Exhibit # E-2
2 pages

SQUAW VALLEY PUBLIC SERVICE DISTRICT
BOARD OF DIRECTORS SPECIAL MEETING MINUTES #823
February 15, 2017

A. Call to Order, Roll Call and Pledge of Allegiance. Chairman Dale Cox called the meeting to order at 1:02 p.m.

Directors Present: Directors: Dale Cox, Carl Gustafson, Fred Illfed and Eric Poulsen. Director Bill Hudson arrived at 1:33 p.m.

Directors Absent: none

Staff Present: Mike Geary, General Manager; Fabienne Gueissaz, Office Supervisor; Pete Bansen, Fire Chief; Danielle Grindle, Finance & Administration Manager; Jessica Grunst, Account Clerk II & HR Specialist; Dave Hunt, District Engineer and Brandon Burks, Operations Superintendent.

Others Present: Brad Chisholm, Patty Guilford, Shawn Koorn, David Stepner and John Wilcox.

Chairman Cox asked David Stepner to lead the Pledge of Allegiance.

B. Public Comment.
Public Comment – none.

C. Old and New Business.

C-1 Water and Sewer Rates – Rate Study and Cost of Service Analysis.
Mr. Geary introduced and summarized the rate study (see attachment A).

Patty Gilford asked the price of the study; Mr. Geary stated that it cost the District a little over $50,000.

Mr. Hunt provided information on the Capital Replacement Plan (see Attachment A).

Mr. Stepner asked Mr. Hunt if the 100 year Capital Replacement Plan was calculated in the current dollar value or at a future dollar value. Mr. Hunt confirmed that it is at the current 2017 dollar value.

Chairman Cox asked Mr. Hunt how the District is notified when an asset needs to be replaced. Mr. Hunt said that the VUEWorks program schedules the replacement year and forecasted replacement costs of all buried water and sewer assets and that the Operations Department is also constantly reviewing and assessing the condition of the District's assets.

Mr. Geary introduced Shawn Koorn of HDR Engineering. Mr. Koorn provided a review and explanation of the rate study (see Attachment B). He emphasized that the numbers in the presentation are not final, and may change slightly in the future.

Chairman Cox had a question on the sewer rate structure for secondary units, and Mr. Koorn commented that research had not been done yet.

Mr. Stepner shared how the Squaw Valley Mutual came up with their current rate structure.

Chairman Cox commented that he thinks the District should look further into secondary units, in regards to parking and rates.

Director Poulsen commented that if sewer and water rates are planned to increase this year that the District should send out notification documents to customers sooner rather than later.

Director Ilfeld left the meeting at 4:00 p.m.

D. Adjourn.

Directors Hudson and Poulsen made a motion to adjourn at 4:31 p.m.; vote was unanimous.
Cox-yes
Gustafson-yes
Hudson-yes
Ilfeld-absent
Poulsen-yes

By, F. Gueissaz

Attachment A

Squaw Valley Public Service District

Rate Workshop

February 15, 2017

Rate Structure Policy Objectives

- Comply with case law and state law
- Maintain the fiscal health of the District
- Implement equity amongst customers
- Encourage water conservation

Five-Year Strategic Plan

- **Goal 4 – Finance. Maintain a well-planned, proactive financial condition that minimizes rate shocks and impacts on customers while meeting all service needs.**

  - **4.1.0 - Maintain adequate funding to meet long-term District obligations, including asset replacement, maintenance, expansion and employee benefits**

    - 4.1.1 - Continue Strong Reserve Funding of the Capital Replacement Programs by setting rates that include contributions to asset replacements.

    - 4.1.2 - Prepare Deferred Maintenance / Replacement Schedules including cost estimates for all District Facilities, Equipment and Fixed Assets and assign funding responsibilities to beneficiary service department by allocations developed from Work Order System.

    - 4.1.3 - Prepare **Capital Replacement Programs** for each service department (water, sewer, fire, administration, dumpster facility, parks and recreation) that include Needs Analyses, Budget Forecasts and Funding Plans. Clearly justify capital replacement contributions collected from User Fees. Incorporate in to an update of Master Plans for each service upon completion of improvements prompted by new development.

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Five-Year Strategic Plan

- **4.3.0 - Continue to review and update Water, Sewer, Fire, Garbage, Park/Public Recreation Facilities connection fees and user fees. Include capital replacement fees in user fees.**

❖ 4.3.1 - Utilize annual budget process to update User Fees to cover operating expenses. Use Capital Replacement Programs to determine asset replacement contributions to User Fees. Update Connection Fees. Utilize cost allocations for shared resources developed from Work Order System.

- **5.3.0 - Implement an effective GIS-based Work Order System and Asset Management System and improve it over time to improve governance and accountability**

❖ 5.3.2 - Utilize the Asset Management System to inform and improve the accuracy of the Capital Replacement Programs, rate setting and apportionment of costs and benefits. Provide long-term financial stability that avoids rate shocks and special assessments.

SQUAW VALLEY PUBLIC SERVICE DISTRICT

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History

- 1995 – Creation of Water and Sewer FARF's
- May 2004 – EES, Inc. – Technical Review of the District's Water Rate Designs
- June 2005 – ECO:LOGIC – Task 4 - Lifecycle Analysis Report - Water System
- October 2005 – HDR Engineering – Proposal to Review & Provide Recommendations for the District's Sewer and Water Asset Replacement Programs
- March 2006 – ECO:LOGIC – Water Asset Replacement Program Review & Recommendations
- March 2006 – ECO:LOGIC – Sewer Asset Replacement Program Review & Recommendations

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Why Fund the Asset Replacement Program?

- Develop funding to replace infrastructure as assets reach the end of their useful life
- Promote rate stability and avoid rate shock
- Avoid debt financing and paying interest
- Promote rate equity by spreading burden of replacement cost between existing customers and future customers.

Connection Fees vs. User Fees

- User Fees – for operating expenses; asset replacements.
  - Projects in Capital *Replacement* Plans (CRP's)

- Connection Fees – for system expansions; new assets; capacity increases.
  - Projects in Capital *Improvement* Plans (CIP's)

Capital Replacement Plan (CRP)

- Inventory of Assets
  - Age, Design Life, Original Cost
- Unit Cost Estimates for Maintenance and Replacement
- VueWorks Budget Forecast for GIS Assets
- Higher Cost Maintenance Activities for Facilities
- Replacement Cost for Facilities and Equipment
- *Develop 100-Year Capital Replacement Plan*

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Assets in the CRP

- Water & Sewer Infrastructure (e.g., buried assets)
  - VUEWorks & GIS – Asset Management
  - Sewer pipes, manholes, service laterals, cleanouts
  - Water pipes, valves, meters, service laterals, hydrants, tanks
- Equipment
  - Rolling Stock (Fleet and Equipment)
  - Small Tools and Equipment
- Facilities
  - Wells and Pump Stations
- Shared Facilities
  - 305 and 1810 Squaw Valley Road

