



INFRASTRUCTURE COMMITTEE

REGULAR MEETING

Wednesday, June 13, 2018 - 10:00 AM to 12:00 PM
2850 Burton Drive Cambria CA 93428

AGENDA

- A. CALL TO ORDER
- B. ESTABLISH QUORUM
- C. CHAIRMAN'S REPORT

1. PUBLIC COMMENT

Members of the public may now address the Committee on any item of interest within the jurisdiction of the Committee but not on its agenda today. In compliance with the Brown Act, the Committee cannot discuss or act on items not on the agenda. Each speaker has up to three minutes. Speaker slips (available at the entry) should be submitted to the District Clerk.

2. CONSENT AGENDA

- A. Consideration to Approve the May 30, 2018 Regular Meeting Minutes

3. REGULAR BUSINESS

- A. Discussion and Consideration to Amend the Wastewater CIP List of Priorities to be Provided to the Finance Committee
- B. Discussion Regarding the Water CIP List

4. FUTURE AGENDA ITEMS

5. ADJOURN



INFRASTRUCTURE COMMITTEE

REGULAR MEETING

Wednesday, May 30, 2018 - 10:00 AM
2850 Burton Drive Cambria CA 93428

MINUTES

A. CALL TO ORDER

Chairman Bahringer called the meeting to order at 10:02 a.m.

B. ESTABLISH QUORUM

A quorum was established.

Committee Members present: Jim Bahringer, Karen Dean, Muril Clift, Mike Lyons and Harry Farmer

Staff present: General Manager Jerry Gruber, District Engineer Bob Gresens, Wastewater Systems Supervisor John Allchin, Wastewater Operator-In-Training Toni Artho and Confidential Administrative Assistant Haley Dodson.

C. CHAIRMAN'S REPORT

Chairman Bahringer stated there is no chairman's report. He stated he was going to provide a synopsis from the last meeting, but the minutes reflect that quite well.

Vice Chair Dean asked that they work together to create a synopsis for the next meeting. Chairman Bahringer agreed.

Chairman Bahringer asked the public to introduce themselves.

Introductions were made:

Rebecca Weber
Brent Pantera
Jordan Garbayo
Allen Dean
John Martinez
Ms. Martinez
Don Howell
Paul Reichart
Mark Meeks

1. PUBLIC COMMENT

None.

2. CONSENT AGENDA

A. Consideration to Approve the April 19, 2018 Regular Meeting Minutes

Committee Member Lyons states the phoenix plan is referenced on page 2 and wants clarification on what that is.

General Manager Jerry Gruber responded that it's an analysis of the cost to bring the lift stations up-to-date.

Vice Chair Dean stated we did not include a depreciation schedule to review as planned.

Chairman Bahringer stated this will be discussed at a future meeting.

Public Comment:

Paul Reichardt: No discussion of public comment in minutes.

Chairman Bahringer stated Vice Chair Dean will transcribe a brief description of public comment and provide it to Haley Dodson for the minutes.

Public Comment:

Donn Howell: Finance Committee decided to notate public comment, this committee should do the same. Want review of Water Supply on the agenda, with climate change should consider alternatives that were in the Water Master Plan.

The minutes were approved unanimously: 5-Ayes, 0-Nays, 0-Absent

3. REGULAR BUSINESS

A. Discussion and Consideration Regarding the Updated Wastewater CIP List

General Manager Jerry Gruber introduced the item and turned it over to District Engineer Bob Gresens.

Mr. Gresens stated he updated the CIP lists for Water, Wastewater and the SWF, and put them in subcategories. He provided the committee with a PowerPoint presentation on the CIP lists (attached).

Bob Gresens stated Ms. Bettenhausen's memo (attached) references no abbreviations. Bob discussed the abbreviations in the PowerPoint.

Public Comment:

Jon Martinez asked what percentage of energy savings were realized in previous projects.

Someone (Mark Meeks?) Is there a retro efficiency program?

Chairman Bahringer: will provide synopsis of presentation to Finance Committee.

Mark Meeks: will there be a peer review process? Will PG&E provide energy incentives as well?

Chairman Bahringer moved to recommend completion of items 1 and 12 and postpone the remaining until after determination.

Vice Chair Dean seconded the motion.

Motion Passed: 4- Ayes (Bahringer, Dean, Lyons, Clift), 0-Nays, 1-Abstain (Farmer)

Chairman Bahringer stated the committee will discuss Regular Business Item 3.A. again in the future.

B. Brent Patera from PG&E Will Provide a Presentation to the Committee

Chairman Bahringer stated Regular Business Item 3.B. will be presented first.

Brent Pantera introduced himself. He presented a PowerPoint presentation (attached) regarding turnkey solutions to the committee and answered questions.

Public Comment:

Jon Martinez: power coming in is PG&E's responsibility?

