

Chino Basin Watermaster

OPTIMUM BASIN MANAGEMENT PROGRAM

BOARD WORKSHOP

JULY 28, 2022





Recap

WORKSHOP I

Improve understanding of:

- The Chino Basin Adjudication and provisions of the Judgment
- The Watermaster Role
- The role and expectations of Board, Board Officers, and other Committees

WORKSHOP II

Improve understanding of:

- The relationship between the Pool Committees, AC, and the Board
- The different types of actions and decisions that the Board could make



Workshop Goals

Improve understanding of:

- The 2000 OBMP and the management of the Chino Basin
- The 2020 OBMP and the proposed actions for future management of the Chino Basin



Historical Context

Historical Context: The first 20 years



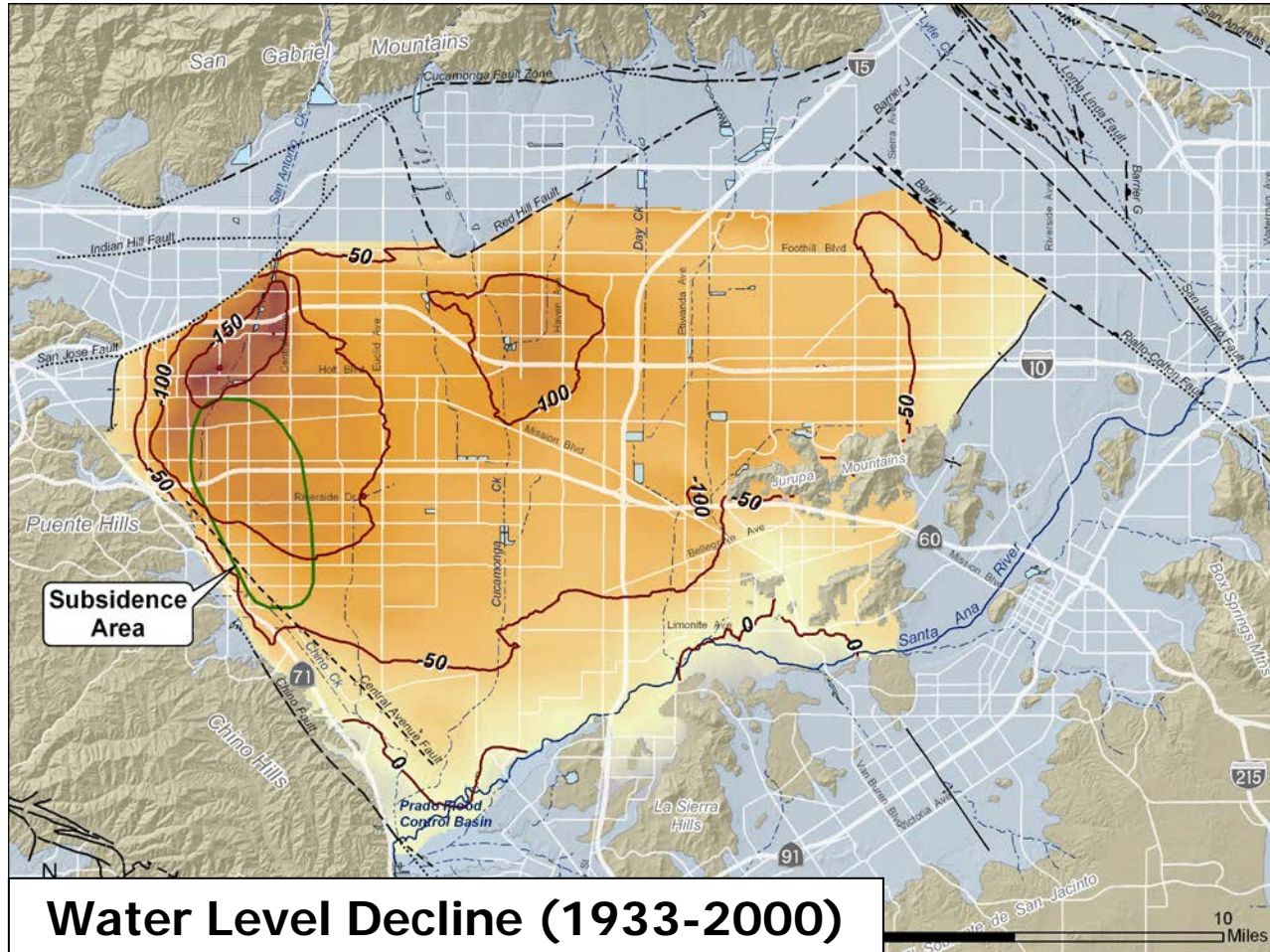
1 || SUSAN M. TRAGER
2 entered January 27, 1978. This motion is made pursuant to
3 Paragraphs 15, 16, and 31 of the Judgment.

4
5 2. This Motion will be made upon the ground that the
6 Watermaster has failed and continues to fail to abide its
7 responsibilities and duties under the Judgment by failing to
8 undertake and implement an Optimum Basin Management Program
9 for Chino Basin, by failing to conduct the Socio-Economic
10 Study and Survey mandated by the Judgment, by failing to
11 provide proper, responsible, equitable and fair water
12 management policy, and by failing to comment on the proposal
13 by the Metropolitan Water District ("MWD") for Groundwater
14 Storage at Chino Basin.

15 3. This Motion will be based on this Notice and Motion

TR II

Historical Context: The first 20 years

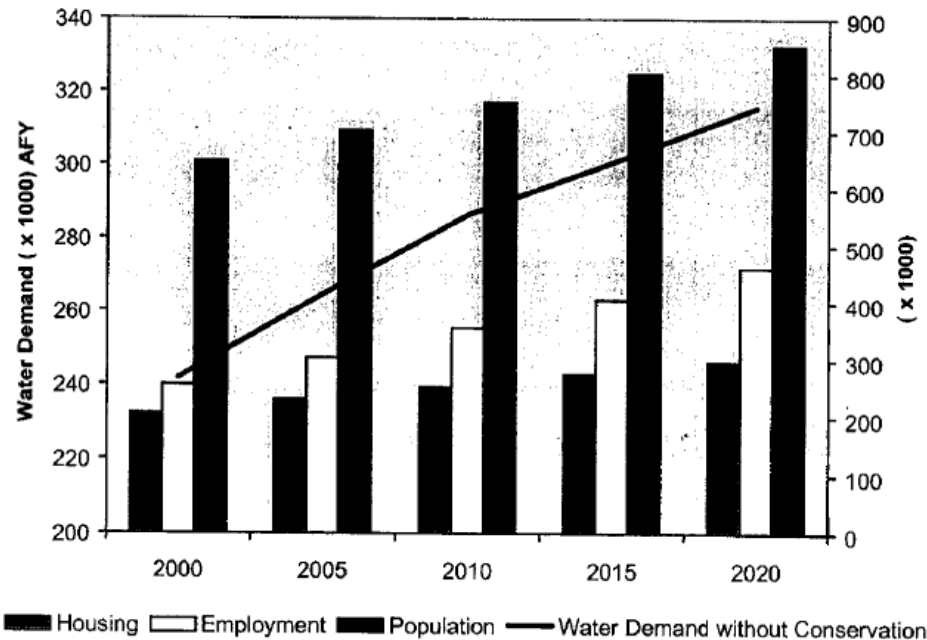


View of a fissure that developed beneath CIM facility in December 1992



2000: The region prepares for unprecedented growth

Figure 3-1: Demographic Projections for IEUA Service Area



Significant urban development is expected to occur throughout the Agency, but especially in the southern portion of the Chino Basin. The conversion of agricultural lands to urban uses will increase municipal and industrial demand for water, while agricultural water demands are expected to decrease. Over the twenty year planning period, the relative share of M&I demand is expected to grow from 210,000 acre-feet (87%) to 306,000 acre-feet (97%), while agricultural water use is expected to decline from 32,000 acre-feet (14%) to 10,000 acre-feet (3%), as shown in Figure 3-2.

Employment within the service area is forecasted to increase by 242,000 jobs between 2000 and 2020. With a projected growth rate of 90% over the next twenty years, the Chino Basin one of the fastest growing regions in the State. Housing stock will increase dramatically as well. Over 120,000 units will built and occupied over the next twenty years, representing an increase of 65%.

Urban Water Management Plan Year 2000 Update





Unprecedented Growth Realized

Table 2-2: Water Demand by Retail Agency – Actual

Retail Agency	Volume in Acre-Feet (2020 Actual)
City of Chino	19,303
City of Chino Hills	14,493
Cucamonga Valley Water District	47,059
Fontana Water Company ^(a)	37,804
Monte Vista Water District	9,035
City of Ontario	39,666
San Antonio Water Company	6,219
City of Upland	18,520
TOTAL	192,100

Notes: Volume values from FY 19/20 Annual Water Use Report; includes recycled water for direct use; does not include recycled water for groundwater recharge. Interagency transfers within the region are not included.

(a) Includes demands within IEUA service area only.

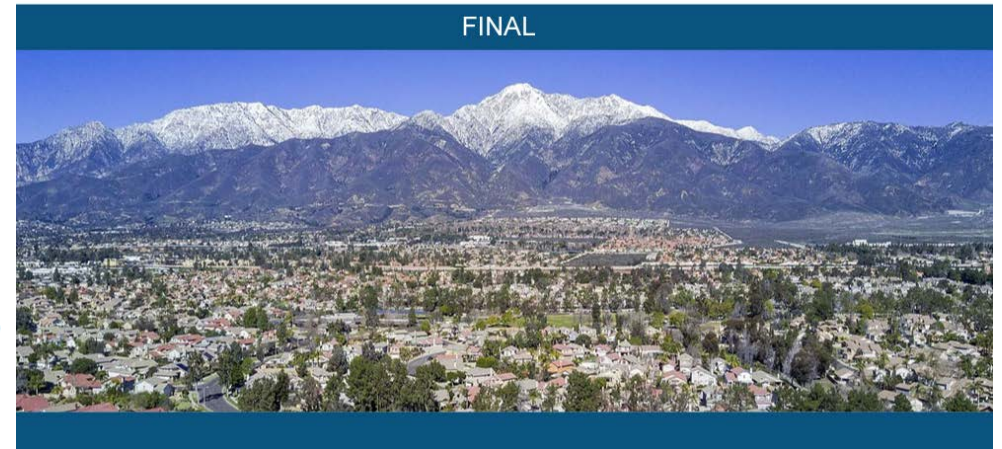
From these calculations, IEUA's service area currently serves a population of approximately 906,046 in 2020 and has an expected growth rate of approximately 0.90% per year. With this growth rate, IEUA's service area is expected to reach a population of 1,119,568 in 2045.



June 2021

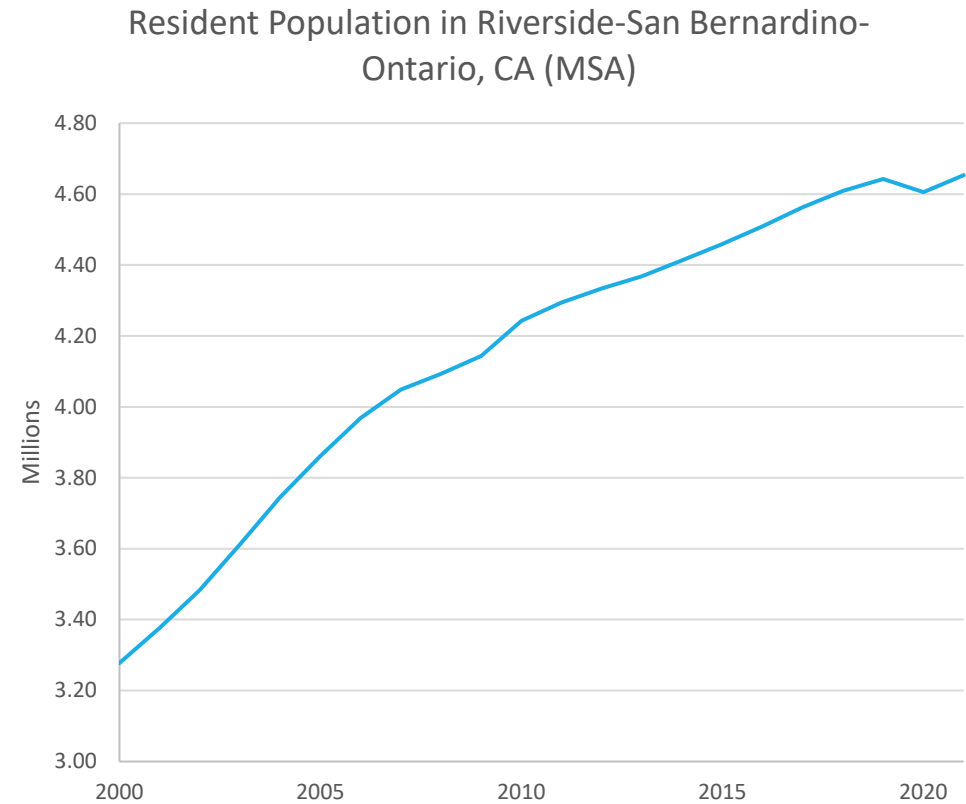
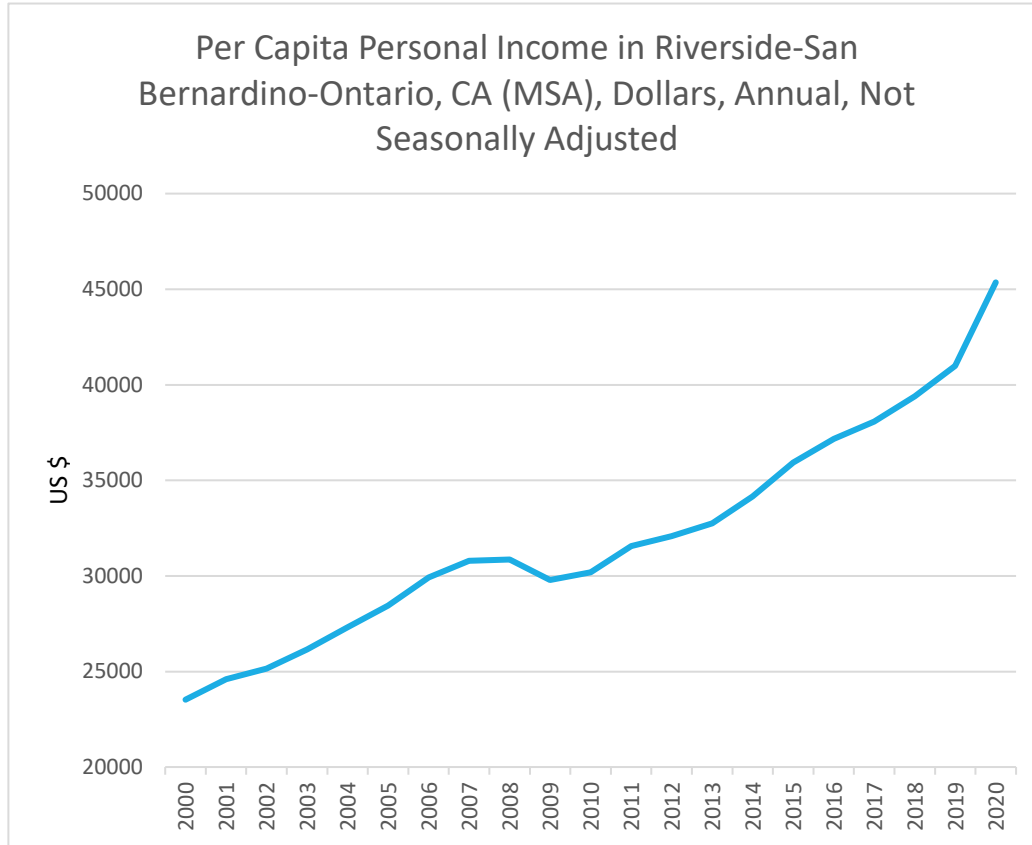
KJ 2044518*00

2020 Urban Water Management Plan





Unprecedented Growth Realized

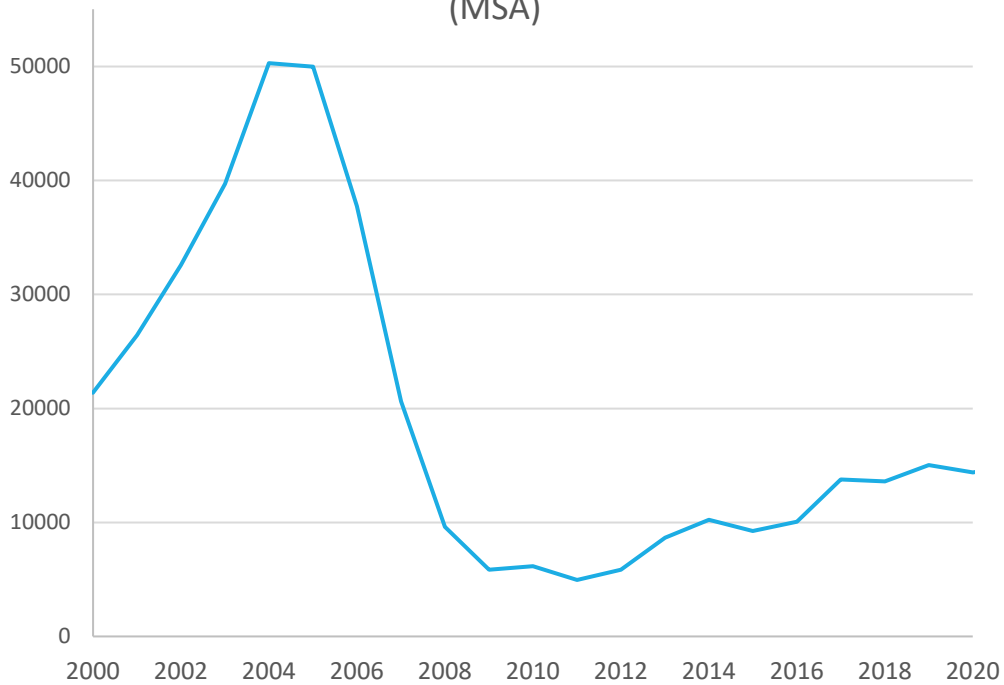


U.S. Bureau of Economic Analysis, retrieved from FRED, Federal Reserve Bank of St. Louis; July 13, 2022.

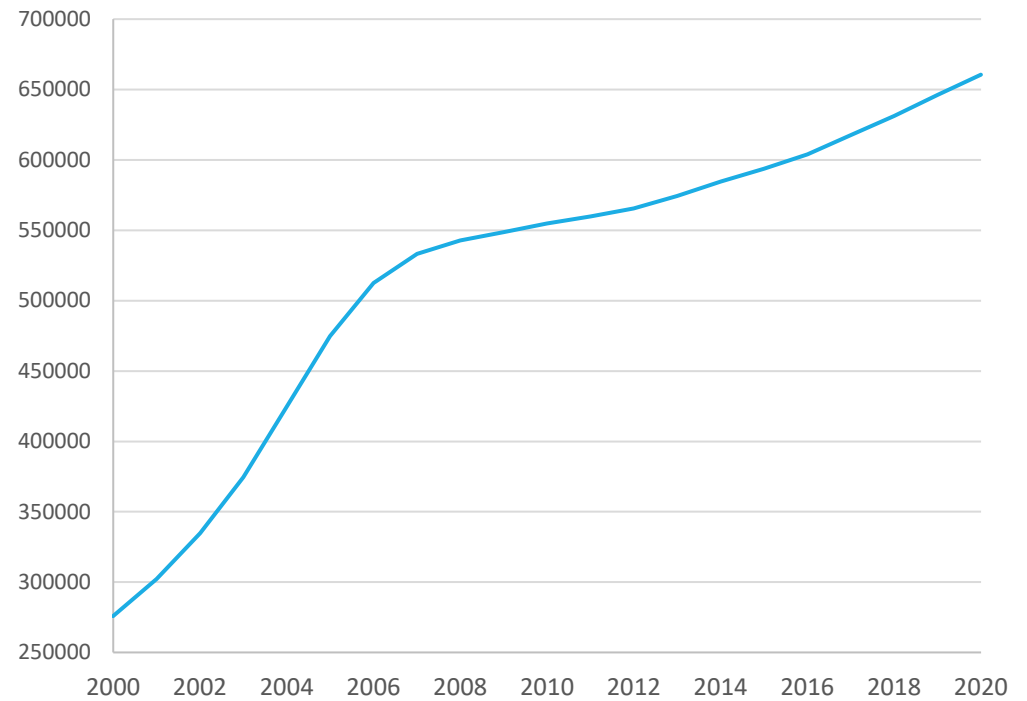


Water Reliability Unlocks Housing Boom

New Private Housing Units Authorized by Building Permits for Riverside-San Bernardino-Ontario, CA (MSA)



Cumulative Housing Units Built in Riverside-San Bernardino- Ontario, CA (MSA)



U.S. Bureau of Economic Analysis, retrieved from FRED, Federal Reserve Bank of St. Louis; July 13, 2022.

