

# Financial Analysis

CITY OF DAVIS  
UTILITIES COMMISSION MEETING  
JUNE 17, 2020

# Project Overview

## Goals

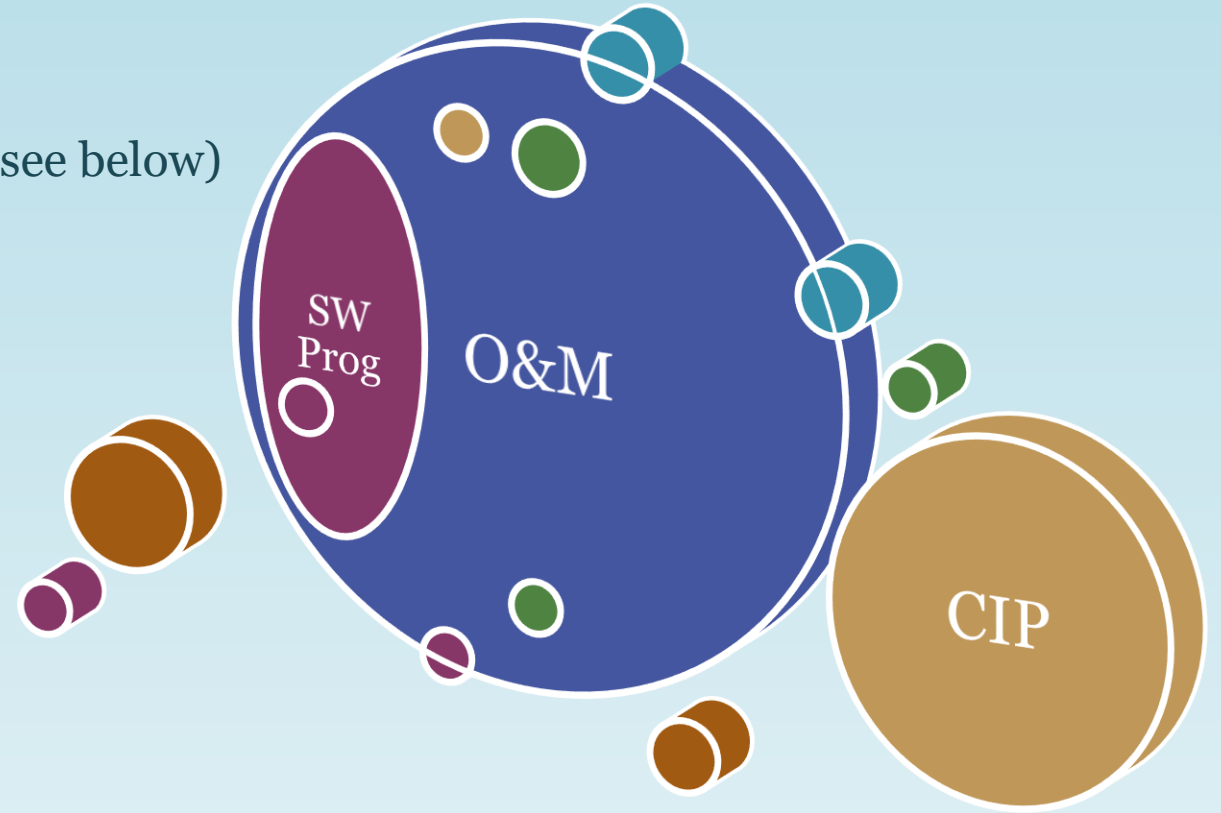
- Review Financial Status
  - *Establish revenue needed to sustain ongoing fiscal requirements (20-year outlook)*
- Cost of Service Study
- Rate Structure
  - O&M
  - Capital
  - Additional Studies
  - Reserves

## Project Tasks

- Data Collection
- Cost of Service & Revenue Requirement
  - Funding Options
- *Utilities Commission (June 2020)*
- Rate Design
  - Cost Re-Alignment Opportunities
  - Feasibility
- Rate Recommendation
- Prop 218 Process

# Definitions

- Storm Drainage Enterprise
  - All of the Elements under this umbrella (see below)
- Operations and Maintenance (O&M)
  - Most Non-CIP elements
- Stormwater Program
  - NPDES Permit Compliance Element
  - Subset of O&M
- Capital Improvement Program (CIP)
  - Large Projects