Jon Martinez: so we are having power surges?

Mark Meeks: we want/need to upgrade for the future.

Mark Meeks: are there other resources to cover these Projects?

Donn Howell: in past years don't recall much discussion about wastewater, past ten years or more other boards have been focused otherwise.

Committee Member Clift stated the discussion is educational, but it's financial. The committee should make a general or specific recommendation about the things that we think should be done, and it moves onto the finance committee on how it's done.

Chairman Bahringer thanked Mr. Pantera for the presentation.

C. Discussion and Consideration to Establish Regular Meeting Dates, Times, and a Maximum Meeting Length

Public Comment:

Donn Howell: Infrastructure Committee should be driving the Finance Committee. We haven't even discussed water.

Mike Lyons: suggest joint meeting 12th of July after Finance Committee has time to discuss our recommendations?

Chairman Bahringer asked the committee if they want to hold a meeting on water supply. The committee agreed to hold a meeting on June 13, 2018 from 10:00 a.m. to 12:00 p.m. at the Fire Department to discuss the water supply issues.

4. FUTURE AGENDA ITEMS

5. ADJOURN

Chairman Bahringer adjourned the meeting at 12:05 p.m.

Integrated Energy Projects

Cambria CSD – Infrastructure Committee

May 30, 2018



Together, Building
a Better California

Brent Patera

Business Development Manager
PG&E Turnkey Solutions

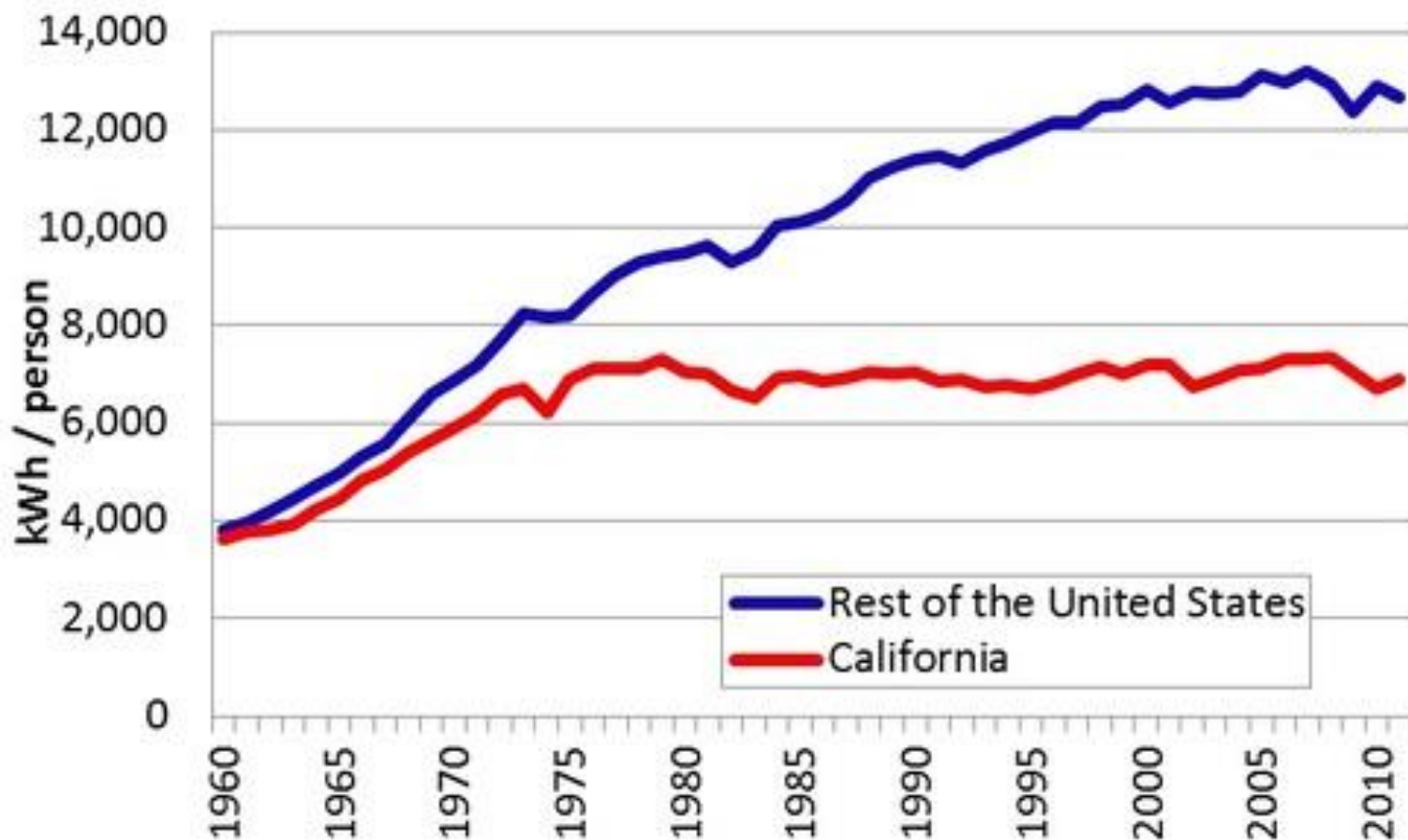


Agenda

- **Energy in California**
- **Integrated Energy Projects**
- **PG&E Turnkey Energy Solutions**
- **Q & A**



Impact of Energy Efficiency in CA



Ranked 49th in nation per capita energy use (2012)

Saved Californians over \$65 Billion



What's Next?

