



RCAC

Georgetown Divide PUD Water Rates

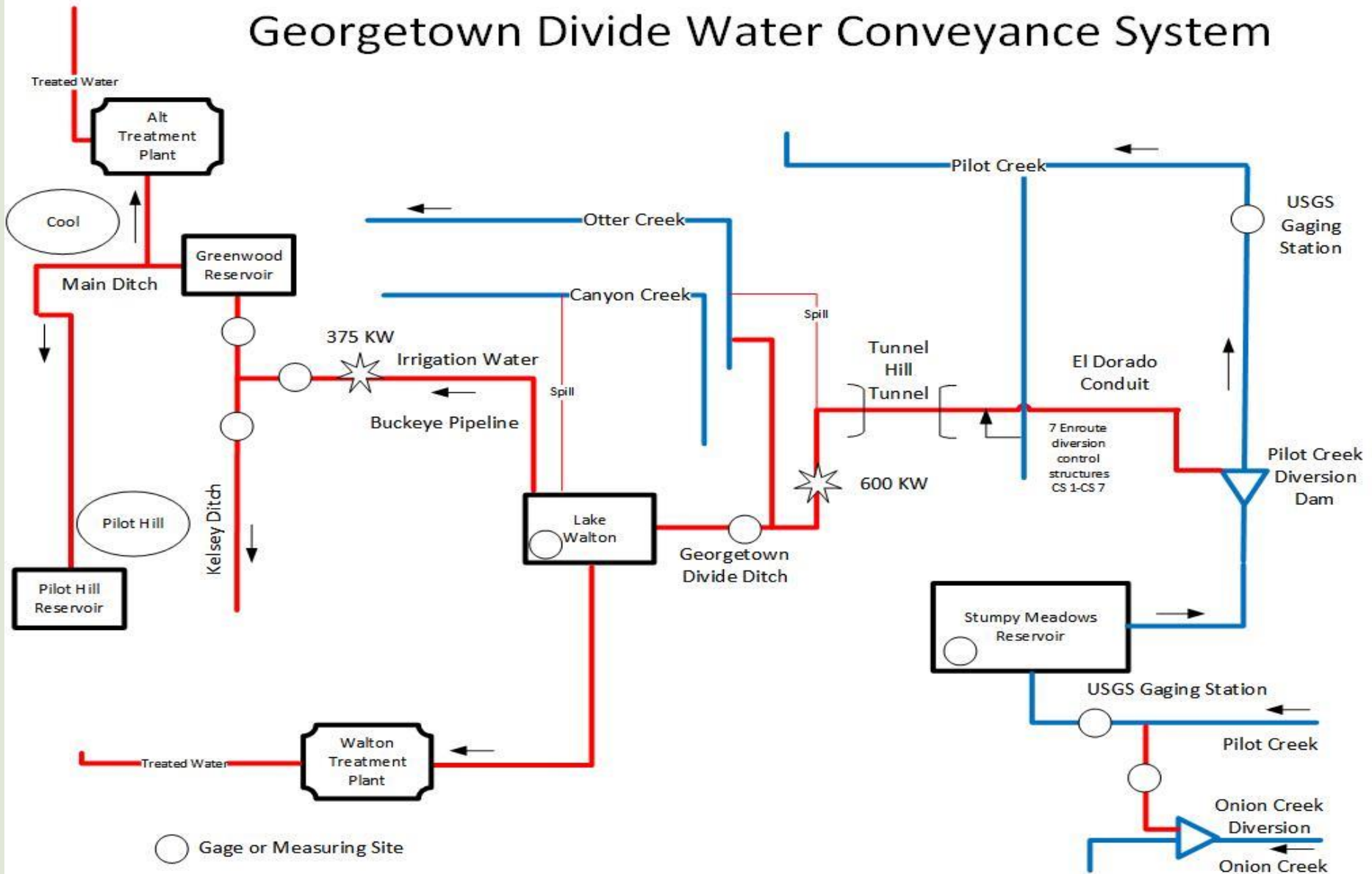
What is RCAC?

- Rural Community Assistance Corporation
- State funded to help communities like Georgetown Divide
- ...stay in compliance with the rules and regulations

Finance Committee Roll

- Review methodology
- Provide feedback to rate study team
- Provide recommendations on policy questions
- Resource to educate and share information

Georgetown Divide Water Conveyance System



Background

- Rate Study Purpose
 - Identify “true cost” to deliver water
 - Determine funding needed over the next 5-10 years to operate and maintain the system
 - Create adequate revenue to fund capital improvements
 - Ensure costs are allocated equitably
 - Establish appropriate rates for 5 years
 - Meet legal requirements for treated water and irrigation water rates

Background

- Rate Study Purpose
- Stay solvent
- Required for grants and loans
 - Current Affordability: 1.25%
 - Disqualification for State and USDA Grants
 - Should be 1.50% to 4.00%

Legal Requirements

- Proposition 218
 - Shall not exceed the funds required to provide the service
 - Shall not be used for any other purpose
 - Shall not exceed the proportional cost of service
 - Affects all properties with water service available

Legal Requirements

- Proposition 218 Implementation
 - Must provide a Public Hearing Notice
 - Amount of rate
 - Basis of rate calculation
 - Reason for the rate
 - Date, time, location of public hearing
 - One **written** protest per parcel (owner OR tenant, not both)
 - Rate cannot be increased if >50% of property owners protest

Legal Requirements

- San Juan Capistrano Case
 - 2015 case that created strict standards on how tiered rates can be created
 - Tiers need to “...correspond to the actual cost of providing service at a given level of usage...”
 - In response, many agencies have eliminated tiered rates or revised their tiered rates

Legal Requirements

- Subsidies
 - Subsidies between customer types are prohibited in rates
 - Subsidies must be funded by:
 - Funds not related to rates (eg. property tax)
 - Voluntary donations by other customers

Draft Long Range Financial Forecast

- Over 70 miles of canals & ditches
- Two water treatment plants
- 10 storage tanks
- 5 pumping stations
- Three reservoirs
- Two State regulated dams
- Two miles of sewer pipelines
- 5 community wastewater disposal fields
- Corporation yard & office building