# Baseline O&M

- Funds

- 541 & 544

- *542 & 543 are strictly for development improvements*

- Revenues

- User Fees
- Interest
- Misc

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FUND NO	TITLE	WORKING CAPITAL LESS ENCUMB June 30, 2019	FY 2019/20 ADOPTED BUDGET			WORKING CAPITAL LESS ENCUMB June 30, 2020
			REVENUES	EXPENDITURES	ADJUSTMENTS AND TRANSFERS	
<b>STORM SEWER FUNDS</b>						
541	STORM SWR/DRN - MAINT & OPER	327,748	1,304,988	991,289	(393,625) <sup>1</sup>	247,822
542	STORM SWR/DRN - CAP REPL RESRV	721,265	22,400	1,500,444	393,625 <sup>1</sup>	(363,154)
543	STORM SWR/DRN - CAP EXP RESRV	2,159,357	68,880	65,794		2,162,443
544	STORM SEWER - QUALITY	763,978	626,080	975,724	0	414,334

# Expenditures

- Primary
  - El Macero (7411)
  - Facility Maintenance (7414)
  - Water Quality (7730)
- Other
  - Integrated Pest Control
  - Public Works Permits
  - Engineering Support
  - Utility Accounting
  - General Administration
  - Interdepartmental Charges

		Fiscal Year 2019/20										ENT SUMMARIES & BARRY
		EXPENDITURES BY CATEGORY						FUNDING SOURCES				
Program		Salaries & Benefits	Operations & Maintenance	Contracts & Professional Services	Inter-departmental Charges	Capital Outlay	Program Total	General Fund	Other Funds	Program Total		
7300 - Wastewater Inter-Dept Charges			-	-	438,444	-	438,444	-	438,444	438,444		
7411 - El Macero Maintenance District		48,388	151,070	10,000	-	-	209,458	-	209,458	209,458		
7414 - Storm Drain Facility Maintenance		686,484	233,475	10,000	137,135	-	1,067,094	-	1,067,094	1,067,094		
7465 - Storm Drainage Inter-Dept Charges			-	-	58,820	-	58,820	-	58,820	58,820		
7701 - Solid Waste		362,806	11,103,130	86,000	91,140	-	11,643,076	-	11,643,076	11,643,076		
7715 - Integrated Pest Management		200,796	2,910	-	54,780	-	258,486	187,715	70,771	258,486		
7720 - Habitat Management		105,957	19,500	4,000	111	-	129,568	129,568	-	129,568		
7725 - Wastewater Regulatory Management		247,800	164,127	90,500	38,355	-	540,782	-	540,782	540,782		
7730 - Stormwater Regulatory Management		273,090	70,150	14,500	18,053	-	375,793	-	375,793	375,793		
7735 - Water Regulatory Management		209,874	106,750	25,150	18,911	-	360,685	-	360,685	360,685		
7740 - Water Conservation		285,266	50,550	102,000	53,954	-	491,770	-	491,770	491,770		
7745 - Wastewater Pretreatment		189,005	75,377	27,500	9,751	-	301,633	-	301,633	301,633		
7765 - Solid Waste Inter-Dept Charges		-	-	-	538,414	-	538,414	-	538,414	538,414		

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# Reserve Policy Applications

- Operating Reserves
    - 3 months of operating revenue (*25% of annual operating costs*)
  - Rate Stabilization Reserve
    - 5% of operating revenues
  - Emergency Capital Reserve
    - Average Annual CIP Expenditure (*Non-Debt*)
    - CIP fluctuates – difficult to calculate
- 30% of Op Expense
    - *Shown as “Balance Ending” each year*
  - \$1 million
    - *Interest accumulates as a hedge against inflation and fluctuations*

# Escalation Rate Assumptions

- Revenues = 2.60%
  - *Linked to CPI (cap @ 3%..??)*
  - *Reduced to account for cap*
- O&M Costs = 2.78%
  - *Personnel (3.26%)*
  - *Other operating costs (2.0%)*
  - *(From Leland Model)*
- CIP Costs = 2.60%
  - *Linked to CCI*
- Reserve Interest = 2%

## About CPI Banking

- Assume cap at 3%
- In years where CPI is higher, excess is “banked”
- In future years where CPI is lower, “banked” CPI can be applied to bring increase up to cap
- Comparison (30-year trend)
  - *2.76% = Actual CPI*
  - *2.66% = Effective CPI w/ Banking*
  - *2.34% = Effective CPI w/o Banking*

# Escalators Applied

From Leland Model

Salaries/Wages	2.25%
Part time Wages/Benefits	3.20%
Overtime/Standby/Callback	2.25%
Retirement	6.97%
Leave	2.25%
Health/Dental/Cafeteria Plan	3.00%
Retiree Medical	2.50%
Add Pays	2.25%
Other Benefits	1.00%
Workers Comp	2.25%
Unemployment Insurance	2.25%

