional Water Quality Control Board
SamTrans	San Mateo County Transit District
SFDPW	San Francisco Department of Public Works
SFMTA	San Francisco Municipal Transportation Agency
SFRPD	San Francisco Recreation and Parks Department
SFPD	San Francisco Planning Department
SFPUC	San Francisco Public Utilities Commission
USACE	United States Army Corps of Engineers
USFWS	United Stated Fish and Wildlife Service

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
Aesthetics						
AES-3	Project construction could result in a new source of substantial light or glare that would adversely affect day or nighttime views in the area.	**Implement Mitigation Measure 3.4-9: Night Lighting Minimization (see details under Biological Resources, below)**				
NEPA Impact	The Project could generate visual resource impacts to Fort Funston that would contribute to visual change in landscape.	**3.2-1:** The contractor shall ensure that construction-related activity at the Fort Funston staging area is as clean and inconspicuous as practical by storing materials and equipment within the proposed construction staging areas or in areas that are generally away from public view and by removing construction debris promptly at regular intervals. An 8-foot-high green screening fence shall be installed around the perimeter of the staging area. Stockpiled materials shall not exceed 8 feet in height.	1. DC/NPS 2. DC (Construction Contractor) 3. DC/NPS	1. DC/NPS 2. DC/NPS 3. DC/NPS	1. Ensure that the construction contract for work at Fort Funston includes the requirements for minimizing visual impacts. 2. Maintain clean and inconspicuous staging areas and work areas. Install 8-foot-high green screening fence around staging areas and do not stockpile materials higher than 8 feet. 3. Monitor to ensure that contractor(s) implements measures in contract documents. Report non-compliance, and ensure corrective action.	1. Design 2. Preconstruction/ Construction 3. Construction
Air Quality						
AIR-1	The Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.	**3.3-1: Dust Control Plan Implementation.** All elements of the Dust Control Plan required for work within San Francisco shall also be implemented for work occurring at Fort Funston. At a minimum this Plan shall include watering of exposed surfaces, covering of haul trucks, and sweeping of visible mud or dirt on adjacent public roads.	1. DC 2. DC	1. DC 2. DC/NPS	1. Ensure that the construction contract for Fort Funston includes the same Dust Control Plan that is used for San Francisco. 2. Monitor to ensure that contractor(s) implements measures in contract documents. Report non-compliance, and ensure corrective action.	1. Preconstruction 2. Construction
AIR-2	The Project could result in a cumulatively considerable net increase of ozone, PM10, or PM2.5 (for which the SFBAAB is in non-attainment), including releasing emissions which exceed quantitative thresholds for ozone precursors.	**Implement Mitigation Measure 3.3-1: Dust Control Plan Implementation (see details above)**				
Biological Resources						
BIO-1	Construction of the Project could have a substantial adverse effect either directly or through habitat Modifications, on plant species identified as sensitive or special-status in local or regional plans, policies, or regulations, or by the CDFW or USFWS.	**3.4-1: Avoidance, minimization, and compensation for impacts to special-status plants.** A qualified botanist shall conduct appropriately timed floristic preconstruction surveys for special-status plant species with a moderate or high potential to occur in the study area, and for species known to be present in the study area, in all suitable habitat that would be potentially disturbed by the Project within the year of initiation of ground disturbance (e.g., spring/summer 2017 surveys prior to fall 2017 start of construction). Surveys on NPS managed land shall be coordinated with NPS. Surveys shall be conducted following the current CDFW protocol (CDFG, 2009). If no special-status plants are found during focused surveys, the botanist shall document the findings in a letter to CDFW and the Project proponent, and no further mitigation will be required. If special-status plants are found during focused surveys, the following measures shall be implemented:	1. DC (Botanist) 2. DC (Botanist) 3. DC (Botanist) 4. DC (Botanist)	1. DC/NPS/CDFW 2. DC/CDFW/ USFWS/NPS 3. DC/NPS 4. CDFW/USFWS/ NPS	1. Obtain and review résumé or other documentation of consulting botanist's qualifications. Conduct preconstruction surveys for special status plants in accordance with NPS and/or CDFW protocols and reporting requirements. If special status plants are found, implement appropriate measures. 2. Develop relocation plan and/or compensation plan if relocation is not feasible.	1. Preconstruction 2. Preconstruction 3. Preconstruction 4. Post-construction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
Biological Resources (cont.)						
BIO-1 (cont.)		a) Information regarding the special-status plant populations shall be reported to the CNDDB, mapped, and documented in a technical memorandum provided to Daly City. b) No federal- or state-listed plants have been observed or are expected to occur within the Project areas of disturbance; however, if federal- or state-listed species are identified during floristic preconstruction surveys Daly City shall mark these plants for avoidance and comply with the federal and state Endangered Species Acts through consultation with USFWS and CDFW, respectively, as described in items c and d, below. c) If other special-status plant population(s) (i.e., California Rare Plant Ranked or locally significant plants) are identified during floristic preconstruction surveys and can be avoided during Project implementation, it shall be clearly marked in the field by a qualified botanist and avoided during construction activities. Before ground clearing or ground disturbance, all on-site construction personnel shall be instructed as to the species' presence and the importance of avoiding impacts to this species and its habitat. d) If special-status plant populations cannot be avoided, Daly City shall consult with CDFW and/or USFWS as appropriate (and NPS on populations within NPS-managed lands) to coordinate relocation of special-status plants or compensation if relocation is not determined to be a feasible or successful option by a qualified biologist: i. To the extent feasible, special-status plants that would be impacted by the Project shall be relocated within local suitable habitat. This can be done either through salvage and transplanting or by collection and propagation of seeds or other vegetative material. Any plant relocation shall be done under the supervision of a qualified biologist. ii. Compensation for temporary or permanent loss of special-status plant occurrences, in the form of land purchase or restoration, shall be provided to the level acceptable to the resource agencies. Compensatory measures shall be determined on a case-by-case basis in consultation with the resource agencies. Compensation for loss of special-status plant populations typically involves the purchase and permanent stewardship of known occupied habitat or the restoration and reintroduction of populations in degraded, unoccupied habitat. Restoration or reintroduction may be located on- or offsite. In either case the City of Daly City shall prepare a Mitigation and Monitoring Plan for relocated special-status plants or to compensate for the loss of special-status plant species. The plan shall detail relocation methods or appropriate replacement ratios and methods for implementation, success criteria, monitoring and reporting protocols, and contingency measures that shall be implemented if the initial mitigation fails. The plan shall be developed in consultation with the appropriate agencies prior to the start of local construction activities. For special-status plants displaced on NPS-managed lands, the Mitigation and Monitoring Plan shall be coordinated with and approved by NPS. At a minimum, success criteria shall require any mitigation to provide equal or better habitat and populations than the impacted area. e) If more than 2 years elapses between the focused, floristic preconstruction surveys of the Project site and commencement of ground disturbance activities, a final set of appropriately timed focused, floristic preconstruction botanical surveys shall be conducted and populations mapped. The results of these final surveys shall be combined with previous survey results to produce habitat maps showing habitat where the special-status plants have been observed during either of the focused floristic surveys conducted for the Project. Copies of all surveys shall be submitted to NPS for NPS-managed lands and communications with the appropriate agencies shall be coordinated with NPS for NPS-managed lands.			3. Ensure that floristic preconstruction surveys are conducted again if more than 2 years elapses between initial preconstruction survey and commencement of ground disturbance. 4. Maintain and monitor relocation and/or restored areas for 5 years following construction and restoration activities. Submit monitoring reports to appropriate resource agencies according to protocol.	

