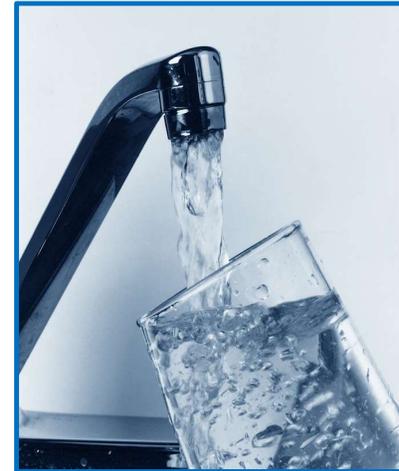


# Alameda County Water District

## Water Resources Planning Workshop: Water Resources Master Plan – Phase 2



ACWD Board Workshop  
November 20, 2025  
Agenda Item 4



# Water Resources Master Plan 2050: *Implementation Planning*

**November 20, 2025**

**Presenters:**

Thomas Niesar, ACWD, Water Supply & Planning Manager  
Persephene St. Charles, Woodard & Curran  
Phillippe Daniel, Liquisti

# Acronyms used in this presentation

<b>MPR</b>	Minimum Purchase Requirement
<b>NDF</b>	Newark Desal Facility
<b>PFAS</b>	per- and polyfluoroalkyl substances
<b>SFPUC</b>	San Francisco Public Utilities Commission
<b>SGMA</b>	Sustainable Groundwater Management Act
<b>SWP</b>	State Water Project
<b>UWUO</b>	Urban Water Use Objective
<b>WEMP</b>	Water Efficiency Master Plan
<b>WRMP</b>	Water Resources Master Plan





## Objectives for today's workshop

Share updates on planning process

Confirm WRMP goals will be met

Discuss decision points that drive implementation



# Agenda

- ▶ Update: Planning Process
- ▶ Overview: Aligning WRMP Goals with projects and policies
- ▶ Discussion: Meeting WRMP Goals
- ▶ Overview: Implementation planning
- ▶ Discussion: Key decision points and drivers
- ▶ Preview: Looking Ahead to the WRMP document
- ▶ Next Steps





# Planning Process

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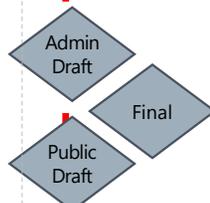
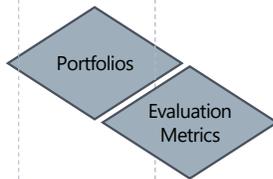
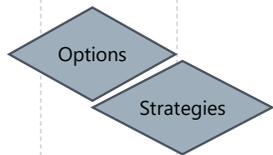
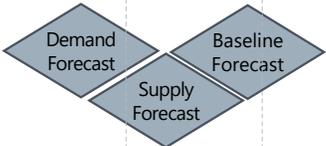
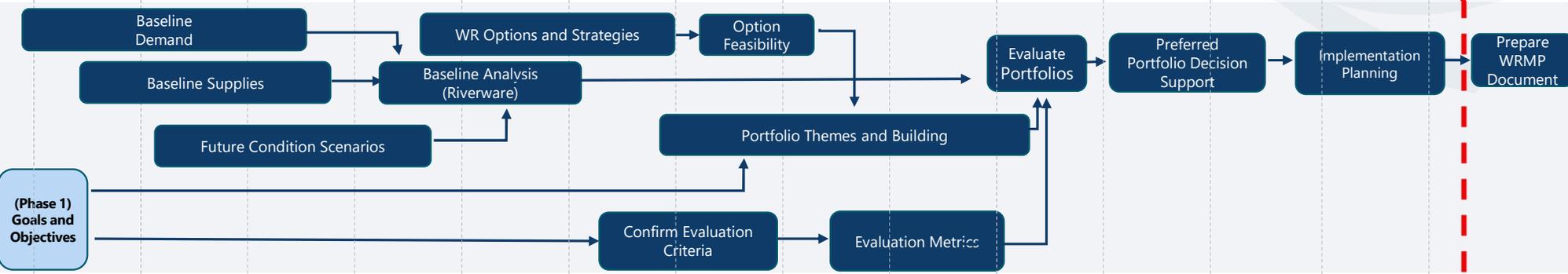
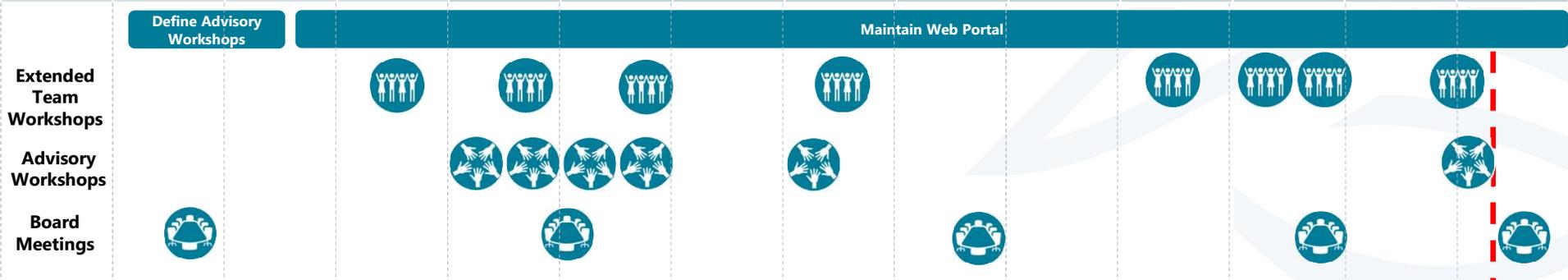
# Water Resources Master Plan Phase 2 Project Roadmap