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



2000 OBMP Drafting Process



2000 OBMP Peace Agreement and CEQA Process



2000 OBMP Goals



Enhance Basin
Water Supplies



Protect and Enhance
Water Quality



Enhance Management
of the Basin



Equitably Finance
the OBMP

2000 OBMP Program Elements (PEs)

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 MZ1

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

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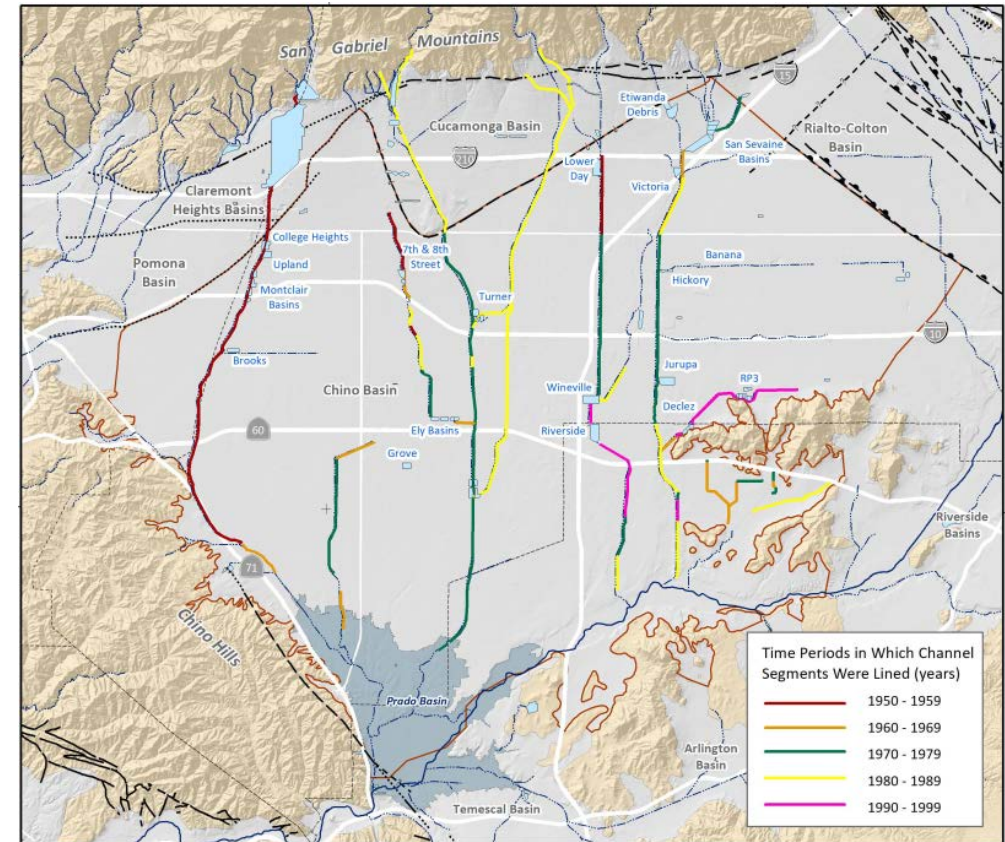
9 - Develop and Implement Storage and Recovery Programs





PE 2 - Develop and Implement Comprehensive Recharge Program

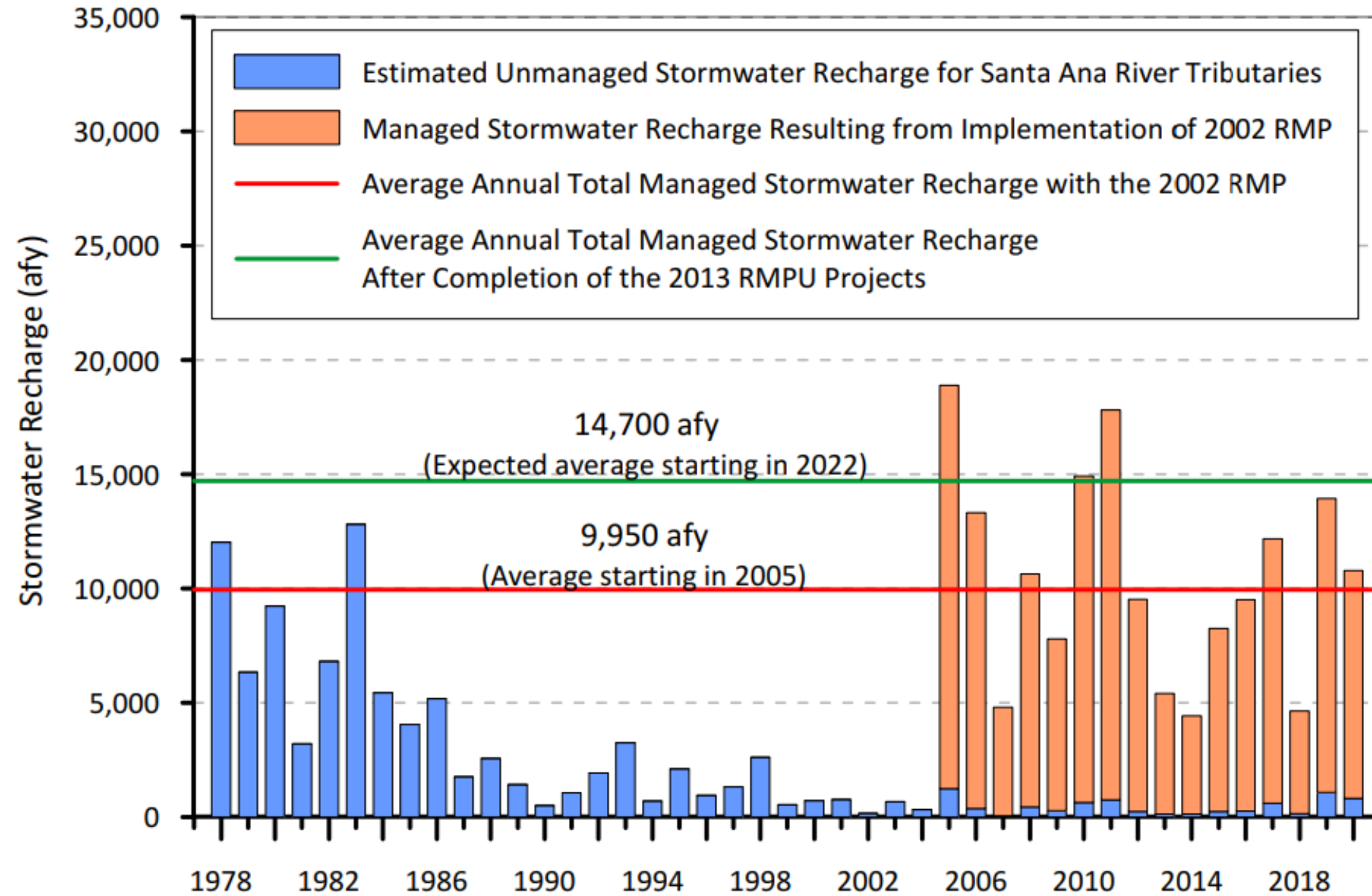
- Urbanization and flood control improvements **reduced** groundwater recharge and net recharge
- Existing recharge capacity was **insufficient** to meet Replenishment and other basin management needs.
- Recharge master plans were completed in 2002, 2013 and 2018
 - Recharge improvements have been completed at 20 existing and new recharge facilities
 - Additional improvements will be completed by 2022
 - Cumulative RMP stormwater recharge through 2021 is 175,000 af
 - Cumulative imported water recharge through 2021 is 205,000 af



2013 Recharge Master Plan Update (RMPU) – Projects/Goal



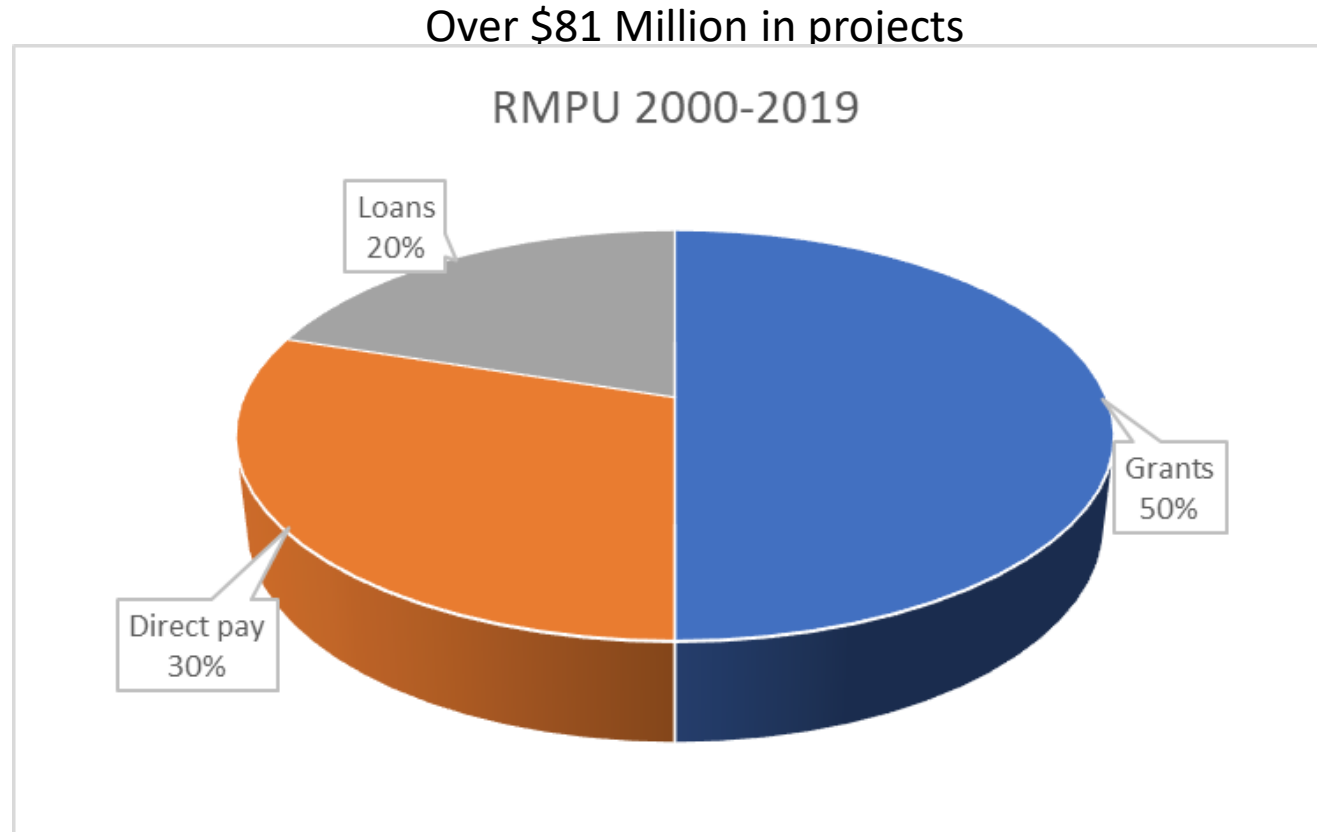
Source: IEUA (2019)



By 2022, the OBMP recharge projects implemented by Watermaster, IEUA, CBWCD and SBCFCD will have mitigated the stormwater recharge lost through channel lining



What are the benefits of PE 2?



Having conceptual projects and a PEIR allows IEUA to pursue Grant funding opportunities



PE 2 Staff and Board Responsibilities

- Watermaster staff responsibilities and contributions:
 - Accounting
 - Replenishment
 - Developing and implementing a Recharge Master Plan (Multi-year effort)
- Parties' contributions and responsibilities:
 - Provide Advice and Assistance, and ongoing oversight
 - Funding
- Board responsibilities:
 - Approve Recharge Applications
 - Approve RMPU
 - Adopt Annual Finding of Compliance with the RMPU

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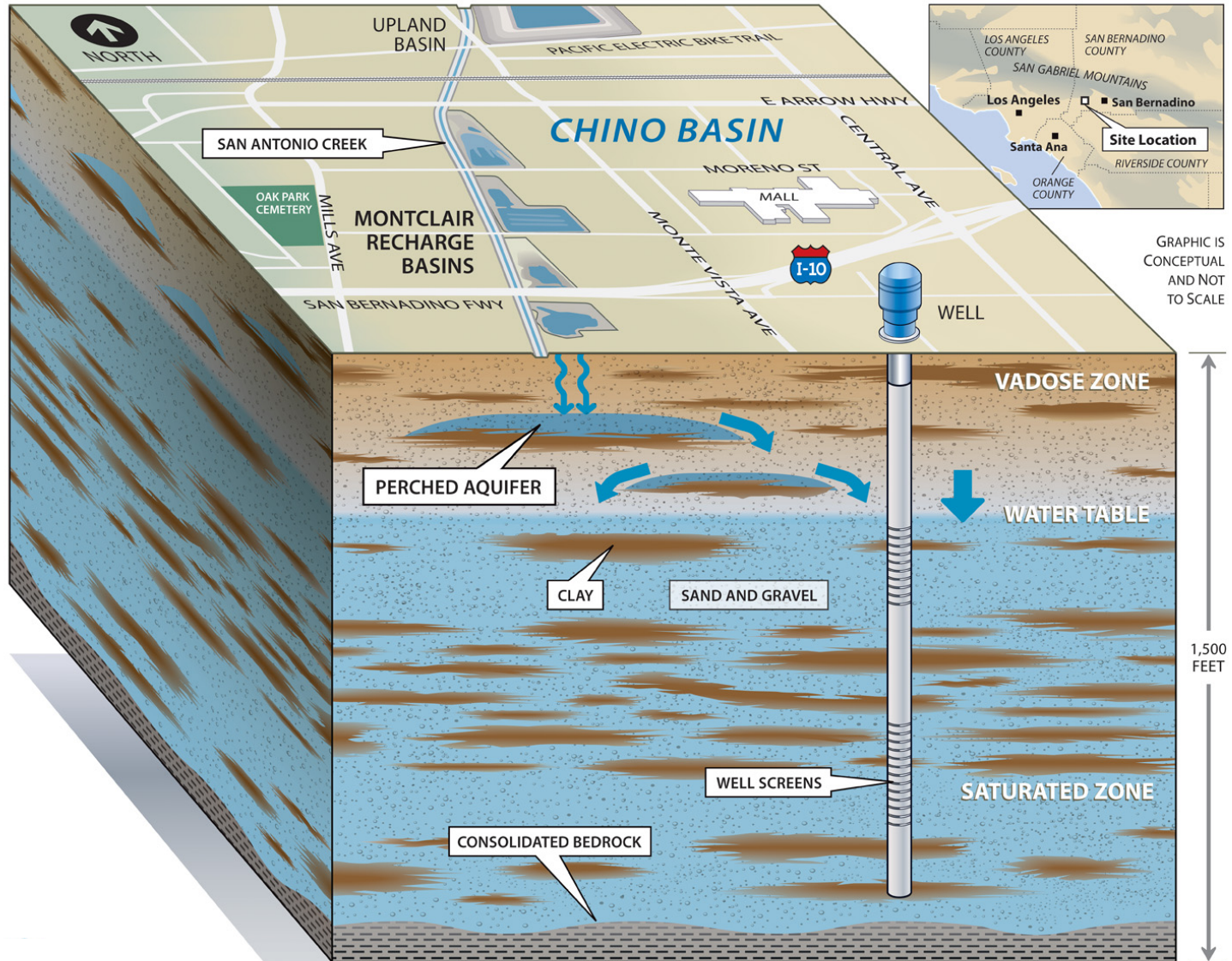
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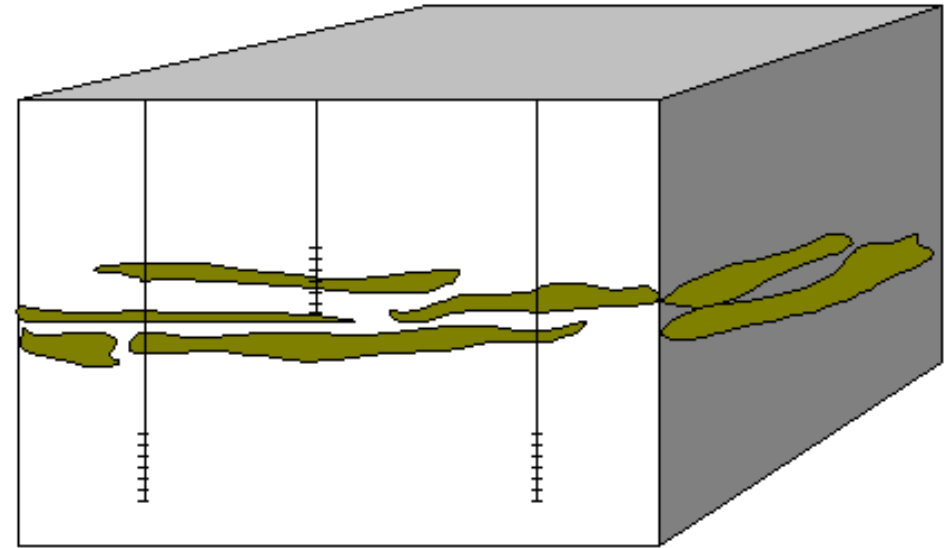
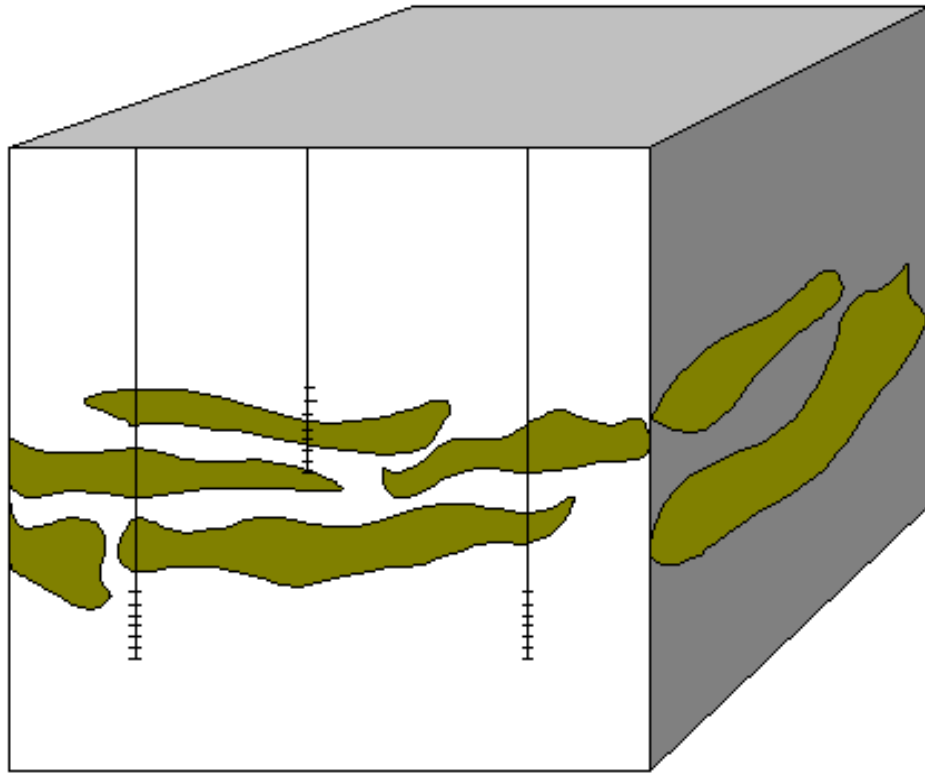




