



EVMWD Water Supply Planning - Water Reuse and Groundwater

Basin Monitoring Task Force

May 29, 2024



EVMWD

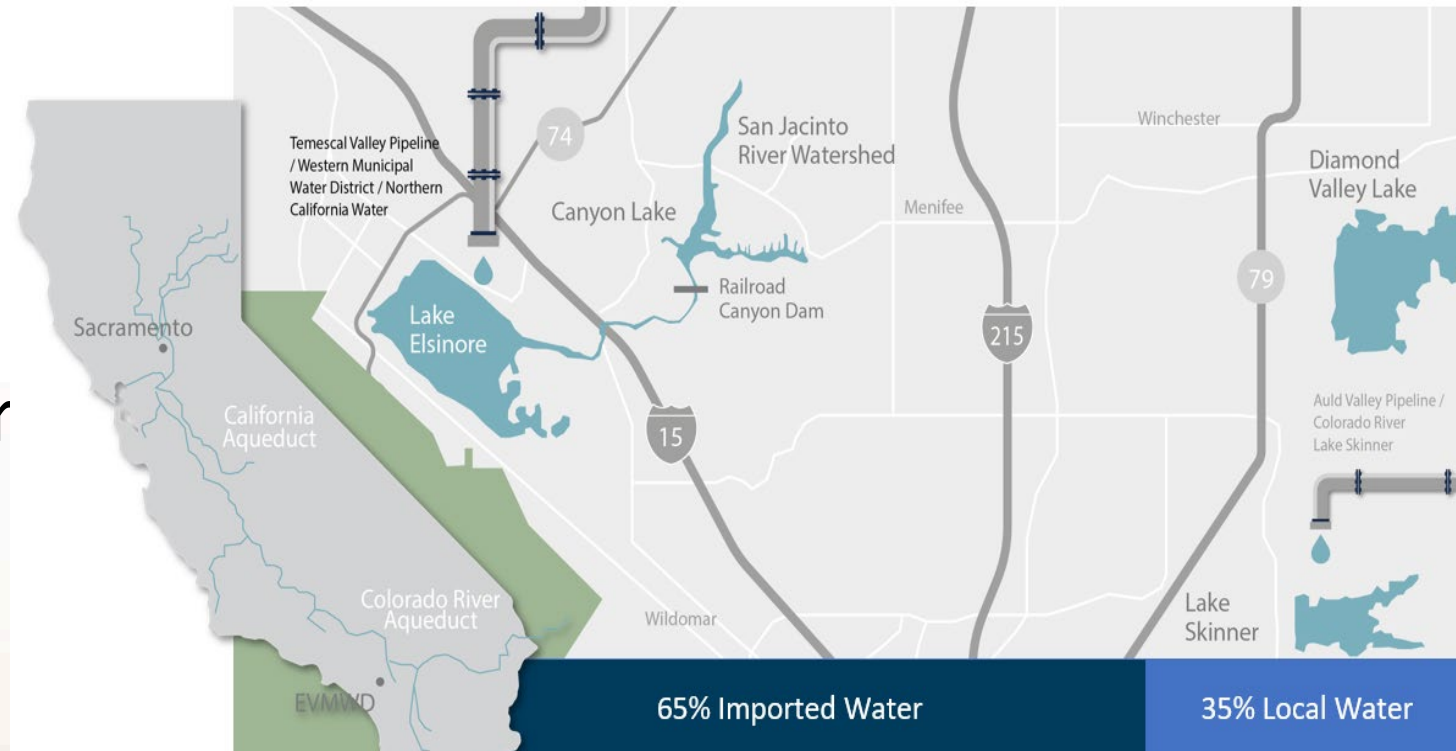
Outline

1. EVMWD Water Demand and Supply Facts
2. Integrated Resources Plan
3. Upper Temescal Valley Salt Nutrient Management Plan (UTV SNMP)
4. Elsinore Basin Maximum Benefit SNMP
5. SGMA Implementation

