File No. 141159	Committee Item No3 Board Item No3					
COMMITTEE/BOARD OF SUPERVISORS AGENDA PACKET CONTENTS LIST						
Committee: Budget & Finance Comm	Date December 10, 2014					
Board of Supervisors Meeting	Date 12/16/14					
Cmte Board Motion Resolution Ordinance Legislative Digest Budget and Legislative Youth Commission Reg Introduction Form Department/Agency Co MOU Grant Information Form Grant Budget Subcontract Budget Contract/Agreement Form 126 – Ethics Com Award Letter Application	oort ver Letter and/or Report					
Public Correspondence						
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Completed by: Linda Wong Completed by: $\sim \omega$.	Date December 5, 2014 Date Olull 4					

AMENDED IN COMMITTEE 12/10/14 RESOLUTION NO.

FILE NO. 141159

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San Francisco Public Utilities Commission BOARD OF SUPERVISORS

[Emergency Work - Repairing Lower Cherry Aqueduct and Upgrading Sunol Valley Water Facilities Related to Drought Declaration - Not to Exceed \$33,000,000]

Resolution approving emergency public work of the San Francisco Public Utilities

Commission related to drought declaration under Administrative Code, Section 6.60, to
perform immediate work to repair Lower Cherry Aqueduct, Sunol Valley Water

Treatment Plant, San Antonio Pump Station, and related infrastructure with contract
amounts not to exceed \$33,000,000 collectively.

WHEREAS, California continues to experience one of the most extreme droughts since hydrologic recordkeeping began; and

WHEREAS, As of September 26, 2014, precipitation in the Hetch Hetchy watershed was at 65% of the long-term average, below the average for the third year in a row; and

WHEREAS, On February 10, 2014, Mayor Ed Lee issued an Executive Directive to all city departments outlining actions to be taken to reduce water use, and directing the San Francisco Public Utilities Commission (SFPUC) to develop alternative sources of water supplies for both potable and non-potable uses; and

WHEREAS, On March 11, 2014, the San Francisco Board of Supervisors adopted Resolution 82-14, supporting emergency drought relief and the restoration of Lower Cherry Aqueduct to augment water supplies during the statewide drought; and

WHEREAS, Immediate SFPUC drought mitigation actions include the rehabilitation of the Lower Cherry Aqueduct, to repair aging infrastructure and damages incurred during the recent Rim Fire; and

WHEREAS, This project will enable the SFPUC to access up to 200,000 acre-feet of water storage in Cherry Lake by December 15, 2014; and

WHEREAS, The principal purpose of the Lower Cherry Aqueduct system is to convey a water supply from Cherry Creek that can supplement the primary Hetch Hetchy Reservoir supply during a drought year, but due to its age and the damage caused by the Rim Fire, the Lower Cherry Aqueduct system is currently unable to reliably convey this supplemental water supply; and

WHEREAS, There are three (3) facilities that are part of the Sunol Valley Water Treatment Plant Emergency Drought Reliability Improvements (SEDRI): San Antonio Pump Station (SAPS), Sunol Valley Chloramination Facility (SVCF), and the Sunol Valley Water Treatment Plant (SVWTP); and

WHEREAS, The SAPS has three (3) sets of pumps with the primary purpose of transferring water from the Alameda Siphon Pipelines or San Antonio Reservoir to SVWTP for treatment; and

WHEREAS, The SVCF, neighbors the SAPS, and treats the water blended in the Alameda Siphon Pipelines from the SVWTP and Hetch Hetchy; this facility also manages remote treatment facilities using supervisory control and data acquisition (SCADA) technology; and

WHEREAS, The SVWTP is a 160 million gallons per day capacity conventional filter plant that treats water from San Antonio and Calaveras Reservoirs, as well as Hetch Hetchy water transferred from the Alameda Siphons; and

WHEREAS, Repairs to the Sunol Valley Water Treatment Plant are required to improve several components of the plant to ensure treatment and safety reliability and allow the SFPUC to treat the water supply from the Lower Cherry Aqueduct system; and

WHEREAS, The work will consist of a new flocculant chemical system and building, chemical feed line replacement, replace lighting under the sedimentation basins, replace air scour piping, valve replacement, and repair sludge lagoon decant system defect; and

San Francisco Public Utilities Commission
BOARD OF SUPERVISORS

WHEREAS, The communications link between the Sunol Valley Chloramination Facility and Sunol Valley Water Treatment Plan will be improved for greater reliability and there are electrical upgrades to improve SAPS reliability; and

WHEREAS, If the above mentioned work to extend SFPUC water supplies is not immediately undertaken and facilities expeditiously brought into or returned to service, the sustainability of San Francisco's water supply would be placed at significant risk which would endanger the public's health and welfare; and

WHEREAS, San Francisco Administrative Code, Chapter 6, Article IV, Section 6.60, authorizes department heads responsible for public work to award an emergency contract, exempt from the competitive bidding process, in the event of an actual emergency which is defined to include, "...The breakdown or imminent breakdown of any plant, equipment, structure, street or public work necessitating immediate emergency repair or reconditioning to safeguard the lives or property of the citizens, or the property of the City and County, or to maintain the public health and welfare..."; and

WHEREAS, On February 21, 2014, the SFPUC General Manager declared an emergency, approved by the President of the SFPUC, to take immediate action to extend SFPUC water supplies and thereby protect public health and safety; and

WHEREAS, On April 29, 2014, the SFPUC General Manager updated the original emergency declaration, approved by the President of the SFPUC; and

WHEREAS, On October 24, 2014, the SFPUC General Manager updated the revised emergency declaration, approved by the President of the SFPUC; and

WHEREAS, Administrative Code, Section 6.60(D) requires that the General Manager immediately notify the Controller, and seek Board of Supervisors approval of emergency public works with an estimated cost in excess of \$250,000; and

WHEREAS, The SFPUC General Manager estimates that the emergency rehabilitation work on the Lower Cherry Aqueduct will be approximately \$22 million; and

WHEREAS, The repairs to Sunol Valley Water Facilities to extend SFPUC water supplies are projected to total approximately \$9,392,106; and

WHEREAS, Collectively, these projects will have a not-to-exceed value of \$33,000,000; and

WHEREAS, On July 29, 2014, the San Francisco Board of Supervisors adopted resolution 306-14, approving the emergency public work contract between the San Francisco Public Utilities Commission and Monterey Mechanical to perform immediate work to repair Sunol Valley Water Treatment Plant, San Antonio Pump Station and related infrastructure; and