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
Biological Resources (cont.)						
BIO-1 (cont.)		f) If special-status plants are relocated from the Project or compensatory restoration or reintroduction of plants or seed is implemented, Daly City shall maintain and monitor the relocation sites and/or restored areas for 5 years following the completion of construction and restoration activities. Daly City shall submit monitoring reports to the resource agencies at the completion of restoration and for 5 years following restoration implementation. Monitoring reports shall include photo-documentation, planting specifications, a site layout map, descriptions of materials used, and justification for any deviations from the mitigation plan. Success criteria for restored areas after 5 years will be determined by the appropriate agencies that will approve the plans. For mitigation on NPS-managed lands, restoration plans shall be coordinated with and approved by NPS and all plants shall be propagated from material collected and grown according to NPS protocols.				
BIO-2	Construction of the Project could have a substantial adverse effect either directly or through habitat modifications, on reptile species identified as special-status in local or regional plans, policies, or Regulations, or by the CDFW or USFWS.	**3.4-2a: Worker Environmental Awareness Program Training.** A project-specific Worker Environmental Awareness Program (WEAP) training shall be developed and implemented by a qualified biologist and attended by all Project personnel prior to beginning work onsite. The WEAP training shall generally include but not be limited to education about the following: a) Applicable State and federal laws, environmental regulations, Project permit conditions, and penalties for non-compliance; b) Special-status plant and animal species with potential to occur at or in the vicinity of the Project site, avoidance measures, and a protocol for encountering such species including a communication chain; c) Preconstruction surveys and biological monitoring requirements associated with each phase of work and at each Project site as biological resources and protection measures will vary depending on the land managers (see f, below); d) Known sensitive resource areas in the Project vicinity that are to be avoided and/or protected as well as approved Project work areas, access roads, and staging areas; e) Best management practices (BMPs) and their location at various Project sites for erosion control, species exclusion, in addition to general housekeeping requirements; and f) Specific requirements sanctioned by NPS that the Project must comply with while working on NPS-managed lands, including but not limited to: i. Preconstruction surveys for and relocation of terrestrial wildlife prior to grading or vegetation removal at Fort Funston; ii. Biological monitoring during Project initiation at each NPS-managed Project location (e.g., Ocean Outlet work area) to identify nearby sensitive biological resources and implement avoidance or protection measures approved by NPS staff; iii. Seasonal work restrictions during wildlife breeding, nesting, or migration periods; and iv. Work area exclusion methods, communication and relocation protocols if wildlife enters a work area(s) while a biological monitor is not onsite.	1. DC 2. DC (Biologist) 3. DC (Biologist) 4. DC	1. DC 2. DC/NPS 3. DC 4. DC	1. Ensure that contract documents include provisions that all project personnel to attend WEAP training prior to the start of onsite work. 2. Ensure that training program complies with NPS requirements, where applicable. 3. Obtain and review résumé or other documentation of consulting biologist's qualifications. Develop worker training program and ensure that all construction personnel participate in the environmental training prior to beginning work at the job site(s). Conduct additional trainings as new workers start project work. Require workers to sign the training program sign-in sheet. Maintain file of training sign-in sheets. 4. Compare list of WEAP attendees with list of contracted workers. Ensure that all workers have attended the WEAP training prior to starting work.	1. Preconstruction 2. Preconstruction 3. Preconstruction/ Construction 4. Preconstruction/ Construction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
Biological Resources (cont.)						
BIO-2 (cont.)		**3.4-2b: Avoidance and Minimization Measures for Western Pond Turtle.** During construction at the Lake Merced overflow structure in South Lake, construction at the outlet structure on the bank and within waters of Impound Lake, and during installation of the in-lake treatment infrastructure a qualified biological monitor shall be present during vegetation removal and the installation of exclusion fencing and cofferdam at Impound Lake. Also, the following measures shall be implemented: a) Within one week before construction commences at these locations, a qualified biologist shall supervise the installation of exclusion fencing along the terrestrial boundaries of the work area, as the biologist deems necessary. This is to prevent western pond turtles and incidental common wildlife from entering the work area from the adjacent riparian and upland grassland habitats. The construction contractor shall install CDFW-approved species exclusion fencing, with a minimum height of 3 feet above ground surface and with an additional 4 to 6 inches of fence material buried such that species cannot crawl under the fence. Any vegetation removal in advance of exclusion fence installation shall be performed under the supervision of a qualified biologist. b) A qualified biologist shall supervise the installation of a cofferdam around the inwater work area which shall be in place throughout the duration of construction on the Lake Merced overflow structure in South Lake and the Lake Merced outlet into Impound Lake (should lake water levels at the time of construction require in-water work to execute construction of either the overflow or the outlet structure). The following measures will be taken to prevent entrapment of western pond turtle and common, resident fish21 within the cofferdam: i. The qualified biologist shall visually survey the area for wildlife where the cofferdam is to be installed and monitor affected waters during installation. ii. As the final cofferdam piece is installed, resulting in isolation of the work zone and potential trapping of turtles and fish, the qualified biologist shall oversee initial dewatering of the area and conduct rescue-relocation effort of potentially isolated turtles and fish. Once a zero catch is recorded for three successive passes of nets, the work area can be declared free of wildlife. iii. The biologist shall monitor final dewatering of the work area and rescue-relocate any final fish that are revealed by drawing water levels all the way down. iv. The isolated work area can now be considered a construction zone and can be managed as such. Memo of rescue-relocation results involving western pond turtles shall be submitted to CDFW, as required by CDFW, and kept on file at construction site (in case of inspections). c) The biological monitor shall monitor the exclusion fencing and inspect the cofferdam weekly to confirm proper maintenance and inspect for turtles. If turtles are found, the contractor shall halt construction in the immediate area and contact the CDFW for instructions on how to proceed. Construction may resume after approval from the CDFW. d) During construction and/or maintenance activities at work sites around Lake Merced, excavations deeper than 6 inches shall have an escape ramp of earth or a wooden plank installed at a 3:1 rise, be completely covered with plywood/metal plates at the end of each day to prevent entrapment, or be surrounded by species exclusion fencing to prevent species entry; openings, such as the ends of pipes, where western pond turtles might seek refuge shall be covered when not in use; and all trash that may attract predators or hide western pond turtles shall be properly contained each day, removed from the worksite, and disposed of regularly. Following site remediation, the construction contractor shall remove all trash and construction debris from the work areas.	1. DC 2. DC (Biologist) 3. DC (Biologist) 4. DC	1. DC 2. DC/CDFW/ USFWS 3. DC 4. DC	1. Ensure that contract documents include applicable avoidance and minimization measures for western pond turtles and incidental, common wildlife, including requirement for exclusion fencings. 2. Obtain and review résumé or other documentation of consulting biologist's qualifications. Conduct preconstruction surveys, species relocation (if appropriate and approved by CDFW and/or USFWS), and monitoring, including weekly fence inspection. Document activities in monitoring logs. 3. Develop worker training program and ensure that all construction personnel participate in the environmental training prior to beginning work at the job site(s). Require workers to sign the training program sign-in sheet. Maintain file of training sign-in sheets. 4. Monitor to ensure that contractor(s) implements measures in contract documents. Report noncompliance, and ensure corrective action.	1. Design 2. Preconstruction/ Construction 3. Preconstruction/ Construction 4. Construction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
Biological Resources (cont.)						
BIO-3	Construction of the Project could have a substantial adverse effect either directly or through habitat modifications, on migratory birds and/or on bird species identified as special-status in local or regional plans, policies, or regulations, or by the CDFW or USFWS.	**3.4-3: Nesting Bird Protection Measures** Nesting birds and their nests shall be protected during construction through the implementation of the following measures: a) To the extent feasible, conduct initial ground disturbance and site grading, vegetation removal, tree removal, pile driving, and other construction activities that may compromise breeding birds or the success of their nests outside of nesting season (i.e., from January 1 – August 15). Timing of pile driving on NPS-managed lands shall be coordinated with NPS biologists. b) If construction activities cannot be fully avoided during bird nesting season (i.e., from January 1 to August 15), a qualified wildlife biologist shall conduct preconstruction nesting surveys within 7 days prior to the start of construction or prior to reinitiating construction after any construction breaks of 14 days or more. Lead agencies and/or responsible agencies may, at their discretion, require shorter preconstruction survey periods as a condition of Project approval (e.g., NPS previously has required that surveys occur within less than 7 days prior to the start or re-initiation of construction in other GGNRA locations). Surveys shall be performed for the Project sites and for suitable habitat within 250 feet of the Project sites in order to locate any active passerine (perching bird) nests and within 500 feet of the Project sites to locate any active raptor (birds of prey) nests or double-crested cormorant or heron rookeries. c) If active nests are located during the preconstruction bird nesting surveys, a qualified biologist shall evaluate if the schedule of construction activities could affect the active nests and if so, the following measures shall apply: i. If construction is not likely to affect the active nest, it may proceed without restriction; however, a biologist shall regularly monitor the nest to confirm there is no adverse effect and may revise their determination at any time during the nesting season. ii. If construction may affect the active nest, the qualified biologist shall establish a no-disturbance buffer around the nest(s) and all Project work shall halt within the buffer until it is determined no longer in use by a qualified biologist. Typically, these buffer distances are 250 feet for passerines and 500 feet for raptors; however, they may be adjusted if 1) determined to not sufficiently avoid or minimize adverse project effects in which case the buffer would be expanded, or 2) an obstruction, such as a building, is within line-of-sight between the nest and construction in which case the buffer could be reduced, if approved by CDFW. Modifying nest buffer distances, allowing certain construction activities within the buffer, modifying construction, and removing or relocating active nests shall be coordinated with the CDFW as appropriate given the nests that are found on the site. Protective measures surrounding nests found on NPS-managed lands shall be coordinated with NPS. iii. Any work that must occur within established no-disturbance buffers (e.g., vegetation removal, grading, work with hand tools, etc.) around active nests shall be monitored by a qualified biologist. If adverse effects in response to Project work within the buffer are observed and could compromise the nest, work shall halt until the nest fledges. d) Any birds that begin nesting within the Project area and survey buffers amid construction activities are assumed to be habituated to construction-related or similar noise and disturbance levels so exclusion zones around nests may be reduced or eliminated in these cases as determined by the qualified biologist in coordination with respective land managers. Work may proceed around these active nests as long as they and their occupants are not directly impacted. Protective buffers may be established around such nests at any time if Project-related adverse effects to bird, nests, or nestlings are observed.	1. DC 2. DC (Biologist) 3. DC (Biologist) 4. DC	1. DC/NPS 2. DC/NPS 3. DC/CDFW/NPS 4. DC/NPS	1. Ensure that construction contract includes provisions to avoid construction disturbance during the nesting season. 2. Obtain and review résumé or other documentation of consulting biologist's qualifications. Conduct preconstruction nesting surveys within 7 days or less prior to start of construction or reinitiation of construction activities. 3. Create construction mitigation and monitoring plan if active nests are located within disturbance range of project area. 4. Monitor to ensure contractor(s) implements measures in contact documents. Report non-compliance and ensure corrective action.	1. Design 2. Preconstruction 3. Preconstruction/ Construction 4. Construction
		Implement Mitigation Measure 3.11-1 (see details under Noise and Vibration, below)				