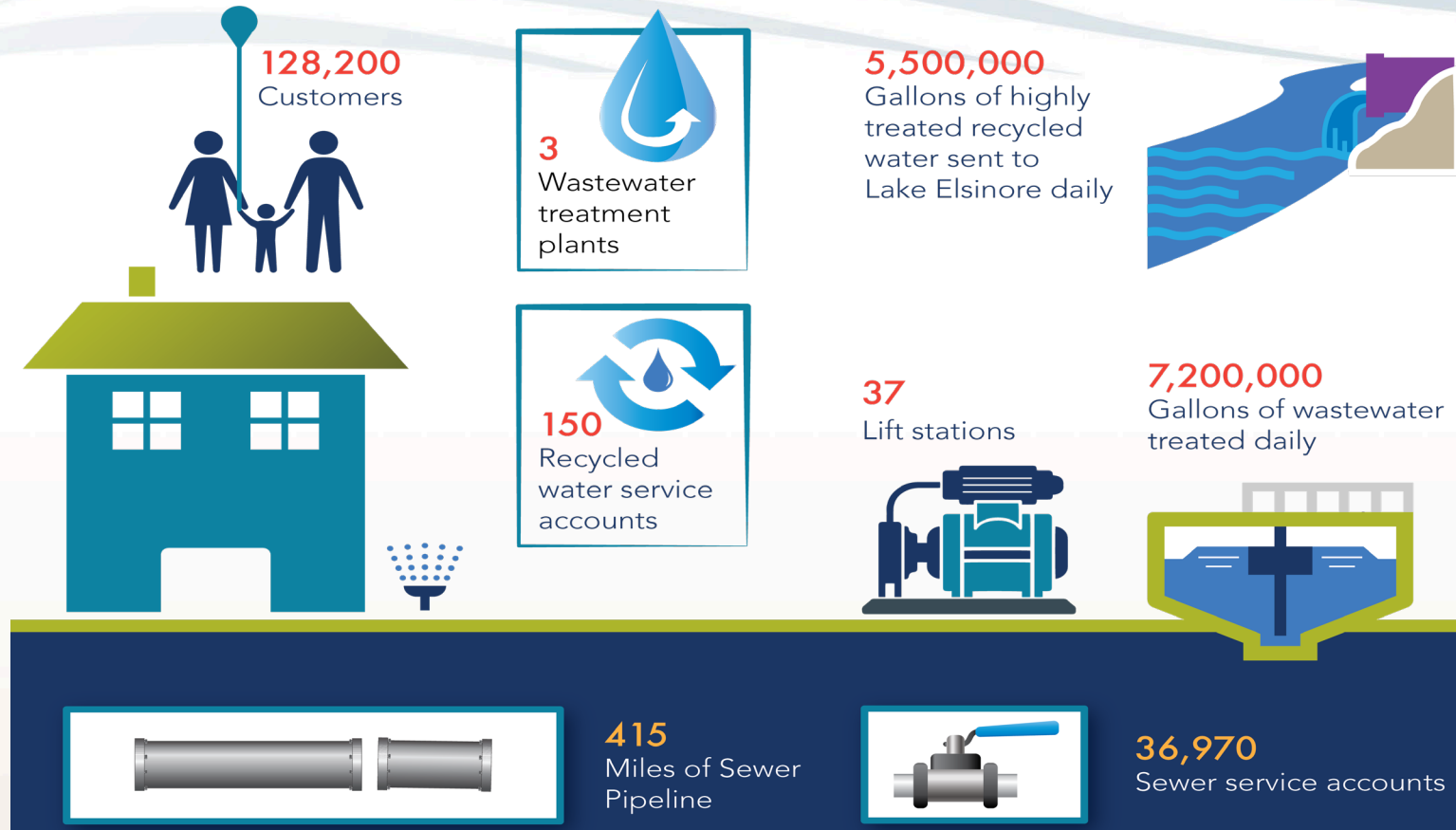
Overview of Water System

- 97 sq. mi. service area
- 159,000 customers
- 50,000 water connections
- 3 lakes and 2 dams
- 3 drinking water plants for potable supply

Water Supplies



Overview EVMWD – Wastewater System

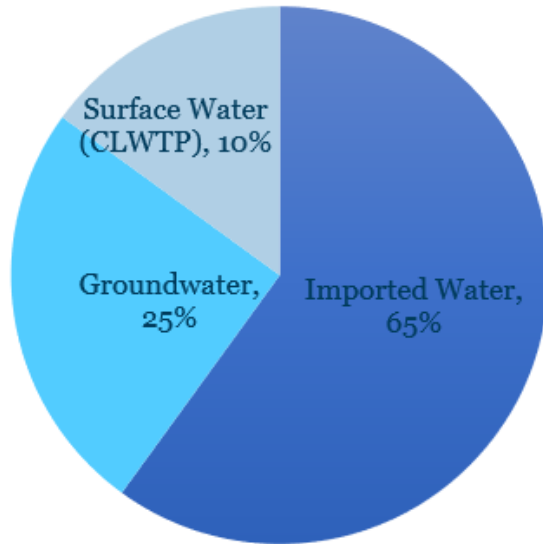


- **2022 Recycled Water Use**
 - Direct Use (Irrigation): 1,180 af
 - Environmental Enhancements: 6,580 af
- **Environmental Enhancements**
 - 5 MGD to Lake Elsinore
 - 0.5 MGD to Riparian Habitat in Temescal Wash (downstream of live stream discharge point)