- **Understand Customer Goals & Challenges**
- **Creatively Expand Offerings and Services**
- **“Unlock” Savings Opportunities**



Example from the Feds

- Ever-increasing mandates and regulatory requirements
- Resource Constrained
 - People
 - Approval and “contracting vehicles”
 - Funds
- “Actual” operating expenses (OPEX) exceed appropriated funds



Utility Energy Services Contract (UESC)

- Prioritize efficiency, renewables & security
- Executive & statutory authority for alternate delivery
- UESC = sole-source energy projects to serving utility
- Design-build delivery funded by OPEX savings
- \$100 million worth of projects with PG&E alone



U.S. DEPARTMENT OF
ENERGY



Department of
Veterans Affairs



FEMP
Federal Energy Management Program





Water + Energy Nexus

*Water-related energy use in California also consumes approximately **20% of the state's electricity**, and 30% of the state's non-power plant natural gas (i.e. natural gas not used to produce electricity).*

[-California Energy Commission](#)



2016

CWEA

One Water.

One California.





Dissecting Traditional Capital Projects

- Fine balance between capital requirements vs. cost to the ratepayer
- Projects are typically . . .
 1. Planned based on available CIP from rate structure
 2. Executed in “series” as funds are available
- Always more work than there is capital budget

**Is there a way to do more work
without increasing rates?**



2016 CWEA
One Water.
One California.





Integrated Energy Projects

- Do more work – faster and more efficiently
- Realize synergies between project “elements”
- Use energy and OPEX savings to offset cost
- Transfer cost and delivery risk to provider
- Energy savings . . .
 - Improve “status” for SRF financing
 - Open up additional sources of low cost funds
 - Allow for more efficient contracting (CA GC 4217)
- Avg 30% of project scope is End-of-Life



2016 CWEA
One Water.
One California.





CA Government Code 4217

Government Code 4217.10 – 4217.18

- Public “agencies”
- Project results in lower energy costs
- Governing body determines in the best interest of the agency
- Public hearing with two (2) weeks notice

**“Provide the greatest possible flexibility to public agencies
... so that economic benefits may be maximized and
... costs may be minimized”**



Sustainable Solutions Turnkey (SST) Program

Feasibility Assessment

No Cost

- Do we have the grounds for a project?
- If so, what does it look like?
- Is the project or opportunity worthy of investment?



Investment Grade Audit (IGA)

- Detailed validation of technical and financial viability
- 30 – 50% design package
- Implementation proposal with Firm-Fixed Cost



Construction

- Deliver turnkey Design-Build project
- Commissioning, acceptance, training and turn-over



\$10M project @ City of SLO WRRF

- **\$450,000 in total annual savings**
 - 1,080,275 kWh
 - 29,038 therms
 - 16.8M lbs of CO2
 - Hauling/tipping, chemicals & polymer
- **~ \$300K in utility incentives**
- **Design-Build Delivery**
 - 135kW Bio-gas Cogen
 - Screwpress & RAS Pumps/VFD
 - Filter media, headworks & grit removal
 - SCADA/controls
 - LED lighting





Cambria CSD





Cambria CSD (Integrated)



Thank You!

Questions?



Together, Building
a Better California

Update to Water, Wastewater, & Sustainable Water Facility (SWF) Capital Improvement Projects with Focus on Wastewater

Prepared for May 30, 2018 CCSD Infrastructure Committee meeting

By Robert Gresens, CCSD District engineer

Background

- ▶ Listing of CIP projects was developed to identify investment needs over multiple years to coordinate with financing & timing of projects
- ▶ Projects were identified based on discussions with operating staff over several years, as well as during earlier meetings with Ad-hoc infrastructure committee.
- ▶ Per 4/19/2018 standing Infrastructure Committee input, reorganized earlier project listings. E.g., For WW, separated out plant projects, collection system projects, O&M projects, vehicles/trailer mounted equipment, & OH projects.
- ▶ Today's discussion to focus on WW CIP.
- ▶ For WW, split FY 18/19 into first half & second half to coordinate with current budget & potential funding from future rate increase.
- ▶ Key WW background documents include 2014 Tech memos by Carollo Engineers on the WWTP, and past Sewer System Management Plans

Priority Levels Shown on Lists

- ▶ Four priority levels shown with subtotals for each year.
- ▶ Level 1 is highest , level 4 is lowest.
- ▶ Project lists and priorities assigned are subject to future revision.
- ▶ Level 1 projects are the most urgently needed. Often mandated by a law, regulation, or safety need.
- ▶ Level 2 projects are generally needed to improve operational efficiencies that will save on costs, including labor. May include replacing worn out equipment.
- ▶ Level 3 projects conserve or protect assets. May enhance reliability. Have a lower return on investment/take more years to pay back.
- ▶ Level 4 projects are more anticipatory, future projected needs (e.g., new admin offices.)

