

2020 OBMP Update

LISTENING SESSION 7

OCTOBER 17, 2019





Agenda

- OBMPU Process Recap
- Mapping of Program Elements and Proposed Activities
- 2020 OBMPU Report Outline
- Integration of 2000 PE and 2020 Activity Implementation Actions
- Next Steps



Why Update the OBMP?

- The OBMP is a 19-year-old water-resources management plan that was Court-ordered.
- Much has been accomplished in implementation, but not everything. OBMP implementation is ongoing as part of Program Elements 1 - 9.
- The OBMP Implementation Plan needs to be updated: the OBMP goals remain the same, but the OBMP IP is no longer an accurate description of the status, future actions, and schedule for OBMP implementation.
- The CEQA documentation needs to be updated.



2020 OBMP Update Process Recap

- Listening Session 1:
 - History of the OBMP
 - Rationale for an update to the OBMP
 - Drivers, Trends and Implications
- Listening Session 2:
 - Issues, Needs and Wants
 - Goals and Impediments
- Listening Session 3:
 - 2020 OBMP Goals
 - 2020 OBMP Update Proposed Activities
- Listening Session 4:
 - 2020 OBMP Update Proposed Activities
 - Nexus between Proposed Activities, Goals and Impediments
- Listening Session 5:
 - 2020 OBMP Update Scoping Report (TM1) Pt. 1 review and comments
- Listening Session 6:
 - 2020 OBMP Update Process
 - 2020 OBMP Update Scoping Report (TM1) Pt. 2 review and comments

2000 OBMP

OBMP Phase 1 Report

1. Introduction
2. State of the Basin
3. OBMP Goals
4. Management Plan

OBMP Implementation Plan Program Elements (PEs)

1. Monitoring
2. Recharge Program
3. Water Supply Plan for Impaired Areas
4. Subsidence Management
5. Regional Supplemental Water Program
6. Cooperative Program with Regulators
7. Salt Management Plan
8. Storage Management Plan
9. Storage and Recovery Programs

Peace Agreement



OBMP
PEIR

2020 OBMP Update

2020 OBMPU Scoping Report (TM1)

1. Introduction
2. Development of Activities
3. Scope of Work to Perform Proposed 2020 OBMP Update Activities.
 - Activity A: New and Improve Recharge Facilities
 - Activity B: Optimize Storage and Recovery Programs
 - Activity D: Maximize use of Recycled Water
 - Activity E/F: WQ Management Plan and Strategic Compliance Solutions
 - Activity C/G: Regional Conveyance and Treatment
 - Activity K: Salt and Nutrient Management
 - Activity L: Appropriate Monitoring

Harmonize 2000
OBMP PEs with
2020 OBMP
Update Activities

2020 OBMP Update Report (TM2)

1. Introduction
2. 2020 OBMP Goals
3. OBMP Program Elements
4. 2020 OBMP Management Plan

2020 OBMP Implementation Plan

Implementation Agreement



2020 OBMP
PEIR



Response to comments



Is there duplication of efforts between the OBMP Update and the other planning efforts in the Region?

- The recommended scope of work and cost for each OBMP activity were developed assuming that the activities were unrelated, or that they could be implemented independently.
- The recommended scopes of work and costs were assumed to leverage existing work being performed by Watermaster, but not by others.
- In implementation, when the activity objectives and scopes of work are being refined, the ability to leverage the work of others would need to be identified and considered to eliminate redundancies and reduce cost.
- These assumptions are included in page 10 of the Scoping Report under “Assumptions Applied in Defining the Scope of Work, Schedule, and Cost of the OBMP Activities.”



What would be the scope of CEQA analysis of the 2020 OBMP Implementation Plan?

- The CEQA analysis will be performed for the implementation activities, and possible future projects, described in very general terms. Since the scope of CEQA analysis will cover all activities in the OBMP Implementation Plan, the scope will be determined after TM2 is produced. CEQA analysis will enable future implementation of projects, if the stakeholders choose to move forward, similar to the Desalters in the 2000 OBMP IP.
- Discussions of proposed Basin management and planning activities are necessary for developing an Optimum Basin Management Program, a discretionary Watermaster function.
- The IP and subsequent PEIR does not compel activities to be completed; it enables them. And, moving forward can be conditioned through the Implementation Agreement.
 - E.g. The OBMP contemplated that the Desalters could also be used to treat contaminants other than salts and nutrients.
 - Ontario, IEUA and CDA have secured funding to expand the Desalter treatment facility to support the clean up of the South Archibald TCE plume.



Mapping OBMP Update Activities to 2000 Program Elements

2000 OBMP Program Elements (PEs)

2020 OBMP Update Activities

1 - Develop and Implement Comprehensive Monitoring Program

A - Construct new facilities and improve existing facilities to increase the capacity to store and recharge storm and supplemental waters, particularly in areas of the basin that will promote the long-term balance of recharge and discharge

2 - Develop and Implement Comprehensive Recharge Program

B - Develop, implement, and optimize storage-and-recovery programs to increase water-supply reliability, protect or enhance safe yield, and improve water quality

3 - Develop and Implement Water Supply Plan for the Impaired Areas of the Basin

CG - Identify and implement regional conveyance and treatment projects/programs to enable all stakeholders to exercise their pumping rights and minimize land subsidence AND Optimize the use of all sources of water supply by improving the ability to move water across the basin and amongst stakeholders, prioritizing the use of existing infrastructure

4 - Develop and Implement Comprehensive Groundwater Management Plan for Management Zone 1

D - Maximize the reuse of recycled water produced by IEUA and others

5 - Develop and Implement Regional Supplemental Water Program

EF - Develop and implement a water-quality management plan to address current and future water-quality issues and protect beneficial uses AND Develop strategic regulatory-compliance solutions that achieve multiple benefits in managing water quality

6 - Develop and Implement Cooperative Programs with the Regional Board and

K - Develop a management strategy within the salt and nutrient management plan to ensure the ability to comply with the dilution requirements for recycled water recharge

7 - Other Agencies to Improve Basin Management and Develop and Implement Salt Management Program

L - Perform the appropriate amount of monitoring and reporting required to fulfill basin management and regulatory compliance

8 - Develop and Implement Groundwater Storage Management Program

9 - Develop and Implement Storage and Recovery Programs

2020 OBMPU Activities 2000 OBMP Program Elements (PEs)	A - Increase Recharge	B - Optimize Storage and Recovery	CG - Regional Conveyance	D - Maximize RW Reuse	EF - Water Quality Mgmt.	K - Plan for SNMP Dilution Compliance	L - Monitoring
1 - Monitoring							
2 - Recharge Program							
3 - Impaired Areas							
4 - Subsidence Mgmt.							
5 - Supplemental Water							
6 - Water Quality							
7 - SNMP							
8 – Storage Mgmt. Plan							
9 – S&R Programs							