Draft Long Range Financial Forecast

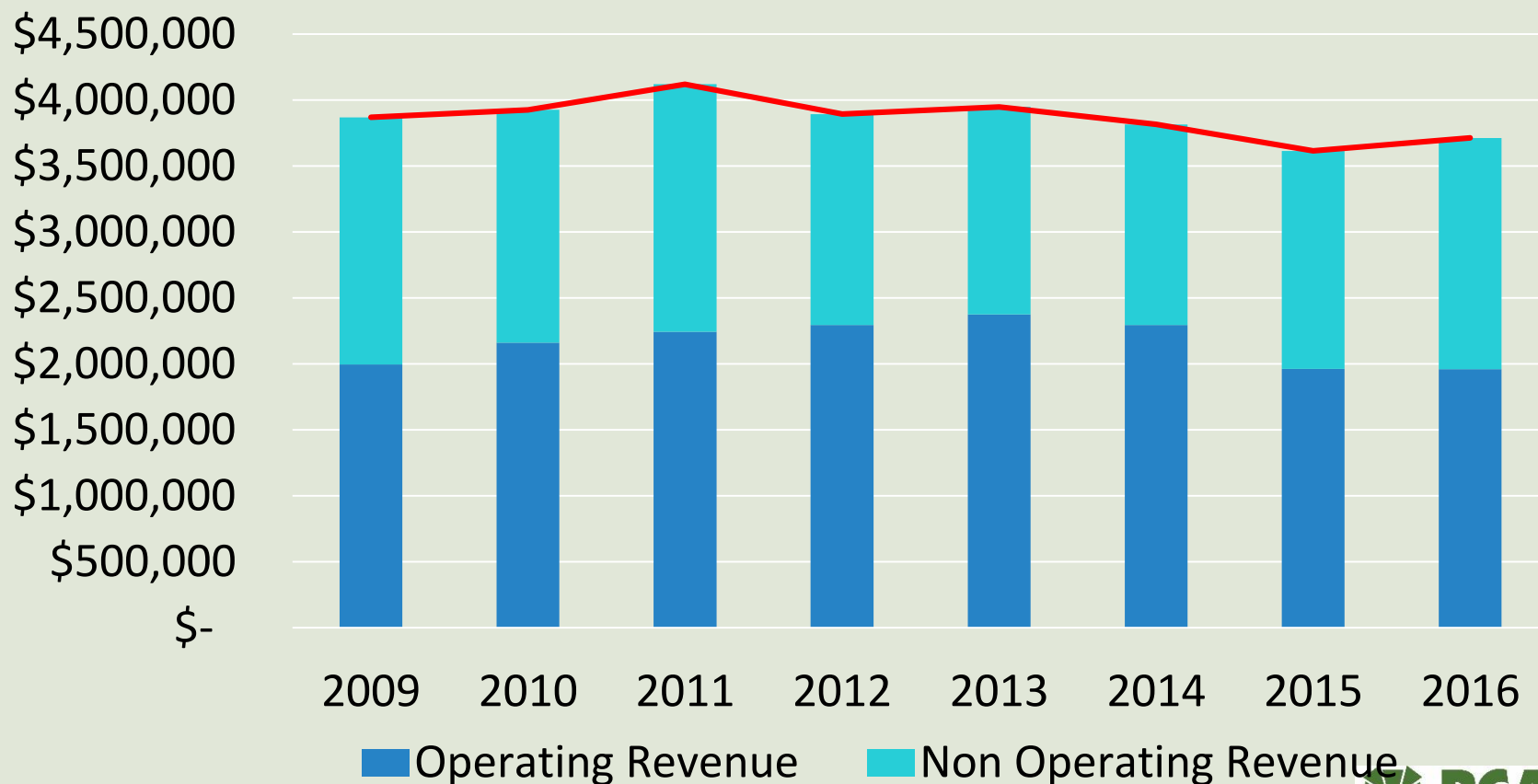
- 21 full time employees
- Encompasses 415 square miles
- Approximately 15,000 residents
- Approximately 3,600 treated water connections

Draft Long Range Financial Forecast

- Historical Perspective
 - End of Statewide 6-year drought
 - Snowpack low of 15% of average
 - Reservoir storage low of 66% of average
 - Stumpy Meadows storage low of 41% of capacity
 - Operating revenue dropped by 17% as compared to 2013

