File No. 100340

Committee Item No. 3
Board Item No. 19

COMMITTEE/BOARD OF SUPERVISORS

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Sub-Committee BUDGET AND FINANCE **Date:** April 14, 2010

Board of Supervisors Meeting **Date** 4/20/10

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Completed by: Andrea S. Ausberry **Date** Friday, April 09, 2010
Completed by: A. Ausberry **Date** April 14, 2010

An asterisked item represents the cover sheet to a document that exceeds 25 pages. The complete document is in the file.

[Wastewater Revenue Bond Issuance – Not to Exceed $297,756,235]

Ordinance approving the issuance and sale of wastewater revenue bonds in an agrregrate principal amount not to exceed $297,756,235 by the San Francisco Public Utilities Commission to finance various projects benefitting the Wastewater Enterprise pursuant to amendments to the Charter of the City and County of San Francisco enacted by the voters on November 5, 2002, as Proposition E; and ratifying previous actions taken in connection therewith.

Be it ordained by the People of the City and County of San Francisco:

Section 1. Findings. The Board of Supervisors (the "Board") of the City hereby finds and declares as follows:

A. On November 5, 2002, the voters of the City and County of San Francisco (the "City") approved Proposition E, codified as Article VIIIB of the Charter of the City (the "Charter"), which among other things, authorized the Commission to issue revenue bonds, including notes, commercial paper or other forms of indebtedness, when authorized by ordinance approved by a two-thirds vote of the Board of Supervisors, for the purpose of reconstructing, replacing, expanding, repairing or improving water facilities or clean water facilities, or combinations of water and clean water facilities under the jurisdiction of the Commission; and,

B. The Commission adopted the Indenture dated as of January 1, 2003, between the Commission and U. S. Bank National Association (the "Indenture") and in connection therewith, issued the first series of bonds under the Indenture to finance projects benefitting the Wastewater Enterprise, designated the "Public Utilities Commission of the City and County of San Francisco Clean Water Revenue Bonds, 2003 Refunding Series A" (the "2003

Refunding Series A Bonds"), in the original principal amount of $396,270,000 to finance projects of the Wastewater Enterprise, previously referred to from time to time as the "Clean Water Enterprise", and,

C. Section 8B.124 of the Charter allows for the issuance of revenue bonds or other forms of indebtedness by ordinance approved by two-thirds of the Board, subject to the provision of certain certifications of an independent engineer retained by the Commission and certain certifications by the San Francisco Planning Department, which certifications shall make the findings and determinations set forth in Section 8B.124, and

D. The Board now desires to authorize the issuance and sale of the Wastewater Revenue Bonds by the Commission pursuant to said Section 8B.124.

E. This Board is concurrently considering with this ordinance Capital Improvement Program related supplemental budget appropriations totaling $241,182,550, including related financing costs totaling $56,573,685.

Section 2. Approval of the Wastewater Revenue Bonds. The Board hereby declares that the Certificates satisfy the requirements of Section 8B. 124 of the Charter, and in accordance therewith, the Commission is hereby authorized to issue the Wastewater Revenue Bonds pursuant to Section 8B. 124 of the Charter to finance a portion of the design, acquisition and construction of the Capital Projects, as well as paying costs of issuance and other incidental costs relating thereto; and the Board hereby approves the issuance and sale of the Wastewater Revenue Bonds in one or more series from time to time by the Commission pursuant to Section 8B. 124 of the Charter and in accordance with the Commission Resolution, in an aggregate principal amount not to exceed $297,756,235, representing $241,182,550 in supplemental capital improvement program appropriations and $56,573,685 in financing costs, at a maximum rate or rates of interest of not to exceed twelve percent (12%) per annum. The Commission is hereby authorized to determine the timing, amount and manner

of sale of each series of Wastewater Revenue Bonds issued pursuant to this authorization; provided however Commission's authorization to issue Wastewater Revenue Bonds is subject to (i) the filing with the Commission and the Board of the certifications required by approval by 8B1.24, and (ii) the approval by the Board of the form of offering document prepared in connection with issuance of the Wastewater Revenue Bonds .

Section 3. General Authority. The Controller, Treasurer, the City Attorney and other officers of the City and their duly authorized deputies and agents are hereby authorized and directed, jointly and severally, to take such actions and to execute and deliver such certificates, agreements, requests or other documents, as they may deem necessary or desirable to facilitate the issuance, sale and delivery of the Wastewater Revenue Bonds, to obtain bond insurance or other credit enhancements with respect to the Wastewater Revenue Bonds, to obtain a surety bond, to obtain title and other insurance with respect to the facilities to be financed, and otherwise to carry out the provisions of this Ordinance.

Section 4. Ratification of Prior Actions. All actions authorized and directed by this Ordinance and heretofore taken are hereby ratified, approved and confirmed by this Board.

Section 5. File Documents. All documents referred to as on file with the Clerk of the Board are in File Nos. _____.

Section 6. Effective Date. Pursuant to Section 14.102 of the Charter, this Ordinance shall take effect thirty (30) days after its adoption.

APPROVED AS TO FORM:
DENNIS J. HERRERA, City Attorney

By: _____
Mark D. Blake
Deputy City Attorney

CITY AND COUNTY OF SAN FRANCISCO

BOARD OF SUPERVISORS

BUDGET AND LEGISLATIVE ANALYST

1390 Market Street, Suite 1025, San Francisco, CA 94102 (415) 554-7642
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April 8, 2010

TO: Budget and Finance Subcommittee

FROM: Budget and Legislative Analyst

SUBJECT: April 15, 2010 Budget and Finance Subcommittee Meeting

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EXECUTIVE SUMMARY

Legislative Objectives

- File 10-0339: An ordinance appropriating a total of $348,064,054 to fund capital improvements for the PUC's wastewater system in FY 2010-2011 and FY 2011-2012, including (a) $30,000,000 from grant funds from the State of California, (b) $20,307,819 from Wastewater Capacity Fees, and (c) $297,756,235 from proceeds from the issuance of Wastewater Revenue Bonds.
- File 10-0340: An ordinance authorizing the Public Utilities Commission (PUC) to issue up to $297,756,235 in Wastewater Revenue Bonds to fund capital improvements to the PUC's wastewater system.

