STEPS IN CONDUCTING A RATE STUDY

**Rate Setting Framework**
- Financial goals and policies
- Pricing objectives

**Financial Plan**
- Evaluation of CIP and financing options
- Cash flow analysis for financial sufficiency

**Cost of Service & Rate Design**
- Cost allocations
- Rate design
  - Rate calculations
  - Customer impact analyses

**Final Rate Adoption**
- Report
- Prop 218 Notice
- Public Hearing
OPERATIONS & CIP EVALUATION

• Determine Need for Increase in Revenue
  › Components of System
  › Cost of Operations & Maintenance & CIP
  › Capital Improvement Program (CIP) scope/need
COMPONENTS OF SYSTEM

WELLS
1977 - Industrial • 1978 - Watson Ranch
1989 - School Well • 2004 - Valley Glen
2007 - Parklane

PUMPING CAPACITY
12.2 MILLION GALLONS/DAY
(8,500 gpm)

TANKS
1995 - Watson Ranch • 2002 - Fitzgerald
2007 - Parklane (2 tanks)

STORAGE CAPACITY
4.3 MILLION GALLONS
(800k-1.5M gal/tank)

PIPES
LENGTH OF PIPES
40 MILES
(ranging from 4”-14”)

HUNDREDS OF FIRE HYDRANTS

3,000 METERS
**COST OF O&M/CIP**

![Budget & Gallons Produced Graph](image)

- **Gallons Produced (MGs)**
- **Annual Exp ($1,000s)**
- **Annual Rev ($1,000s)**

The graph shows the budget and gallons produced from 2005 to 2018, with a steady increase in gallons produced and annual expenses, and a decline in annual revenue.
COST OF O&M/CIP

Cost/Gallon Pumped

- Expense/Gallon ($)
- Revenue/Gallon ($)
STRATEGIC ASSET MANAGEMENT PLAN

- Exist. System Eval.
- Lifecycle Eval.
- Replacement Value
- Asset Inventory
- Risk Assessment
- Condition Assessment
- Preventive Maint. Prgm
- Rehab & Replacement Prgm
Black dot represents the Median Risk Level for the facility.
SIGNIFICANT O&M COST INCREASES

• Additional Staff Member (authorized on 8/28/18)
• Annual On-Call Service Contracts
  › Generator Maintenance
  › Pump/Motor evaluation/servicing
  › SCADA/Electronics servicing
  › Well maintenance
  › Tank inspection
  › City-owned Backflow device servicing
  › Laboratory services
• Deduct for Cal Water service contract when full time Supervisor is hired.
• Leak Repairs/Existing Customer meter replacements.
SIGNIFICANT CIP COSTS

• 2021, 2022 & 2023 – 3 wells replaced
  › School Well (1989), Watson Ranch (1978) and Industrial Well (1977)
  › $8.8M, including design, construction, inspection, etc.

• Water meter replacement
  › Inefficient meters = loss of revenue to operate system

• Asbestos pipe replacement
  › Could be deferred but not recommended

• Electrical/controls systems upgrades
  › $400-500k/site for Industrial, Watson Ranch & School Well

• Tank Seismic upgrades

• Watson Ranch Subdivision service line replacement
COST OF O&M/CIP

Cost/Gallon Pumped

- Expense/Gallon ($)
- Revenue/Gallon ($)
COST PERSPECTIVE

Soda = $1.90/gal

Sports Drink = $3.96/gal

Water = $0.50/gal
AGENDA

• Preliminary Financial Plan Model Overview Update
  › Inflation/escalation assumptions
  › Proposed and projected O&M
  › Projected growth in accounts & usage
  › Proposed Reserve Policies
  › Capital Improvement Plan (CIP) - updated

• Preliminary Revenue Requirements and Rate Adjustments
  › CIP Pay as You Go
  › CIP Proposed Debt Financing
Financial Plan Overview
### ESCALATION FACTORS (FY 2019-FY 2027)

<table>
<thead>
<tr>
<th>Budgetary Inflation Factors</th>
<th>Annual Escalation</th>
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<tbody>
<tr>
<td>Salary</td>
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<tr>
<td>Benefits</td>
<td>7.0%</td>
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<tr>
<td>Materials/Supplies/Operational Expenses</td>
<td>3.0%</td>
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<tr>
<td>Repairs &amp; Maintenance</td>
<td>3.0%</td>
</tr>
<tr>
<td>Power &amp; Utilities</td>
<td>3.0%</td>
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<tr>
<td>Contractual Services</td>
<td>3.0%</td>
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<td>Administration</td>
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<tr>
<td>Construction</td>
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<tr>
<td>Non-Operating Revenue Growth</td>
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</table>

- Historic CPI averages have been roughly 3%.
- Historic 20-City CCI (construction cost index): average of 3% annual increase over past decade.
## O&M EXPENSES

<table>
<thead>
<tr>
<th>Categories</th>
<th>Estimated FY 2018</th>
<th>Budgeted FY 2019</th>
<th>Projected FY 2020</th>
<th>Projected FY 2021</th>
<th>Projected FY 2022</th>
<th>Projected FY 2023</th>
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<th>Projected FY 2025</th>
<th>Projected FY 2026</th>
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<td>Benefits</td>
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<td><strong>$1,948,816</strong></td>
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# ACCOUNT & USAGE GROWTH

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<th>FY 2020</th>
<th>FY 2021</th>
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<td><strong>Account Growth</strong></td>
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<tr>
<td><strong>Water Demand Factor</strong></td>
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**Accounts**

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<td><strong>Total - Accounts</strong></td>
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<td>2,881</td>
<td>2,931</td>
<td>2,983</td>
<td>3,037</td>
<td>3,093</td>
<td>3,150</td>
<td>3,208</td>
<td>3,268</td>
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</table>

**Water Sold (Acre-feet)**

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<tr>
<th></th>
<th>FY 2018</th>
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<th>FY 2020</th>
<th>FY 2021</th>
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<td>3,150</td>
<td>3,208</td>
<td>3,268</td>
</tr>
</tbody>
</table>

*Note that all ¾" account growth is attributed to 1” meters due to new 1” minimum meter size.*
## CIP SUMMARY

<table>
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<tr>
<th>Year</th>
<th>R&amp;R</th>
<th>Other CIP</th>
<th>Total CIP</th>
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<tbody>
<tr>
<td>FY 2018</td>
<td>$125,000</td>
<td>$40,000</td>
<td>$165,000</td>
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<tr>
<td>FY 2019</td>
<td>$659,000</td>
<td>$42,518</td>
<td>$701,518</td>
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<tr>
<td>FY 2020</td>
<td>$4,450,115</td>
<td>$298,700</td>
<td>$4,748,815</td>
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<td>FY 2021</td>
<td>$5,686,424</td>
<td>$28,644</td>
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<td>FY 2022</td>
<td>$4,415,710</td>
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<td>FY 2023</td>
<td>$4,400,739</td>
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<td>FY 2025</td>
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<td>FY 2026</td>
<td>$2,425,311</td>
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<td>$2,437,610</td>
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<td>FY 2027</td>
<td>$2,202,913</td>
<td>$12,668</td>
<td>$2,215,581</td>
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<td>TOTAL</td>
<td>$30,012,976</td>
<td>$7,881,901</td>
<td>$37,894,877</td>
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*Note that FY 2022 includes $6.9M of CIP to be funded by developer agreements.
Financial Policies
WHY DO WE NEED RESERVES?

• Nature of municipal utility system
  › Capital intensive
  › Highly fluctuating capital costs
  › Risk and liability → unknown liability costs
  › Emergencies or capital infrastructure problems that may arise

• Healthy reserves help provide financial and rate stability

• Healthy reserves levels → better credit ratings → lower interest rates for future debt
FINANCIAL HEALTH INDICATORS

1. Reserve Balances:
   1) **Operating Reserve**: to meet daily working capital for operating expenses
   2) **Capital Replacement Reserve**: for future capital expenditures
   3) **Rate Stabilization Reserve**: to be used during periods of short-term revenue shortages (recession, drought) to prevent rate-shock and phase in any necessary rate adjustments
   4) **Emergency Reserve**: funds available in case of asset failure or natural disaster

2. Debt Coverage Ratios
   - To meet Official Statement requirements
   - To achieve credit ratings from rating agencies
PROPOSED RESERVE POLICIES

Healthy Reserves

• Operating Reserve – results from positive cash flow
  › Suggested policy: **25%** of annual O&M

• CIP Reserves – Can award contracts quickly and speed up projects if necessary
  › Suggested policy: **100%** of average 5-year R&R (excluding well replacements)

Debt Coverage Ratio

• Exceed Official Statement requirements
• Achieve / Maintain good credit ratings
Preliminary Revenue Requirements
FINANCIAL PLAN SCENARIOS

1. PAYGO CIP:
   › 300% revenue adjustment in April 2019
   › -50% revenue adjustment in April 2024
   › No debt funding for CIP

2. Debt Financed CIP
   › 205% revenue adjustment in April 2019
   › $7M debt issue in FY 2021 to help fund CIP
FINANCIAL PLAN
SCENARIO 1: PAYGO CIP

• 300% revenue adjustment in FY 2019
• -50% revenue adjustment in FY 2024
• No debt-funded CIP
FINANCIAL PLAN
SCENARIO 1: PAYGO CIP

- 300% revenue adjustment in FY 2019
- -50% revenue adjustment in FY 2024
- No debt-funded CIP
FINANCIAL PLAN
SCENARIO 2: DEBT FINANCED CIP

- 205% revenue adjustment in FY 2019
- $7M debt issue in FY 2021 to fund CIP
FINANCIAL PLAN
SCENARIO 2: DEBT FINANCED CIP

Financial Plan

- 205% revenue adjustment in FY 2019
- $7M debt issue in FY 2021 to fund CIP
Rate Setting Framework
- Financial goals and policies
- Pricing objectives

Financial Plan
- Evaluation of CIP and financing options
- Cash flow analysis for financial sufficiency

Cost of Service & Rate Design
- Cost allocations
- Rate design
  - Rate calculations
  - Customer impact analyses

Final Rate Adoption
- Report
- Prop 218 Notice
- Public Hearing

NEXT STEPS
Raftelis is a Registered Municipal Advisor within the meaning as defined in Section 15B (e) of the Securities Exchange Act of 1934 and the rules and regulations promulgated thereunder (Municipal Advisor Rule).

However, except in circumstances where Raftelis expressly agrees otherwise in writing, Raftelis is not acting as a Municipal Advisor, and the opinions or views contained herein are not intended to be, and do not constitute “advice” within the meaning of the Municipal Advisor Rule.
Thank you!

Contact: Sally Van Etten
510 813 8704 / svanetten@raftelis.com