3.26% composite

*Other operating costs @ 2.0%*

Expenditures		FY 19	FY20	FY 21	Use	FY 22	FY 23
7411	El Macero Mtce District						
	Salaries & Benefits	63	48	50	3.26%	52	53
	Operations & Mtce	40	25	136	2.00%	139	142
	Contracts / Prof Svcs	92	133	25	2.00%	26	26
	Inter-Dept	-	-	-	2.00%	0	0
	Capital Outlay	-	-	-		0	0
		195	205.958	211		216	221

**2.78%**  
Composite  
*across all  
Storm  
Drainage  
O&M Costs*



# The Numbers (O&M)

		FY20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30
<b>Revenues</b>												
541	Storm Sew/Drn - M & O	1,305	1,342	70	72	74	76	78	80	82	84	86
542	Storm Sew/Drn - Cap Repl											
543	Storm Sew/Drn - Cap Exp											
544	Storm Sewer - Quality	626	626									
	New Fee - O & M Baseline	-		2,113	2,168	2,225	2,282	2,342	2,403	2,465	2,529	2,595
	New Fee - O & M Add'l			417	428	439	451	463	475	487	500	513
	New Fee - CIP	-	-	1,278	1,312	1,346	1,381	1,417	1,453	1,491	1,530	1,570
	<b>Total Rev</b>	<b>1,931</b>	<b>1,968</b>	<b>3,879</b>	<b>3,980</b>	<b>4,083</b>	<b>4,190</b>	<b>4,299</b>	<b>4,410</b>	<b>4,525</b>	<b>4,643</b>	<b>4,764</b>
<b>Expenditures</b>												
7411	El Macero Mtce District	206	211	216	221	226	231	237	242	248	254	259
7414	Storm Drain Facility Mtce	1,062	1,103	1,134	1,166	1,199	1,233	1,268	1,304	1,341	1,380	1,419
7730	Stormwater Regulatory	381	387	398	410	422	435	448	461	474	489	503
	Support Costs	335	312	319	325	332	339	346	353	361	368	376
	<b>Baseline Subtotal</b>	<b>1,983</b>	<b>2,013</b>	<b>2,067</b>	<b>2,123</b>	<b>2,180</b>	<b>2,238</b>	<b>2,299</b>	<b>2,361</b>	<b>2,424</b>	<b>2,490</b>	<b>2,557</b>

# Stormwater Program

**Table 1. Summary of Total Estimated Costs for Stormwater Program, by Cost Category and Fiscal Year**

Cost Category	Current	Projected Future									
	FY 19-20	FY 20-21	FY 21-22	FY 22-23	FY 23-24	FY 24-25	FY 25-26	FY 26-27	FY 27-28	FY 28-29	FY 29-30
Existing Identified Expenses	\$516,470	\$530,235	\$544,382	\$558,923	\$573,867	\$589,227	\$605,015	\$621,241	\$637,918	\$655,058	\$672,676
Additional Needs											
Current Additional Needs	\$0	\$355,895	\$299,760	\$308,093	\$316,658	\$325,461	\$334,509	\$343,808	\$353,366	\$363,190	\$373,287
Future Anticipated Needs	\$0	\$18,261	\$97,224	\$99,927	\$102,705	\$105,560	\$108,495	\$111,511	\$114,611	\$117,797	\$121,072
Total Additional Needs	\$0	\$374,156	\$396,984	\$408,020	\$419,363	\$431,022	\$443,004	\$455,320	\$467,977	\$480,987	\$494,359
<b>Total Regulatory Expenses<sup>[a]</sup></b>	<b>\$516,000</b>	<b>\$904,000</b>	<b>\$941,000</b>	<b>\$967,000</b>	<b>\$993,000</b>	<b>\$1,020,000</b>	<b>\$1,048,000</b>	<b>\$1,077,000</b>	<b>\$1,106,000</b>	<b>\$1,136,000</b>	<b>\$1,167,000</b>

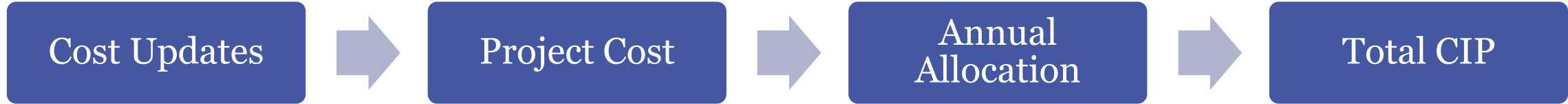
[a] Rounded values.