2000 OBMP Program Elements (PEs)

2020 OBMPU Activities

A - Construct new facilities and improve existing facilities to increase the capacity to store and recharge storm and supplemental waters, particularly in areas of the basin that will promote the long-term balance of recharge and discharge

1 - Develop and Implement Comprehensive Monitoring Program

2 - Develop and Implement Comprehensive Recharge Program

3 - Develop and Implement Water Supply Plan for the Impaired Areas of the Basin

4 - Develop and Implement Comprehensive Groundwater Management Plan for Management Zone 1

5 - Develop and Implement Regional Supplemental Water Program

6 - Develop and Implement Cooperative Programs with the Regional Board and other Agencies to Improve Basin Management

7 - Develop and Implement Salt Management Program

8 - Develop and Implement Groundwater Storage Management Program

9 - Develop and Implement Storage and Recovery Programs

- Activity A Objectives:**
- Ensure sufficient supplemental water recharge capacity for future replenishment
 - Promote the long-term balance of recharge and discharge
 - Maximize stormwater capture
 - Reduce dependence on imported water
 - Improve water quality
 - Ensure a supply of dilution water


- PE2 Objectives:**
- Ensure sufficient recharge capacity and supplemental water available to meet future replenishment requirements.
 - Balance the recharge and discharge
 - Maximize the recharge of recycled and storm waters

<p>2000 OBMP Program Elements (PEs)</p>	<p>2020 OBMPU Activities</p> <p>B - Develop, implement, and optimize storage-and-recovery programs to increase water-supply reliability, protect or enhance safe yield, and improve water quality</p>
<p>1 - Develop and Implement Comprehensive Monitoring Program</p>	
<p>2 - Develop and Implement Comprehensive Recharge Program</p>	
<p>3 - Develop and Implement Water Supply Plan for the Impaired Areas of the Basin</p>	
<p>4 - Develop and Implement Comprehensive Groundwater Management Plan for Management Zone 1</p>	
<p>5 - Develop and Implement Regional Supplemental Water Program</p>	
<p>6 - Develop and Implement Cooperative Programs with the Regional Board and other Agencies to Improve Basin Management</p>	<div data-bbox="1072 446 2313 963" data-label="Text"> <p>Activity B Objectives:</p> <ul style="list-style-type: none"> • To develop storage and recovery programs in the Chino Basin that provide defined benefits to the parties and the basin • Storage and recovery programs that are optimized: to protect/enhance safe yield, to improve water quality, etc. • Leverage unused storage space in the basin. • Reduce reliance on imported water • Potentially provide opportunity for outside funding sources </div>
<p>7 - Develop and Implement Salt Management Program</p>	
<p>8 - Develop and Implement Groundwater Storage Management Program</p>	<div data-bbox="1072 1021 2313 1278" data-label="Text"> <p>PE9 Objectives:</p> <ul style="list-style-type: none"> • To develop a storage and recovery program that will benefit all • Ensure that Basin water and storage capacity are put to maximum beneficial use while causing no material physical injury </div>
<p>9 - Develop and Implement Storage and Recovery Programs</p>	<div data-bbox="1640 1333 1684 1386" data-label="Image"> </div>

<p>2000 OBMP Program Elements (PEs)</p>	<p>2020 OBMPU Activities</p> <p>CG - Identify and implement regional conveyance and treatment projects/programs to enable all stakeholders to exercise their pumping rights and minimize land subsidence AND Optimize the use of all sources of water supply by improving the ability to move water across the basin and amongst stakeholders, prioritizing the use of existing infrastructure</p>
<p>1 - Develop and Implement Comprehensive Monitoring Program</p>	
<p>2 - Develop and Implement Comprehensive Recharge Program</p>	
<p>3 - Develop and Implement Water Supply Plan for the Impaired Areas of the Basin</p>	
<p>4 - Develop and Implement Comprehensive Groundwater Management Plan for Management Zone 1</p>	<p>Activity CG Objectives:</p> <ul style="list-style-type: none"> • Optimize the use of all sources of water available to the parties to meet their demands despite basin management and reliability challenges and potentially help mitigate them
<p>5 - Develop and Implement Regional Supplemental Water Program</p>	<p>PE5 Objectives:</p> <ul style="list-style-type: none"> • Increase potable supplies • Improve the regional conveyance and availability of imported and recycled waters throughout the basin
<p>6 - Develop and Implement Cooperative Programs with the Regional Board and other Agencies to Improve Basin Management</p>	
<p>7 - Develop and Implement Salt Management Program</p>	
<p>8 - Develop and Implement Groundwater Storage Management Program</p>	
<p>9 - Develop and Implement Storage and Recovery Programs</p>	<p>●</p>

<p>2000 OBMP Program Elements (PEs)</p>	<p>2020 OBMPU Activities</p> <p>D - Maximize the reuse of recycled water produced by IEUA and others</p>
<p>1 - Develop and Implement Comprehensive Monitoring Program</p>	
<p>2 - Develop and Implement Comprehensive Recharge Program</p>	
<p>3 - Develop and Implement Water Supply Plan for the Impaired Areas of the Basin</p>	
<p>4 - Develop and Implement Comprehensive Groundwater Management Plan for Management Zone 1</p>	
<p>5 - Develop and Implement Regional Supplemental Water Program</p>	<p>Activity D Objectives:</p> <ul style="list-style-type: none"> Maximize the reuse of recycled water produced by the IEUA and other publicly owned treatment works (POTWs) in proximity to the Chino Basin
<p>6 - Develop and Implement Cooperative Programs with the Regional Board and other Agencies to Improve Basin Management</p>	<p>PE5 Objectives:</p> <ul style="list-style-type: none"> Increase potable supplies Improve the regional conveyance and availability of imported and recycled waters throughout the basin
<p>7 - Develop and Implement Salt Management Program</p>	
<p>8 - Develop and Implement Groundwater Storage Management Program</p>	
<p>9 - Develop and Implement Storage and Recovery Programs</p>	