Outreach & Engagement

Planning Process

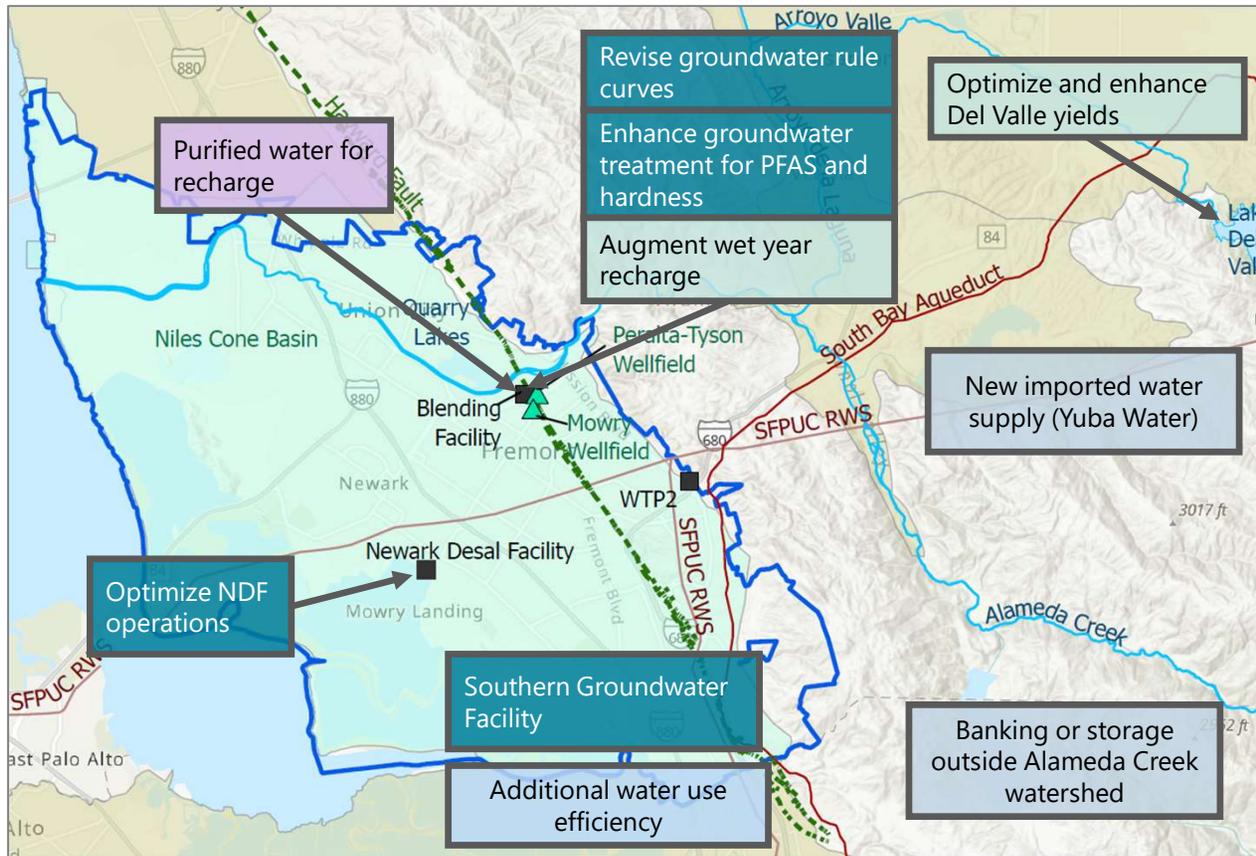
Key Deliverables





# Aligning WRMP Goals with projects and policies

# Selected Water Supply Portfolio *(from August workshop)*



## Phase 1

Optimizing existing surface and groundwater resources

## Phase 2

Adding new groundwater opportunities and additional water use efficiency

## Phase 3

Purifying water for recharge

# WRMP Projects and Strategies

## Water Supply Projects *for implementation*

**Augment wet year recharge**

**Optimize and enhance Del Valle yield**

**Revise groundwater rule curves**

**Enhance groundwater treatment (PFAS and hardness)**

**Optimize Newark Desalination Facility operations**

**Groundwater banking**

**New imported water supply through the Yuba Accord**

**Southern Groundwater Facility**

**Additional water use efficiency**

**Purified water for groundwater recharge**

## Water Resource Strategies *for consideration*

**Implement Updated Water Efficiency Master Plan**

**Develop Resilience/Emergency Response Plan**

**Establish Multi-Benefit Land Trust**

**Maintain and Enhance Quarry Lakes Water Quality**

**Support Watershed Monitoring, Studies, Restoration**

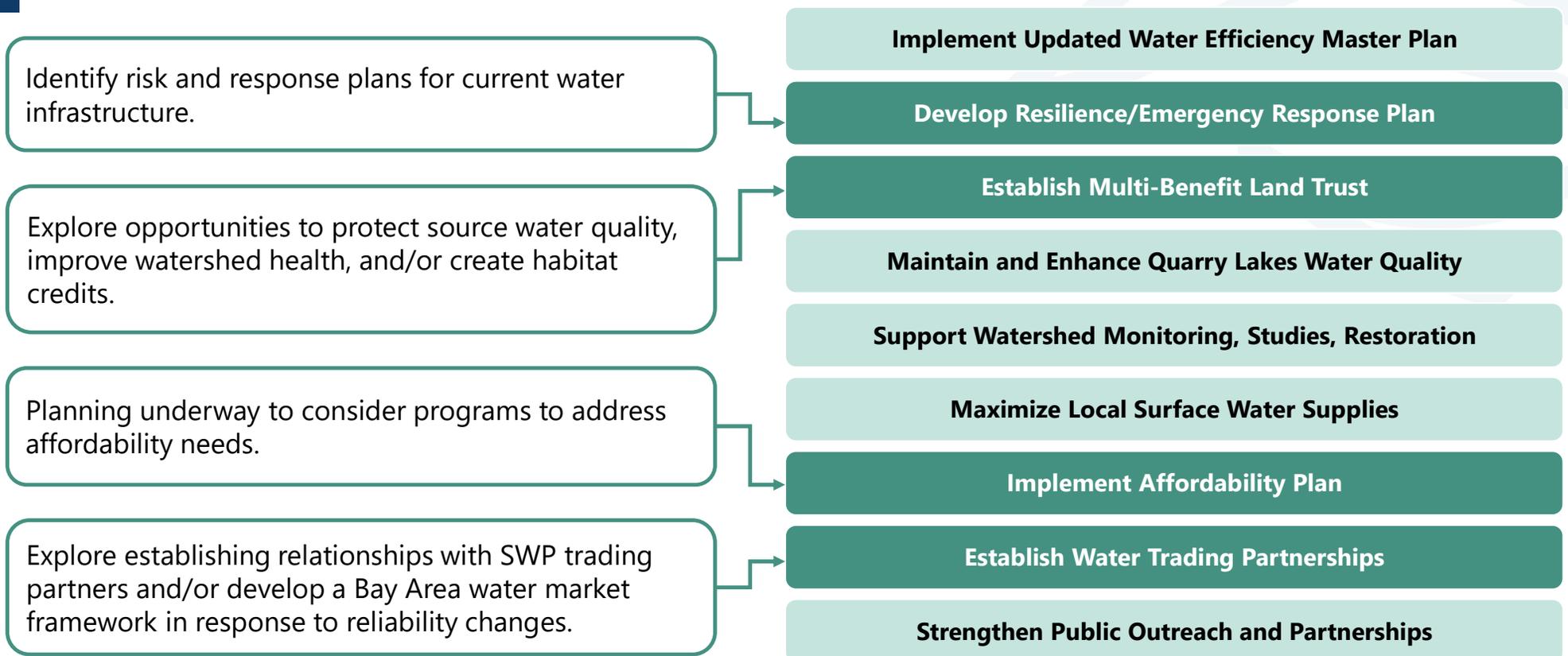
**Maximize Local Surface Water Supplies**