# Additional Needs (FY 22)

- Stormwater Program
  - \$289 k – Construction Inspection, Annual Report, & Illicit Discharge
  - \$110 k – Trash Amendments, Pesticides, Basin Plan, & future Permit Requirements
  - ***\$399 k – Total***
- Operations & Maintenance
  - \$45 k – Salary adjustments to market rate
  - \$270 k – Two additional staff for necessary maintenance
  - \$154 k – Contract services for pipe hydro cleaning & channel cleaning
  - ***\$469 k – Total***
- **Total Additional Needs = \$868 k**
  - ***Approximately 42% over baseline O&M***

		FY20	FY 21	FY 22	FY 23	FY 24	FY 25	FY 26	FY 27	FY 28	FY 29	FY 30
<b>Revenues</b>												
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	Total Rev	1,931	1,968	3,879	3,980	4,083	4,190	4,299	4,410	4,525	4,643	4,764
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	Support Costs	335	312	319	325	332	339	346	353	361	368	376
	Baseline Subtotal	1,983	2,013	2,067	2,123	2,180	2,238	2,299	2,361	2,424	2,490	2,557
	Add'l Regulatory Needs		375	397	408	419	431	443	455	468	481	494
	Add'l Operational Needs		457	469	482	496	510	524	538	553	569	584
	OPERATIONS TOTAL	1,983	2,846	2,934	3,013	3,095	3,179	3,265	3,354	3,446	3,540	3,636

# Capital Needs



Project Name	2016 Costs	2020 Costs												TOTAL 2020
	Constr Cost	Constr Cost	Soft Costs (20%)	Proj Cost	FY21/22	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27	FY27/28	FY28/29	FY29/30	
SDS #6 Replacement	1,400,000	1,601,943	320,389	1,922,000	157,901	0	0	2,014,654	0	0	0	0	0	2,172,556
SDS #3 Replacement	12,200,000	13,959,787	2,791,957	16,752,000	0	270,011	0	0	19,249,557	0	0	0	0	19,519,569
SDS #5 Raising & Upgrades	5,200,000	5,950,073	1,190,015	7,140,000	0	0	277,032	0	0	8,246,141	0	0	0	8,523,173
Covell Channel Widening	1,150,000	1,315,882	263,176	1,579,000	210,535	0	1,528,107	0	0	0	0	0	0	1,738,642
Plans & Studies (Asset, Capital, Ponds, Basis)				1,000,000	0	324,014	110,813	284,235	116,650	299,207	0	0	0	1,134,918
Annual Misc Upgrades (inlets, trash racks, siphons, sumps)				900,000	105,268	108,005	110,813	113,694	116,650	119,683	122,794	125,987	129,263	1,052,156
<b>Total Project Costs</b>	<b>19,950,000</b>	<b>22,827,684</b>	<b>4,565,537</b>	<b>29,293,000</b>	<b>473,704</b>	<b>702,030</b>	<b>2,026,764</b>	<b>2,412,583</b>	<b>#####</b>	<b>8,665,030</b>	<b>122,794</b>	<b>125,987</b>	<b>129,263</b>	<b>34,141,012</b>

Roll-out pace  
 Future needs not yet identified  
 Constrained by voter approval

Annual Rev Requirement..??  
 PayGo or Debt or Blend..??  
 Start with present value = \$29.3

