



# Developing the Capital Improvement Program

Board & Community Engagement Processes

Presented by:

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# Agenda

## 1. CIP Development

- A. New project identification
- B. Adding/removing projects
- C. Tools to aid Board in decision-making

## 2. Review of Projects by Category

- A. CIP FY 2025-29 Five-Year Plan Projects
  - 1) Organized by Fund and Funding Categories

## 3. Next Steps

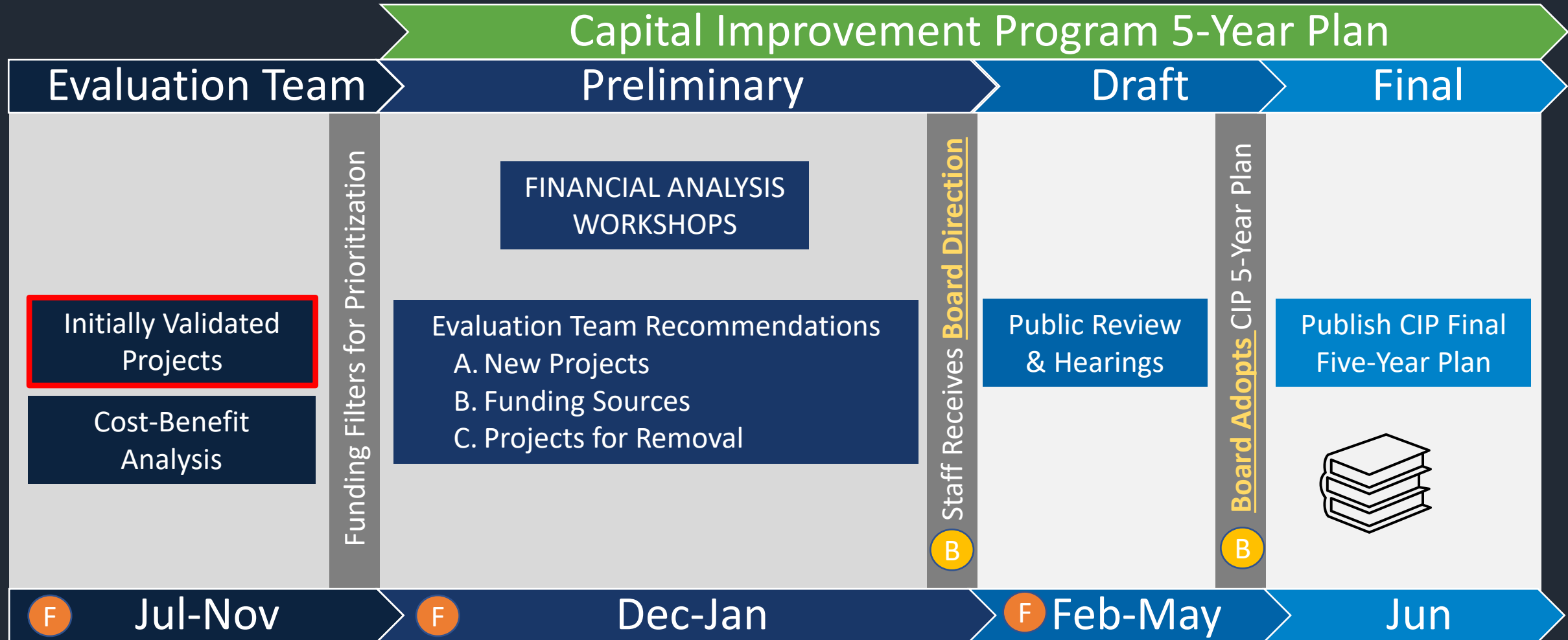
- A. Integrated Financial Planning Calendar



# Identifying new projects for the CIP

How are new capital projects identified and initially validated?