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
Biological Resources (cont.)						
BIO-4	Project construction could have a substantial adverse effect either directly or through habitat modifications, on bats identified as special-status in local or regional plans, policies, or regulations, or by the CDFW or USFWS.	**3.4-4: Avoidance and Minimization Measures for Special-Status Bats.** A preconstruction survey for special-status bats shall be conducted by a qualified biologist in advance of tree and structure removal within the project site to characterize potential bat habitat and identify active roost sites. Should the preconstruction survey find no bat habitat or bat roosting sites then no further action is required. Should potential roosting habitat or active bat roosts be found in trees and/or structures to be removed under the project, Daly City shall implement avoidance and minimization measures. These measures include, but are not limited to, the following, subject to modification by the terms of applicable permits issued by the CDFW: a) Removal of trees and structures shall occur when bats are active, approximately between the periods of March 1 to April 15 and August 15 to October 15; outside of bat maternity roosting season (approximately April 15 – August 31) and outside of months of winter torpor (approximately October 15 – February 28), to the extent feasible. b) If removal of trees and structures during the periods when bats are active is not feasible and active bat roosts being used for maternity or hibernation purposes are found on or in the immediate vicinity of the project site where tree and structure removal is planned, a no disturbance buffer of 100 feet shall be established around these roost sites until they are determined to be no longer active by the qualified biologist. A 100-foot no disturbance buffer is a typical protective buffer distance however may be modified by the qualified biologist depending on existing screening around the roost site (such as dense vegetation or a building) as well as the type of construction activity which would occur around the roost site. c) The qualified biologist shall be present during tree and structure removal if potential bat roosting habitat or active bat roosts are present. Trees and structures with active roosts shall be removed only when no rain is occurring or is forecast to occur for 3 days and when daytime temperatures are at least 50°F. d) Removal of trees with potential bat roosting habitat or active bat roost sites shall follow a two-step removal process: i. On the first day of tree removal and under supervision of the qualified biologist, branches and limbs not containing cavities or fissures in which bats could roost, shall be cut only using chainsaws. ii. On the following day and under the supervision of the qualified biologist, the remainder of the tree may be removed, either using chainsaws or other equipment (e.g., excavator or backhoe). e) Removal of structures containing or suspected to contain potential bat roosting habitat or active bat roosts shall be dismantled under the supervision of the qualified biologist in the evening and after bats have emerged from the roost to forage. Structures shall be partially dismantled to significantly change the roost conditions, causing bats to abandon and not return to the roost.	1. DC 2. DC (Biologist) 3. DC (Biologist)	1. DC/CDFW 2. DC 3. DC/NPS	1. Ensure that contract documents include applicable avoidance and minimization measures for special status bats. 2. Obtain and review resume or other documentation of consulting biologist's qualifications. Conduct pre-construction survey. If roosts are found, implement appropriate measures. Document activities in monitoring logs. 3. Monitor to ensure that contractor(s) implements measures in contract documents. Report noncompliance, and ensure corrective action.	1. Design 2. Preconstruction 3. Construction
BIO-5	Project construction could have a substantial adverse effect on central dune scrub, a sensitive natural community identified by the CDFW.	**3.4-5: Avoidance, minimization, and compensation for impacts to central dune scrub.** a) Concurrent with focused botanical surveys, prior to establishing staging areas or beginning construction activities, areas of central dune scrub vegetation within the Project footprint and within a 50-foot buffer adjacent to the Project footprint shall be mapped by a qualified botanist using a Global Positioning System (GPS) unit with 3-meter accuracy. b) To the extent feasible, Project elements shall be designed to avoid and minimize impacts to central dune scrub. This includes minimizing the Project footprint within central dune scrub or siting Project elements outside of this sensitive community. Where central dune scrub can be avoided, protective fencing shall be installed along the edge of construction areas including temporary and permanent	1. DC 2. DC (Botanist) 3. DC (Ecologist) 4. DC (Botanist) 5. DC (Ecologist)	1. DC 2. DC 3. DC/NPS/ CDFW/CCC 4. DC 5. DC/NPS	1. Ensure that contract documents include applicable avoidance and minimization measures for central dune scrub. 2. Obtain and review resume or other documentation of consulting botanist qualifications. Conduct pre-construction survey and map areas that contain central dune scrub within project area and within a 50-foot buffer adjacent to project footprint.	1. Design 2. Preconstruction 3. Preconstruction 4. Construction 5. Post-construction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
Biological Resources (cont.)						
BIO-5 (cont.)		access roads where construction will occur within 50 feet of the edge of central dune scrub (as determined by a qualified botanist). The location of fencing shall be marked in the field with stakes and flagging and shown on the construction drawings. The construction specifications shall contain clear language that prohibits construction-related activities, vehicle operation, material and equipment storage, trenching, grading, or other surface-disturbing activities outside of the designated construction area. Signs shall be erected along the protective fencing at a maximum spacing of one sign per 25 feet of fencing. The signs shall state: "This area is environmentally sensitive; no construction or other operations may occur beyond this fencing. Violators may be subject to prosecution, fines, and imprisonment." The signs shall be clearly readable at a distance of 20 feet, and shall be maintained for the duration of construction activities in the area. c) In areas where impacts to central dune scrub cannot be avoided, the Project proponent shall prepare and implement an onsite Revegetation and Restoration Plan for Central Dune Scrub, to be submitted to CDFW and CCC for review and approval. For impacts to central dune scrub on NPS-managed lands, the plan shall also be coordinated with and approved by NPS. Restoration and revegetation shall take place onsite following Project completion and will directly restore those areas temporarily impacted. If grading has occurred in these locations to facilitate Project construction, re-contouring of the disturbed areas to pre-project conditions or similar shall be performed prior to restoration. If permanent impacts to central dune scrub occur within the Project footprint, central dune scrub adjacent to the restored areas could be enhanced through (1) removal of invasive plants, (2) planting of local central dune scrub species, and (3) continued monitoring and maintenance to compensate for permanent losses. The revegetation and restoration plan shall be prepared by a qualified restoration ecologist and shall include specifications for seed and propagule26 collection prior to the commencement of construction and at the appropriate phonological stage to capture reproductive structures of target central dune scrub plants. The restoration ecologist shall coordinate with a local native plant restoration nursery and NPS for restoration of central dune scrub on NPS-managed lands to either store the propagules until planting or grow the plants so that they are ready to plant once construction is complete. Restoration areas shall be monitored to assess reestablishment for 5 years or until the sites meet the success criteria determined in the plan. At a minimum, total native vegetation cover, composition, and species richness in the restored areas should be monitored and maintained until comparable with suitable reference sites.			3. Obtain and review resume or other documentation of consulting restoration ecologist qualifications. Prepare and implement onsite Revegetation and Restoration Plan in areas where impacts to Central Dune Scrub cannot be avoided. 4. Monitor to ensure that contractor(s) implements measures in contract documents. Report noncompliance, and ensure corrective action. 5. Monitor restoration areas for 5 years or until the sites meet criteria in restoration plan.	
BIO-6	Project construction would not have a substantial adverse effect on upland vegetation communities identified in local or regional plans, policies, regulations, or by the CDFW or USFWS.	**3.4-6: Implement Tree Protection Measures and Plant Replacement Trees.** 1. A certified arborist shall perform a tree survey of the Project prior to construction to identify trees to be removed, trimmed, or retained and that shall need to be protected during construction. 2. Trees to be trimmed or retained under the Project shall be protected during construction by measures determined by the certified arborist that may include but are not limited to the following: a. Establishing a Tree Protection Zone (TPZ) around any tree or group of trees to be retained. The formula typically used is defined as 1.5 times the radius of the dripline or 5 feet from the edge of any grading, whichever is greater. The TPZ may be adjusted on a case-by-case basis after consultation with a certified arborist. b. Marking the TPZ of any trees to be retained with permanent fencing (e.g., post and wire or equivalent), which shall remain in place for the duration of construction activities in the area. "Keep Out" signs shall be posted on all sides of fencing.	1. DC 2. DC (Arborist) 3. DC 4. DC	1. DC/SFDPW 2. DC 3. SFDPW 4. DC	1. Ensure that contract documents include tree protection and replacement measures. 2. Obtain and review resume or other documentation of certified arborist's qualifications. Conduct preconstruction tree survey to identify trees to be removed, trimmed, retained, and/or protected during construction. 3. Ensure that the contractor implements tree removal and replacement measures in accordance with SFDPW requirements. 4. Monitor to ensure that contractor implements measures in contract documents. Report noncompliance, and ensure corrective action.	1. Design 2. Preconstruction 3. Preconstruction/ Construction 4. Construction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
Biological Resources (cont.)						
BIO-6 (cont.)		c. Prohibiting construction-related activities, including grading, trenching, construction, demolition, or other work within the TPZ; or, if work within the TPZ is necessary, performing the work in a manner that will adequately protect the tree. No heavy equipment or machinery shall be operated within the TPZ. No construction materials, equipment, machinery, or other supplies shall be stored within a TPZ. No wires or signs shall be attached to any tree. Any modifications shall be approved and monitored by a certified arborist. d. Pruning selected trees to provide necessary clearance during construction and to remove any defective limbs or other parts that may pose a failure risk. All pruning shall be completed by a certified arborist or tree worker and adhere to the Tree Pruning Guidelines of the International Society of Arboriculture. 3. Trees to be removed under the Project shall follow the SFDPW tree removal permit process and be replaced on the property from which trees are removed at a 1:1 ratio. Non-native trees removed shall be replaced with native tree species determined suitable for the site by a qualified biologist, horticulturist, landscape architect, or biologist in coordination with the SFDPW. a. Trees shall be replaced within the first year after completion of construction, or as soon as possible in areas where construction has been completed, during a favorable time period for replanting, as determined by a qualified arborist, horticulturist, or landscape architect. b. Selection of replacement sites and installation of replacement plantings shall be supervised by a qualified arborist, horticulturist, landscape architect, or landscape contractor. Irrigation of trees during the initial establishment period (generally for two to four growing seasons) shall be provided as deemed necessary by a qualified arborist, horticulturist, landscape architect, or landscape contractor. c. Trees shall be planted at or in close proximity to removal sites, in locations suitable for the replacement species. The specialist shall work with the SFDPW to determine appropriate nearby off-site locations that are within the same jurisdiction from which the trees are removed if replanting within the well facility sites is precluded. d. A qualified arborist, horticulturist, landscape architect, or landscape contractor shall monitor newly planted trees at least twice a year for five years. Each year, any trees that do not survive shall be replaced and monitored at least twice a year for five years thereafter.				
BIO-7	Construction of the Project would have a substantial adverse effect on sensitive communities identified in local or regional plans, policies, regulations, or by CDFW or USFWS through the introduction or spread of invasive plants.	**3.4-7a: Control Measures for Spread of Invasive Plants.** Construction best management practices shall be implemented in all construction areas to prevent the spread of invasive plants, seed, propagules, and pathogens through the following actions: 1) Avoid driving in or operating equipment in weed-infested areas outside of fenced work areas and restrict travel to established roads and trails whenever possible. 2) Avoid leaving piles of exposed soil or construction materials in areas with the potential for invasive plants (e.g., Fort Funston staging area). Non-active stockpiles shall be covered with plastic or a comparable material. 3) Clean tools, equipment, and vehicles before transporting materials and before entering and leaving worksites (e.g., wheel washing stations at Project site access points). Inspect vehicles and equipment for weed seeds and/or propagules stuck in tire treads or mud on the vehicle to minimize the risk of carrying them to unaffected areas. Designate areas within active construction sites for cleaning and inspections.	1. DC/NPS 2. DC/NPS	1. DC/NPS 2. DC/NPS	1. Ensure that construction contract includes best management practices and control measures for the spread of invasive plants, at all project locations, with additional actions to be implemented at Fort Funston. 2. Monitor to ensure that contractor implements measures in contract documents. Report noncompliance, and ensure corrective action.	1. Design 2. Construction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
Biological Resources (cont.)						
BIO-7 (cont.)		The following additional actions shall be implemented at Fort Funston: 4) An NPS representative shall inspect vehicles and equipment prior to project initiation at any Fort Funston work area work for weed seeds and plant fragments that could colonize within the site. At Project initiation, all construction vehicles must be cleaned to remove soil and plant fragments at the Fort Funston main parking area (or other agreed to location) and vehicles or equipment that are not clean shall be rejected until clear of weed seed and plant fragments. Wheel washing stations or other methods to remove and contain seeds or other plant fragments from vehicles, equipment, boots, and tools shall be performed in designated areas. 5) All equipment and tools involved in soil disturbance at Fort Funston shall be disinfected using a 10% bleach or 70% isopropyl alcohol solution prior to initial use within Fort Funston or prior to returning to Fort Funston if used on another project site. 6) Only certified, weed-free, plastic-free imported erosion control materials (or rice straw in upland areas) shall be used at Fort Funston.				
		3.4-7b: Post-Construction Treatment of Upland Areas. Upon completion of final grading, and in order to prevent the establishment and spread of invasive plant species in upland areas temporarily disturbed by construction activities, hydroseed or broadcast seed of a native plant seed mix shall be applied to upland areas disturbed during construction. This does not include areas of central dune scrub which will be restored according to Mitigation Measure 3.4-5, Avoidance, minimization, and compensation for impacts to central dune scrub. Native plant seed mix composition shall vary between sites and depend on the surrounding vegetation community of each area. Post-construction treatment of upland areas on NPS-managed lands (i.e., disturbed dune scrub) shall be coordinated with and approved by NPS and all seeds and propagules shall be collected and grown according to NPS protocols. Fertilizers shall not be used at Fort Funston post construction as they may favor invasive plant species over native perennial species. Following post construction treatment of these upland areas disturbed during construction (i.e., hydroseeding, broadcast seeding, or planting), monitoring of these areas shall occur quarterly for a minimum of 2 years. If more than 50 percent of the relative plant cover of these areas is composed of invasive plant species, management actions shall be carried out to reduce the invasive plant cover and promote the native species.	1. DC/NPS 2. DC	1. DC/NPS 2. DC/NPS	1. Ensure that construction contract includes post-construction treatment of upland areas to prevent spread of invasive plant species. 2. Conduct monitoring program quarterly for a minimum of 2 years following post construction treatment of upland areas.	1. Design 2. Post-construction
BIO-8	Project construction could have a substantial adverse effect on wetlands and other jurisdictional waters.	**3.4-8a: Wetland Avoidance and Protection.** Access roads, work areas, and infrastructure shall be sited to avoid and minimize direct and indirect impacts to wetlands and waters to the extent feasible. Where work will occur on the Project adjacent to state and federal jurisdictional wetlands and waters, protection measures shall be applied to protect these features. These measures shall include the following: 1) A protective barrier (such as silt fencing) shall be erected around adjacent wetland or water features to isolate them from Project activities and reduce the potential for incidental fill, erosion, or other disturbance; 2) Signage shall be installed on the fencing to identify sensitive habitat areas and restrict construction activities beyond fenced limits; 3) No equipment mobilization, grading, clearing, storage of equipment or machinery, or similar activity shall occur at the Project site until a representative of Daly City has inspected and approved the wetland protection fencing; 4) Daly City shall ensure that the temporary fencing is continuously maintained until all remediation is completed;	1. DC 2. DC	1. DC 2. DC	1. Ensure that construction contract includes avoidance and protection measures for wetlands and waters where work occurs adjacent to such locations. 2. Monitor to ensure that contractor(s) implements measures in contract documents. Report noncompliance, and ensure corrective action.	1. Design 2. Construction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
Biological Resources (cont.)						
BIO-8 (cont.)		5) Equipment maintenance and refueling in support of Project implementation shall be performed in designated upland staging areas and work areas, and spill kits shall be available onsite. Maintenance activity and fueling must occur at least 50 feet from jurisdictional wetlands and other waters or farther as specified in the Project permits and authorizations; and 6) Installation of the cofferdam around the existing outfall structure on the beach below Fort Funston and all subsequent work outside of the cofferdam once installed shall be conducted during periods of low tide, out of the Pacific Ocean, and when beach conditions provide accessible areas for equipment mobilization and storage beyond the reach of tides. Drip pans and/or liners shall be stationed beneath all equipment staged on the beach to minimize spill of deleterious materials into jurisdictional waters and spill kits shall be available within the cofferdam for easy accessibility during beach work. A fencing material meeting the requirements of both water quality protection and wildlife exclusion may be used.				
		3.4-8b: Compensation for Impacts to Wetlands and Riparian Habitat. To offset temporary impacts, restoration to pre-project conditions (typically including contours, topsoil, and vegetation) shall be conducted, as required by regulatory permits (e.g., those issued by the Corps, RWQCB, CDFW, and/or CCC). To offset unavoidable permanent impacts to jurisdictional wetlands, waters, and to riparian habitat, compensatory mitigation shall be provided as required by regulatory permits. Compensation may include on-site or off-site creation, restoration, or enhancement of jurisdictional resources, or payment into an approved mitigation bank for in-kind habitat credits, as determined by the permitting agencies. Mitigation bank credits, if available, shall be obtained prior to the start of construction. On-site or off-site creation/restoration/enhancement plans must be prepared by a qualified biologist prior to construction and approved by the permitting agencies. Implementation of creation/restoration/enhancement activities by the permittee shall occur prior to Project impacts, whenever possible, to avoid temporal loss. On- or off-site creation/restoration/enhancement sites shall be monitored by Daly City for at least five (5) years to ensure their success.	1. DC (Biologist) 2. DC (Biologist; Construction) 3. DC	1. DC 2. DC/USACE/ RWQCB/ CDFW/CCC 3. DC	1. Obtain and review résumé or other documentation of consulting biologist's qualifications. Prepare on-site and off-site creation/restoration/enhancement plans. 2. Restore wetlands, waters, and riparian habitat to pre-construction conditions. Ensure that compensatory mitigation measures for unavoidable permanent impacts comply with applicable regulatory permits. 3. Monitor on- or off-site restoration sites for at least 5 years.	1. Design/ Preconstruction 2. Post-construction 3. Post-construction
BIO-9	Construction of the Project could impede movement of native resident fish species.	**Implement Mitigation Measure 3.4-2b: Avoidance and Minimization Measures for Western Pond Turtle (see details above)**				
BIO-10	Construction of the Project could interfere substantially with the movement of native resident or migratory species or with established native resident or migratory corridors, or impede the use of nursery sites.	**3.4-9: Night Lighting Minimization** At construction areas set up for nighttime activity and requiring nighttime lighting, the construction contractor shall implement the following measures as long as the safety of workers is not compromised: a) To the extent feasible, night construction near suitable habitat for nesting and migratory birds and roosting bats (e.g., scrub vegetation, dense wooded areas, unoccupied buildings) shall be avoided during bird nesting season (January 1 – August 15), bat maternity roosting season (approximately April 15 – August 31), and periods of winter torpor (approximately October 15 – February 28). b) All construction-related lighting shall be fully shielded and focused downward to the maximum extent feasible to ensure no significant illumination passes beyond the immediate work area into surrounding habitat (e.g., central dune scrub, bluffs or the Pacific Ocean), or vertically into the sky. Lighting should be positioned around the perimeter of the work area and oriented toward construction activity rather than toward surrounding habitat. A qualified biologist shall be present at the start of nighttime activities when lights are placed to facilitate appropriate light placement and ensure surrounding wildlife habitat is not unnecessarily illuminated. Maps or other information indicating the location(s) of active nests or nesting habitat nearby nighttime work shall be available at the construction site.	1. DC 2. DC (Biologist) 3. DC (Biologist) 4. DC (Biologist) 5. DC	1. DC 2. DC 3. DC 4. DC/CDFW/ USFWS/NPS 5. DC/NPS	1. Ensure that construction contract documents include requirements for nighttime lighting minimization. 2. Obtain and review résumé or other documentation of consulting biologist's qualifications. Conduct pre-construction surveys for nesting birds and roosting bats within 7 days or less prior to start of construction or reinitiation of construction activities. 3. Ensure that a qualified biologist is present at the start of nighttime activities to ensure that lighting avoids any wildlife habitat. 4. If active nests or roosts are present near nighttime construction areas, monitor for disturbance during night work to determine species tolerance. Create construction mitigation and monitoring plan.	1. Design 2. Preconstruction 3. Construction 4. Construction 5. Construction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
		e) Yellow, orange, or other "warm colored" light shall be used where feasible (e.g., unless required by safety regulations, pre-installed in construction equipment, etc.).				
Biological Resources (cont.)						
BIO-10 (cont.)		d) Construction personnel shall reduce the amount of lighting to the minimum necessary to safely accomplish the work. e) Construction areas set-up for nighttime activity are subject to all of the same preconstruction surveys for nesting birds and roosting bats listed in Mitigation Measures 3.4-3 through 3.4-4. f) If active bird nests or bat roosts are identified near nighttime construction areas, a qualified biologist shall monitor nests or roosts for disturbance during night work to determine species tolerance to nearby lights. Illumination methods or shielding shall be modified if disturbance is determined to have potential to compromise the nest or roost. Coordination with CDFW, USFWS, or NPS (on NPS-managed lands) shall occur as appropriate.			5. Monitor to ensure that contractor(s) implements measures in contract documents. Report non-compliance, and ensure corrective action.	
BIO-12	Project operation could adversely affect central dune scrub, thimbleberry, wax myrtle, and canyon live oak scrub, and Vancouver rye grassland associated with Lake Merced.	**3.4-10a: Lake Level Management.** The Lake Merced overflow weir in South Lake shall be set at no greater than 9 feet City Datum to prevent lake water surface elevation from exceeding 9 feet City Datum during normal operations to avoid significant effects on wax myrtle scrub, Vancouver rye grassland, and eucalyptus forest. Lake Merced water levels shall be maintained at no more than 9 feet City Datum during normal operations. Should an operating WSE above 9 feet City Datum be selected or an extreme storm event requires temporary storage in Lake Merced that would increase WSE above 9 feet City Datum for more than 14 days (at which time vegetation die-off could occur), Mitigation Measure 3.4-10b is required.	1. DC (Structural Engineer) 2. SFPUC 3. SFPUC 4.	1. DC 2. DC 3. DC	1. Establish and incorporate design criterion for the overflow weir such that excess flow above 9 feet City Datum within 14 days of an extreme storm event. 2. Ensure that Lake Merced overflow weir in South Lake is set at no greater than 9 feet City Datum during normal operations. 3. Create log for overflow weir that documents daily operational level of weir. Create automatic alert if water level is greater than 9 feet City Datum for more than 14 days, to trigger actions required in Mitigation Measure 3.4-10b.	1. Design 2. Design/ Post-construction 3. Post-construction
		3.4-10b: Compensation for Loss of Sensitive Communities at Lake Merced. a) If 9.5 feet City Datum is selected as the target maximum WSE and Lake Merced water levels are not maintained at or below 9 feet City Datum during normal operations, or a storm event requires storage in Lake Merced that would increase WSE above 9 feet City Datum for more than 14 days for wax myrtle scrub and Vancouver rye grassland or for more than one month for blue gum eucalyptus forest, a resurvey of these sensitive vegetation communities around the Lake Merced shoreline to which a significant impact is predicted to occur (i.e., more than 10 percent loss) shall be performed post-inundation to determine actual percent loss. i. The resurvey shall be performed by qualified botanists and document the postinundation conditions (extent) of the wax myrtle scrub, Vancouver rye grassland, and blue gum eucalyptus around Lake Merced between the new inundation limit (above 9 feet WSE) and 13 feet WSE City Datum. Information on the extent of these sensitive natural communities gathered during this exercise may be applied to subsequent storm events during which WSE exceeds 9 feet WSE or if an operating WSE maintains lake levels above 9 feet WSE, for use in quantifying loss of these sensitive communities at various inundation limits above 9 feet City Datum. ii. Surveyors may use a combination of on-the-ground vegetation community and habitat type mapping with an assessment of current aerial imagery for informing cover estimates, similar to the mapping exercise performed in 2012 that informed the vegetation change analysis for this EIR/EIS. iii. Once the updated vegetation mapping exercise is complete, the new vegetation polygons shall be compared with the 2012 vegetation polygons to quantify change. The polygon comparison shall also	1. DC/SFPUC (Botanist) 2. DC/SFPUC (Botanist)	1. DC 2. DC/CDFW/ CCC/SFRPD	1. Obtain and review résumé or other documentation of consulting botanist's qualifications. If water levels are above 9 feet City Datum for more than 14 days, conduct a post-inundation sensitive vegetation survey in communities around the lake shoreline. 2. Prepare restoration plan for any sensitive vegetation communities or loss of habitat as a result of inundation. Submit to CDFW and CCC for approval.	1. Preconstruction/ Post-construction 2. Preconstruction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