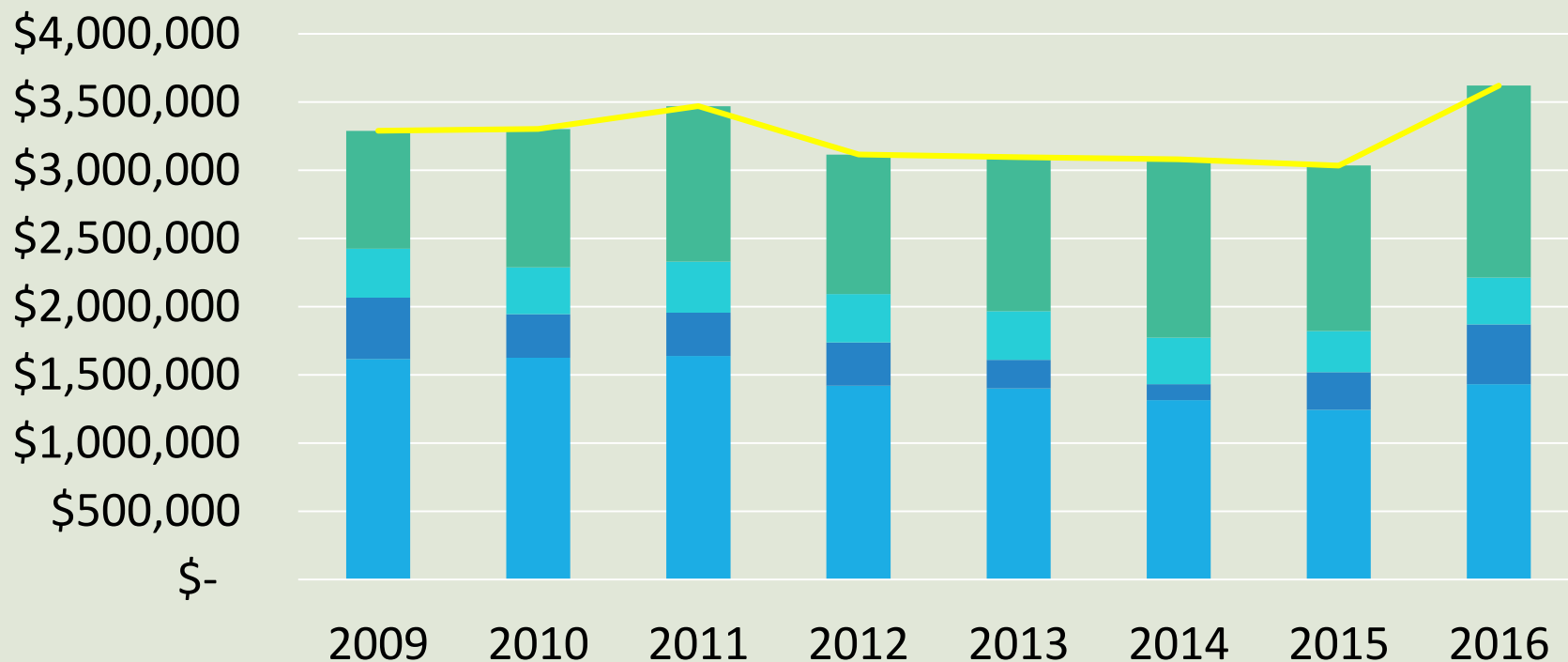
Draft Long Range Financial Forecast

Historical Revenue



Draft Long Range Financial Forecast

Historical Expenses



Salaries & Payroll Tax
Employee Insurance

CalPERS
Service and Supplies



Draft Long Range Financial Forecast

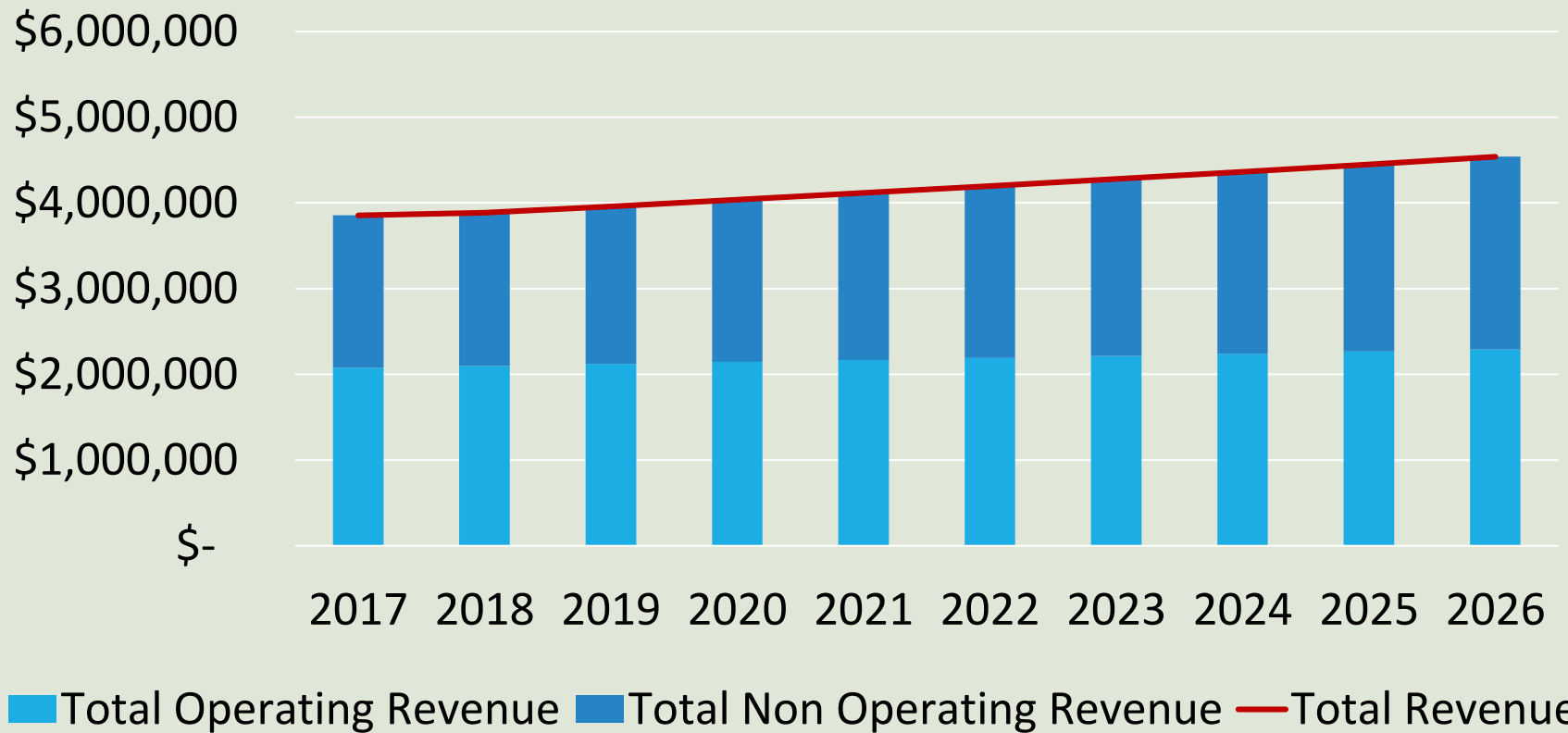
- Forecast Assumptions

Revenue	Forecast Growth per Year
Water Sales	1.1%
Property Tax	3.0%
Misc (penalties, etc)	2.5%

Expenses	Forecast Growth per Year
Salary	2.5% after 17/18
Pension	6.0% after 20/21
Health Insurance	6.0%
Payroll Tax	2.5%
Materials & Supplies	5.0%