# Annual CIP 5-Year Plan Timeline



**F** CIP Committee and/or Board Feedback

**B** Key Decision Points for Board



# Drivers for New Capital Projects



*Minimizing asset life-cycle costs while sustainably delivering the levels of service that meet customer expectations at an acceptable level of risk as expressed through the Board. (I-EL-6.4.a)*



# Initial Project Validation for CIP Preliminary Five-Year Plan

1. Business Case Report\*
  - A. Life-cycle Cost
  - B. Risk
  - C. Options
  - D. Costs: Capital, O&M, Benefits
2. Initially Validated Project
3. Evaluation Team
  - A. Prioritization
    - 1) Funding Filters & Categories
  - B. Resource Analyses
    - 1) Funding (Internal/External)
    - 2) Staff

\* Staff evaluates the lifecycle costs of different capital, non-capital, or non-asset-based solutions

**BUSINESS CASE REPORT FOR <Project Title>**

**III. OPTIONS ANALYSIS**

Complete the table below with a brief description of each option. The Status Quo Option should be analyzed for all projects. Besides the Status Quo, not all options will apply to every project. It is possible to have more than one alternative for each type of option. For example, there may be two options for "operate differently", and the "maintain differently" option may not apply.

Option	Brief Description
1. Status Quo / Baseline	Continue operating and maintaining the asset as it is currently being done. This is the base case and should be analyzed for all projects with existing processes or assets.
2. Do Nothing / Run to Fail	Running an asset to failure. It involves not spending any money on planned maintenance or refurbishments unless required to maintain a minimum level of service to the customer.
3. Operate Differently	Changing operations to meet the project objectives. Examples include running a pump at lower speeds or releasing lower flows into a channel.
4. Maintain Differently	Changing the maintenance program to meet the project objective. Examples include increasing the frequency of planned maintenance.
5. Refurbish / Rehabilitation	Transforming the asset to "as new" condition. It includes replacement of a component part or parts, or equivalent intervention sufficient to return the asset to as-new condition.
6. Replace	Substitution of an entire asset with a new or equivalent asset.
7. New Asset or Augmentation	Augmenting an asset or adding a new asset, typically to meet new level of service or capacity requirements.
8. Decommission	Retiring the asset at the end of its useful life.
9. Non Asset Solutions	A solution that meets the project objective(s) without changing the asset or its operations and maintenance plans. Examples include changing policies, contracts, or permit requirements to decrease demand on the asset, such as conservation.
10. (Other options)	Identify any other feasible alternatives.

For each viable option in the table above, attach a detailed description to this report. A template is provided in Appendix A as an example of the type of information that should be included in the description. The template is not required. Any reasonable description can be attached.

**IV. LIFE-CYCLE COSTING (LCC) AND BUSINESS RISK EXPOSURE (BRE)**

A. Summary Table – see attached.

Use the Validation Tool Kit to prepare a life-cycle business risk exposure (BRE) for each feasible option. Attach the summary and detailed instructions. Attach the summary and detailed instructions.

B. BRE Assumptions

Describe any assumptions used in determining the BRE.

- Provide reasoning for CoE scores.
- Provide an explanation of any redundancy.