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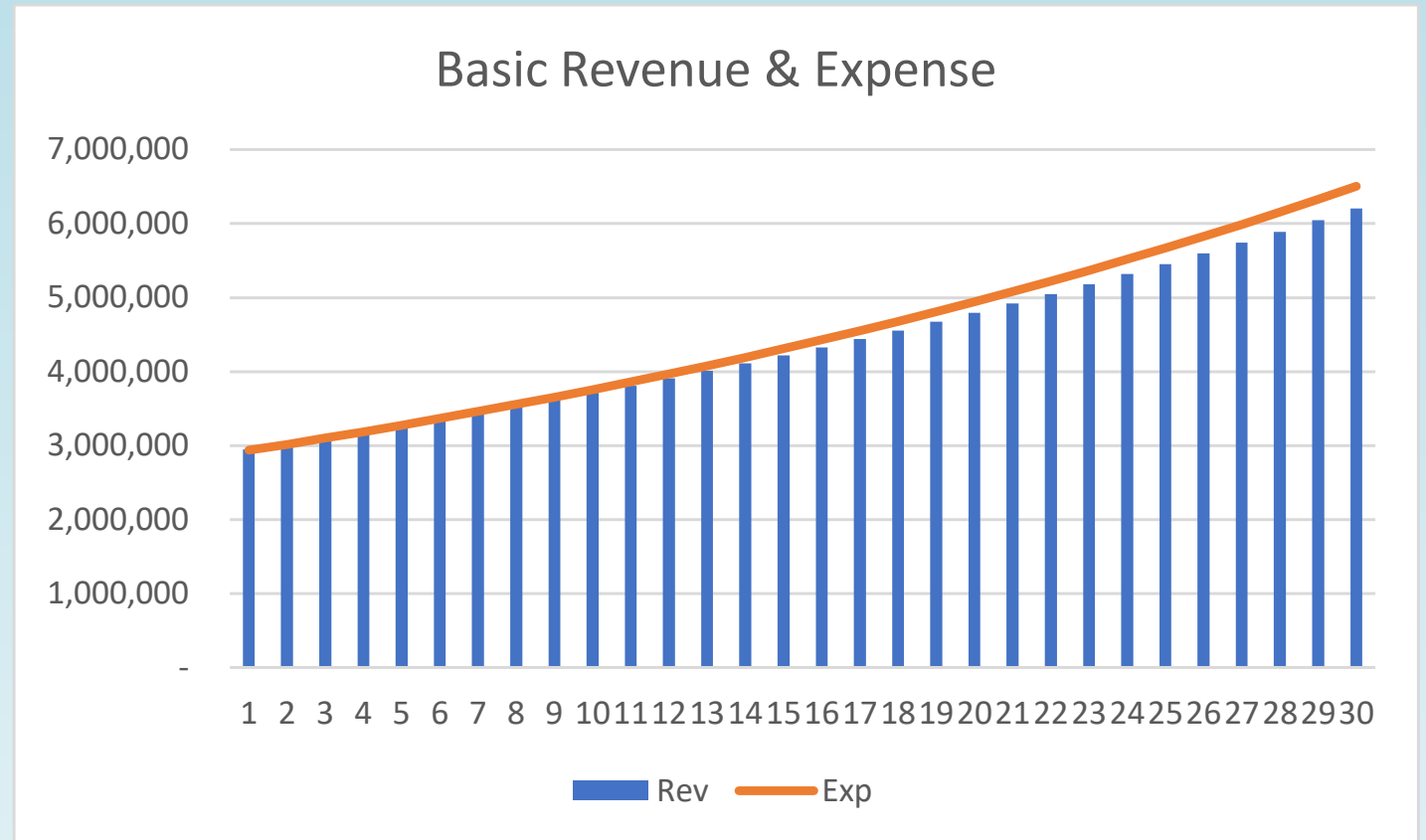
# Revenue Requirements – 30-Year Model

- Balance + Revenues – O&M – Debt – End Bal = Capital Funding
- PayGo Capital is the cushion; what is left over after obligations

		Revenues			What is leftover			30% of O&M	Goes To Zero
		Revenues			What is leftover			30% of O&M	Goes To Zero
	FY End	Begin Bal	Rates	Other	O&M	Capital	Debt	End Bal	Remaining Capital Need
1	2022	281,000	4,070,024	75,756	2,935,852	610,172		880,756	29,293,000
2	2023	880,756	4,175,845	77,741	3,017,469	711,632		905,241	29,428,581
3	2024	905,241	4,284,417	79,779	3,101,354	737,676		930,406	29,463,589
4	2025	930,406	4,395,812	81,870	3,187,572	1,264,244		956,272	29,472,787
5	2026	956,272	4,510,103	84,015	3,276,186	1,291,348		982,856	28,941,965
6	2027	982,856	4,627,366	94,828	3,367,264	466,542	861,064	1,010,179	23,538,456
7	2028	1,010,179	4,747,677	97,088	3,460,874	494,744	861,064	1,038,262	23,671,784
8	2029	1,038,262	4,871,117	99,407	3,557,087	523,510	861,064	1,067,126	23,779,643
9	2030	1,067,126	4,997,766	101,787	3,655,974	552,849	861,064	1,096,792	23,860,793
10	2031	1,096,792	5,127,708	104,229	3,757,610	582,773	861,064	1,127,283	23,913,951