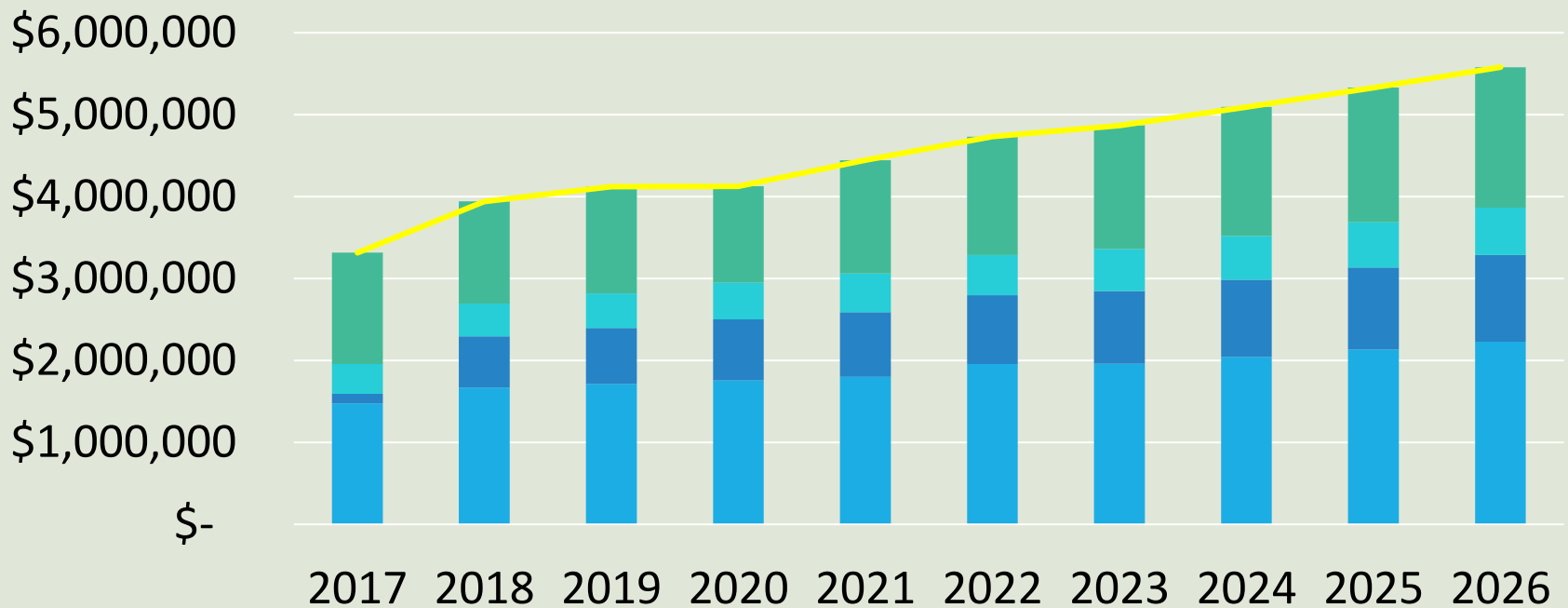
Draft Long Range Financial Forecast

Revenue Forecast



Draft Long Range Financial Forecast

Expense Forecast



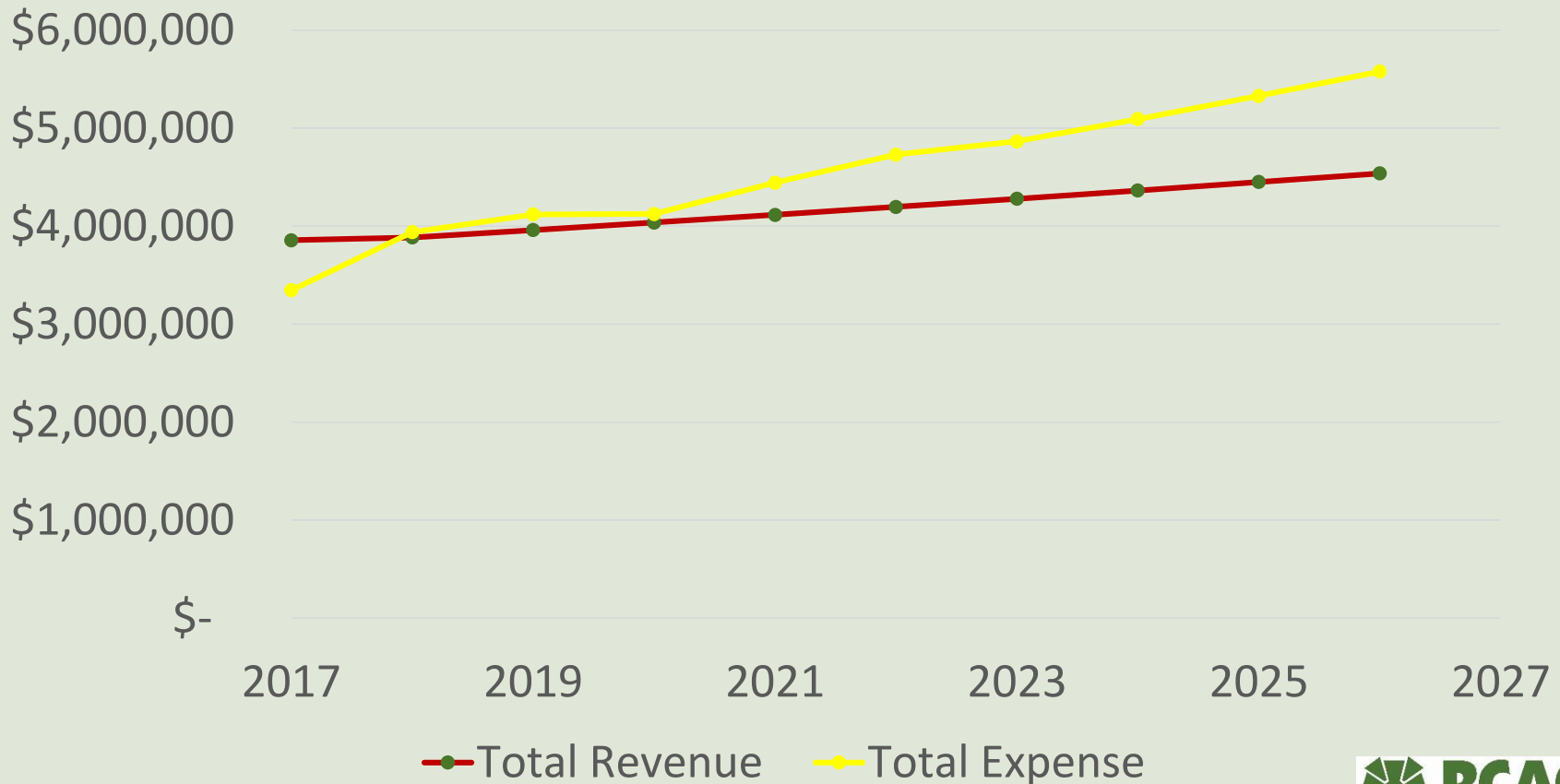
Salaries & Payroll Tax
Employee Insurance

CalPERS
Service and Supplies



Draft Long Range Financial Forecast

Revenue vs. Expense Forecast



Draft Long Range Financial Forecast

- Observations
 - Total revenue has decreased since 2009
 - Non-operating revenue (property tax) is forecast to increase faster than operating revenue (rates)
 - CalPERS
 - Significant portion of annual expenses
 - Increases are expected to continue
 - Expenses are forecast to exceed revenue by \$55,000 in FY17/18 and \$328,000 in FY20/21

Draft Long Range Financial Forecast

- Current Reserves
 - Restricted - \$4.5M
 - Unrestricted, Designated - \$4.5M
 - Unrestricted, Undesignated - \$1.0M

Treated vs Irrigation Water

- Reasons for splitting
 - Different assets
 - Different cost structure
 - Different rates
- Split
 - Assets
 - Budget
 - Reserves

Treated Water Rate Study

- Current Rate Structure
 - Adopted on September 9, 2008
 - Last rate increase on July 1, 2011

Treated Water Rate Study

- Current Rate Structure
 - Bi-monthly charge for consumption up to 2,000 cubic feet
 - Residential = \$ 47.14
 - Commercial = \$ 50.32
 - Bi-monthly Supplemental Charge for treatment plant construction loan:
 - \$30.16

Treated Water Rate Study

- Current Rate Structure
 - Consumption exceeding 2,000 cubic feet during a billing period:

2,001 – 4,000 cf	\$0.0138 per cf
4,001 – 6,000 cf	\$0.0165 per cf
6,001 – 8,000 cf	\$0.0193 per cf
8,001+ cf	\$0.0221 per cf

Treated Water Rate Study

- Methodology
 - Calculate operating costs
 - Calculate capital replacement costs
 - Establish reserve targets
 - Allocate costs into fixed and variable
 - Distribute fixed costs by meter size
 - Calculate usage rates based on usage

Treated Water Rate Study

- Operating Costs
 - Recent budgets and projections
 - \$2.7M per year excluding depreciation, and capital improvements – treated water only

Treated Water Rate Study

- Capital Needs
 - Recapitalization Cost
 - List all assets and infrastructure
 - Assign year constructed, constructed value, life span, remaining life, and estimated future replacement cost
 - Estimated future cost \$116M
 - Assume amounts funded with grants, loans, and cash

Treated Water Rate Study

- Capital Needs
 - Reserve Amounts
 - Based on cost of projects funded with cash
 - Minimum recommendation is 20% cash

Treated Water Rate Study

- **Functional Cost Allocation**
 - Expenses allocated to fixed and variable
 - Base rate based on fixed expenses
 - Usage rate based on variable expenses
 - 74% fixed costs
 - 26% variable

Irrigation Water Rate Study

- Current Rates
 - Bi-monthly in advance
 - May 1 through September 1

0.5 miner's inch	\$94.00
1+ miner's inch	\$145.48 per miner's inch

Irrigation Water Rate Study

- Methodology
 - Calculate operating costs
 - Calculate capital replacement costs
 - Establish reserve targets
 - Distribute costs by service size/flow rate

Irrigation Water Rate Study

- Capital Needs
 - Recapitalization Cost
 - List all assets and infrastructure
 - Assign year constructed, constructed value, life span, remaining life, and estimated future replacement cost
 - Estimated future cost \$40M
 - Assume amounts funded with grants, loans, and cash

Irrigation Water Rate Study

- Capital Needs
 - Reserve Amounts
 - Based on cost of projects funded with cash
 - Minimum recommendation is 20% cash