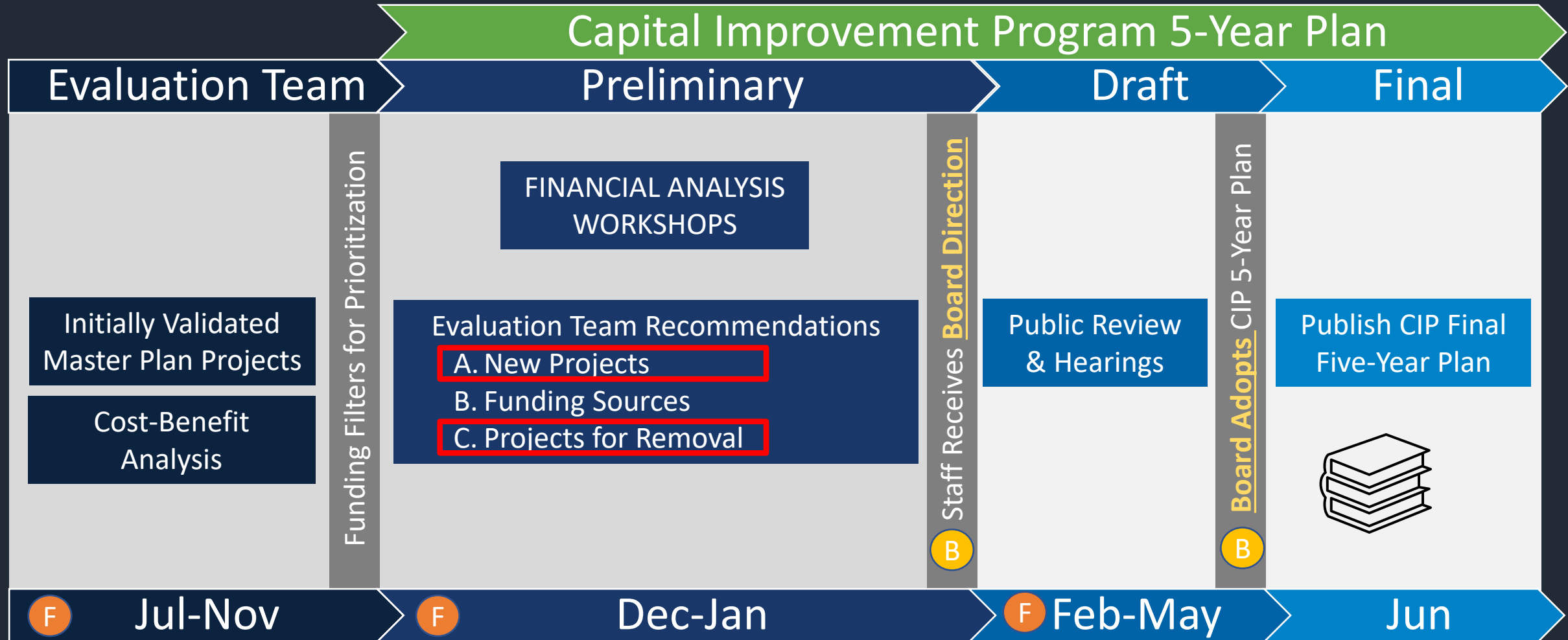
C. LCC Assumptions

Describe any key assumptions used in developing the LCC.

# Adding/removing projects from the CIP

How are capital projects added or  
removed from the CIP?

# Annual CIP 5-Year Plan Timeline



**F** CIP Committee and/or Board Feedback

**B** Key Decision Points for Board



# Funding Categories Tool Implemented

How to use the tools designed to aid the Board  
in its decision-making

# Review Projects by Fund

## Category 1 Projects

- Existing infrastructure with BRE  $\geq 88$ ; and/or
- In construction and/or mandated

## Category 2 Projects

- Existing infrastructure with BRE 76-87

## Category 3 Projects

- Existing infrastructure with BRE  $\leq 75$
- NEW Infrastructure
- Placeholder/Small Caps

# CIP FY 2025-29 Five-Year Plan Projects

## (Organized by Fund and Funding Categories)



# Fund 11: General

Total Project Cost \$ based upon FY 2025-29 Five-Year Plan

## Category 1 Projects

- Existing infrastructure with **BRE  $\geq 88$** ; and/or
- In **construction** and/or **mandated**

## Category 2 Projects

- Existing infrastructure with **BRE 76-87**

## Category 3 Projects

- Existing infrastructure with **BRE  $\leq 75$**
- **NEW** Infrastructure
- **Placeholder**/Small Caps

### *Buildings & Grounds*

\$16.9M

Security Upgrades & Enhancements

\$15.1M

Headquarters Operations Building

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### *Small Capital Improvement Project*

\$64M

Facility Mgmt, Small Capital Improvements

# Fund 12: Watershed Stream Stewardship

Total Project Cost \$ based upon FY 2025-29 Five-Year Plan

## Category 1 Projects

- Existing infrastructure with BRE ≥ 88; and/or
- In construction and/or mandated

### Flood Protection

\$117.3M	SF Bay Shoreline (EIA 11)
\$35.5M	Lower Pen. Creek Improvements

### Water Resources Stewardship

\$8.9M	Coyote 10B Freshwater Wetlands
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## Category 2 Projects

- Existing infrastructure with BRE 76-87

### Flood Protection

\$107M	Lower Guadalupe River Capacity Restoration
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### Water Resources Stewardship

\$15.5M	Calabazas/San Tomas Ck Marsh Connection (P&D)
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## Category 3 Projects

- Existing infrastructure with BRE ≤ 75
- NEW Infrastructure
- Placeholder/Small Caps

### Flood Protection

\$136.6M	Berryessa Creek (Phases 1 and 2)
\$11.5M	Palo Alto Tide Gates

### Water Resources Stewardship

\$5.7M	Pond A4 (Phase 1)
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### Placeholder Projects

\$49.7M	Berryessa Creek (Phase 3) Construction
\$13.7M	Stevens Creek Fish Passage Const/Moffett Ave (FAHCE)

### Small Capital Improvements

\$304.4M	WARP
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# Fund 26: Safe, Clean Water