Overview of Service Area Growth

2023 - EVMWD Water Supply Portfolio

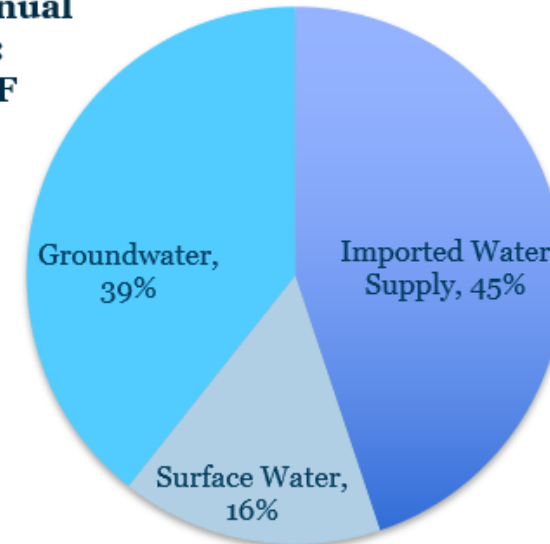
Annual
Demand:
25,000 AF



■ Imported Water ■ Groundwater ■ Surface Water (CLWTP)

2050 - Projected Water Supply Portfolio

Projected Annual
Demand:
50,000 AF



■ Imported Water Supply ■ Surface Water ■ Groundwater

Integrated Resources Plan

- Roadmap to achieve long term water supply reliability given challenges of growth, climate change, and regulations
- Assessment of various water supply portfolios to optimize following District goals:
 - Develop new local supply sources
 - Increase dry-year reliability
 - Decrease dependence on imported water
 - Reuse 100% of available recycled water
 - Improve water quality
 - Improve groundwater management
- Initially developed in 2017, currently being updated