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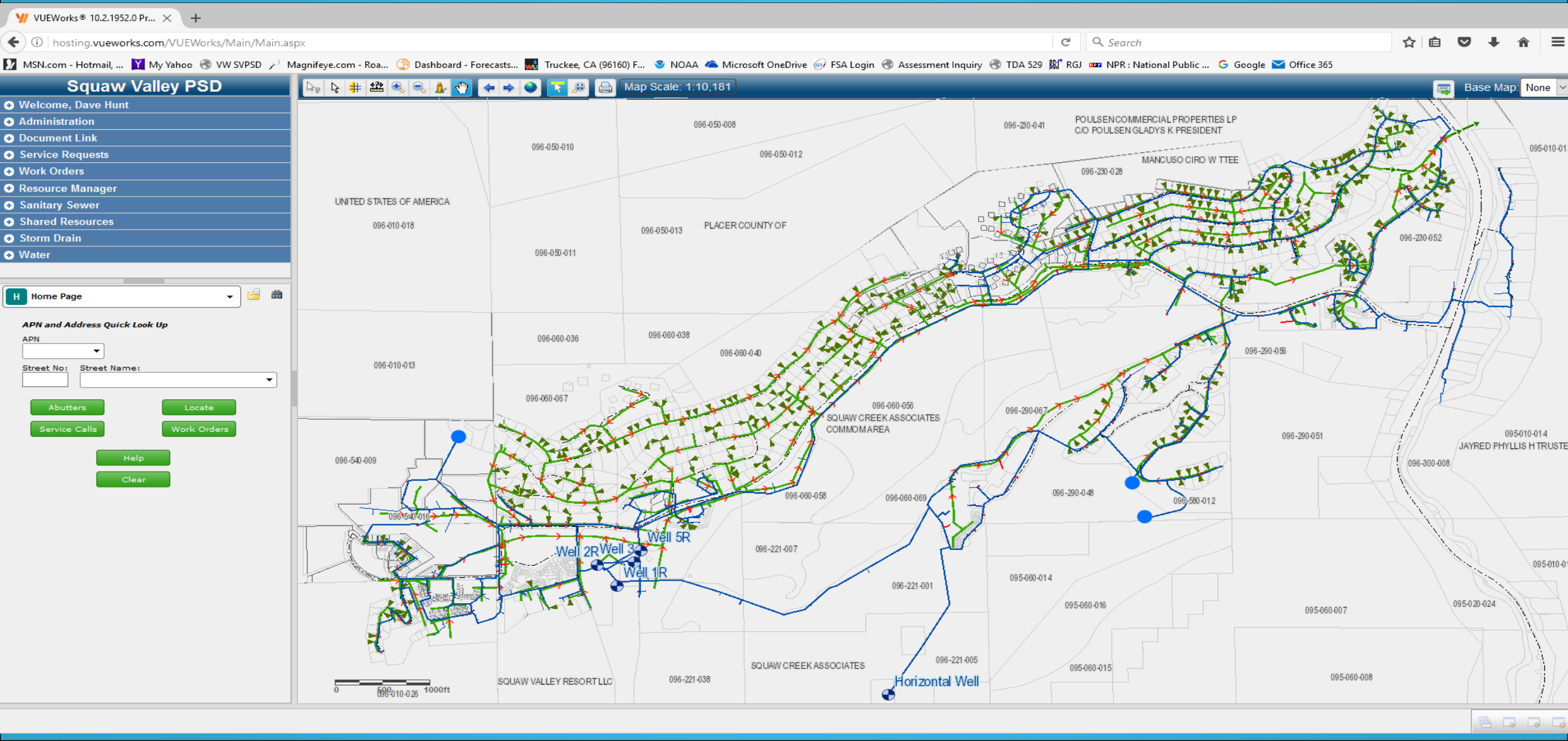
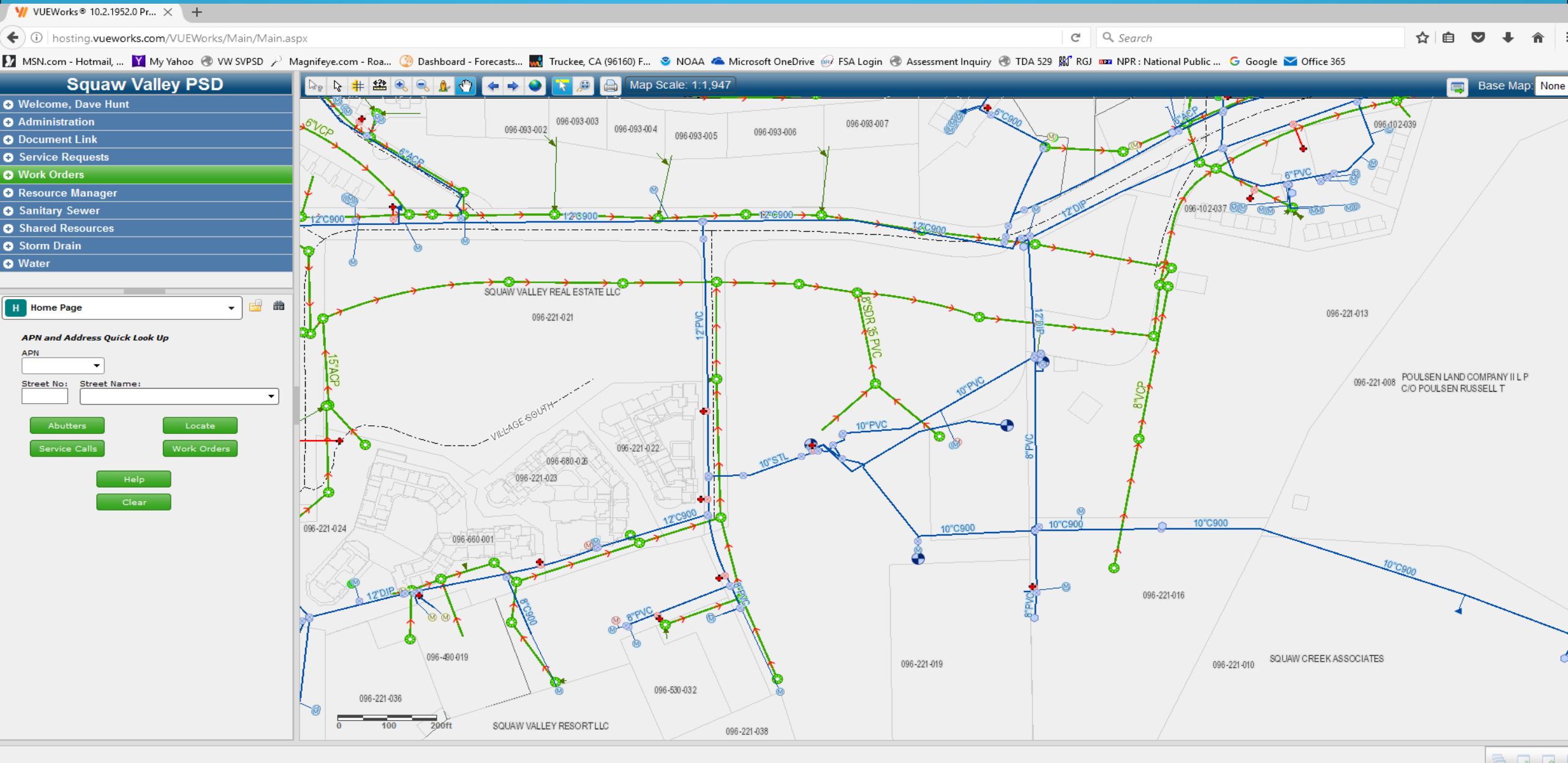
Water & Sewer Infrastructure



Water & Sewer Infrastructure



Unit Replacement Costs

Mains - On Road

Diameter (in.)	Replacement Pipe Type	Main Replacement $/ft (w/o AC)	Main Replacement AC Width (in.)	Main AC Patch $/sf	Main AC Patch $/ft main	Total Replacement $/ft	Total Replacement $/ft (adjusted for 25% Soft Costs)
4	C900 PVC	$76.00	22	$9.00	$16.50	$92.50	$115.63
6	C900 PVC	$83.00	24	$9.00	$18.00	$101.00	$126.25
8	C900 PVC	$90.00	26	$9.00	$19.50	$109.50	$136.88
10	C900 PVC	$97.00	28	$9.00	$21.00	$118.00	$147.50
12	C900 PVC	$104.00	30	$9.00	$22.50	$126.50	$158.13
8	Ductile Iron	$110.00	26	$9.00	$19.50	$129.50	$161.88
10	Ductile Iron	$120.00	28	$9.00	$21.00	$141.00	$176.25
12	Ductile Iron	$140.00	30	$9.00	$22.50	$162.50	$203.13

Mains - Off Road

Diameter (in.)	Replacement Pipe Type	Main Replacement $/ft (w/o AC)	Main Replacement AC Width (in.)	Main AC Patch $/sf	Main AC Patch $/ft main	Total Replacement $/ft	Total Replacement $/ft (adjusted for 25% Soft Costs)
4	C900 PVC	$76.00	NA	NA	NA	$76.00	$95.00
6	C900 PVC	$83.00	NA	NA	NA	$83.00	$103.75
8	C900 PVC	$90.00	NA	NA	NA	$90.00	$112.50
10	C900 PVC	$97.00	NA	NA	NA	$97.00	$121.25
12	C900 PVC	$104.00	NA	NA	NA	$104.00	$130.00
8	Ductile Iron	$110.00	NA	NA	NA	$110.00	$137.50
10	Ductile Iron	$120.00	NA	NA	NA	$120.00	$150.00
12	Ductile Iron	$140.00	NA	NA	NA	$140.00	$175.00