Total Project Cost \$ based upon FY 2025-29 Five-Year Plan

## Category 1 Projects

- Existing infrastructure with **BRE ≥ 88**; and/or
- In **construction** and/or **mandated**

### Flood Protection

\$341.2M	Llagas Creek (all phases)*
\$221.1M	Coyote Creek (Montague Expwy – Tully)

### Water Resources Stewardship

\$13.8M	Ogier Ponds Separation from Coyote Creek (D4.2)**
\$12.4M	Hale Creek Pilot Project
\$9.2M	Bolsa Rd Fish Passage Improvements
\$8.9M	SCW Regnart Creek Rehabilitation (F8)

### Water Supply - Transmission

\$25.4M	IRP2 Additional Line Valves
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## Category 2 Projects

- Existing infrastructure with **BRE 76-87**

### Flood Protection

\$124.9M	Guadalupe River-Upper (Reaches 7-12) ***
\$57.8M	Sunnyvale East & West
\$28.7M	SF Shoreline (EIAs 1-4)
\$15.7M	SF Shoreline (EIAs 5-9 or 10)

\* Per Board decision following the Safe, Clean Water Program public hearing held on 08/13/24, the revised TPC for Llagas Creek (all phases) is approximately \$393.1M.

\*\*In addition to the \$13.8M shown here in Fund 26, Fund 61 also includes planned funding for Ogier Ponds in the amount of \$77.9M, which includes placeholder project dollars of \$27.9M and \$50M earmarked in ADSRP for project mitigation.

\*\*\* Per Board decision following the Safe, Clean Water Program public hearing held on 08/13/24, the revised TPC for the Guadalupe River – Upper (Reaches 7-12) is approximately \$90.7M.

## Category 3 Projects

- Existing infrastructure with **BRE ≤ 75**
- NEW** Infrastructure
- Placeholder**/Small Caps

### Flood Protection

\$101.8M	SF Creek, SF Bay to Middlefield, Construction
\$38.1M	Guadalupe River (R6)****
\$7.8M	Berryessa Creek, Phase 3- Planning & Design
\$12.1M	Upper Penitencia Creek, Coyote Ck- Dorel

### Water Resources Stewardship

\$9.3M	SCW D4.3 Fish Passage Improvements
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\*\*\*\*Guadalupe River Reach 6 Phase I, Gravel Augmentation complete. Phase II construction is planned for FY29-30.



# Fund 61: Water Utility Enterprise

Total Project Cost \$ based upon FY 2025-29 Five-Year Plan

## Category 1 Projects

- Existing infrastructure w/ **BRE ≥ 88**; and/or
- In **construction** and/or **mandated**

### Storage Facilities

\$1.9B	Anderson Dam Seismic Retrofit
\$253M	Anderson Dam Tunnel
\$186M	Calero Dam Seismic Retrofit
\$117.4M	Coyote Creek Flood Mgmt. Measure
\$84.7M	Guadalupe Dam Seismic Retrofit
\$65M	Coyote Pumping Plant ASD Replacement
\$40.5M	Almaden Dam Improvements
\$31.3M	Dam Seismic Stability Evaluations
\$23.5M	Coyote Creek Chillers
\$17.7M	Coyote Percolation Dam Replacement
\$11.9M	Cross Valley Pipeline Extension

### Transmission Facilities

\$171M	10-Year Pipeline Insp. & Rehab.
\$145.1M	FAHCE Implementation
\$119.3M	Almaden Valley Pipeline Replacement
\$36.8M	Vasona Pump Station Upgrade
\$9.3M	Dist. Sys. Master Plan Implementation
\$8.5M	Treated Water Isolation Valves
\$6.5M	SCADA Master Plan Implementation
\$6.1M	Pacheco/SCC ROW Acquisition

### Treatment Facilities

\$722.5M	RWTP Reliability Improvement
\$32.9M	RWTP Residuals Mgmt.
\$20.4M	WTP Electrical Improvement
\$20.6M	STWTP Filter Media Replacement

### Recycled Water Facilities

\$60.1M	So. County Recycled Water Pipeline
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### Placeholder Projects

\$27.9M	Ogier Ponds *
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\*In addition to the \$27.9M shown here in Fund 61, Fund 61 also includes \$50M earmarked in ADSRP for Ogier Ponds for project mitigation. Fund 26 also includes \$13.8M for construction.