Summary/Recommendations

- Subsidies
- Recapitalization Costs/Reserve Needs
- Property Tax Allocation
- Functional Cost Allocation

Tough decisions must be made



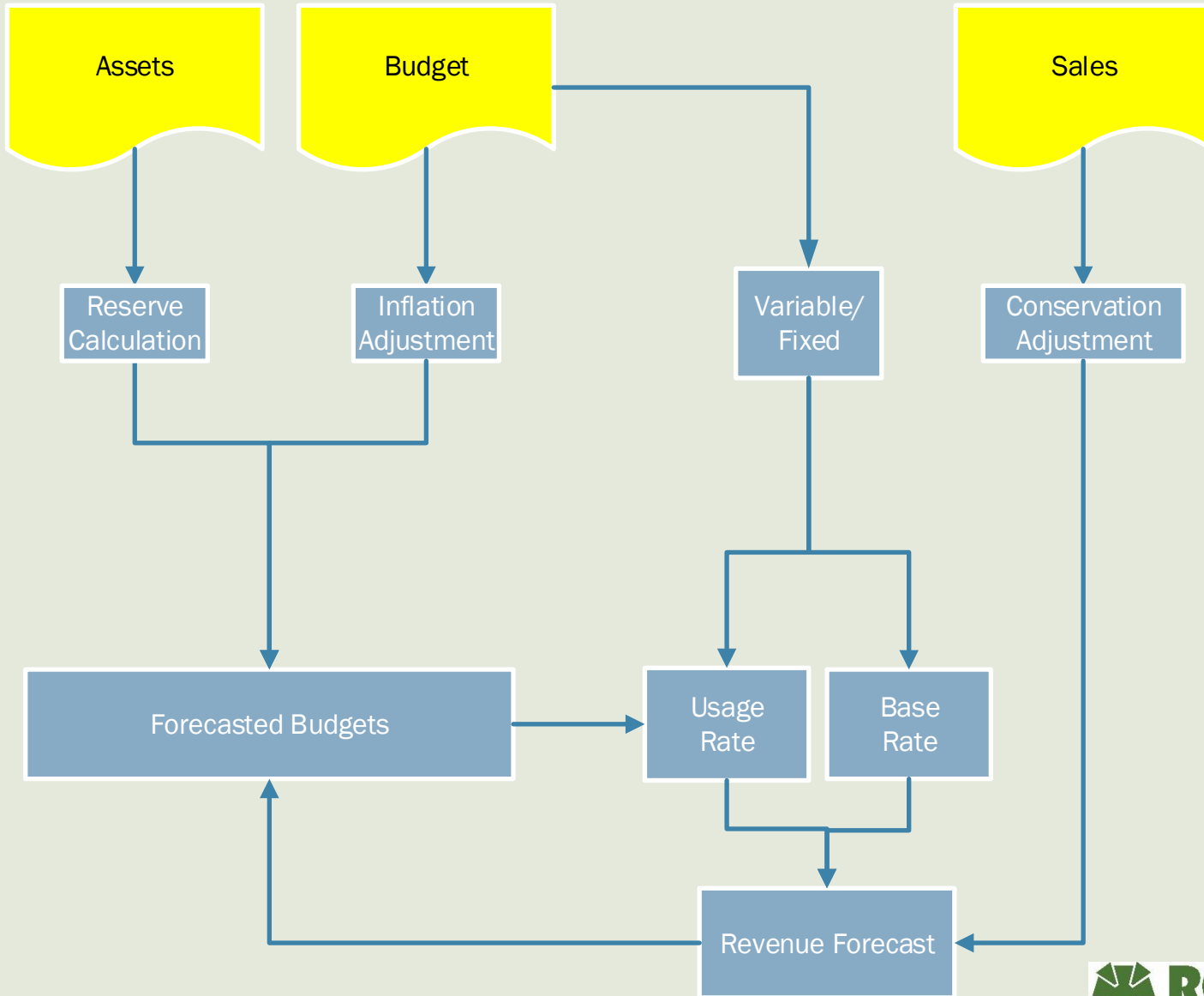
Consequences of not raising rates enough

1. Reduction in reserves
2. Inability to pay bills
3. Inability to maintain system
4. Extra pressure from state to consolidate with neighboring systems
5. Take-over by the state=Receivership

Guiding Principles of this Rate Study

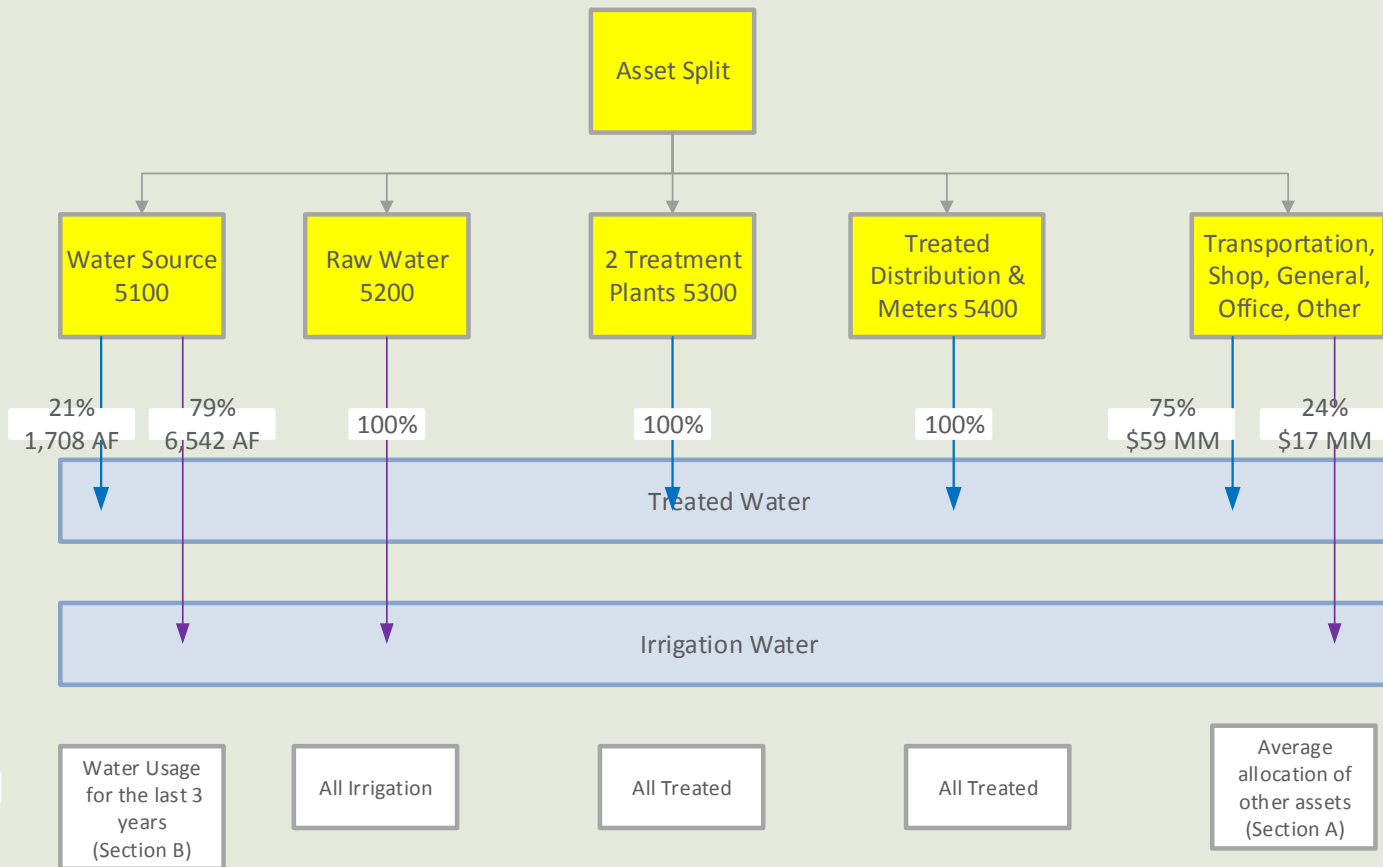
- Sustainable
- Fair
- Conservation
- Justifiable