Aquifer-System Underlying the Western Portion of the Chino Basin



Inelastic Aquifer System Compaction

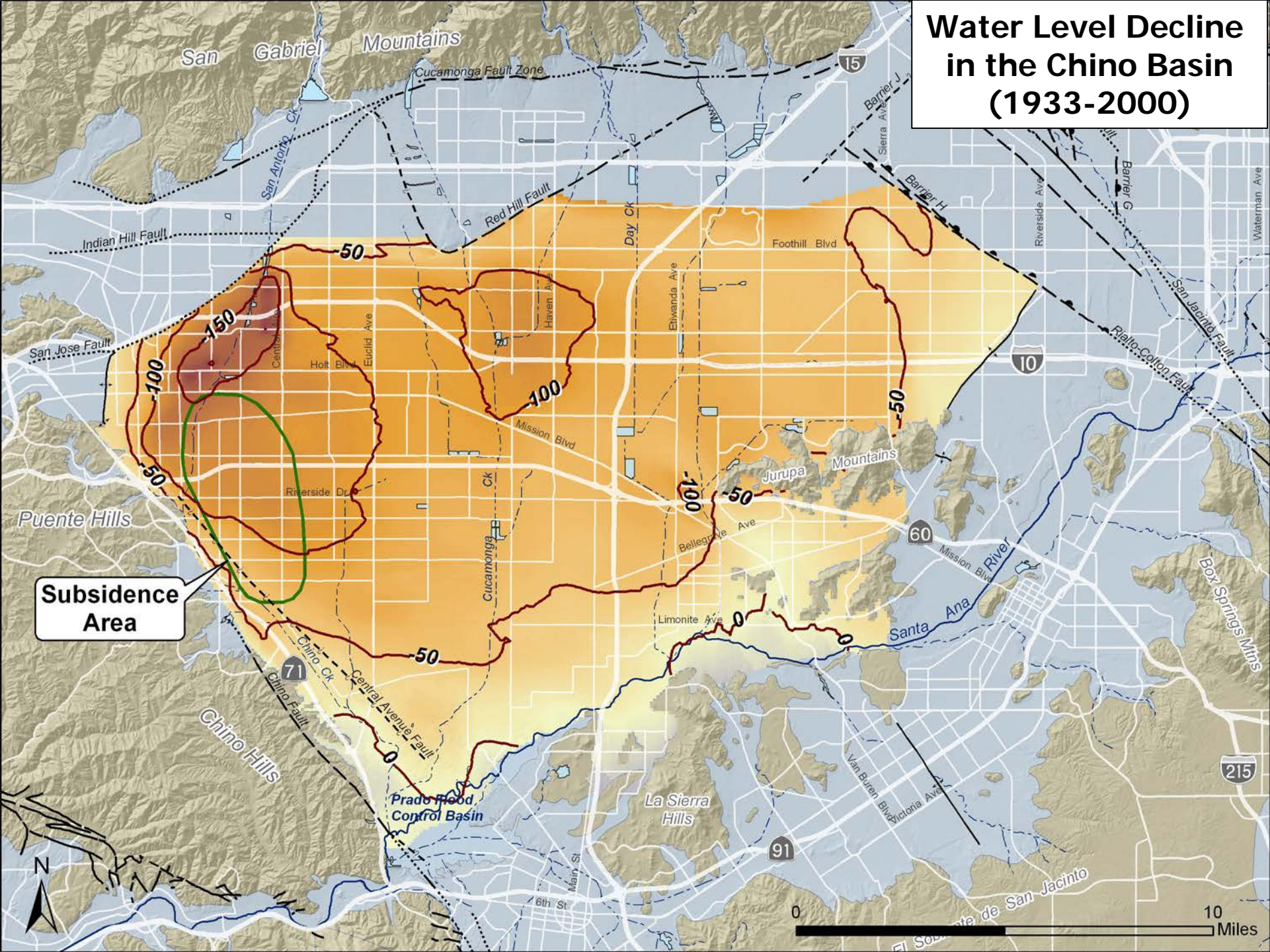


Sediment Layers from a Deep Borehole in Chino, CA



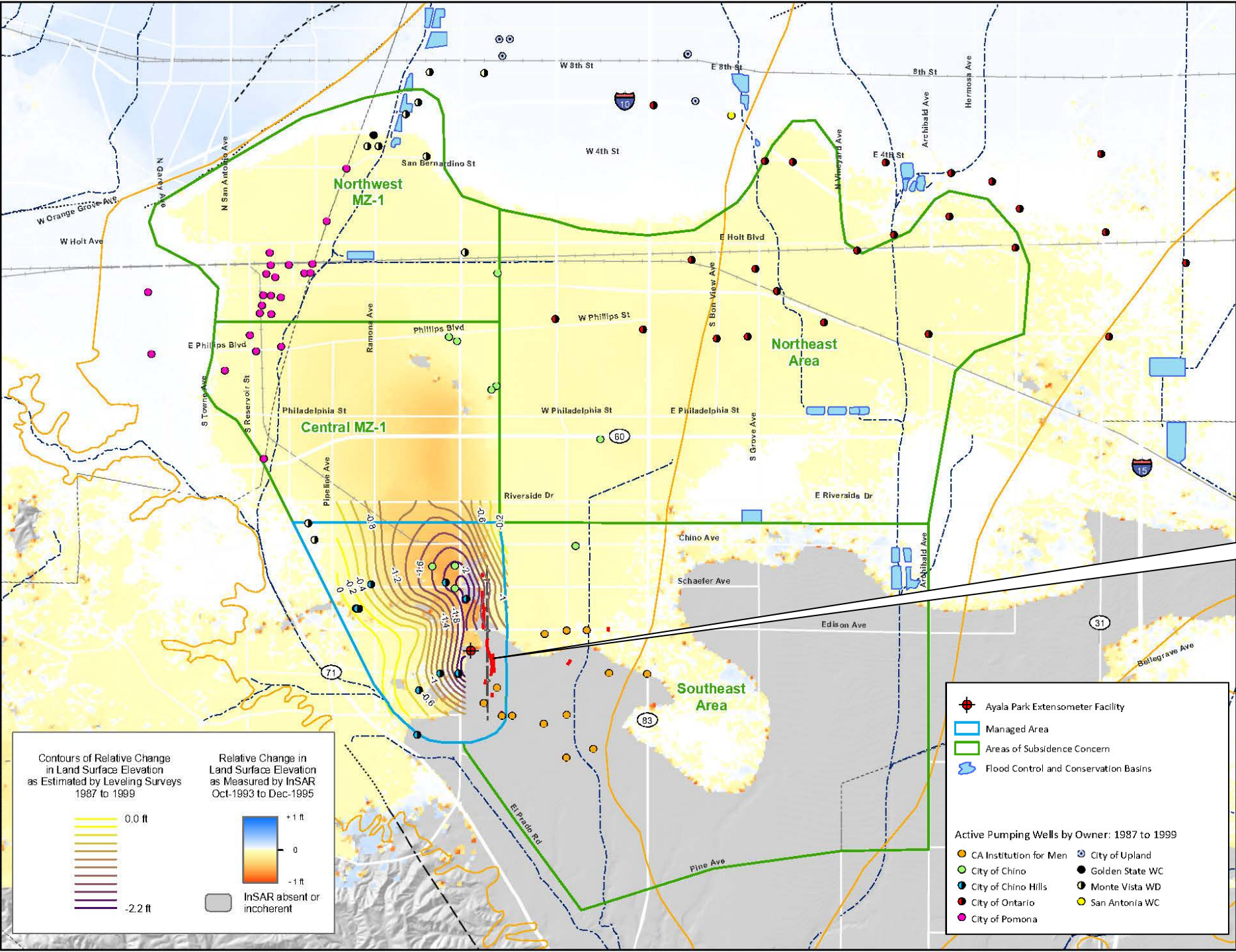


Water Level Decline in the Chino Basin (1933-2000)



Subsidence Area

Land Subsidence and Ground Fissuring in the Chino Basin (1987-1999)



View of a fissure that developed beneath CIM facility in December 1992





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

- PE 4 recognized that the occurrence of land subsidence and ground fissuring in MZ-1 is not acceptable and should be reduced to tolerable levels or stopped.

- PE4 described a plan to:
 - Characterize the historical occurrence of land subsidence spatially and temporally
 - Identify its causes
 - Where appropriate, develop and implement a program to manage it

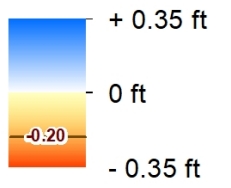


Progress in PE 4 Implementation since 2000

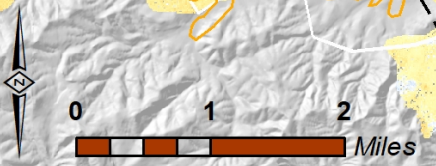
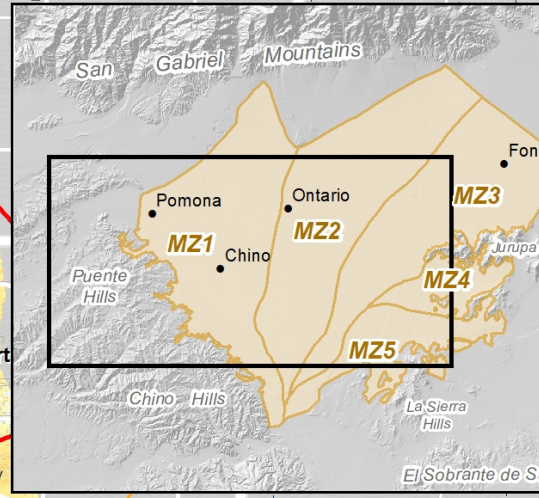
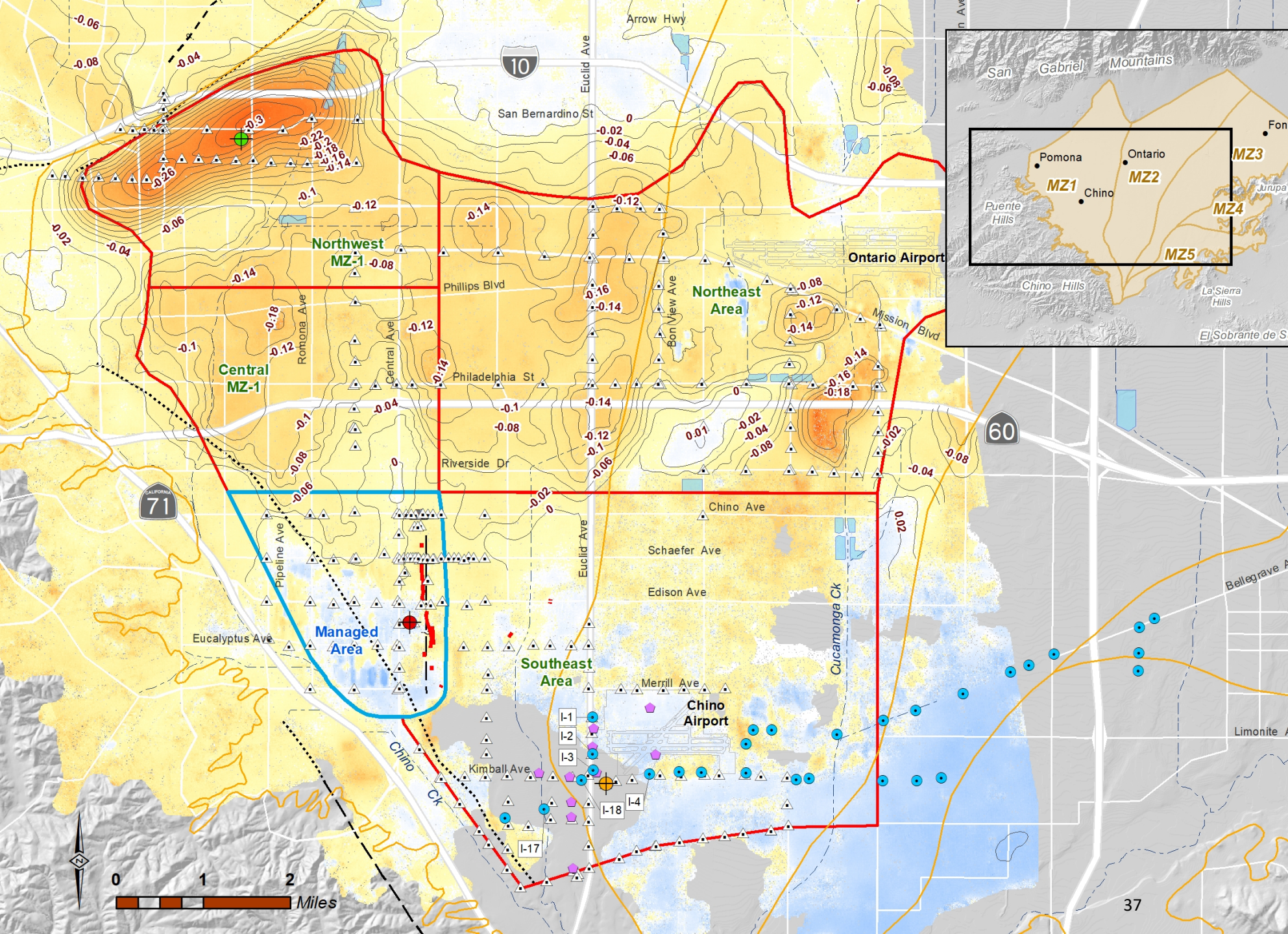
- Physical recharge of at least 6,500 afy of Supplemental Water in MZ1.
- Convened the Ground-Level Monitoring Committee to develop an Interim Management Plan to:
 - Minimize subsidence in the short term
 - Collect data to characterize the extent, rates, and causes of the historical land subsidence
 - Develop a long-term subsidence management plan
- Implemented the long-term Subsidence Management Plan
 - Virtually eliminated land subsidence in the City of Chino
 - Identified a new area of subsidence concern in Northwest MZ-1
 - Continued monitoring program with annual reports
 - Currently, updating the Subsidence Management Plan to address subsidence in Northwest MZ-1

Land Subsidence in the Chino Basin (2011-2020)

Relative Change in Land Surface Altitude as Estimated by InSAR (March 2011 to March 2020)



- InSAR absent or incoherent
- Pomona Extensometer Piezometers
- Ayala Park Extensometer
- Chino Creek Extensometer
- Ground-Level Survey Benchmark
- Chino Desalter Authority Well
- SB County Extraction Well
- Managed Area
- Areas of Subsidence Concern
- Ground Fissures
- Riley Barrier (approximate location)





PE 4 Staff and Board Responsibilities

- Watermaster staff responsibilities and contributions:
 - Conducting the Ground-Level Monitoring Program
 - Conducting meetings and preparing annual reports of the Ground-Level Monitoring Committee
 - When necessary, updating the Chino Basin Subsidence Management Plan in coordination with the GLMC
- Parties' contributions and responsibilities:
 - Provide Advice and Assistance, and ongoing oversight
 - Funding
- Board responsibilities:
 - Review/approve annual reports of the Ground-Level Monitoring Committee
 - Adopt updates of the Chino Basin Subsidence Management Plan
 - Submit updates of the Chino Basin Subsidence Management Plan to the Court for approval

2000 OBMP Program Elements (PEs)

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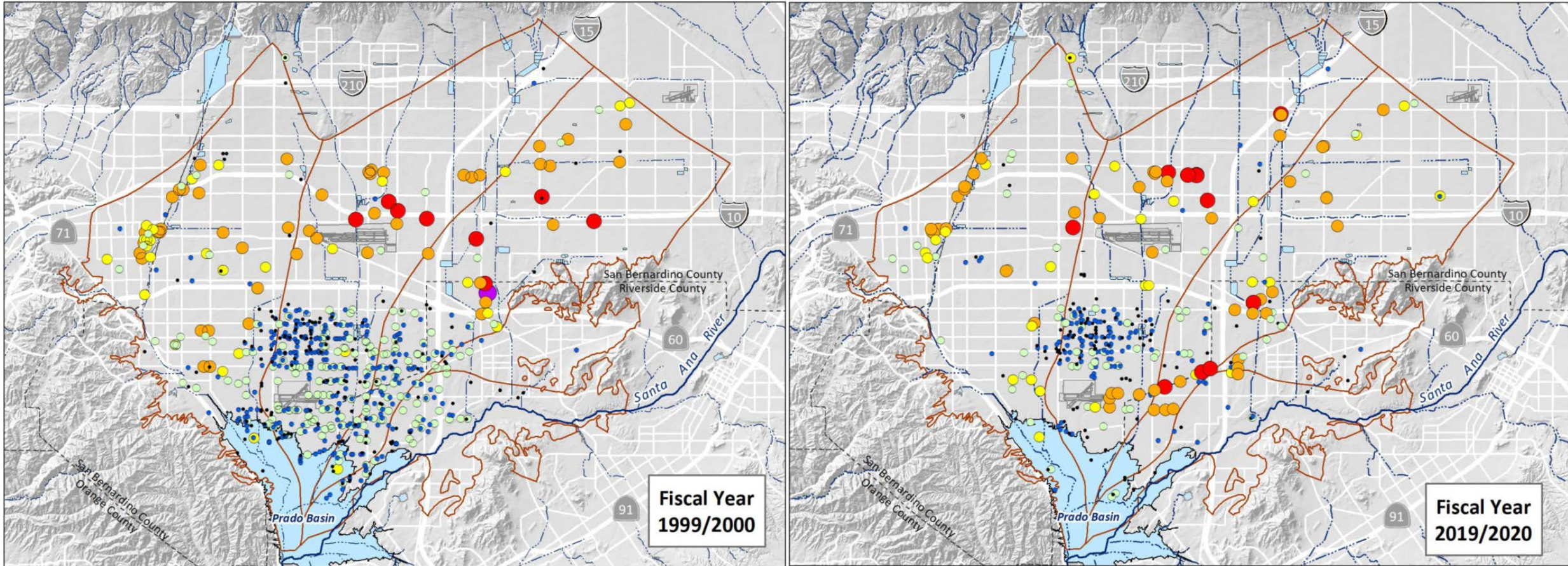


PE 3 - Develop and Implement Water Supply Plan for the Impaired Areas of the Basin