SQUAW VALLEY PUBLIC SERVICE DISTRICT

SQUAW VALLEY FIRE DEPARTMENT

Equipment

Fleet - Rolling Stock				
Equipment	**Purchase Year**	**Economic Life (Years)**	**Purchase Price**	**Cost 2016 $ (2.5% inflation)**
Ford F-250	1999	10	$ 30,432.00	$ 46,305.89
Ford F-350	2007	10	$ 34,393.00	$ 42,952.14
Dodge Ram 2500	2014	10	$ 30,749.00	$ 32,305.67
Ford F-150 Service Truck	2015	10	$ 26,913.00	$ 27,585.83
Ford Explorer PI	2016	10	$ 27,544.00	$ 27,544.00
Equipment - Rolling Stock				
JCB Backhoe	1994	25	$ 49,571.00	$ 85,340.02
JD Loader	1998	25	$ 45,663.00	$ 71,218.70
Ford Dump Truck	2007	20	$ 67,754.00	$ 84,615.46
SnoQuip Trackless MT Snow Blower	2014	15	$ 107,812.00	$ 113,269.98
VacCon	2009	20	$ 256,552.50	$ 304,960.30
Towable 6" Bypass Pump	2000	20	$ 21,099.00	$ 31,321.58
Prowler Easement Machine	2010	20	$ 34,382.37	$ 39,873.01
New Holland Snow Blower	2007	15	$ 63,138.00	$ 78,850.71
Small Tools and Equipment				
Air Compressor	1998	20	$ 12,633.00	$ 19,703.17
SCBA	1999	15	$ 6,220.00	$ 9,464.47
Miller Trailblazer Welder	2009	15	$ 6,126.00	$ 7,281.89
Ditch Bridge	2009	50	$ 8,533.00	$ 10,143.06
Cues Sewer Lateral Camera	2009	20	$ 12,948.00	$ 15,391.10
Hydraulic Trench Shoring	2012	15	$ 5,749.00	$ 6,345.82
Trimble GPS	2013	10	$ 9,230.00	$ 9,939.70
Confined Space Harnesses	2015	15	$ 6,145.00	$ 6,298.63

SQUAW VALLEY PUBLIC SERVICE DISTRICT

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Facilities

Well 2R Maintenance & Replacement Summary					
Maintenance Activity	**Install Year**	**Frequency (Years)**	**Cost (2011)**	**Cost (2016)**	**w/ Soft Costs (25%)**
Exterior - AC Repaving	2011	15	$17,000.00	$19,269.79	
Interior/Exterior - Painting	2011	15	$24,500.00	$27,771.17	
Exterior - Stucco/EIFS	2011	50	$16,000.00	$18,136.27	
Exterior - Replace Roof (Asphalt Shingles)	2011	25	$17,000.00	$19,269.79	
Interior/Exterior - Replace Doors/Windows	2011	25	$20,500.00	$23,237.10	
Interior/Exterior - Replace Overhead Door	2011	25	$6,000.00	$6,801.10	
Mechanical - HVAC	2011	20	$20,000.00	$22,670.34	
Mechanical - Replace Submersible Pump	2011	20	$60,000.00	$68,011.03	
Mechanical - Replace Fire Suppression System	2011	50	$12,000.00	$13,602.21	
Mechanical - Replace Chemical Feed Equipment	2011	25	$40,000.00	$45,340.68	
Interior - Seal Concrete Flooring	2011	20	$6,500.00	$7,367.86	
Electrical - Replace Light Fixtures and Controls	2011	20	$9,000.00	$10,201.65	
Electrical - Replace Primary Power	2011	50	$240,000.00	$272,044.10	
Electrical - Replace Instrumentation and Controls	2011	50	$50,000.00	$56,675.85	
Electrical - Replace Generator	??	35	$100,000.00	$113,351.71	
Redrill Well	2011	50	$200,000.00	$226,703.42	$283,379.27
Demo and Reconstruct Building (including Redrill Well)	2011	100	$1,300,000.00	$1,473,572.22	$1,841,965.27

SQUAW VALLEY PUBLIC SERVICE DISTRICT

SQUAW VALLEY FIRE DEPARTMENT

Shared Assets

305 SV Road Maintenance & Replacement Summary			
Maintenance Activity	**Install Year**	**Frequency (Years)**	**Cost**
Exterior - AC Slurry Seal	2014	4	$5,000.00
Exterior - AC Repaving	2005	16	$147,000.00
Exterior - Replace Concrete Curb and Gutter, Sidewalk	2005	30	$128,000.00
Exterior - Paint Exterior Wood Surfaces	2005	10	$18,000.00
Exterior - Replace Roof (Low Slope Roofing System)	2005	25	$270,000.00
Interior - Replace Appliances (Common Area Kitchen)	2005	15	$5,000.00
Interior - Replace Appliances (FD Kitchen)	2005	15	$10,000.00
interior - Replace Water Heater	2016	10	$11,000.00
Interior - Replace HVAC Equipment	2005	20	$258,000.00
Interior - Replace Elevator	2005	25	$50,000.00
Interior - Replace Windows	2005	25	$152,000.00
Interior - Replace Window Coverings	2005	20	$13,000.00
Interior - Kitchen Remodel (Common Area Kitchen)	2005	20	$15,000.00
Interior - Kitchen Remodel (FD Kitchen)	2005	20	$20,000.00
Interior - Replace Fire Suppression System	2005	50	$112,000.00
Interior - Replace Carpet	2005	15	$85,000.00
Interior - Replace Linoleum	2005	25	$30,000.00
Interior - Replace Tile	2005	25	$45,500.00
Interior - Paint Walls	2005	15	$65,000.00
Interior/Exterior - Replace Doors	2005	50	$132,500.00
Interior/Exterior - Replace Rollup Doors	2005	25	$83,000.00
Electrical - Replace Light Fixtures	2005	20	$75,000.00
Electrical - ReplacePhone System	2005	15	$55,000.00
Electrical - Replace IT Hardware	2005	8	$40,000.00
Demo and Reconstruct Building	2005	100	$13,800,000.00

SQUAW VALLEY PUBLIC SERVICE DISTRICT

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Capital Improvement Plan (CIP)

- Planned System Expansion and Capacity Projects (District-Funded)
  - Water
    - Redundant Water Supply Project
    - Zone 1A PRV Station
    - East Booster Pump Station Replacement
  - Sewer
    - Truckee River Siphon Replacement
    - Sewer Flow Meter
- Future System Expansion and Capacity Projects (Developer-Funded)
  - Sewer Interceptor Replacement
  - Sewer Flow Meters
  - RSC Phase 2 PRV Station and Well 18-3R
  - VSVSP New Water Sources and Tank

SQUAW VALLEY PUBLIC SERVICE DISTRICT

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Questions / Comments

Squaw Valley PSD

Attachment B

Water & Sewer Rate and Connection Fee Study

February 15, 2017

Presented by:

Shawn Koorn
Associate Vice President
HDR Engineering, Inc.