**Implement Affordability Plan**

**Establish Water Trading Partnerships**

**Strengthen Public Outreach and Partnerships**

# Resource strategies can be implemented as opportunities arise



# 2050 WRMP Goals

*What water resources future does ACWD want to achieve by 2050?*



1. Sustainable water supply portfolio that leverages local resources and adapts to climate change



2. Affordable and equitable supply for all direct and indirect customers



3. Resilient and optimized water service infrastructure system and operations



4. Healthy watersheds and aquifers that are managed to provide multiple-benefits



5. Collaborative leadership to facilitate regional water management

# WRMP Goal Alignment

## 1. Sustainable water supply portfolio that leverages local resources and adapts to climate change

**Augment wet year recharge**

**Optimize and enhance Del Valle yield**

**Revise groundwater rule curves**

**Enhance groundwater treatment (PFAS and hardness)**

**Optimize Newark Desalination Facility operations**

**Groundwater banking**

**New imported water supply through the Yuba Accord**

**Southern Groundwater Facility**

**Additional water use efficiency**

**Purified water for groundwater recharge**

**Implement Updated Water Efficiency Master Plan**

**Maximize Local Surface Water Supplies**

**Establish Water Trading Partnerships**

# WRMP Goal Alignment



## 2. Affordable and equitable supply for all direct and indirect customers

Relatively low cost, no-regrets

Augment wet year recharge

Optimize and enhance Del Valle yield

Revise groundwater rule curves

Enhance groundwater treatment (PFAS and hardness)

Groundwater banking

Establish Multi-Benefit Land Trust

Implement Affordability Plan

Strengthen Public Outreach and Partnerships

# WRMP Goal Alignment



## 3. Resilient and optimized water service infrastructure system and operations

- 
- 
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- Enhance groundwater treatment (PFAS and hardness)
- Optimize Newark Desalination Facility operations
- Groundwater banking
- 
- Southern Groundwater Facility
- Additional water use efficiency
- 

- 
- Develop Resilience/Emergency Response Plan
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# WRMP Goal Alignment



## 4. Healthy watersheds and aquifers that are managed to provide multiple-benefits

**Augment wet year recharge**

**Revise groundwater rule curves**

**Establish Multi-Benefit Land Trust**

**Maintain and Enhance Quarry Lakes Water Quality**

**Support Watershed Monitoring, Studies, Restoration**

# WRMP Goal Alignment



## 5. Collaborative leadership to facilitate regional water management

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- Groundwater banking**
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- Purified water for groundwater recharge**

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- Maintain and Enhance Quarry Lakes Water Quality**
- Support Watershed Monitoring, Studies, Restoration**
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- Establish Water Trading Partnerships**
- Strengthen Public Outreach and Partnerships**



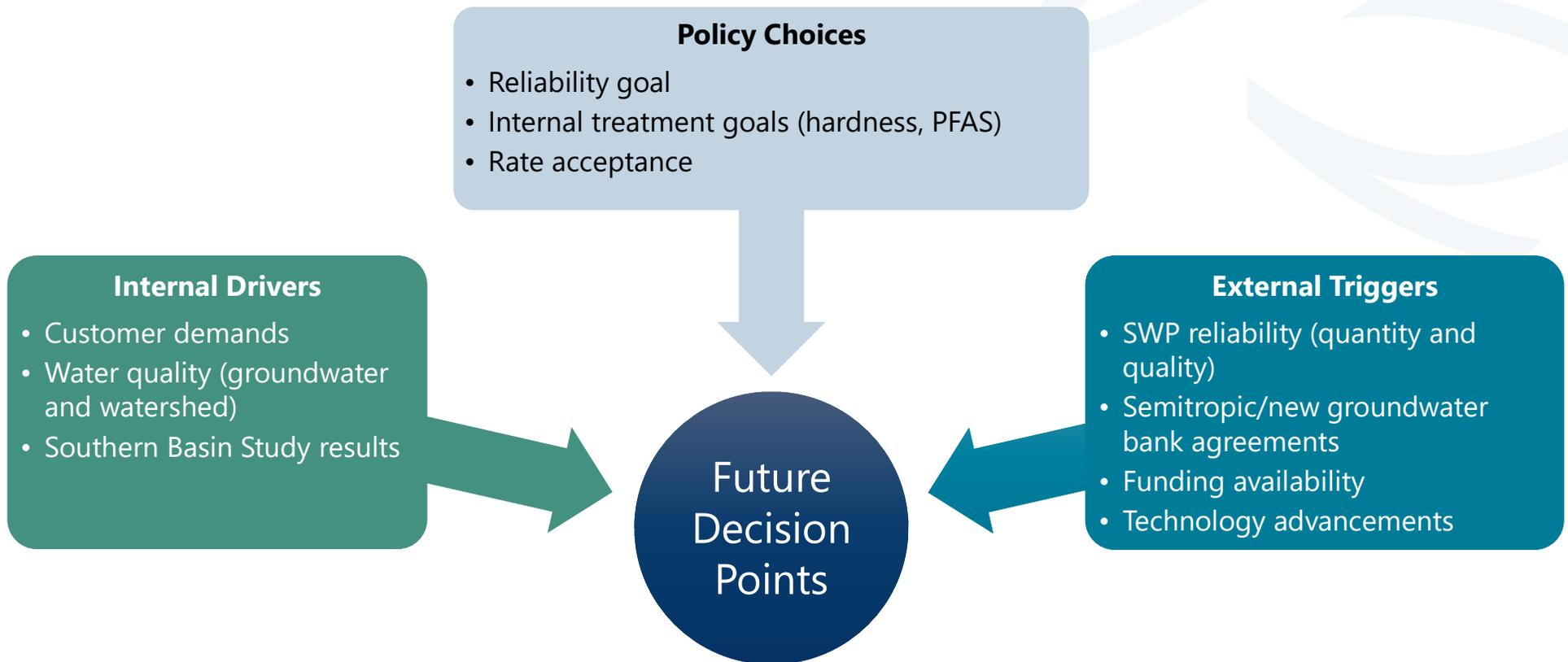
# Discussion: Meeting WRMP Goals

*Do you think the WRMP Goals can be met through these recommended suite of projects and policies?*