# Fund 61: Water Utility Enterprise cont...

Total Project Cost \$ based upon FY 2025-29 Five-Year Plan

## Category 2 Projects

- Existing infrastructure with BRE 76-87

### Treatment Facilities

\$41.5M PWTP Residuals Mgmt.

\$6.9M RWTP Ammonia Storage & Metering

### Transmission Facilities

\$10.4M SMP/IP Upgrades – Phase 1

## Category 3 Projects

- Existing infrastructure with BRE  $\leq 75$
- NEW Infrastructure
- Placeholder/Small Caps

### Storage Facilities

\$2.75B Pacheco Reservoir Expansion

\$25.4M Almaden Calero Canal Rehabilitation

### Treatment Facilities

\$9.3M WTP Master Plan Implementation

### Recycled Water Facilities

\$48.9M San Jose Purified Water Project (SJPWP)

\$6.8M Land Rights – South County Recycled Water PL

### Small Capital Improvement Projects

\$23.9M Water Utility Computer Network Modernization

\$79.7M San Felipe (Reaches 1-3)

\$60.7M Water Treatment

\$14.8M Raw Water Transmission

\$1.3M Treated Water Transmission

### Placeholder Projects

\$20M Coyote Percolation Dam Fish Passage – Phase 2

# Fund 73: Information Technology

Total Project Cost \$ based upon FY 2025-29 Five-Year Plan

## Category 1 Projects

- Existing infrastructure with **BRE  $\geq 88$** ; and/or
- In **construction** and/or **mandated**

### *Information Technology*

**\$2.6M** IT Disaster Recovery

**\$1.3M** Data Consolidation

## Category 2 Projects

- Existing infrastructure with **BRE 76-87**

## Category 3 Projects

- Existing infrastructure with **BRE  $\leq 75$**
- **NEW** Infrastructure
- **Placeholder**/Small Caps

### *Small Capital Improvement Project*

**\$20.8M** Software Upgrades & Enhancements



# Integrated Financial Planning Schedule

REF #	MEETING		MILESTONE
	CIP CMTE	BOARD	
1	9/16/24		Annual CIP Development Process Overview/Funding Filters for Prioritization Presentation/Integrated Financial Planning Calendar/Review of CIP FY25-29 Five-Year Plan Projects by Category
2		10/08/24★	Annual CIP Development Process Overview/Funding Filters for Prioritization Presentation/Integrated Financial Planning Calendar/Review of CIP FY25-29 Five-Year Plan Projects by Category
3	10/21/24		New, & Unfunded Projects Presentation
4		11/12/24	New, & Unfunded Projects Presentation / Receive Board Feedback Regarding CIP FY25-29 Five-Year Plan Projects, and New & Unfunded Projects for Inclusion in CIP Preliminary FY26-30 Plan Water Rate Planning Overview Biennial Budget Process Overview
5	12/16/24		CIP Preliminary Five-Year Plan Funding Workshop (Financial Modeling & CIP Updates From Adopted FY25-29 Plan)
6		1/14/25	Five-Year WS & WU O&M Plans CIP Preliminary 5-yr Plan Workshop (Financial Modeling & Significant Updates); Board to Provide Direction CIP SCW/WS Preliminary 10-yr Financial Analysis Preliminary Water Rate Analysis & Scenarios
7		1/28/25	SCW Public Hearing (If Required) 1 <sup>st</sup> Pass Budget Update
8		2/25/25	Draft CIP (Authorize to Distribute for Public Review)
9		3/11/25	2 <sup>nd</sup> Pass Budget Update
10		4/5/25	Ground Water Charge Public Hearings Begin CIP Public Hearing Begins (Optional Date 4/23)
11		4/10/25	Ground Water Charge Public Hearing in South County (Gilroy)
12		4/22/25	Ground Water Charge Public Hearings Close
13		4/23/25	Budget Work-study Session
14		5/13/25	Board Adoption of Water Rates, CIP, Budget, Investment and Debt Resolutions (w/Final CIP and Budget Reports Completed by 6/30/2025)
15		6/28/24	FY25 Rate Notifications: Website and Mailers (Retailers and All Customers)

LEGEND

CIP

Budget

Water Rates

Safe Clean Water (SCW)

Asset Management (AM)

Updates  
Available  
Online

SCAN THE QR CODE:



Or visit this website:  
[delivr.com/24wqn](https://delivr.com/24wqn)