Abbreviations Used in Wastewater CIP list

- ▶ BNR – biological nutrient removal
- ▶ CIP - Capital Improvement Program/Capital Improvement Project
- ▶ CVs – control valves
- ▶ DO – dissolved oxygen
- ▶ FY – fiscal year
- ▶ MCC – motor control center
- ▶ P.S. - pump station
- ▶ SCADA – supervisory control & data acquisition
- ▶ WW – wastewater
- ▶ WWTP – wastewater treatment plant

Summary of Wastewater Projects

- ▶ Wastewater CIP
 - ▶ 23 WWTP projects
 - ▶ 23 Collection system projects
 - ▶ 3 vehicle & trailer mounted equipment projects
 - ▶ 3 overhead projects
- ▶ Not including 11 WW maintenance projects that are assumed to be funded through annual budgeting process, the total comes to about \$8.9 million
- ▶ For FY 18/19, WW split in half due to ongoing 218 rate process
 - ▶ First half – \$195,000 (Influent screen & digester hand railings)
 - ▶ Second half - \$854,000 in projects
- ▶ Totals by priority levels (through FY2026/2027)

Priority 1	Priority 2	Priority 3	Priority 4
\$2,140,000	\$4,520,000	\$2,160,000	\$230,000

Key Issues

▶ Near term

- ▶ Continue to seek committee input/consensus & update CIP as needed
- ▶ Update/develop project summary sheets, which include justifications & other key info.
- ▶ Coordinate with 218 process
- ▶ Further discuss risks from not proceeding

Safety, Public Health, Environmental, Inefficiencies, Regulatory Fines, Employee Turnover

▶ Long term

- ▶ Further strategize & define how the projects are to be completed (as listed, or larger project combining several projects)
- ▶ Value engineer & update what has been proposed in earlier Carollo WWTP technical memos (project 6)
- ▶ WWTP power needs, particularly related to future Energy Watch assistance (projects 2 through 5B)
- ▶ Determine best means to fund projects (E.g., spread out based on cash flow, or borrow to complete earlier?)

Questions?

MEMO

DATE: 29 May 2018

FROM: Elizabeth Bettenhausen

TO: CCSD Standing Committee on Finance:

Re: Wastewater CIP Capital Improvement Program (WWCIP), Agenda 3A for 30 May 2018

Looking at the 05/25/2018 revision of the Wastewater CIP list, I have several questions.

1. One column is labeled Priority and then Ranking. I am unable to tell from the cost projections exactly what this means. I would think that Priority/Ranking 1 would get funded in the next Fiscal Year. But that is not always the case in this list.

What exactly does Priority mean? What does Ranking mean? Why are they in the same column with the same number?

Recommendation from the Standing Committee to the Board of Directors would now be most helpful were the Standing Committee to recommend funding in the FY 18-19 Budget certain projects at a certain level.

2. In order for that recommendation to be adequate, a brief (half page) written description of each project to be funded would be included, with the reasons it needs funding within the next FY and at what level.

In the Minutes of April 19, 2018, it states, "Wastewater Supervisor John Allchin provided the committee with a brief summary on outdated equipment and items that need to be addressed at the Wastewater Treatment Plant." The Standing Committee could be very helpful to the community were such a summary appended to the Minutes. It would certainly be a good idea for supervisors to bring written statements to the meeting.

3. Are some of the line items on the WWCIP already included in the current draft of the FY 18-19 budget that has already come before the Board of Directors? The sheet does not show anything about that, even though it lists certain items for funding FY 18-19 in the first and/or the second half.

4. What kind of evaluation is made regularly of a crucial element such as power service to the entire sewer plant? I find it rather odd that all of a sudden so many items (lines 2, 3, 4, 5a, 5b) appear concerning the electrical service.

How does the replacement of the back-up power generator on Line 11 relate to lines 2-5b?

Why is annual electric maintenance only Priority 2 (see line 19). How are maintenance projects ranked by Wastewater Department for assignment of daily, once a month, or "annual" work? Why is this item only Priority 2?