<p>2000 OBMP Program Elements (PEs)</p>	<p>2020 OBMPU Activities</p> <p>EF - Develop and implement a water-quality management plan to address current and future water-quality issues and protect beneficial uses AND Develop strategic regulatory-compliance solutions that achieve multiple benefits in managing water quality</p>
<p>1 - Develop and Implement Comprehensive Monitoring Program</p>	
<p>2 - Develop and Implement Comprehensive Recharge Program</p>	
<p>3 - Develop and Implement Water Supply Plan for the Impaired Areas of the Basin</p>	
<p>4 - Develop and Implement Comprehensive Groundwater Management Plan for Management Zone 1</p>	
<p>5 - Develop and Implement Regional Supplemental Water Program</p>	
<p>6 - Develop and Implement Cooperative Programs with the Regional Board and other Agencies to Improve Basin Management</p>	<p>Activity EF Objectives:</p> <ul style="list-style-type: none"> • Collect and analyze the data and information needed to characterize and proactively plan for the water quality challenges • Evaluate the treatment and related infrastructure improvements, that can be implemented to ensure groundwater can be pumped for beneficial use
<p>7 - Develop and Implement Salt Management Program</p>	<p>PE6 Objectives:</p> <ul style="list-style-type: none"> • Routinely characterize water quality trends • To characterize and address point and non-point sources of groundwater contamination
<p>8 - Develop and Implement Groundwater Storage Management Program</p>	
<p>9 - Develop and Implement Storage and Recovery Programs</p>	

<p>2000 OBMP Program Elements (PEs)</p>	<p>2020 OBMPU Activities</p> <p>K - Develop a management strategy within the salt and nutrient management plan to ensure the ability to comply with the dilution requirements for recycled water recharge</p>
<p>1 - Develop and Implement Comprehensive Monitoring Program</p>	
<p>2 - Develop and Implement Comprehensive Recharge Program</p>	
<p>3 - Develop and Implement Water Supply Plan for the Impaired Areas of the Basin</p>	
<p>4 - Develop and Implement Comprehensive Groundwater Management Plan for Management Zone 1</p>	
<p>5 - Develop and Implement Regional Supplemental Water Program</p>	<p>Activity K Objectives:</p> <ul style="list-style-type: none"> Determine if compliance with the recycled water recharge dilution requirements in the Maximum Benefit Salt-and-Nutrient Management Plan can be achieved under existing management plans, and if not, to develop a plan to achieve compliance.
<p>6 - Develop and Implement Cooperative Programs with the Regional Board and other Agencies to Improve Basin Management</p>	<p>PE7 Objectives:</p> <ul style="list-style-type: none"> Characterize current and future salt and nutrient conditions and subsequently develop and implement a plan to manage them
<p>7 - Develop and Implement Salt Management Program</p>	<p style="text-align: center;"></p>
<p>8 - Develop and Implement Groundwater Storage Management Program</p>	
<p>9 - Develop and Implement Storage and Recovery Programs</p>	

<p>2000 OBMP Program Elements (PEs)</p> <p>2020 OBMPU Activities</p>	<p>L - Perform the appropriate amount of monitoring and reporting required to fulfill basin management and regulatory compliance</p>
<p>1 - Develop and Implement Comprehensive Monitoring Program</p>	<p>⚓</p>
<p>2 - Develop and Implement Comprehensive Recharge Program</p>	<p>●</p>
<p>3 - Develop and Implement Water Supply Plan for the Impaired Areas of the Basin</p>	<p>Activity L Objectives:</p> <ul style="list-style-type: none"> To refine the monitoring and reporting requirements of Watermaster to ensure that the objectives of each requirement are being met efficiently at a minimum cost.
<p>4 - Develop and Implement Comprehensive Groundwater Management Plan for Management Zone 1</p>	<p>●</p>
<p>5 - Develop and Implement Regional Supplemental Water Program</p>	<p>●</p>
<p>6 - Develop and Implement Cooperative Programs with the Regional Board and other Agencies to Improve Basin Management</p>	<p>PE1 Objectives:</p> <ul style="list-style-type: none"> Provide monitoring information to support the implementation of the other OBMP program elements and evaluate their performance.
<p>7 - Develop and Implement Salt Management Program</p>	<p>●</p>
<p>8 - Develop and Implement Groundwater Storage Management Program</p>	<p>●</p>
<p>9 - Develop and Implement Storage and Recovery Programs</p>	<p>●</p>

2020 OBMPU Activities 2000 OBMP Program Elements (PEs)	A - Increase Recharge	B - Optimize Storage and Recovery	CG - Regional Conveyance	D - Maximize RW Reuse	EF - Water Quality Mgmt.	K - Plan for SNMP Dilution Compliance	L - Monitoring
1 - Monitoring							⚓
2 - Recharge Program	⚓	•					•
3 - Impaired Areas		•			•	•	•
4 - Subsidence Mgmt.	•	•	•				•
5 - Supplemental Water		•	⚓	⚓	•		•
6 - Water Quality	•	•	•		⚓		•
7 - SNMP				•		⚓	•
8 – Storage Mgmt. Plan		•					•
9 – S&R Programs	•	⚓	•				•



2020 OBMP Update Report – *TM2 Report Outline*

2000 OBMP

OBMP Phase 1 Report

1. Introduction
2. State of the Basin
3. OBMP Goals
4. Management Plan

OBMP Implementation Plan Program Elements (PEs)

1. Monitoring
2. Recharge Program
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8. Storage Management Plan
9. Storage and Recovery Programs

Peace Agreement



OBMP
PEIR

2020 OBMP Update

2020 OBMPU Scoping Report (TM1)

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 - Activity A: New and Improve Recharge Facilities
 - Activity B: Optimize Storage and Recovery Programs
 - Activity D: Maximize use of Recycled Water
 - Activity E/F: WQ Management Plan and Strategic Compliance Solutions
 - Activity C/G: Regional Conveyance and Treatment
 - Activity K: Salt and Nutrient Management
 - Activity L: Appropriate Monitoring

Harmonize 2000
OBMP PEs with
2020 OBMP
Update Activities

We are
Here

2020 OBMP Update Report (TM2)

1. Introduction
2. 2020 OBMP Goals
3. OBMP Program Elements
4. 2020 OBMP Management Plan

2020 OBMP Implementation Plan

Implementation Agreement



2020 OBMP
PEIR



2020 OBMP Update Report – TM2

Report Outline

1. Introduction

- History of the OBMP
- Need for the 2020 OBMP Update
- Stakeholder Process to Update the OBMP

2. 2020 OBMP Goals

- This section will summarize the outcomes of the stakeholder process to define INWs, Goals, and Basin optimization Activities

3. OBMP Program Elements

- This section will describe the 2000 Program Elements and their IPs, the progress made in implementing the IPs, and how the 2020 OBMP Update Activities are mapped to the Program Elements

4. 2020 OBMP Management Plan

- This section will describe the actions, schedule and responsible parties for implementing the Program Elements for the next 20 years.
- For Each PE: Objective, Need and Function, Description of Actions, Watermaster's Role and Cooperative Efforts with Other Entities, Implementation Actions and Schedule, Institutional Arrangements