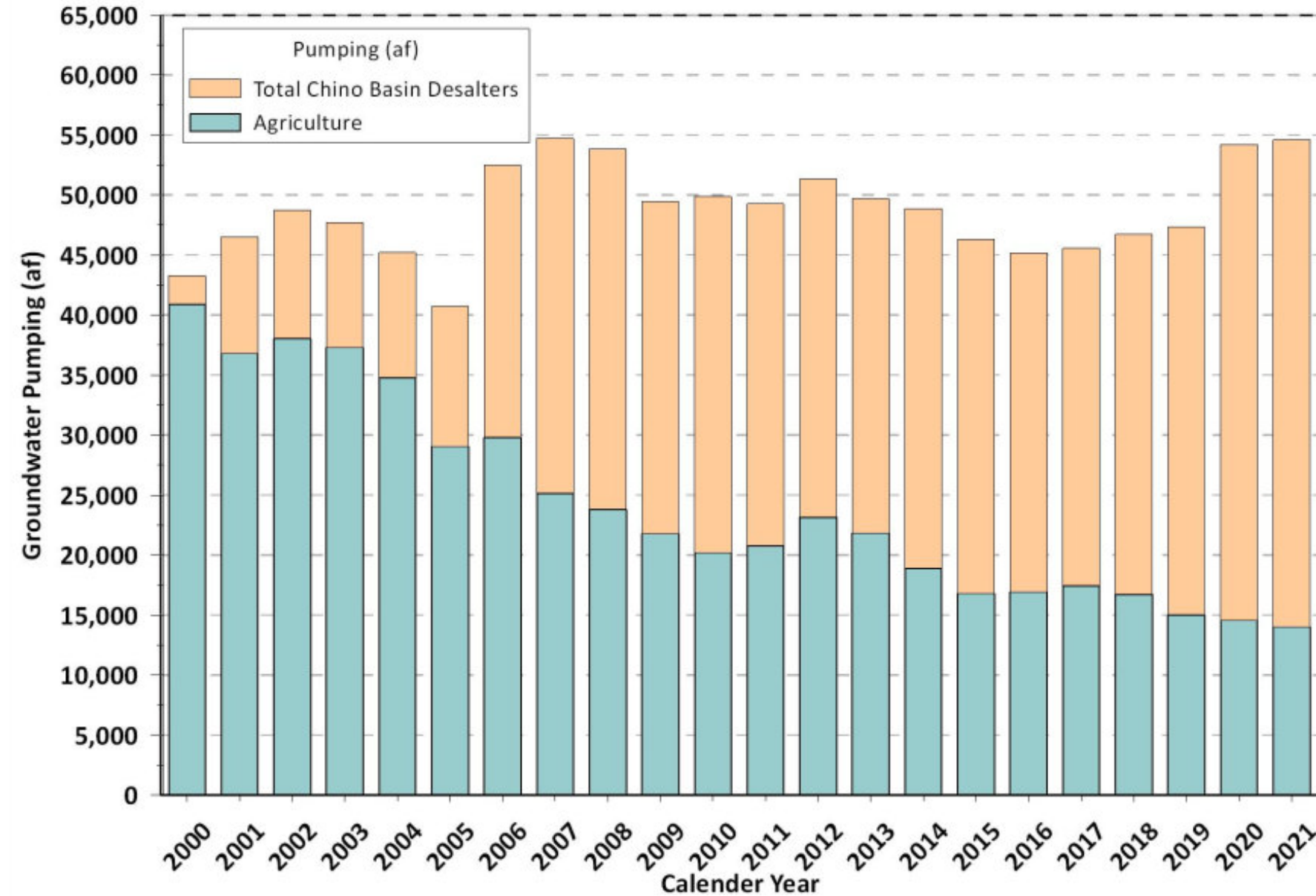
- The groundwater desalting program was designed to protect and enhance the Safe Yield by controlling groundwater levels in the southern Chino Basin
 - Replace declining agricultural groundwater pumping in the southern part of the basin with new groundwater pumping
 - Meet increasing municipal water demands in the same area
- The desalter wells were constructed in strategic locations to:
 - Minimize outflow of poor-quality groundwater to the Santa Ana River (SAR)
 - Increase the SAR recharge into the basin
 - Minimize future TDS and nitrogen regulatory liabilities in the Chino Basin and the SAR



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



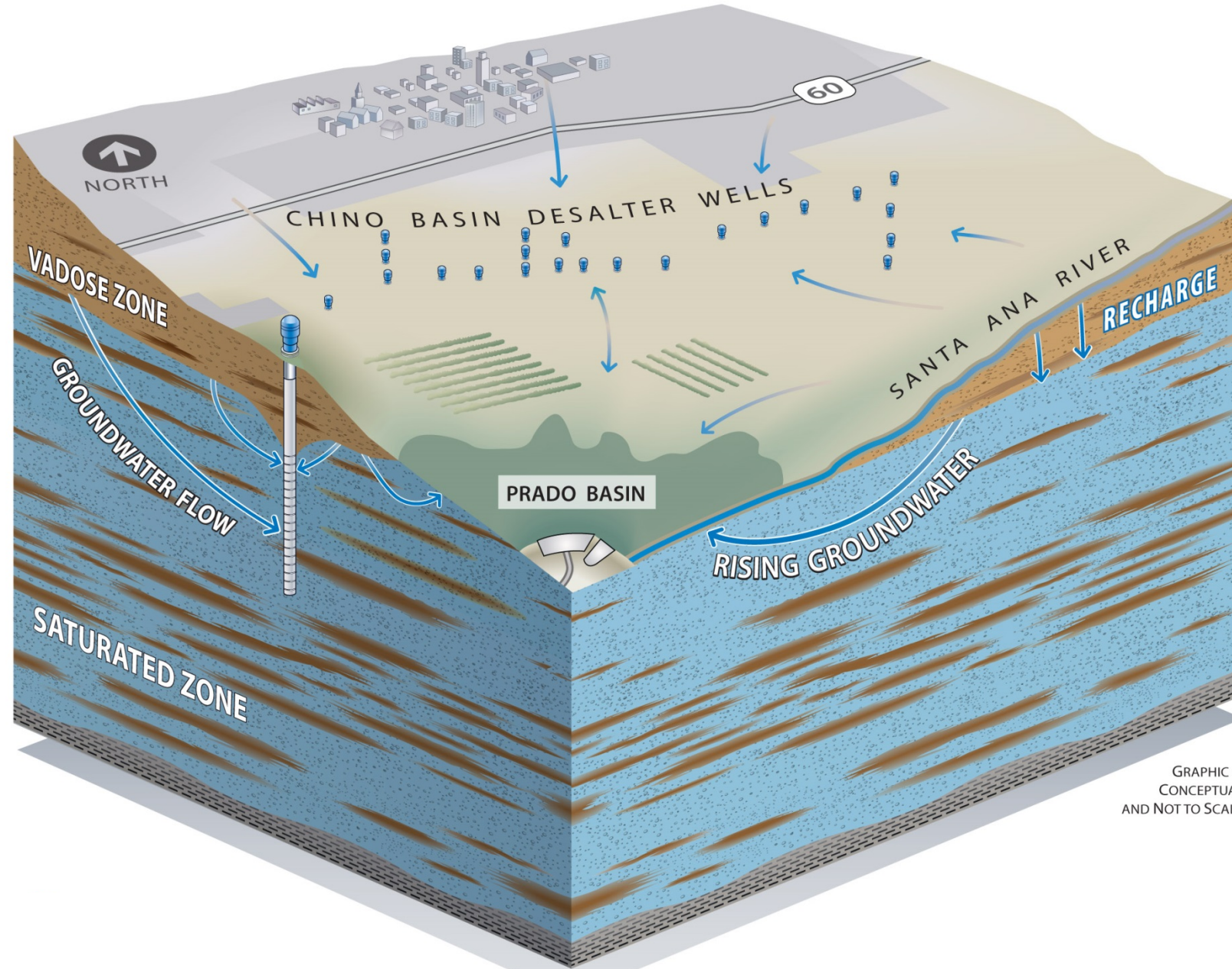
Annual Pumping at the Chino Basin Desalter and Agriculture Wells from 2000 to 2021



Chino Desalter pumping has effectively replaced the ongoing decline in agricultural pumping in southern Chino Basin



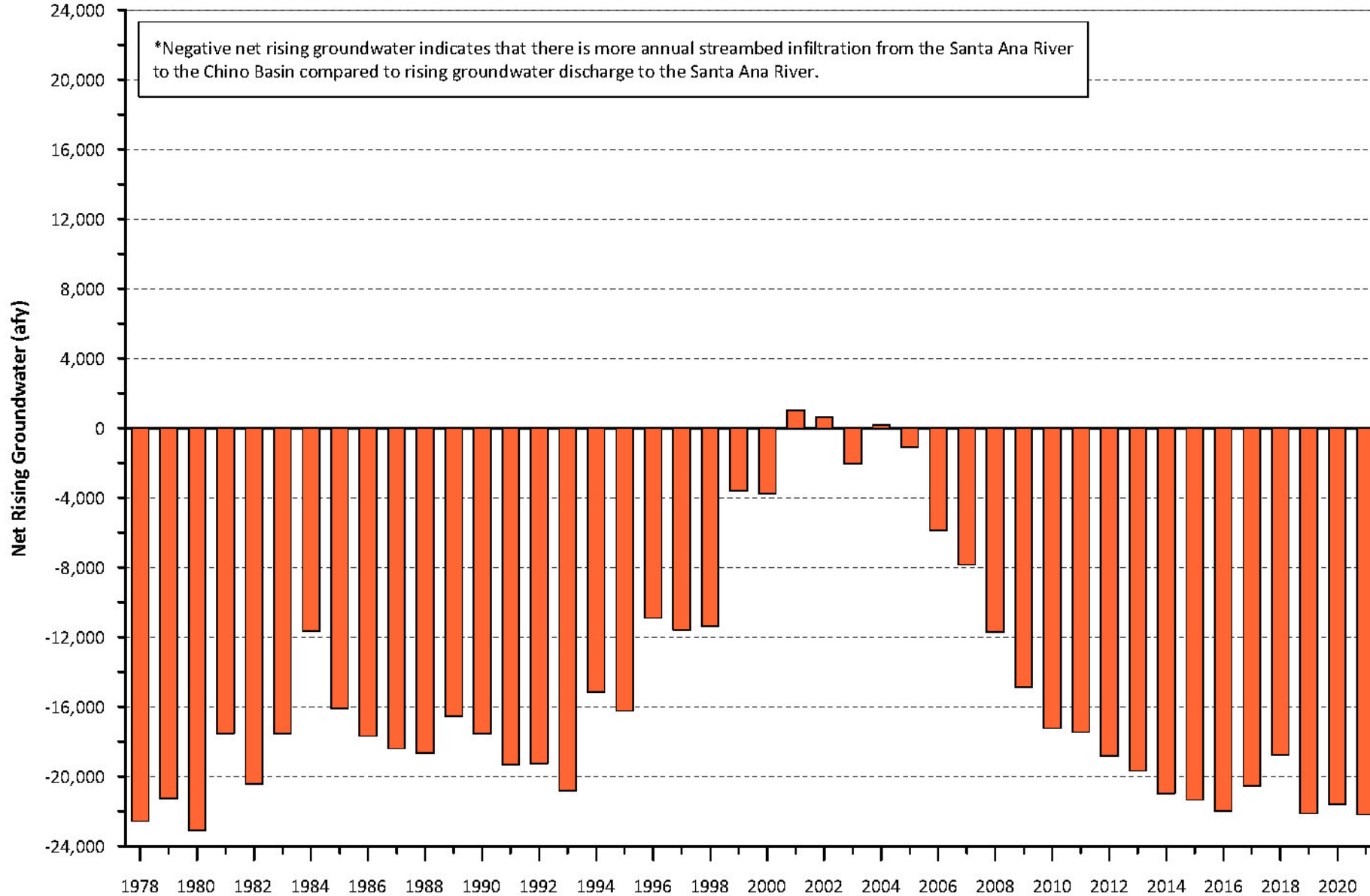
Surface-Water and Groundwater Interaction in the Southern Portion of Chino Basin



GRAPHIC IS
CONCEPTUAL
AND NOT TO SCALE



The Influence of the OBMP on Groundwater Interaction with the Santa Ana River

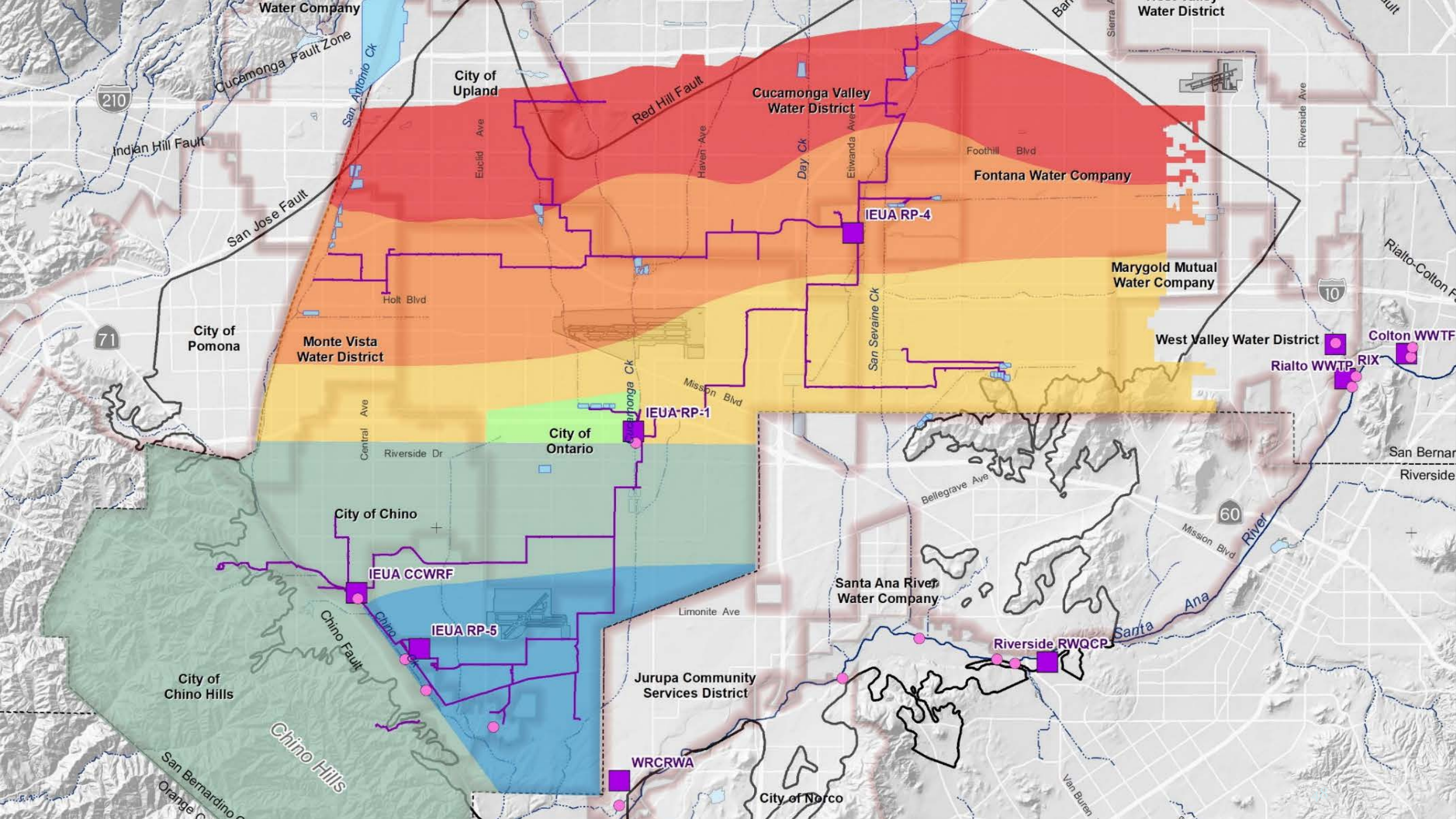


Chino Desalter pumping and the achievement of Hydraulic Control has recaptured the lost yield due to declining agricultural pumping



PE 5 - Develop and Implement Regional Supplemental Water Program

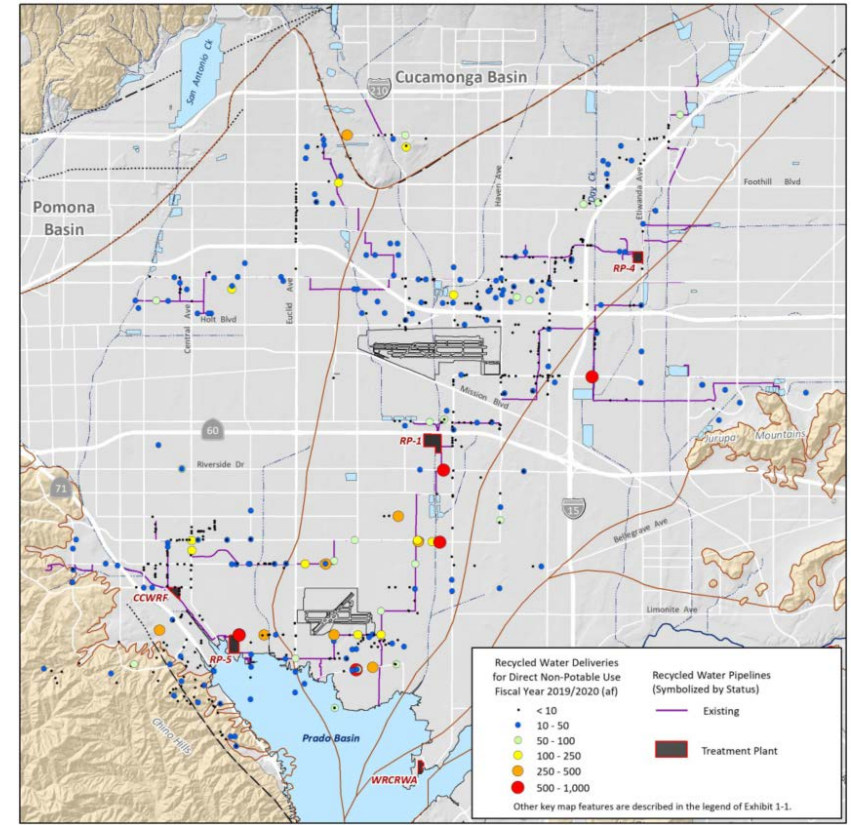
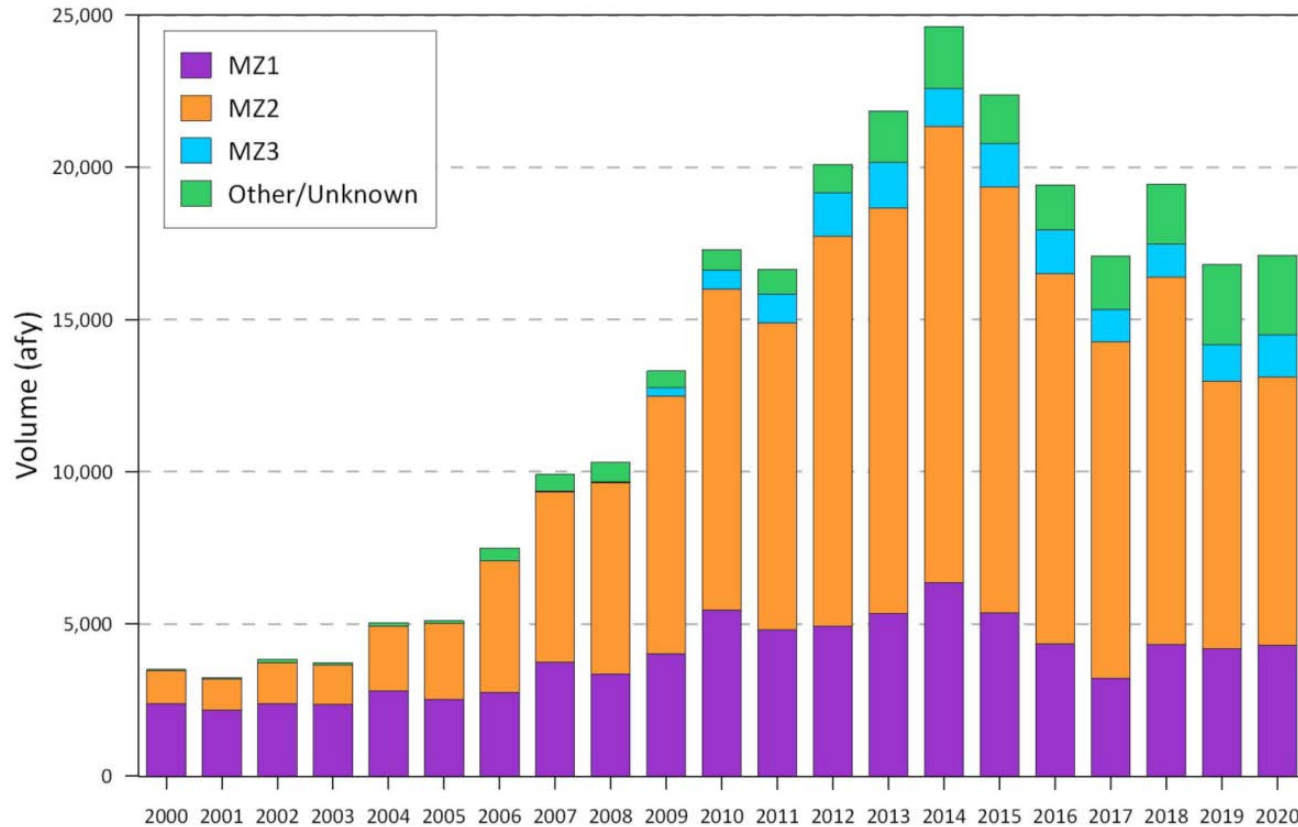
- Since 2000, the IEUA has constructed and operated a recycled water conveyance system throughout the basin
- Recycled water deliveries grew from about 3,400 afy in 2000 to about 33,000 afy in 2021. Cumulatively through FY 2021 = 395,000 af
- Recycled water provided by the IEUA has replaced a like amount of groundwater and imported water that would have otherwise been used for non-potable purposes
- Recycled water is more reliable than imported water, and thus using it in lieu of imported water has improved the sustainability of the Chino Basin and water-supply reliability