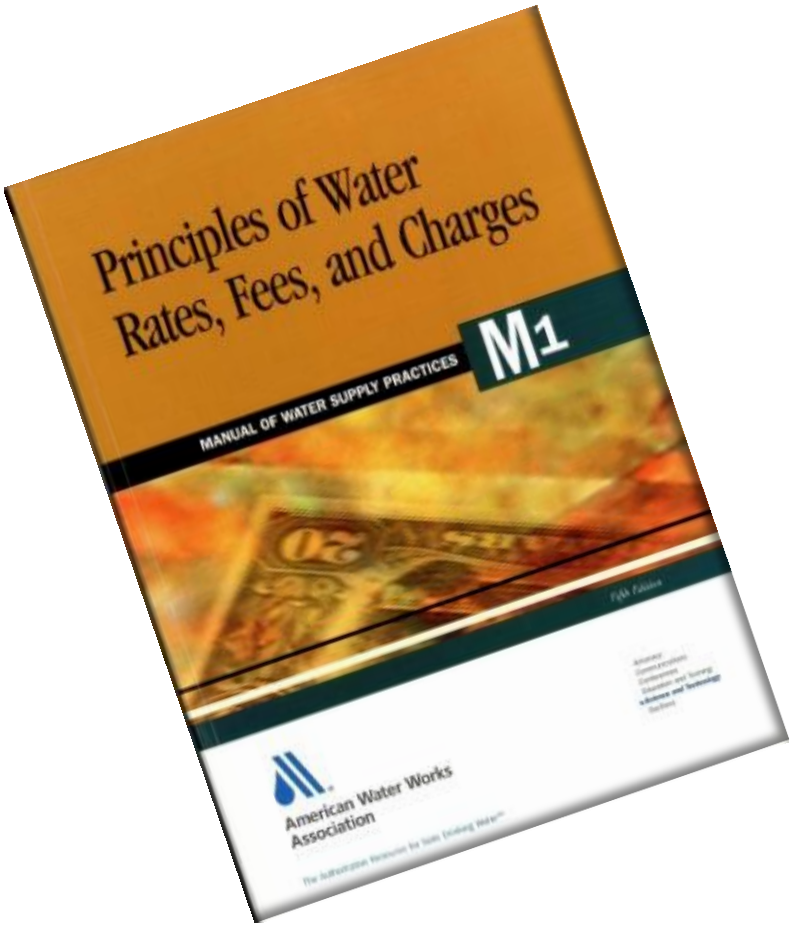
Purpose of the District's Study

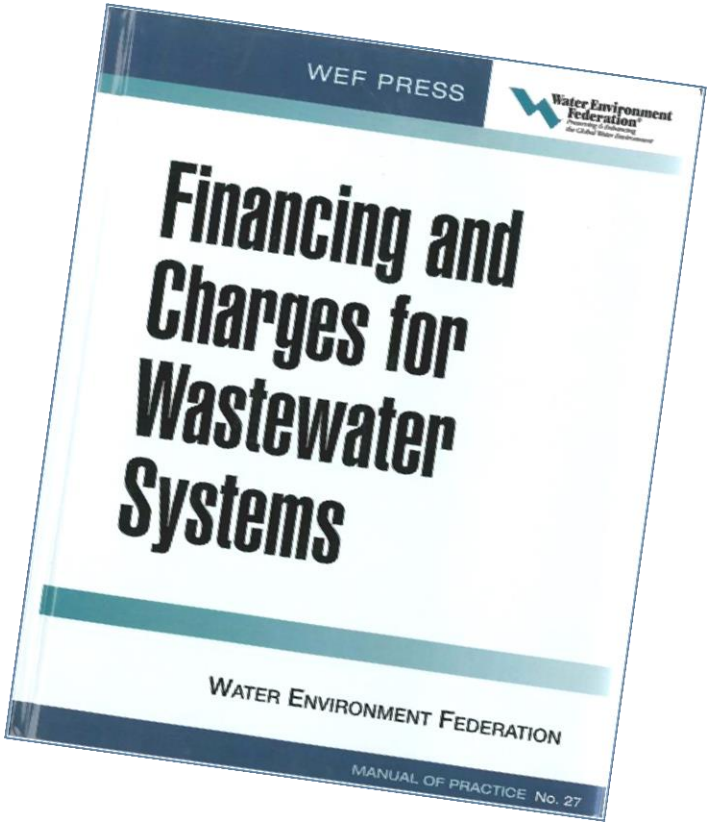
- Provide sufficient revenue to operate and maintain the water and sewer utilities
- Review rate structures based on industry standard approaches
- Develop equitable, cost-based, and legally defendable rates
- Review and develop equitable and cost-based connection fees

Overview of the Presentation

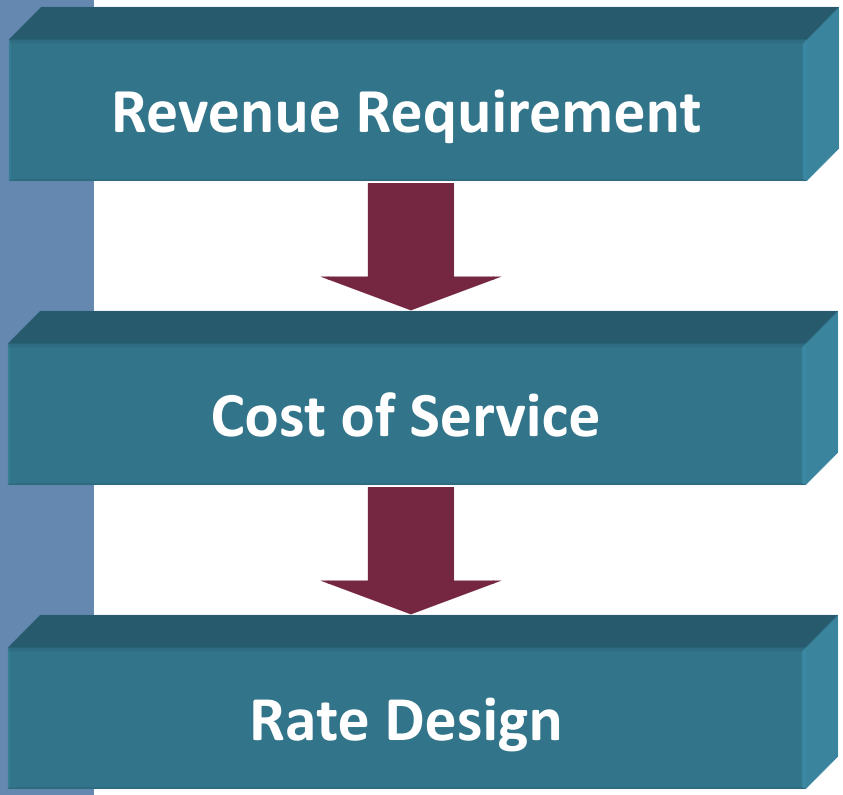
- Overview of rate and fee setting methodologies
- Review the preliminary results of the water & sewer
  - Revenue Requirements
  - Cost of service
  - Rate design
- Additional considerations
- Review the water and sewer connection fee preliminary results
- Next steps
- Questions and discussion

What is “Generally Accepted”?





Overview of the Rate Setting Process



Compares the revenues of the utility to its expenses to determine the overall level of rate adjustment

Equitably allocates the revenue requirements between the various customer classes of service

Design rates for each class of service to meet the revenue needs of the utility, along with any other rate design goals and objectives

Overview of the Revenue Requirement

Compares utility revenues to expenses	• Determines the level of rate adjustment necessary
Uses prudent financial planning criteria	• Adequate funding of renewal and replacements • Maintaining sufficient ending fund balances
Reviews a specific time period	• Typically a five to ten year period
Utility is analyzed on a "stand-alone basis"	• No transfer of funds from other District funds • Rates need to support operations
Utilizes the "cash basis" methodology	• Generally accepted method for municipal utilities

Details of the Cash Basis Methodology

(i + Term)

+ O&M Expenses
+ Taxes/Transfer Payments
+ Debt Service (P+I)
+ Capital Projects Funded from Rates
= Revenue Requirements
– Miscellaneous Revenues
= Balance Required from Rates

= Total Capital Improvement Projects
– Outside Funding Sources
  - ✓ Long-Term Debt
  - ✓ Connection Fees
  - ✓ Reserves
  - ✓ Grants
= Capital Projects Funded from Rates

=>Annual Depr. Exp.

Overview of the Cost of Service

What is cost of service?

- Analysis to equitably allocate the revenue requirement to the various customer classes of service

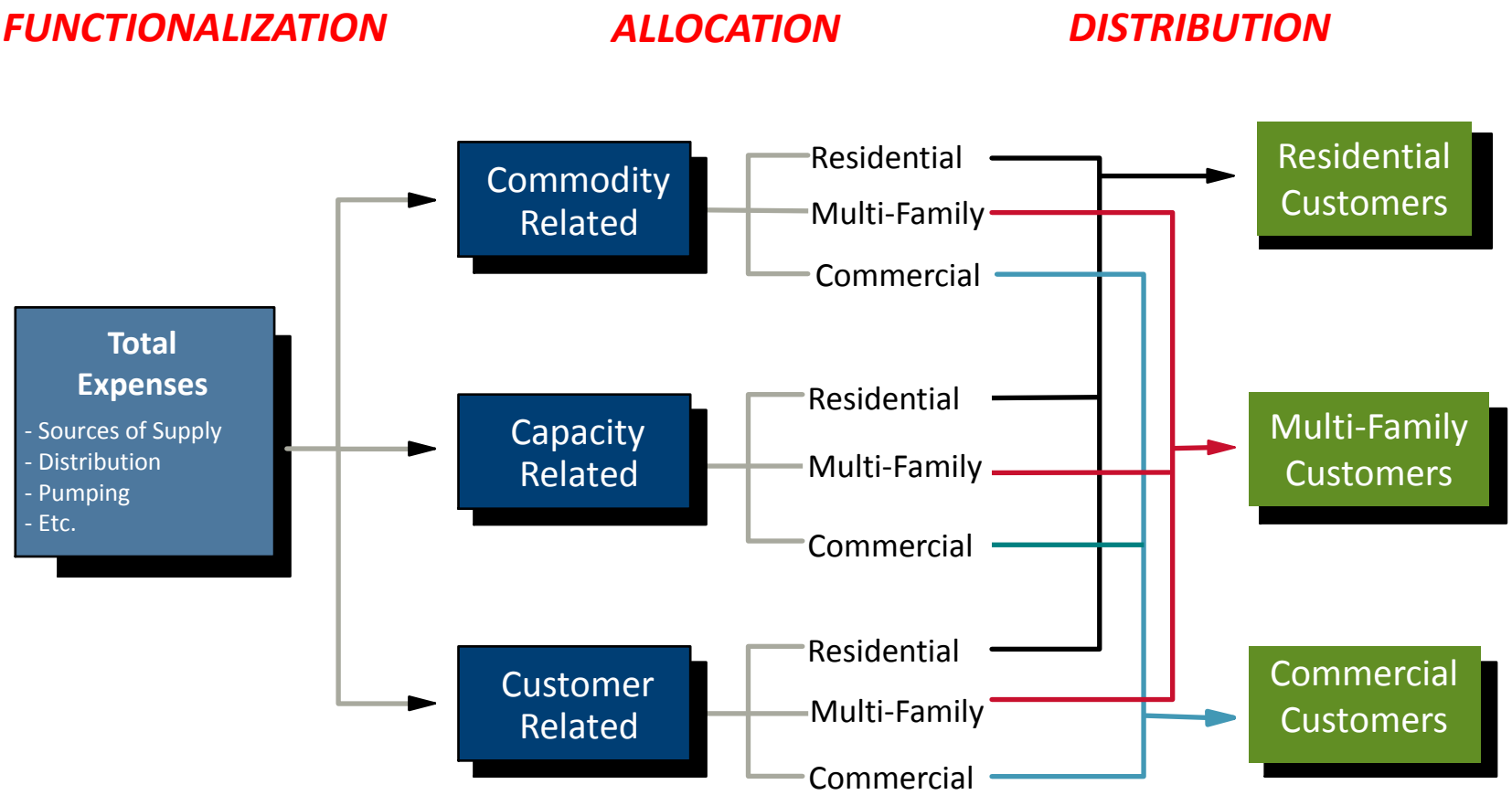
Why cost of service

- Generally accepted as “fair and equitable”
- Avoids subsidies
- Revenues track costs
- Meet the intent of Proposition 218

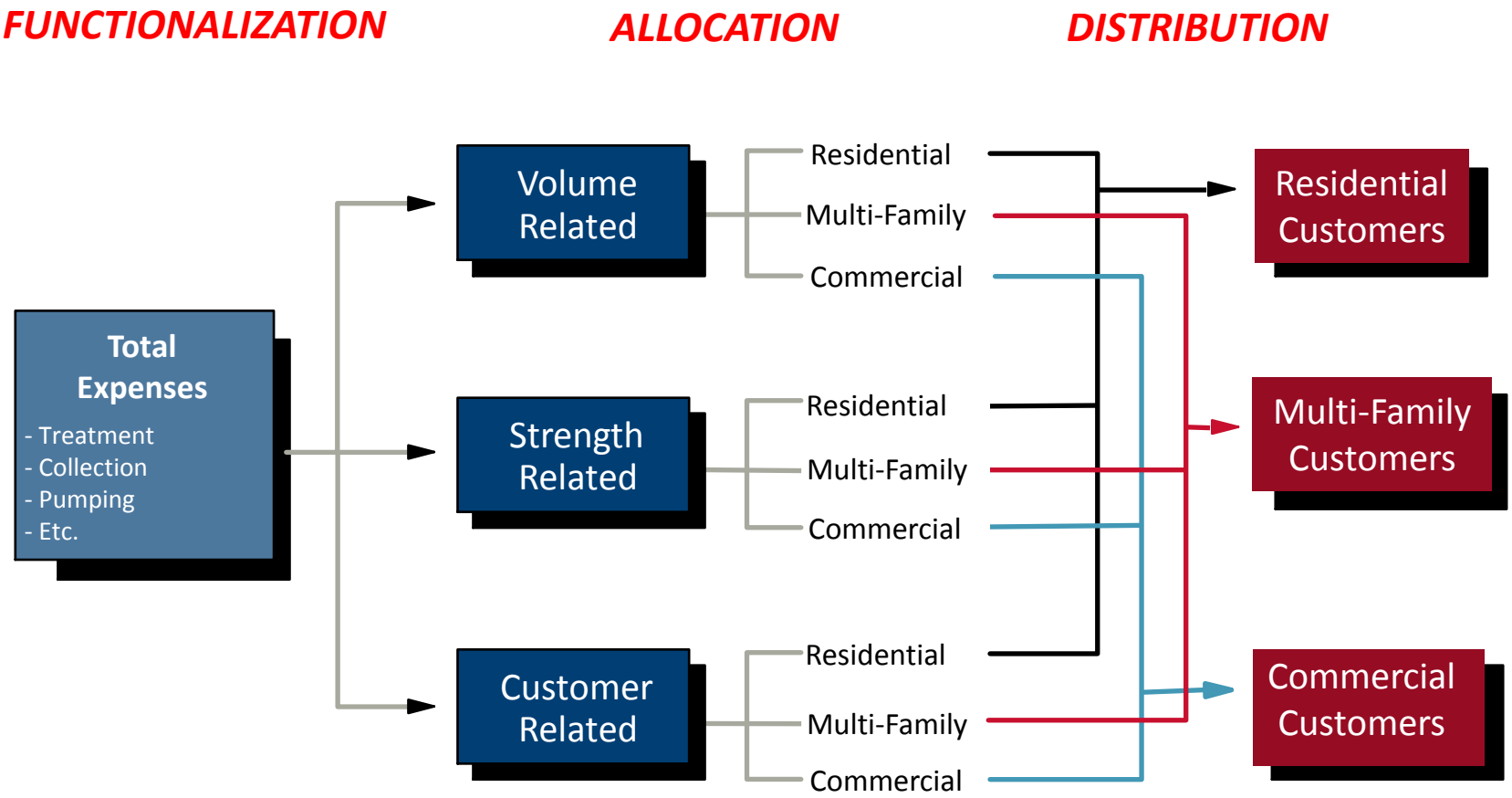
Objectives of Cost of Service

- Determine if subsidies exist
- Develop average unit costs

Water Utility Cost of Service Process



Sewer Utility Cost of Service Process

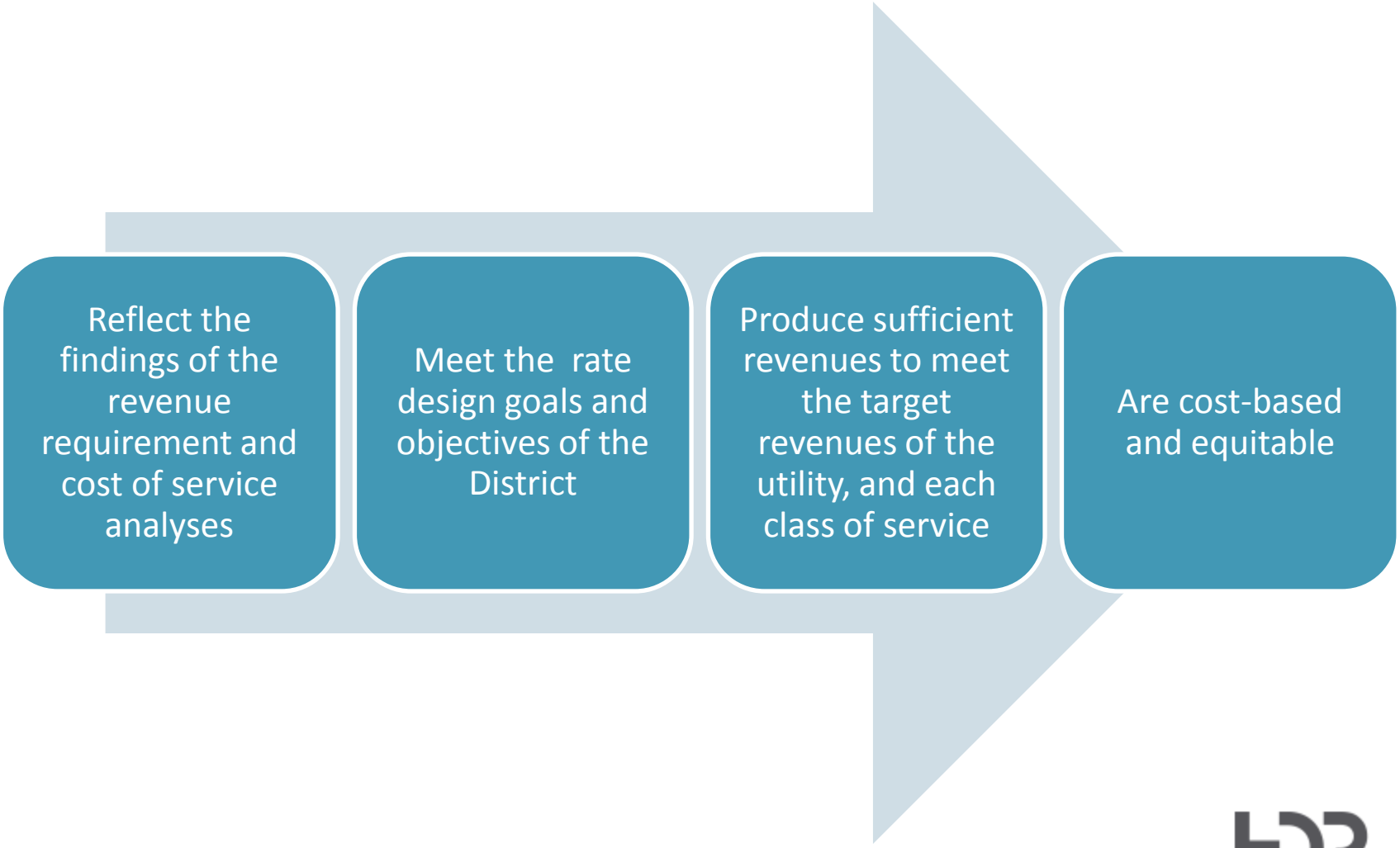


Typical Rate Setting Goals and Objectives

- Revenue sufficiency
- Revenue stability
- Easy to understand (customer)
- Easy to administer (District)
- Affordability
- Economic development
- Encourage efficient use of the resource
- Equitable & non-discriminating (cost-based)
- Legally defendable

Always trade-offs between goals and objectives

Overview of Rate Design



Water and Sewer Connection Fees

- **Purpose:** To bring equity to existing and new connections to the system and a method to fund infrastructure necessary to serve growth.
  - New connections pay a “buy-in” for existing assets and an “incremental” fee for future or new expansion related facilities
  - These are a one-time fee to pay into the system, a share equal to the value to the funds paid by others
  - New connections to pay an equitable share of expansion-related facilities needed to serve them

Water Rate Study

Water Revenue Requirement – Key Assumptions

- Starting point was the FY 2016 and FY 2017 Budgets
- Developed a 5-year financial plan
  - Rate revenues were calculated based on current rates, customer counts, consumption levels, and growth estimates
  - O&M was escalated annually by inflationary factors for each line item
- Capital funding plan was developed based on current capital improvement and replacement plans
  - Adequately fund renewal and replacement of the existing system

Water Capital Plan ($000s)

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Capital Improvement Projects (CIP)						
Redundant Water Supply Project	$0	$0	$0	$0	$0	$0
RSC Phase 2 PRV	0	0	54	0	0	0
East Booster Pump Station - Replcmnt	0	0	0	0	0	629
East Booster Pump Station - Expansion	0	0	0	0	0	310
Total CIP	**$0**	**$0**	**$54**	**$0**	**$0**	**$939**
Capital Replacement Projects (CRP)						
Services	$0	$0	$307	$0	$0	$0
Gate / BF Valves	0	0	31	0	0	0
ARV / BO Valves	0	7	0	0	0	0
Tanks	248	0	0	0	0	133
Meters	0	153	9	7	17	7
Facilities	9	0	0	0	0	0
Equipment	44	21	142	3	0	93
Shared Facilities - 305	0	2	0	81	71	2
Shared Facilities - 1810	6	24	47	0	9	39
Total CRP	**$307**	**$206**	**$536**	**$92**	**$97**	**$274**
To Water FARF	$43	$194	$0	$408	$453	$0
Future Unidentified Projects	0	0	0	0	0	0
To Capital Reserves	0	0	0	0	0	0
Total Capital Improvement Projects	**$350**	**$400**	**$590**	**$500**	**$550**	**$1,213**
Less: Outside Funding Sources						
Operating Reserve	$0	$0	$0	$0	$0	$0
Capital Reserve	0	0	54	0	0	310
Fixed Asset Replacement Fund	0	0	86	0	0	303
New SRF Loans	0	0	0	0	0	0
New Revenue Bonds	0	0	0	0	0	0
Total Outside Funding Sources	**$0**	**$0**	**$140**	**$0**	**$0**	**$613**
Rate Funded Capital (CRP)	**$350**	**$400**	**$450**	**$500**	**$550**	**$600**

Water Revenue Requirement – Preliminary Results ($000s)

	Budgeted	*Projected*				
	FY 2017	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**	**FY 2022**
Revenues						
Rate Revenues	$1,651	$1,659	$1,667	$1,675	$1,688	$1,701
Non-Operating Revenues	204	207	210	213	217	219
Total Revenues	**$1,855**	**$1,866**	**$1,877**	**$1,888**	**$1,905**	**$1,919**
Expenses						
Total Water Department Expenses	$647	$673	$701	$729	$759	$790
Total Administration Expenses	550	692	712	732	753	775
Net Annual Debt Service	128	102	102	102	102	102
Rate Funded Capital (CRP)	350	400	450	500	550	600
Transfer To / (From) Reserves	181	48	14	(20)	(29)	(38)
Total Expenses	**$1,855**	**$1,916**	**$1,979**	**$2,044**	**$2,135**	**$2,229**
Bal/(Def.) of Funds	**$0**	**($50)**	**($102)**	**($155)**	**($230)**	**($309)**
Rate Adj. as a % of Rate Rev.	*0.0%*	*3.0%*	*6.1%*	*9.3%*	*13.6%*	*18.2%*
Proposed Rate Adjustment	**0.0%**	**3.0%**	**3.0%**	**3.0%**	**4.0%**	**4.0%**
Add'l Revenue from Adj.	**$0**	**$50**	**$102**	**$155**	**$230**	**$309**
Total Bal/(Def.) of Funds	**$0**	**($0)**	**($0)**	**($0)**	**$0**	**$0**

Summary of the Preliminary Water Revenue Requirement

- Preliminary rate adjustments are required in order to adequately fund the water utility (FY 2018 – FY 2022)
  - Sufficiently fund O&M expenses
  - Provide adequate funds for the capital replacement and improvement projects
  - Maintain prudent ending reserve fund levels
- Driven by need to cash fund capital replacement projects
  - Assumes no long-term debt issues over the time period reviewed

Water Cost of Service – Key Assumptions

- Allocated the revenue requirement for FY 2018
- Classify costs into the appropriate component (commodity, capacity, customer, etc.)
- Allocate costs to the following customer class
  - Residential (SFR)
  - Condos/Apartments/Duplexes/Secondary Units (MFR)
  - Commercial
  - Irrigation
- Allocate costs to each tier
  - Requirement of Prop 218 and San Juan Capistrano decision

Water Cost of Service – Preliminary Results ($000s)

	Residential (SFR)				Multi-Family	Commercial	Irrigation
	Tier 1	*Tier 2*	*Tier 3*	*Tier 4*			
Rate Revenue	$174	$111	$34	$160	$743	$280	$158
Allocated Costs	186	118	36	171	827	194	178
Unit Costs							
Fixed ($/Acct.)	$950	$950	$950	$950	$475	$704	$704
Variable ($/1,000 gal)	$4.35	$7.99	$12.23	$26.06	$6.90	$5.30	$9.03

Summary of the Preliminary Water Cost of Service

- Results are used to develop the pricing for each class of service
- Cost differences between the various customer classes of service
- First cost of service in over 10 years
- Provides the cost basis for the fixed and consumption charges for each customer class of service
- Bill impacts will not be the same for all customers
  - Even within the same customer class

Water Rate Design – Key Assumptions

- Maintain current rate structure for most customer classes
  - Exception is multi-family customers
- Fixed meter charge
  - Single Family Residential based on account
    - Plus accessory dwelling unit if applicable
  - Multi-Family Residential based on living units
  - Commercial & Irrigation based on meter size
- Volumetric component on a per 1,000 gallon basis
  - Single Family Residential: 4-tiered rate
    - Basis of the tier pricing is the cost of service unit costs
  - Multi-Family Residential: Transition from 4-tiered rate to uniform rate
  - Commercial & Irrigation: Uniform rate

Preliminary Water Rate Alternative – Fixed Charges

	Present Rates	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
		3.0%	*3.0%*	*3.0%*	*4.0%*	*4.0%*
Fixed Charge $/Acct or LU/Year						
Residential (SFR)	$836.00	$915.00	$942.45	$970.75	$1,010.00	$1,050.50
Condo/Apt./Duplex/Second Unit (MFR)	$418.00	$503.25	$518.35	$533.90	$555.50	$577.80
Commercial / Irrigation						
5/8"	$285.00	$915.00	$942.45	$970.75	$1,010.00	$1,050.50
3/4"	311.00	998.47	1,028.43	1,059.31	1,102.14	1,146.34
1"	347.00	1,114.05	1,147.47	1,181.93	1,229.72	1,279.03
1 1/2"	697.00	2,237.74	2,304.87	2,374.08	2,470.07	2,569.12
2"	1,112.00	3,570.11	3,677.21	3,787.63	3,940.77	4,098.79
3"	2,088.00	6,703.58	6,904.69	7,112.02	7,399.58	7,696.29
4"	3,483.00	11,182.26	11,517.73	11,863.59	12,343.26	12,838.22
6"	6,967.00	22,367.74	23,038.77	23,730.58	24,690.07	25,680.12

Preliminary Water Rate Alternative Consumption Charges

	Present Rates	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
		3.0%	*3.0%*	*3.0%*	*4.0%*	*4.0%*
Consumption Charge $ / 1,000 gal						
Residential (SFR)						
0 - 120	$3.04	$4.35	$4.48	$4.62	$4.80	$5.00
120 - 220	10.38	7.99	8.23	8.49	8.82	9.18
220 - 280	15.13	12.23	12.60	12.99	13.50	14.06
280 +	31.74	26.06	26.84	27.68	28.76	29.95
Condo/Apt./Duplex/Second Unit (MFR)						
0 - 120	$3.04	N/A	N/A	N/A	N/A	N/A
120 - 220	10.38	N/A	N/A	N/A	N/A	N/A
220 - 280	15.13	N/A	N/A	N/A	N/A	N/A
280 +	31.74	N/A	N/A	N/A	N/A	N/A
All Usage	N/A	$6.90	$7.11	$7.33	$7.62	$7.91
Commercial	$11.08	$5.30	$5.46	$5.62	$5.85	$6.08
Irrigation	$12.41	$9.03	$9.30	$9.60	$10.00	$10.40

Summary of the Water Rate Study

- Revenue requirement shows a need for rate adjustments from FY 2018 – FY 2022
  - 3%-4% per year to adequately fund operating and capital needs
- Cost of service provides the pricing for the fixed and consumption charges
  - Provides year 1 (FY 2018) rates, future years are adjusted by rate transition plan
- Maintained the rate structure for residential, commercial, and irrigation
  - Multi-family rate structure alternative transitions to a uniform rate
- Bill impacts will vary from overall revenue adjustment for the utility (e.g., 3%/4%)

Sewer Rate Study

Sewer Revenue Requirement – Key Assumptions

- The starting point was the FY 2017 Budget
- Developed a 5-year financial plan
  - Rate revenues were calculated based on current rates and customer counts plus growth estimates
  - O&M was escalated by inflationary factors for each line item
- Developed capital funding plan
  - Based on the District's current CIP & CRP
  - Adequately funds renewal and replacement of the existing system

Sewer Capital Plan ($000s)

Capital Projects	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Captial Improvement Projects (CIP)						
Truckee River Siphon - Replace	$0	$902	$0	$0	$0	$0
Truckee River Siphon - Expansion	0	1,102	0	0	0	0
Sewer Flow Meters	0	0	0	0	0	117
Total CIP	**$0**	**$2,004**	**$0**	**$0**	**$0**	**$117**
Captial Replacement Projects (CRP)						
Mains	$0	$0	$0	$0	$0	$0
Laterals	0	0	0	0	0	0
Manholes	25	0	0	0	0	0
Cleanouts	0	30	0	0	0	12
Flow Meters	0	0	0	0	0	0
Shared Facilities - 305	0	2	0	81	71	2
Shared Facilities - 1810	6	24	47	0	9	39
Total CRP	**$31**	**$56**	**$47**	**$81**	**$80**	**$53**
To Sewer FARF	$319	$0	$403	$419	$470	$547
Future Unidentified Projects	0	0	0	0	0	0
To Capital Reserves	0	0	0	0	0	0
Total Capital Improvement Projects	**$350**	**$2,060**	**$450**	**$500**	**$550**	**$717**
Less: Outside Funding Sources						
Operating Reserve	$0	$0	$0	$0	$0	$0
Capital Reserve	0	1,102	0	0	0	117
Fixed Asset Replacement Fund	0	558	0	0	0	0
New SRF Loans	0	0	0	0	0	0
New Revenue Bonds	0	0	0	0	0	0
Total Outside Funding Sources	**$0**	**$1,660**	**$0**	**$0**	**$0**	**$117**
Rate Funded Capital (CRP)	**$350**	**$400**	**$450**	**$500**	**$550**	**$600**

Sewer Revenue Requirement – Preliminary Results ($000s)

	Budgeted	*Projected*				
	FY 2017	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**	**FY 2022**
Revenues						
Rate Revenues	$1,102	$1,108	$1,114	$1,119	$1,127	$1,136
Non-Operating Revenues	40	218	217	222	226	231
Total Revenues	**$1,142**	**$1,326**	**$1,331**	**$1,341**	**$1,354**	**$1,367**
Expenses						
Total Sewer Department Expenses	$359	$373	$388	$403	$418	$435
Total Administration Expenses	332	413	425	437	450	462
Net Annual Debt Service	131	83	83	59	58	58
Rate Funded Capital (CRP)	350	400	450	500	550	600
Transfer To / (From) Reserves	(29)	100	76	82	69	58
Total Expenses	**$1,142**	**$1,370**	**$1,421**	**$1,481**	**$1,545**	**$1,613**
Bal/(Def.) of Funds	**$0**	**($44)**	**($91)**	**($140)**	**($192)**	**($246)**
Rate Adj. as a % of Rate Rev.	*0.0%*	*4.0%*	*8.2%*	*12.5%*	*17.0%*	*21.7%*
Proposed Rate Adjustment	**0.0%**	**4.0%**	**4.0%**	**4.0%**	**4.0%**	**4.0%**
Add'l Revenue from Adj.	**$0**	**$44**	**$91**	**$140**	**$192**	**$246**
Total Bal/(Def.) of Funds	**$0**	**($0)**	**$0**	**$0**	**$0**	**($0)**

Summary of the Preliminary Sewer Revenue Requirement

- Preliminary rate adjustments are required in order to adequately fund the water utility (FY 2018 – FY 2022)
  - Sufficiently fund O&M expenses
  - Provide adequate funds for the capital replacement and improvement projects
  - Maintain prudent ending reserve fund levels
- Driven by need to cash fund capital replacement projects
  - Assumes no long-term debt issues over the time period reviewed

Sewer Cost of Service – Key Assumptions

- Allocated the revenue requirement for FY 2018
- Classify costs into the appropriate component (volume, customer)
- Allocated costs to the following customer classes of service
  - Residential (SFR)
  - Condos/Apartments/Duplex/Secondary Units (MFR)
  - Commercial
  - Church

Sewer Cost of Service – Preliminary Results ($000s)

	Residential (SFRI	Multi-Family	Commercial	Church
Rate Revenue	$171	$588	$344	$5
Allocated Costs	$217	582	346	7
Unit Costs				
Fixed ($/Acct.)	$687	$486	N/A	$3420
Variable ($/1,000 gal)	N/A	N/A	13.19	N/A

Summary of the Preliminary Sewer Cost of Service Analysis

- Results are used to develop the pricing for each class of service
- Cost differences between the various customer classes of service
- First cost of service in over 10 years
- Cost of service provides the basis for the fixed and volume charge (commercial only)
- Bill impacts will not be the same for all customers

Sewer Rate Design – Key Assumptions

- Maintain current rate structure for most customer classes
  - Exception is multi-family customers
- Fixed charge
  - Single Family Residential based on account
    - Plus accessory dwelling (MFR) unit if applicable
  - Multi-Family Residential based on living units
  - Commercial based on account
  - Church based on account
- Volumetric component on a per 1,000 gallon basis
  - Commercial customers only
  - >75,000 gallons annually

Preliminary Sewer Rate Alternative

	Present Rates	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
		4.0%	*4.0%*	*4.0%*	*4.0%*	*4.0%*
Fixed Charge	**$/Year**					
Residential (SFR)	$540.00	$686.00	$713.44	$741.98	$771.66	$802.53
Condo/Apt./Duplex/Second Unit (MFR)	$466.00	$490.00	$509.60	$529.98	$551.18	$573.23
Commercial	$954.00	$990.00	$1,029.60	$1,070.78	$1,113.61	$1,158.15
Residential - Pool / Spa	$767.00	$797.00	$828.88	$862.04	$896.52	$932.38
Church	N/A	$3,420.00	$3,557.00	$3,699.00	$3,847.00	$4,001.00
Consumption Charge	**$/1,000 gal**					
Commercial						
> 75,000	$12.74	$13.20	$13.73	$14.28	$14.85	$15.44

Summary of the Sewer Rate Study

- Revenue requirement shows a need for rate adjustments from FY 2018 – FY 2022
  - 4% per year to adequately fund operating and capital needs
- Cost of service provides the pricing for the fixed and volumetric charges
  - Provides year 1 (FY 2018) rates, future years are adjusted by rate transition plan
- Maintained the rate structure for residential and commercial customers
  - Multi-family will depend on current billed method
- Bill impacts will vary from overall revenue adjustment for the utility (e.g., 4%)

Connection Fees

Definition of a Connection Fee

- A connection fee is defined as a:
  - Fee for new customer demand only
  - Fee required of all new customers desiring water or sewer service or existing customers requesting increased water or sewer service capacity.
  - Charge based on the value of the utility's capacity and the amount of capacity needed by the new customer.
    - Capacity can be defined in different ways (e.g., MGD, EDU)

Criteria in Determining Connection Fees

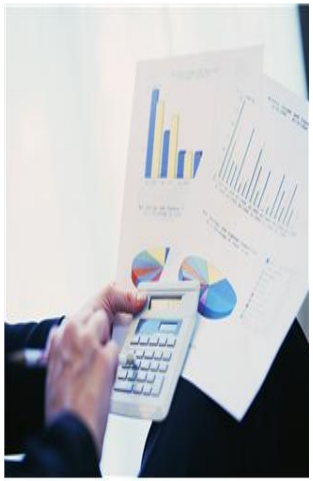
- System planning criteria
- Determination of an Equivalent Dwelling Unit (EDU)
  - City planning analysis of the areas of growth
  - Master plan EDUs for system capacity
- Capital improvement needs
- System financing
- Various methodologies
  - Buy-in Approach
  - Incremental (Marginal) Approach
  - Combined (Hybrid)
- Legal requirements

Legal Considerations

- State Laws and Regulations
  - AB 1600 Mitigation Fee Act
- Rational Nexus -relationship between the price & cost incurred
  - Connection be established between new development and the new or expanded facility to accommodate such development
  - Identification of the cost of those new or expanded facilities needed to accommodate development
  - Appropriate apportionment of cost to new development in relationship to benefits reasonably received
- Reasonable relationship to the burden imposed to provide capacity
  - Reasonable relationship does not mean mathematically exact

Connection Fee Methodology

- Using the combined methodology
- Buy-In (Existing assets)
  - Asset replacement costs from District's Capital Replacement Plan model
  - Used costs that are connection fee eligible
  - Reduced by outstanding debt principal
  - Divided by current + future ERUs
- Incremental (Future assets)
  - Used current capital improvement plan
  - Included on connection fee eligible projects
  - Divided by current + future ERUs



Summary of the Preliminary Water Connection Fee

Component	Existing	Future	Total
Source	$1,452.17	$0.00	$1,452.17
Pumping	70.91	555.17	626.08
Storage	586.78	0.00	586.78
Trans. & Dist.	4,942.73	173.49	5,116.22
General Plant	3,750.92	0.00	3,750.92
Debt Service	(253.12)	N/A	(253.12)
Total	$10,550.40	$728.66	$11,279.06
		Rounded	$11,280.00

Water Connection Fee – Rate Comparison

- Current
  - Based on 30 equivalent fixture units
  - Fee = $8,414
    - 5/8” = 30 EFUs
    - 3/4” = 31-54 EFUs
    - 1” = 55-127 EFUs
- Preliminary Results
  - Based on 1 ERU
  - Fee = $11,280
    - Increases based on service meter size and AWWA equivalent meter ratios

Summary of the Preliminary Sewer Connection Fee

Component	Existing	Future	Total
Collection	$5,553.58	$1,470.38	$7,023.96
General Plant	2,950.20	0.00	2,950.20
Debt Service	(268.15)	N/A	(268.15)
Total	$8,235.62	$1,470.38	$9,706.00
		Rounded	$9,705.00

Sewer Connection Fee – Rate Comparison

- Current
  - Based on fixture units
  - Fee = $1,211
    - Based on 22 EFUs
- Preliminary Results
  - Based on 1 ERU
  - Fee = $9,705
    - Increases based on service meter size and AWWA equivalent meter ratios

Summary of the Preliminary Connection Fee Study

- Basis of the connection fee is the existing system and future improvements necessary to meet new growth on the systems
  - Excludes projects **not** funded by the District
- Maintains equity between existing and future customers
- Study provides the basis for the maximum allowable connection fee
  - Board policy decision on the final level
- Fee can be adjusted annually
  - Engineering News Record Construction Cost Index (ENR CCI)

Next Steps…

- Incorporate provided policy direction
- Finalize the revenue requirement (rate transition plan), cost of service, and rate design
- Finalize connection fee analyses
- Present final rate transition plans and begin rate adoption process (e.g., Prop 218)

Questions and Discussion