		consider the new inundation line, to assess whether or not the change in vegetation communities is attributable to inundation or saturation.				
Biological Resources (cont.)						
BIO-12 (cont.)		iv. If the updated mapping exercise and comparison assessment determine impacts to wax myrtle scrub, Vancouver rye grassland, or blue gum eucalyptus are less than 10 percent following inundation above 9 feet WSE, no further mitigation is required. v. If the updated mapping exercise and comparison assessment determine impacts to wax myrtle scrub, Vancouver rye grassland, or blue gum eucalyptus vegetation communities are 10 percent or more, an onsite revegetation and restoration plan shall be developed for permanently impacted (inundated/lost) communities and habitat types, as detailed in part b), below. b) An onsite revegetation and restoration plan shall be prepared to compensate for the affected sensitive vegetation communities and habitat lost (in excess of 10 percent) with a maintained WSE above 9 feet City Datum for 14 days or more for wax myrtle scrub and Vancouver rye grassland and for one month or more for eucalyptus forest. The plan shall be submitted to CDFW and CCC for review and approval, as appropriate. Typical compensation ratios for these communities shall be between 1:1 and 3:1 with native plant replacement quantities that shall be determined by the appropriate permitting agencies. Restoration and revegetation shall take place onsite where possible, and occur above the maximum water surface elevation to be maintained at Lake Merced so that future inundation impacts are avoided, and be implemented in coordination with SFRPD. i. The revegetation and restoration plan shall be prepared by a qualified restoration ecologist and shall include specifications for seed and propagule collection prior to the commencement of construction and at the appropriate phonological stage to capture reproductive structures of target plants within each affected sensitive vegetation community or habitat type. The restoration ecologist shall coordinate with a local native plant restoration nursery to either store the propagules until planting or grow the plants so that they are ready to plant once construction is complete. Restoration areas shall be monitored to assess re-establishment for 5 years or until total native vegetation cover, composition, and species richness in the restored areas are similar to suitable reference sites. ii. Individual special-status plants within the affected wax myrtle scrub and Vancouver rye grassland communities shall be mitigated according to the guidelines established in Mitigation Measure 3.4-1, Avoidance, Minimization, and Compensation for Special-Status Plants, items d and f regarding additional compensation location and revegetation and restoration plan performance standard details. Eucalyptus forest communities shall be mitigated according to guidelines established in Mitigation Measure 3.4-6, Implement Tree Protection Measures and Plant Replacement Trees, item 3 regarding appropriate replacement tree types, techniques, and performance standards.				
BIO-15	Project operation could adversely affect native wildlife nursery sites associated with Lake Merced.	**Implement Mitigation Measure 3.4-10a: Lake Level Management and, if necessary, Mitigation Measure 3.4-10b: Compensation for Loss of Sensitive Communities at Lake Merced (see details above)**				
Cultural Resources						
CUL-1	The Project would cause a substantial adverse change in the significance of a historical resource because it would demolish the majority of the historic Vista Grande Canal and Tunnel.	**3.5-1: HABS/HAER Recordation.** Prior to initiation of Project construction or demolition, the City of Daly City, in consultation with the NPS, shall record the Vista Grande Canal and Tunnel in accordance with the NPS Historic American Building Survey/Historic American Engineering Record (HABS/HAER) program. This program entails: 1) documentation of the canal and tunnel through large-format black and white photographs (including the interior of the length of the tunnel), 2) preparation of a historic resources report, 3) preparation of measured drawings (or copies of original plans), and 4) archiving of the documentation package at the U.S. Library of Congress, the City of Daly City, Golden Gate park archives,	1. DC/NPS	1. NPS	1. Record Vista Grande Canal and Tunnel with the NPS Historic American Building Survey/Historic American Engineering Record (HABS/HAER) program.	1. Preconstruction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Actions	Implementation Schedule
		and other local repositories such as public libraries. The specific HABS/HAER requirements of the Vista Canal and Tunnel will be further detailed in consultation with the NPS Pacific Western Region's HABS/HAER coordinator.				
Cultural Resources (cont.)						
CUL-1 (cont.)		**3.5-2: Public Interpretation.** Prior to the completion of the Project, the City of Daly City, in coordination with the NPS, shall prepare a public interpretation package that may entail interpretive materials, including but not limited to signage, brochures, videos, historical narrative, or other printed or web-based methods of explaining the historical and engineering significance of the Vista Grande Canal and Tunnel to the general public.	1. DC/NPS	1. NPS	1. Prepare a public interpretation package explaining the historical and engineering significance of the Vista Grande Canal and Tunnel.	1. Preconstruction/ Construction/ Post-construction
CUL-2	The Project would cause a substantial adverse change in the significance of an archaeological resource, including shipwrecks.	**3.5-3: Inadvertent Discovery of Archaeological Resources or Shipwrecks.** The following measures shall be implemented should construction activities result in the inadvertent discovery of an archaeological resource: a) Prior to construction, a training session on the recognition of the types of archaeological resources that could be encountered and the procedures to be followed if they are found shall be presented to Project construction personnel by a qualified professional archaeologist. If prehistoric or historic-period archaeological resources or shipwrecks are encountered, all construction activities within 50 feet shall halt. If the resource is located within San Francisco, the San Francisco Planning Department also shall be notified. b) If the resource is located on federally administered lands, NPS also shall be notified. Abandoned shipwrecks, archaeological sites, and historic resources in submerged lands of California are under the jurisdiction of the California State Lands Commission (CSLC). In the case of an inadvertent discovery of a submerged archaeological site, shipwreck, or related artifacts, the applicable jurisdictional agency shall also contact and initiate consultation with the CSLC staff within two business days of such discovery. c) The qualified archaeologist shall inspect the find within 24 hours of discovery and consult with the applicable jurisdictional agency and the culturally affiliated Native American group or groups. d) If the find is determined to be a historical resource according to CEQA Guidelines or a historic property that meets the National Register listing criteria at 36 CFR 60.4, the archaeologist, in consultation with the applicable jurisdictional agency and the culturally affiliated Native American group shall determine whether preservation in place is feasible. This may be accomplished through planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement. e) If preservation in place is not feasible, Daly City and the qualified archaeologist shall prepare and implement an Archaeological Research Design and Treatment Plan (ARDTP). Daly City, the qualified archaeologist, agencies with jurisdiction in the location(s) of the discovered resource(s), and the culturally affiliated Native American group(s, if applicable) shall meet to determine the scope of the ARDTP. The ARDTP shall identify a program for the treatment and recovery of important scientific data contained within the portions of the archaeological resources located within the Project Area of Potential Effects (APE); preserve any significant historical information obtained; and identify the scientific/historic research questions applicable to the resources, the data classes the resource is expected to possess, and how the expected data classes shall address the applicable research questions. f) Treatment for most archaeological resources shall consist of (but is not limited to) sample excavation, artifact collection, site documentation, and historical research, with the aim to target the recovery of important scientific data contained in the portion(s) of the significant resource(s) to be impacted by the Project. The treatment plan shall include provisions for analysis of data in a regional context, reporting of results within a timely manner, curation of artifacts and data at an approved facility, and dissemination of reports to local and state repositories, libraries, and interested professionals. The results of the investigation shall be documented in a technical report that provides a full artifact catalog,	1. DC 2. DC (Archeologist) 3. DC (Archeologist) 4. DC (Archeologist)	1. DC 2. DC 3. SFPD/NPS/ CSLC/Native American Groups 4. DC/SFPD/NPS/ CSLC/Native American Groups	1. Ensure that the contract documents include measures related to archeological discoveries or shipwrecks. 2. Obtain and review resume of qualified archeologist. Conduct training session with construction crew regarding types of archeological resources that could be encountered and procedures to follow. 3. Inspect any find within 24 hours and notify appropriate jurisdictional authority if archeological resources are discovered. Determine whether find can be preserved in place. 4. Prepare ARDTP if preservation cannot be made in place. Conduct treatment of resource as necessary.	1. Design 2. Preconstruction 3. Construction 4. Construction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
		analysis of items collected, results of any special studies conducted, and interpretations of the resource(s) within a regional and local context. All technical documents shall be placed on file at the Northwest Information Center of the California Historical Resources Information System.				
Cultural Resources (cont.)						
CUL-3	Project construction would disturb human remains.	**3.5-4: Inadvertent Discovery of Human Remains.** The following measure shall be implemented should construction activities result in the inadvertent discovery of human remains: The treatment of any human remains and associated or unassociated funerary objects discovered during soil-disturbing activities shall comply with applicable state laws. Such treatment shall include stopping work within 50 feet of the discovery and immediate notification of the County Coroner. In the event of the coroner's determination that the human remains are Native American, the coroner shall notify the Native American Heritage Commission, which shall appoint a Most Likely Descendant (MLD) (Pub. Res. Code §5097.98). The qualified archaeologist, Daly City, the landowner of the property on which the discovery is made, and the MLD shall make all reasonable efforts to develop an agreement for the treatment, with appropriate dignity, of any human remains and associated or unassociated funerary objects (CEQA Guidelines §15064.5[d]). The agreement shall take into consideration the appropriate excavation, removal, recordation, analysis, custodianship, curation, and final disposition of the human remains and associated or unassociated funerary objects. Public Resources Code Section 5097.98 allows 48 hours to reach agreement on these matters. If the MLD and the other parties do not agree on the reburial method, the landowner of the property on which the discovery is made shall follow Public Resources Code Section 5097.98(b), which states that "the landowner or his or her authorized representative shall reinter the human remains and items associated with Native American burials with appropriate dignity on the property in a location not subject to further subsurface disturbance."	1. DC 2. DC (Archeologist) 3. DC (Archeologist)	1. DC 2. County Coroner/ Native American Heritage Commission/ Most Likely Descendant 3. DC/NPS	1. Ensure that Contract Documents include measures related to discovery of human remains. 2. If potential human remains are encountered, mobilize an archaeologist to confirm existence of human remains. If human remains are confirmed, perform required coordination and notifications. 3. Monitor to ensure that the contractor implements measures in contract documents including insuring that all potential human remains are reported as required and that contractor suspends work in the vicinity. Report noncompliance and ensure corrective action.	1. Design 2. Construction 3. Construction
Geology and Soils						
GEO-1	Construction, operation, and maintenance of the Project could expose people or structures to potential substantial adverse effects involving strong seismic ground shaking and/or seismic-related ground failure.	**3.6-1a:** Prior to final Project design, a qualified engineer and/or geologist shall perform an inspection to map the size, location, orientation, and patterns of cracks and any crack offsets to provide additional insight into possible tunnel deformation related to faulting, and to help better assess the potential impact of the Serra Fault Zone during future seismic events on the San Andreas Fault, as recommended in the geotechnical investigation conducted by Treadwell & Rollo (2013).	1. DC (Engineer/ Geologist)	1. DC	1. Obtain and review a resume for a qualified engineer/geologist. Inspect tunnel to map details of any cracks or deformation related to faulting.	1. Design
		3.6-1b: Daly City and/or its contractor(s) shall retain inspectors working under the auspices of a California-licensed geotechnical engineer to be present on the Project site during excavation, grading, and general site preparation activities to monitor the implementation of the recommendations specified in this measure. • Project construction shall be in conformance with CBC seismic design requirements and the OSHA Excavation and Trenching standard (29 CFR 1926.650) for the Project area. • When and if needed, the geotechnical engineer shall provide structure-specific geologic and geotechnical recommendations prior to and during construction that shall be documented in a report to be appended to the Project's previous geotechnical reports and approved by the City of San Francisco Department of Building Inspection.	1. DC (Geotechnical engineer) 2. DC (Geotechnical engineer) 3. DC (Geotechnical engineer)	1. DC 2. DC 3. City of San Francisco Department of Building Inspection	1. Obtain and review resume for CA-licensed geotechnical engineer. Monitor excavation and grading and general site preparation activities for seismic requirement standards. 2. Ensure that project construction/project area conforms with CBC seismic design requirements and OSHA Excavation and Trenching standard (29 CFR 1926.650) 3. Prepare report outlining structure specific geologic and geotechnical recommendations made prior to and during construction, if needed.	1. Design/ Preconstruction 2. Construction 3. Post-construction
		3.6-1c: Project foundations in the vicinity of Boring B-3 shall be constructed using cast-in-place drilled piers, micropiles, or another equivalent deep foundation system such as auger-cast or displacement piles or a torqued-in piling system for deep foundations.	1. DC 2. DC	1. DC 2. DC	1. Ensure that construction contract includes the appropriate boring equipment for Boring B-3. 2. Monitor to ensure that contractor(s) implements measures in contract documents.	1. Design 2. Construction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
					Report non-compliance, and ensure corrective action.	
Geology and Soils (cont.)						
GEO-2	The Project could result in substantial soil erosion or the loss of topsoil.	**3.6-2:** Annual maintenance shall include the following: inspection and flushing to make sure that subdrain pipes are free of debris and are in good working order; and inspection of subdrain outfall locations to verify that introduced water flows freely through the discharge pipes and that no excessive erosion has occurred.	1. DC 2. DC (Construction Contractor) 3. DC	1. DC 2. DC 3. DC	1. Ensure that contract documents include requirements for annual maintenance of subdrain pipes and subdrain outfall locations. 2. Prepare annual maintenance logs that include measures to ensure that subdrain pipes are free of debris, are in good working order, that water can flow freely from discharge pipes, and that no excessive erosion has occurred. 3. Review annual maintenance logs and monitor maintenance to ensure that contractor(s) implements measures in contract documents. Report non-compliance, and ensure corrective action.	1. Design 2. Construction/ Post-construction 3. Post-construction
GEO-3	The Project may be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project.	**3.6-3a:** The following recommendations regarding site preparation, foundations, retaining walls, seismic design, and other geotechnical aspects provided in the geotechnical report shall be incorporated into this Project. • Areas that will include improvements, including new below-grade structures, concrete flatwork and slabs-on-grade, shall be cleared and grubbed of all vegetation, and the site shall be stripped of organic topsoil containing over three percent organic matter. Stripped materials shall be removed from the site or stockpiled for later use in landscaped areas, if approved by the architect. • After stripping the existing soil subgrade, areas to receive fill or other improvements shall be scarified, moisture-conditioned, and compacted. The subgrade shall provide a firm, non-yielding surface. The soil subgrade shall be kept moist until it is covered by improvements. If soft or loose soil is encountered after stripping, the unsuitable material shall be excavated and replaced with suitable fill material. • All materials to be used as general engineered fill or backfill, including on-site soil, shall be free of organic material, be non-hazardous and non-corrosive, contain no large rocks or lumps, and have low expansion potential, and be approved by the geotechnical engineer. • Fill shall be placed in horizontal lifts, moisture-conditioned to above the optimum moisture content and compacted. • Fill placed beneath exterior slabs-on-grade/flatwork and other below-grade structures shall also be moisture-conditioned. From a geotechnical standpoint, concrete flatwork/exterior slabs and other below-grade structures can be cast directly on soil subgrade. If Class 2 aggregate base is used beneath flatwork/slabs or structures it shall be compacted as necessary. • Backfill for utility trenches and other excavations is also considered fill, and shall be compacted according to the recommendations previously presented. Jetting of trench backfill shall not be permitted. Special care shall be taken when backfilling utility trenches in pavement areas. • Temporary slopes in loose to medium dense sand shall not be steeper than 2:1 (horizontal to vertical) for slopes up to 15 feet in height. Slopes higher than 15 feet shall be analyzed for stability.	1. DC 2. DC (Construction Contractor) 3. DC (Construction Contractor) 4. DC (Geotechnical Engineer) 5. DC (Shoring Designer) 6. DC (Shoring Designer) 7. DC (Construction Contractor) 8. DC (Geotechnical Engineer) 9. DC (Construction Contractor) 10. DC	1. DC 2. DC 3. DC 4. DC 5. DC 6. DC 7. DC 8. DC 9. DC 10. DC	1. Ensure that contract documents include the recommendations provided in the geotechnical report. 2. Incorporate recommendations regarding site preparation, foundations, retaining walls, seismic design, and other geotechnical aspects from the geotechnical report into the Project. 3. Determine the length of tiebacks. 4. Observe and evaluate tieback testing and test results. 5. Evaluate required penetration depth of soldier piles to ensure they have sufficient axial capacity to support the vertical load acting on the piles. 6. Determine appropriate factor of safety to use an internally braced soil-cement shoring wall. 7. Select and design the dewatering system. 8. Check the design of the proposed dewatering system prior to installation. 9. Monitor for signs of subsidence while dewatering is in progress. 10. Monitor to ensure that contractor(s) implements measures in contract documents. Report non-compliance, and ensure corrective action.	1. Design 2. Design 3. Design/ Preconstruction 4. Preconstruction/ Construction 5. Design/ Preconstruction/ Construction 6. Design/ Preconstruction/ Construction 7. Construction 8. Preconstruction/ Construction 9. Construction 10. Construction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
		Temporary slopes in dense sand shall not be steeper than 1.5:1. If the sides of proposed excavations cannot be sloped back, then shoring shall be provided.				
Geology and Soils (cont.)						
GEO-3 (cont.)		• A flexible shoring system shall be designed to resist lateral earth pressures and other pressures as described in the geotechnical investigations. Traffic or surcharge loads shall be added to the active pressures. • The contractor shall be responsible for determining the actual length of tiebacks required to resist the lateral earth and water pressures imposed on the temporary retaining systems. • The geotechnical engineer shall observe tieback testing. • The geotechnical engineer shall evaluate the tieback test results and determine whether the tiebacks are acceptable. • The shoring designer shall evaluate the required penetration depth of the soldier piles. The soldier piles shall have sufficient axial capacity to support the vertical load acting on the piles, if any. • The geotechnical investigation anticipates an internally braced soil-cement shoring wall may be used for shoring in some areas where tiebacks aren't needed. The shoring designer shall determine the appropriate factor of safety to use. • During excavation, the groundwater shall be lowered and maintained at that level until sufficient structural weight or a foundation system is available to resist the hydrostatic uplift forces on the bottom of the foundation and/or slab-on-grade. The selection and design of the dewatering system shall be the responsibility of the contractor. The geotechnical engineer shall check the design of the proposed dewatering system prior to installation. • Adjacent improvements shall be monitored by the contractor for signs of subsidence including vertical movement and groundwater levels outside the excavation shall be monitored while dewatering is in progress.				
		3.6-3b: Prior to final Project design, additional slope stability studies, including updated geologic mapping and slope stability analysis, shall be performed by a California-licensed geotechnical engineer to evaluate potential for weakened blocks that could become loose during outlet construction or tunneling. Also, stability analyses shall be completed to evaluate the potential impacts of bluff failure on the new outlet structure to be constructed at the base of the cliff. If potential for weakened blocks to become loose or for bluff failure to occur during construction, the study shall include design specifications and construction methods, such as use of temporary structural supports, to avoid such effects. Recommendations from the studies shall be incorporated into the final Project design and construction methods, and implemented by Daly City and/or its contractors.	1. DC (Geotechnical engineer) 2. DC (Geotechnical engineer)	1. DC 2. DC	1. Obtain and review resume of CA-licensed geotechnical engineer. Conduct additional slope stability studies to evaluate potential stability issues during outlet construction and tunneling. 2. Incorporate recommendations from geotechnical slope studies into the final Project design and construction methods.	1. Design 2. Design
GEO-4	The proposed Project would not create substantial risks to life or property due to expansive or corrosive soils.	**3.6-4:** Daly City and/or its contractors shall ensure that all micropiles used for the Project are double-corrosion protected.	1. DC 2. DC (Construction Contractor) 3. DC	1. DC 2. DC 3. DC	1. Ensure that contract documents include provisions for contractors to double-corrosion protect micropiles. 2. Ensure that micropiles are double-corrosion protected. 3. Monitor to ensure that contractor(s) implements measures in contract documents. Report non-compliance, and ensure corrective action.	1. Design 2. Construction 3. Construction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
Greenhouse Gas Emissions and Climate Change						
GHG-1	Project construction and operation would generate GHG emissions.	**3.7-1: Greenhouse Gas Emission Reduction.** Daly City and/or its contractor(s) shall implement the following measures to reduce greenhouse gas emissions from construction: 1) On-road vehicle idling time shall be minimized and shall not exceed a 5-minute maximum. Additionally, off-road engines shall not idle for longer than 5 minutes, per Section 2449(d)(3) of Title 13, Article 4.10, Chapter 9 of the California Code of Regulations. Clear signage of this requirement shall be provided for construction workers at all access points to construction areas. 2) Utilize B20 biodiesel for generator fueling to reduce greenhouse gas emissions of generator operation by approximately 20 percent. 3) Following finalization of project design and construction phasing, but prior to the start of construction activities, Daly City and/or its contractors shall use best available modeling tools to estimate annual greenhouse gas emissions resulting from construction. After accounting for the use of B20 biodiesel as under Item 2, Daly City shall purchase carbon offsets in the amount that construction emissions would exceed the greenhouse gas emissions significance threshold of 1,100 MT/CO2-equivalent per year from an accredited source.	1. DC (Construction Contractor) 2. DC (Construction Contractor) 3. DC	1. DC 2. DC 3. DC	1. Ensure that contract documents include the requirements for reducing greenhouse gases. 2. Ensure that contract documents include the requirements for reducing greenhouse gases. 3. Ensure that the preparer(s) of estimates implement appropriate modeling tool. Ensure that carbon offsets are purchased prior to construction commencement.	1. Design 2. Design 3. Preconstruction
Hazards and Hazardous Materials						
HAZ-2	Project construction could result in a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.	**3.8-1: Health and Safety Plan.** The construction contractor(s) shall prepare and implement a site-specific Health and Safety Plan in accordance with 29 CFR 1910.120 to protect construction workers and the public during all excavation, grading, and construction activities. The Health and Safety Plan shall include, but is not limited to, the following elements: • A summary of all potential risks to construction workers and maximum exposure limits for all known and reasonably foreseeable site chemicals; • Training for hazard recognition, including visual and olfactory cues; • Specified personal protective equipment and decontamination procedures, if needed; • Emergency procedures, including route to the nearest hospital; • Procedures to be followed in the event that evidence of potential soil or groundwater contamination (such as soil staining, noxious odors, debris or buried storage containers) is encountered. These procedures shall be in accordance with hazardous waste operations regulations and specifically include, but are not limited to, the following: immediately stopping work in the vicinity of the unknown hazardous materials release, and retaining a qualified environmental firm to perform sampling and remediation.	1. DC 2. DC (Construction Contractor) 3. DC	1. DC 2. DC 3. DC	1. Ensure that contract documents include the requirement for preparing a health and safety plan. 2. Prepare and submit a health and safety plan and verify that it includes information cited in contract documents. 3. Monitor to ensure that the contractor(s) implements measures in the contract documents and health and safety plan. Report noncompliance, and ensure corrective action.	1. Design 2. Preconstruction 3. Preconstruction/ Construction
HAZ-3	Project construction would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	**Implement Mitigation Measure 3.15-1: Construction Traffic Management Plan** (see details under Transportation and Traffic, below)				