PE 5 - Develop and Implement Regional Supplemental Water Program

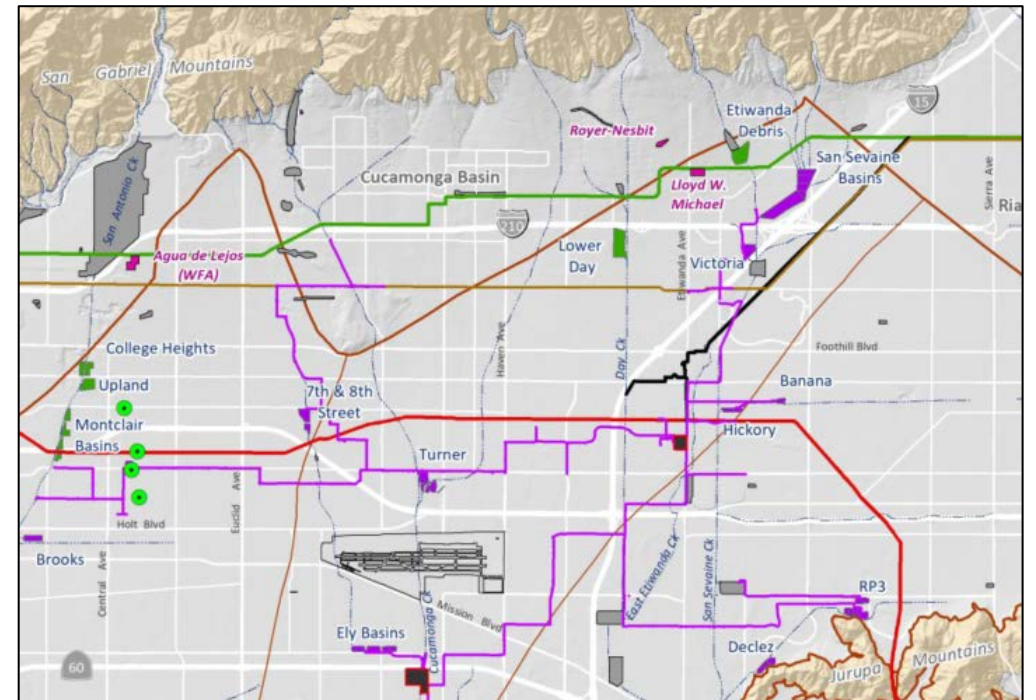
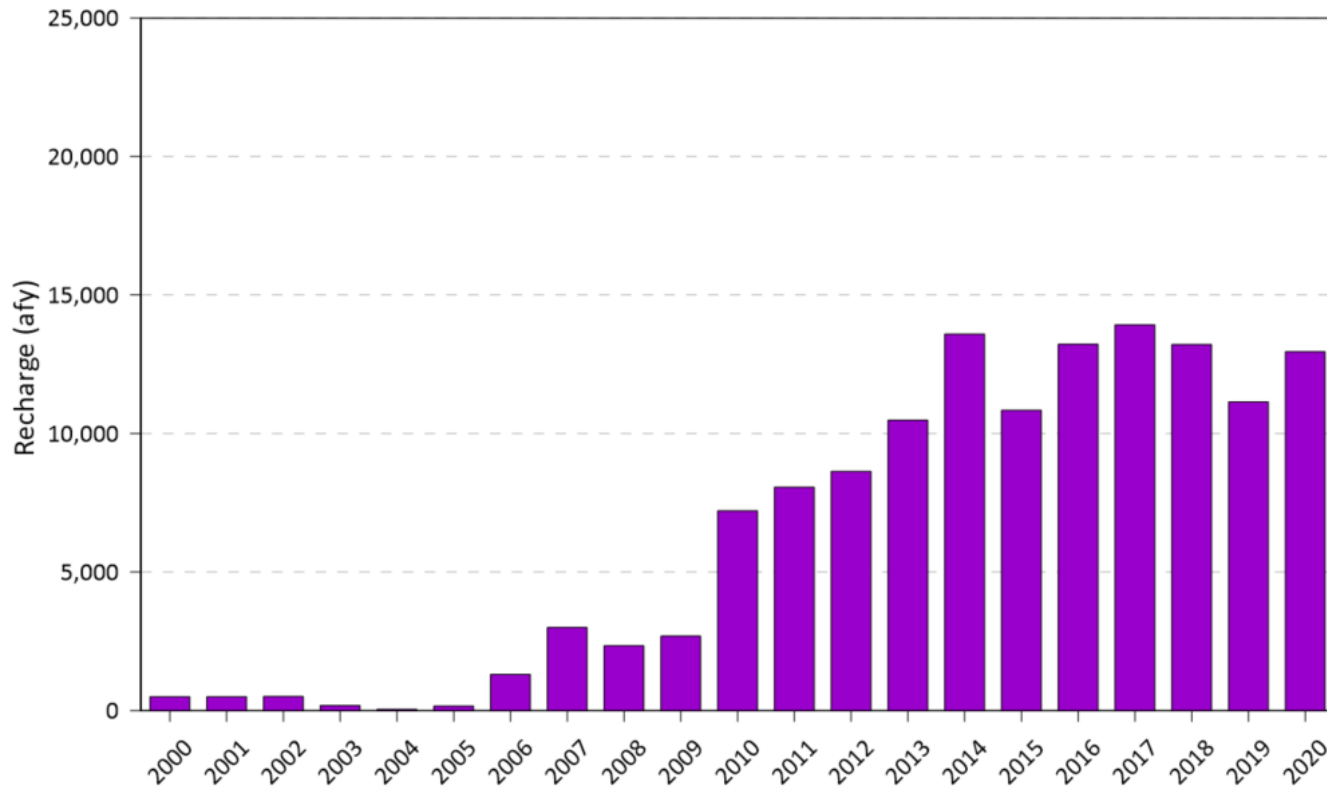
Direct Use of Recycled Water by OBMP Management Zone by Fiscal Year





PE 5 - Develop and Implement Regional Supplemental Water Program

Recycled Water Recharge in the Chino Basin by Fiscal Year





PE 7 - Develop and Implement Salt Management Program

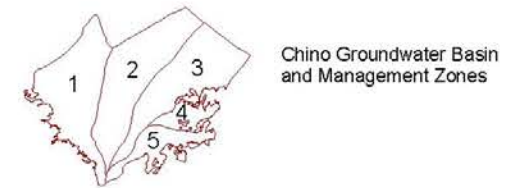
- The Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) was a barrier to implementation of PE2 and PE5
- The groundwater quality objectives for TDS and N would require advanced treatment to reduce TDS and nitrate concentrations of recycled water for recharge and direct use
- Water Quality Objectives < 300 mg/l TDS
- Recycled Water TDS > 400 mg/l

Optimum Basin Management Program

Chino Basin Watermaster

Proposed Water Quality Objectives by Management Zone

262 TDS (mg/L)
3.5 Nitrate as Nitrogen (mg/L)



Other Map Features

- Flood Control and Conservation Basins
- Fault
 - Solid where known; Dashed where approximate;
 - Dotted where concealed; Queried where uncertain;
 - Large dots where probable and barrier to groundwater flow

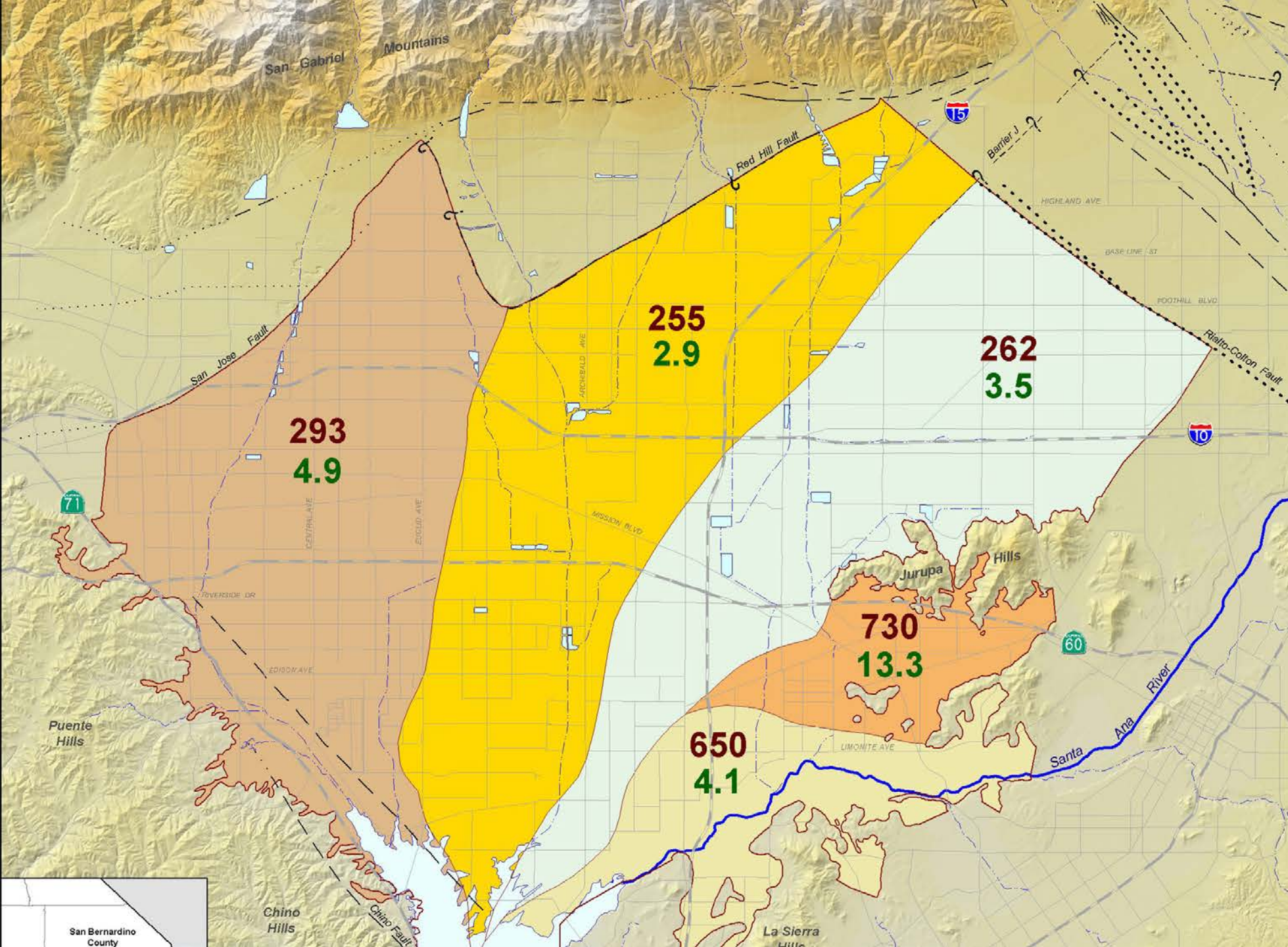


Figure 1

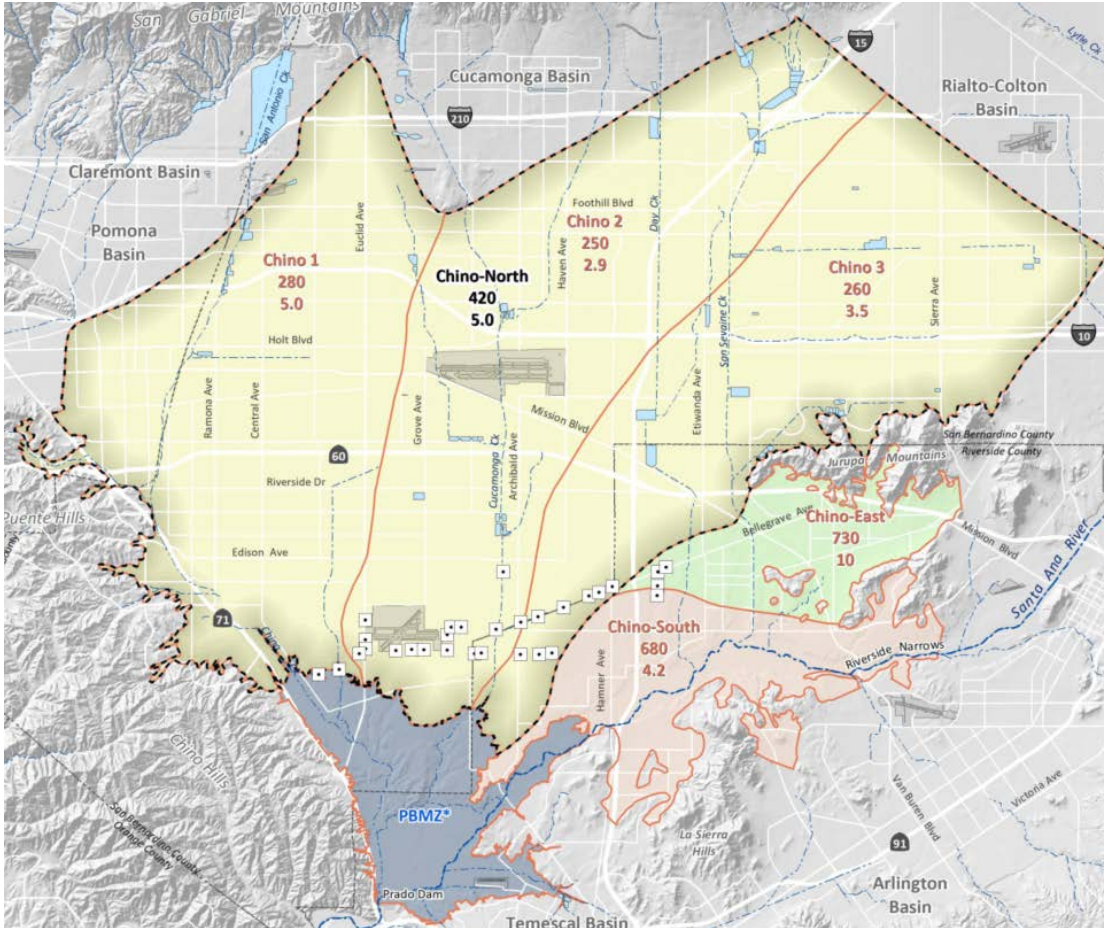
Proposed Water Quality Objectives Based on Historical Ambient Water Quality for Chino Basin Management Zones



Maximum Benefit

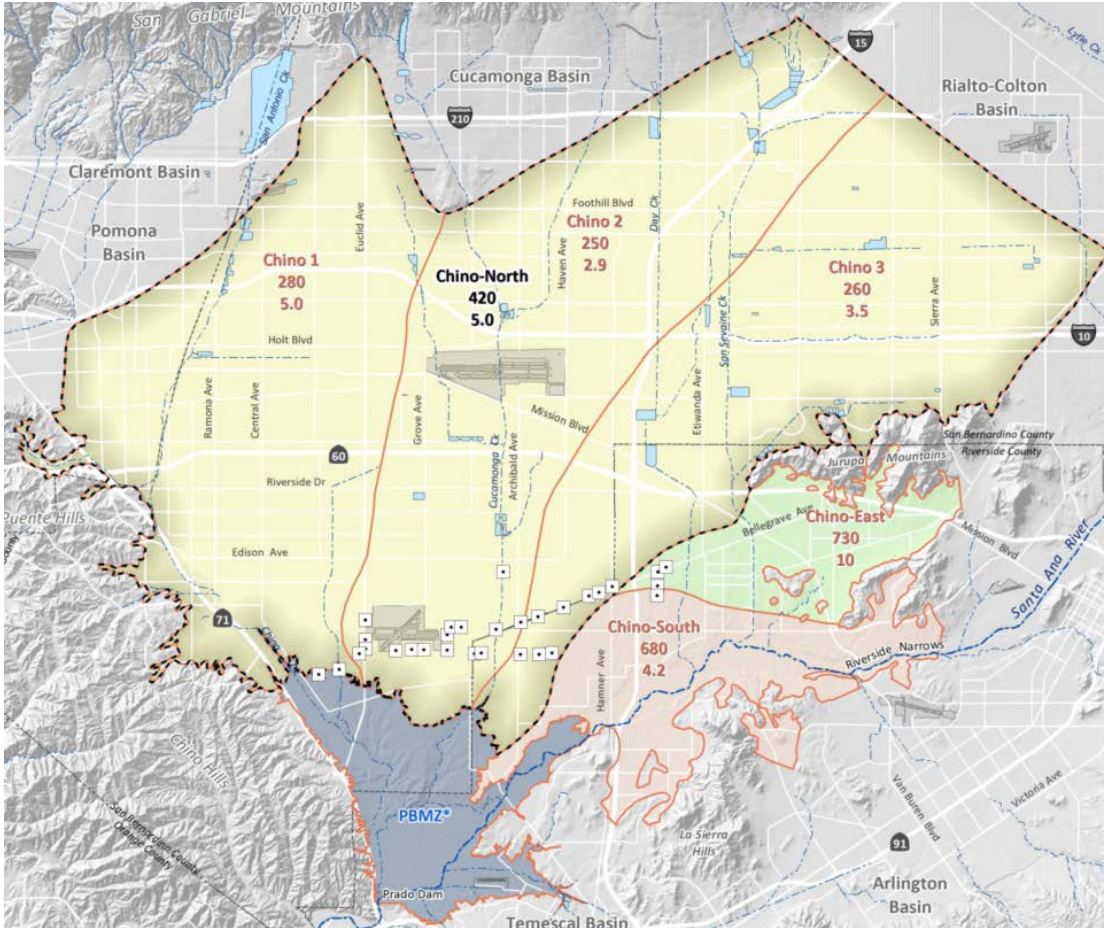
- Under the traditional permitting approach, the Regional Board:
 - Would require mitigation for imported water recharge if TDS exceeded the objective
 - Would require mitigation for recycled water reuse (recharge and direct use)
 - Mitigation of these salt loads would be required on one-for-one basis in each groundwater management zone