WHEREAS, on September 2, 2014, the San Francisco Board of Supervisors adopted resolution 321-14, approving an emergency public work contract between the Public Utilities Commission and Flatiron, West, Inc. to perform immediate work to repair Lower Cherry Aqueduct; and

WHEREAS, The emergency rehabilitation work at Lower Cherry Aqueduct began April 2014, and should be completed by January 2016; and

WHEREAS, The emergency repairs at Sunol Valley Treatment Plant began July 2014, and should be completed by May 2015; and

WHEREAS, The Controller has certified that funds are available for this emergency work; now, therefore, be it

RESOLVED, That the Board of Supervisors approves the emergency work under Administrative Code, Section 6.60, for extending SFPUC water supplies with a cumulative amount not to exceed \$33,000,000; and, be it

FURTHER RESOLVED, That this resolution captures all work related to drought mitigation efforts including previously approved mitigation contracts and repairs relating to Lower Cherry Aqueduct, Sunol Valley Treatment Plant, San Antonio Pump Station, and all related infrastructure.

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RECOMMENDED:

FUNDS AVAILABLE:

Harlan L. Kelly, Jr.

General Manager

Ben Rosenfield, Controller

Item 3	Department:	•
File 14-1159	Public Utilities Commission (PUC)	

EXECUTIVE SUMMARY

Legislative Objectives

- The proposed resolution would approve PUC's emergency public work related to the drought declaration under Administrative Code Section 6.60 to provide for additional needed expenditures for project costs not-to-exceed \$35,000,000.
- This emergency public work consists of immediate work repair to Lower Cherry Aqueduct, Sunol Valley Water Treatment Plant, and the San Antonio Pump Station.

Key Points

- In accordance with Administrative Code Section 6.60, the Board of Supervisors previously
 approved two emergency public work contracts for capital projects to augment the PUC's water
 supply in response to the drought.
- On September 2, 2014 the Board of Supervisors approved an emergency public work contract between the Public Utilities Commission and Flatiron West, Inc. to perform work to repair the Lower Cherry Aqueduct (File 14-0586).
- On July 29, 2014 the Board of Supervisors approved an emergency public work contract between the Public Utilities Commission and Monterey Mechanical to perform work to the Sunol Valley Water Treatment Plant and related infrastructure (File 14-0781).

Fiscal Impact

- Total estimated project costs for the emergency public work are \$31,392,106, of which \$22,000,000 are allocated to the Lower Cherry Aqueduct repairs and \$9,392,106 are allocated to the Sunol Valley Treatment Plant Emergency Reliability Improvements. PUC estimates that total project costs will not exceed \$33,000,000.
- The budget for the repairs to the Lower Cherry Aqueduct increased by \$3,900,000 or 22 percent, from the original budget of \$18,100,000 to the revised budget of \$22,000,000.
- The budget for the Sunol Valley Treatment Facilities Emergency Reliability Improvements increased by \$879,106 or approximately 10 percent, from the original budget of \$8,513,000 to the revised budget of \$9,392,106.
- The increases to the project budgets are within the scope of appropriations previously approved by the Board of Supervisors.

Recommendations

- Amend the proposed resolution to: (a) revise the preamble to state: "...with public works amounts not-to-exceed \$33,000,000"; (b) revise page 4, lines 6 and 24 to state that the public works amounts are not-to-exceed \$33,000,000; and (c) page 4, line 4 to state that the repairs to Sunol Valley Water Facilities are projected to total \$9,392,106 and not \$13,000,000.
- Given that the Board of Supervisors previously approved the emergency contracts, delete the clause "Further Resolved, that within 30 days of related contracts being fully executed by all parties, the Public Utilities Commission shall provide the final contracts to the Clerk of the Board of Supervisors for inclusion in the official file."
- Approve the proposed resolution as amended.

MANDATE STATEMENT

Mandate Statement

According to Administrative Code Section 6.60, the Board of Supervisors may declare an emergency and may authorize any department head to perform any repair or other emergency work in any manner the Board determines to be in the best interests of the City. The Administrative Code defines an emergency as a sudden, unforeseeable and unexpected occurrence or a discovery of a condition involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss or damage to, life, health, property or essential public services. If the estimated cost of the emergency work exceeds \$250,000, the department head shall obtain the approval of the Board of Supervisors.

BACKGROUND

Background

On February 10, 2014 the Mayor issued an Executive Directive to all City departments outlining initiatives to reduce water use. The Mayor specifically directed the Public Utilities Commission (PUC) to develop alternative sources of water supplies for both potable and non-potable uses.

According to the PUC, as of September 26, 2014 precipitation in the Hetch Hetchy system was 65 percent of its long-term average, below this average for the third year in a row. On February 21, 2014 the Vice President of the PUC issued a Declaration of Emergency due to drought conditions. The Declaration found that repairs to the Lower Cherry Aqueduct and Sunol Valley Water Treatment Plant were critical to ensuring the sustainability of the City's water supply, and authorized the Water Enterprise to procure construction and professional services to conduct these needed repairs.

Previous Board of Supervisors' Approval of Emergency Work

In accordance with Administrative Code Section 6.60, the Board of Supervisors previously approved two emergency public work contracts for capital projects to augment the PUC's water supply in response to the drought. On September 2, 2014 the Board of Supervisors approved an emergency public work contract between the Public Utilities Commission and Flatiron West, Inc. to perform work to repair the Lower Cherry Aqueduct (File 14-0586). On July 29, 2014 the Board of Supervisors approved an emergency public work contract between the Public Utilities Commission and Monterey Mechanical to perform work to the Sunol Valley Water Treatment Plant and related infrastructure (File 14-0781).

Pursuant to Administrative Code 6.60, PUC conducted a modified competitive process to select a construction manager/general contractor for the Lower Cherry Aqueduct project and Sunol Valley project. PUC awarded the Lower Cherry Aqueduct contract to Flatiron West, Inc. and the Sunol Valley Project to Monterey Mechanical after each company submitted a bid with the lowest cost proposal and highest bid evaluation score.

Lower Cherry Aqueduct

The Lower Cherry Aqueduct was constructed to convey water from Cherry Creek in Tuolumne County to supplement the City's primary water supply from the Hetch Hetchy Reservoir during a drought year. The Lower Cherry Aqueduct is able to provide the City with 200,000 acre-feet of water¹ from Cherry Creek in Tuolumne County, California. Repairs to the Lower Cherry Aqueduct, which was damaged during the 2013 Rim Fire, began in April 2014 and are expected to be complete in January 2015.