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
Hydrology and Water Quality						
HYD-1	Project construction could violate water quality standards and/or waste discharge requirements, provide substantial additional sources of polluted runoff, or otherwise substantially degrade water quality.	**3.9-1: Implement Cofferdam Dewatering BMPs for In-Water Work.** If dewatering discharge produced during construction of the Lake Merced outlet and overflow structures is not discharged to the sewer system, a requirement shall be included in construction specifications that requires the construction contractor(s) to implement standard BMPs developed and approved by Daly City for the treatment of sediment-laden water produced during cofferdam dewatering activities. BMPs could include discharging water through filtration media, such as filter bags or a similar filtration device, or allowing the cofferdam dewatering discharge to infiltrate into the soil. If infiltration is used, application of the dewatering discharge shall be conducted at a rate and location that does not allow runoff into Lake Merced or drainage conveyances, such as storm drains, and does not cause flooding or runoff to adjacent properties. The dewatering discharge shall also be conducted at a rate that does not allow ponding, unless the ponding is a result of implementing BMPs to reduce the velocity of the flow and occurs within constructed containment, such as an excavation or berm with no outlet. The discharge must also be applied at a sufficient distance from building foundations or other areas that could be damaged from ground settling or swelling. Alternatively, and if feasible, the filtered dewatering effluent could be used for construction dust suppression. Any BMPs developed and implemented shall remove sediment in a manner sufficient to meet the Water Quality Objective for turbidity as specified in the Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan). Specifically, receiving waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses and increases in turbidity related to dewatering discharges shall not be greater than 10 percent in areas where natural turbidity is greater than 50 Nephelometric Turbidity Units (NTU).	1. DC 2. DC 3. DC	1. DC 2. DC 3. DC	1. Ensure that contract documents include measures requiring the implementation of BMPs designed to treat sediment-laden water produced during cofferdam activities if dewatering discharge is not discharged to sewer system. 2. Review contractor's Dewatering Plan to ensure that it meets Water Quality Objectives for turbidity as specified in the Water Quality Control Plant for the Basin Plan. 3. Monitor to ensure that the contractor implements measures in Dewatering Plan, report noncompliance, and ensure corrective action within timelines specified in contract.	1. Design 2. Preconstruction 3. Construction
HYD-9	The Project could conflict with plans, policies, or regulations related to alteration of coastal landforms or processes adopted for the purpose of avoiding or mitigating an environmental effect.	**3.9-2: Avoidance and Minimization of Conflicts with California Coastal Act and NPS Management Policies.** The final design of the Ocean Outlet structures must minimize conflicts with the applicable Coastal Act requirements that new development: 1) be designed to eliminate or mitigate adverse effects on local shoreline sand supply (Section 30235); and 2) assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs (Section 30253). In order to minimize conflicts with these policies, Daly City shall undertake the following steps when developing final engineering designs of the Ocean Outlet structures: 1) A California licensed engineer shall prepare a study consistent with the methods for assessing sea level rise in Coastal Development Permits detailed in the California Coastal Commission's Sea Level Rise Policy Guidance (California Coastal Commission, 2015). The study shall identify Project design elements that may conflict with California Coastal Act Policies (Sections 30235 and 30253) and recommend revisions to bring the final design into conformity with these guidelines and policies (Study). At a minimum, the Study shall: a) Use the range of projections recommended by the CCC's 2015 Sea Level Rise Policy Guidance in evaluating potential sea level rise effects over the Project planning horizon. b) Incorporate, and update as necessary, information concerning baseline conditions at the Ocean Outlet, and future projections (both with and without sea level rise) concerning: i) Bluff erosion rates and patterns; ii) Sand supply sequestering as a result of Project design; iii) Storm effects relating to coastal hazards (e.g., scour, wave runup, flooding; iv) Potential for exposure of Project infrastructure over the Project lifetime, and v) Potential cumulative effects of the Project on the identified coastal process elements above with applicable existing or future projects.	1. DC/NPS 2. DC (Engineer) 3. DC (Engineer) 4. DC (Engineer) 5. DC/NPS	1. DC/NPS 2. DC/NPS/CCC 3. NPS/CCC 4. DC/NPS/CCC 5. DC/NPS	1. Ensure that contract and design documents for the Ocean Outlet minimize conflicts with applicable Coastal Act requirements. 2. Obtain and review resume or other documentation of a CA-licensed engineer's qualifications. Prepare a study that is consistent with the methods for assessing sea level rise in Coastal Development Permits and the CCC's Sea Level Rise Policy Guidance. 3. Prepare report of study's findings and submit final report and design to NPS and CCC for review. 4. Ensure that recommendations made by NPS and CCC are incorporated into design and specifications and implemented during construction, operation, and maintenance of project. 5. Monitor to ensure the contractor(s) implements measures in contract documents. Report noncompliance and ensure corrective action.	1. Design 2. Design 3. Design 4. Design/ Construction/ Post-Construction 5. Construction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program			
			Implementation and Reporting		Monitoring and Reporting Actions	Implementation Schedule
			Responsible Party	Reviewing and Approval Party		
Hydrology and Water Quality (cont.)						
HYD-9 (cont.)		c) Include recommendations for final engineering design, construction methods and materials for all aspects of the Ocean Outlet development, including the site preparation, building foundations, and design, to remedy any identified coastal process or coastal resource related impacts. Also the Study shall identify final engineering design recommendations and alternatives to minimize identified risks relating to hazards, such as geologic instability. Design recommendations and alternatives shall be protective of coastal resources throughout the expected life of the Project and include recommendations to minimize hazard exposure where avoidance is infeasible, including steps to relocate or modify the development as needed to prevent risks to the Project structures or to coastal resources. Such alternatives could include, but would not be limited to, alteration of the proposed wing walls or other outlet structure components to ensure final Project design is consistent with the following California Coastal Act policies to the extent feasible: a. Section 30235 Consistency: Construction of Project features that alter natural shoreline processes shall be approved only if it is determined by the CCC that such a design is required to serve a coastal dependent use or to protect existing structures or public beaches in danger from erosion, and that final design minimizes adverse impacts on local shoreline sand supply as compared to current and future baseline conditions. b. Section 30253 Consistency: Final design shall be approved only if it is determined that such a design minimizes contribution to erosion, geologic instability, or destruction of the site or surrounding area, and if the Project's necessary protective devices minimize the alteration of natural landforms. 2) The Study's findings shall be presented in a report, which shall be reviewed, signed, and stamped by the professional engineer in charge. The report shall be subject to technical review by Daly City, the NPS, SFPUC, and the CCC staff. 3) The report and final design shall be submitted to the NPS and CCC for review and approval to ensure any inconsistencies with NPS and CCC policy requirements are resolved. Recommendations in the approved study shall be incorporated into the design and construction specifications and shall be implemented during construction and operation and maintenance of the Project as applicable.				
Land Use and Planning						
LU-1	The project could conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.	**Implement Mitigation Measure 3.9-2: Avoidance and Minimization of Conflicts with California Coastal Act and NPS Management Policies** (see details under Hydrology and Water Quality, above)				