Current



New

Asset Split



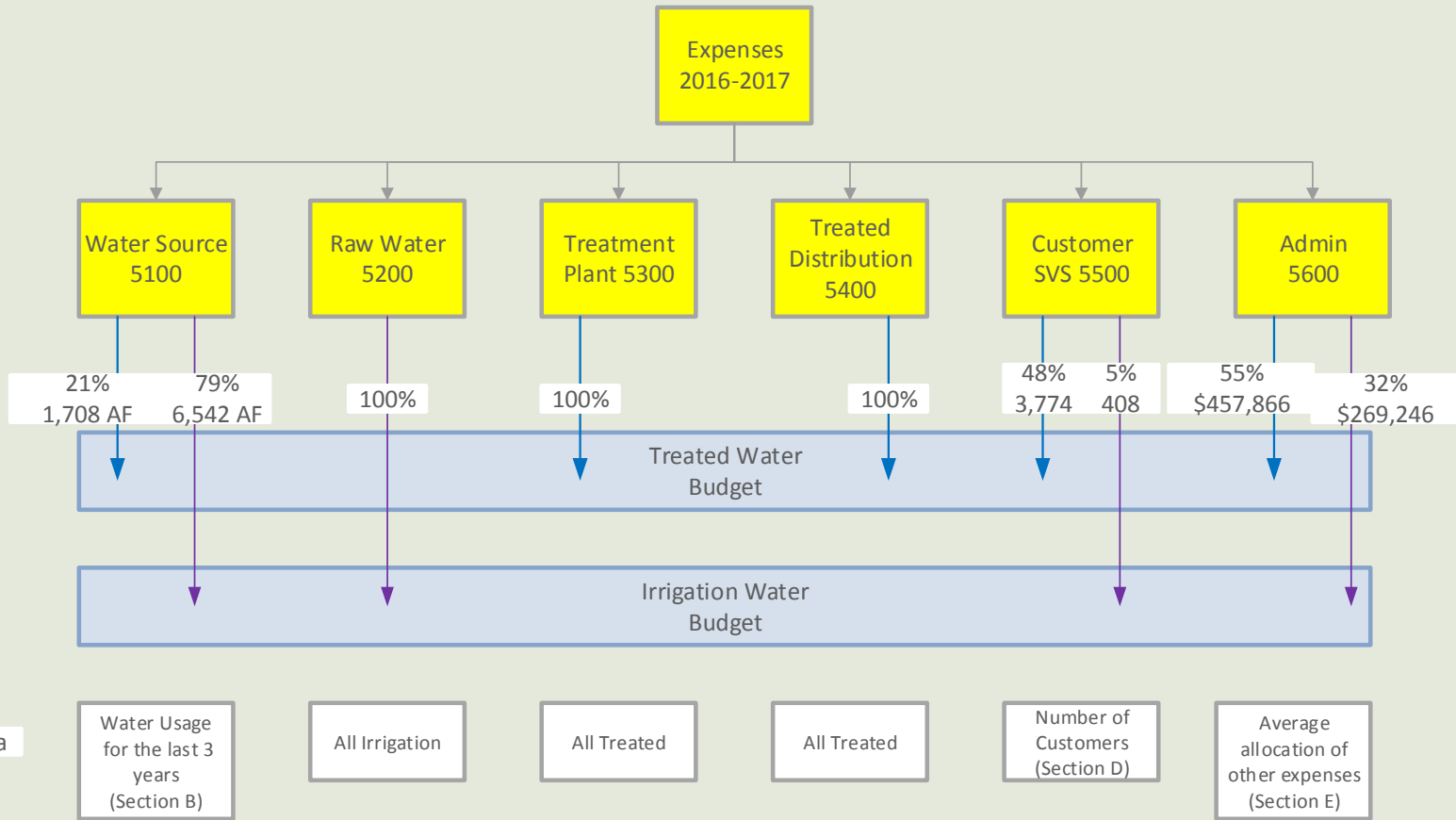
Reserve Calculation (Treated Water)

Component	Year Acquired	Unit Cost (Historic, Current or Future)	Normal Estimated Life	Current Age	Estimated Current Cost	Planned Remaining Life	Estimated Remaining Life	Estimated Future Cost	Fund with Cash	Fund with Grant	Fund with Loan	Existing Reserves	Annual Reserve Required
Pilot Hill North Pipeline	1991	\$514,837	60	26	\$861,537	34	35	\$1,722,978	20%		80%	\$47,887	\$6,903
Pipe & Related Additions 91-92	1992	\$18,445	30	25	\$30,261	5	6	\$34,078	20%		80%	\$1,682	\$828
Highway 49 Crossing	1992	\$1,255	30	25	\$2,059	5	6	\$2,319	100%		0%	\$572	\$282
Pipeline Extensions 91-92	1992	\$31,666	30	25	\$51,952	5	6	\$58,506	20%		80%	\$2,888	\$1,421
Pilot Hill North Pipeline Addition	1992	\$26,028	60	25	\$42,702	35	36	\$87,106	20%		80%	\$2,374	\$338
Kelsey & Pilot Hill Storage Tanks	1992	\$474,340	60	25	\$778,205	35	36	\$1,587,450	20%		80%	\$43,255	\$6,169
Kelsey South Pipeline	1992	\$594,471	60	25	\$975,292	35	36	\$1,989,486	20%		80%	\$54,210	\$7,731
Pilot Hill South Pipeline	1992	\$385,410	60	25	\$632,306	35	36	\$1,289,832	20%		80%	\$35,146	\$5,012
Kelsey North Pipeline	1992	\$824,623	60	25	\$1,352,882	35	36	\$2,759,726	20%		80%	\$75,198	\$10,724
Kelsey/Pilot Hill Tank Add. Phase 2	1992	\$308	60	25	\$506	35	36	\$1,032	100%		0%	\$141	\$20
Kelsey/Pilot Hill Phase 1 Additions	1992	\$95,621	60	25	\$156,876	35	36	\$320,010	20%		80%	\$8,720	\$1,244
Buffalo Hill Siphon	1993	\$364,867	60	24	\$586,866	36	37	\$1,221,084	20%		80%	\$32,620	\$4,605
Pipe & Related Additions 92-93	1993	\$9,193	30	24	\$14,787	6	7	\$16,985	20%		80%	\$822	\$354
Buffalo Hill-Final (see B.H. Siphon)	1993	\$19,737	59	24	\$31,745	35	36	\$64,757	20%		80%	\$1,765	\$252
Bayne Road Pipeline	1994	\$168,562	30	23	\$265,806	7	8	\$311,434	20%		80%	\$14,774	\$5,671
Pipe & Related Additions 93-94	1994	\$8,644	30	23	\$13,630	7	8	\$15,970	20%		80%	\$758	\$291
Hackomiller P/L Ext. 186	1994	\$9,185	30	23	\$14,483	7	8	\$16,970	20%		80%	\$805	\$309
Garden Valley/Greenwood P/L	1994	\$295,070	60	23	\$465,296	37	38	\$987,496	20%		80%	\$25,863	\$3,617
Bayne Road Pipeline - Final	1994	\$1,000	30	23	\$1,537	7	8	\$1,818	100%		0%	\$100	\$100