Sunol Valley Water Treatment Facilities Emergency Reliability Improvements

The Sunol Valley Water Treatment Plant Emergency Reliability Improvements cover three facilities in Alameda County: (1) the San Antonio Pump Station, (2) the Sunol Valley Chloramination Facility, and (3) the Sunol Valley Water Treatment Plant. The Water Enterprise Ten-Year Capital and Programmatic Plans for 2015 through 2024 contain repairs to the Treatment Plant during FY 2015-24. However, in response to the Declaration of Emergency, PUC determined that it was necessary to begin certain repairs immediately to enable the Treatment Plant to treat water from the Lower Cherry Aqueduct by Fall 2014 and therefore ensure the sustainability of the City's water supply. The repairs to the Sunol Valley Water Treatment Plant began in July 2014 and are expected to be completed in May 2015.

Exhibit 1 below shows a portion of the Hetch Hetchy Water System and the locations of the Lower Cherry Aqueduct and the Sunol Valley Treatment Plant.

¹ One acre-foot of water is equivalent to 325,851 gallons of water.

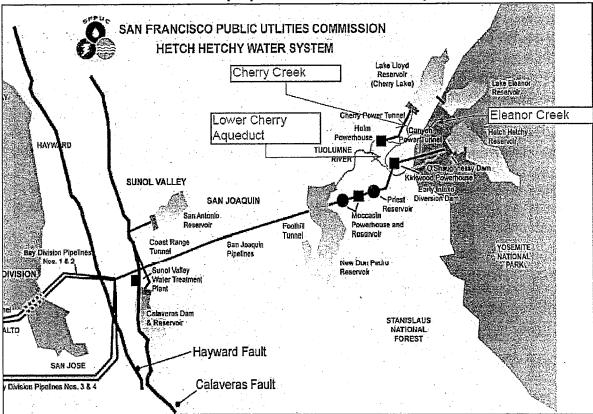


Exhibit 1: The Lower Cherry Aqueduct and the Sunol Valley Treatment Plant

Source: PUC

DETAILS OF PROPOSED LEGISLATION

The proposed resolution would approve PUC's emergency public work related to the drought declaration under Administrative Code Section 6.60 to provide for additional needed expenditures for project costs not-to-exceed \$35,000,000. This emergency public work consists of immediate repair work to the Lower Cherry Aqueduct, Sunol Valley Water Treatment Plant, and the San Antonio Pump Station. As noted above, the Board of Supervisors previously approved the emergency public work contracts between PUC and Flatiron (File 14-0586) for Lower Cherry Aqueduct repairs, and PUC and Monterey Mechanical (File 14-0781) for emergency reliability improvements to the Sunol Valley Treatment Plant and San Antonio Reservoir facilities.

FISCAL IMPACT

Total estimated project costs for the emergency repair work are \$31,392,106, of which \$22,000,000 are allocated to the Lower Cherry Aqueduct repairs and \$9,392,106 are allocated to the Sunol Valley Treatment Plant Emergency Reliability Improvements.

Lower Cherry Aqueduct Repairs

The budget for the repairs to the Lower Cherry Aqueduct increased by \$3,900,000 or 22 percent, from the original budget of \$18,100,000 to the revised budget of \$22,000,000, shown in Table 1 below. This increase is driven primarily by delays in acquiring environmental permits, additional permitting costs, and an unforeseen need to undergo a National Environmental Policy Act review. According to Ms. Tracy Cael, PUC Project Manager, because of the permit delays, additional costs for design and construction management services are needed to sequence project work in order to allow completion of maintenance and refurbishment work. The maintenance work was needed to allow repairs due to the damage caused by the Rim Fire in order to deliver water by the end of the year. The refurbishment work is a permanent improvement needed to provide reliable supplemental water to Hetch Hetchy in the event of drought condition. The refurbishment work consists of the installation of 84-inch pipe, replacement of sluice and slide gates, and refurbishing the dam.

Table 1: Total Lower Cherry Aqueduct Project Budget

Project Phase	Original Budget	Revised Budget	Percent Change in Budget	Percent Complete
Project Design (PUC Staff and Consultants)	\$1,650,000	\$2,383,000	44%	- 85%
Construction Management (PUC Staff)	\$1,500,000	\$3,783,000	152%	15%
Planning and Permitting (PUC Staff and Consultants)	\$750,000	\$1,434,000	91%	65%
Project Contingency (PUC Staff and Consultants)	\$200,000	\$400,000	100%	-
Subtotal	\$4,100,000	\$8,000,000	95%	-
Flatiron West, Inc. Contract	\$14,000,000	\$14,000,000	0%	15%
Project Total	\$18,100,000	\$22,000,000	22%	25%

Source: PUC

The Board of Supervisors appropriated \$18,100,000 in Hetch Hetchy revenues in June 2014 to fund the Lower Cherry Aqueduct repairs (File 14-0480). Additional funding of \$3,900,000 to fully fund the \$22,000,000 revised budget comes from Water Revenue Bonds previously appropriated by the Board of Supervisors to Water Infrastructure Projects, which include the Lower Cherry Aqueduct (Files 12-0430 and 13-0365).

Sunol Valley Treatment Facilities Emergency Reliability Improvements

The budget for the Sunol Valley Treatment Facilities Emergency Reliability Improvements increased by \$879,106 or approximately 10 percent, from the original budget of \$8,513,000 to the revised budget of \$9,392,106, shown in Table 2 below. The revised budget of \$9,392,106 is \$3,607,894 less than the \$13,000,000 stated in the proposed resolution. According to Mr. Ravi Krishnaiah, PUC Assistant Regional Manager, changes to the Sunol Valley Treatment Facilities

Project budget stem from a more thorough understanding of the project's needs as the project progressed. This includes repairs to electrical pumps that were not originally scoped within the project and repairs to electrical systems that had over 50 years of undocumented upgrades. Because the treatment plant is required to be in service during construction, the PUC must acquire temporary facilities, such as chemical feed systems, to maintain treatment operations. The project also requires additional engineering and design review to purchase long lead items such as electrical circuit breakers, pump motor soft starters, and relays.