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Actions	Implementation Schedule
Noise and Vibration						
NOI-1	Project construction could temporarily expose persons to or generate noise levels in excess of local noise ordinances or create a substantial temporary increase in ambient noise levels.	**3.11-1:** The applicant shall require construction contractors to implement the following measures: • Equipment and trucks used for Project construction shall use the best available noise control techniques (e.g., improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures, and acoustically-attenuating shields or shrouds, wherever feasible). • Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for Project construction shall be hydraulically or electrically powered where feasible to avoid noise associated with compressed air exhaust from pneumatically powered tools. Where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible; this could achieve a reduction of 5 dBA. Quieter procedures, such as use of drills rather than impact tools, shall be used whenever feasible. • Stationary construction noise sources shall be located as far from adjacent residential receptors as possible. Stationary noise-generating construction equipment shall be muffled and enclosed within temporary sheds, incorporate insulation barriers, and/or controlled using other measures to the extent this does not interfere with construction purposes. Specifically, any generator used on site shall be muffled using an acoustical enclosure.	1. DC 2. DC (Construction Contractor) 3. DC	1. DC 2. DC 3. DC	1. Ensure that contract documents include language requiring preparation of a noise control plan that includes best available noise control techniques. 2. Ensure that the noise control plan is prepared in accordance with the contract documents. 3. Monitor to ensure that the contractor(s) implements noise control requirements and ensure corrective action within timelines specified in contract.	1. Design 2. Preconstruction 3. Construction
		3.11-2: To further address potential nuisance impacts of Project construction, construction contractors shall implement the following: • Signs shall be posted at all construction site entrances to the property upon commencement of Project construction, for the purposes of informing all contractors/subcontractors, their employees, agents, material haulers, and all other persons at the applicable construction sites, of the basic requirements of Mitigation Measures 3.11-1. • Signs shall be posted at the construction sites that include permitted construction days and hours, a day and evening contact number for the job site, and a contact number in the event of problems. • An onsite complaint and enforcement manager shall respond to and track complaints and questions related to noise.	1. DC 2. DC (Construction Contractor) 3. DC	1. DC 2. DC 3. DC	1. Ensure that contract documents include requirements for the posting of signs that inform all construction personnel of the requirements of the noise control plan, permitted construction days/hours, and contact information. 2. Designate project liaison responsible for responding to noise complaints and enforcing noise control requirements. Ensure that liaison's name and phone number is included on posted notices. As necessary, develop a reporting program for tracking complaints received and for documenting their resolution. 3. Monitor to ensure that required signs are posted and that complaints are tracked and responded to in a timely manner. Report noncompliance and ensure corrective action.	1. Design 2. Preconstruction 3. Construction
NOI-2	Project construction could result in the exposure of persons to or generation of excessive groundborne Vibration or groundborne noise levels.	**3.11-3:** To address the vibration impact at the Missile Assembly Building located in Fort Funston, Daly City shall require construction contractors to implement the following vibration monitoring measures: 1) A pre-construction visual survey of the Missile Assembly Building shall be conducted and existing conditions shall be documented by use of photography or video. A qualified and licensed structural engineer and architectural historian shall be retained to assess whether the potentially affected structure(s) could withstand a vibration level above the "stop work" threshold of 0.12 in/sec PPV (90 VdB). If this assessment results in a higher threshold for potential damage than 0.12 in/sec PPV (90 VdB), that higher threshold shall be used in lieu of 0.12 in/sec PPV (90 VdB) for purposes of part 2. 2) The construction contractor shall monitor vibration levels during tunnel construction, especially during impact pile driving at the temporary construction shaft. If construction vibration levels measured at the Missile Assembly Building exceed 0.12 in/sec PPV (90 VdB) or the higher threshold determined in part 1 if applicable, construction shall be halted and other feasible construction	1. DC 2. DC (Structural Engineer; Architectural Historian) 3. DC	1. DC 2. DC 3. DC	1. Ensure contract documents include vibration monitoring measures to address vibration impacts at the Missile Assembly Building located in Fort Funston. 2. Obtain and review resume or other documentation of consulting licensed structural engineer and architectural historian's qualifications. Assess whether vibrations would affect the structure. 3. Monitor to ensure that contractor(s) implements vibration monitoring measures in contract documents. Report noncompliance and ensure corrective action.	1. Design 2. Design 3. Construction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Monitoring and Reporting Program: Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Program: Monitoring and Reporting Actions	Monitoring and Reporting Program: Implementation Schedule
		methods shall be employed to reduce the vibration levels below the standard threshold. Alternative construction methods may include sonic or vibratory pile drivers.				
Geologic and Paleontological Resources						
PAL-1	The Project would directly or indirectly destroy a unique paleontological resource or site or unique geological feature.	**3.12-1: Inadvertent Discovery of Paleontological Resources.** Prior to construction, a training session on the recognition of the types of paleontological resources that could be encountered and the procedures to be followed if they are found shall be presented to Project construction personnel by a qualified professional paleontologist. A qualified paleontologist shall be on call when excavations disturb the Merced and Colma Formations. In the event that potential vertebrate fossils are discovered, work shall cease at the location and a qualified paleontologist shall evaluate the discovery, as described below. For areas of excavation on federally managed lands that would disturb the Merced formation, NPS shall determine the NPS paleontologist or NPS-approved private paleontologist that will perform this monitoring. Consistent with NPS guidance, disturbance within other formations present in Fort Funston shall be monitored for fossils by trained Project construction personnel unless the NPS paleontologist determines that monitoring by a qualified paleontologist is necessary. If potential vertebrate fossils are discovered by construction crews or a paleontological monitor, all earthwork or other types of ground disturbance within 50 feet of the find shall stop immediately and the monitor shall notify Daly City, as well as the NPS if the potential fossil is found on federal lands. Work shall not resume until a qualified professional paleontologist can assess the nature and importance of the find. Based on the scientific value or uniqueness of the find, the qualified paleontologist may record the find and allow work to continue, or recommend salvage and recovery of the fossil. The qualified paleontologist may also propose modifications to the stop-work radius based on the nature of the find, site geology, and the activities occurring on the site. If treatment and salvage is required, recommendations shall be consistent with NPS guidelines (on federal land), SVP 1995 guidelines (on non-federal land), and currently accepted scientific practice, and shall be subject to review and approval by Daly City, and by NPS if the potential fossil is found on federal land. If required, treatment for fossil remains may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection [e.g., the University of California Museum of Paleontology (UCMP)], and may also include preparation of a report for publication describing the finds. Daly City shall ensure that information on the nature, location, and depth of all finds is readily available to the scientific community through university curation or other appropriate means.	1. DC/NPS 2. DC/NPS (Paleontologist) 3. DC/NPS (Paleontologist) 4. DC/NPS	1. DC/NPS 2. DC/NPS 3. DC/NPS 4. DC/NPS	1. Ensure that contract documents include measures related to paleontological discoveries. 2. Obtain and review resume of qualified paleontologist. Conduct training session with construction crew regarding types of paleontological resources that could be encountered and procedures to follow. 3. Evaluate potential discoveries according to jurisdictional requirements, and if confirmed, treat and prepare fossil materials appropriately. Prepare report of find, as necessary. 4. Monitor to ensure contractor(s) implements paleontological measures in contract documents if discovery occurs. Report noncompliance and ensure corrective action.	1. Design 2. Preconstruction 3. Construction 4. Construction
Transportation and Traffic						
TRA-1	Project construction would cause temporary increases in traffic volumes on area roadways, which could cause substantial conflicts with the performance of the circulation system, but would not conflict with applicable plans, ordinances, or policies pertaining to the performance of the circulation system.	**3.15-1: Construction Traffic Management Plan** Daly City and/or its contractor(s) shall prepare and implement a Construction Traffic Management Plan in accordance with professional traffic engineering standards to show methods for maintaining traffic flows on roadways and access to recreational resources directly affected by Project construction, which shall include, at a minimum, the following requirements: a) Develop circulation plans to minimize impacts on local street circulation; use flaggers and/or signage to guide vehicles through and/or around the construction zone (including, as needed, for trucks turning into and out of Fort Funston at the intersection of SR 35 and Fort Funston Road). Circulation plans may be modified during construction, based on observed conditions. b) Identify truck routes and, to the extent possible, use haul routes that minimize truck traffic on local roadways and residential streets. c) Schedule truck trips to minimize trips during the peak morning and evening commute hours, and the peak hours of arrivals and departure from Fort Funston, to the extent possible. d) Provide sufficient staging areas for trucks accessing construction zones to minimize disruption of access to adjacent land uses, particularly within residential neighborhoods.	1. DC 2. DC (Construction Contractor) 3. DC	1. DC 2. DC/SFMTA/ NPS/SamTrans 3. DC	1. Ensure that contract documents include requirements of Construction Traffic Management Plan. 2. Prepare and implement Construction Traffic Management Plan with requirements cited in contract documents. Coordinate with Caltrans regarding construction traffic use of SR 35. 3. Monitor to ensure the contractor(s) implements measures in the contract documents and Construction Traffic Management Plan. Report noncompliance, and ensure corrective action.	1. Design 2. Preconstruction/ Construction 3. Construction