Qty	Component	Year Acquired	Unit Cost (Historic, Current or Future)	Normal Estimated Life	Current Age	Estimated Current Cost	Planned Remaining Life	Estimated Remaining Life	Estimated Future Cost	Fund with Cash	Fund with Grant	Fund with Loan	Existing Reserves	Annual Reserve Required
50567	12" Main	1987	\$55	40	30	\$4,996,370	10	10	\$6,030,547	20%	80%	0%	\$277,716	\$88,658
282	15" Main	1987	\$65	40	30	\$33,436	10	10	\$40,759	20%	80%	0%	\$1,859	\$593
													\$0	
36	2" Laterals	1987	\$17	45	30	\$1,138	15	15	\$1,532	20%	80%	0%	\$63	\$15
20727	4" Laterals	1987	\$19	45	30	\$716,790	15	15	\$964,705	20%	80%	0%	\$39,842	\$3,330
1433	6" Laterals	1987	\$22	45	30	\$56,636	15	15	\$76,225	20%	80%	0%	\$3,148	\$737
77	10" Laterals	1987	\$44	45	30	\$6,087	15	15	\$8,192	20%	80%	0%	\$338	\$79
94135	1" Service Lines	1987	\$15	45	30	\$2,511,321	15	15	\$3,379,908	20%	80%	0%	\$139,588	\$32,689
													\$0	
													\$0	
	Subtotal Existing Capital Assets					\$82,196,779			\$116,170,406	21%	42%	37%	\$4,781,695	\$1,480,009

Annual Reserve Requirement: \$1,480,009

Split of Expenses



Budget (Treated Water)

EXPENSES AND SOURCES OF FUNDS	2017	2018	2019	2020	2021
OPERATIONS & MAINTENANCE EXPENSES					
Labor Related	1,641,518.00	1,674,348.36	1,707,835.33	1,741,992.03	1,776,831.87
Materials & Supplies	150,650.00	153,663.00	156,736.26	159,870.99	163,068.40
Rentals	21,200.00	21,624.00	22,056.48	22,497.61	22,947.56
Staff Development	10,500.00	10,710.00	10,924.20	11,142.68	11,365.54
Travel-Conference	15,000.00	15,300.00	15,606.00	15,918.12	16,236.48
Utilities	178,300.00	181,866.00	185,503.32	189,213.39	192,997.65
Vehicle Maintenance	31,000.00	31,620.00	32,252.40	32,897.45	33,555.40
Vehicle Operations	25,200.00	25,704.00	26,218.08	26,742.44	27,277.29
Govt Reg/Lab Fees	87,900.00	89,658.00	91,451.16	93,280.18	95,145.79
Engineering Studies	35,000.00	35,700.00	36,414.00	37,142.28	37,885.13
Retiree Health	132,000.00	134,640.00	137,332.80	140,079.46	142,881.05
		0.00	0.00	0.00	0.00
Total Operation and Maintenance Expenses:	2,328,268.00	2,374,833.36	2,422,330.03	2,470,776.63	2,520,192.16
GENERAL & ADMINISTRATIVE EXPENSES					
-		0.00	0.00	0.00	0.00
Debt Reserve	5,011.60	5,011.60	5,011.60	5,011.60	5,011.60
Operating Reserve	0.00	0.00	0.00	0.00	0.00
Emergency Reserve	0.00	0.00	0.00	0.00	0.00
Existing Capital Replacement Program	1,480,008.83	1,480,008.83	1,480,008.83	1,479,668.61	1,479,668.61
Funded Project Replacement Program	0.00	0.00	0.00	0.00	0.00
Future Capital Improvement Program	0.00	0.00	0.00	0.00	0.00
Debt Payments (Principle + Interest)	120,078.26	120,078.26	116,584.00	116,584.00	116,584.00
Consultants	76,000.00	77,520.00	79,070.40	80,651.81	82,264.84
Other General & Administrative	310,000.00	316,200.00	322,524.00	328,974.48	335,553.97
Total General and Administrative Expenses:	1,991,098.69	1,998,818.69	2,003,198.83	2,010,890.49	2,019,083.02
TOTAL EXPENSES	4,319,366.69	4,373,652.05	4,425,528.86	4,481,667.12	4,539,275.18

Fixed – Variable Expense Split

	2017	% Fixed	\$ Fixed	\$ Variable
OPERATIONS & MAINTENANCE EXPENSES				
Labor Related	\$1,641,518.00	80%	\$1,313,214	\$328,304
Materials & Supplies	\$150,650.00	50%	\$75,325	\$75,325
Rentals	\$21,200.00	50%	\$10,600	\$10,600
Staff Development	\$10,500.00	100%	\$10,500	\$0
Travel-Conference	\$15,000.00	100%	\$15,000	\$0
Utilities	\$178,300.00	5%	\$8,915	\$169,385
Vehicle Maintenance	\$31,000.00	50%	\$15,500	\$15,500
Vehicle Operations	\$25,200.00	50%	\$12,600	\$12,600
Govt Reg/Lab Fees	\$87,900.00	100%	\$87,900	\$0
Engineering Studies	\$35,000.00		\$0	\$35,000
Retiree Health	\$132,000.00	80%	\$105,600	\$26,400
0	\$0.00		\$0	\$0
Total Operation and Maintenance Expenses:	\$2,328,268.00		\$1,655,154	\$673,114
GENERAL & ADMINISTRATIVE EXPENSES				
-	\$0.00		\$0	\$0
Debt Reserve	\$5,011.60	100%	\$5,012	\$0
Operating Reserve	\$0.00	100%	\$0	\$0
Emergency Reserve	\$0.00	100%	\$0	\$0
Existing Capital Replacement Program	\$1,480,008.83	100%	\$1,480,009	\$0
Funded Project Replacement Program	\$0.00	100%	\$0	\$0
Future Capital Improvement Program	\$0.00	100%	\$0	\$0
Debt Payments (Principle + Interest)	\$120,078.26	100%	\$120,078	\$0
Consultants	\$76,000.00	90%	\$68,400	\$7,600
Other General & Administrative	\$310,000.00	90%	\$279,000	\$31,000
Total General and Administrative Expenses:	\$1,991,098.69		\$1,952,498.69	\$38,600.00
Total All Expenses	\$4,319,366.69		\$3,607,653.09	\$711,713.60
Fixed-Variable as % of all Expenses			83.52%	16.48%