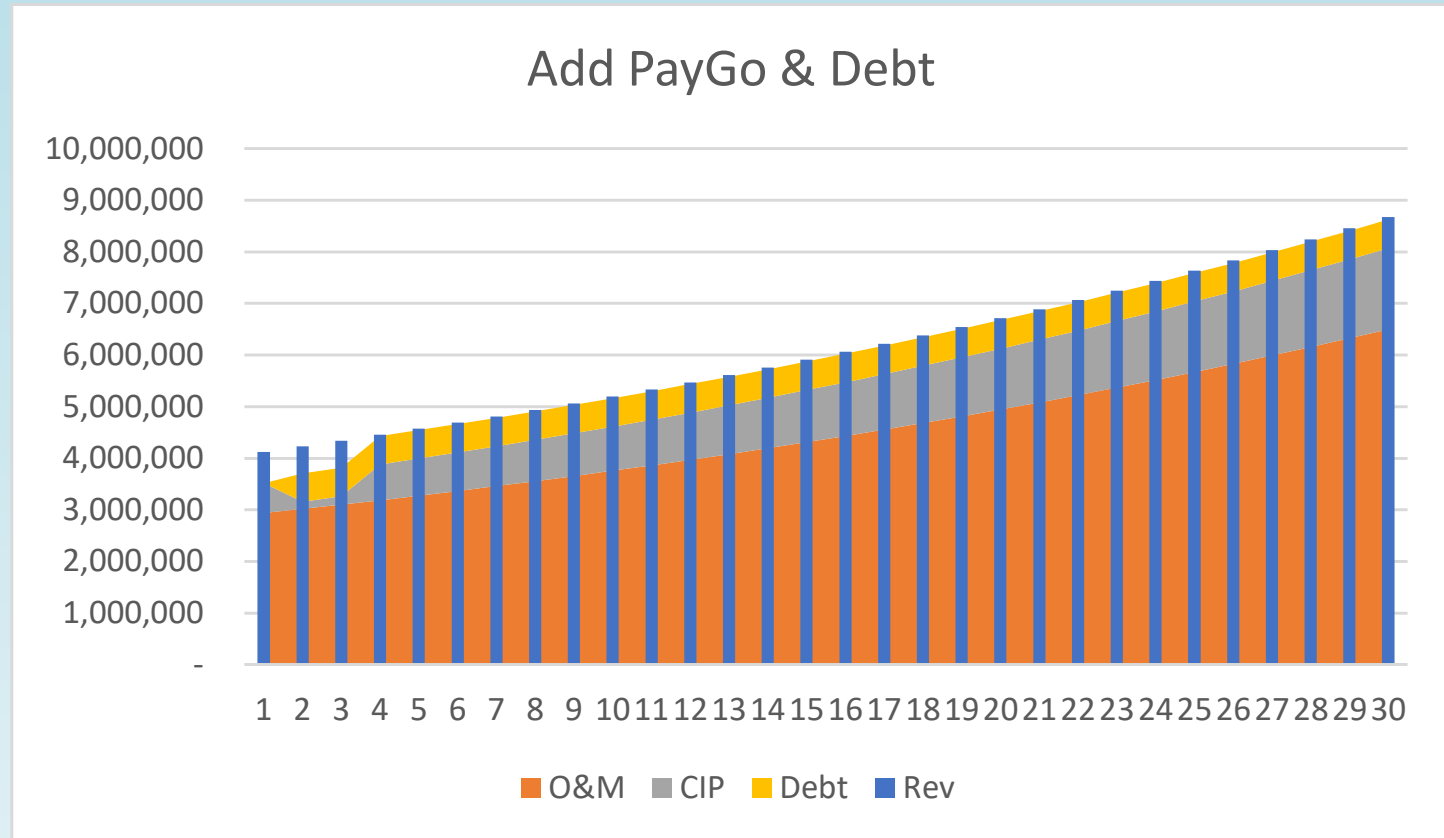
# The Basic Dilemma

- Expenses increase @ 2.78%
- Revenues increase @ 2.60%
- Long-Term Discrepancy
  - *5-yr window – barely shows up*
  - *10-yr window – averaging can cover the gap*



# More Complex Picture

- Discrepancy between Operating Rev & Exp are covered
- Debt service does not increase
- PayGo CIP is the cushion
- Numbers get much bigger
  - *\$10 m versus \$7 m*
- First few years
  - *CIP sacrifices for Reserves*