5. Perhaps line 6 concerns electrical service too. However, I do not know all the acronyms and so am unsure what BNR modeling means. Bulk Nitrate Residue? Big No-No's Refuse?

A Glossary would be helpful for a Standing Committee.

5. Assumptions I am making:

1. Funding is finite, limited, not over-flowing.
2. Projects might be needed from the perspective of administration, but not from the perspective of staff now doing the service. The reverse of that is also true.
3. Standing Committee on Infrastructure members sometimes talk with the staff when the administration is not present. This is good.
4. Hiring a Utility Manager does not in and of itself improve management of capital projects.
5. The goals of a department set each year should correspond with the budget and policy recommendation coming to the Board from the Standing Committees. Is the Standing Committee on Infrastructure keeping the goals of Wastewater always in view?
6. Sometimes the net profit of companies determines the frequency of offering new equipment, but not necessarily the improved quality of that equipment. This is bad.
7. The community served by the utility and paying its expenses should determine the expected quality of the service and the amount the ratepayer is willing to pay. The two will not necessarily match.

What assumptions do members of the Standing Committee on Infrastructure bring to your deliberations?

Many of these concerns would pertain also to infrastructure of the Water Department and the Emergency Water Supply plant.

I hope you will consider what I have raised here, since all these concerns are elements of items on the Agenda.

Elizabeth Bettenhausen
345 Plymouth St.
Cambria, CA 93428
elizabethbettenhausen@gmail.com

Wastewater CIP - Capital Improvement Program

DRAFT - For Discussion Only 5/24/2018 revision 1

Line/Project No.	Total Project Estimate	Outside Grant Funding	Ops Budget Account #	Expansion [X], Replacement [R] Operations [O]	% R	% X	% O	Priority Ranking	Budget Year										Check of total	
									Projected											
									FY17/18	1st Half FY18/19	2nd Half FY18/19	FY19/20	FY20/21	FY21/22	FY22/23	FY23/24	FY24/25	FY25/26		FY26/27
Wastewater Projects																				
Wastewater Treatment Plant Projects																				
1				R/O	20	80		1									\$ 125,000			
2					20	80		1									\$ 50,000			
3				R	20	80		2									\$ 25,000			
4				R	20	80		1									\$ 20,000			
5A				R	20	80		1									\$ 30,000			
5B				R	20	80		1									\$ 300,000			
6				X/R/O	20	20	80	1									\$ 40,000			
7				R/O	20	80		1									\$ 40,000			
8				X/R/O	20	20	80	2									\$ 50,000			
9				X/R/O	20	20	80	2									\$ 30,000			
10					20	80		2									\$ 10,000			
11					20	80		2									\$ 200,000			
12				R	20	80		1									\$ 45,000			
13				R	20	80		3									\$ 10,000			
14					20	80		1									\$ 15,000			
15				X/R/O	20	20	80	1									\$ 15,000			
16					20	80		2									\$ 25,000			
17					20	80		3									\$ 250,000			
18							100	3									\$ 40,000			
19					20	80		1									\$ 25,000			
20				X/R/O	20	20	80	2									\$ 60,000			
21				X/R/O	20	20	80	2									\$ 25,000			
22					20	80		1									\$ 20,000			
23					20	80		1									\$ 10,000			
Collection System Projects																				
24				X/R/O	20	20	80	2									\$ 25,000			
25						100	2										\$ 50,000			
26						100	2										\$ 40,000			
27				R/O		100	2										\$ 100,000			
28			6044			100	2										\$ 10,000			
29						100	2										\$ 30,000			
30						100	2										\$ 50,000			
31					20	80		1									\$ 10,000			
32				X/R/O	20	20	80	1									\$ 10,000			
33				X/R/O	20	20	80	2									\$ 50,000			
34				X/R/O	20	20	80	1									\$ 60,000			
35				X/R/O	20	20	80	2									\$ 40,000			
36			6170	R/O	20	20	80	3									\$ 25,000			
37			6170	X/R/O	20	20	80	1									\$ 30,000			
38				X/R/O	20	20	80	1									\$ 300,000			
39				X/R/O	20	20	80	2									\$ 60,000			
40				X/R/O	20	20	80	1									\$ 300,000			
41			6170	X/R/O	20	20	80	1									\$ 75,000			
42				X/R/O	20	20	80	2									\$ 90,000			
43				X/R/O	20	20	80	2									\$ 20,000			
44					100			1									\$ 8,000			
45					20	80		2									\$ 10,000			
46				R/O	20	80		3									\$ 5,000			
Vehicles and Trailer- Mounted Equipment																				
47					20	80		2									\$ 56,000			
48						100		3									\$ 25,000			
49								4									\$ 15,000			
Overhead CIP Projects																				
50			6045	R/O	20	80		3									\$ 25,000			
51				X/R/O	20	20	80	4									\$ 10,000			
Total Per Year (all priorities)									\$ 45,000	\$ 180,000	\$ 854,000	\$ 1,991,000	\$ 979,000	\$ 819,000	\$ 1,984,000	\$ 584,000	\$ 794,000	\$ 479,000	\$ 229,000	\$ 8,938,000
Priority Level 1 projects:									\$ -	\$ 170,000	\$ 253,000	\$ 970,000	\$ 13,000	\$ 13,000	\$ 313,000	\$ 48,000	\$ 328,000	\$ 13,000	\$ 13,000	\$ 2,134,000
Priority Level 2 projects:									\$ -	\$ -	\$ 536,000	\$ 846,000	\$ 586,000	\$ 496,000	\$ 1,361,000	\$ 226,000	\$ 156,000	\$ 156,000	\$ 156,000	\$ 4,519,000
Priority Level 3 projects:									\$ 30,000	\$ 10,000	\$ 50,000	\$ 150,000	\$ 355,000	\$ 285,000	\$ 285,000	\$ 285,000	\$ 285,000	\$ 285,000	\$ 35,000	\$ 2,055,000
Priority Level 4 projects:									\$ 15,000	\$ -	\$ 15,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 230,000	
Cumulative Total									\$ 45,000	\$ 225,000	\$ 1,079,000	\$ 2,216,000	\$ 3,195,000	\$ 4,014,000	\$ 5,998,000	\$ 6,582,000	\$ 7,376,000	\$ 7,855,000	\$ 8,084,000	\$ 8,938,000