Defining 2020 OBMP Implementation Plan by Program Element

- Program Element 6
- Program Element 8/9

BREAK

- Program Element 2
- Program Element 1



2000 OBMP Implementation Plan

Program Element 6

Overview/Objectives

- Routinely characterize water quality trends and assess how water quality has changed as a result of the implementation of the OBMP
- To characterize and address point and non-point sources of groundwater contamination



2000 OBMP Implementation Plan

Program Element 6

	One-time	Ongoing
Years 1 through 3		
<ul style="list-style-type: none">Watermaster will form an ad hoc committee, hereafter <i>water quality committee</i>. The schedule and frequency of the meetings will be developed with the Regional Board during the first year of OBMP implementation	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
<ul style="list-style-type: none">Watermaster will refine its monitoring efforts to support the detection and quantification of water quality anomalies. This may require additional budgeting for analytical staff/support	<input checked="" type="checkbox"/>	
<ul style="list-style-type: none">If necessary, Watermaster will conduct investigation to assist the Regional Board in accomplishing mutually beneficial objectives		<input checked="" type="checkbox"/>
<ul style="list-style-type: none">Watermaster will seek funding from outside sources to accelerate detection and clean up efforts		<input checked="" type="checkbox"/>
Years 4 through 50		
<ul style="list-style-type: none">Continue monitoring coordination efforts with the Regional Board		<input checked="" type="checkbox"/>
<ul style="list-style-type: none">Annually update priority list and schedule for cleaning up all known water quality anomalies		<input type="checkbox"/>
<ul style="list-style-type: none">Continue to seek funding from outside sources to accelerate cleanup efforts		<input checked="" type="checkbox"/>
<ul style="list-style-type: none">Implement projects of mutual interest		<input checked="" type="checkbox"/>

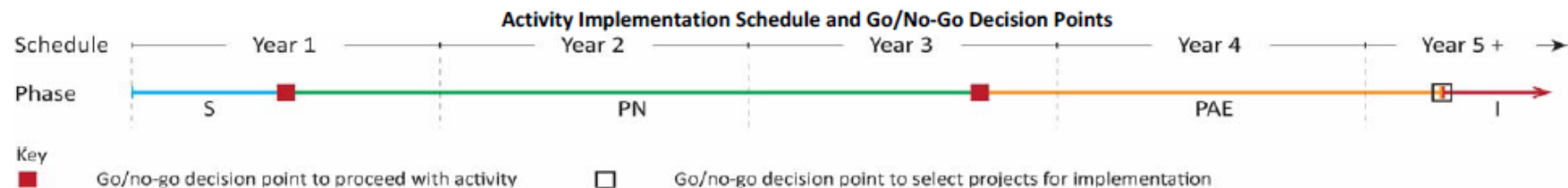
2020 OBMP Update - Activity EF

*Develop and implement a water-quality management plan to address current and future water-quality issues and protect beneficial uses AND
Develop strategic regulatory-compliance solutions that achieve multiple benefits in managing water quality*

Need and Objectives: Groundwater contaminants are present across the Chino Basin, new contaminants are being discovered, and water-quality regulations are evolving and becoming more restrictive. These trends are limiting the beneficial use of groundwater and increasing the cost of the water supply. The objectives of Activity EF are to characterize the water-quality challenges across the Chino Basin and identify the most efficient means to address the water-quality challenges, including the potential for multi-benefit collaborative projects, to ensure that groundwater can be put to beneficial use.

Phase*	Task	Outcomes	Watermaster Role	Are these outcomes necessary for Watermaster to Administer the Physical Solution or Comply with Other Requirements ?
S	1 - Convene the Water Quality Committee, define objectives, and refine scope of work	Mutual understanding of the universe of water quality concerns of parties	Convene committee	Yes
PN	2 - Develop and implement an initial emerging-contaminants monitoring plan	Data	Prepare monitoring plan; collect and compile data	Yes
PN	3 – Perform a water quality assessment and prepare a scope to develop and implement a Groundwater Quality Management Plan	Understanding of scale of problem; scope/cost to evaluate project alternatives; long-term monitoring plan;	Perform characterization	Yes
PAE	4 – Develop planning, screening, and evaluation criteria 5 – Identify and describe potential projects for evaluation 6 – Conduct a reconnaissance-level study for the proposed projects 7 – Prepare the Groundwater Quality Management Plan	Conceptual design and operating plans for project alternatives Understanding of cost to manage Chino Basin groundwater quality with and without collaborative projects Management plan to document project implementation plan and supporting info	Technical support role to evaluate project alternatives and characterize potential for MPI (if necessary) Technical support role to prepare the Groundwater Quality Management Plan	Yes
I	8 – Plan, design, and build water quality management projects	Groundwater quality improvement projects	None	No

*Phase Descriptions: S = Scoping PN = Evaluate need for project PAE = Project alternative evaluation I = Implementation





New Implementation Actions for PE6

Activity EF

Develop and implement an initial and long-term emerging contaminants monitoring plan

Prepare a water quality assessment of the Chino Basin to evaluate the need for a groundwater quality management plan

Develop and implement a Groundwater Quality Management Plan



2020 OBMPU Implementation Plan

Program Element 6

	One-time	Ongoing
Years 1 through 3		
• Re-convene the water quality committee and meet periodically to update groundwater quality management priorities		<input type="checkbox"/>
• Develop and implement an initial emerging contaminants monitoring plan	<input type="checkbox"/>	
• Prepare a water quality assessment of the Chino Basin to evaluate the need for a Groundwater Quality Management Plan and prepare a long-term emerging contaminants monitoring plan	<input type="checkbox"/>	
• Continue to support the parties to identify funding from outside sources to finance cleanup efforts		<input type="checkbox"/>
Years 4 through 20		
• Develop and implement a Groundwater Quality Management Plan and periodically update		<input type="checkbox"/>
• Implement emerging contaminants monitoring plan	<input type="checkbox"/>	
• Continue to conduct investigations to assist the parties and/or the Regional Board in accomplishing mutually beneficial objectives as needed		<input type="checkbox"/>
• Implement projects of mutual interest		<input type="checkbox"/>



2000 OBMP Implementation Plan

Program Elements 8/9

- OBJECTIVE:

- To support the development of a storage and recovery program that will benefit all the parties in the Basin and ensure that Basin water and storage capacity are put to maximum beneficial use while causing no material physical injury to any Producer or the Basin.
- Defines the Storage Management Plan for Local Storage and Storage & Recovery Programs
 - Defines concepts of Operational Storage Requirement, Safe Storage, Safe Storage Capacity
 - Watermaster framework for review and approval of Local Storage and S&R applications
 - Requirement to recompute safe yield and storage losses every 10 years to support SMP