# Implementation Planning

# Decision points will inform progressive implementation



# WRMP implementation plan includes:



**High-level steps  
for each project**



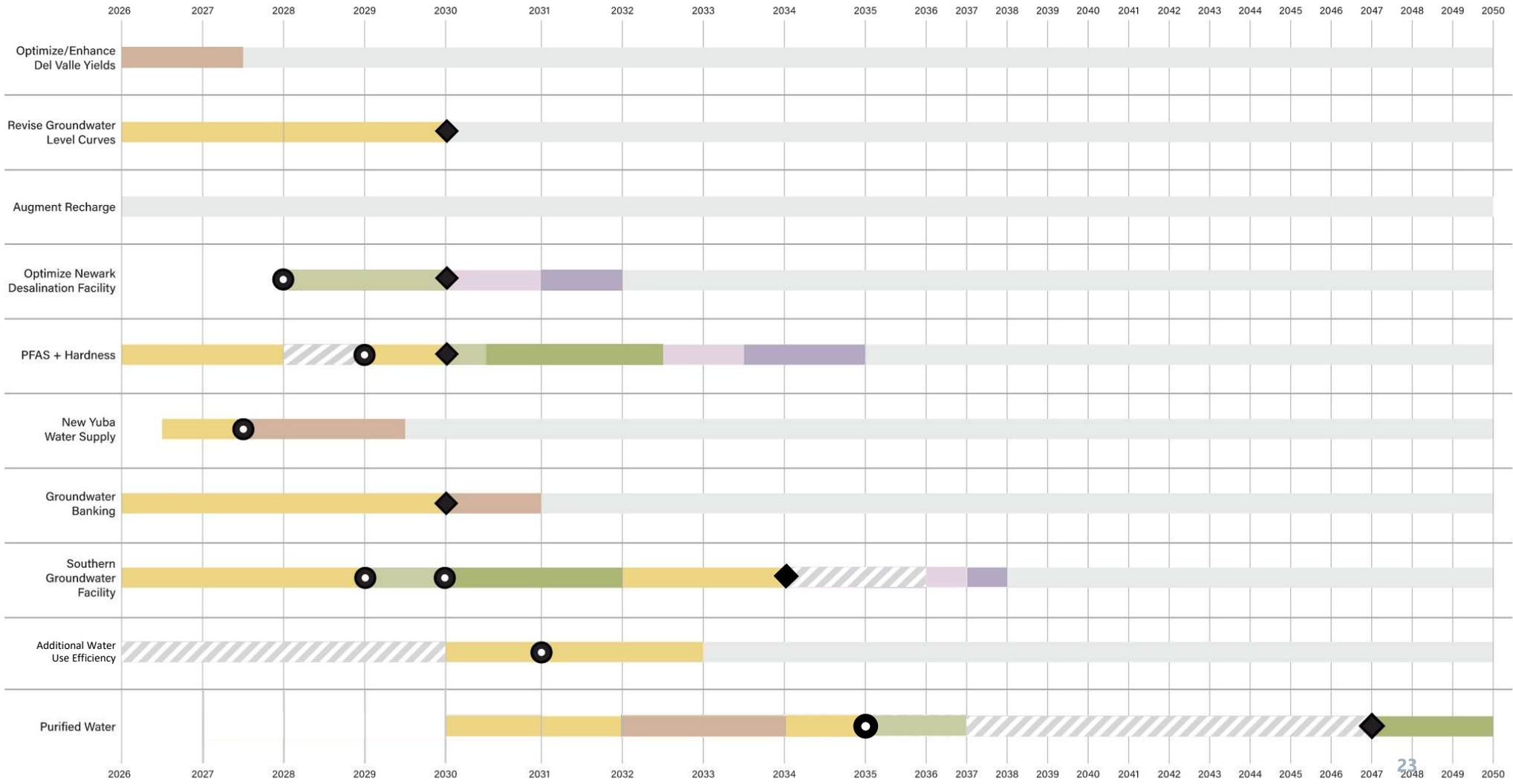
**Implementation  
timescale**



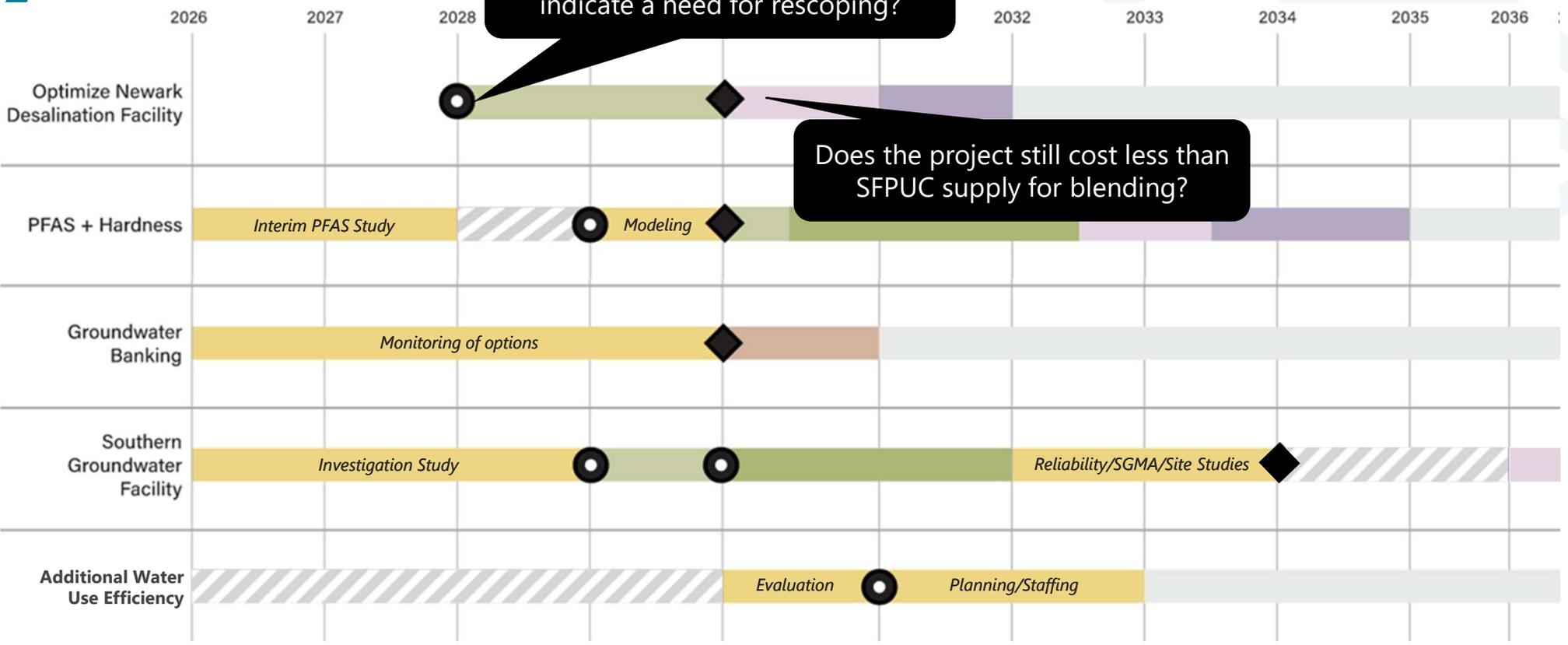
**Relationships  
between  
projects**



**Key decision points**



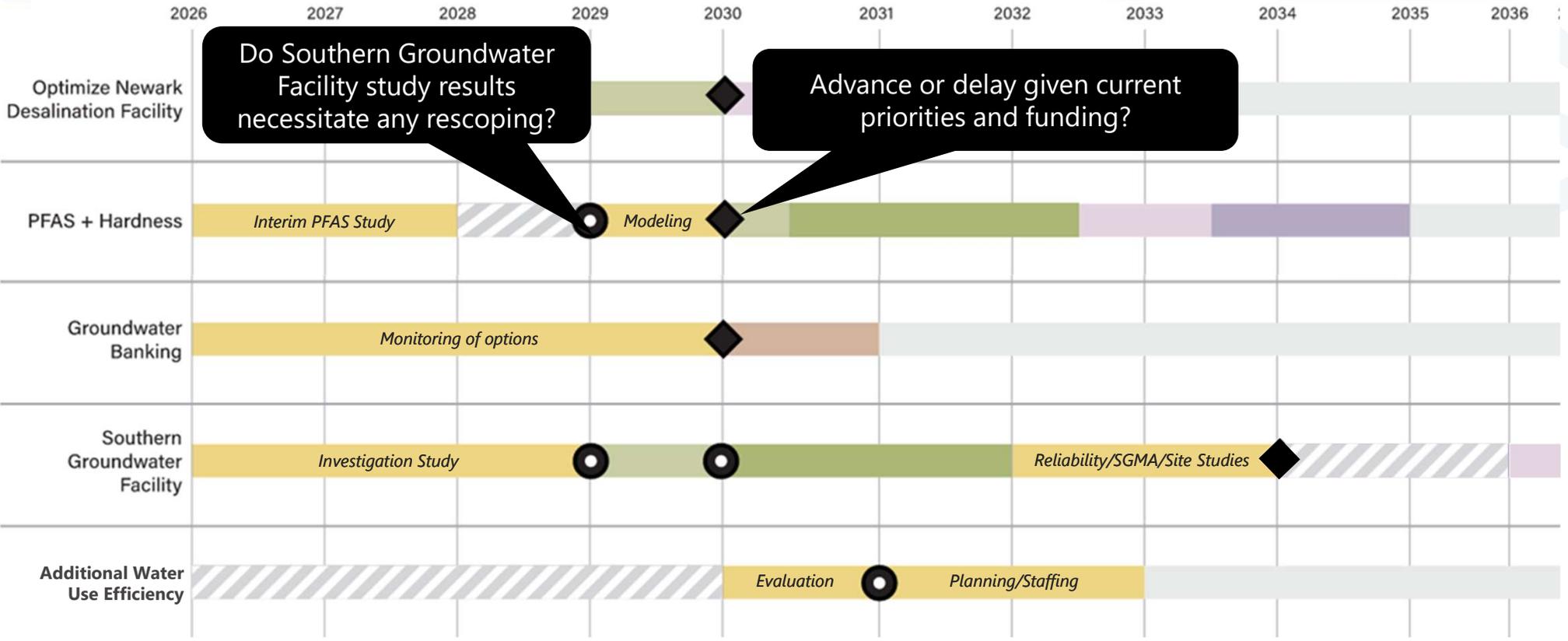
■ Planning or Study   
 ■ Agreements   
 ■ Pre-Design and Design   
 ■ Procurement and Construction   
 ■ Supply Available (Implemented)   
 ▨ On hold while monitoring   
 ● Decision: Internal Driver   
 ◆ Decision: External Driver



Do the SFPUC MPR amendments indicate a need for rescoping?

Does the project still cost less than SFPUC supply for blending?