Table 2: Total Sunol Valley Treatment Facilities Project Budget

Project Phase	Original Budget	Revised Budget	Percent Change in Budget	Percent Complete
Design and Engineering (PUC Staff)	\$718,000	\$1,892,106	164%	90%
PUC Staff	\$2,658,000	\$800,000	-70%	15%
Subtotal	\$3,376,000	\$2,692,106	` -20%	
Monterey Mechanical Contract	\$5,137,000	\$6,700,000	30%	15%
Project Total	\$8,513,000	\$9,392,106	10%	15%

Source: PUC

As noted above, the Sunol Valley Treatment Facilities Emergency Reliability Improvements were included in the Water Enterprise Ten-Year Capital and Programmatic Plans for 2015 through 2024; and PUC determined that it was necessary to begin certain repairs immediately to enable the Treatment Plant to treat water from the Lower Cherry Aqueduct by Fall 2014. Funds for the Sunol Valley Treatment Facilities Emergency Reliability Improvements were previously appropriated by the Board of Supervisors in June 2014 (File 14-0479). Funding sources include proceeds from Water Revenue bonds, Bay Area Water Supply and Conversation Agency prepayment bonds, water revenues and water capacity fees for PUC's Water Enterprise's Capital Improvement Program.

Summary

The proposed resolution approves PUC's emergency public repair work related to the drought declaration under Administrative Code Section 6.60. As shown in Table 3 below, the total budget for both emergency projects is \$31,392,106, with a contingency of \$1,607,894, resulting in a total budget of \$33,000,000 instead of the requested not-to-exceed amount of \$35,000,000. According to PUC staff, a contingency of \$1,607,894 is sufficient to cover unanticipated increases in project costs. The preamble to the proposed legislation, which states: "Resolution approving emergency public work...with contract amounts not to exceed \$35,000,000" should be revised to state "...with public works amounts not-to-exceed \$33,000,000."

Table 3: Total Project Budgets

Item	Amount
Lower Cherry Aqueduct	\$ 22,000,000
Sunol Valley Treatment Facilities Project	<u>\$ 9,392,106</u>
Projects Subtotal	\$ 31,392,106
Contingency	<u>\$ 1,607,894</u>
Total Budget	\$ 33,000,000

Source: PUC

The resolution should be further amended on page 4, lines 6 and 24 to correctly state that the public works amounts are not-to-exceed \$33,000,000 rather than \$35,000,000; and on page 4, line 4 to correctly state that the repairs to Sunol Valley Water Facilities are projected to total \$9,392,106 rather than \$13,000,000.

Also, the clause "Further Resolved, that within 30 days of related contracts being fully executed by all parties, the Public Utilities Commission shall provide the final contracts to the Clerk of the Board of Supervisors for inclusion in the official file" should be deleted because the PUC does not intend to enter into any new contracts. The PUC's existing contracts with Flatiron and Monterey Mechanical were previously approved by prior Board of Supervisors resolutions, as noted above.

RECOMMENDATIONS

- 1. Amend the proposed resolution to: (a) revise the preamble to state: "...with public works amounts not-to-exceed \$33,000,000" and not \$35,000,000; (b) revise page 4, lines 6 and 24 to correctly state that the public works amounts are not-to-exceed \$33,000,000; and (c) page 4, line 4 to correctly state that the repairs to Sunol Valley Water Facilities are projected to total \$9,392,106 and not \$13,000,000.
- 2. Given that the Board of Supervisors previously approved the emergency contracts, delete the clause "Further Resolved, that within 30 days of related contracts being fully executed by all parties, the Public Utilities Commission shall provide the final contracts to the Clerk of the Board of Supervisors for inclusion in the official file."
- 3. Approve the proposed resolution as amended.



525 Golden Gate Avenue, 13th Floor San Francisco, CA 94102 T 415.554.3155 F 415.554.3161

TTY 415.554.3488

TO:

Angela Calvillo, Clerk of the Board

FROM:

Erin Hagan, Policy and Government Affairs Manager

DATE:

November 3, 2014

SUBJECT:

Emergency Work - Repairing Lower Cherry Aqueduct and

Upgrading Sunol Valley Water Facilities Related to Drought

Declaration - Not to Exceed \$35,000,000

Attached please find an original and one copy of a proposed resolution approving emergency public work of the San Francisco Public Utilities Commission related to drought declaration under San Francisco Administrative Code, Section 6.60, to perform immediate work to repair Lower Cherry Aqueduct, Sunol Valley Water Treatment Plant, San Antonio Pump Station, and related infrastructure with contract amounts not to exceed \$35,000,000 collectively.

The following is a list of accompanying documents (2 sets):

- 1. Board of Supervisors Resolution
- 2. Executive Directive 14-01
- 3. Resolution 82-14
- 4. SFPUC Declaration of Emergency
- 5. SFPUC Update on Declaration of Emergency
- 6. SFPUC Revised Emergency Declaration
- 7. Resolution 306-14
- 8. Resolution 321-14

BOARD OF SUPERVISOR
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Please contact Erin Hagan at 554-0706 if you need any additional information on these items.

Edwin M. Lee Mayor

Ann Moller Caen President

Francesca Vietor Vice President

Vince Courtney Commissioner

> Anson Moran Commissioner

Harlan L. Kelly, Jr. General Manager



Office of the Mayor City & County of San Entreised



Edwin M. Lee

Executive Directive 14-01 Water Conservation – City Departments February 10, 2014

San Francisco is a leader in using water wisely. Our citizens have some of the lowest water use in California, and the City has taken steps to help residents and businesses become even more efficient in their water use. In 2009, the City and County of San Francisco passed two water conservation ordinances for residential and commercial properties to Install high-efficiency plumbing fixtures. The San Francisco Public Utilities Commission (SFPUC) offers financial incentives and technical assistance to replace inefficient plumbing fixtures for retail water customers. Additionally, San Francisco is diversifying our water supply by developing groundwater and recycled water.

Snowmelt from the Sierra Nevada is the primary drinking water source for 2.6 million people in the Bay Area. In 2013, California experienced one of the driest years on record, setting the stage for reduced water storage levels and possible first year drought conditions. These conditions have persisted in 2014, which could be the driest water year in the state's history. Precipitation has been less than 10 percent of normal so far for the year. After two years of below-average rainfall in California, Governor Jerry Brown declared a statewide drought in January 2014.

Given the current conditions in California, the City and County of San Francisco is requesting its water customers to reduce overall water consumption by 10 percent. Reducing water usage is essential to stretching our water supplies during this time of drought.