2000 OBMP Implementation Plan

Program Elements 8/9

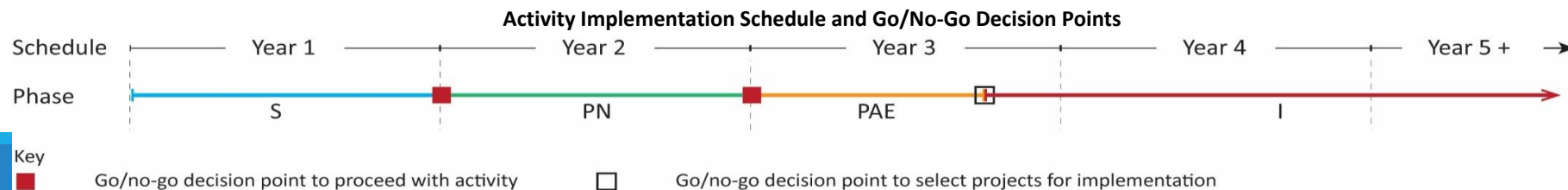
	One-time	Ongoing
Years 1 through 3		
• Evaluate the need to modify Watermaster UGRR regarding storage management plans and procedures	<input checked="" type="checkbox"/>	
• Determine the operational storage requirement and safe storage	<input checked="" type="checkbox"/>	
Years 4 through 50		
• Start assessing losses at 2% per year in year 2005. This amount will be subject to modification in future years		<input checked="" type="checkbox"/>
• In year 2010/11 and every ten years thereafter, compute safe yield and storage loss rate for prior ten-year period, and reset safe yield and storage loss rates for the next ten-year period. Reassess storage management plan and modify Watermaster UGRR, if needed.		<input checked="" type="checkbox"/>



Need and Objectives: The Parties desire to develop and implement “optimized” storage and recovery programs that avoid potential MPI and provide broad benefits, such as increased water-supply reliability, protected or enhanced safe yield, improvements to water quality, and reduced cost for OBMP implementation. The objectives of Activity B are to prepare a Storage and Recovery Master Plan in a collaborative setting that clearly articulates the specific objectives of the parties and the required benefits to be realized from storage and recovery programs. The master plan will assist the parties and their storing partners to select and implement storage and recovery programs that achieve the their objectives and the desired benefits.

Phase*	Task	Outcomes	Watermaster Role	Are these outcomes necessary for Watermaster to Administer the Physical Solution or Comply with Other Requirements ?
S	1 – Convene the Storage and Recovery Program Committee, define objectives, and refine scope of work	Consensus on objectives and desired benefits of S&R programs Scope/cost to prepare the Master Plan	Convene committee; ensure that Committee recommendations are consistent with Watermaster governing documents	Yes. While there is no requirement to optimize S&R programs, the Watermaster is required to evaluate S&R programs for potential MPI, compel mitigation, if necessary, and prioritize approval of S&R programs that provide broad mutual benefits to the parties. This is the most efficient process that enables Watermaster to perform this role.
PN	2 – Develop conceptual alternatives for storage and recovery programs at various scales	Conceptual descriptions of various types of S&R recovery programs that achieve the objectives defined in Task 1	Administer meetings; assist in the development and documentation of conceptual alternatives	
PAE	3 – Describe and evaluate reconnaissance-level facility plans and costs for S&R program alternatives	Reconnaissance-level facility plans, operational plans, and costs for various S&R program alternatives	Administer meetings; assist in development of alternatives; groundwater modeling to estimate basin response	
I	4 – Prepare Storage and Recovery Program Master Plan	S&R Program Master Plan that will support S&R program selection, solicitation of storing partners, applications for funding, and Watermaster approvals	Administer meetings; Preparing draft and final master plan	

*Phase Descriptions: S = Scoping PN = Evaluate need for project PAE = Project alternative evaluation I = Implementation





New Implementation Actions for PE9

*Activity B**

Develop Storage and Recovery Master Plan that will support the design of optimized S&R programs consistent with the SMP, solicitation of storing partners, applications for funding, and Watermaster approvals consistent with the Peace Agreement

Additional Items Pending Completion of SMP



2020 OBMP Implementation Plan

*Program Elements 8/9**

Additional Items Pending Completion of SMP

	One-time	Ongoing
Years 1 through 3		
• Complete and submit to the Court the 2020 Safe Yield Reset	<input type="checkbox"/>	
• Complete and submit to the Court the 2020 Storage Management Plan	<input type="checkbox"/>	
• <i>Develop Storage and Recovery Master Plan that will support the design of optimized S&R programs consistent with the SMP, solicitation of storing partners, applications for funding, and Watermaster approvals consistent with the Peace Agreement</i>	<input type="checkbox"/>	
Years 4 through 20		
• Perform Safe Yield Reset every 10 years (2030, 2040)		<input type="checkbox"/>
• Periodically update the Storage Management Plan		<input type="checkbox"/>
• Assess losses from storage accounts at 0.07% per year. This amount will be subject to modification in future years		<input type="checkbox"/>



Break



2000 OBMP Implementation Plan

Program Element 2

Overview/Objectives

- Ensure there is enough recharge capacity and supplemental water available to meet future replenishment requirements
- Balance the recharge and discharge in every area and subarea
- Maximize the recharge of recycled and storm waters where feasible



2000 OBMP Implementation Plan

Program Element 2

	One-time	Ongoing
Years 1 through 3		
Watermaster advisory committee will form an ad-hoc committee to coordinate with CBWCD and SBCFCD	<input checked="" type="checkbox"/>	
Implement all high priority recharge projects that involve only re-operation of existing recharge/flood control facilities	<input checked="" type="checkbox"/>	
Complete the RMP	<input checked="" type="checkbox"/>	
Complete design and construction of early action recharge projects identified in the first year other implementation of the OBMP	<input checked="" type="checkbox"/>	
Years 4 through 50		
By year 5 implement all high priority projects that involve construction and re-operation at existing facilities	<input checked="" type="checkbox"/>	
Implement all other recharge projects based on need and available resources		<input checked="" type="checkbox"/>
Update the comprehensive recharge program every five years		<input checked="" type="checkbox"/>

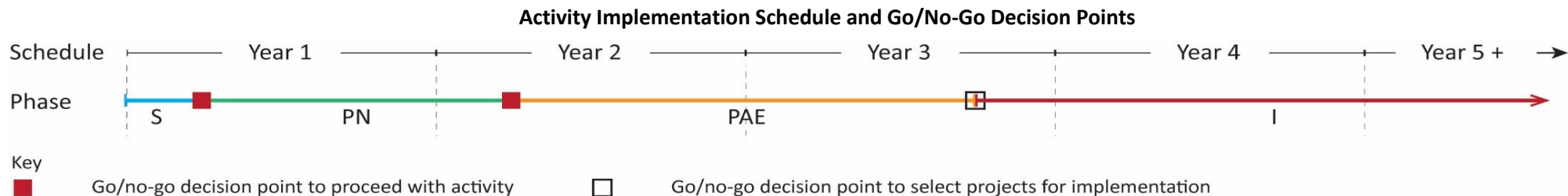
2020 OBMP Update - Activity A:

Construct new facilities and improve existing facilities to increase the capacity to store and recharge storm and supplemental waters, particularly in areas of the basin that will promote the long-term balance of recharge and discharge

Need and Objectives: The objectives of Activity A are (1) to maximize stormwater capture pursuant to Watermaster’s diversion permits, (2) to promote the long-term balance of recharge and discharge, (3) to ensure sufficient supplemental water recharge capacity for future replenishment, (4) to reduce dependence on imported water by maintaining or enhancing safe yield, (5) to improve water quality, and (6) to ensure a supply of dilution water to comply with recycled water recharge permit requirements. Based on the alignment of the objectives of Activity A with those of the RMPU, Activity A can be accomplished through the existing RMPU process.

Phase	Task	Outcomes	Watermaster Role	Are these outcomes necessary for Watermaster to Administer the Physical Solution or Comply with Other Requirements ?
S	1 – Define objectives and refine scope of work	Consensus on objectives of 2023 RMPU	Convene committee	Yes
PN	2 – Develop planning, screening, and evaluation criteria	New criteria for selecting projects	Technical support role	Yes
PAE	3 – Describe recharge enhancement opportunities	Conceptual design, operating plans, and costs of recharge alternatives	Technical support role	Yes
	4 – Develop reconnaissance-level engineering design and operating plan	Project implementation and financing plan		
I	5 – Plan, design, and construct selected recharge projects	New recharge projects	Technical support role	Yes, to the extent that additional recharge capacity is needed

**Phase Descriptions: S = Scoping PN = Evaluate need for project PAE = Project alternative evaluation I = Implementation*





New Implementation Actions for PE2

Activity A

NONE!



2020 OBMPU Implementation Plan

Program Element 2

	One-time	Ongoing
Years 1 through 3		
• Continue to convene the Recharge Investigations and Projects Committee		<input checked="" type="checkbox"/>
• Complete the 2023 Recharge Master Plan Update (RMPU)	<input type="checkbox"/>	
Years 4 through 20		
• Implement recharge projects based on need and available resources		<input checked="" type="checkbox"/>
• Continue to convene the Recharge Investigations and Projects Committee		<input checked="" type="checkbox"/>
• Update the RMPU every five years		<input checked="" type="checkbox"/>



2000 OBMP Implementation Plan

Program Element 1 - Monitoring

Overview/Objectives

- Provide monitoring information to support the implementation of the other OBMP program elements and evaluate their performance.



2000 OBMP Implementation Plan

Program Element 1

	One-time	Ongoing
Years 1 through 3		
• Perform Initial tasks to survey sites and design and set up all groundwater level, groundwater quality, ground level, surface water, and recharge monitoring programs	<input checked="" type="checkbox"/>	
• Complete initial meter installation program for overlying agricultural pool	<input checked="" type="checkbox"/>	
Years 4 through 50		
• Start all groundwater level, groundwater quality, ground level, and surface water monitoring programs	<input checked="" type="checkbox"/>	
• Continue all groundwater level, groundwater quality, ground level, and surface water monitoring programs		<input checked="" type="checkbox"/>
• Continue production monitoring		<input checked="" type="checkbox"/>

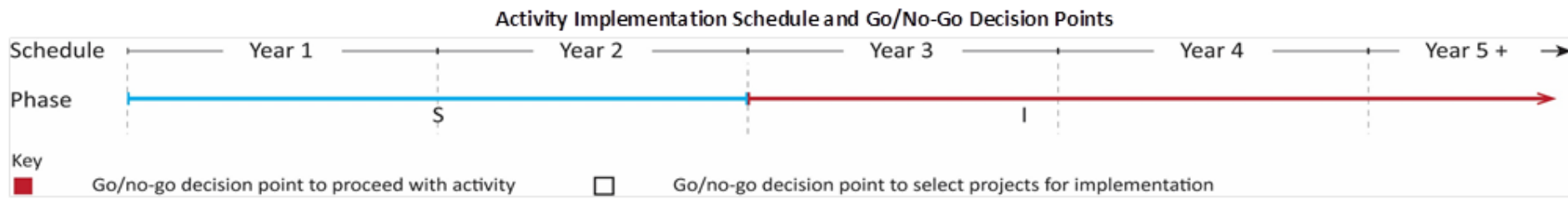
2020 OBMP Update - Activity L

Perform the appropriate amount of monitoring and reporting required to fulfill basin management and regulatory compliance

Need and Objectives: Watermaster conducts data-collection programs and prepares reports and data deliverables to comply with regulations, to fulfill its obligations under its agreements and Court orders, to comply with its requirements under CEQA, and to assess the performance of the evolving OBMP IP, including the 2020 OBMP Update. These monitoring and reporting efforts are described in Exhibit L-1, and will need to continue. The objective of Activity L is to refine the monitoring and reporting requirements of Watermaster to ensure that the objectives of each requirement are being met efficiently at a minimum cost.

Phase*	Task	Outcomes	Watermaster Role	Are these outcomes necessary for Watermaster to Administer the Physical Solution or Comply with Other Requirements?
S, PN	1 – Convene Monitoring and Reporting Committee and prepare the Monitoring and Reporting Work Plan	Comprehensive review of all monitoring/reporting programs in an open stakeholder process; <i>Monitoring and Reporting Work Plan</i> ; Technical Memo: <i>Recommended Revisions to Watermaster’s Non-Discretionary Monitoring and Reporting Programs</i>	Lead committee; Prepare work plan	No, however, monitoring and reporting are required to implement the Judgment and comply with regulations and Watermaster obligations. Since the beginning of OBMP implementation, Watermaster staff and engineer have continually refined the monitoring and reporting efforts to meet all requirements and achieve efficiencies (see Exhibit L-1) and will continue to do so. This activity continues these refinement efforts in closer collaboration with the parties.
I	2 – Implement recommendations in Monitoring and Reporting Work Plan	Revisions to Watermaster’s non-discretionary monitoring and reporting programs Future updates to the Monitoring and Reporting Work Plan	Technical demonstrations to the appropriate regulatory body to gain approval for revisions to the monitoring/reporting program; Update work plan, when necessary	
PN, I	3 – (recurring future task) – Bi-Annual review of scope of work and cost to implement the Monitoring and Reporting Work Plan in the subsequent fiscal year	Update to <i>Monitoring and Reporting Work Plan</i> A scope of work and budget for the subsequent fiscal year	Convene committee; Update the work plan; Prepare scope and budget recommendation for subsequent year	