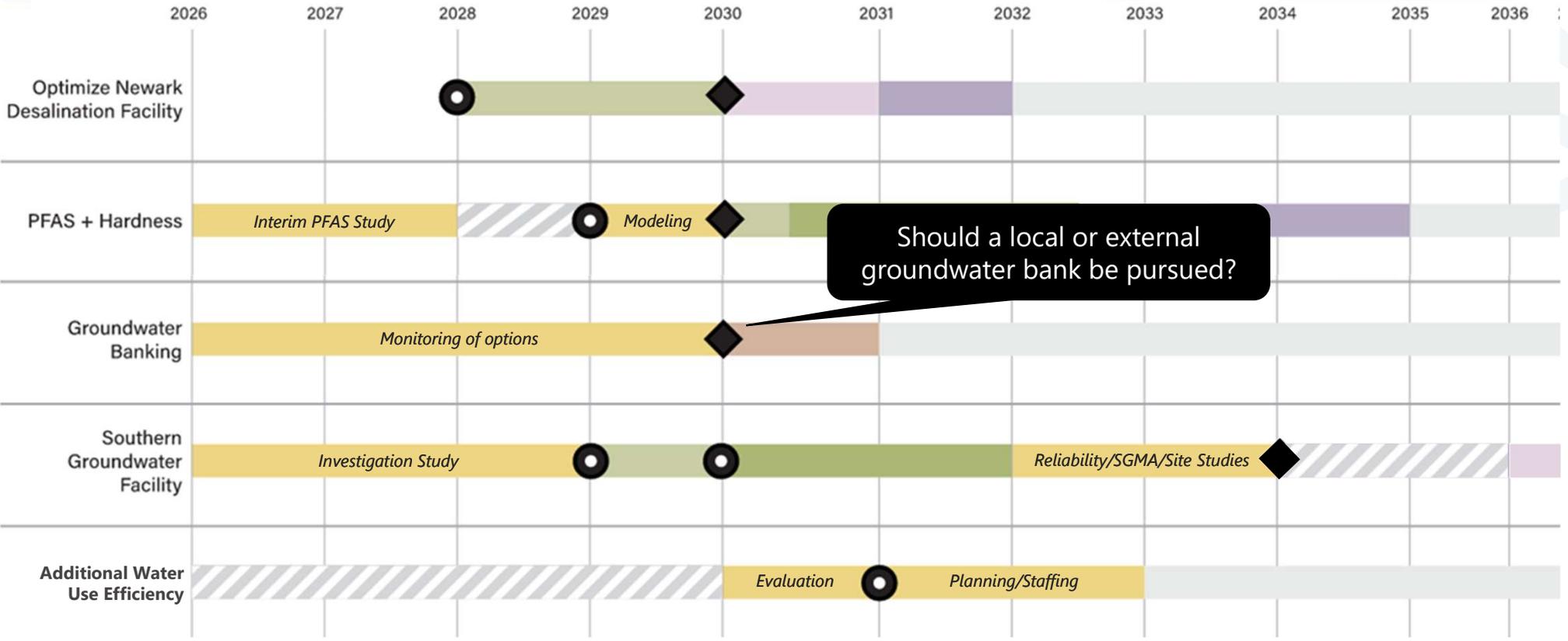
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 ● Decision: Internal Driver   
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Do Southern Groundwater Facility study results necessitate any rescoping?

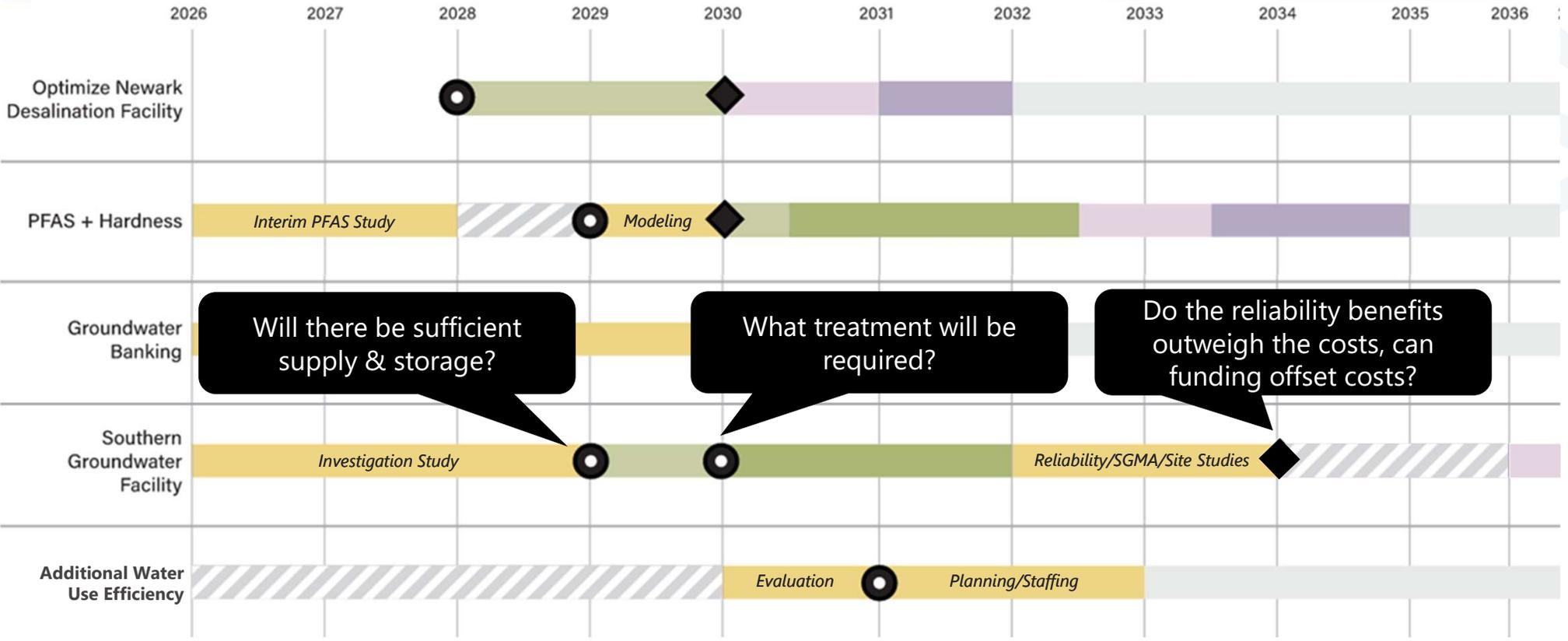
Advance or delay given current priorities and funding?

■ Planning or Study   
 ■ Agreements   
 ■ Pre-Design and Design   
 ■ Procurement and Construction   
 ■ Supply Available (Implemented)   
 ▨ On hold while monitoring   
 ● Decision: Internal Driver   
 ◆ Decision: External Driver



Should a local or external groundwater bank be pursued?