City agencies have made great strides to use less water. Since the last period of voluntary rationing in 2007, water use by City departments has declined by 22%. While many departments have implemented water conservation measures, there is still room to improve and save more water. Therefore, with this Executive Directive, I am outlining actions City departments should pursue to further reduce their consumption of water.

Further reduce consumption by 10 percent. All departments are directed to take steps immediately to reduce their water consumption with a goal of achieving a 10 percent reduction. Department heads are requested to report innovative conservation strategies to the SFPUC (contacts below) for the purpose of sharing best practices with other Departments. This reporting will be voluntary.

Develop a Water Conservation Plan. By August 1, 2014 all departments shall develop a Water Conservation Plan that includes:

- · A departmental contact for water conservation efforts.
- An inventory of all departmental plumbing fixtures and their flow rates, including toilets, urinals, faucets, and showerheads.
- Timeline for retrofitting inefficient plumbing fixtures with high-efficiency models.
- A list of best management practices that departments will implement to achieve waterefficient operations and maintenance of parks, medians and other irrigated landscapes.

Executive Directive 14-01
Water Conservation – City Departments
February 10, 2014

Educate staff and visitors on water conservation practices. Effective immediately, all departments shall educate employees and facility visitors about the efficient use of water at City facilities and the need to conserve.

Explore the use of non-potable water for street cleaning. City departments should explore the feasibility of replacing potable water with non-potable water sources for street cleaning.

Develop alternative sources of water supply. The SFPUC is directed to develop alternative sources of water supplies for both potable and non-potable uses. All departments shall cooperate with the SFPUC in developing these alternative water supplies. These alternatives shall include, but not be limited to: Cherry Lake; groundwater; recycled water; and foundation drainage.

The SFPUC can provide departments with assistance to comply with this Executive Directive. Please contact Steven Ritchie, Assistant General Manager, SFPUC (415-934-5736, sritchie@sfwater.org) or Paula Kehoe, Director of Water Resources, SFPUC (415-554-0792, pkehoe@sfwater.org).

This Executive Directive shall be effective immediately, and remain in place until rescinded or amended by future Directive.

Edwin M. Lee

Mayor, City & County of San Francisco

[Urging the State Legislature to Provide Drought Mitigation Funding for Critical Water Supply and Conservation Projects for San Francisco]

Resolution urging the State Legislature to provide drought mitigation funding for critical water supply and conservation projects for the San Francisco Bay Area.

WHEREAS, The Hetch Hetchy Regional Water System operated by the San Francisco Public Utilities Commission (SFPUC) provides 265 million gallons of water per day to 2.6 million people in Alameda, Santa Clara, San Mateo, and San Francisco counties; and

WHEREAS, California continues to experience one of the most extreme droughts since hydrologic recordkeeping began; and

WHEREAS, As of February 19, 2014, precipitation in the Hetch Hetchy watershed was at 47% of normal levels and snowpack was at 22% of normal levels; and

WHEREAS, On Friday, January 17th, Governor Brown issued a State Declaration of Emergency for California due to drought and severe water supply conditions; and

WHEREAS, On January 31, 2014, the SFPUC asked customers to voluntarily conserve water with the goal of reducing systemwide usage by 10% to stretch limited water supplies during this time of drought; and

WHEREAS, On February 10, 2014, Mayor Ed Lee issued an Executive Directive to all city departments outlining actions to be taken to reduce water use, and directing the SFPUC to develop alternative sources of water supplies for both potable and non-potable uses; and

WHEREAS, Both Federal and State lawmakers have introduced bills that would appropriate funding for drought mitigation measures including funding for local drought alleviation projects; and

WHEREAS, The California State Legislature is considering legislation to direct over \$640 million toward projects that would alleviate the effects of current drought conditions; and

WHEREAS, The SFPUC has identified three projects that can be quickly implemented and would have an immediate impact in stretching critical water supplies throughout its service area during this statewide drought, including: San Francisco Groundwater Supply Project, Lower Cherry Aqueduct Restoration Project, and Citywide Direct Install Toilet Program; now, therefore, be it

RESOLVED, That should the State of California appropriate funding for emergency drought relief, the State should prioritize the funding of the above identified SFPUC projects, which help strengthen immediate water reserves and promote conservation and water supply diversification for the long-term sustainability of critical water supplies for 2.6 million residents in the San Francisco Bay Area.



City and County of San Francisco

Tails

1 Dr. Carlton B. Goodlett Place San Francisco, CA 94102-4689

Resolution

File Number:

140196

Date Passed:

March 11, 2014

Resolution urging the State Legislature to provide drought mitigation funding for critical water supply and conservation projects for the San Francisco Bay Area.

March 11, 2014 Board of Supervisors - ADOPTED

Ayes: 9 - Avalos, Breed, Campos, Chiu, Cohen, Farrell, Kim, Mar and Tang Excused: 2 - Wiener and Yee

File No. 140196

I hereby certify that the foregoing Resolution was ADOPTED on 3/11/2014 by the Board of Supervisors of the City and County of San Francisco.

Angela Calvillo
Clerk of the Board

Unsigned

Mayor

3/21/14

Date Approved

I hereby certify that the foregoing resolution, not being signed by the Mayor within the time limit as set forth in Section 3.103 of the Charter, or time waived pursuant to Board Rule 2.14.2, became effective without his approval in accordance with the provision of said Section 3.103 of the Charter or Board Rule 2.14.2.