*Phase Descriptions: S = Scoping PN = Evaluate need for project PAE = Project alternative evaluation I = Implementation





New Implementation Actions for PE1

Activity L

Perform review and update of Watermaster's monitoring and reporting programs and document in a work plan: *OBMP Monitoring Program Work Plan*

Perform periodic review and update of the *OBMP Monitoring Program Work Plan*



2020 OBMP Implementation Plan

Program Element 1

	One-time	Ongoing
Years 1 through 3		
<ul style="list-style-type: none">Continue to conduct all Watermaster monitoring and reporting programs		<input checked="" type="checkbox"/>
<ul style="list-style-type: none">Perform review and update of Watermaster's monitoring and reporting programs and document in a work plan: <i>OBMP Monitoring Program Work Plan</i>	<input type="checkbox"/>	
Years 4 through 10		
<ul style="list-style-type: none">Continue to conduct Watermaster monitoring and reporting programs pursuant to the <i>OBMP Monitoring Program Work Plan</i>		<input type="checkbox"/>
<ul style="list-style-type: none">Perform periodic review and update of the <i>OBMP Monitoring Program Work Plan</i>		<input type="checkbox"/>



2020 OBMP Implementation Plan

Cost-Loaded Schedule: Example

Q: Based on the 2020 OBMP Implementation Plan, what new implementation actions might Watermaster initiate in 2020?

- Program Element 1 - Perform review and update of Watermaster's monitoring and reporting programs and document in a work plan: OBMP Monitoring Program Work Plan
 - Rationale: Some parties have indicated this as a priority
- Program Element 6 – Initiate process to evaluate need for a Groundwater Quality Management Plan
 - Rationale: There are multiple ECs subject to new or revised DDW standards – PFAS, Chromium VI, Perchlorate
- Program Element 8/9 - Develop Storage and Recovery Master Plan
 - Rationale: Submission of one or more S&R applications is anticipated and Watermaster wants to be able to review them for approval in a manner consistent with the Peace Agreement



2020 OBMP Implementation Plan

Cost-Loaded Schedule: Example

Q: How will these new implementation actions be scheduled over the next three years, and what are the associated costs?

New Implementation Actions	Estimated Cost of New Implementation Actions	
Fiscal Year 2020/21		
<ul style="list-style-type: none"> PE1 – Begin review and update of Watermaster’s monitoring and reporting programs and prepare <i>OBMP Monitoring Program Work Plan</i> 		\$60,000
<ul style="list-style-type: none"> PE6 – Reconvene water quality committee and develop interim EC monitoring program 		\$115,000
<ul style="list-style-type: none"> PE9 – Initiate scoping effort for <i>Storage and Recovery Master Plan</i> 		\$105,000
	<i>Subtotal:</i>	\$280,000
Fiscal Year 2021/22		
<ul style="list-style-type: none"> PE1 – Complete review and update of Watermaster’s monitoring and reporting programs and prepare <i>OBMP Monitoring Program Work Plan</i> 		\$65,000
<ul style="list-style-type: none"> PE6 – Implement interim CEC monitoring program and begin water quality characterization of the Chino Basin 		\$125,000
<ul style="list-style-type: none"> PE9 – Implement SOW to prepare <i>Storage and Recovery Master Plan</i> 		TBD
	<i>Subtotal:</i>	\$190,000+
Fiscal Year 2022/23		
<ul style="list-style-type: none"> PE6 – Complete water quality characterization and develop Management Plan scope of work and long-term monitoring program work plan 		\$55,000
<ul style="list-style-type: none"> PE9 – Continue to implement SOW to prepare <i>Storage and Recovery Master Plan</i> 		TBD
	<i>Subtotal:</i>	\$55,000+
	3-Year Cost:	\$525,000+



Next Steps



**2020 OBMP Update Report (TM2) Draft
(Nov 22, 2019)**



Listening Session 8 (Dec 11, 2019)

Feedback on 2020 OBMP Update Report (TM2)
2020 OBMP Implementation Plan Outline



**Beginning of CEQA Analysis
(January 2020)**

2000 OBMP

OBMP Phase 1 Report

1. Introduction
2. State of the Basin
3. OBMP Goals
4. Management Plan

OBMP Implementation Plan Program Elements (PEs)

1. Monitoring
2. Recharge Program
3. Water Supply Plan for Impaired Areas
4. Subsidence Management
5. Regional Supplemental Water Program
6. Cooperative Program with Regulators
7. Salt Management Plan
8. Storage Management Plan
9. Storage and Recovery Programs

Peace Agreement



OBMP
PEIR

2020 OBMP Update

2020 OBMPU Scoping Report (TM1)

1. Introduction
2. Development of Activities
3. Scope of Work to Perform Proposed 2020 OBMP Update Activities.
 - Activity A: New and Improve Recharge Facilities
 - Activity B: Optimize Storage and Recovery Programs
 - Activity D: Maximize use of Recycled Water
 - Activity E/F: WQ Management Plan and Strategic Compliance Solutions
 - Activity C/G: Regional Conveyance and Treatment
 - Activity K: Salt and Nutrient Management
 - Activity L: Appropriate Monitoring