Impact No.	Impact Summary	Mitigation Measure	Monitoring and Reporting Program: Implementation and Reporting: Responsible Party	Implementation and Reporting: Reviewing and Approval Party	Monitoring and Reporting Actions	Implementation Schedule
		e) Maintain pedestrian and bicycle access and circulation during Project construction where safe to do so. If construction activities encroach on a bicycle lane, post warning signs that indicate bicycles and vehicles are sharing the lane.				
Transportation and Traffic (cont.)						
TRA-1 (cont.)		f) Maintain public safety and access on the beach by posting notices and maps at and around the project site and on Golden Gate National Recreation Area's website prior to and during construction, informing the public about when and where public access could be restricted and about alternative access points, if applicable; and incorporate measures on the beach to protect the public during construction activities. g) Store all equipment and materials in designated contractor staging areas on or adjacent to the worksite, in such a manner to minimize obstruction of traffic. h) Implement roadside safety protocols and provide advance "Road Work Ahead" warning signs and speed control (including signs informing drivers of state-legislated double fines for speed infractions in a construction zone) to achieve required speed reductions for safe traffic flow through the work zone. i) Coordinate construction with facility owners or administrators of sensitive land uses such as police and fire stations (including all fire protection agencies), transit stations, hospitals, and schools, as well as Fort Funston. Notify facility owners or operators in advance of the timing, location, and duration of construction activities. j) Provide residents adjacent to Project construction areas (e.g., on Avalon Drive and Westmoor Avenue) with information regarding Project construction in their area, including anticipated start and end of construction activities. k) Coordinate construction with local traffic agencies, SFMTA, NPS, and SamTrans, to minimize disruption and arrange for the temporary relocation of bus stops in work zones as necessary.				
TRA-5	Project construction would result in increased wear-and-tear on the designated haul routes.	**3.15-2:** Daly City, San Francisco, and the National Park Service shall enter into an agreement prior to construction that shall detail pre-construction conditions and the post-construction requirements of a roadway rehabilitation program. Daly City and/or its contractors shall repair roads damaged by construction to a structural condition equal to that which existed prior to construction activity.	1. DC/SF/NPS 2. DC (Construction Contractor) 3. DC/SF/NPS	1. DC/SF/NPS 2. DC 3. DC/SF/NPS	1. Ensure that contract documents include pre-construction conditions and post-construction requirements of a roadway rehabilitation program. 2. Repair roads damaged by construction to a structural quality equal to preconstruction activity. 3. Monitor to ensure the contractor(s) implements measures in the contract documents. Report noncompliance, and ensure corrective action.	1. Design 2. Post-construction 3. Post-construction