Supply Options Under Evaluation

Recycled
Water

Groundwater

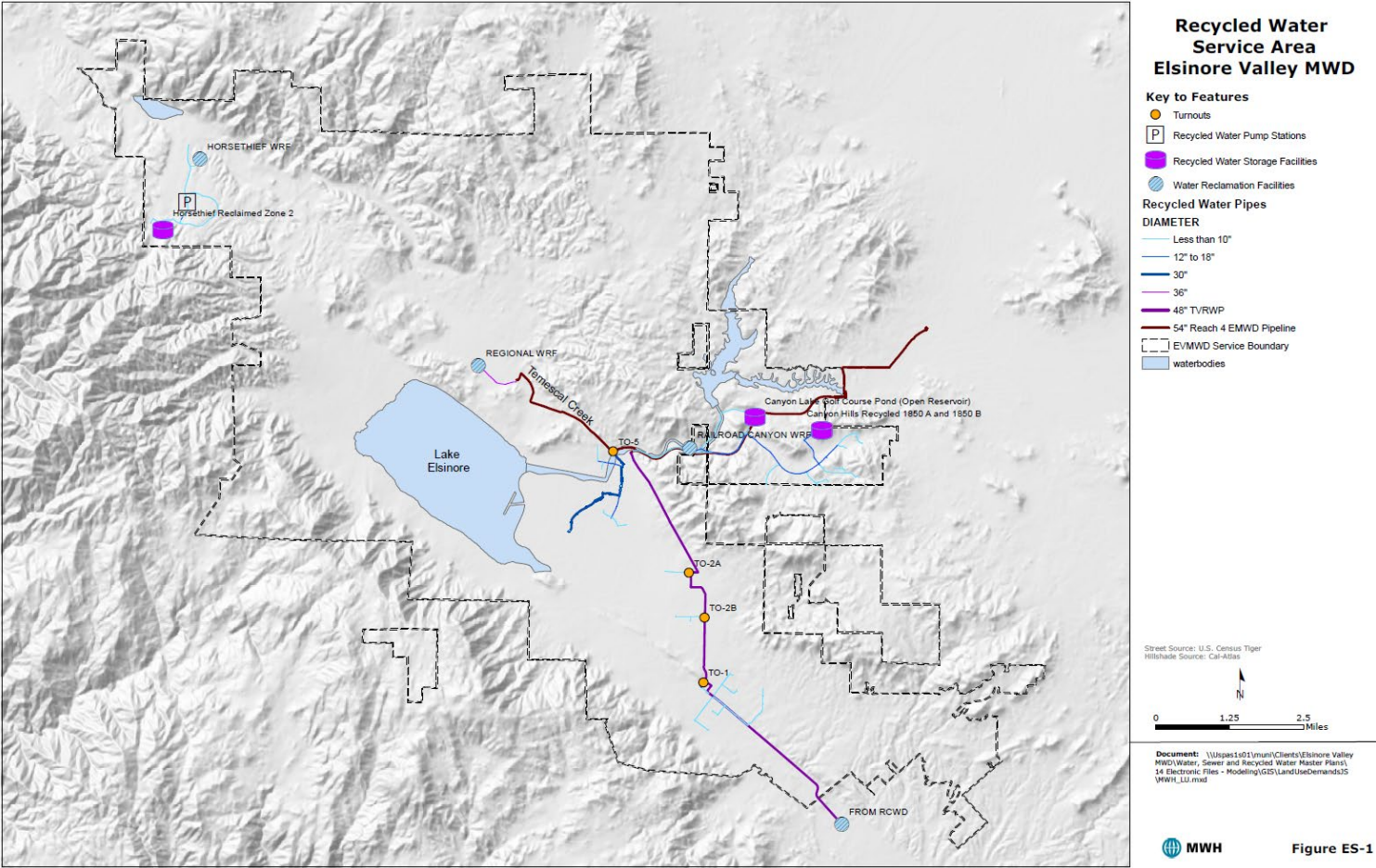
Seawater
Desalination

Water Banking
& Transfers

Stormwater
Capture

Water
Conservation

Recycled Water System



Water Reclamation Facility	Plant Capacity	Reuse (AF)	Future Capacity
Regional WRF	8 mgd	6,705	12 mgd
Railroad Canyon WRF	1.1 mgd	783	1.1 mgd
Horsethief WRF	0.5 mgd	444	0.8 mgd
Santa Rosa WRF	5 mgd	1,082	5 mgd

Future monthly and yearly effluent projections to be estimated in the current master plan update

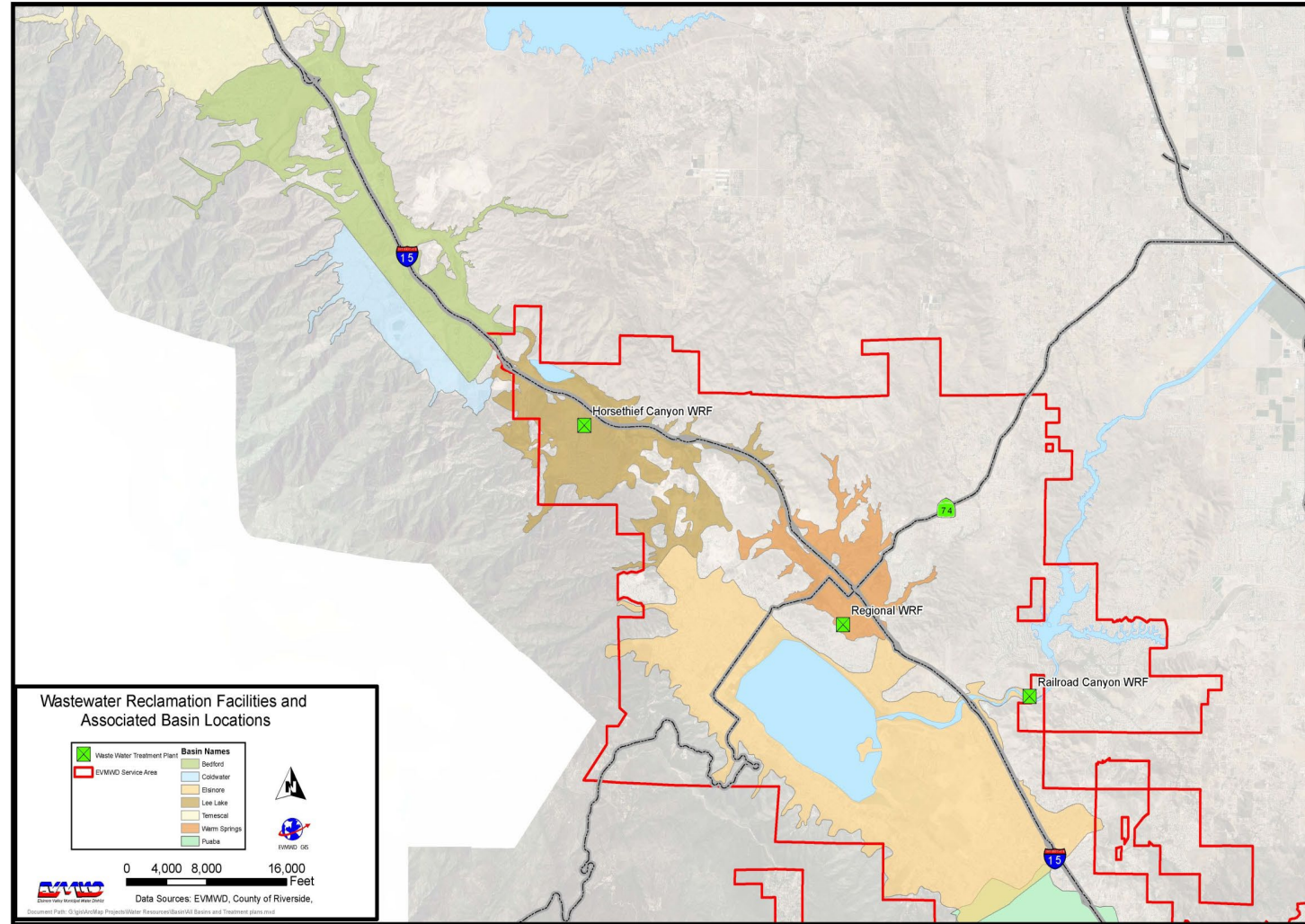
Regulatory Framework for Recycled Water Permitting



- State Agencies
 - State Water Resources Control Board
 - Regional Boards
- Policies
 - Antidegradation Policy (EO 68-16)
 - Porter-Cologne Act (1969)
 - Regional Boards
 - Regional Water Quality Control Plans (Basin Plans)
 - Waste Discharge Permitting
 - Recycled Water Policy

Upper Temescal Valley Salt and Nutrient Management Plan (UTV SNMP)

- In partnership with Eastern Municipal Water District
- Permitting of recycled water discharge and reuse in the UTV
- Historical exceedance of permitted effluent discharge from WRF
- Limitations: Salt offset required
- No Basin Water Quality Objectives (WQO) or current ambient water quality (AWQ) for Nitrate and TDS
- Proposal: Offset historical exceedances of TDS discharge limitations by preparing an SNMP for the UTV

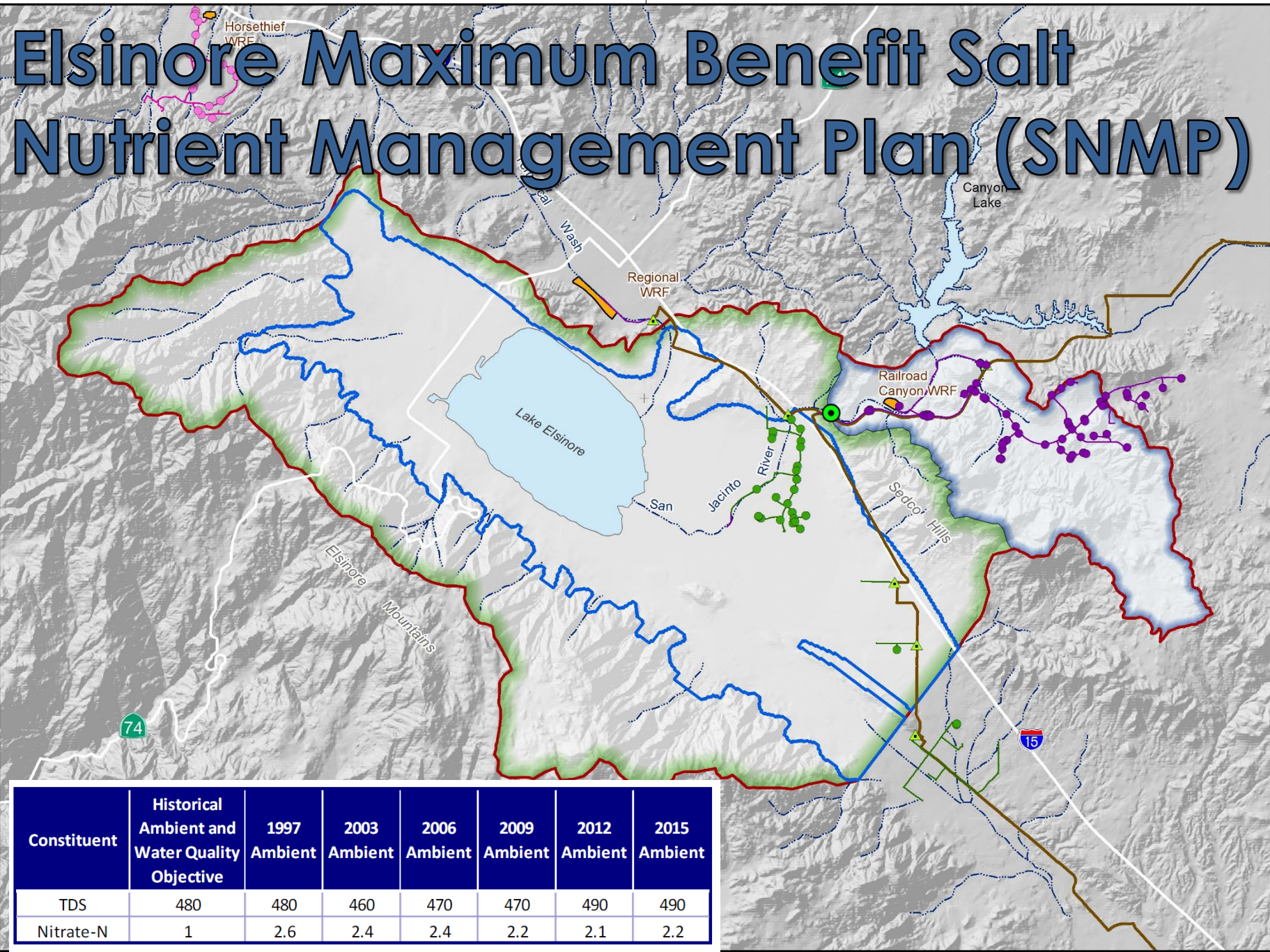


Main Findings and Recommendations UTV-SNMP

Constituent	Antidegradation Objective	Current Ambient
TDS (mg/L)	820	840
Nitrate (mg/L)	7.9	4.1

- Salt and Nutrient Management Plan Actions:
- Implementation of SNMP Monitoring and Reporting Program
- Triennial reporting of water supply and discharge water quality
- Recomputation of current ambient water quality and projections (every six years)
- Participation in Task Force efforts (WLAM and AWQ Updates)
- Annual reporting of progress and activities of SNMP

Elsinore Maximum Benefit Salt Nutrient Management Plan (SNMP)



- Elsinore Basin Watershed
- Elsinore Sub-watershed
- Canyon Hills Sub-watershed
- Elsinore Valley Municipal Water District Recycled Water Service Areas**
- Railroad Canyon Recycled Water System**
 - Recycled Water Meter
 - Recycled Water Line
- Wildomar Recycled Water System**
 - Recycled Water Meter
 - Recycled Water Turnout
 - Recycled Water Line
- Horsethief Recycled Water System**
 - Recycled Water Meter
 - Recycled Water Line
- EMWD Recycled Water Line
- Water Reclamation Plant
- Elsinore Groundwater Model Boundary
- San Jacinto River USGS Station
- Streams & Flood Control Channels
- Lakes and Reservoirs

Constituent	Historical Ambient and Water Quality Objective	1997 Ambient	2003 Ambient	2006 Ambient	2009 Ambient	2012 Ambient	2015 Ambient
TDS	480	480	460	470	470	490	490
Nitrate-N	1	2.6	2.4	2.4	2.2	2.1	2.2



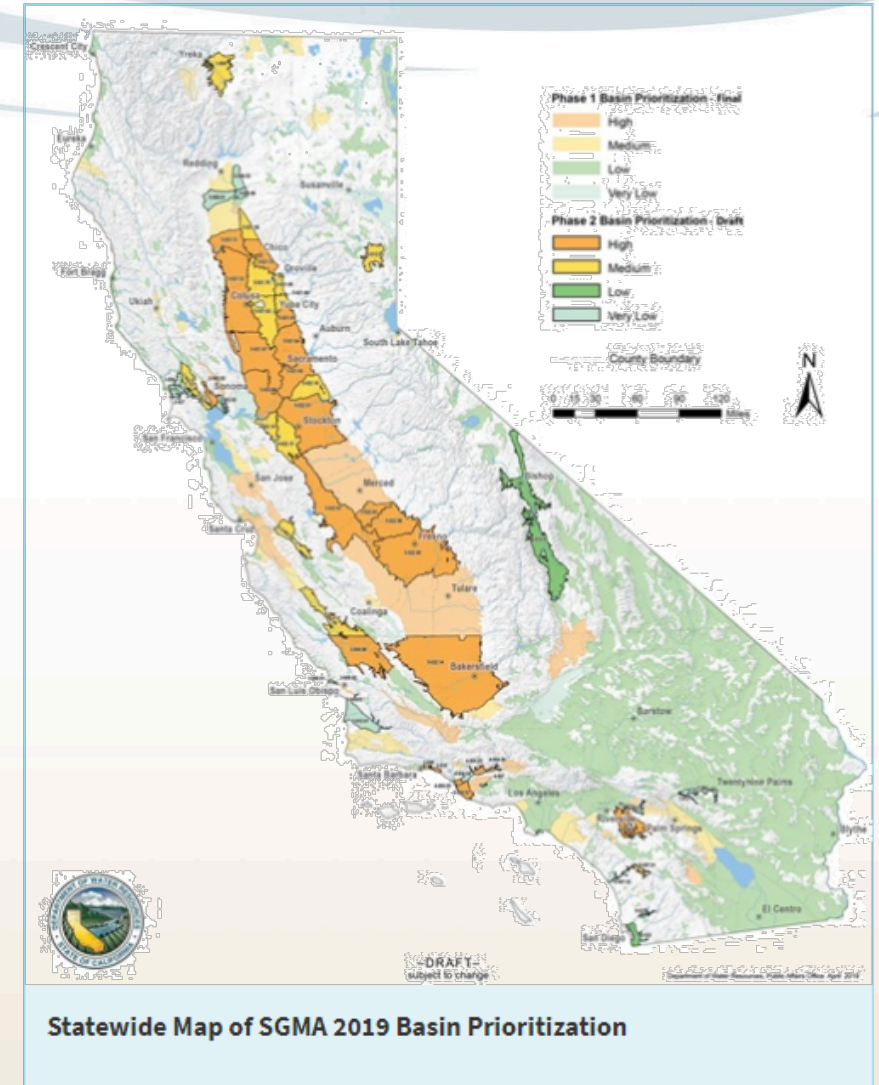
Maximum Benefit Approval and Commitments

Constituent	Old Antidegradation Objective	New Antidegradation Objective	Current Ambient Quality
TDS (mg/L)	480	530	490
Nitrate (mg/L)	1	5	2.3

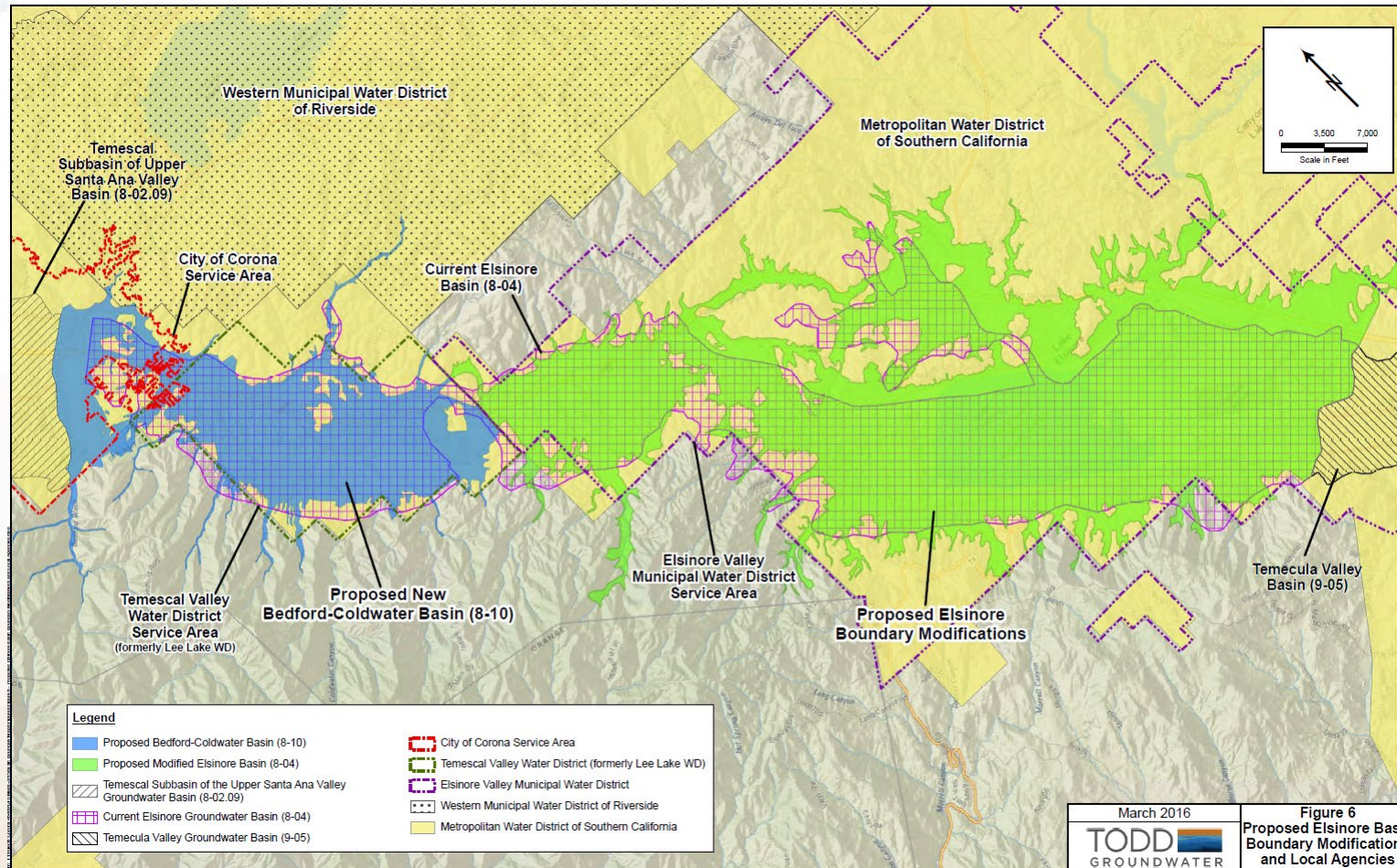
1. Guarantee the beneficial use of the Elsinore GMZ
2. Prioritize recycled water use to maintain Lake Elsinore
3. Salt offset obligation accounting
4. Implement Integrated Resources Plan
5. Complete construction and commence its salt offset project once the total recycled water production at its Regional WRF reaches 10 mgd
6. Monitoring and report (consistent with 2019 Recycled Water Policy)
7. Annual reporting of status/compliance with commitments

Sustainable Groundwater Management Act (SGMA)

- Landmark Legislation in 2014
 - Based on local control
 - State assistance and intervention, if necessary
- Includes comprehensive requirements for:
 - Forming a Groundwater Sustainability Agency (GSA)
 - Preparing a Groundwater Sustainability Plan (GSP)
 - Compliance deadlines



SGMA Implementation – Basin Boundary Revision and GSAs



- Partition of Elsinore Basin in two Subbasins: Bedford-Coldwater Basin and Elsinore Subbasin
- Creation of Groundwater Sustainability Agencies (GSAs):
- Bedford-Coldwater GSA: JPA among City of Corona, TVWD, and EVMWD
- Elsinore Basin GSA: EVMWD the sole water agency

Sustainability Criteria



Groundwater Levels



Groundwater Storage



Water Quality



Land Subsidence



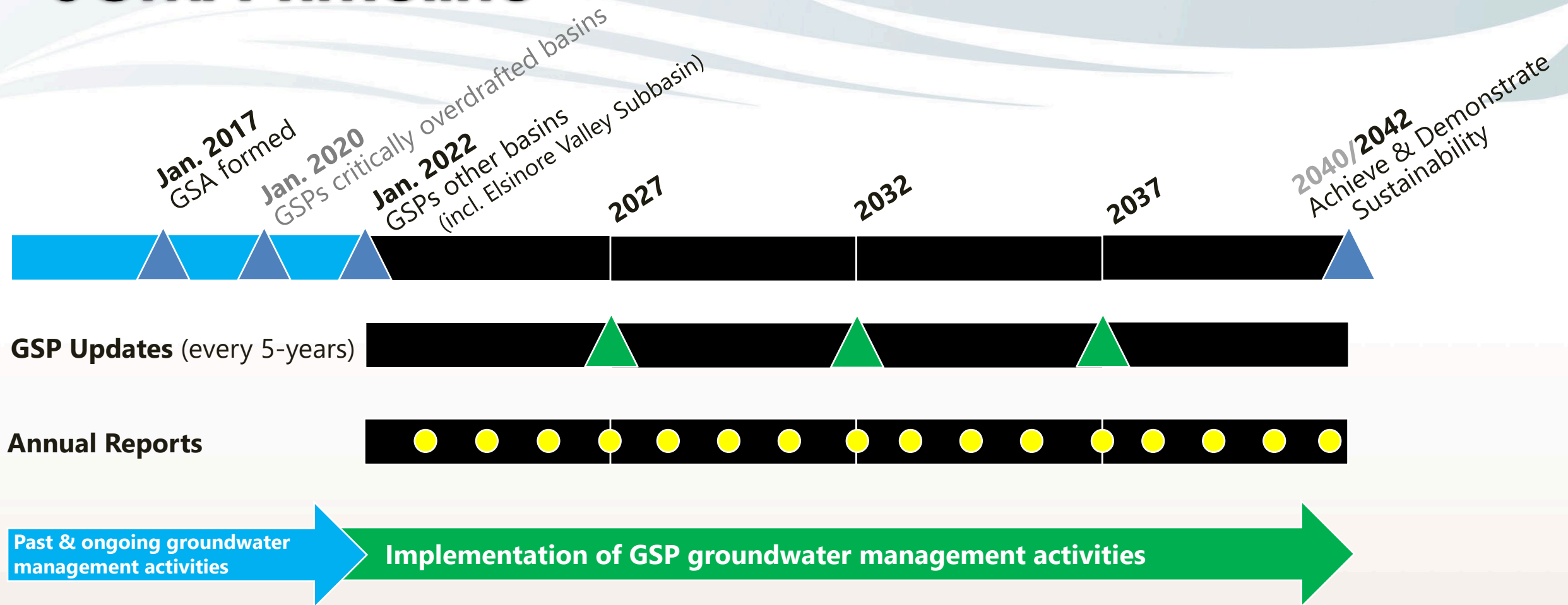
Interconnected Surface Water

Sea Water Intrusion

For Each Criterion and each Management Area the GSP defines the:

- Undesired Result
- Minimum Threshold
- Measurable Objective

Background SGMA Timeline



Thank you

Summary and Conclusions

- EVMWD is proactively managing and enhancing water supply reliability, including recycled water
- IRP has been instrumental in increasing a more long term reliable water supply portfolio
- Successful implementation of SNMPs plan to maximize use of Recycled water
- Ongoing implementation of SGMA to reach long term groundwater sustainability

Sustainability Criteria Definitions

- Undesirable Results
 - Significant and unreasonable impacts
 - Metrics are worse than minimum threshold
- Minimum Threshold
 - Quantifiable criteria
- Measurable Objectives
 - Necessary if current conditions are undesirable