Harmonize 2000
OBMP PEs with
2020 OBMP
Update Activities

We are here

2020 OBMP Update Report (TM2)

1. Introduction
2. 2020 OBMP Goals
3. OBMP Program Elements
4. 2020 OBMP Management Plan

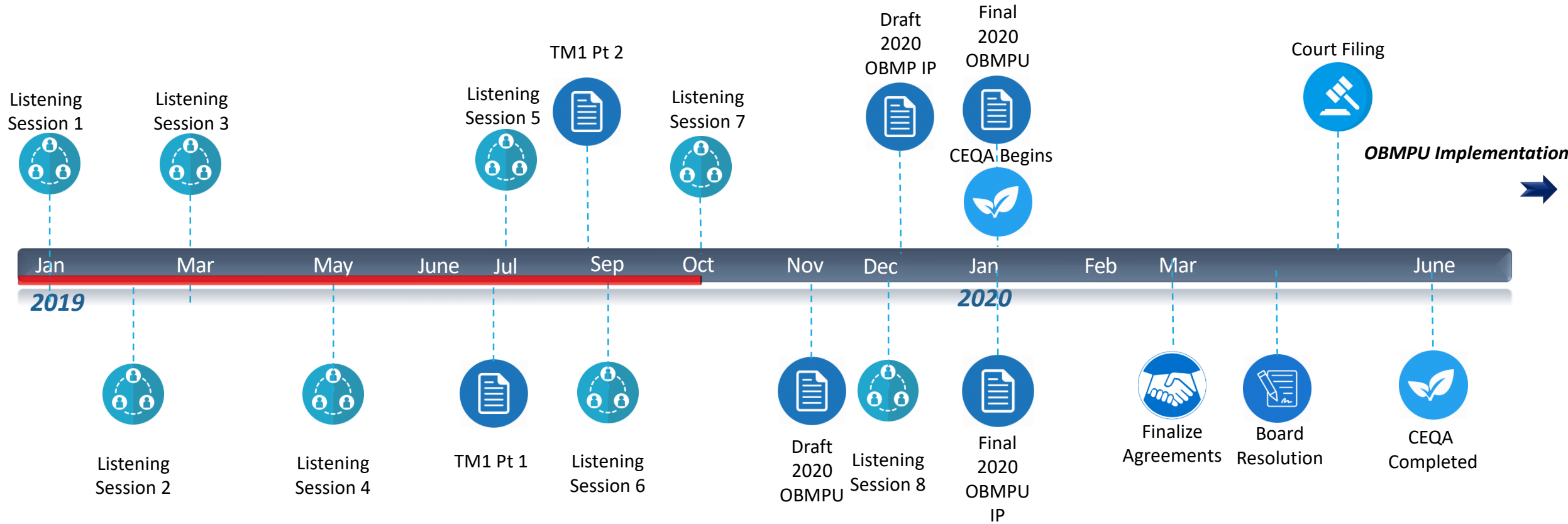
2020 OBMP Implementation Plan

Implementation Agreement



2020 OBMP
PEIR

OBMP Update Timeline





END



2000 OBMP Implementation Plan

Program Element 7

Overview/Objectives

- Characterize current and future salt and nutrient conditions
- Develop and implement a plan to manage salts and nutrients



2000 OBMP Implementation Plan

Program Element 7

	One-time	Ongoing
Years 1 through 3		
• Develop salt budget goals, develop the salt budget tool and review all the OBMP actions	<input checked="" type="checkbox"/>	
• Watermaster will continue to monitor the nitrogen and salt management activities within the basin		<input checked="" type="checkbox"/>
Years 4 through 50		
• As part of periodic updates of the OBMP, re-compute the salt budget using the salt budget tool. The salt budget tool will be used to reassess future OBMP actions to ensure the salt management goals are attained		<input checked="" type="checkbox"/>
• Watermaster will continue to monitor the nitrogen and salt management activities within the basin		<input checked="" type="checkbox"/>

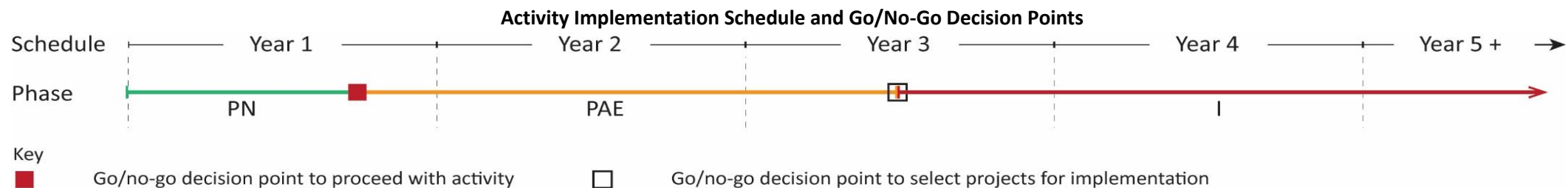
2020 OBMP Update - Activity K:

Develop a management strategy within the salt and nutrient management plan to ensure the ability to comply with the dilution requirements for recycled water recharge

Need and Objectives: The Watermaster and IEUA implement a recycled water recharge program to improve supply reliability. The Maximum Benefit SNMP requires that the recharge be diluted with other sources of low-salinity water to comply with Basin Plan Objectives. If sufficient dilution supplies are not available to comply with the dilution metric, treatment of recycled water, or other salt offset program will be required by the Regional Board. The objective of this activity is to determine if compliance with the Maximum Benefit SNMP recycled water recharge dilution requirements can be achieved under existing management plans, and if not, to develop a plan to achieve compliance.

Phase	Task	Outcomes	Watermaster Role	Are these outcomes necessary for Watermaster to Administer the Physical Solution or Comply with Other Requirements ?
S/PN	1 – Prepare projection to evaluate compliance with recycled water dilution requirements 5 – Periodically reevaluate compliance with dilution requirements	understanding of ability to comply with the TDS and nitrate dilution requirements in the SNMP (near-term and long-term)	Perform technical work in collaboration with IEUA	Yes
PAE	2 – Identify alternative compliance strategies 3 – Evaluate alternative compliance strategies	conceptual design, operating plans, and costs of project alternatives Report to document compliance plan and supporting info	Technical support role to IEUA to evaluate hydrogeologic impacts of project alternatives	Yes
I	4 – Implement the selected compliance strategy	Compliance project (or other compliance action)	Level of support depends on the compliance action	Yes

**Phase Descriptions: S = Scoping PN = Evaluate need for project PAE = Project alternative evaluation I = Implementation*





New Implementation Actions for PE7

Activity K

Complete water quality projections to evaluate compliance with and update the Maximum Benefit Salt and Nutrient Management Plan

Starting in 2025 and every five years thereafter, update water quality projections to evaluate compliance with the Maximum Benefit Salt and Nutrient Management Plan



2020 OBMPU Implementation Plan

Program Element 7

	One-time	Ongoing
Years 1 through 3		
<ul style="list-style-type: none">• Complete water quality projections to evaluate compliance with and update the Maximum Benefit Salt and Nutrient Management Plan	<input type="checkbox"/>	
<ul style="list-style-type: none">• Continue to implement the Maximum Benefit Salt and Nutrient Management Plan pursuant to the Basin Plan, including:<ul style="list-style-type: none">• <i>Implement monitoring program requirements (PE1)</i>• <i>Maintain hydraulic control through operation of the Chino Basin desalters</i>• <i>Increase and maintain desalter pumping at 40,000 acre-feet per year</i>• <i>Comply with recycled water TDS and TIN limitations</i>• <i>Continue storm and supplemental recharge program to comply with recycled water recharge dilution requirements (PE2)</i>• <i>Compute ambient water quality every three years</i>		<input checked="" type="checkbox"/>
Years 4 through 20		
<ul style="list-style-type: none">• Starting in 2025 and every five years thereafter, update water quality projections to evaluate compliance with the Maximum Benefit Salt and Nutrient Management Plan		<input type="checkbox"/>