Fiscal Impact

- Debt service on the proposed issuance of $297,756,235 in Wastewater Revenue Bonds, totaling $609,092,655 over the 30 year term of the bonds, including $297,756,235 in principal and $311,336,420 in interest, would be paid by wastewater fees paid by PUC customers.

Key Points

- The PUC is requesting an appropriation of $348,064,054 to fund capital improvements for the PUC's wastewater system in FY 2010-2011 and FY 2011-2012, including (a) $30,000,000 in grants from the State of California, (b) $20,307,819 in Wastewater Capacity Fees, and (c) $297,756,235 in proceeds from the proposed issuance of Wastewater Revenue Bonds.
- Of the total proposed appropriation of $348,064,054, the PUC is requesting a total of $69,019,400 to fund the Sewer Collection System Projects, including (a) $39,019,400 in proceeds from the proposed sale of Wastewater Revenue Bonds and (b) $30,000,000 from a new grant program established by the State of California. However, the funding plan for the Sewer Collection System Projects is uncertain because (a) the PUC has not yet applied for the $30,000,000 in State grant funds, and (b) the grant program is new, and therefore the PUC has no history of this State grant program on which to base the assumption of future grant awards. Therefore, the Budget and Legislative Analyst recommends placing all construction funds for the Sewer Collection System Projects, totaling $56,249,400 out of the requested $69,019,400, on Budget and Finance Committee reserve, pending receipt of the anticipated State grant funds, which have not yet been awarded by the State.

Recommendations

- Because receipt of the future State grant funds for the Sewer Collection System Projects is uncertain, the Budget and Legislative Analyst recommends amending the proposed appropriation ordinance (File 10-0339) by placing the $56,249,400 in construction expenditures on Budget and Finance Committee reserve pending receipt of the State grant funds, which the PUC has not yet applied for, and therefore such grant funds have not yet been awarded.
- Approve the proposed supplemental appropriation ordinance, as amended (File 10-0339), and approve the other ordinance (File 10-0340).

BACKGROUND / MANDATE STATEMENT

On November 5, 2002, the voters of San Francisco approved Proposition E, codified as Article VIIIB of the City's Charter, which among other things, authorized the San Francisco Public Utilities Commission to issue an unlimited amount of either Wastewater or Water Revenue Bonds for the purpose of reconstructing, replacing, expanding, repairing or improving water facilities or wastewater facilities, under the jurisdiction of the PUC. However, in accordance with Proposition E, all such bond issuances must be authorized by ordinance and approved by a two-thirds vote of the Board of Supervisors.

The PUC's Wastewater Enterprise is responsible for collecting, treating, and disposing of sanitary waste and storing water runoff. In order to finance its Wastewater project, the PUC charges monthly rates to 171,902 customers in the Bay Area for providing the needed services. The Wastewater Enterprise operates, cleans and maintains 900 miles of City sewers, 17 pump stations and three wastewater treatment plants.

According to Mr. Carlos Jacobo, Budget Manager for the PUC, there are numerous existing wastewater and stormwater issues that need to be addressed by the Wastewater Enterprise. These issues include: (a) aging infrastructure, (b) system reliability and redundancy, (c) odor control, (d) stormwater control, (e) biosolids handling, and (f) regulatory compliance. In response, the Wastewater Enterprise is working to develop a Sewer System Improvement Plan (SSIP), which is estimated to be implemented over approximately 20 years. Although the PUC is still working to develop the scope and budget for the SSIP, Mr. Jacobo stated that the total cost of the SSIP is currently estimated to be approximately $3,500,000,000 through FY 2019-2020. Mr. Jacobo anticipates that the final scope and budget will be approved by the PUC in the winter of 2011.

According to Mr. Jacobo, the PUC is requesting funding prior to completion of the final project scope and budget for the SSIP in order to (a) make repairs and capital improvements which are necessary prior to the implementation of the forthcoming final SSIP, and (b) complete the planning and feasibility studies required in order to implement the final SSIP.

On March 30, 2010, the Board of Supervisors authorized the PUC to issue up to $282,400,000 in Wastewater Revenue Bonds to (a) refund $137,500,000 in Commercial Paper previously issued by the PUC, (b) finance $82,300,000 in various capital improvements to the PUC's wastewater system in FY 09-10, and (c) and cover financing costs totaling $62,600,000 (Files 10-0168 and 10-0169). The PUC is now requesting to issue an additional $297,756,235 in Wastewater Revenue Bonds to fund wastewater capital improvements in FY 2010-11 and FY 2011-12.

DETAILS OF PROPOSED LEGISLATION

The proposed ordinance (File 10-0339) would appropriate a total of $348,064,054 from three funding sources, including (a) $297,756,235 from the proceeds of the proposed Wastewater Revenue Bond Issuance, (b) $20,307,819 in Wastewater Capacity Fees[1], and (c) $30,000,000 in grant funds from the State of California.

The proposed ordinance (File 10-0339) would appropriate $348,064,054 to fund capital improvements for the PUC's wastewater system, including (a) $291,490,370 in project costs as shown in Table 1 below, and (b) $56,573,684 in financing costs (see Table 2 below in the Fiscal Analysis Section).

Table 1: Funding Plan for Projects Included in the Proposed Appropriation

Project Category	Previous Appropriations	Requested Appropriation for Capital Improvement Project Costs for FY 2010-2011 and FY 2011-2012	Future Appropriations	Total Project Costs
SSIP Planning Projects	$25,470,000	$32,695,000	$49,406,000	$107,571,000
Wastewater Facilities Projects	34,104,000	91,046,284	2,800,000	127,950,284
Sewer Collection System Projects	7,450,000	69,019,400	0	76,469,400
Renewal and Replacement Projects	58,222,000	45,729,686	435,517,007	539,468,693
Biosolids Digester Project[2]	9,000,000	27,000,000	1,446,000,000	1,482,000,000
Channel Tunnel Project	10,000,000	20,000,000	238,000,000	268,000,000
Treasure Island Wastewater Project	2,695,000	6,000,000	0	8,695,000
Total	**$146,941,000**	**$291,490,370***	**$2,171,723,007**	**$2,610,154,377**

**$291,490,370 plus financing costs of $56,573,684 totals $348,064,054.*

Attachments I, II, and III, provided by the PUC, show (a) descriptions of each project included in the proposed appropriation (Attachment I), (b) the funding plan for each project in the proposed appropriation (Attachment II), and (c) the expenditure plan for the $291,490,370 (Attachment III).

As shown in Table 1 above, the PUC's Renewal and Replacement Projects would appropriate $45,729,686 for FY 2010-2011 and FY 2011-2012. The PUC's Renewal and Replacement Project, as described in Attachment I, is an ongoing project to replace the aging sewer system pipelines in the City, some portions of which are over 100 years old. Historically, the PUC has funded the Renewal and Replacement Project through wastewater fees appropriated in the PUC's annual budget. According to Mr. Jacobo, the PUC now intends to finance a portion of the Renewal and Replacement Project through Wastewater Revenue Bond fund proceeds in

[1] According to Mr. Jacobo, Wastewater Capacity Fees are annual revenues paid to the PUC by property owners for new construction projects which require expansion of the PUC's wastewater system.

[2] The Biosolids Digester Project would replace the existing Southeast Water Pollution Control Plant in Bayview with a modern facility. A more detailed description is provided in Attachment I.

order to balance the benefits of (a) cash financing capital projects which results in the lowest overall cost to the rate payers, and (b) spreading the cost of the Renewal and Replacement Projects over the life of the capital assets using debt financing. According to Mr. Jacobo, in addition to the $45,729,686 included in the requested appropriation, the PUC intends to request an appropriation totaling $36,804,914 funded by Wastewater Enterprise revenues for the Renewal and Replacement Project in the FY 2010-2011 and FY 2011-2012 budget request.

FISCAL ANALYSIS

The sources and uses of funds for the proposed issuance of $297,756,235 in Wastewater Revenue Bonds are shown below in Table 2, based on data provided by the PUC.

Table 2: Uses of Bond Proceeds

Capitalized Interest	$43,473,747
Debt Service Reserve Funds	10,211,137
Underwriter's Discount	1,488,800
Costs of Issuance	1,400,000
Subtotal of Financing Costs	**$56,573,684**
Project Funds[3]	241,182,551
Total	**$297,756,235**

Mr. Jacobo anticipates that the PUC will issue the proposed $297,756,235 in Wastewater Revenue Bond in two separate issuances, including (a) $119,883,950 in May of 2011, and (b) $177,872,285 in May of 2012. Mr. Jacobo estimates that the bonds will be issued at an interest rate of 5.50 percent over a 30 year term, with total debt service of $609,092,655, including $297,756,235 in principal and $311,336,420 in interest, for average annual debt service payments of $20,303,089 over 30 years.

Debt service on the proposed Wastewater Revenue Bonds will be paid from fees charged to wastewater customers. The impact of the such debt service payments on wastewater fees charged to the average single family residence, based on approved[4] wastewater fees through FY 2013-2014, is shown in Table 3 below.

[3] Project funds from the issuance of Wastewater Revenue Bonds totaling $241,182,551, as shown in Table 2 above, would be combined with (a) $30,000,000 in State grant funds, and (b) $20,307,819 in Wastewater Capacity Fees, to fully fund total project costs of $291,490,370 (shown in Table 1 above).

[4] Pursuant to Charter Section 8B.125, after the PUC approves new wastewater service rates, the Board of Supervisors may elect to hold a public hearing within 30 days and reject the rate package based on a majority vote of the Board of Supervisors. The Board of Supervisors did not hold a hearing following the PUC's approval of wastewater rate increases for FY 2009-2010 through FY 2013-2014, and therefore these wastewater rates went into effect on July 1, 2009.

Table 3: Impact of Wastewater Revenue Bonds on the Monthly Wastewater Fee Charges for an Average Single Family Residence

Cost Category	Average Cost			
	FY 10-11	FY 11-12	FY 12-13	FY 13-14
Previously Issued Wastewater Revenue Bonds and other Debt	$12.69	$10.15	$9.76	$9.65
$297,756,235 in Requested Wastewater Revenue Bonds (subject of this request)	**$0.00**	**$0.00**	**$4.84**	**$4.81**
Future Authorized Wastewater Revenue Bonds	$0.00	$0.00	$0.76	$2.91
Subtotal Wastewater Bond Debt Service	**$12.69**	**$10.15**	**$15.36**	**$17.37**
Other Wastewater Non-Debt Related Costs	$33.17	$38.01	$35.21	$35.72
Total	**$45.86**	**$48.16**	**$50.57**	**$53.09**

The proposed appropriation of $348,064,054 includes, in addition to the proceeds of the proposed $297,756,235 Wastewater Revenue Bond issuance discussed above, (a) $30,000,000 in grant funds from the State of California, and (b) $20,307,819 in Wastewater Capacity Fees.

According to Mr. Jacobo, the State of California has created a new $212,000,000 grant program entitled the Integrated Regional Water Management (IRWM) Grant Program with a maximum award of $30,000,000 per project. The application process and timeline for this grant program have not yet been finalized by the State, although Mr. Jacobo anticipates that the State will begin accepting applications by May of 2010.

POLICY CONSIDERATIONS

Of the total proposed appropriation of $348,064,054, the PUC is requesting an appropriation of $69,019,400 (see Table 1 above) to fund Sewer Collection System Projects including (a) $39,019,400 from the proceeds of the proposed Wastewater Revenue Bond issuance, and (b) $30,000,000 in State grant funds which have not yet been awarded to the PUC.

The PUC is requesting an appropriation of $30,000,000 in State grant funds despite the fact (a) the PUC has not yet applied for the $30,000,000 in subject grant funds, and therefore such funds have not yet been awarded by the State, and (b) the State grant program for these funds is new. Therefore the PUC has no history of this State grant program on which to base the assumption of future grant awards, under this new State grant program.