# END OF PRESENTATION

## Questions & Answers



# EXTRA SLIDES

# Asset Management Program Tool (Business Risk Exposure (BRE))

# Asset Management Program- Business Risk Exposure (BRE)

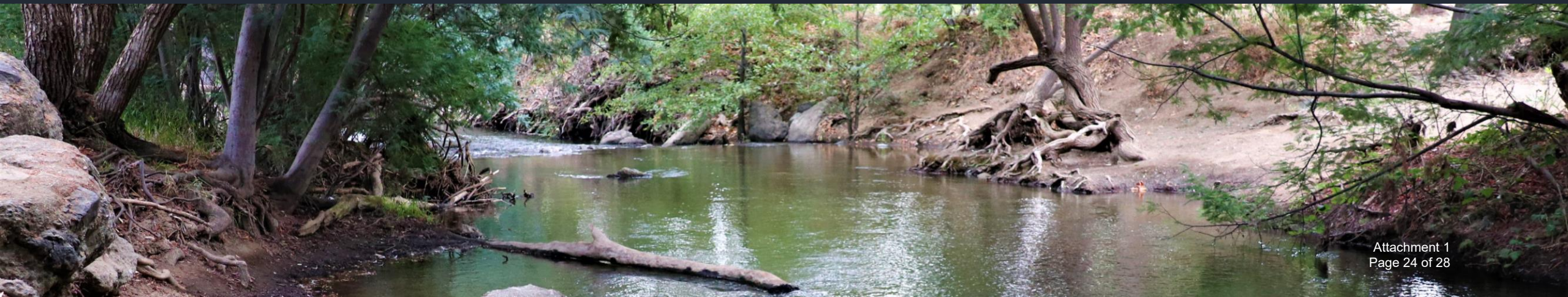
<b>Consequence of Failure</b> <b>0 - 30</b> <i>(each criteria scored on a 0-to-5 scale)</i>		<b>x</b>	<b>Probability of Failure</b> <b>1 - 5</b>	<b>=</b>	<b>Business Risk Exposure (BRE)</b> <b>0 - 150</b>
<b>Social</b> <b>(50% of CoF)</b>	Service Delivery		1 = New or Recently Rehabilitated  2 = Good Condition, Only Minor Defects  3 = Defects Requiring Monitoring, But Fully Functional  4 = Requires Corrective Action, Functionality Threatened  5 = Failed, Unable to Satisfy LOS, Requires Immediate Action		
	Community Impacts				
	Workplace Safety				
<b>Environmental</b> <b>(17% of CoF)</b>	Environmental Impacts				
<b>Economic</b> <b>(33% of CoF)</b>	Financial Impacts				
	Impact to Reputation				



# Capital Improvement Program Tool (Funding Filters and Categories)

# CIP Funding Filters for Prioritization (w/Point Application)

- |   |                 |
|---|-----------------|
| 1. Repair/Replace Existing Infrastructure Projects          | <b>5 points</b> |
| 2. Public Health and Safety Projects                        | <b>4 points</b> |
| 3. Shovel Ready (Permits/Land Rights Secured) Projects      | <b>3 points</b> |
| 4. Multi-Benefit Projects                                   | <b>2 points</b> |
| A. Environmental Justice Benefit Projects                   | <b>½ point</b>  |
| 5. Partially External-Funded (Grants/Partnerships) Projects | <b>1 point</b>  |



# CIP Project Funding Categories

## Scoring for Repairing and Replacing Existing Infrastructure





# CIP Project Funding Categories

## Category 1: $\geq 19$ points

1. Repair/replace existing infrastructure
2. Risk of failure score is  $\geq 88$
3. Required for public health and safety
4. **Projects under construction or mandated (required by law, regulation, federal order, lawsuit, etc...) are automatically included in Category 1.**





# CIP Project Funding Categories

## Category 2: 13-18.5 points

1. Repair/replace existing infrastructure
2. Risk of failure score is between **76-87**
3. Required for public health and safety.





# CIP Project Funding Categories

## Category 3: $\leq 12.5$ points

1. Projects with a lower risk of failure,  $\leq 75$
2. **New infrastructure projects in the Water Supply Master Plan and One Water Plan**
3. **Small capital improvement and placeholder projects.**
  - A. **Placeholder projects meet Valley Water's mission and are anticipated to be needed but may not yet have defined scopes, schedules, or funding sources.**