Maximum Benefit



- Watermaster/IEUA proposed a new water quality paradigm called “maximum benefit” based on SWRCB resolution 68-18 and Water Code 13241
- New paradigm required the Chino Basin parties to commit to the following actions:
 - construction of recharge facilities
 - Expansion of Chino Basin Desalters
 - Attainment of hydraulic control through desalter operation
 - Monitoring and reporting
 - Treatment of recycled water when certain triggers exceeded

Maximum Benefit

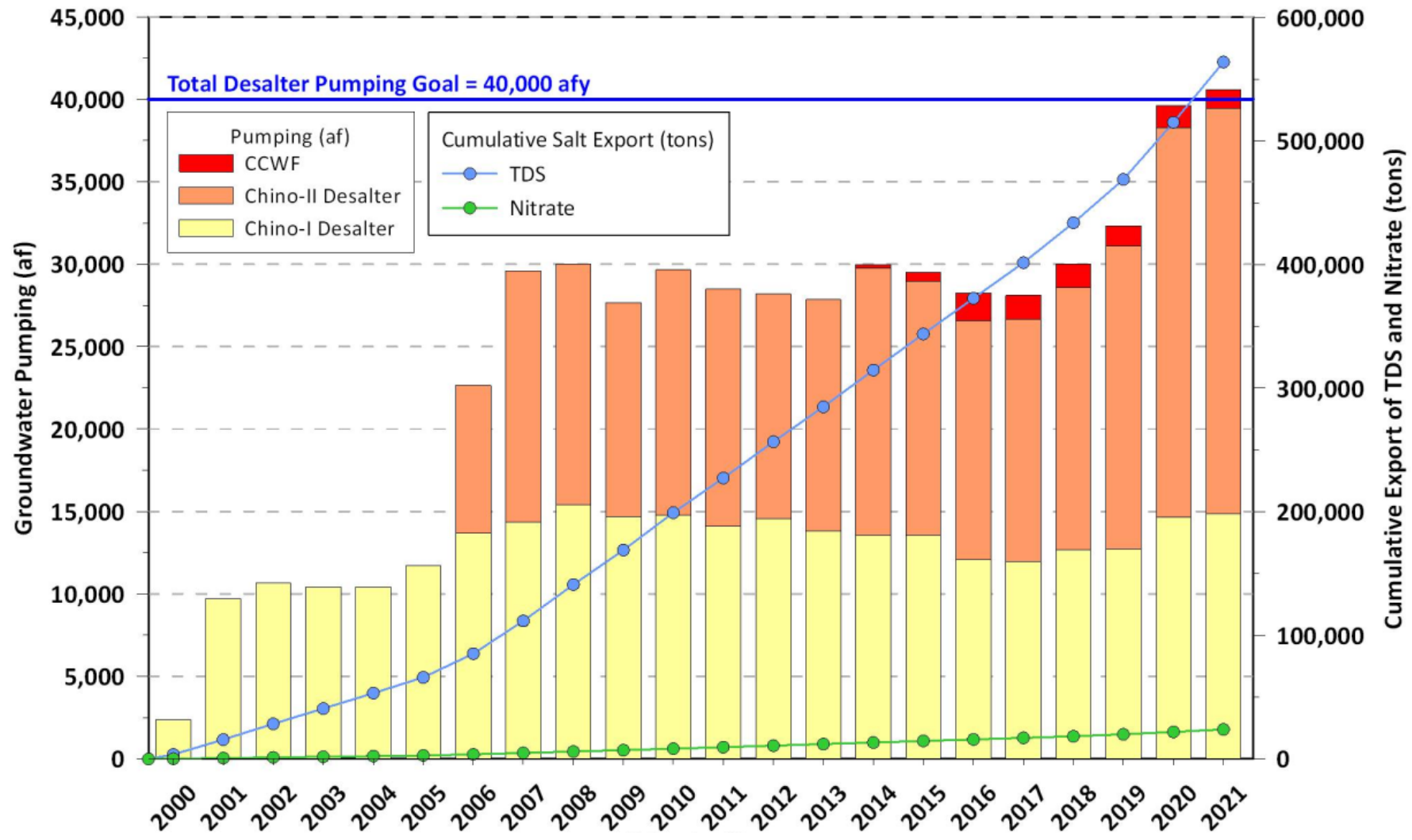


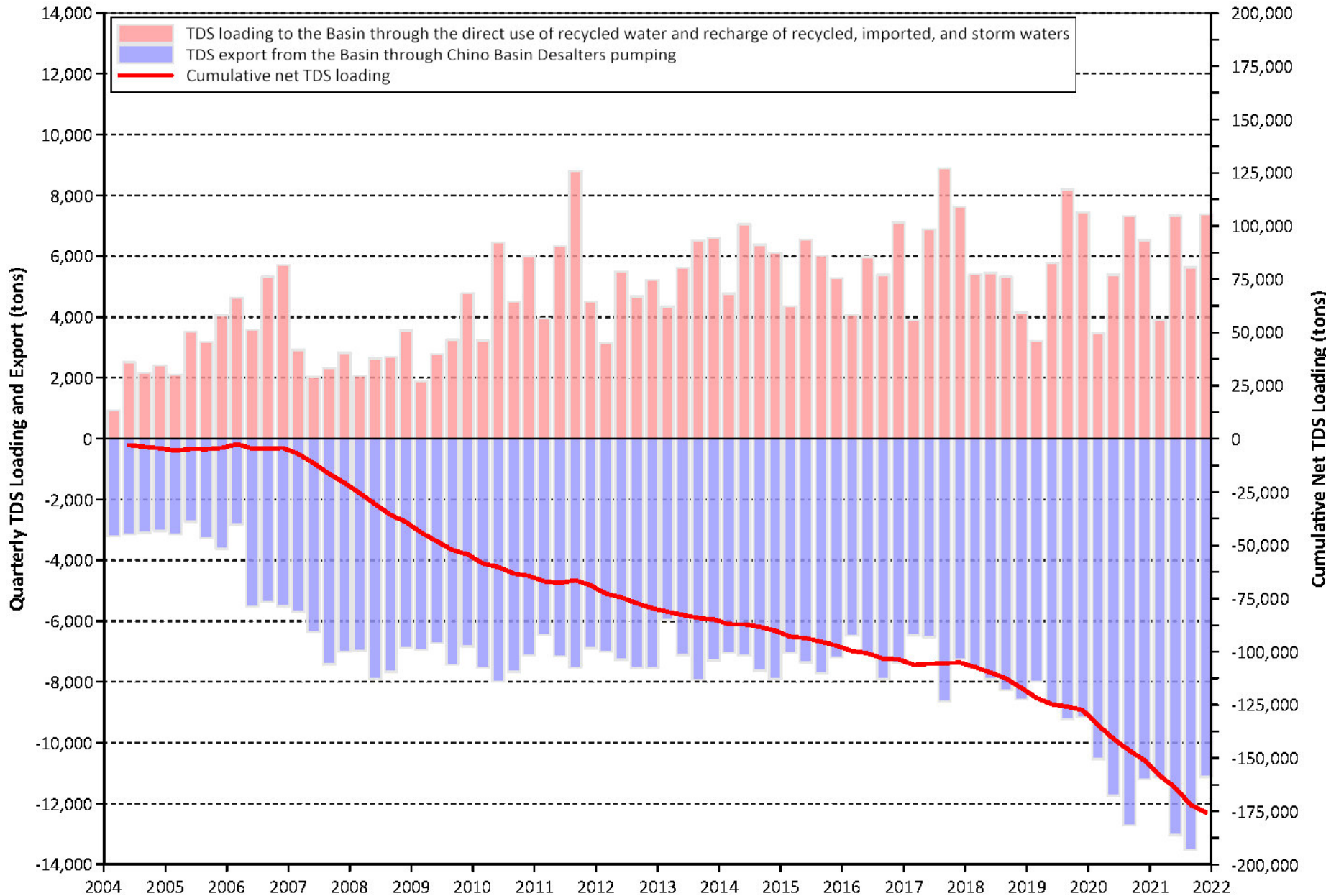
Resulting Basin Plan changes:

- The regulatory groundwater management zone boundaries were changed: Chino –North GMZ
- Numerically-higher TDS and nitrate objectives for Chino North GMZ were established:
 - TDS = 420 mg/l
 - N = 5 mg/l
- Mandates implementation of the Maximum Benefit Commitments



Annual Pumping and Salt Export at the Chino Basin Desalter Wells from 2000 to 2021^(a)





TDS Loading and Export Associated with OBMP Projects

Implementation of OBMP projects has resulted in:

- an augmented water supply
- a net export of salt:
 - Exports were 175,000 tons more than required



Maximum Benefit

- Because of new maximum benefit-based TDS objectives, the following occurred since 2004 without the cost of TDS removal:
 - Direct recycled water reuse = 238,000 af
 - Recharge of recycled water = 157,000 af
 - Recharge of imported water = 201,000 af
 - **Total** **596,000 af**

- Based on an analysis from 2018, the net present value from the implementation of Maximum Benefit is greater than:
 - **\$600 million**

Assuming that all recycled water was treated to meet the objectives.



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

- During 2003 through 2010, Watermaster convened the Water Quality Committee to oversee activities to investigate and characterize point and non-point source of contamination in collaboration with Regional Board
 - Identified responsible parties for South Archibald and Chino Airport plumes
 - Researched sources of perchlorate in the basin
- Watermaster performs monitoring for contaminants and prepares status reports on point-source plumes
- Responsible parties for South Archibald and Chino Airport plumes are implementing remediation actions utilizing Chino Basin Desalters in coordination with CDA

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PE3, 5, 6 & 7 – Staff and Board Responsibilities

- Watermaster staff responsibilities and contributions:
 - Convening the Water Quality Committee
 - Preparing plume status reports
 - Developing the Chino Basin Optimum Basin Management Program Maximum Benefit Annual Reports
- Parties' contributions and responsibilities:
 - Providing advice and assistance, and ongoing oversight
 - Participating in Water Quality Committee
 - Funding
- Board responsibilities:
 - Implement the Peace II Agreement

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PE 8 - Develop and Implement Groundwater Storage Management Program (SMP)

- Implement and periodically update SMP
 - SMP provides guidelines for the management of storage to:
 - Prevent overdraft
 - Protect water quality
 - Ensure equity among the Parties
 - Facilitate Storage and Recovery Programs
- PE 8 defines the “Safe Storage Capacity” – managed storage available for use by the Parties
- Periodically recalculate the Safe Yield



PE 9 - Develop and Implement Storage and Recovery Programs

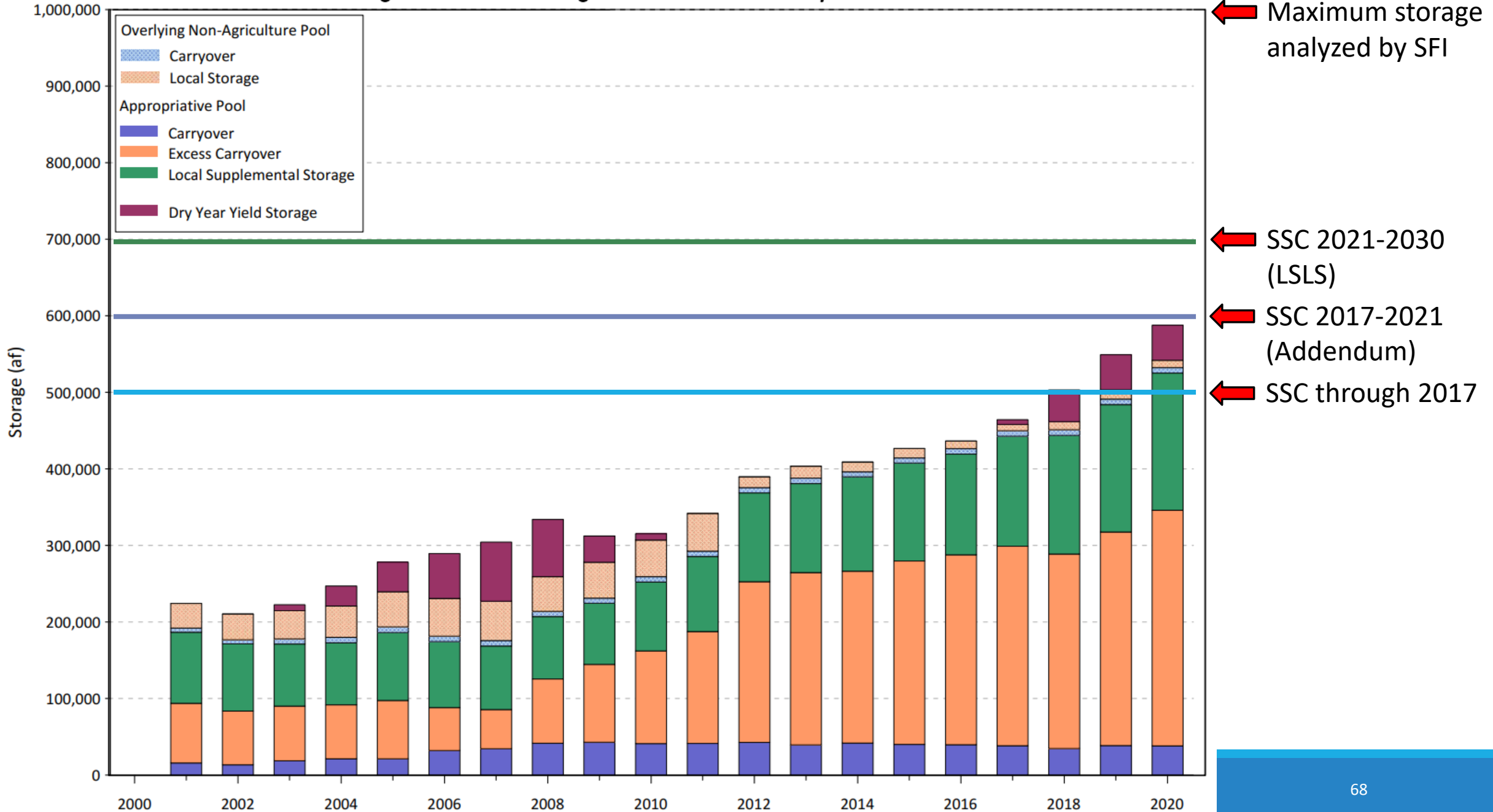
- Develop Storage and Recovery Programs (conjunctive use program) that will:
 - Provide broad mutual benefit to the Parties
 - Ensure that Chino Basin water and storage capacity are put to maximum beneficial use while causing no Material Physical Injury (MPI)
 - Comply with the Storage Management Plan
- Peace Agreement describes Watermaster's obligations to facilitate Storage and Recovery Programs



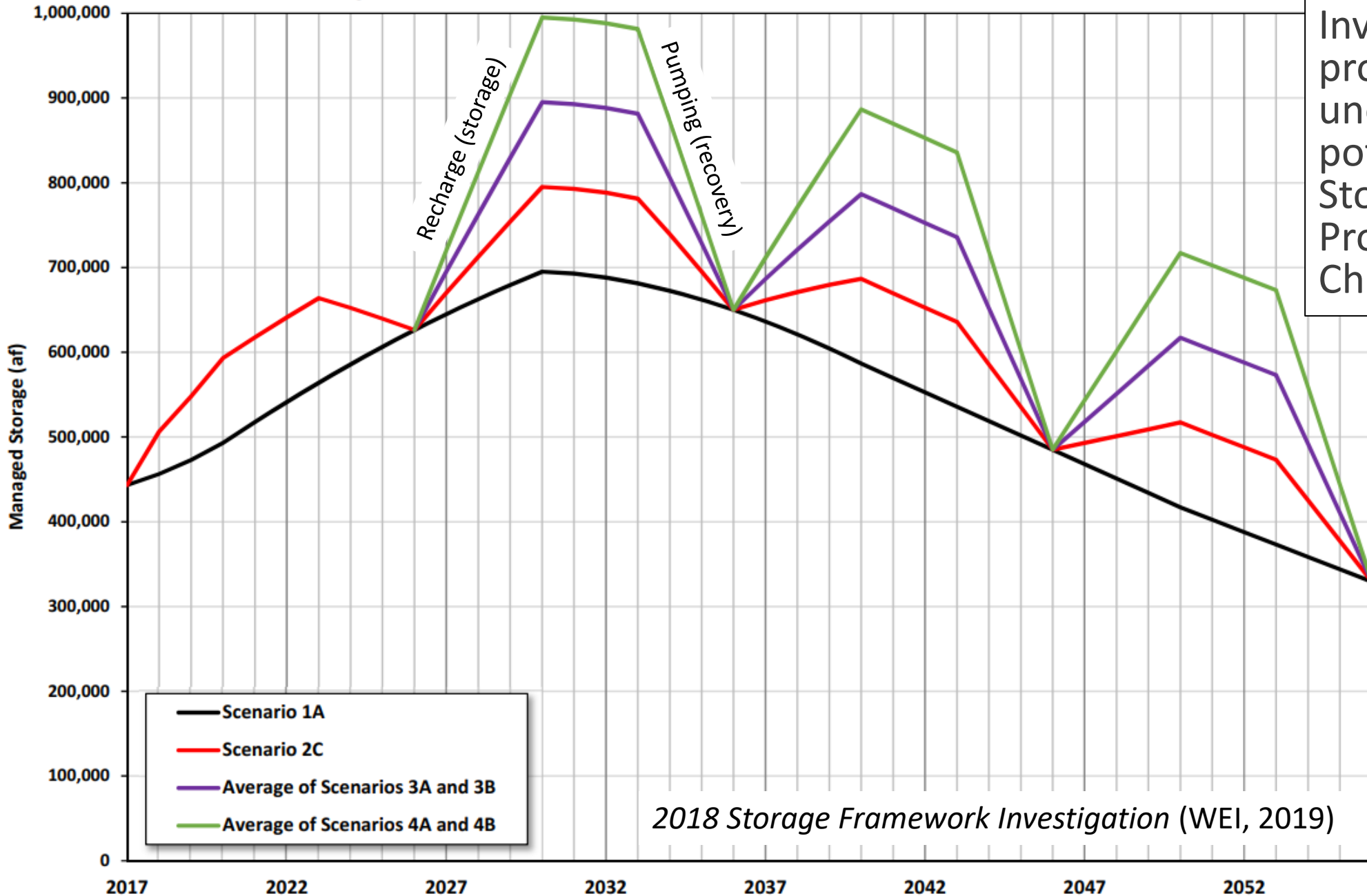
Benefits of PEs 8 and 9

1. 600k AF of water in local storage
2. Facilitate technical investigations to ensure sound management consistent with the Judgment
 - Established plan to regularly recompute the Safe Yield
 - Recomputed for 2011-2020 and 2021-2030
 - Recalculated the loss rate of water in managed storage accounts
3. Provide flexibility for Parties' use of storage to benefit the Parties and the Basin
 - Established Safe Storage Capacity, which was increased in 2021 (Local Storage Limitation Solution)
 - Developed *2018 Storage Framework Investigation* and *2020 Storage Management Plan*