Reserve Calculation (Irrigation Water)

Component	Year Acquired	Unit Cost (Historic, Current or Future)	Cost Type (H, C, F)	Estimated Historic Cost	Normal Estimated Life	Current Age	Estimated Current Cost	Planned Remaining Life	Estimated Remaining Life	Estimated Future Cost	Fund with Cash	Fund with Grant	Fund with Loan	Existing Reserves	Annual Reserve Required
Buckeye Conduit	1955	\$414,636	H	\$414,636	100	62	\$1,415,600	38	39	\$3,064,412	20%		80%	\$11,053	\$12,643
Wagner Reservoir	1969	\$26,598	H	\$26,598	40	48	\$68,812	-8	10	\$83,881	20%		80%	\$537	\$1,550
Wagner Reservoir Addition	1970	\$1,830	H	\$1,830	40	47	\$4,642	-7	5	\$5,125	100%		0%	\$181	\$968
Clark Hill Project	1963	\$9,359	H	\$9,359	40	54	\$27,266	-14	5	\$30,104	20%		80%	\$213	\$1,138
Kelsey Ditch	1963	\$2,671	H	\$2,671	30	54	\$7,781	-24	10	\$9,485	100%		0%	\$304	\$876
Garden Valley Pipeline	1965	\$28,587	H	\$28,587	40	52	\$80,054	-12	10	\$97,585	20%		80%	\$625	\$1,803
Kelsey Ditch	1965	\$4,239	H	\$4,239	30	52	\$11,870	-22	5	\$13,106	20%		80%	\$93	\$495
Buckeye-Schroeder Pipeline	1967	\$780	H	\$780	30	50	\$2,098	-20	5	\$2,317	100%		0%	\$82	\$438
Garden Valley - Spurgin	1967	\$3,902	H	\$3,902	30	50	\$10,503	-20	5	\$11,596	20%		80%	\$82	\$438
Hennes Reservoir Improvements	1969	\$799	H	\$799	10	48	\$2,066	-38	5	\$2,281	100%		0%	\$81	\$431
Salgado Siphone	1972	\$25,197	H	\$25,197	20	45	\$61,427	-25	10	\$74,879	20%		80%	\$480	\$1,383
Kaiser Pipe & Kelsey Flume	1973	\$49,037	H	\$49,037	30	44	\$117,200	-14	10	\$142,866	20%		80%	\$915	\$2,640
Cunningham Reservoir	1973	\$3,244	H	\$3,244	30	44	\$7,753	-14	10	\$9,451	100%		0%	\$303	\$873
Frampton Extension	1978	\$2,880	H	\$2,880	30	39	\$6,234	-9	5	\$6,882	100%		0%	\$243	\$1,301
R & M Roadways	1979	\$905	H	\$905	30	38	\$1,920	-8	5	\$2,120	100%		0%	\$75	\$401
PIL Extension	1980	\$2,400	H	\$2,400	30	37	\$4,994	-7	5	\$5,514	100%		0%	\$195	\$1,042
Shoemaker Siphon	1980	\$37,940	H	\$37,940	30	37	\$78,941	-7	10	\$96,229	20%		80%	\$616	\$1,778
Lake Walton Sediment Removal	1980	\$20,839	H	\$20,839	30	37	\$43,359	-7	5	\$47,872	20%		80%	\$339	\$1,809
Ditch Improvements 80-81	1981	\$28,381	H	\$28,381	30	36	\$57,694	-6	5	\$63,919	20%		80%	\$452	\$2,416
Ditch Improvements 81-82	1982	\$5,667	H	\$5,667	30	35	\$11,334	-5	5	\$12,513	20%		80%	\$88	\$473
Ditch Improvements 82-83	1982	\$13,835	H	\$13,835	30	35	\$27,669	-5	5	\$30,549	20%		80%	\$216	\$1,155
Ditch Improvements 83-84	1984	\$5,202	H	\$5,202	30	33	\$9,999	-3	5	\$11,040	20%		80%	\$78	\$417
Ditch Improvements 84-85	1985	\$21,640	H	\$21,640	30	32	\$40,782	-2	5	\$45,027	20%		80%	\$318	\$1,702
Ditch Improvements 86-87	1985	\$11,481	H	\$11,481	30	32	\$21,637	-2	5	\$23,889	20%		80%	\$169	\$903
Flood '86 Repair Item #6	1986	\$1,926	H	\$1,926	30	31	\$3,559	-1	5	\$3,929	100%		0%	\$139	\$742

Budget (Irrigation Water)

EXPENSES AND SOURCES OF FUNDS	2017	2018	2019	2020	2021
OPERATIONS & MAINTENANCE EXPENSES					
Labor Related	564,657.00	575,950.14	587,469.14	599,218.53	611,202.90
Materials & Supplies	20,000.00	20,400.00	20,808.00	21,224.16	21,648.64
Rentals	5,000.00	5,100.00	5,202.00	5,306.04	5,412.16
Staff Development	0.00	0.00	0.00	0.00	0.00
Travel-Conference	0.00	0.00	0.00	0.00	0.00
Utilities	1,000.00	1,020.00	1,040.40	1,061.21	1,082.43
Vehicle Maintenance	10,000.00	10,200.00	10,404.00	10,612.08	10,824.32
Vehicle Operations	12,000.00	12,240.00	12,484.80	12,734.50	12,989.19
Govt Reg/Lab Fees	1,000.00	1,020.00	1,040.40	1,061.21	1,082.43
		0.00	0.00	0.00	0.00
		0.00	0.00	0.00	0.00
		0.00	0.00	0.00	0.00
Total Operation and Maintenance Expenses:	613,657.00	625,930.14	638,448.74	651,217.72	664,242.07
GENERAL & ADMINISTRATIVE EXPENSES					
-		0.00	0.00	0.00	0.00
Debt Reserve	0.00	0.00	0.00	0.00	0.00
Operating Reserve	0.00	0.00	0.00	0.00	0.00
Emergency Reserve	0.00	0.00	0.00	0.00	0.00
Existing Capital Replacement Program	259,405.89	259,405.89	259,405.89	259,405.89	259,405.89
Funded Project Replacement Program	0.00	0.00	0.00	0.00	0.00
Future Capital Improvement Program	0.00	0.00	0.00	0.00	0.00
Debt Payments (Principle + Interest)	1,043.74	1,043.74	0.00	0.00	0.00
Consultants	12,000.00	12,240.00	12,484.80	12,734.50	12,989.19
Other General & Administrative	23,000.00	23,460.00	23,929.20	24,407.78	24,895.94
Total General and Administrative Expenses:	295,449.63	296,149.63	295,819.89	296,548.17	297,291.02
TOTAL EXPENSES	909,106.63	922,079.77	934,268.64	947,765.89	961,533.09

Summary/Recommendations

- Subsidies
- Recapitalization Costs/Reserve Needs
- Property Tax Allocation
- Functional Cost Allocation

Tough decisions must be made