Wastewater Maintenance Projects (non-CIP)																				
M1	Cleaning of pipelines from headworks to aeration tanks (after screen installation), including cleanout additions							100	1								30000			
M2	Cleaning of pipelines from headworks to aeration tanks (after screen installation), including cleanout additions							100	1								30000			
M3	Cleaning of aeration basins (after screen installation)							100	1								20000			
M4	Clarifier Repairs (replace eastern drive unit's metallic hubs with non-corrosive hubs)							100	1								3000			
M5	Replace clarifier wear shoes - (western clarifier)							100	2								5000			
M6	Western clarifier - Replace wear strips along bottom of tank							100	2								7500			
M7	Western clarifier - Replace clarifier chain, wear shoes, skid plates, & sprockets after 10 years use							100	3								30000			
M8	Replace clarifier chain, wear shoes, skid plates, & sprockets after 10 years use (eastern clarifier)							100	3								30000			
M9	Annual painting of WWTP							100	2								7500			
M10	Annual painting of lift station facilities							100	2								3000			
M11	Seal coat AC pavement at WWTP							100	3								15000			
Overhead Non-CIP Projects																				
OH1	User Fee study (wastewater rates portion)			6080M	O			100	1								5000			
Total Per Year (Non-capital, all priorities)									8000	151000	0	10500	10500	10500	10500	10500	10500	10500	55500	288000

Water Projects

Preliminary costs need to be updated & tied to a an ENR/year basis.

Revised 5/24/2018

Line/Project No.	Description	Total Project Estimate	Outside Grant Funding	Ops Budget Account #	Expansion [X], Replacement [R] Operations [O]	% X	% R	% O	Priority Ranking	Budget Year											Check of total			
										Mid Year	Projected	FY18/19	FY19/20	FY20/21	FY21/22	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27		FY27/28		
										\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$		
	Annual Inflation (Percentage)									3%	3%	3%	3%	3%	3%	3%								
	Cumulative Inflation (Percentage)									103%	106%	109%	113%	116%	119%	123%								
Water Distribution System Projects																								
1	Water Master Plan Amendment (revised fire flow modeling/tank sizing check)			6080M	R/O/X	20	80		2														\$ 35,000	
2	Stuart Street Tank Replacement (125K gallon welded steel tank with new foundation)								2														\$ 458,000	
3	Water pipelines, pumps, and PRV repairs and replacements				R/O		100		2														\$ 475,000	
4	Piney Way erosion control protection for existing pipeline			6035	O			100	3														\$ 10,000	
6	Study & predesign for pipeline in State Parks wetlands												30,000										\$ 10,000	
7A	Inspection & spot repair to water transmission main under S. Parks wetlands area; or do 7B					20	80		1					80,000									80,000	
7B	Lining of transmission main under S. Parks wetlands area (alt to relocate ~ \$612K to \$1.16 million), or do 7A					20	80		3					50,000	150,000	816,000							1,016,000	
8	Pressure zone 2 to zone 7 transmission main @ SR Creek pedestrian bridge					20	80		1				120,000										120,000	
9	Subzone metering of distribution system							100	2					50,000	50,000	50,000							150,000	
10	Pine Knolls - Iva Court zone 1 pipeline expansion				R/O	20	80		3					40,000	125,000								165,000	
11	Replacement of problematic service lines within Leimert								3				10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	100,000
12	Water Meter Replacements & Upgrades				R/O		75	25	1				10,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	1,050,000
13	Annual GIS updating & upgrades				R/O			100	3				10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	100,000
14	Valve Replacements								2				20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	200,000
15	Replacement of problematic service lines within Leimert								3				10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	100,000
Water Treatment																								
16	Electronic self monitoring reporting program (yr 1 is software + consulting, yrs 2 + are annual tech support)							100	2				10,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	19,000
Tank & Booster Pump Station Projects																								
17	Rodeo Grounds Pump Station Replacement (aka Zone 2 Booster pump station)				R/X	20	80		2				25,000	101,000	500,000	400,000							1,026,000	
18	SCADA System - Long-term Water Portion				R/O		50	50	3				10,000	50,000	50,000	50,000	50,000						210,000	
19	Electrical transfer switch and conduit to well SS-3				O			100	2					25,000									25,000	
20	San Simeon well field generator replacement				R/O	20	80		2					100,000									100,000	
21	Leimert Tank - Seismic Upgrade				R	20	80		3					30,000	75,000	75,000							180,000	
Water conservation																								
22	Database for water conservation program/tracking with parcel links & APN file converter				X/R/O	80		20	3				10,000	10,000									20,000	
Vehicles & Trailer Mounted-Equipment																								
23	Replacement Dump Truck (75 K with 6 yr loan @ 4% assumed)								1				14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000	84,000
24	Trailer Mounted Air Compressor			6170	O		100		2				25,000										25,000	
25	Trailer mounted, small capacity vactor			6170	O		100		2				55,000										55,000	
26	Vehicle Replacement Program								2				25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	250,000
Overhead Projects																								
27	Finance/billing software upgrade (water est'd @ 50%)				R/O		100		1				50,000	25,000									75,000	
28	Administrative Offices - est'd water proportion @ 1/3 total of 20 yr loan				R/O		100		4				10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	10,000	100,000
29	User Fee study (water rates portion)			6080M	O		100		1				30,000										30,000	
subtotal water projects - noninflated \$/yr										\$ -	\$ 30,000	\$ 514,000	\$ 651,000	\$ 1,250,000	\$ 1,200,000	\$ 1,749,000	\$ 350,000	\$ 136,000	\$ 136,000	\$ 136,000	\$ 136,000	\$ 136,000	\$ 6,258,000	
Priority Level 1 projects:										\$ -	\$ 30,000	\$ 234,000	\$ 239,000	\$ 294,000	\$ 214,000	\$ 214,000	\$ 214,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,439,000	
Priority Level 2 projects:										\$ -	\$ -	\$ 220,000	\$ 272,000	\$ 746,000	\$ 546,000	\$ 554,000	\$ 96,000	\$ 96,000	\$ 96,000	\$ 96,000	\$ 96,000	\$ 96,000	\$ 2,818,000	
Priority Level 3 projects:										\$ -	\$ -	\$ 50,000	\$ 100,000	\$ 200,000	\$ 430,000	\$ 971,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 30,000	\$ 1,901,000	
Priority Level 4 projects:										\$ -	\$ -	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 100,000	
cumulative water projects \$ (all priority levels)										\$ -	\$ 30,000	\$ 544,000	\$ 1,195,000	\$ 2,445,000	\$ 3,645,000	\$ 5,394,000	\$ 5,744,000	\$ 5,880,000	\$ 6,016,000	\$ 6,152,000	\$ 6,288,000	\$ 6,258,000		

SWF Projects

Preliminary costs need to be updated & tied to an ENR/year basis.

Revised 6/6/2018

Line/Project No.	Description	Total Project Estimate	Outside Grant Funding	Ops Budget Account #	Expansion [X], Replacement [R], Operations [O]	% X	% R	% O	Priority Ranking	FY17/18	FY18/19	FY19/20	FY20/21	FY21/22	FY22/23	FY23/24	FY24/25	FY26/27	FY27/28	Check of total	
Annual Inflation (Percentage)																					
Cumulative Inflation (Percentage)										3.0%	3.0%	3.0%	3.0%	3.0%							
SWF Projects																					
Regular Coastal Development Permitting Support																					
1	EIR consulting (follow up agency discussions to support the SWF's Regular CDP)					20	80		1	\$ 10,000	\$ 10,000	\$ 10,000								\$ 30,000	
2	Section 7 ESA consulting, annual AMP report, & AMP update					20	80		1		\$ 125,000									\$ 125,000	
Off-Site RO Concentrate Disposal Mods																					
3	Mods at SWF for trailer fill station (piping & spill containment/loading pad)					20	80		1		\$ 200,000									\$ 200,000	
Advanced Water Treatment Plant Improvements																					
4	AWTP pull-barn style covers for outdoor equipment & control panels					20	80		2		\$ 50,000									\$ 50,000	
5	Miscellaneous instrumentation - monitoring upgrades, added effluent flow meter					20	80		1		\$ 10,000	\$ 35,000								\$ 45,000	
6	Sems, Hach WIMS, or equal; logging/reporting software and tablets (yr 1 is software & consulting, yrs 2 + are tech support)					20	80		2		\$ 25,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 41,000	
7	Installation of remote sensing instrumentation at SS creek (needs access agreement with State Parks)					20	80		3		\$ 10,000									\$ 10,000	
Long-Term Improvement Modifications																					
8	Surface Water Treatment Plant (SWTP) for Holding Basin and Well SS-1 treatment					20		80	3						\$ 150,000	\$ 600,000	\$ 600,000			\$ 1,350,000	
9	Pipeline from Well SS-1 to surface water treatment plant (SWTP)					20		80	3							\$ 75,000	\$ 350,000			\$ 425,000	
10	Impoundment basin conversion to groundwater storage, pump station at storage basin, and connecting pipelines					20		80	3							\$ 75,000	\$ 350,000			\$ 425,000	
11	Solar Array System(1,2)								3		\$ 375,000										
2017 Cease & Desist Order Compliance - Non-capitalized Expenses																					
12	Short term flood damage/CDO response - consultants for surveying, project mngt assistance& inspection, surface water hydrology & geohydrological					20	80		1	\$ 75,000										\$ 75,000	
13	Short term flood damage mitigation - drainage swale construction					20	80		1	\$ 50,000										\$ 50,000	
14	Short term flood damage mitigation - closure plan equipment, installation, rentals, and temp power & controls							100	1	\$ 50,000	\$ 10,000									\$ 60,000	
15	Hauling off the last 18-inches of impoundment water & emptied impoundment cleaning							100	1	\$ 35,000										\$ 35,000	
subtotal SWF CIP projects - noninflated \$/yr										\$ 185,000	\$ 415,000	\$ 482,000	\$ 2,000	\$ 2,000	\$ 152,000	\$ 752,000	\$ 1,302,000	\$ 2,000	\$ 2,000	\$ 2,886,000	
Priority Level 1 projects:										\$ 185,000	\$ 390,000	\$ 45,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 620,000
Priority Level 2 projects:										\$ -	\$ 25,000	\$ 52,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 91,000	
Priority Level 3 projects:										\$ -	\$ -	\$ 385,000	\$ -	\$ -	\$ 150,000	\$ 750,000	\$ 1,300,000	\$ -	\$ -	\$ 2,585,000	
Priority Level 4 projects:										\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
cumulative SWF projects \$ (CIP projects, levels 1 through 4)										\$ 185,000	\$ 600,000	\$ 1,082,000	\$ 1,084,000	\$ 1,086,000	\$ 1,238,000	\$ 1,990,000	\$ 3,292,000	\$ 3,294,000	\$ 3,296,000	\$ 3,296,000	
Potential Future Expenses																					
16	French drain @ impoundment to control groundwater level (implemented should hauling costs become prohibitively high)					20	80		3											unknown	
17	Flood water diversion from roadway to creek (implemented should hauling costs become prohibitively high)					20	80		3											unknown	
Off Hauling & Disposal of RO Concentrate - Operatinal Costs																					
18	RO Concentrate hauling (est'd at \$350/6000-gallon truckload hauled, 18000 gallons per day, 5 days/week, 3 mos per yr.)										63,000	63,000	63,000	63,000	63,000	63,000	63,000	63,000	63,000	567,000	
19	Rental of semi-tractor to pull 6000-gallon trailers (est'd at \$220 per day, 3 mos per yr.)										13,200	13,200	13,200	13,200	13,200	13,200	13,200	13,200	13,200	118,800	
20	Disposal fee at pt of discharge (45 days/yr operation at 18,000 gallons per day, \$0.12 per gallon)										129,600	129,600	129,600	129,600	129,600	129,600	129,600	129,600	129,600	1,166,400	
Operational Expenses																					
21	Annual RO membrane & microfilter contract maintenance service										20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	180,000	
22	Annual Adaptive management Plan (AMP) monitoring by biologist										5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	5,000	50,000	
subtotal non-CIP/unknown potential SWF projects - noninflated \$/yr										5,000	230,800	230,800	230,800	230,800	230,800	230,800	230,800	230,800	230,800	2,082,200	

Notes:

- Solar array estimated at 250 KW, & approximately \$1.50 per KW installed
 - Shown because cost could be 75% federally funded via existing WRDA grant with Army Corps (I.e., Local match would be \$375,000 X .25 ~ \$94,000)
- Future candidate for Renewable Energy System Credit Transfer (RESCT) to allow applying production towards remote CCSD electrical loads, such as WWTP.
- Shading indicates the cells included within the CIP totals (I.e., totals do not include operational costs nor potential future costs.)