Time History of Ending Balances in Storage in the Chino Basin by Fiscal Year



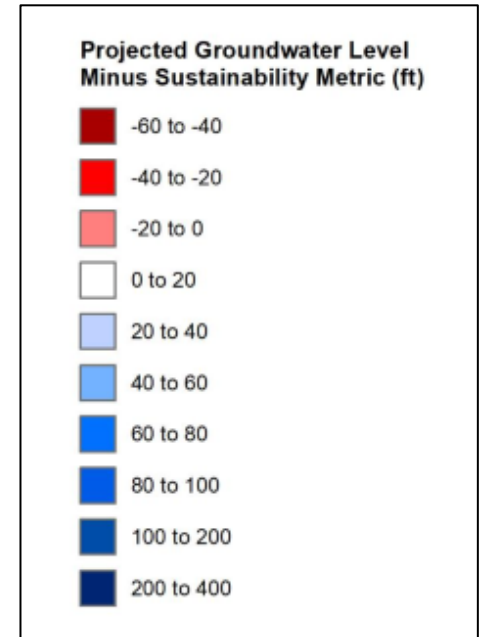
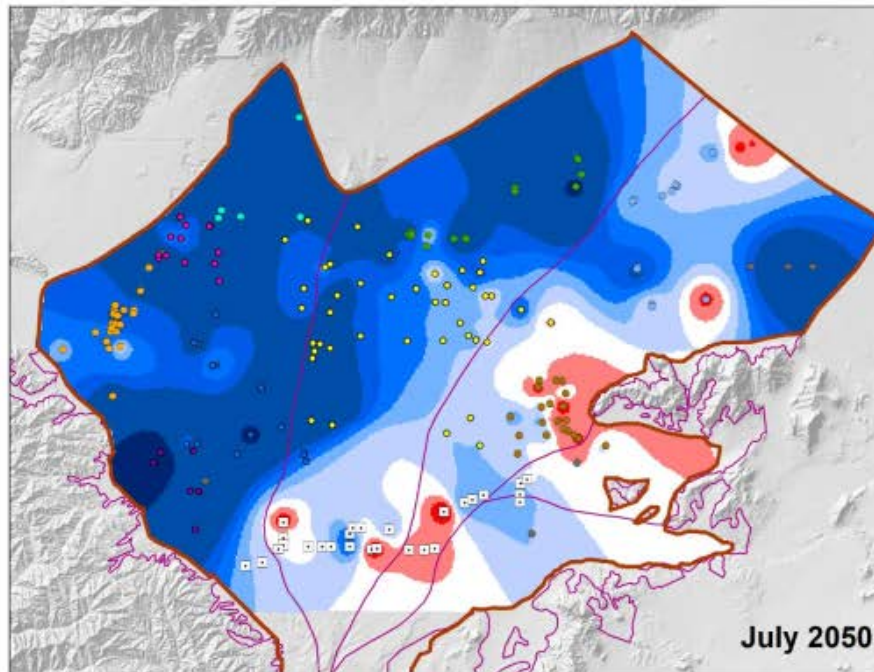
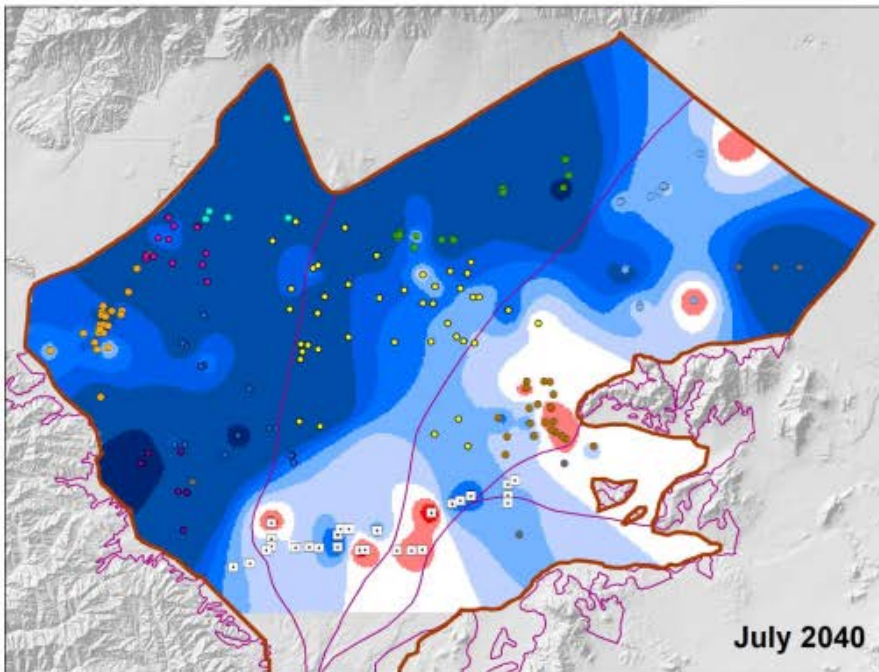
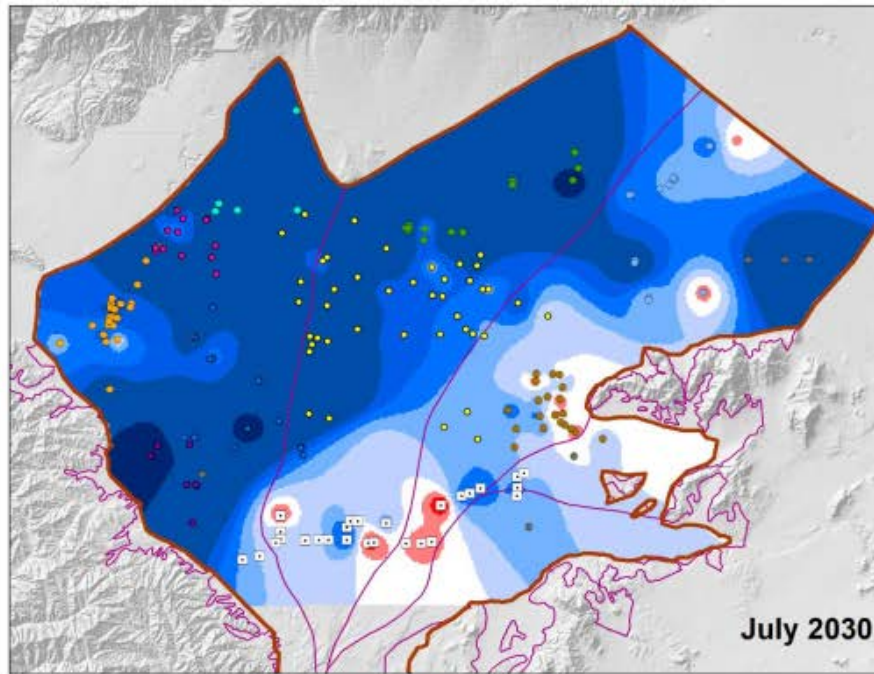
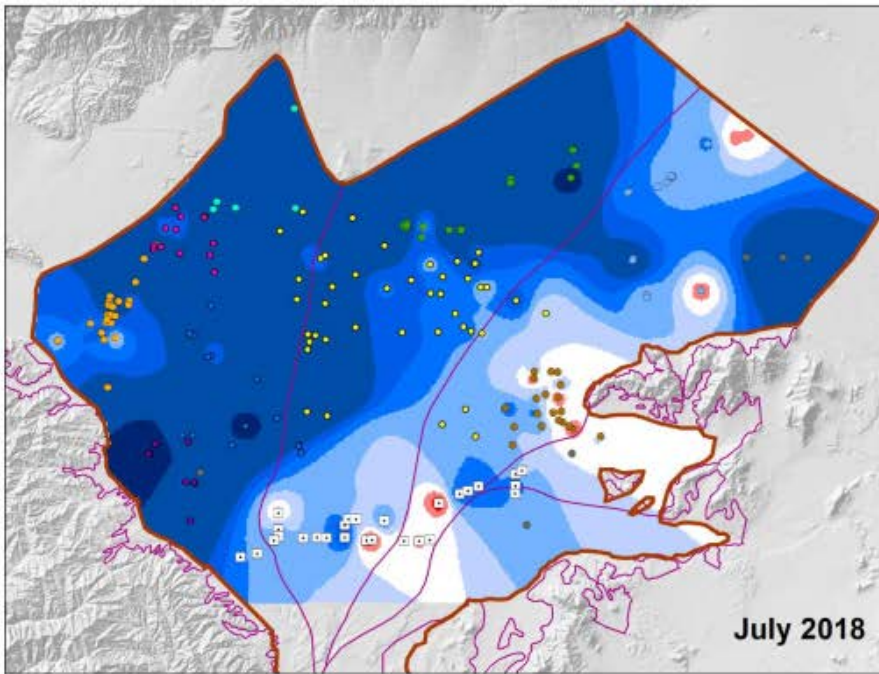
Planned End-of-Year Volume in Managed Storage for Scenarios 1A and 2C and Average End-of-Year Volume for Scenarios 3A and 3B and 4A and 4B



Storage Framework Investigation provided understanding of potential impacts of Storage and Recovery Programs on the Chino Basin

2018 Storage Framework Investigation (WEI, 2019)

- Developed systematic methods to evaluate MPI and adverse impacts to inform Safe Yield and evaluate Storage and Recovery Programs



2020 Safe Yield Recalculation Report (WEI, 2020)



PE 8-9 Staff and Board Responsibilities

- Watermaster staff responsibilities and contributions:
 - Developing and implementing Storage Management Plan, and Storage and Recovery Program storage agreements
 - If necessary, enforce actions to mitigate adverse impacts or potential MPI due to Storage and Recovery Programs
 - Recalculating the Safe Yield
- Parties' contributions and responsibilities:
 - Provide Advice and Assistance, and ongoing oversight
 - Funding
- Board responsibilities:
 - Approve Storage and Recovery Applications
 - Adopt Resolutions to change Safe Storage Capacity (e.g., Local Storage Limitation Solution)
 - Adopt Storage Management Plan
 - Adopt storage loss rate

2000 OBMP Program Elements (PEs)

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 MZ1

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





PE 1—Develop and Implement Comprehensive Monitoring Program

- Collect the data and information necessary to support the implementation of all other OBMP PEs and to satisfy other regulations and Watermaster’s obligations under its agreements, court orders, and CEQA



Types of Monitoring Programs Called For By PE 1

- Groundwater level
- Groundwater quality
- Groundwater production
- Ground Level
- Surface-water discharge and quality (including managed artificial recharge)
- Well construction, abandonment, and destruction



Overview of Data Collected

Data collected for the OBMP is a regional effort between partnering agencies and stakeholders.

- Groundwater level – 1150 wells
- Groundwater quality – 800 wells
- Groundwater production – 459 wells
- Ground Level – 3 extensometer locations, Interferometric Synthetic Aperture Radar (InSAR), and benchmark monuments for traditional surveying
- Surface water discharge and quality – 2 sites along Santa Ana River, Prado Basin Habitat Sustainability Committee (PBHSC), Additional sources include Wastewater and Stormwater discharge
- Well construction, abandonment, and destruction

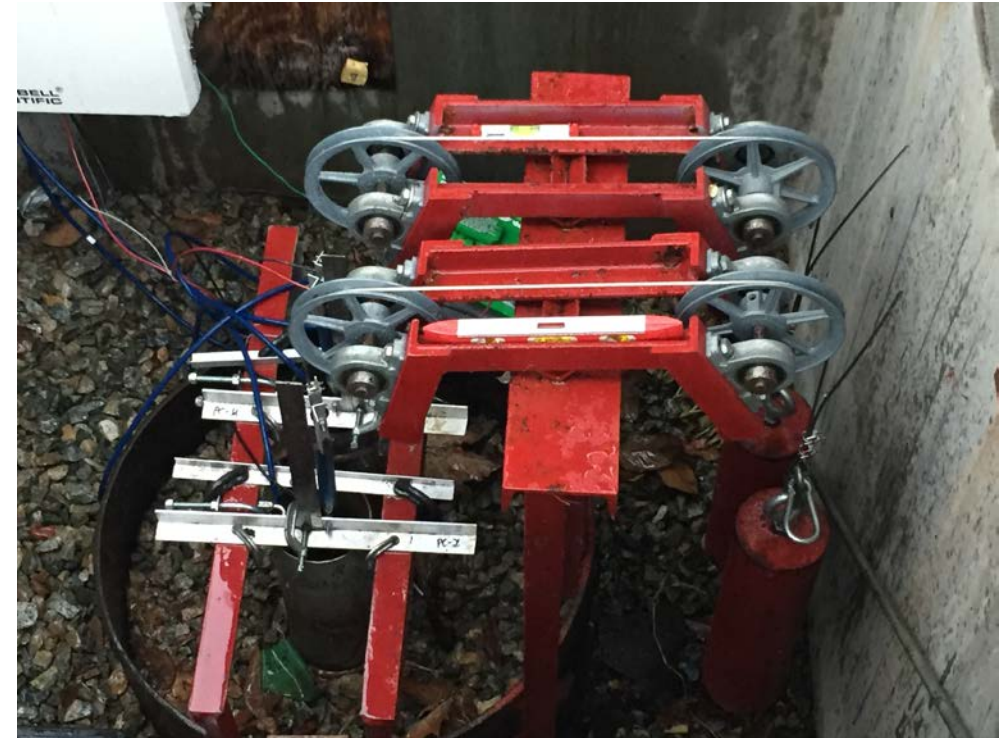


OBMP 2000 vs 2020 Data Collection

Then	Now
<ul style="list-style-type: none">• Groundwater level – 500 wells• Groundwater quality – 600 wells• Groundwater production – 600 wells	<ul style="list-style-type: none">• Groundwater level – 1150 wells• Groundwater quality – 800 wells• Groundwater production – 459 wells

Monitoring Equipment and Processes

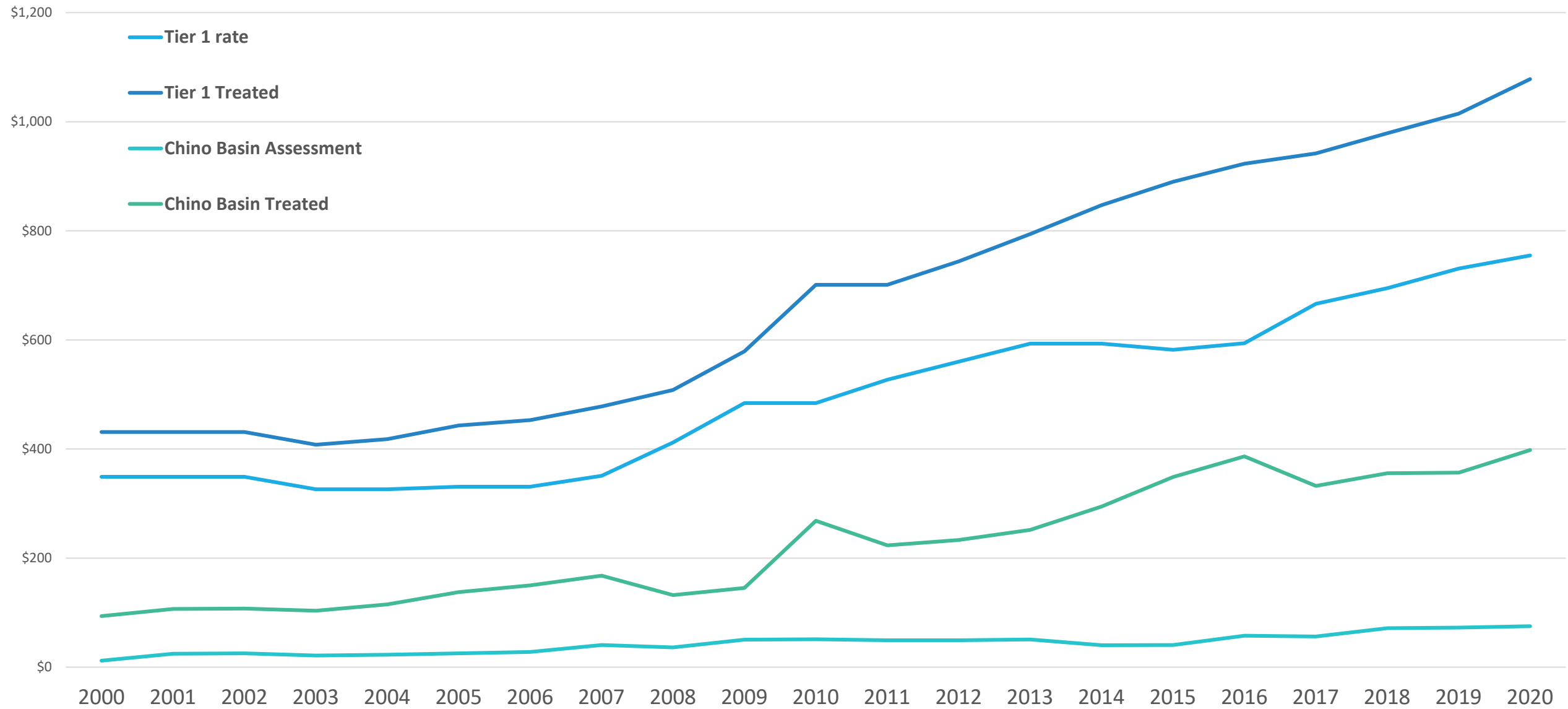
- Water Level Meter (Sounder)
- Pressure Transducers (Measures and logs)
- Water Quality Meter (Measures parameters)
- InSAR and Extensometers - (Ground level change)