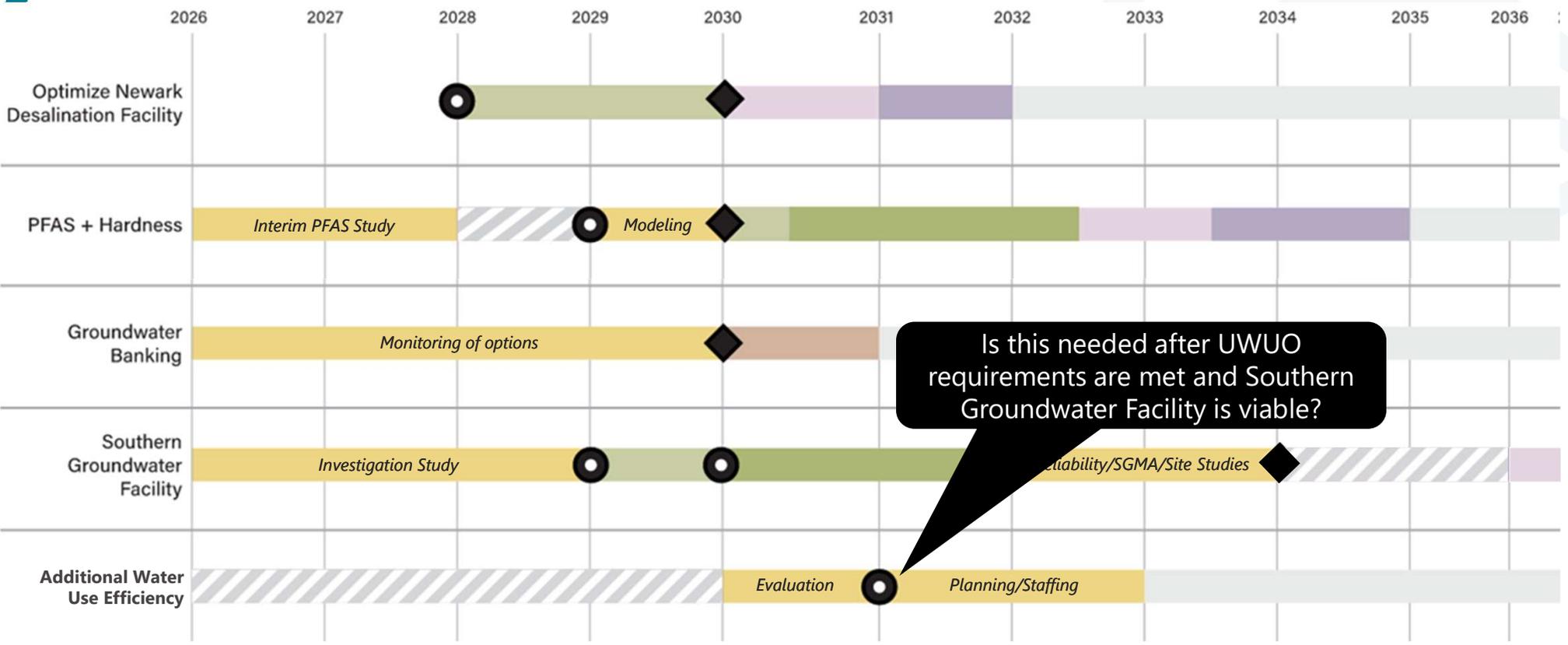
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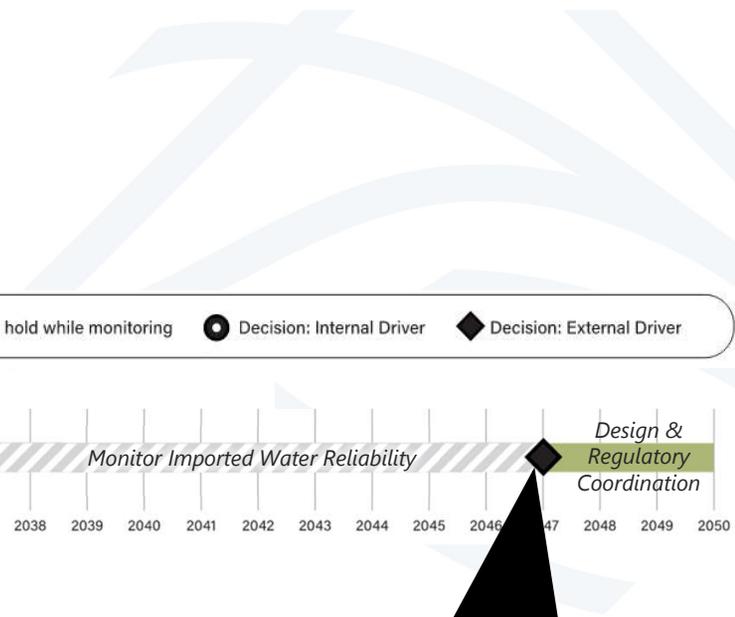
Will there be sufficient supply & storage?

What treatment will be required?

Do the reliability benefits outweigh the costs, can funding offset costs?



Is this needed after UWUO requirements are met and Southern Groundwater Facility is viable?



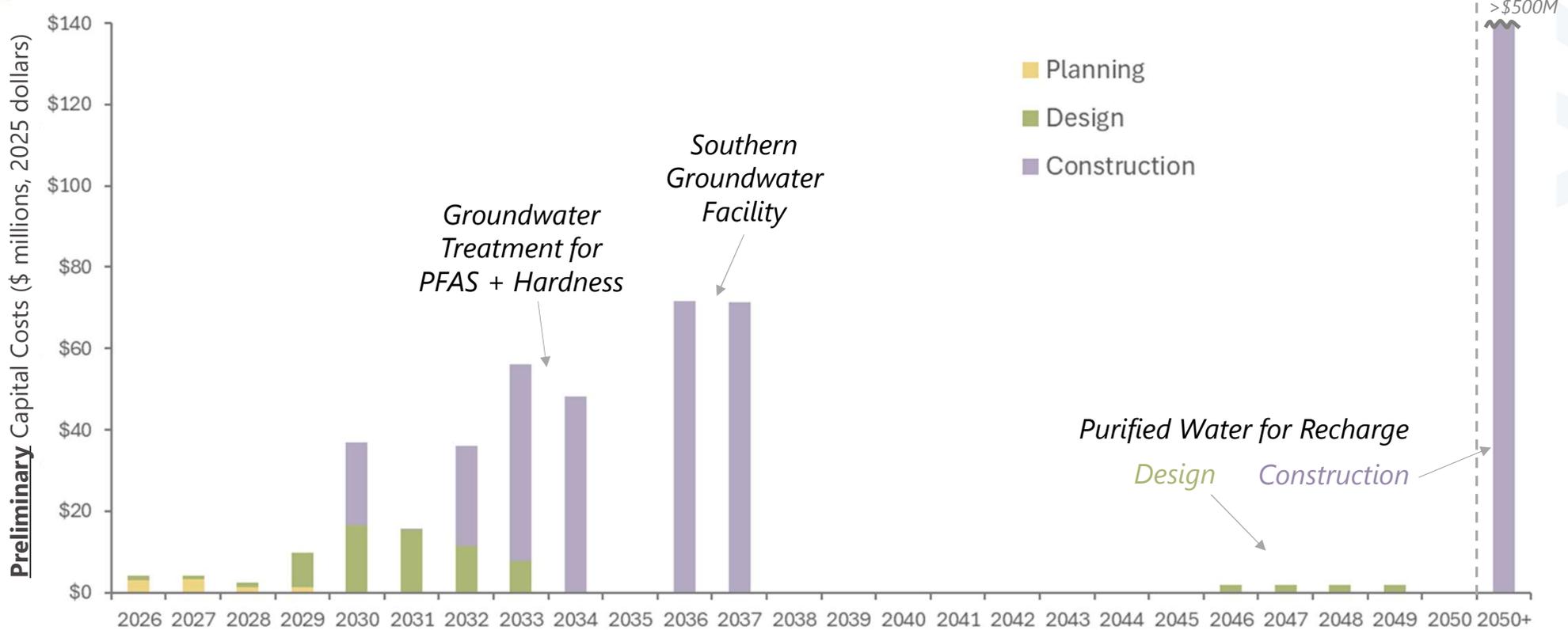
■ Planning or Study   ■ Agreements   ■ Pre-Design and Design   ■ Procurement and Construction   ■ Supply Available (Implemented)   ■ On hold while monitoring   ● Decision: Internal Driver   ◆ Decision: External Driver