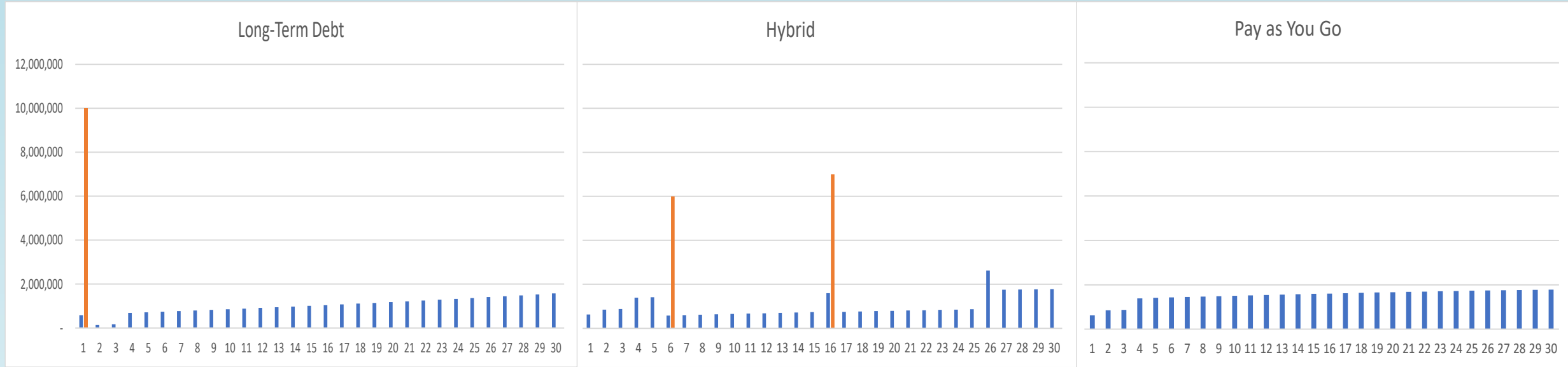




# Debt Assumptions

- 4% Interest Rate
- 2% Debt Issuance Cost (one-time)
- Debt Service does not escalate
- Debt Reserve = Annual Debt Service
  - *Interest counted as operating income*
- Coverage at least 110%
  - *Revenues are stable*
- DISCLAIMER: Any reference to indebtedness is strictly an exercise in engineering economics for the purpose of forecasting revenue requirements in connection to the rate setting process. Neither SCI nor any of its employees are a registered municipal advisor under the SEC rules. This is not a recommendation with respect to any **specific municipal financial products** or **the issuance of any specific municipal securities**. In that regard, we 1) are not recommending an action to the City, 2) are not acting as an advisor to the City, and 3) do not owe a fiduciary duty to the City pursuant to Section 15B of the Exchange Act. The City should discuss any information and material contained in this communication with any and all internal or external advisors and experts that the City deems appropriate before acting on this information or material.

# Scenarios – CIP Variables



## Revenue Requirement

- \$4.05 m – Debt Scenarios
- \$3.99 m – PayGo Scenario
- 1.5% variance
  - Trade off: *slightly lower revenue = much slower projects*

# Reality Check

- Current Revenues = \$2 m
- Forecast Revenue Requirement = \$4 m
- Double
- *More on this next Month (Rate Options)*



# Comparison to Other Cities

City	Population	O&M Needs	Capital Improvement Program			
			Needs	Funded	Yrs	Annual Ave
Salinas	155,000	\$ 6.11 m	\$ 3 m			
Vallejo	122,000	\$ 1.38 m	na	\$ 10.3 m	5	\$ 2.06 m
Berekely	120,000	\$ 3.44 m	\$ 208 m	\$ 12.5 m	6	\$ 2.08 m
San Mateo	104,000	\$ 3.64 m	\$ 139 m			
Alameda	78,000	\$ 4.45 m	\$ 170 m	\$ 18.2 m	15	\$ 1.21 m
Davis	69,000	\$ 2.93 m	\$ 29 m			
Cupertino	61,000	\$ 1.44 m	\$ 79 m	\$ -	na	\$ -
Los Altos	31,000	\$ 0.52 m	\$ 29 m	\$ 15.8 m	30	\$ 0.53 m
Arroyo Grande	18,000	\$ 0.37 m	na	\$ 1.6	5	\$ 0.32 m
Moraga	17,000	\$ 0.41 m	\$ 27 m	\$ 7.3 m	20	\$ 0.37 m
Del Mar	4,300	\$ 0.87 m	\$ 3 m			

# Funding Options

## Stormwater Funding Matrix

2018

### **Summary Matrix Contents**

#### Traditional Mechanisms

Balloted

- 1.01 Parcel Taxes
- 1.02 Other Special Taxes
- 1.03 Property-Related Fees
- 1.04 General Obligation Bonds
- 1.05 Senate Bill 231
- 1.06 Regulatory Fees
- 1.07 Developer Impact Fees
- 1.08 Re-Alignment
- 1.09 Grants
- 1.10 Loans

#### Special Financing Districts

- 2.01 Benefit Assessments
- 2.02 Community Facilities District
- 2.03 Business Improvement Districts
- 2.04 Enhanced Infrastructure Financing Districts (EIFD)

#### Alternative Compliance

- 3.01 Alternative Compliance
- 3.02 In-Lieu Fee Challenges
- 3.03 Credit Trading Programs

#### Partnerships

- 4.01 Multi-Agency
- 4.02 Transportation
- 4.03 Caltrans Mitigation
- 4.04 Public-Private ("P3")
- 4.05 Financial Capability Assessment
- 4.06 Volunteers

Funding Category	Applicability	Requirements	Pros	Cons	Staff	Planning	Capital	O&M
<b>Traditional Mechanisms</b>								
1.01 Parcel Taxes	Can fund all or any parts of a stormwater program as stipulated in the ballot question and authorizing ordinance	Usually a 2/3 majority of voters (general taxes require only 50% majority, but can only go to General Fund)	<ul style="list-style-type: none"> <li>* Flexible and legally stout;</li> <li>* Debt can be issued in most cases;</li> <li>* Most voters are familiar with Parcel Taxes</li> </ul>	<ul style="list-style-type: none"> <li>* Requires voter approval at the 2/3 level;</li> <li>* Must compete with other ballot measures</li> </ul>	X	X	X	X
1.02 Other Special Taxes	<ul style="list-style-type: none"> <li>* Business License Tax;</li> <li>* Vehicle License Fees;</li> <li>* Sales Tax;</li> <li>* Utility Users Tax;</li> <li>* Transit Occupancy Tax</li> </ul>	Typically require a 2/3 voter approval	<ul style="list-style-type: none"> <li>* Most are flexible in how they can be used;</li> <li>* 50% threshold can be used if a general tax;</li> </ul>	<ul style="list-style-type: none"> <li>* 2/3 voter approval is difficult to attain;</li> <li>* Ballot measure can be expensive;</li> <li>* If a general tax, then stormwater must compete with other General Fund needs;</li> <li>* Must compete with other ballot questions</li> </ul>	X	X	X	X
1.03 Property-Related Fees	Establishes Storm Drainage as a separate utility service and can fund all or any parts of a stormwater program	Prop 218 compliance; <ul style="list-style-type: none"> <li>* Rigorous rate study;</li> <li>* Must define services and service area;</li> <li>* Property owners approval for non-Water, -Sewer, and -Garbage</li> </ul>	<ul style="list-style-type: none"> <li>* Flexible and legally stout;</li> <li>* Debt can be issued in most cases</li> </ul>	<ul style="list-style-type: none"> <li>* Ballot measure required if for a Storm Drain service - usually voted on by property owners (Not registered voters);</li> <li>* Ballot measure requires significant public outreach;</li> <li>* Public not familiar with balloted property-related fees</li> </ul>	X	X	X	X
1.04 General Obligation Bonds	Can fund Capital Projects through debt taken on by municipality	<ul style="list-style-type: none"> <li>* Voter approval at 2/3 level;</li> <li>* Will need Financial Advising Consultant</li> </ul>	<ul style="list-style-type: none"> <li>* Can fund capital projects or programs with debt paid back over time through property taxes;</li> <li>* Typically easier to pass than a parcel tax;</li> <li>* Taxes based on property value, so annual obligation of individual prop owner is vague</li> </ul>	Can only be used for capital costs - Cannot be used for O&M or staff costs		X	X	
1.05 Senate Bill 231	Allows for adoption of property-related fees without having to go to ballot	<ul style="list-style-type: none"> <li>* Cost of Service Analysis</li> <li>* Rate Study</li> <li>* Prop 218 Protest Hearing</li> </ul>	Avoids the cost and risk of a ballot measure	<ul style="list-style-type: none"> <li>* Taxpayers groups vow to sue on grounds of constitution / court provisions</li> <li>* Governing boards will still have political pressure to not raise rates</li> </ul>	X	X	X	X
1.06 Regulatory Fees	Fees and charges for performing administrative activities related to GI	Cannot exceed the actual cost of performing activities such as permit issuance, inspections, on-site mitigation, etc.	<ul style="list-style-type: none"> <li>* No voter approval is needed;</li> <li>* Usually included in Master Fee Schedule;</li> <li>* Most municipalities already have these in place</li> </ul>	Does not pay for capital improvements or O&M	X			

# Look Ahead

- Next Month – Rate Options
  - Work toward a rate recommendation to Council
- Other Challenges & Opportunities
  - Outreach
    - Who / When / What
  - Timeline
  - Post-COVID19 World



# Discussion & Questions

- Budgets and Costs
  - FY 20 baseline (budget)
- Applying the Reserve Policy
  - Operating/Rate Smoothing
  - Emergency Capital (\$1 m)
- Escalation Factors
  - Leland Model
  - CPI (banking)
  - CCI
- Capital Project Roll-out
  - Future needs not yet identified
- Debt Assumptions
- LWA Estimates
- Additional Costs
  - Stormwater
  - O&M
- Other