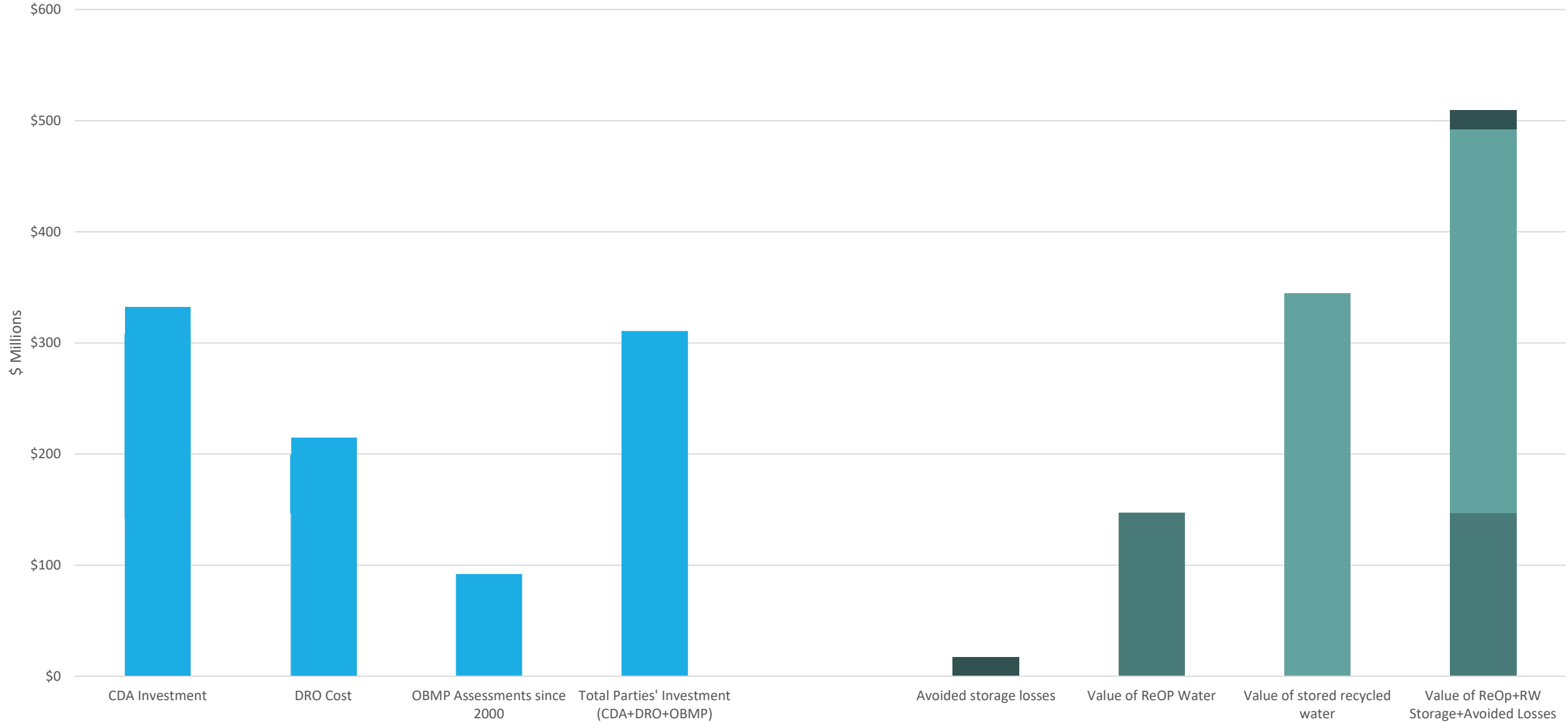
OBMP Costs and Benefits

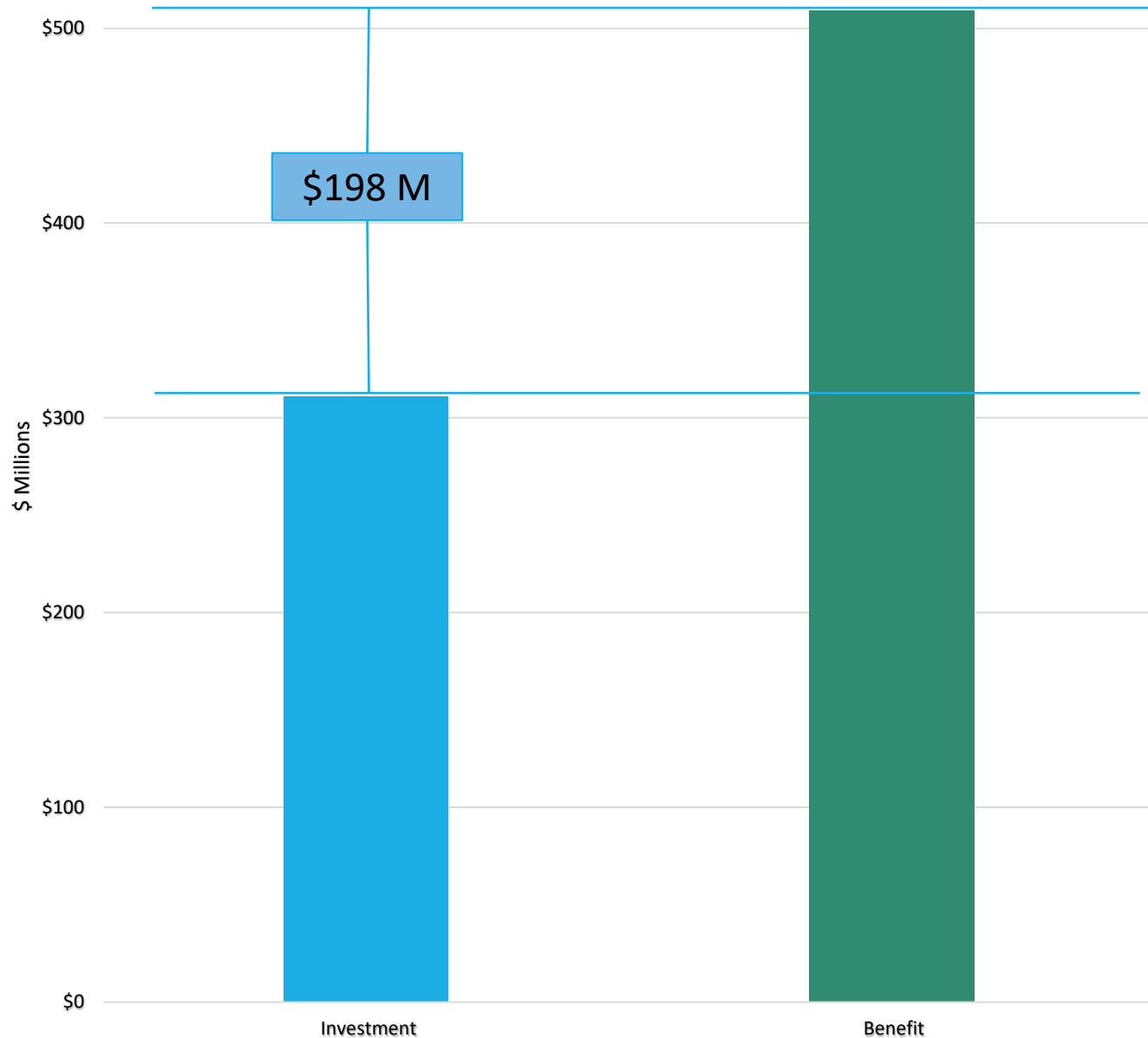
Chino Basin Water vs First Alternative





OBMP Investment and Benefits





Other OBMP Benefits

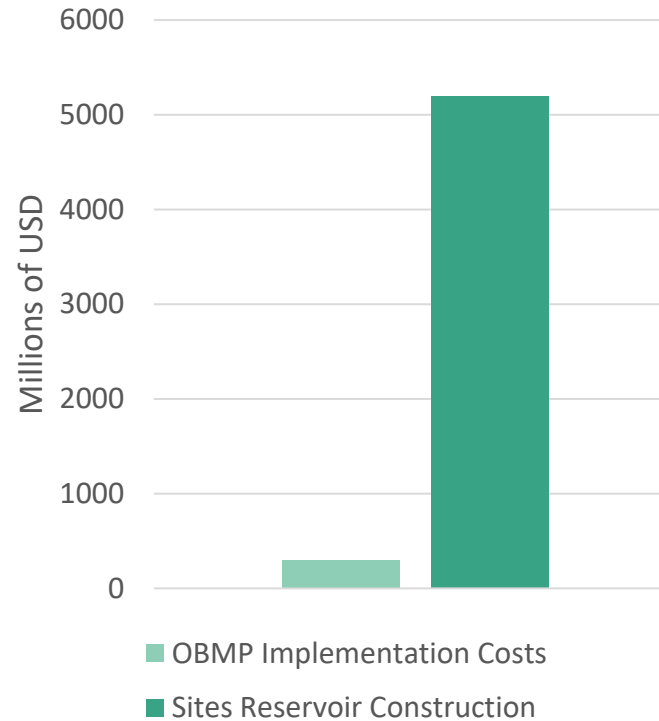
- Cumulative transfers of water between parties: ~766k AF
- Cumulative water produced by the CDA: ~449k AF
- Cumulative water recharged through DYY: ~420k AF
- Avoided conflict due to water quality
- Avoided conflict due to land subsidence
- Improved resilience to drought
- Subsidence management and improved water quality in MZ1.



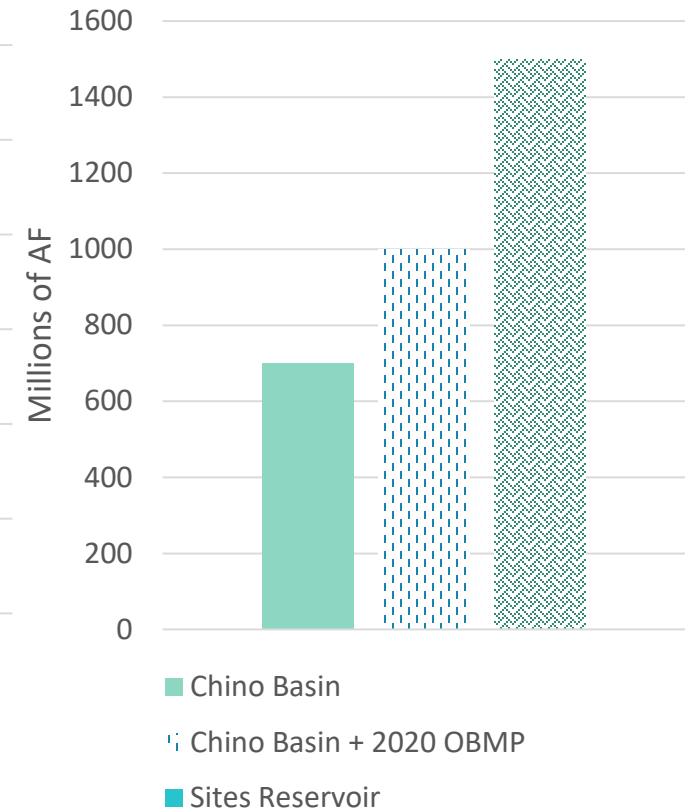
Putting Benefits into Perspective

- The Chino Basin has a Safe Storage capacity of up to 700k AF. (It has been studied for up to 1M AF with no MPI in the 2020 OBMP)
- The estimated cost to implement the OBMP has been of 300M USD.
- The Sites Reservoir project is estimated to be able to hold 1.5M AF.
- The estimated cost to build the Sites Reservoir is 5.2B USD

Cost Comparison



Storage Comparison





Activity

- Form 3 groups and discuss:

“What would the Chino Basin look like without Cooperative Basin Management (OBMP)?”



Break



2020 OBMP



Why Update the OBMP?

- We've accomplished a lot in OBMP implementation but not everything we set out to do. There is more to be done.
- The OBMP goals remain the same, but the OBMP Implementation Plan is outdated.
- We know more about the basin.
- There are new basin management challenges. For instance, there are new regulations and more are on the way.
- The storage management plan is outdated.
- The OBMP CEQA documentation needs to be updated.
- The parties have new needs/wants.
- OBMP Update White Paper: "An updated OBMP will provide the Judgment parties with: a program-level water resources management plan that maximizes their pumping rights, use of recycled water, use of storage space, and an updated CEQA document to provide certainty for implementation."
- The best way to make sure the basin is utilized in an optimal and equitable fashion is to update the OBMP in a collaborative effort.



2020 OBMP Update Process Recap

- **Eight Listening Sessions:**

- Discussed Update rationale; external drivers
- Identified stakeholders Issues, Needs and Wants, and Basin management Goals
- Identified Impediments and activities to remove them
- Related new activities to ongoing basin management efforts

- **Four Workshops focused exclusively on Storage:**

- Discussed local storage needs
- Identified desirable threshold for storage and recovery programs
- Storage Management Plan approved by Watermaster Board in May 2020 at parties' request

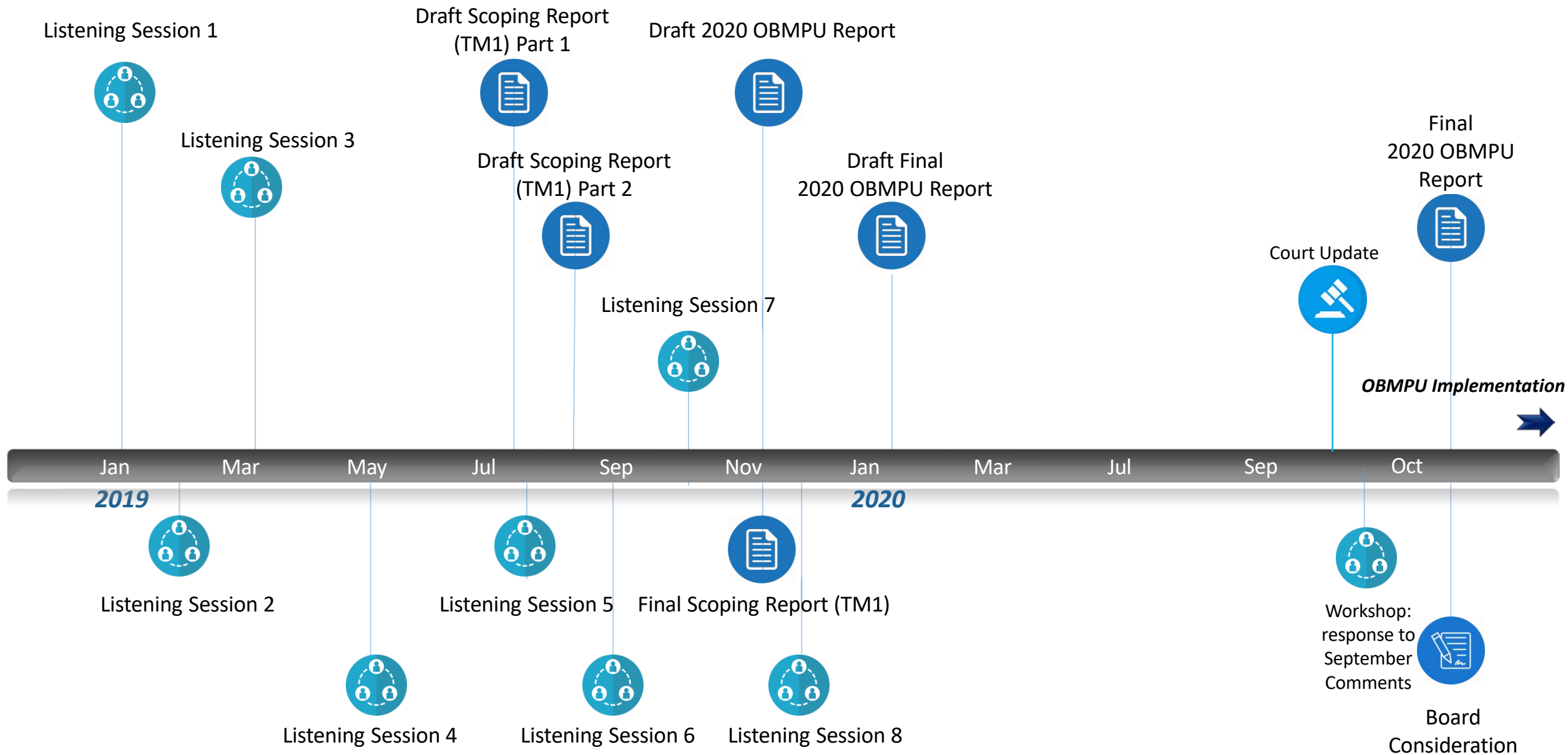
- **Two Technical Memoranda:**

- TM1 to describe the scope of activities; and
- TM2, the actual OBMP Update
- Several rounds of comments and presentations to discuss responses



2020 OBMP Update Process Recap

- Comments were actively sought from stakeholders and responded to throughout the process. Comments and responses have been preserved as an appendix to the final 2020 OBMP report;
- Comments were received during the original schedule which concluded in January 2020. Additionally, comments were received in September 2020, and again October 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

2020 OBMP Update Report (TM2)

1. Introduction
2. Goals
3. Mapping of Activities with Program Elements
4. Management Plan

2020 OBMP Implementation Plan

Implementation Agreement



OBMP
PEIR





2020 OBMP Update Report

Report Outline

1. Introduction

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

2. 2020 OBMP Goals and Activities

- This section summarizes the outcomes of the stakeholder process to define issues, needs and wants, OBMP goals, and basin optimization activities

3. Integration of the 2020 OBMP Update Activities with the 2000 OBMP Program Elements

- This section describes the 2000 PEs and their implementation plan and how the 2020 OBMP Update Activities are integrated to the PEs
- For each PE it described the objectives, implementation progress since 2000, and ongoing activities

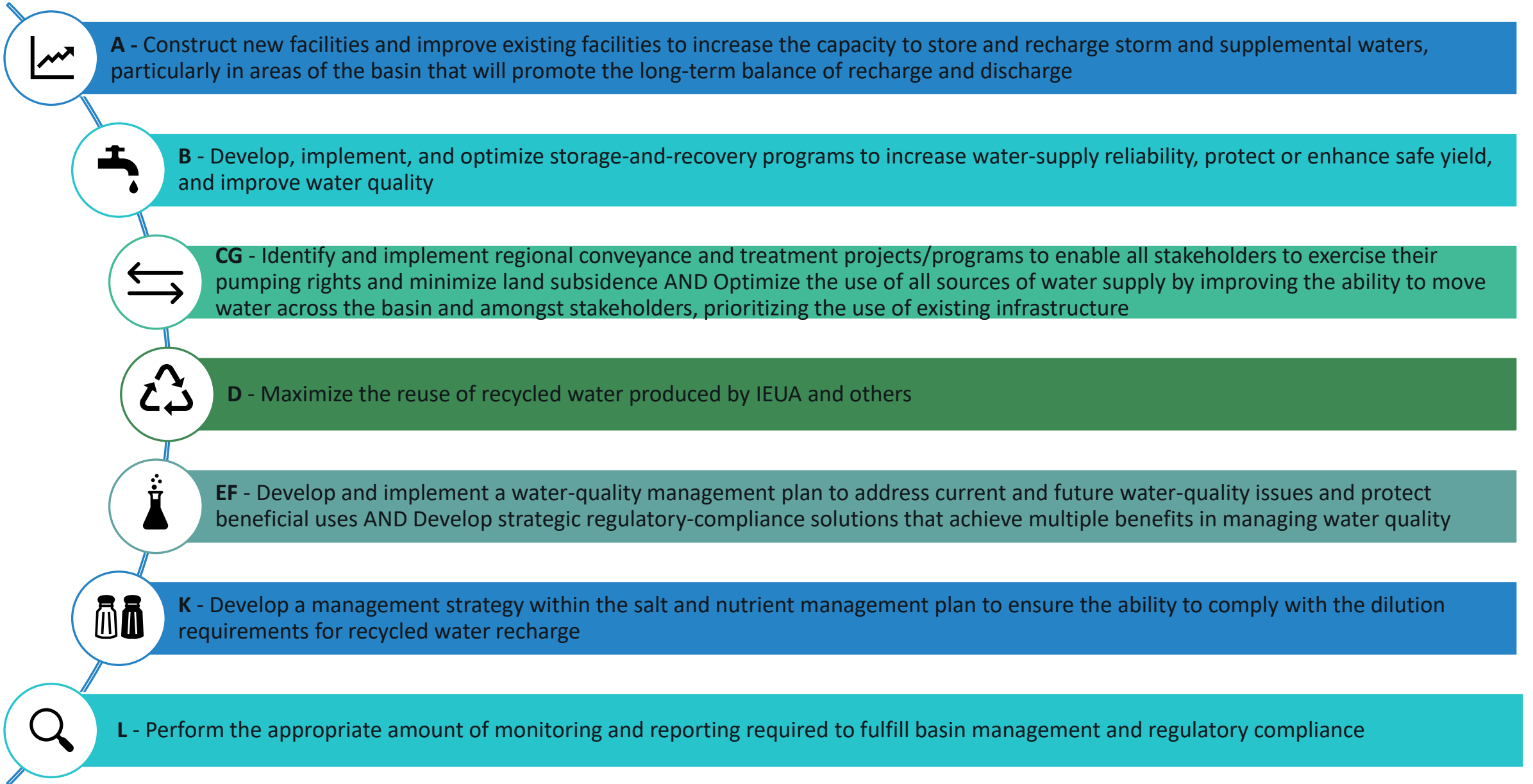
4. 2020 OBMP Update Management Plan

- This section describes the actions, schedule, and responsible parties for implementing the 2020 OBMP Update



2020 OBMP Goals

- ***Goal No. 1 – Enhance Basin Water Supplies***
- ***Goal No. 2 – Protect and Enhance Water Quality***
- ***Goal No. 3 – Enhance Management of the Basin***
- ***Goal No. 4 – Equitably Finance the OBMP***



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	•	⚓	•				•



Next Steps

- Environmental Review
- Potential Implementation Plan Update
- Potential Peace Agreement Amendment



Workshop Goals

Improve understanding of:

- The 2000 OBMP and the management of the Chino Basin
- The 2020 OBMP and the proposed actions for future management of the Chino Basin



Next Workshop

- Regional Water Supply in collaboration with:

