



# PUBLIC UTILITIES REVENUE BOND OVERSIGHT COMMITTEE CITY AND COUNTY OF SAN FRANCISCO MINUTES - DRAFT

Public Utilities Commission Building  
525 Golden Gate Ave., 4<sup>th</sup> Floor  
San Joaquin Conference Room  
San Francisco, CA 94102

March 7, 2016 - 9:00 AM

## Regular Meeting

**Purpose:** The purpose of the RBOC is to monitor the expenditure of revenue bond proceeds related to the repair, replacement, upgrading, and expansion of the City's water collection, power generation, water distribution, and wastewater treatment facilities.

**Mission:** The goal of the RBOC is to make certain public dollars are spent according to authorization and applicable laws. Its purpose is to facilitate transparency and accountability in connection with the expenditure of revenue bond proceeds. The General Public is invited and welcomed to attend RBOC meetings and to provide input.

### 1. Call to Order and Roll Call

Seat 1 Holly Kaufman (Holdover status)  
Seat 2 Kevin Cheng, Co-Chair (Holdover status)  
Seat 3 Vacant  
Seat 4 Marina Pelosi (Holdover status)  
Seat 5 Vacant  
Seat 6 Christina Tang, Vice Chair  
Seat 7 Joshua Low, Co-Chair

*Co-Chairs Kevin Cheng and Joshua Low called the meeting to order at 9:09 a.m. On the call of the roll, Members Cheng, Pelosi, Tang, and Low were noted present. Member Kaufman was noted absent. There was a quorum.*

### 2. Agenda Changes

*There were no agenda changes.*

### 3. Public Comment: Members of the public may address the Revenue Bond Oversight Committee (RBOC) on matters that are within the RBOC's jurisdiction but are not on today's agenda.

*Public Comment: Speakers: Kevin Vega; Michele Nuñez; and Julian Blake; introduced themselves to the Committee.*

*Items 4 through 6 were called and heard together.*

4. **Follow Up: Strategic Planning Session**

*Public Comment: Speakers: There were none.*

5. **Updates to Mission Statement**

*Public Comment: Speakers: There were none.*

6. **RBOC Member Vacancies**

*Public Comment: Speakers: There were none.*

*The foregoing items were called and heard together, and by unanimous consent the Committee elected to continue the items to the April 11, 2016, regular meeting.*

7. **Adoption of 2016 Calendar**

*Public Comment: Speakers: Carmen Clark; provided a brief description of a follow-up document that she provided to the Committee.*

*By unanimous consent, the Committee adopted the work calendar as a work in progress; it will be included with the agenda for future meetings and will be adapted by the Committee as needed.*

8. **RBOC Strategic Planning Preparations**

*Christina Anderson, Audit Manager (SFPUC); provided a summary of an upcoming presentation on audits to be given at the April 11, 2016, regular meeting, and responded to questions raised throughout the discussion.*

*Public Comment: Speakers: There were none.*

9. **San Francisco Public Utilities Commission (SFPUC) Staff Report: Sewer System Improvement Program (SSIP) Update, Re-baselining, Accuracy of Estimates and Program Comprehensiveness**

*Karen Kubick, Sewer System Improvement Program Director, and Dan Donahue, Sewer System Improvement Program Pre-construction Technical Advisor (SFPUC); presented an update of the SSIP, re-baselining, accuracy of estimates and program comprehensiveness, and responded to questions raised throughout the hearing. A SSIP report will be released in June. Mike Brown; and Sheena Johnson, System Improvement Program Administrator (SFPUC); provided information and responded to questions raised throughout the hearing.*

*Public Comment: Speakers: There were none.*

*The Committee recessed from 10:00 a.m. until 10:04 a.m.*

10. **San Francisco Public Utilities Commission (SFPUC) Staff Report:** Water System Improvement Program (WSIP) Update; briefing on project cost management; lessons learned from WSIP, especially any from design build experience, Calaveras Dam update

*Dan Wade, Water System Improvement Program Director (SFPUC); presented an update of the WSIP, project cost management, lessons learned, and an update on the Calaveras Dam, and responded to questions raised throughout the hearing. The Committee discussed a possible site visit to the Calaveras Dam in July or August. Member Low voiced interest in the application of lessons learned enterprise wide; Dan Wade responded that teams currently bring specific lessons learned and that information is disseminated to other departments for future projects. Mark Blake, Deputy City Attorney; Richard Morales, Debt Manager, and Mike Brown (SFPUC); provided information and responded to questions raised throughout the hearing.*

*Public Comment: Speakers: There were none.*

11. **San Francisco Public Utilities Commission (SFPUC) Staff Report:** Bond Sale Updates and Refunding

*Richard Morales, Debt Manager, and Mike Brown (SFPUC); provided information on upcoming bond sales and refunding, including upcoming pre-authorization request to the Board of Supervisors for refunding wastewater bonds, and a new bond sale at the end of the year; and answered questions raised throughout the hearing.*

*Public Comment: Speakers: There were none.*

12. **Announcements, Comments, Questions, and Future Agenda Items**

*Next SSIP presentation to the RBOC should include information on a stress-tested baseline and how lessons learned (e.g., Calaveras Dam) could be applied to SSIP, and will be followed by the Bond Finance presentation.*

*Public Comment: Speakers: There were none.*

13. **Adjournment**

*There being no further business, the meeting adjourned at 11:10 a.m.*

*N.B. The Minutes of this meeting set forth all actions taken by the Revenue Bond Oversight Committee on the matters stated but not necessarily in the chronological sequence in which the matters were taken up.*

### Agenda Item Information

Each item on the agenda may include: 1) Department or Agency cover letter and/or report; 2) Public correspondence; 3) Other explanatory documents. For more information concerning agendas, minutes, and meeting information, such as these documents, please contact RBOC Clerk, City Hall, 1 Dr. Carlton B. Goodlett Place, Room 244, San Francisco, CA 94102 – (415) 554-5184.

Audio recordings of the meeting of the Revenue Bond Oversight Committee are available at: [http://sanfrancisco.granicus.com/ViewPublisher.php?view\\_id=97](http://sanfrancisco.granicus.com/ViewPublisher.php?view_id=97)

For information concerning San Francisco Public Utilities Commission please contact by e-mail [RBOC@sfgov.org](mailto:RBOC@sfgov.org) or by calling (415) 554-5184.

### Meeting Procedures

Public Comment will be taken before or during the Committee’s consideration of each agenda item. Speakers may address the Committee for up to three minutes on that item. During General Public Comment, members of the public may address the Committee on matters that are within the Committee’s jurisdiction and are not on the agenda.

Procedures do not permit: 1) persons in the audience to vocally express support or opposition to statements by Commissioners by other persons testifying; 2) ringing and use of cell phones, pagers, and similar sound-producing electronic devices; 3) bringing in or displaying signs in the meeting room; and 4) standing in the meeting room.

The ringing of and use of cell phones, pagers and similar sound-producing electronic devices are prohibited at this meeting. Please be advised that the Chair may order the removal from the meeting room of any person(s) responsible for the ringing or use of a cell phone, pager, or other similar sound-producing electronic devices.

LANGUAGE INTERPRETERS: Requests must be received at least 48 hours in advance of the meeting to help ensure availability. Contact Peggy Nevin at (415) 554-5184. AVISO EN ESPAÑOL: La solicitud para un traductor debe recibirse antes de mediodía de el viernes anterior a la reunion. Llame a Derek Evans (415) 554-5184. PAUNAWA: Ang mga kahilingan ay kailangang matanggap sa loob ng 48 oras bago mag miting upang matiyak na matutugunan ang mga hiling. Mangyaring tumawag kay sa (415) 554-5184.

### Disability Access

Revenue Bond Oversight Committee meetings are held at the Public Utilities Commission, 525 Golden Gate Avenue, San Francisco, CA. The hearing rooms at the Public Utilities Commission are specified on the agenda and are wheelchair accessible. To request sign language interpreters, readers, large print agendas or other accommodations, please call (415) 554-5184. Requests made at least 48 hours in advance of the meeting will help to ensure availability.

翻譯 必須在會議前最少四十八小時提出要求  
請電 (415) 554-7719

### **Know Your Rights Under the Sunshine Ordinance**

Government's duty is to serve the public, reaching its decisions in full view of the public. Commissions, boards, councils, and other agencies of the City and County exist to conduct the people's business. This ordinance assures that deliberations are conducted before the people and that City operations are open to the people's review.

For more information on your rights under the Sunshine Ordinance (San Francisco Administrative Code, Chapter 67) or to report a violation of the ordinance, contact by mail: Sunshine Ordinance Task Force, 1 Dr. Carlton B. Goodlett Place, Room 244, San Francisco, CA 94102; phone at (415) 554-7724; fax at (415) 554-7854; or by email at [soff@sfgov.org](mailto:soff@sfgov.org).

Citizens may obtain a free copy of the Sunshine Ordinance by printing San Francisco Administrative Code, Chapter 67, at <http://www.sfbos.org/sunshine>.

### **Lobbyist Registration and Reporting Requirements**

Individuals and entities that influence or attempt to influence local legislative or administrative action may be required by the San Francisco Lobbyist Ordinance [SF Campaign & Governmental Conduct Code, Section 2.100, et. seq.] to register and report lobbying activity. For more information about the Lobbyist Ordinance, please contact the Ethics Commission at: 25 Van Ness Avenue, Suite 220, San Francisco, CA 94102; telephone (415) 581-3100; fax (415) 252-3112; website [www.sfgov.org/ethics](http://www.sfgov.org/ethics).

## RBOC DRAFT MISSION AND GOALS

March 7, 2016

**MISSION:** The purpose of the RBOC is to monitor the expenditure of revenue bond proceeds related to the repair, replacement, upgrade and expansion of the SFPUC's water, power and sewer infrastructure. The RBOC's goal is to ensure that specific SFPUC revenue bond proceeds are spent appropriately and according to authorization and applicable laws. The RBOC provides oversight to ensure transparency and accountability in connection with expenditure of the proceeds. The public is welcome to attend RBOC meetings and provide input.

### **GOALS:**

- 1) Monitoring – The Committee maintains awareness of program scope, schedule and budget, and any major issues in planning and implementation of the program.

#### *Activities:*

- Through review of staff documents and discussions during staff presentations, members are made aware of milestones, schedule and budget adherence, question staff and consultants and provide advice on any remedial or mitigation strategies needed.
- Where additional technical assistance is needed, reports are prepared in conjunction with special consultants, reporting to the Committee.
- Routine reporting is in place, diagnostics of project delay are handled expeditiously, and course correction advice is provided in a timely manner.
- Conduct site visits

- 2) Accountability – The Committee is accountable to .....

#### *Activities:*

- Committee members have an in depth knowledge of agency staff roles and responsibilities. When program or project delay or advancement occurs, the Committee understands where the accountability lies for delivery of program components.
- The Committee also takes steps to keep the Commission, the Mayor's Office and the general public informed of the results of the monitoring and oversight activities, and summarizes these activities in its Annual Report.

- 3) Transparency - The Committee practices transparency in its operations.

#### *Activities:*

- Transcripts of all meetings are available in various formats.
- Meetings are open to the public and some meetings are held at community locations

4) Efficiency – The Committee utilizes staff and consultant time in cost effective ways.

*Activities:*

- The Committee meetings are well run.
- Meeting attendance is nearly one hundred percent
- Preparation and participation by members is active and involved.
- When a subject needs more detailed work than the entire Committee has available, ad hoc subcommittees are established by the Chair.
- Contractual assistance is competitively bid and the resulting recommendations used for improved program or project implementation.

# **Sewer System Improvement Program (SSIP) Update – Baseline Scope, Schedule, and Budget for Phase 1 Projects**

**March 7, 2016**

**Karen Kubick, PE – SSIP, Program Director**

**Dan Donahue, PE – SSIP, Pre-Construction Technical Advisor**



# Program Update

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- Three years since Commission endorsement
- Significant progress in program planning and project development

**This has  
resulted in:**

- Better definition of project scopes
- Refinement of costs
- Updated project schedules

# Commission-Endorsed Program Goals

August 28, 2012



- Provide a Compliant, Reliable, Resilient, and Flexible System that **Respond to Catastrophic Events**



- Integrate Green & Grey Infrastructure to **Manage Stormwater** and **Minimize Flooding**



- Provide **Benefits** to Impacted **Communities**



- Modify the System to **Adapt to Climate Change**
  - New infrastructure must accommodate expected sea level rise within the service life of the asset (~~i.e. 16 inches by 2050, 25 inches by 2070, 55 inches by 2100~~) (**i.e., 6 inches by 2030, 11 inches by 2050, 36 inches by 2100**) and be consistent with the City's Guidance for Incorporating Sea Level Rise into Capital Planning.

# Establishing a Baseline

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**Prioritization  
Process**



**Refinements  
from 2012**



**Cost &  
Schedule  
Updates**



# Prioritization & Refinement Process

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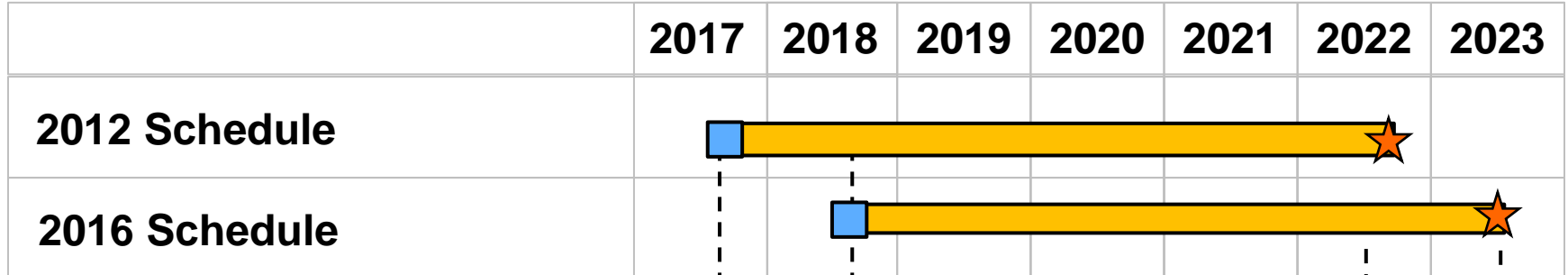
- **Prioritization of project scopes and cost**
  - Priority 1: must remain
  - Priority 2: eliminate or defer with acceptable risk
  - Priority 3: eliminate or defer without risk
- **Refinement of Projects**
  - Receiving water model results
  - Central Bayside Improvement Project tunnel resizing
- **Definition of Collection System Projects**
  - Interdepartmental
  - Flooding
- **Schedule Impacts**

# Schedule Update

## SEP Biosolids Digester Facilities Project

■ Site Control

■ Construction Phase



Site Control delayed by: 1 year

End of Substantial Completion delayed by: 1 year



# Phase 1: 2012 Commission-Endorsed

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## Planning through Construction (\$M)

• New Biosolids Digester Facilities.....	1,596
• SEP Grit and Odor Control Upgrades.....	272
• North Shore and Westside Pump Station Upgrades.....	256
• Combined Sewer Discharge Structure Refurbishments.....	84
• Green Infrastructure – Early Implementation Projects.....	57
• Collection System Pump Stations/Odor Control.....	110

## Planning through Preliminary Design (\$M)

• Treatment Plant Process Upgrades.....	58
• Treatment Seismic and Structural Upgrades.....	51
• Central Bayside System Improvement Project.....	70
• Citywide Green Infrastructure Projects.....	6
• Collection System Operational Improvements.....	27

## Program Management (\$M)

125

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**2,712**



# Phase 1: 2016 Update

## Planning through Construction (\$M)

• New Biosolids Digester Facilities.....	1,596	1,622	↑
• SEP Grit and Odor Control Upgrades.....	272	438	↑
• North Shore and Westside Pump Station Upgrades.....	256	199	↓
• Combined Sewer Discharge Structure Refurbishments....	84	27	↓
• Green Infrastructure – Early Implementation Projects.....	57	59	↑
• Collection System Pump Stations/Odor Control.....	110	104	↓

## Planning through Preliminary Design (\$M)

• Treatment Plant Process Upgrades.....	58	6	↓
• Treatment Seismic and Structural Upgrades.....	51	16	↓
• Central Bayside System Improvement Project.....	70	64	↓
• Citywide Green Infrastructure Projects.....	6	24	↑
• Collection System Operational Improvements.....	27	12	↓

## Program Management (\$M)

125      125

**2,712**      **2,696**



# Phase 2: 2012 Commission-Endorsed

## Design & Construction (\$M)

• Demolition of Ex. Digesters & Southside Renovation...	371
• SEP Wet Weather Primary Treatment Replacement...	250
• OSP Grit/Process Upgrades.....	70
• NPF Odor/Process Upgrades.....	195
• Seismic and Structural Upgrades.....	329
• Central Bayside System Improvement Project.....	1,224
• Citywide Green Infrastructure Projects.....	105
• Westside Pump Station Expansion.....	290
• Pump Station Upgrades.....	188
• Combined Sewer Discharge Structure Refurbishment...	121

## Program Management (\$M)

152

**3,295**





# Phase 2: 2016 Update

## Design & Construction (\$M)

• Demolition of Ex. Digesters & Southside Renovation...	371	<b>371</b>
• SEP Wet Weather Primary Treatment Replacement...	250	<b>283</b> ↑
• OSP Grit/Process Upgrades.....	70	<b>82</b> ↑
• NPF Odor/Process Upgrades.....	195	<b>197</b>
• Seismic and Structural Upgrades.....	329	<b>341</b> ↑
• Central Bayside System Improvement Project.....	1,224	<b>782</b> ↓
• Citywide Green Infrastructure Projects.....	105	<b>180</b> ↑
• Westside Pump Station Expansion.....	290	<b>51</b> ↓
• Pump Station Upgrades.....	188	<b>188</b>
• Combined Sewer Discharge Structure Refurbishment...	121	<b>138</b> ↑
• Sewer Improvements.....	0	<b>131</b> ↑

## Program Management (\$M)

152      **152**

**3,295**

**2,896**



# Phase 3: 2012 Commission-Endorsed

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## Design & Construction (\$M)

- Oceanside & NPF Treatment Plant Refurbishments..... 195
- Treatment Seismic and Structural Upgrades..... 212
- Citywide Green Infrastructure Projects..... 168
- Pump Station Upgrades..... 188
- Combined Sewer Discharge Structure Refurbishment... 120

## Program Management (\$M)

**43**

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**926**



# Phase 3: 2016 Update

## Design & Construction (\$M)

• Oceanside & NPF Treatment Plant Refurbishments.....	195	<b>195</b>
• Treatment Seismic and Structural Upgrades.....	212	<b>212</b>
• Citywide Green Infrastructure Projects.....	168	<b>168</b>
• Pump Station Upgrades.....	188	<b>188</b>
• Combined Sewer Discharge Structure Refurbishment...	120	<b>120</b>

## Program Management (\$M)

43	<b>43</b>
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926	926
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**No changes in 2016 update**



# Commission-Endorsed Budget

## August 28, 2012

Subprograms	Phase 1 (\$M)	Phase 2 (\$M)	Phase 3 (\$M)	Total Cost (\$M)
<b>Treatment Plants</b>	<b>2,233</b>	<b>1,215</b>	<b>407</b>	<b>3,855</b>
Biosolids Digester Facilities Project	1,596	371	-	1,967
Southeast Plant (SEP) Improvements	340	357	103	800
Oceanside Plant (OSP) Improvements	183	177	104	464
North Point Facility (NPF) Improvements	114	310	200	624
<b>Collection System</b>	<b>354</b>	<b>1,928</b>	<b>476</b>	<b>2,758</b>
Reliability and Operational Improvements	221	309	308	838
Stormwater Management	63	169	168	400
Central Bayside Improvement Project (CBSIP)	70	1,173	0	1,243
Westside Pump Station Expansion	0	277	0	277
<b>Program Management</b>	<b>125</b>	<b>152</b>	<b>43</b>	<b>320</b>
<b>Total SSIP</b>	<b>2,712</b>	<b>3,295</b>	<b>926</b>	<b>6,933</b>



# Commission-Endorsed Budget

## August 28, 2012

Subprograms	Phase 1 (\$M)	Phase 2 (\$M)	Phase 3 (\$M)	Total Cost (\$M)
Treatment Plants	2,233	1,215	407	3,855
Collection System	354	1,928	476	2,758
Program Management	125	152	43	320
<b>Total SSIP</b>	<b>2,712</b>	<b>3,295</b>	<b>926</b>	<b>6,933</b>



# 2012 and 2016 Budget Comparison

<b>2012 Commission-Endorsed Budget</b>	<b>Phase 1 (\$M)</b>	<b>Phase 2 (\$M)</b>	<b>Phase 3 (\$M)</b>	<b>Total Cost (\$M)</b>
Treatment Plants	2,233	1,215	407	3,855
Collection System	354	1,928	476	2,758
Program Management	125	152	43	320
<b>Total SSIP</b>	<b>2,712</b>	<b>3,295</b>	<b>926</b>	<b>6,933</b>

<b>2016 Revised Baseline Budget</b>	<b>Phase 1 (\$M)</b>	<b>Phase 2 (\$M)</b>	<b>Phase 3 (\$M)</b>	<b>Total Cost (\$M)</b>
Treatment Plants	2,280	1,299	407	3,986
Collection System	291	1,445	476	2,212
Program Management	125	152	43	320
<b>Total SSIP</b>	<b>2,696</b>	<b>2,896</b>	<b>926</b>	<b>6,518</b>



# 2016 Revised Baseline Budget

Subprograms	Phase 1 (\$M)	Phase 2 (\$M)	Phase 3 (\$M)	Total Cost (\$M)
<b>Treatment Plants</b>	<b>2,280</b>	<b>1,299</b>	<b>407</b>	<b>3,986</b>
Biosolids Digester Facilities Project	1,622	371	-	1,993
Southeast Plant (SEP) Improvements	438	387	103	928
Oceanside Plant (OSP) Improvements	133	214	104	451
North Point Facility (NPF) Improvements	87	327	200	614
<b>Collection System</b>	<b>291</b>	<b>1,445</b>	<b>476</b>	<b>2,212</b>
Reliability and Operational Improvements	131	483	308	922
Stormwater Management	96	180	168	444
Central Bayside Improvement Project (CBSIP)	64	782	-	846
Westside Pump Station Expansion	-	-	-	-
<b>Program Management</b>	<b>125</b>	<b>152</b>	<b>43</b>	<b>320</b>
<b>Total SSIP</b>	<b>2,696</b>	<b>2,896</b>	<b>926</b>	<b>6,518</b>



# 2016 Revised Baseline Budget

Subprograms	Phase 1 (\$M)	Phase 2 (\$M)	Phase 3 (\$M)	Total Cost (\$M)
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## **Biosolids Digester Facilities Project**

- Biosolids Project
- Land Reuse (1800/1801 Jerrold)
- DCS Upgrades
- Digester Repairs
- Power Feed Upgrades
- Seismic Reliability
- Oxygen Generation

## **SEP Improvements**

- Primary Sludge Handling
- Primary & Secondary Clarifier
- 521/522 & Disinfection
- New Headworks

## Biosolids Digester Facilities Project

- Biosolids Project
- ~~Land Reuse (1800/1801 Jerrold)~~
- DCS Upgrades
- Digester Repairs
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- Oxygen Generation

## Land Reuse

## SEP Improvements

- Primary Sludge Handling
- Primary & Secondary Clarifier
- 521/522 & Disinfection
- New Headworks

## Biosolids Digester Facilities Project

- Biosolids Project
- ~~Land Reuse (1800/1801 Jerrold)~~
- ~~DCS Upgrades~~
- ~~Digester Repairs~~
- ~~Power Feed Upgrades~~
- ~~Seismic Reliability~~
- ~~Oxygen Generation~~

## Land Reuse

## SEP Improvements

- Primary Sludge Handling
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- *DCS Upgrades*
- *Digester Repairs*
- *Power Feed Upgrades*
- *Seismic Reliability*
- *Oxygen Generation*

## Biosolids Digester Facilities Project

- Biosolids Project
- ~~Land Reuse (1800/1801 Jerrold)~~
- ~~DCS Upgrades~~
- ~~Digester Repairs~~
- ~~Power Feed Upgrades~~
- ~~Seismic Reliability~~
- ~~Oxygen Generation~~

## Land Reuse

## SEP Improvements

- Primary Sludge Handling
- Primary & Secondary Clarifier
- 521/522 & Disinfection
- ~~New Headworks~~
- *DCS Upgrades*
- *Digester Repairs*
- *Power Feed Upgrades*
- *Seismic Reliability*
- *Oxygen Generation*

## SEP New Headworks





## **Biosolids Digester Facilities Project**

- Biosolids Project

## **SEP Improvements**

- Primary Sludge Handling
- Primary & Secondary Clarifier
- 521/522 & Disinfection
- DCS Upgrades
- Digester Repairs
- Power Feed Upgrades
- Seismic Reliability
- Oxygen Generation

## **Land Reuse**

## **SEP New Headworks**



# 2016 Revised Baseline Structure

Subprograms	Phase 1 (\$M)	Phase 2 (\$M)	Phase 3 (\$M)	Total Cost (\$M)
<b>Treatment Plants</b>	<b>2,182</b>	<b>1,299</b>	<b>407</b>	<b>3,888</b>
Biosolids Digester Facilities Project	1,276	47	-	1,323
SEP New Headworks	359	-	-	359
SEP Improvements	327	711	103	1,141
OSP Improvements	133	214	104	451
NPF Improvements	87	327	200	614
<b>Collection System</b>	<b>291</b>	<b>1,445</b>	<b>476</b>	<b>2,212</b>
Reliability and Operational Improvements	131	483	308	922
Stormwater Management	96	180	168	444
CBSIP	64	782	-	846
Westside Pump Station	-	-	-	-
<b>Land Reuse</b>	<b>98</b>	<b>-</b>	<b>-</b>	<b>98</b>
<b>Program Management</b>	<b>125</b>	<b>152</b>	<b>43</b>	<b>320</b>
<b>Subtotal SSIP</b>	<b>2,696</b>	<b>2,896</b>	<b>926</b>	<b>6,518</b>



# 2016 Revised Baseline Structure

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<b>Land Reuse</b>	<b>98</b>	<b>-</b>	<b>-</b>	<b>98</b>
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SEP Improvements	327	711	103	1,141
OSP Improvements	133	214	104	451
NPF Improvements	87	327	200	614
<b>Collection System</b>	<b>291</b>	<b>1,445</b>	<b>476</b>	<b>2,212</b>
CBSIP	64	782	-	846
Interceptors/Tunnels/Odor Control	58	131	-	189
Pump Stations and Force Main Improvements	46	214	188	448
CSD & TS Boxes	27	138	120	285
Stormwater Management	96	180	168	444
<b>Land Reuse</b>	<b>98</b>	<b>-</b>	<b>-</b>	<b>98</b>
<b>Program Management</b>	<b>125</b>	<b>152</b>	<b>43</b>	<b>320</b>
<b>Subtotal SSIP</b>	<b>2,696</b>	<b>2,896</b>	<b>926</b>	<b>6,518</b>





# 2016 Revised Baseline Structure

Subprograms	Phase 1 (\$M)	Phase 2 (\$M)	Phase 3 (\$M)	Total Cost (\$M)
<b>Treatment Plants</b>	<b>2,182</b>	<b>1,299</b>	<b>407</b>	<b>3,888</b>
Biosolids Digester Facilities Project	1,276	47	-	1,323
SEP New Headworks	359	-	-	359
SEP Improvements	327	711	103	1,141
OSP Improvements	133	214	104	451
NPF Improvements	87	327	200	614
<b>Collection System</b>	<b>291</b>	<b>1,445</b>	<b>476</b>	<b>2,212</b>
CBSIP	64	782	-	846
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<b>Program Management</b>	<b>125</b>	<b>152</b>	<b>43</b>	<b>320</b>
<b>Subtotal SSIP</b>	<b>2,696</b>	<b>2,896</b>	<b>926</b>	<b>6,518</b>



# Phase 1 Additional Projects

<b>North Shore Force Main.....</b>	<b>\$30M</b>
<b>Interdepartmental Projects.....</b>	<b>\$96M</b>
• Van Ness BRT Sewer Improvements.....	\$15M
• Better Market Street Sewer Improvements.....	\$32M
• Geary BRT Sewer Improvements.....	\$17M
• Geary BRT Sewer Improvements Phase 2.....	\$2M
• Central Subway Sewer Improvements.....	\$4M
• Mission Bay Loop Sewer Improvements.....	\$2M
• Masonic Avenue Sewer Improvements.....	\$4M
• Taraval Sewer Improvements.....	\$20M
<b>Flood Resilience Projects.....</b>	<b>\$88M</b>
• Flood Resilience Planning and Project Development .....	\$9M
• Wawona St/15th Ave Stormwater Detention.....	\$23M
• Cayuga Ave Stormwater Detention .....	\$8M
• Folsom Area Stormwater Management.....	\$36M
• 17 <sup>th</sup> /Folsom Permanent Barriers.....	\$3M
• Hydraulic Drainage Improvements.....	\$9M

**\$214M**

**Phase 1 SSIP + Additional Projects = \$2,910M**



# Phase 2 Additional Projects

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<b>Interdepartmental Projects.....</b>	<b>\$44M</b>
• Geary BRT Sewer Improvements Phase 2.....	\$16M
• Future Mission Street Sewer Improvements.....	\$26M
• Taraval Sewer Improvements.....	\$2M
<b>Flood Resilience Projects.....</b>	<b>\$219M</b>

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**\$263M**

**Phase 2 SSIP + Additional Projects = \$3,159M**



San Francisco  
**Water**  
**Power**  
**Sewer**

# 2016 Revised Baseline

Subprograms	Phase 1 (\$M)	Phase 2 (\$M)	Phase 3 (\$M)	Total Cost (\$M)
<b>Treatment Plants</b>	<b>2,182</b>	<b>1,299</b>	<b>407</b>	<b>3,888</b>
Biosolids Digester Facilities Project	1,276	47	-	1,323
SEP New Headworks	359	-	-	359
SEP Improvements	327	711	103	1,141
OSP Improvements	133	214	104	451
NPF Improvements	87	327	200	614
<b>Collection System</b>	<b>291</b>	<b>1,445</b>	<b>476</b>	<b>2,212</b>
CBSIP	64	782	-	846
Interceptors/Tunnels/Odor Control	58	131	-	189
Pump Stations and Force Main Improvements	46	214	188	448
CSD & TS Boxes	27	138	120	285
Stormwater Management	96	180	168	444
<b>Land Reuse</b>	<b>98</b>	<b>-</b>	<b>-</b>	<b>98</b>
<b>Program Management</b>	<b>125</b>	<b>152</b>	<b>43</b>	<b>320</b>
<b>Subtotal SSIP</b>	<b>2,696</b>	<b>2,896</b>	<b>926</b>	<b>6,518</b>
<b>North Shore Force Main</b>	<b>30</b>	<b>-</b>	<b>-</b>	<b>30</b>
<b>Interdepartmental Projects</b>	<b>96</b>	<b>44</b>	<b>-</b>	<b>140</b>
<b>Flood Resilience Projects</b>	<b>88</b>	<b>219</b>	<b>-</b>	<b>307</b>
<b>Total SSIP + Additional Projects</b>	<b>2,910</b>	<b>3,159</b>	<b>926</b>	<b>6,995</b>



# 2016 SSIP Revised Baseline

Subprograms	Phase 1 (\$M)	Phase 2 (\$M)	Phase 3 (\$M)	Total Cost (\$M)
<b>Treatment Plants</b>	<b>2,182</b>	<b>1,299</b>	<b>407</b>	<b>3,888</b>
Biosolids Digester Facilities Project	1,276	47	-	1,323
SEP New Headworks	359	-	-	359
SEP Improvements	327	711	103	1,141
OSP Improvements	133	214	104	451
NPF Improvements	87	327	200	614
<b>Collection System</b>	<b>505</b>	<b>1,708</b>	<b>476</b>	<b>2,689</b>
CBSIP	64	782	-	846
Interceptors/Tunnels/Odor Control	58	131	-	189
Interdepartmental Projects	96	44	-	140
Pump Stations and Force Main Improvements	76	214	188	478
CSD & TS Boxes	27	138	120	285
Stormwater Management	96	180	168	444
Flood Resilience	88	219	-	307
<b>Land Reuse</b>	<b>98</b>	<b>-</b>	<b>-</b>	<b>98</b>
<b>Program Management</b>	<b>125</b>	<b>152</b>	<b>43</b>	<b>320</b>
<b>Total SSIP</b>	<b>2,910</b>	<b>3,159</b>	<b>926</b>	<b>6,995</b>





# WSIP Update Revenue Bond Oversight Committee

March 7, 2016  
Daniel L. Wade, WSIP Director  
Infrastructure



San Francisco  
Water Power Sewer

Services of the San Francisco Public Utilities Commission



# WSIP Program Status

- Regional: **90.8%**
- Local: **99.7%**
- Overall WSIP: **91.6%**





# Recent Accomplishments

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- Reached Substantial Completion on two projects:
  - Seismic Upgrade of BDPL Nos. 3 & 4 (Contract WD-2629)
  - Peninsula Pipelines Seismic Upgrade (Contract WD-2727)
- Reached Final Completion on two projects:
  - San Antonio Backup Pipeline (Contract WD-2575)
  - BDPL Reliability Upgrade Pipeline – Peninsula Reaches (WD-2542)
- Completed **190** of **206** system shutdowns to date
- Achieved Level of Service on **40** of **44** Regional Projects
- Safety record exemplary based on **8.1 million** recorded hours
- Recent Awards: EERI & ATC-SEI (WSIP), ACEC and ENR (Bay Tunnel), APWA (New Irvington Tunnel)





# WSIP Cost Variances

(\$ Million)

Project	Current Approved (A)	Current Forecast (B)	Change (C=A-B)
Calaveras Dam Replacement	\$690.1	\$761.6	(\$71.5)
Alameda Creek Fish Passage Facilities (sub-project of Calaveras Dam Replacement)	\$28.2	\$48.4	(\$20.2)
New Irvington Tunnel	\$339.1	\$347.1	(\$8.0)
HTWTP Long-Term Improvements	\$278.2	\$280.2	(\$2.0)
Seismic Upgrade of BDPL Nos.3 & 4	\$75.1	\$77.0	(\$1.9)
New WSIP Closeout Project	-	\$10.5	(\$10.5)
Savings From Other Regional Projects	\$2,263.8	\$2,236.2	\$27.6
Savings From Local Projects	\$619.2	\$612.7	\$6.5
Financing	\$471.7	\$471.7	-
<b>Grand Total</b>	<b>\$4,765.5</b>	<b>\$4,845.5</b>	<b>(\$80.0)</b>



# WSIP Schedule Variances

Project	Current Approved	Current Forecast	Change (Months)
Bioregional Habitat Restoration	07/28/16	05/31/18	(22.1)
New Irvington Tunnel	03/11/16	12/30/16	(9.7)
Regional Groundwater Storage and Recovery	07/31/18	04/30/19	(9.0)
System Security Upgrades	04/29/16	12/31/16	(8.1)
Watershed Environmental Improvement Program	08/31/18	04/26/19	(7.8)
HTWTP Long-Term Improvements	08/01/16	12/30/16	(5.0)
Seismic Upgrade of BDPL Nos. 3 & 4	05/02/16	09/30/16	(5.0)
BDPL Reliability Upgrade / Tunnel	03/31/16	06/30/16	(3.0)



# Calaveras Dam Replacement







# Spillway







Borrow Area B



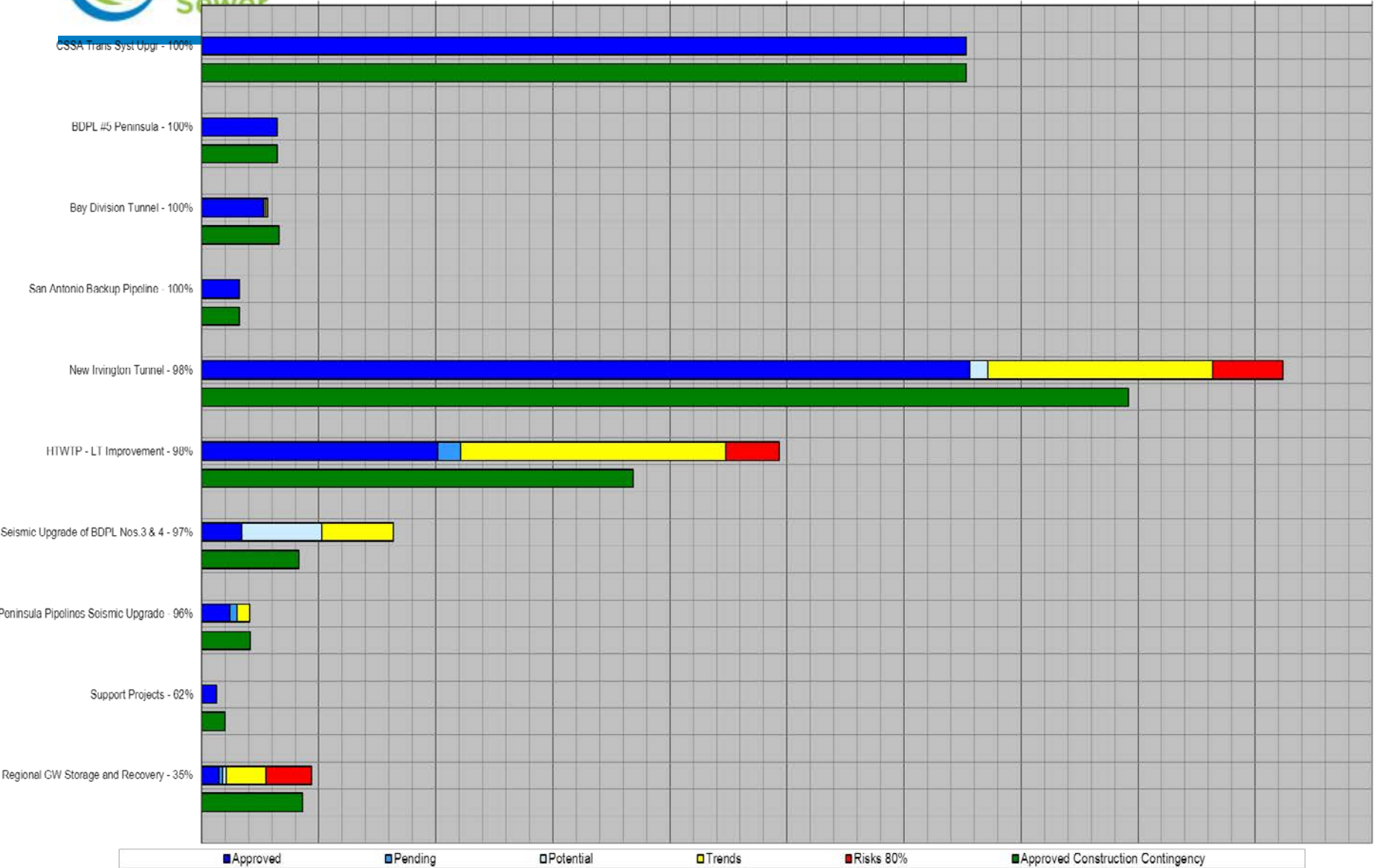


# WSIP Active Construction Contracts

Approved, Pending, Potential COs, Trends, & Risks vs. Contingency  
Status as of January 2016

Note: Projects are ordered by Percent Complete

0 5,000,000 10,000,000 15,000,000 20,000,000 25,000,000 30,000,000 35,000,000 40,000,000 45,000,000 50,000,000



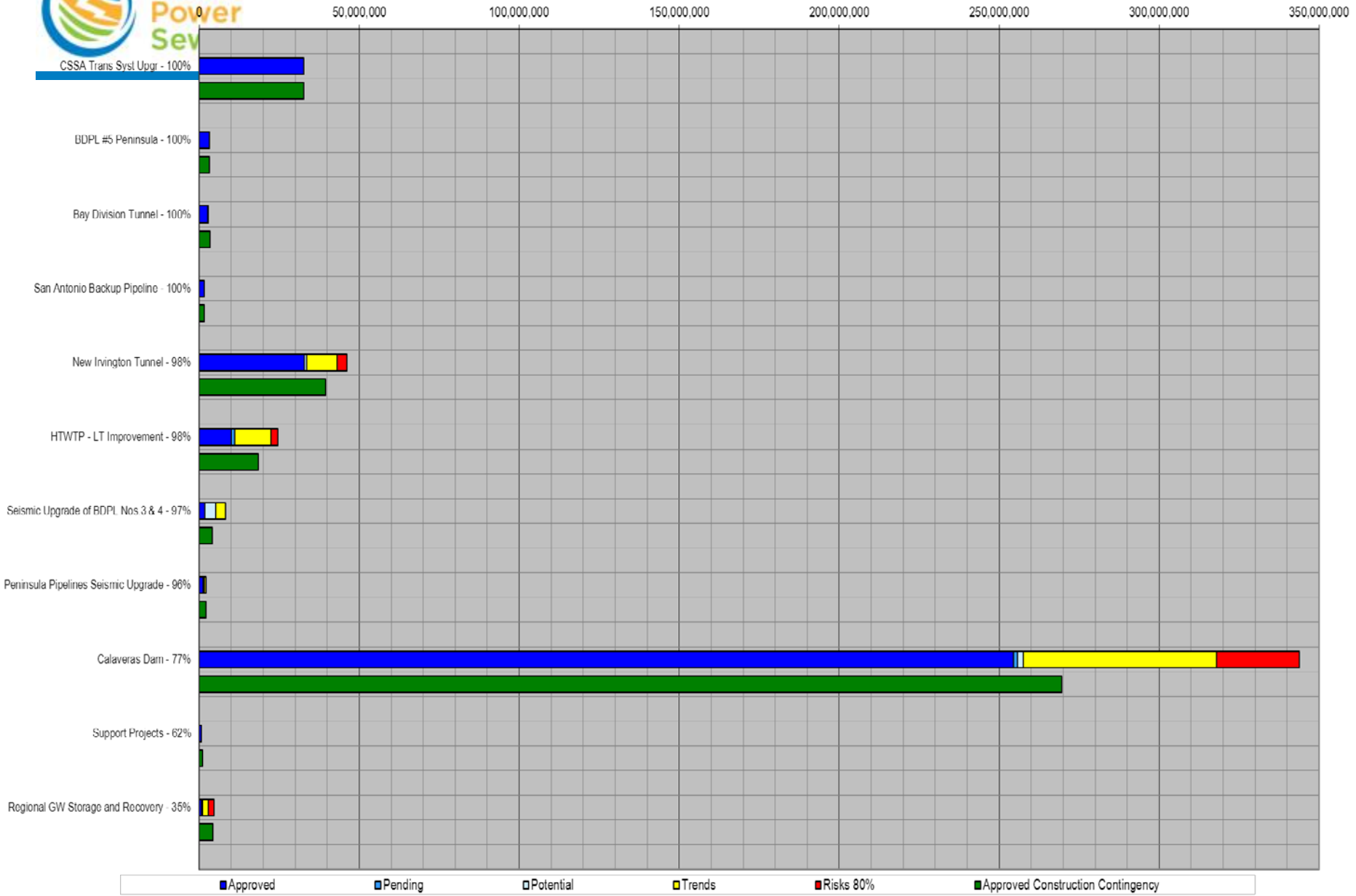
Note: CDRP data not shown



# WSIP Active Construction Contracts

Approved, Pending, Potential COs, Trends, & Risks vs. Contingency  
Status as of January 2016