Attachment IV, a memorandum provided by the PUC, includes additional information regarding such State grant funds.

The Budget and Legislative Analyst notes that the PUC cannot reliably assume the State will award the requested $30,000,000 in State grant funds, such that the financing plan for the Sewer Collection System Projects, which would be partially funded by such State grant funds, is uncertain. Mr. Jacobo stated that should the PUC not be awarded the $30,000,000 in State grants, the PUC would request additional Wastewater Revenue Bond issuance authority from the Board of Supervisors to generate sufficient proceeds to offset the potential $30,000,000 shortfall. The Budget and Legislative Analyst further notes, that regardless of the grant application outcome, the PUC must return to the Board of Supervisors (a) for approval of an accept and expend grant resolution for the anticipated $30,000,000 in State grant funds, or (b) for approval to issue additional Wastewater Revenue Bonds if the State does not award the anticipated grant funds to the PUC.

Included in the $69,019,400 for the Sewer Collection System Projects, the PUC proposes to spend (a) $12,770,000 for planning, design, environmental review, and City staff costs, and (b) $56,249,400 in construction costs for the Sewer Collection System Projects. Because the funding plan for the Sewer Collection System Projects is uncertain, the Budget and Legislative Analyst recommends placing the $56,249,400 in construction costs on Budget and Finance Committee reserve pending receipt of the State grant funds, which have not yet been awarded.

RECOMMENDATIONS

1. Because the funding plan for the Sewer Collection System Projects is uncertain, the Budget and Legislative Analyst recommends amending the proposed appropriation ordinance (File 10-0339) by placing the $56,249,400 in construction expenditures on Budget and Finance Committee reserve pending receipt of the State grant funds, which the PUC has not yet applied for, and therefore such grant funds have not yet been awarded.

2. Approve the proposed supplemental appropriation ordinance, as amended (File 10-0339), and approve the other ordinance (File 10-0340).

PROJECT DESCRIPTIONS

SSIP Planning

The proposed Sewer System Improvement Program (SSIP), currently under development, will encompass a series of large capital improvement projects focused on improving the wastewater system to meet the present and future needs. The projects will improve the level of ensured reliability and future sustainability consistent with the City's goals and objectives. Wastewater Enterprise staff are currently conducting workshops with our Commission to define the desired levels of service and further refine the SSIP projects and overall time frame. Commission Workshops are anticipated to continue until Summer 2010. With the assistance of a program manager, firm budgets and schedules also will be established. Soon after the initial environmental review phase will begin and is expected to last approximately three years.

The requested appropriation will address tasks needed to fully develop the SSIP. Tasks include condition assessment, facility inspections, system hydraulic modeling, alternatives evaluation, evaluation of Low Impact Design approaches, initiation and support of the environmental review processes for the individual projects, public outreach/education and planning-level schedules, cost estimates and life cycle costs

Low Impact Design

Through the Low Impact Design (LID) Program, projects and polices will be developed that will store or divert stormwater for beneficial use prior to it entering the sewer system. The LID Program will enhance local neighborhoods, reduce localized flooding, and improve the operating efficiency of San Francisco's combined sewer system. Potential project partnerships will be pursued with Department of Recreation and Parks, the SF Unified School District and other public and private entities to divert, store and/or use stormwater on site. Activities will include planning and investigation to identify potential LID projects and opportunities, design and construction of projects. In some cases future feasible projects may be public/private partnerships (pavement removal, swale installation etc.). The LID Program will also include neighborhood demonstration projects.

Biofuel/Alternative Energy

The Biofuel/ Alternative Energy Program will determine if it is feasible and cost-effective for the SFPUC to generate bioenergy (e.g. biofuel or cogenerated power) as a byproduct of processing the fats, oils and grease (FOG) and/or food waste collected throughout the City. Information will be developed through pilot studies and analysis to evaluate if adoption of biofuel energy programs into the SFPUC's wastewater infrastructure (collection system and/or treatment processes) would reliably and cost-effectively enhance performance and sustainability.

The specific projects identified to date include:
1) Development of a Business Plan to determine the cost effectiveness and potential benefits from new sources of alternative energy. Evaluation of the market and assessment of the impacts to the Wastewater Enterprise.
2) Continuation of the pilot project evaluating the conversion of brown grease into biodiesel. (This effort is partially supported by a California Energy Commission grant),
3) Pilot studies evaluating collection and treatment of food waste and cost benefit analysis regarding co-digestion versus separate digestion in a dedicated off-site facility.
4) Participation in the Bay Area Regional Biosolids to Energy Project
5) Local FOG collection and handling projects.

Odor Control

The Wastewater Enterprise's 1998 Odor Control Master Plan recommended alternatives to reduce treatment facility odor emissions, assuming no major process changes. Wastewater Enterprise (WWE) has already implemented many of the recommended improvements outlined in the Odor Control Master Plan. However, additional projects are still needed to maximize the control of odors from within WWE facilities, especially the Southeast Water Pollution Control Plant (SEP). The scope of work will include covering, venting, and treating odors from various SEWPCP processes identified as significant odor sources.

Treatment Facilities

Projects in this category will address the near term needs at the wastewater treatment facilities (Southeast Plant, Oceanside Plant and North Point Facility). Projects/tasks will provide facility improvements to ensure reliable service and compliance with regulatory requirements. Projects include near term replacement of aging infrastructure, upgrade of mechanical and electrical equipment, and odor control improvements. The projects are necessary to keep the system operating reliably while the SSIP is being developed.

The proposed projects include:

a) Southeast Water Pollution Control Plant (SEP) Solids Handling Improvements - Replace digester roof, replace digester level controls, and address Building 840/860 corrosion.
b) Mechanical and Electrical Equipment Replacement- Replace major mechanical and electrical equipment such as pumps, motors, motor drives, screens, gates, valves, actuators, motor control centers, switchgears, compressors, instrumentations and controls.
c) Security and Emergency Response Improvements - Provide security (e.g. fencing, cameras) and emergency response improvements for WWE facilities starting with the SEP and the North Point Wet Weather Facility.
d) Oceanside Water Pollution Control Plant (OSP) Solids Handling and Coating Improvements - Replace the deteriorated digester coating, implement conversion to Class A Biosolids, and improving the efficiency/reliability of solids handling processes.
e) Facilities Reliability Improvements - Reliability improvements include SEP Hypochlorite/Bisulfite Tank Farm Relocation,12 KV Feeder Replacement, SEP & OSP Flares Modification, Bldg. 040/041 Corrosion Repairs, Bldg. 930 HVAC Improvements, and SEP Bldg. 270 Oxygen Plant Rehab.

Pump Stations

The Wastewater Enterprise (WWE) is responsible for the operation of 27 pump stations and their associated force mains. The reliability of the pump stations is critical for compliance with SFPUC's Regional Water Quality Control Board permit.

Mariposa Pump Station - This pump station has been overwhelmed during the past few years by additional flows from the new developments at Mission Bay. The project scope includes electrical upgrades, cross-connection modifications between dry weather and wet weather force mains, and heating/ventilation/air conditioning (HVAC) improvements.

Channel Pump Station - The 30-year old Channel Pump Station (CPS) is one of the most critical facilities in the City's wastewater collection system. Its continued operation is becoming more challenging due to age and new neighbors and flows from the surrounding Mission Bay development in the past 5 to 8 years. Over $20M of has been spent through small capital improvement projects, however, there have been recurring issues with reliability of lift pumps and influent gates, inadequate odor control at this pump station and odors from the influent sewers. The scope of work will also include manifold corrosion repairs, instrumentation/control upgrades, emergency generator installation, and regulatory (BCDC) mitigation.

Sewer Collection System

Projects in this category will address the near term needs of the City's sewer collection system. Projects/tasks include various drainage improvements in identified areas prone to chronic flooding during wet weather storms, and repair/rehabilitation of aging or structurally inadequate components of the sewer system (e.g., pipelines, force mains, transport/storage boxes, etc.)

Proposed projects include:

a) Sunnydale Auxiliary Sewer Phase 2 - Sewer improvements within Visitacion Valley.
b) Cesar Chavez Phase 2 – Sewer hydraulic improvements and convey flow from the Mission District to the Islais Creek Transport/Storage structure.
c) Richmond Drainage Phase 2 - Provide sewer improvements to the Richmond/Seacliff districts.
d) Sewer Hydraulic Improvements - Increase hydraulic capacity for sewers Citywide.
e) Aging Sewer Replacements - Provide Citywide sewer improvements for aging sewers and sewer repairs.
f) Sewer Staff Facility Improvement - Modify trailer office space at 160 Napolean Street to accommodate increase in staff.
g) Vactor Waste Staging Area - Vactor truck waste must meet new waste acceptance criteria in order to be properly disposed in a landfill. A transfer facility must be built that eliminates free liquids and reduces moisture content to less than 50%.

Renewal & Replacement (Treatment and Sewers)

Projects in the Renewal and Replacement (R&R) program will result in significant improvements and/or increase the service life of an existing asset in the sewer collection system and wastewater facilities. This appropriation initiates the acceleration of the replacement of many of the local collecting sewers (less that 36-inch in diameter), a 160 miles of which are beyond the end of their useful life (110 years old). These collecting sewers represent over 78% (781 miles) of the City's sewer pipeline inventory (993 miles total). Sewer failures result in flooding, pot holes and disruption to traffic and transportation.

Outfall and Receiving Waters

SFPUC operates and maintains one ocean and multiple bay outfall structures as part of the wastewater treatment process. Up to 110 million gallons per day (MGD) of treated effluent from the Southeast Plant is discharged into the San Francisco Bay, 810 feet from Pier 80 through the Southeast Bay Outfall. Similarly, up to 175 MGD of treated effluent from the Oceanside Plant is discharged into the Pacific Ocean, about four miles offshore through the Southwest Ocean Outfall. Lastly, 150 MGD of effluent from the North Point Wet Weather Facility is discharged into the San Francisco Bay through the North Point Outfalls located between Piers 33 and 35. This project provides for extensive field inspections and condition assessment of the existing outfalls. Minor repair of these outfalls is also included to negate any possible loss of operating capacity.

Receiving water studies will also be conducted as a part of this project to evaluate the impacts of the treated wastewater effluent to the Ocean and Bay environment, and whether improvements should be made in the future. A dilution study is required as outlined in the most recent Regional Water Quality Control Board permit for the Oceanside Plant.

Biosolids Digester Project

The entire project will include the planning, environmental review, design and construction of a new facility replacing the existing digester solids handling facility at the Southeast Wastewater Treatment Plant. The new facility will include state-of-the art treatment processes (including solids thickening, anaerobic digestion, gas handling/ cogeneration, dewatering and related appurtenances) producing a sludge/biosolids that can be reused for beneficial purposes. Constructed with 1950's technology, the existing digester facility is operating well beyond its useful life and is prone to major maintenance repairs. The aging facility has become a known source of odors in the surrounding neighborhood. This appropriation allows the Wastewater Enterprise to initiate facility planning, preliminary design and environmental review phases of the project. Ultimately, this project would be included is the forthcoming SSIP.

Channel Tunnel Project

The proposed project will include facility planning, environmental review, design and construction of a redundant backup system to the existing 66-inch Channel Force Main. The Channel Force Main is a critical component of the sewer system infrastructure conveying 60% of the bayside wastewater flows to the Southeast Plant for treatment. The existing Channel Force Main is aging and vulnerable to seismic damage. It has failed several times including during the Loma Prieta earthquake. This appropriation allows the Wastewater Enterprise to initiate the planning, preliminary design and environmental review phases of the project.

Treasure Island Wastewater Facilities

This appropriation will be used to improve the reliability of the existing collection system and treatment facilities supporting Treasure Island and Yerba Buena Island. Improvements include replacement of major and ancillary equipment that are in poor condition and close to failure. The replacement of critical equipment and infrastructure will allow the plant to reliably operate ensuring compliance with regulatory requirements. The existing facility is not reliable and has suffered numerous serious treatment/equipment failures in the past. Ultimately, a new wastewater facility will be required (and will be addressed separately).

	Previous Appropriation	Current Request FY 2010-11	Current Request FY 2011-12	Future Appropriation	Total Estimated Project Cost
SSIP Planning	25,470,000	11,625,000	10,300,000	13,510,000	60,905,000
Low Impact Design (LID)	0	2,000,000	3,000,000	34,636,000	39,636,000
Biofuel / Alternative Energy	0	2,560,000	3,210,000	1,260,000	7,030,000
SSIP Planning Projects	**25,470,000**	**16,185,000**	**16,510,000**	**49,406,000**	**107,571,000**
Odor Control Improvements at SEP	6,200,000	2,650,000	6,000,000	0	14,850,000
SEP Solids Handling (Digester Roof, etc.)	2,200,000	2,600,000	2,100,000	0	6,900,000
Major Electrical/Mechanical Reliability	20,054,000	12,614,000	10,682,284	0	43,350,284
WWE Facilities Security/Emergency Response	700,000	4,300,000	8,000,000	0	13,000,000
OSP Solids Handling and Coating	500,000	14,300,000	6,800,000	2,800,000	24,400,000
Facility Reliability Improvements	2,700,000	6,000,000	7,000,000	0	15,700,000
Mariposa Pump Station Improvements	500,000	4,650,000	0	0	5,150,000
CPS Improvements & 66" FM Replacement	1,250,000	3,350,000	0	0	4,600,000
Wastewater Facilities Projects	**34,104,000**	**50,464,000**	**40,582,284**	**2,800,000**	**127,950,284**
Sunnydale Auxiliary Sewer, Phase 2	700,000	7,000,000	0	0	7,700,000
Cesar Chavez Sewer Improvements, Phase 2	750,000	200,000	11,450,000	0	12,400,000
Richmond Drainage Improvements, Phase 2	1,000,000	9,250,000	0	0	10,250,000
Sewer Hydraulic Improvements	0	3,518,000	6,361,400	0	9,879,400
Aging Sewer Replacements	5,000,000	14,000,000	14,000,000	0	33,000,000
Sewer Staff Facility Improvement	0	510,000	0	0	510,000
Vactor Waste Staging Area	0	280,000	2,450,000	0	2,730,000
Sewer Collection Systems Projects	**7,450,000**	**34,758,000**	**34,261,400**	**0**	**76,469,400**
R&R Program -Treatment Facilities (1)	19,128,000	3,202,410	0	107,762,660	130,093,070
R&R Program - Collection System/Sewers(2)	39,094,000	24,098,410	9,928,866	327,754,347	400,875,623
Outfall and Receiving Waters	0	3,500,000	5,000,000	0	8,500,000
R&R Projects	**58,222,000**	**30,800,820**	**14,928,866**	**435,517,007**	**539,468,693**
SSIP Biosolids/Digester Project	9,000,000	0	27,000,000	1,446,000,000	1,482,000,000
SSIP - Channel Tunnel Project	10,000,000	0	20,000,000	238,000,000	268,000,000
Wastewater Facilities - Treasure Island	2,695,000	3,000,000	3,000,000	0	8,695,000
TOTAL REQUEST:	**146,941,000**	**135,207,820**	**156,282,550**	**2,171,723,007**	**2,610,154,377**

(1) Additional funding for Treatment Facilities RnR in FY 2011 AAO Budget, $7,022,590 & FY 2012, $11,017,716.
(2) Additional funding for Collection System RnR In FY 2011 AAO Budget, $7,022,590 & FY 2012, $22,759,734.

Updated on March 25, 2010			
PROJECT TITLE	Total (Jul 2010 to Jun 2011) FY10/11	Total (Jul 2011 to Jun 2012) FY11/12	TOTAL NEEDS
Planning (for Sewer System Improvement Program - SSIP	**$11,625,000**	**$10,300,000**	**$21,925,000**
Labor	$2,315,000	$2,600,000	$4,915,000
Other City Labor	$1,185,000	$1,400,000	$2,585,000
Construction	$0	$0	$0
Consultant: Planning	$6,625,000	$3,300,000	$9,925,000
Consultant: Environmental	$1,500,000	$3,000,000	$4,500,000
Consultant: Design	$0	$0	$0
Consultant: Construction Management	$0	$0	$0
Low Impact Design (LID)	**$2,000,000**	**$3,000,000**	**$5,000,000**
Labor	$2,000,000	$2,170,000	$4,170,000
Other City Labor	$0	$0	$0
Construction	$0	$830,000	$830,000
Consultant: Planning	$0	$0	$0
Consultant: Environmental	$0	$0	$0
Consultant: Design	$0	$0	$0
Consultant: Construction Management	$0	$0	$0
Biofuel / Alternative Energy	**$2,560,000**	**$3,210,000**	**$5,770,000**
Labor	$1,430,000	$2,240,000	$3,670,000
Other City Labor	$0	$0	$0
Construction	$480,000	$520,000	$1,000,000
Consultant: Planning	$650,000	$450,000	$1,100,000
Consultant: Design	$0	$0	$0
Consultant: Construction Management	$0	$0	$0
Aging Infrastructure WWE Facilities	**$50,464,000**	**$40,582,284**	**$91,046,284**
Aging Infrastructure - Odor Control	**$2,650,000**	**$6,000,000**	**$8,650,000**
Odor Control Improvements at SEP	**$2,650,000**	**$6,000,000**	**$8,650,000**
Labor	$650,000	$400,000	$1,050,000
Other City Labor	$800,000	$400,000	$1,200,000
Construction	$1,200,000	$5,200,000	$6,400,000
Consultant: Environmental	$0	$0	$0
Consultant: Design	$0	$0	$0
Consultant: Construction Management	$0	$0	$0
Aging Infrastructure - Treatment Facilities	**$39,814,000**	**$34,582,284**	**$74,396,284**
SEP Solids Handling (Digester Roof etc.)	**$2,600,000**	**$2,100,000**	**$4,700,000**
Labor	$250,000	$150,000	$400,000
Other City Labor	$325,000	$375,000	$700,000
Construction	$2,025,000	$1,575,000	$3,600,000
Consultant: Environmental	$0	$0	$0
Consultant: Design	$0	$0	$0
Consultant: Construction Management	$0	$0	$0
Major Electrical/Mechanical Reliability	**$12,614,000**	**$10,682,284**	**$23,296,284**
Labor	$700,000	$700,000	$1,400,000
Other City Labor	$0	$0	$0
Construction	$11,914,000	$9,982,284	$21,896,284
Consultant: Environmental	$0	$0	$0

Updated on March 25, 2010			
PROJECT TITLE	Total (Jul 2010 to Jun 2011) FY10/11	Total (Jul 2011 to Jun 2012) FY11/12	TOTAL NEEDS
Consultant: Design	$0	$0	$0
Consultant: Construction Management	$0	$0	$0
WWE Facilities Security/Emergency Response	**$4,300,000**	**$8,000,000**	**$12,300,000**
Labor	$1,200,000	$1,200,000	$2,400,000
Other City Labor	$0	$0	$0
Construction	$2,500,000	$6,800,000	$9,300,000
Consultant: Environmental	$0	$0	$0
Consultant: Design	$600,000	$0	$600,000
Consultant: Construction Management	$0	$0	$0
OSP Solids Handling and Coating	**$14,300,000**	**$6,800,000**	**$21,100,000**
Labor	$1,300,000	$400,000	$1,700,000
Other City Labor	$1,400,000	$900,000	$2,300,000
Construction	$11,150,000	$5,500,000	$16,650,000
Consultant: Environmental	$0	$0	$0
Consultant: Design	$450,000	$0	$450,000
Consultant: Construction Management	$0	$0	$0
Facility Reliability Improvements	**$6,000,000**	**$7,000,000**	**$13,000,000**
Labor	$550,000	$200,000	$750,000
Other City Labor	$1,000,000	$800,000	$1,800,000
Construction	$4,250,000	$6,000,000	$10,250,000
Consultant: Environmental	$0	$0	$0
Consultant: Design	$200,000	$0	$200,000
Consultant: Construction Management	$0	$0	$0
Aging Infrastructure - Pump Station	**$8,000,000**	**$0**	**$8,000,000**
Mariposa Pump Station Improvements	**$4,650,000**	**$0**	**$4,650,000**
Labor	$450,000	$0	$450,000
Other City Labor	$700,000	$0	$700,000
Construction	$3,500,000	$0	$3,500,000
Consultant: Environmental	$0	$0	$0
Consultant: Design	$0	$0	$0
Consultant: Construction Management	$0	$0	$0
CPS Improvements & 66" FM Replacement	**$3,350,000**	**$0**	**$3,350,000**
Labor	$200,000	$0	$200,000
Other City Labor	$400,000	$0	$400,000
Construction	$2,750,000	$0	$2,750,000
Consultant: Environmental	$0	$0	$0
Consultant: Design	$0	$0	$0
Consultant: Construction Management	$0	$0	$0
Sewer/Collection System	**$34,758,000**	**$34,261,400**	**$69,019,400**
Sewer Capital Improvement Program	**$34,758,000**	**$34,261,400**	**$69,019,400**
Sunnydale Auxiliary Sewer, Phase 2	**$7,000,000**	**$0**	**$7,000,000**
Labor	$170,000	$0	$170,000
Other City Labor	$830,000	$0	$830,000
Construction	$6,000,000	$0	$6,000,000
Consultant: Planning/Environmental			$0
Consultant: Design	$0	$0	$0
Consultant: Construction Management	$0	$0	$0
Cesar Chavez Sewer Improvements, Phase 2	**$200,000**	**$11,450,000**	**$11,650,000**
Labor	$100,000	$650,000	$750,000

Updated on March 25, 2010			
PROJECT TITLE	Total (Jul 2010 to Jun 2011) FY10/11	Total (Jul 2011 to Jun 2012) FY11/12	TOTAL NEEDS
Other City Labor	$100,000	$1,950,000	$2,050,000
Construction	$0	$8,650,000	$8,650,000
Consultant: Planning/Environmental	$0	$0	$0
Consultant: Design	$0	$200,000	$200,000
Consultant: Construction Management	$0	$0	$0
Richmond Drainage Improvements, Phase 2	**$9,250,000**	**$0**	**$9,250,000**
Labor	$370,000	$0	$370,000
Other City Labor	$1,180,000	$0	$1,180,000
Construction	$7,500,000	$0	$7,500,000
Consultant: Planning/Environmental	$200,000	$0	$200,000
Consultant: Design	$0	$0	$0
Consultant: Construction Management	$0	$0	$0
Sewer Hydraulic Improvements	**$3,518,000**	**$6,361,400**	**$9,879,400**
Labor	$340,000	$200,000	$540,000
Other City Labor	$900,000	$800,000	$1,700,000
Construction	$2,278,000	$5,361,400	$7,639,400
Consultant: Planning/Environmental	$0	$0	$0
Consultant: Design	$0	$0	$0
Consultant: Construction Management	$0	$0	$0
Aging Sewer Replacements	**$14,000,000**	**$14,000,000**	**$28,000,000**
Labor	$420,000	$420,000	$840,000
Other City Labor	$1,680,000	$1,680,000	$3,360,000
Construction	$11,900,000	$11,900,000	$23,800,000
Consultant: Planning/Environmental	$0	$0	$0
Consultant: Design	$0	$0	$0
Consultant: Construction Management	$0	$0	$0
Sewer Staff Facility Improvement	**$510,000**	**$0**	**$510,000**
Labor	$50,000	$0	$50,000
Other City Labor	$0	$0	$0
Construction	$460,000	$0	$460,000
Consultant: Planning/Environmental	$0	$0	$0
Consultant: Design	$0	$0	$0
Consultant: Construction Management	$0	$0	$0
Vactor Waste Staging Area	**$280,000**	**$2,450,000**	**$2,730,000**
Labor	$210,000	$150,000	$360,000
Other City Labor	$70,000	$100,000	$170,000
Construction	$0	$2,200,000	$2,200,000
Consultant: Planning/Environmental	$0	$0	$0
Consultant: Design	$0	$0	$0
Consultant: Construction Management	$0	$0	$0
WWE Renewal & Replacement Program	**$30,800,820**	**$14,928,866**	**$45,729,686**
R&R Program (Treatment Facilities)	**$3,202,410**	**$0**	**$3,202,410**
Labor	$832,627	$0	$832,627
Other City Labor	$288,217	$0	$288,217
Construction	$2,081,567	$0	$2,081,567
Consultant: Planning/Environmental	$0	$0	$0
Consultant: Design	$0	$0	$0
Consultant: Construction Management	$0	$0	$0
R&R Program (Sewers)	**$24,098,410**	**$9,928,866**	**$34,027,276**
Labor	$722,952	$297,866	$1,020,818

Updated on March 25, 2010			
PROJECT TITLE	Total (Jul 2010 to Jun 2011) FY10/11	Total (Jul 2011 to Jun 2012) FY11/12	TOTAL NEEDS
Other City Labor	$6,506,571	$2,680,793	$9,187,364
Construction	$16,868,887	$6,950,205	$23,819,092
Consultant: Planning/Environmental	$0	$0	$0
Consultant: Design	$0	$0	$0
Consultant: Construction Management	$0	$0	$0
Outfall and Receiving Waters	**$3,500,000**	**$5,000,000**	**$8,500,000**
Labor	$700,000	$0	$700,000
Other City Labor	$0	$0	$0
Construction	$0	$4,500,000	$4,500,000
Consultant: Planning/Environmental	$200,000	$0	$200,000
Consultant: Design	$2,600,000	$0	$2,600,000
Consultant: Construction Management	$0	$500,000	$500,000
SSIP{ Biosolids/Digester Project	**$0**	**$27,000,000**	**$27,000,000**
SSIP Biosolids Project	**$0**	**$27,000,000**	**$27,000,000**
Labor	$0	$6,400,000	$6,400,000
Other City Labor	$0	$0	$0
Construction	$0	$0	$0
Consultant: Planning/Environmental	$0	$1,000,000	$1,000,000
Consultant: Design	$0	$19,600,000	$19,600,000
Consultant: Construction Management	$0	$0	$0
SSIP - Channel Tunnel Project	**$0**	**$20,000,000**	**$20,000,000**
SSIP Channel Tunnel Transport	**$0**	**$20,000,000**	**$20,000,000**
Labor	$0	$5,800,000	$5,800,000
Other City Labor	$0	$500,000	$500,000
Construction	$0	$0	$0
Consultant: Planning	$0	$200,000	$200,000
Consultant: Environmental	$0	$1,300,000	$1,300,000
Consultant: Design	$0	$12,200,000	$12,200,000
Consultant: Construction Management	$0	$0	$0
Wastewater Facilities - Treasure Island	**$3,000,000**	**$3,000,000**	**$6,000,000**
Existing Treasure Island Wastewater Facility	**$3,000,000**	**$3,000,000**	**$6,000,000**
Labor	$200,000	$200,000	$400,000
Other City Labor	$0	$0	$0
Construction	$2,800,000	$2,800,000	$5,600,000
Consultant: Planning	$0	$0	$0
Consultant: Environmental	$0	$0	$0
Consultant: Design	$0	$0	$0
Consultant: Construction Management	$0	$0	$0
TOTAL REQUEST:	**$135,207,820**	**$156,282,550**	**$291,490,370**
Labor	$15,160,579	$24,177,868	$39,338,447
Other City Labor	$17,364,788	$11,585,793	$28,950,581
Construction	$89,657,454	$78,768,889	$168,426,342

Updated on March 25, 2010			
PROJECT TITLE	**Total (Jul 2010 to Jun 2011) FY10/11**	**Total (Jul 2011 to Jun 2012) FY11/12**	**TOTAL NEEDS**
Consultant: Planning	$7,275,000	$3,950,000	$11,225,000
Consultant: Environmental	$1,500,000	$4,300,000	$5,800,000
Consultant: Design	$3,850,000	$32,000,000	$35,850,000
Consultant: Construction Management	$0	$500,000	$500,000
Consultant: Planning/Environmental	$400,000	$1,000,000	$1,400,000
	$135,207,820	$156,282,550	$291,490,370

San Francisco
Public Utilities Commission
FINANCIAL SERVICES
1155 Market St., 5th Floor
San Francisco, CA 94103

MEMORANDUM

DATE: APRIL 7, 2010

TO: NATHAN CRUZ, BOARD'S BUDGET ANALYST

FROM: CHARLES PERL, SFPUC DEPUTY CFO, FINANCIAL SERVICES

SUBJECT: WASTEWATER $30M SUPPLEMENTAL APPROPRIATION REQUEST GRANT FUNDING

The SFPUC is including $30 million in estimated State grant funds in the two-year (FY 2010-11, 2011-12) Wastewater Enterprise Capital Plan. The funding is part of the Sewer/Collection system project request and includes $20 million in FY 2010 -11 and $10 million in FY 2011 -12. These amounts reflect projected grant sources consistent with the SFPUC's requirement to submit a two-year budget.

The SFPUC is preparing and planning to apply for at least two state grant opportunities that could result in new project funding capacity. Firstly, a $20 million combined sewers grant program which is slated to open at the end of April. Only the SFPUC and Sacramento are eligible to apply. It is anticipated that these funds will be awarded by the state in FY 2010-11. The SFPUC is including the grant funds in its FY 2010-11 budget request.

Another $20 million is pending for urban stream Storm Water Flood Management Projects to reduce the frequency and impacts of flooding in watersheds that drain to the San Francisco Bay. The provisions of the grant are not defined at this time. It is anticipated these funds will become available in FY 2011-12, therefore, we included an estimation of $10 million in the FY 2011- 12 request.