And Calvilla

Angela Calvillo Clerk of the Board

AMENDED IN COMMITTEE 7/23/14

FILE NO. 140781

RESOLUTION NO. 306-14

[Emergency Contracts - Repairing Lower Cherry Aqueduct and Upgrading Sunol Valley Water Facilities Related to Drought Declaration - Not to Exceed \$5.137.0001 1 2 Resolution approving the emergency public work contract between the San Francisco Public Utilities Commission and Monterey Mechanical under San Francisco 3 4 Administrative Code, Section 6.60, to perform immediate work to repair Sunol Valley Water Treatment Plant, San Antonio Pump Station and related infrastructure in an 5 6 amount not to exceed \$5.137.000. 7 WHEREAS. California continues to experience one of the most extreme droughts since 8 9 hydrologic recordkeeping began; and 10 WHEREAS, As of April 27, 2014, precipitation in the Hetch Hetchy watershed was at 11 57% of normal levels and snowpack was at 25% of normal levels; and 12 WHEREAS, On February 10, 2014, Mayor Ed Lee issued an Executive Directive to all 13 city departments outlining actions to be taken to reduce water use, and directing the San 14 Francisco Public Utilities Commission (SFPUC) to develop alternative sources of water 15 . supplies for both potable and non-potable uses; and 16 WHEREAS, On March 11, 2014, the San Francisco Board of Supervisors adopted 17 Resolution 82-14, supporting emergency drought relief and the restoration of Lower Cherry 18 Aqueduct to augment water supplies during the statewide drought; and 19 WHEREAS, Immediate SFPUC drought mitigation actions include the rehabilitation of 20 the Lower Cherry Aqueduct, to repair aging infrastructure and damages incurred during the 21 recent Rim Fire; and 22 WHEREAS, This project will enable the SFPUC to access up to 200,000 acre-feet of 23 water storage in Cherry Lake by December 15, 2014; and 24 25

Supervisor Farrell
BOARD OF SUPERVISORS

WHEREAS, The principal purpose of the Lower Cherry Aqueduct system is to convey a water supply from Cherry Creek that can supplement the primary Hetch Hetchy Reservoir supply during a drought year, but due to its age and the damage caused by the Rim Fire, the Lower Cherry Aqueduct system is currently unable to reliably convey this supplemental water supply; and

WHEREAS, There are three (3) facilities that are part of the Sunol Valley Water Treatment Plant Emergency Drought Reliability Improvements (SEDRI): San Antonio Pump Station (SAPS), Sunol Valley Chloramination Facility (SVCF), and the Sunol Valley Water Treatment Plant (SVWTP); and

WHEREAS, The SAPS has three (3) sets of pumps with the primary purpose of transferring water from the Alameda Siphon Pipelines or San Antonio Reservoir to SVWTP for treatment; and

WHEREAS, The SVCF, neighbors the SAPS, and treats the water blended in the Alameda Siphon Pipelines from the SVWTP and Hetch Hetchy; this facility also manages remote treatment facilities using supervisory control and data acquisition (SCADA) technology; and

WHEREAS, The SVWTP is a 160 million gallons per day capacity conventional filter plant that treats water from San Antonio and Calaveras Reservoirs, as well as Hetch Hetchy water transferred from the Alameda Siphons; and

WHEREAS, Repairs to the Sunol Valley Water Treatment Plant are required to improve several components of the plant to ensure treatment and safety reliability and allow the SFPUC to treat the water supply from the Lower Cherry Aqueduct system; and

WHEREAS, The work will consist of a new flocculant chemical system and building, chemical feed line replacement, replace lighting under the sedimentation basins, replace air scour piping, valve replacement, and repair sludge lagoon decant system defect; and

WHEREAS, The communications link between the Sunol Valley Chloramination Facility and Sunol Valley Water Treatment Plan will be improved for greater reliability and there are electrical upgrades to improve SAPS reliability; and

WHEREAS, If the above mentioned work to extend SFPUC water supplies is not immediately undertaken and facilities expeditiously brought into or returned to service, the sustainability of San Francisco's water supply would be placed at significant risk which would endanger the public's health and welfare; and

WHEREAS, San Francisco Administrative Code, Chapter 6, Article IV, Section 6.60, authorizes department heads responsible for public work to award an emergency contract, exempt from the competitive bidding process, in the event of an actual emergency which is defined to include, "...The breakdown or imminent breakdown of any plant, equipment, structure, street or public work necessitating immediate emergency repair or reconditioning to safeguard the lives or property of the citizens, or the property of the City and County, or to maintain the public health and welfare..."; and

WHEREAS, On February 21, 2014, the SFPUC General Manager declared an emergency, approved by the President of the SFPUC, to take immediate action to extend SFPUC water supplies and thereby protect public health and safety; and

WHEREAS, On April 29th, 2014, the SFPUC General Manager updated the original emergency declaration, approved by the President of the SFPUC; and

WHEREAS, Administrative Code, Section 6.60(D) requires that the General Manager immediately notify the Controller, and seek Board of Supervisors approval of emergency public works with an estimated cost in excess of \$250,000; and

WHEREAS, The SFPUC General Manager estimates that the emergency rehabilitation work on the Lower Cherry Aqueduct will be approximately \$18.1 million; and

WHEREAS, The repairs to Sunol Valley Water Facilities to extend SFPUC water supplies have estimated project costs of \$8.5 million; and

WHEREAS, A resolution (File #140586) in response to this emergency drought declaration was introduced June 3, 2014, to approve a contract with Flatiron, West, Inc. to perform immediate repairs to Lower Cherry Aqueduct and is pending approval by the San Francisco Board of Supervisors; and

WHEREAS, The emergency rehabilitation work at Lower Cherry Aqueduct began April 2014, and should be completed December 2014; and

WHEREAS, The emergency repairs at Sunol Valley Treatment Plant began July 2014, and should be completed October 2014; and

WHEREAS, The Controller has certified that funds are available for this emergency work; now, therefore, be it

RESOLVED, That the Board of Supervisors approves the emergency contract between the SFPUC and Monterey Mechanical under Administrative Code, Section 6.60, for an amount not to exceed \$5,137,000; and, be it

FURTHER RESOLVED, That actions taken to date by the SFPUC to secure such emergency contracts and resolve the emergency condition are hereby ratified; and, be it

FURTHER RESOLVED, That within (30) days of related contracts being fully executed by all parties, the SFPUC shall provide the final contracts to the Clerk of the Board for inclusion into the official file.

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RECOMMENDED:

Harlan L. Kelly, Jr.

General Manager

FUNDS AVAILABLE:

Ben Rosenfield, Controller

Supervisor Mark Farrell BOARD OF SUPERVISORS

Page 5



City and County of San Francisco Tails

City Hall 1 Dr. Carlton B. Goodlett Place San Francisco, CA 94102-4689

Resolution

File Number: 140781

Date Passed: July 29, 2014

Resolution approving the emergency public work contract between the San Francisco Public Utilities Commission and Monterey Mechanical under San Francisco Administrative Code, Section 6.60, to perform immediate work to repair Sunol Valley Water Treatment Plant, San Antonio Pump Station and related infrastructure in an amount not to exceed \$5,137,000.

July 23, 2014 Budget and Finance Sub-Committee - AMENDED, AN AMENDMENT OF THE WHOLE BEARING SAME TITLE

July 23, 2014 Budget and Finance Sub-Committee - RECOMMENDED AS AMENDED

July 29, 2014 Board of Supervisors - ADOPTED.