RESOLUTION NO. 25-82

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF DALY CITY APPROVING ADDENDUM TO FINAL ENVIRONMENTAL IMPACT REPORT FOR THE VISTA GRANDE DRAINAGE BASIN IMPROVEMENT PROJECT; APPROVAL OF MODIFIED PROJECT

A. Staff recommends approval of Addendum to Final Environmental Impact Report; and Approval of the Modified Project identified as refinements to the Vista Grande Drainage Basin Improvement Project.

B. The Vista Grande storm drain system drains the northwestern portion of Daly City and an unincorporated portion of San Mateo County. The existing Canal and Tunnel do not have adequate hydraulic capacity to convey peak storm flows, and this periodically causes backup of Tunnel flows into the Canal and flooding during peak storm events in adjacent low-lying residential areas and along John Muir Drive. Daly City developed the Vista Grande Drainage Basin Improvement Project (Project) to address these deficiencies of the basin.

C. Subsequent to Project approval and certification of the EIR/EIS, additional Project refinements were necessary to address permit conditions and changes to construction staging areas, among other things. These refinements are described below as the Modified Project:

The Modified Project would include the following updates:

- Changing the Canal staging areas and components
- Installing a water recirculation pump
- Adding habitat restoration sites around Lake Merced
- Using the Pacific Rod and Gun Club as a work area
- Revising the Fort Funston work area
- Updating the power source for construction activities
- Using ventilation fans during work in the Tunnel
- Removing wing walls from the final design of the Ocean Outlet at Funston Beach

D. In accordance with CEQA, Daly City prepared an Addendum to the EIR/EIS. The Addendum concludes that the Modified Project would not result in any new significant impacts not previously disclosed in the EIR/EIS, and it would not result in a substantial increase in the magnitude of any significant environmental impact previously identified. Additionally, there is no new information that shows that the mitigation measures previously found not to be feasible would in fact be feasible, or that mitigation measures or alternatives considerably different from those analyzed in the previous EIR/EIS would substantially reduce one or more significant effects on the environment. The Modified Project would also be subject to the mitigation measures already adopted as part of the mitigation monitoring and reporting program. Therefore, an addendum to the EIR/EIS is sufficient to meet the requirements of CEQA Guidelines Section 15164. The Addendum to the EIR/EIS serves as documentation that the Modified Project does not trigger any of the conditions outlined in CEQA Guidelines Section 15162 that would require a subsequent EIR/EIS. Therefore, a subsequent EIR/EIS is not required.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Daly City that it does hereby approve the Modified Project and affirms that the Addendum is compliant with CEQA.

I hereby certify the foregoing to be a true copy of a Resolution adopted by the City Council of Daly City, California, at a regular meeting thereof held on the 9th day of June, 2025, by the following vote of the members thereof:

AYES, and in favor thereof, Councilmembers: DiGiovanni, Manalo, Proaño, Sylvester, Daus-Magbual

NOES, Councilmembers: None

ABSENT, Councilmembers: None

K. Annette Ilipona

CITY CLERK OF THE CITY OF DALY CITY

APPROVED:

RODERICK DAUS-MAGBUAL
MAYOR OF THE CITY OF DALY CITY

PUBLIC UTILITIES COMMISSION

City and County of San Francisco

RESOLUTION NO. **25-0113**

WHEREAS, The San Francisco Public Utilities Commission (SFPUC) and Daly City are working collaboratively towards Daly City's implementation of the Vista Grande Project to alleviate flooding in the Vista Grande Basin within Daly City and the SFPUC's Lake Merced Tract and also facilitate augmentation and management of Lake Merced water levels using sustainable supplies of Daly City's stormwater; and

WHEREAS, The Vista Grande Project is intended to route storm water from the Vista Grande Canal to South Lake Merced as well as to the Pacific Ocean, reduce uncontrolled overflows from the Vista Grande Canal into Lake Merced, achieve a sustained increase in Lake Merced Lake levels, improve storm water quality, and further the restoration of the drainage basin's natural hydrology; and

WHEREAS, Daly City's Vista Grande Project operates to mitigate impacts from SFPUC's implementation of the Regional Groundwater Storage and Recovery and San Francisco Groundwater Project, by increasing water surface elevations in Lake Merced; and

WHEREAS, Both Daly City and the SFPUC wish to memorialize their respective obligations as follows: (1) Daly City to construct and implement the Vista Grande Project; (2) Daly City and SFPUC to share water quality and hydrologic data related to Lake Merced; (3) memorialize the SFPUC's financial contribution towards Project construction; and (4) affirm commitments to sustainably operate the portion of the Westside Basin within their respective jurisdictions while protecting the beneficial uses of Lake Merced; and

WHEREAS, On December 11, 2017, Daly City acting as the California Environmental Quality Act (CEQA) lead agency, certified a Final Environmental Impact Report/Environmental Impact Statement (Final EIR/EIS) for the Vista Grande Drainage Basin Improvement Project (Project), prepared pursuant to the CEQA, by Resolution 17-200; and

WHEREAS, On June 9, 2025, Daly City adopted an Addendum to the Final EIR/EIS, to include modifications to the project such as changing staging areas and adding restoration sites around Lake Merced by Resolution 25-82; and

WHEREAS, Daly City has adopted CEQA findings, and mitigation measures included in the Final EIR/EIS to avoid or substantially lessen the significant environmental effects identified in the Final EIR/EIS and set forth in the Mitigation Monitoring and Reporting Program, and has assumed responsibility for their implementation; and

WHEREAS, Authorization of the MOA is within the scope of the project authorized under the Final EIR/EIS and Addendum to the Final EIR/EIS; and

WHEREAS, Staff has made the Draft EIR/EIS, Final EIR/EIS consisting of the Response to Comments to the Draft EIR/EIS, Addendum to the Final EIR/EIS, CEQA Findings, Mitigation Monitoring and Reporting Program, and Daly City Resolutions 17-200 and 25-82 that are part of the record of this approval available for review by this Commission and the public at the SFPUC offices, Real Estate Services Division, 525 Golden Gate Avenue, 10th Floor, San Francisco, California, and those documents are part of the record before this Commission; and

WHEREAS, This Commission has reviewed and considered the information in the Draft EIR/EIS, Final EIR/EIS consisting of the Response to Comments, Addendum to the Final EIR/EIS, CEQA Findings, and Mitigation Monitoring and Reporting Program, and Daly City Resolutions 17-200 and 25-82; and

WHEREAS, Since Daly City adopted the Final EIR/EIS and Addendum to the Final EIR/EIS, there have been no substantial changes in the Project or changes in Project circumstances that would result in new significant environmental effects or an increase in the severity of previously identified significant impacts, and there is no new information of substantial importance that would change the conclusions set forth in the Final EIR/EIS and Addendum to the Final EIR/EIS; and

WHEREAS, The SFPUC has no direct authority or responsibility with respect to the proposed Project or any Project mitigation measures under the CEQA other than to enable the Daly City, through the MOA, to carry out the proposed Project; and

WHEREAS, The current estimated project construction cost for the entire project is $130,000,000, and SFPUC's contribution is $35,000,000 which is equivalent to the water resource benefit accrued to the SFPUC; and

WHEREAS, Construction work is anticipated to begin in August 2025 and end in August 2030 and the total duration of this agreement is sixty months (five years); and

WHEREAS, Funds for this agreement will be available at the time of award of the agreement from Project No. CUW30101 Lake Merced Water Level Restoration Project and Project No. 10015080 Lake Merced Water Level Restoration Project; now, therefore, be it

RESOLVED, This Commission, acting as a Responsible Agency under the CEQA Guidelines sections 15096 and 15381, has reviewed and considered the Final EIR/EIS, Addendum to the Final EIR/EIS, and the record as a whole, finds that the Final EIR/EIS and Addendum to the Final EIR/EIS are adequate for its use as Responsible Agency for the Project and adopts Daly City's CEQA Findings and incorporates them by this reference as though set forth in this Resolution; and be it

FURTHER RESOLVED, This Commission affirms the determination that since the Final EIR and Addendum to the Final EIR/EIS were finalized, there have been no substantive Project

changes and no substantial changes in Project circumstances that would require revisions to the Final EIR/EIS and Addendum to the Final EIR/EIS due to the potential involvement of new significant environmental effects or an increase in the severity of previously identified significant impacts, and there is no new information of substantial importance that would change the conclusions set forth in the Final EIR/EIS and Addendum to the Final EIR/EIS; and be it

FURTHER RESOLVED, That this Commission hereby authorizes the General Manager of the San Francisco Public Utilities Commission, or the General Manager's designee, to execute a Memorandum of Agreement with the City of Daly City for an amount not to exceed $35,000,000, and with a total duration of 60 months, subject to Board of Supervisors approval under Charter Section 9.118.

I hereby certify that the foregoing resolution was adopted by the San Francisco Public Utilities Commission at its meeting of July 8, 2025.

Director of Commission Affairs
San Francisco Public Utilities Commission

San Francisco Water Power Sewer
Services of the San Francisco Public Utilities Commission

FROM: **Jeremy Spitz, Policy and Government Affairs**

DATE: **July 18, 2025**

SUBJECT: **[Memorandum of Agreement – City of Daly City – Vista Grande Drainage Basin Improvement Project – Not to Exceed $35,000,000]**

Please see attached a proposed Resolution approving and authorizing the General Manager of the San Francisco Public Utilities Commission to execute, on behalf of the City and County of San Francisco, a Memorandum of Agreement with the City of Daly City for the funding, construction, and operation of the Vista Grande Drainage Basin Improvement Project, with a duration of five years starting August 4, 2025, through August 31, 2030, pursuant to Section 9.118 of the Charter.

The following is a list of accompanying documents:

- Proposed Resolution (Word Doc Version)
- Draft Memorandum of Agreement (Word Doc Version)
- Daly City Resolution No.25-82 (PDF Version)
- Daly City Resolution No. 17-200 (PDF Version)
- Final Environmental Impact Report (PDF Version)
- Draft Environmental Impact Report (PDF Version)
- CEQA Findings and Mitigation Measures and Alternatives (PDF Version)
- Addendum to Environmental Impact Report (PDF Version)

Please contact Jeremy Spitz at jspitz@sfwater.org if you need any additional information on these items.

Daniel L. Lurie
Mayor

Kate H. Stacy
President

Joshua Arce
Vice President

Avni Jamdar
Commissioner

Stephen E. Leveroni
Commissioner

Meghan Thurlow
Commissioner

Dennis J. Herrera
General Manager