Note: Projects are ordered by Percent Complete



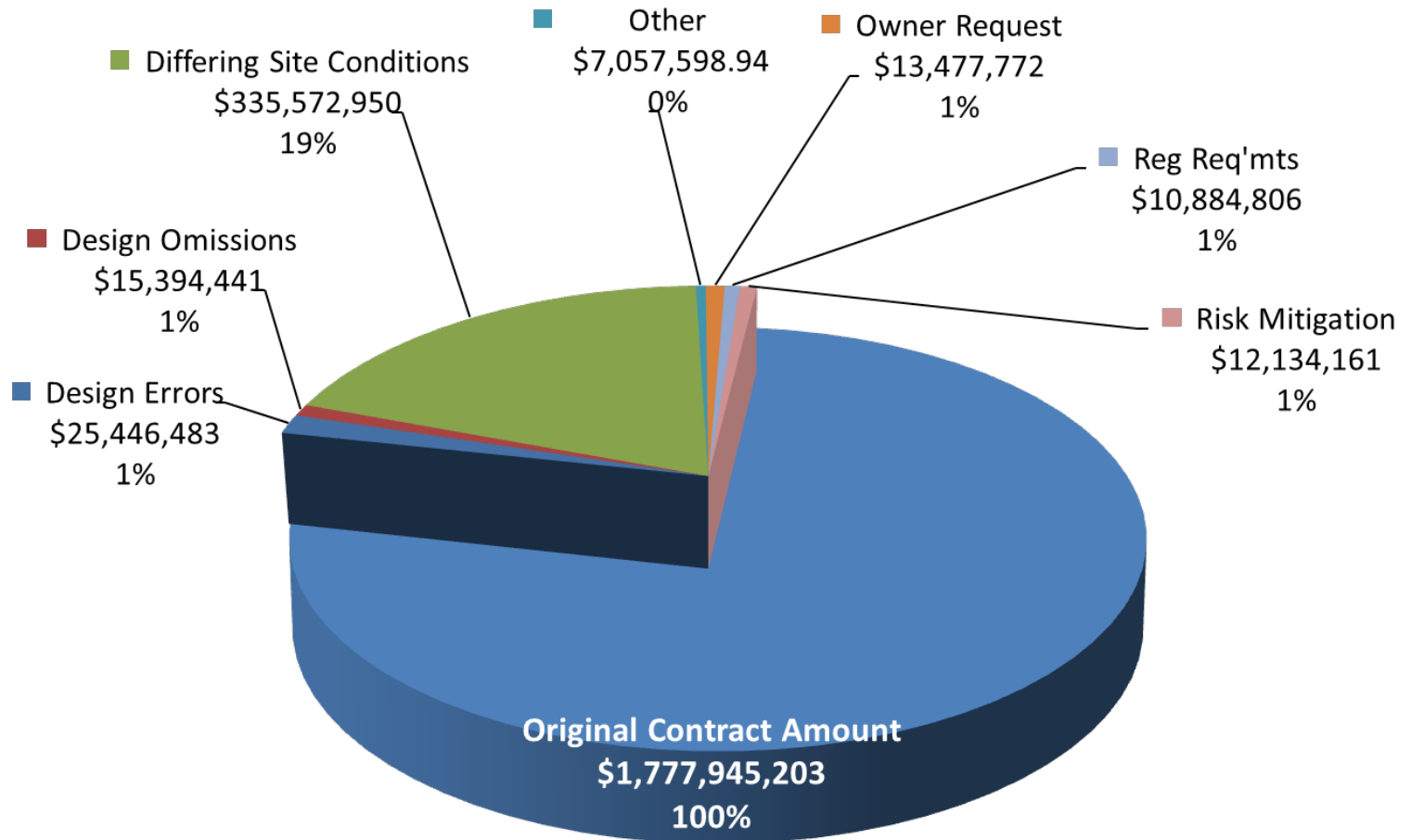


# WSIP Active & Completed including BHR Regional Construction Contracts

## Change Reason vs. Awarded Amount

January 2016

Approved Change Orders = \$420M 24%







# WSIP Active & Completed including BHR

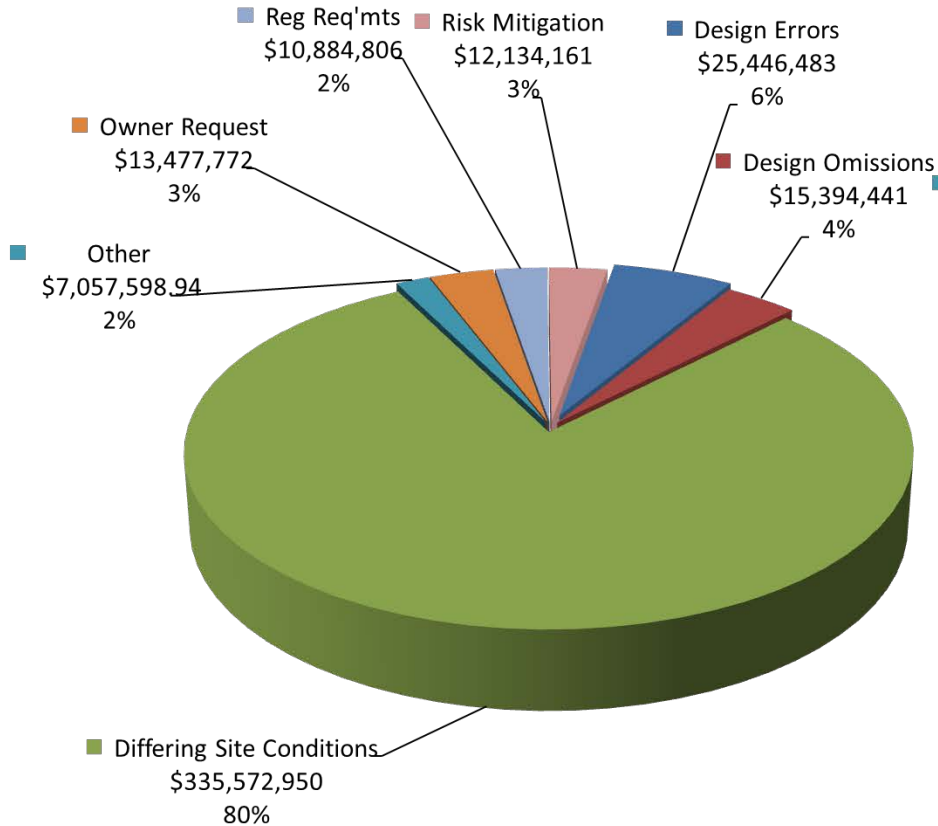
## Change Order Reason

### Approved Change Orders

January 2016

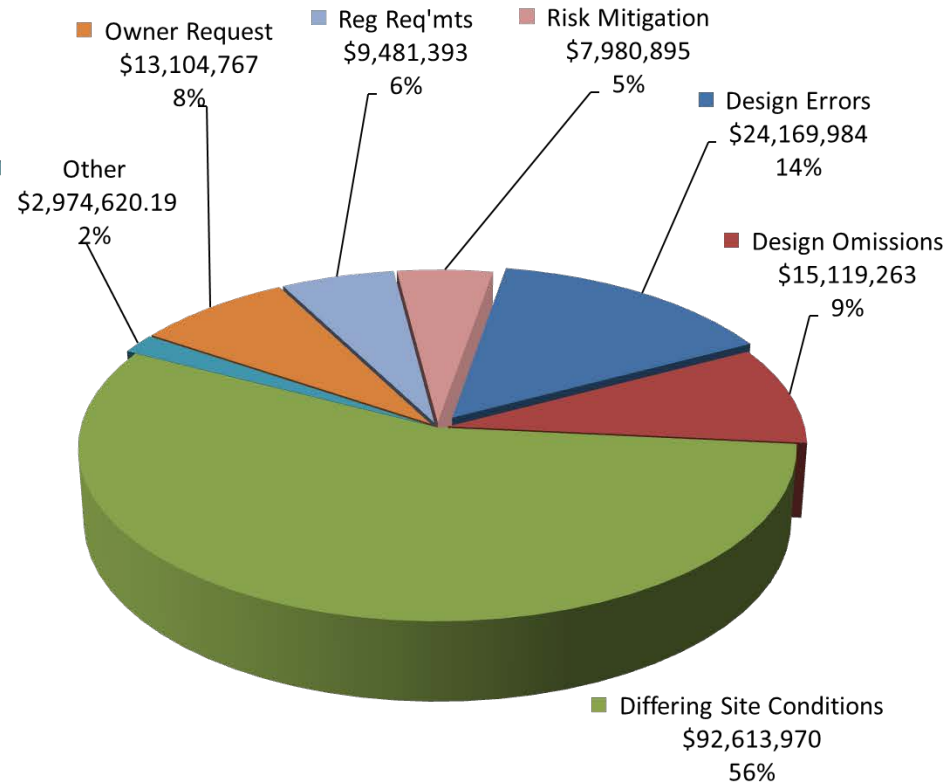
### Total Approved CO

**\$420 M 24%**



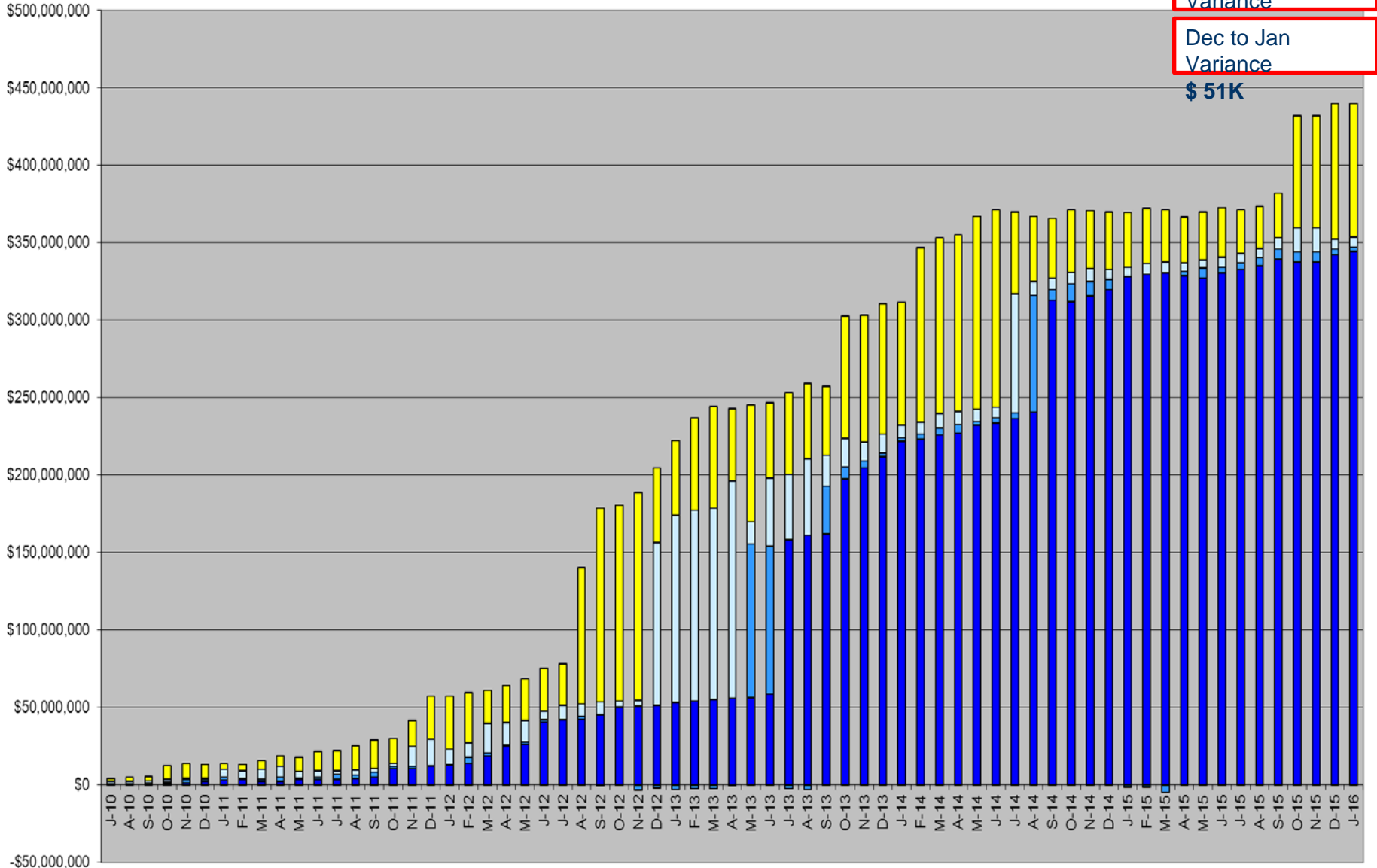
### Total less CDRP

**\$165.4 M 11%**



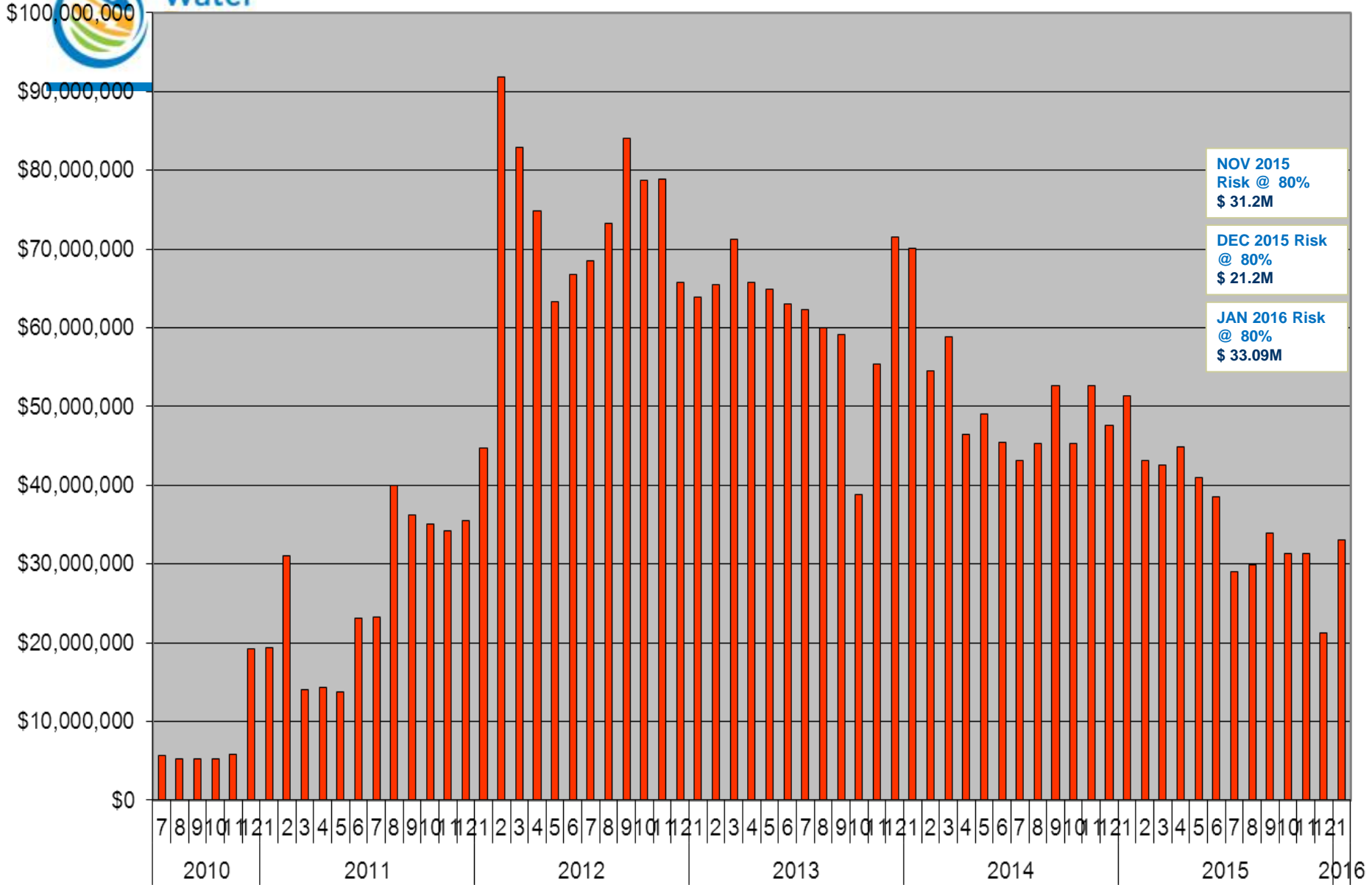
# Change Order + Trends (January 2016)

Change Orders + Trends



Note: Including BHR

# 80 % Risk Confidence Level



**NOV 2015**  
Risk @ 80%  
\$ 31.2M

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**DEC 2015 Risk**  
@ 80%  
\$ 21.2M

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**JAN 2016 Risk**  
@ 80%  
\$ 33.09M

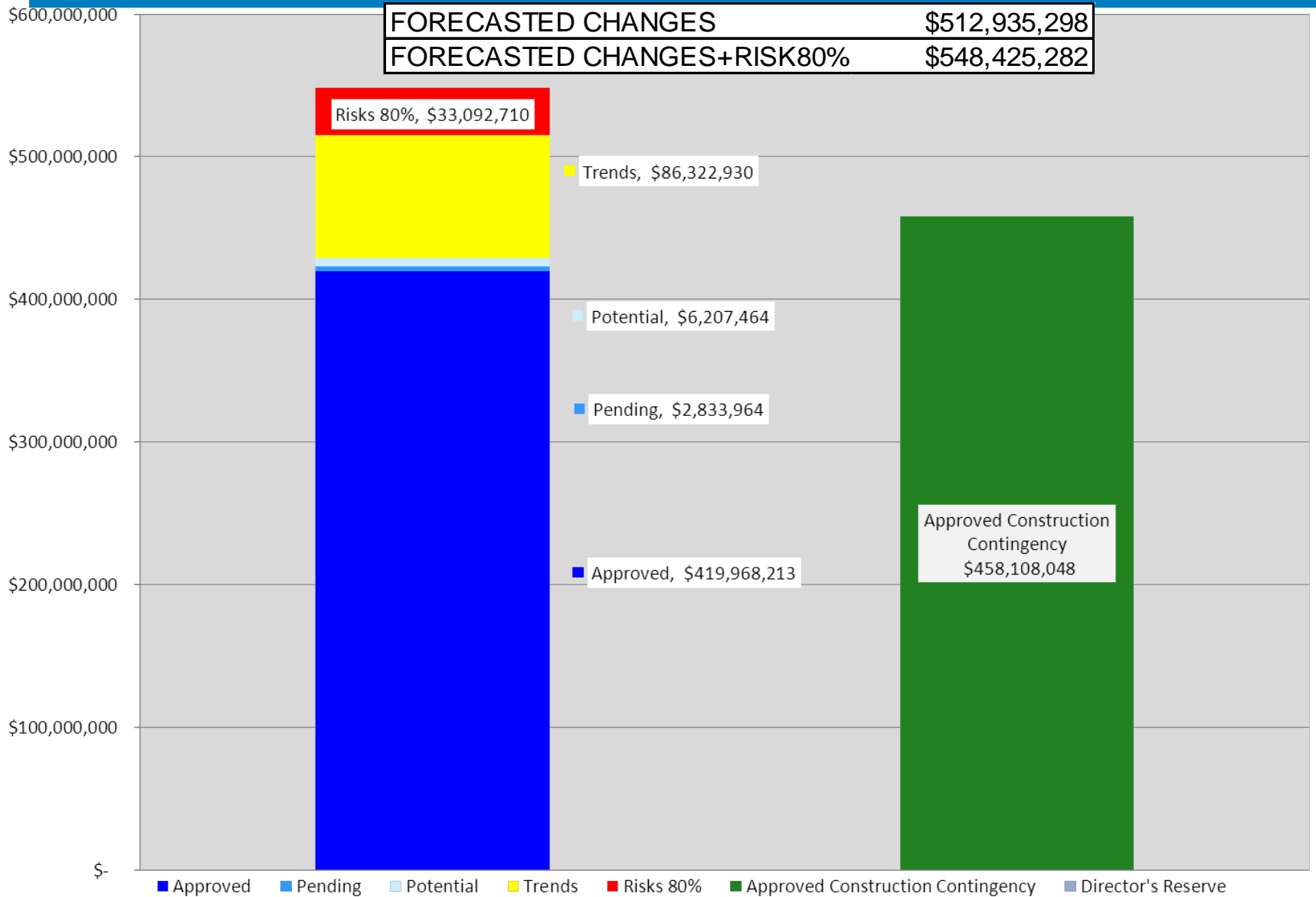
Note:



# WSIP Active & Completed including BHR

## Forecasted Changes VS Contingency

January 2016





# A Few Key WSIP Lessons Learned

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- **Program / Project Controls**

- Emphasize standardization and common understanding among internal and external stakeholders
- Meaningful status report updates – schedule & budget

- **Quality Management**

- Quality Control (QC) verses Quality Assurance (QA)
- Must be a priority in all phases of implementation

- **Risk Management**

- Start formal risk program in planning and design phases
- Make it an integral part of day-to-day management

- **Change Management**

- Establish clear scope definition and performance criteria
- Comprehensive investigations key – however, must balance additional time to collect data with importance of data needs
- Meet early / often with Operations
- Control scope creep requests – utilize LOS goals to evaluate



## Next Steps

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- Issue 30-day Notice of Change (NOC) in compliance with AB1823 in March 2016
- Request Commission Approval of Revised WSIP in April 2016
- Request Approval for \$80M Supplemental Appropriation from SF BOS in May 2016