Ayes: 11 - Avalos, Breed, Campos, Chiu, Cohen, Farrell, Kim, Mar, Tang, Wiener and Yee

File No. 140781

I hereby certify that the foregoing Resolution was ADOPTED on 7/29/2014 by the Board of Supervisors of the City and County of San Francisco.

> Angela Calvillo Clerk of the Board

Mayor

Date Approved

AMENDED IN COMMITTEE 7/23/14 RESOLUTION NO. 321-14

FILE NO. 140586

Exceed \$14,000,000]

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Resolution approving an emergency public work contract between the Public Utilities Commission and Flatiron, West, Inc., under San Francisco Administrative Code, Section 6.6, to perform immediate work to repair Lower Cherry Aqueduct in response to an emergency drought declaration with a contract amount not to exceed \$14.000.000.

[Emergency Contract - Flatiron, West, Inc. - Repairing Lower Cherry Aqueduct - Not to

WHEREAS, California continues to experience one of the most extreme droughts since hydrologic recordkeeping began; and

WHEREAS, As of April 27, 2014, precipitation in the Hetch Hetchy watershed was at 57% of normal levels and snowpack was at 25% of normal levels; and

WHEREAS, On February 10, 2014, Mayor Ed Lee issued an Executive Directive to all city departments outlining actions to be taken to reduce water use, and directing the San Francisco Public Utilities Commission (SFPUC) to develop alternative sources of water supplies for both potable and non-potable uses; and

WHEREAS, Immediate SFPUC drought mitigation actions include the rehabilitation of the Lower Cherry Aqueduct, to repair aging infrastructure and damages incurred during the recent Rim Fire; and

WHEREAS, This project will enable the SFPUC to access 200,000 acre-feet of water storage in Cherry Lake by October 1, 2014; and

WHEREAS, The principal purpose of the Lower Cherry Aqueduct system is to convey a water supply from Cherry Creek that can supplement the primary Hetchy Reservoir supply during a drought year, but due to its age and the damage caused by the Rim Fire, the Lower

Cherry Aqueduct system is currently unable to reliably convey this supplemental water supply; and

WHEREAS, If the above mentioned work to extend SFPUC water supplies was not immediately undertaken and facilities expeditiously brought into or returned to service, the sustainability of San Francisco's water supply would be placed at significant risk which would endanger the public's health and welfare; and

WHEREAS, San Francisco Administrative Code, Chapter 6, Article IV, Section 6.60, authorizes department heads responsible for public work to award an emergency contract, exempt from the competitive bidding process, in the event of an actual emergency which is defined to include, "...The breakdown or imminent breakdown of any plant, equipment, structure, street or public work necessitating immediate emergency repair or reconditioning to safeguard the lives or property of the citizens, or the property of the City and County, or to maintain the public health and welfare..."; and

WHEREAS, On February 21, 2014, the SFPUC General Manager declared an emergency, approved by the President of the San Francisco Public Utilities Commission, to take immediate action to extend SFPUC water supplies and thereby protect public health and safety; and

WHEREAS, On April 29th, 2014, the SFPUC General Manager updated the original emergency declaration, approved by the President of the San Francisco Public Utilities Commission; and

WHEREAS, Administrative Code, Section 6.60(D) requires that the General Manager immediately notify the Controller, and seek Board of Supervisors approval of emergency public works with an estimated cost in excess of \$250,000; and

WHEREAS, The SFPUC General Manager estimates that the emergency rehabilitation of the Lower Cherry Aqueduct to extend SFPUC water supplies will cost approximately \$14,000,000; and

WHEREAS, The emergency rehabilitation work at Lower Cherry Aqueduct began April 2014, and should be completed October 2014; and

WHEREAS, The Controller has certified that funds are available for this emergency work and contract; now, therefore, be it

RESOLVED, That the Board of Supervisors approves the emergency work under Administrative Code, Section 6.60, for extending SFPUC water supplies with a contract amount not to exceed \$14,000,000; and, be it

FURTHER RESOLVED, That actions taken to date by the San Francisco Public Utilities Commission to secure such emergency contracts and resolve the emergency condition are hereby ratified.

FURTHER RESOLVED, That within (30) days of the contract being fully executed by all parties, the Public Utilities Commission shall provide the final contract to the Clerk of the Board for inclusion into the official file.

RECOMMENDED:

FUNDS AVAILABLE:

Harlan L. Kelly, Jr.

General Manager

Ben Rosenfield, Controller

Public Utilities Commission
BOARD OF SUPERVISORS



City and County of San Francisco Tails

City Hall
1 Dr. Carlton B. Goodlett Place
San Francisco; CA 94102-4689

Resolution

File Number:

140586

Date Passed: September 02, 2014

Resolution approving an emergency public work contract between the Public Utilities Commission and Flatiron, West, Inc., under San Francisco Administrative Code, Section 6.6, to perform immediate work to repair Lower Cherry Aqueduct in response to an emergency drought declaration with a contract amount not to exceed \$14,000,000.

July 23, 2014 Budget and Finance Sub-Committee - AMENDED

July 23, 2014 Budget and Finance Sub-Committee - RECOMMENDED AS AMENDED

September 02, 2014 Board of Supervisors - ADOPTED

Ayes: 11 - Avalos, Breed, Campos, Chiu, Cohen, Farrell, Kim, Mar, Tang, Wiener and Yee

File No. 140586

I hereby certify that the foregoing Resolution was ADOPTED on 9/2/2014 by the Board of Supervisors of the City and County of San Francisco.

> Angela Calvillo Clerk of the Board

Mayor/

Date Approved



525 Golden Gate Avenue, 13th Floor San Francisco, CA 94102 T 415.554.3¹⁵5 F 415.554 TTY 415.554.3---

INTER-OFFICE MEMORANDUM

DATE:

October 24, 2014

TO:

Commissioner Ann Moller Caen, President

THROUGH:

Harlan L. Kelly, Jr.

General Manager

FROM:

Steven R. Ritchie

Assistant General Manager, Water

SUBJECT:

Update on Declaration of Emergency – 2014 Drought Conditions

California continues to experience one of the most extreme droughts in our history and the Hetch Hetchy system is no exception. In response to the 2014 drought conditions, on February 21, 2014, General Manager Harlan Kelly requested and Commission Vice President Ann Moller Caen approved an emergency declaration regarding the 2014 Drought Conditions and critical repairs and projects needed to extend our precious water supplies. On April 28, 2014, General Manager Harlan Kelly and Commission President Vince Courtney approved an update to the declaration of emergency.