Do study results support moving ahead with pre-design?

Do reliability impacts necessitate project implementation?

# Phased projects to be implemented if needed (preliminary costs\*)



\* See notes on next slide

# Notes on Preliminary Capital Cost Projection

(previous slide)

- ▶ Costs are high-level and preliminary; a full financial analysis will be completed at a later stage.
- ▶ Capital cost estimates require further refinement, including accounting for combined projects that may offset other elements.
- ▶ \$200–\$300M of current CIP spending can be replaced or is already captured within these estimates.
- ▶ Timeline adjustments will be refined as staff capacity to support the project load becomes clearer.
- ▶ Estimates do not include annual (O&M +supply cost) impacts, additional staffing needs, or anticipated operational savings.
- ▶ Grant funding is a recommended implementation trigger for several items, however no assumptions have been made regarding grant eligibility or partnership cost share.



# Discussion: Key decision points and drivers for implementation

*Are there any additional drivers that could inform future decision-making?*

*Which of the drivers presented will be most significant to trigger or inform future implementation decisions?*



# Looking Ahead to the WRMP Document



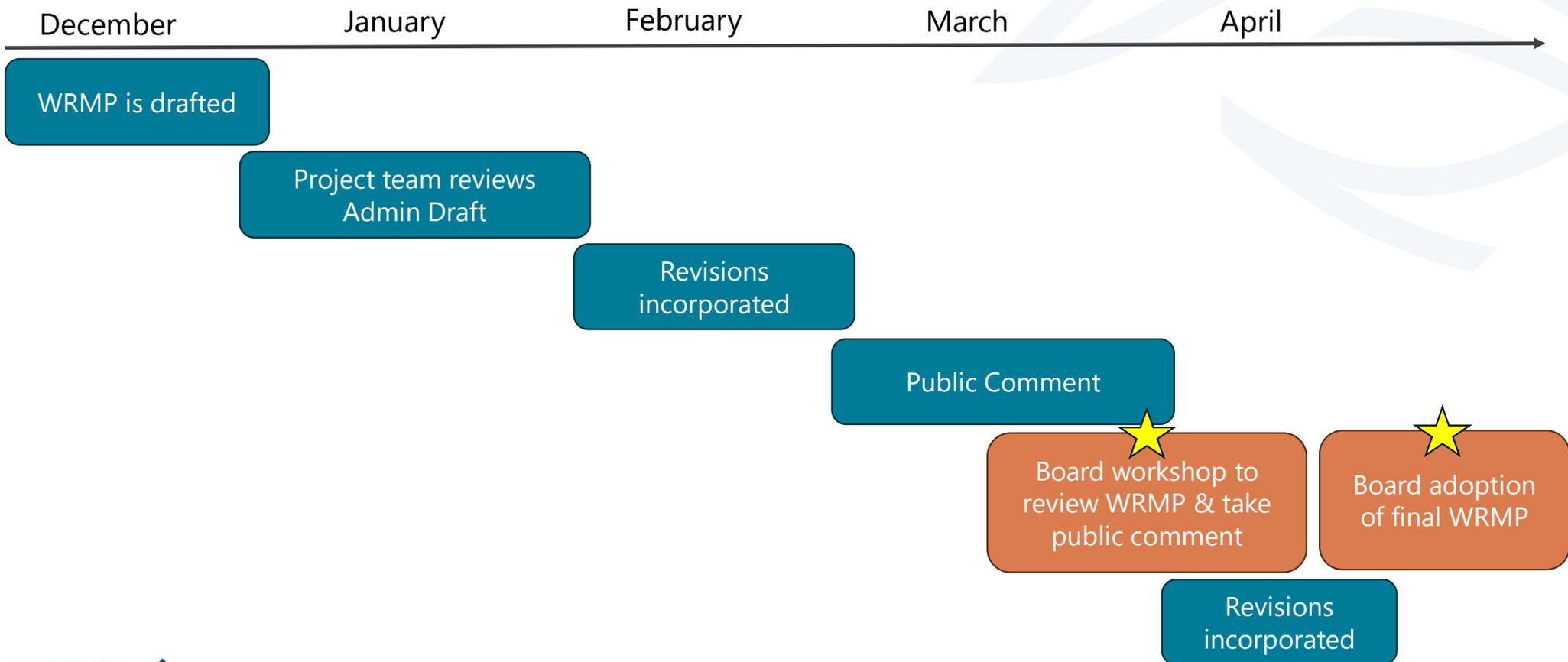
## Looking Ahead to the WRMP Document

- ▶ Team is currently developing a report template
- ▶ Primary target audience: future staff and Board members of ACWD, plus the public & partners
- ▶ Relatively short and accessible main report that is supported by robust technical appendices for more details

# Next Steps



# WRMP Development and Review Schedule





# THANK YOU!

November 20, 2025