The original emergency declaration was estimated in excess of \$10,000,000 and provided authorization to enable the Water Enterprise to procure construction and professional services for projects that were identified for immediate action including the rehabilitation of the Lower Cherry Aqueduct, pump station and water treatment plant improvements in the Sunol area, and other necessary work to extend our water supplies. The April 28, 2014 updated declaration was necessary to address emergency work associated with the San Antonio Pump Station and Sunol Valley Water Treatment Plant Emergency Improvements¹ and a refined estimate for the Lower Cherry Aqueduct Emergency Rehabilitation Project.

Due to unforeseen delays relating to local, state and federal permitting requirements the cost and schedule associated with the emergency work has increased, thus necessitating the current update. The total cost of the combined projects is now estimated at \$35,000,000. I am therefore updating the declaration of an emergency to reflect these changes – increasing the costs of the work to a total of \$35,000,000. I trust that this meets with your concurrence and approval.

CONCUR AND APPROXE

Ann Moller Caen – President

San Francisco Public Utilities Commission

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The San Antonio and Sunol Improvements represent an acceleration of already planned

General Manager

Edwin M. Lee Mayor

Ann Moller Caen President

Francesca Vietor

Vice President Vince Courtney

Commissioner

Anson Moran
Commissio

Harlan L. Kelly, ...



INTER-OFFICE MEMORANDUM

DATE:

April 29, 2014

TO:

Commissioner Vince Courtney, President

THROUGH:

Harlan L. Kelly, Jr. 4

General Manager

FROM:

Steven R. Ritchie

Assistant General Manager, Water

SUBJECT:

Update on Declaration of Emergency – 2014 Drought Conditions

On February 21, 2014, General Manager Harlan Kelly requested and Commission Vice Practident Ann Moller Caen approved an emergency declaration regarding the 2014 Drought Canditions and critical repairs and projects notified the extend our precious water supplies. Califortia continues to experience one of the most extreme droughts in our history and the Hetch Hetchy system is no exception.

The emergency declaration provided authorization to enable the Water Enterprise to procure construction and professional services for projects that were identified for immediate action including the rehabilitation of the Lower Cherry Aquation, pump station and water treatment plant improvements in the Surol area, and other necessary work to extend our water supplies.

The estimated costs at the time of the original emergency declaration were in excess of \$10,000,000. The San Antonio Pump Station and Sunol Valley Water Treatment Plant Emergency Improvements¹ have now been scoped and the Lower Cherry Aqueduct Emergency Rehabilitation Project estimate has been refined. The total cost of the combined projects is now estimated at \$29,000,000.

I am therefore updating the declaration of an emergency to reflect these changes — increasing the costs of the contracts to a total of \$29,000,000. I trust that this meets with your concurrence and approval.

Vince Courtney - President

San Francisco Public Utilities Commission

cc: Commissioners

Edwin M. Lee

Vince Courtney

Ann Moller Caen Vice President

Francesca Viotor

Sennicus de Lacer Vers

Commissioner

Commissioner



¹ The San Antonio and Sunol Improvements represent an acceleration of already planned capital improvements.



525 Golden Gäte Averue, 13th Floor San Francisco, CA 94102 • +15.554.3181 • +45.554.3488

MEMORANDUM

Date:

February 21, 2014

To:

Commissioner Vince Courtney President, Vice Resident

From:

Harlan L. Kelly, Jr., General Manager

Subject:

Declaration of Emergency - 2014 Drought Conditions

In accordance with Chapter 6, Article IV, Section 6.60(D) and Chapter 21, Section 21.15 of the Administrative Code of the City and County of San Francisco, I am declaring an emergency on behalf of the San Francisco Public Utilities Commission (SFPUC).

California continues to experience one of the most extreme droughts since hydrologic recordkeeping began. The Hetch Hetchy system is no exception. As of February 19, precipitation in the Hetch Hetchy watershed was 47% of normal and snowpack was 22% of normal. We have requested that our customers voluntarily reduce water use 10% system-wide. On February 10, Mayor Lee issued an Executive Directive to all city departments outlining actions to be taken to reduce water use, it also directed the PUC to develop alternative sources of water supplies for both potable and non-potable uses.

This request for emergency declaration is to provide immediate authorization to enable the Water Enterprise to procure construction and professional services to extend our water supplies. Immediate actions include rehabilitation of the Lower Cherry Aqueduct which was damaged during the recent Rim Fire (a federal and state declared emergency) to be able to access the 200,000 acre-feet of water storage in Cherry Lake by October 1, 2014; pump station and water treatment plant improvements in the Sunol area and Thomas Shaft so that we can safely and efficiently treat supplies from Cherry Lake at Sunol Valley Water Treatment Plant; services for installing water-saving plumbing fixtures; and other necessary work to extend our precious water supplies.

For the Lower Cherry Aqueduct, the design is being completed through an existing as-needed contract which included a streamlined competitive process for this design Task Order. HHWP and infrastructure staff have been directed to use a pre-qualified list of large pipeline contractors to develop a short competitive process to select the construction contractor who can be brought on while the project is under design so that there will be no delays in constructing the project.

Services of the San Francisco Public Utilities Commission

Edwin M. Leo Mayar

Vince Courtney
President

Age Moller Caes Vice President

Francesca Vieter Commissioner

> Anson Moras Commissioner

> Art Torres Commissioner

Harlan L. Kelly, Jr. General Manager



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POCLES DECLETATION OF Emergency for Drought Conditions February 21, 2014
Page 2 of 2

This request for emergency declaration is for resources and materials to perform work as soon as possible that is beyond the capabilities of City resources. Total estimated costs at this time are \$10,000,000, but will be dependent on the duration and depth of the drought.

f am therefore declaring the existence of an emergency for contracting purposes. This declaration does not serve as a declaration of water shortage emergency under Water Code Sections 350 et. seq., which the Commission may adopt in the near future depending on conditions as a means of requiring mandatory rationing by our customers. I trust that this meets with your concurrence and approval.

CONCURAND APPROVE

Whee Southey President

San Francisco Public Utilities Commission

Ann Moller Caen, Vice President

cc: Commissioners

City Controller