Water Resources and Development Management Plan 2024 (WRDMP24) and Policy E-1001 Update

Board Meeting

October 9, 2024

El Dorado Water Agency

Topics

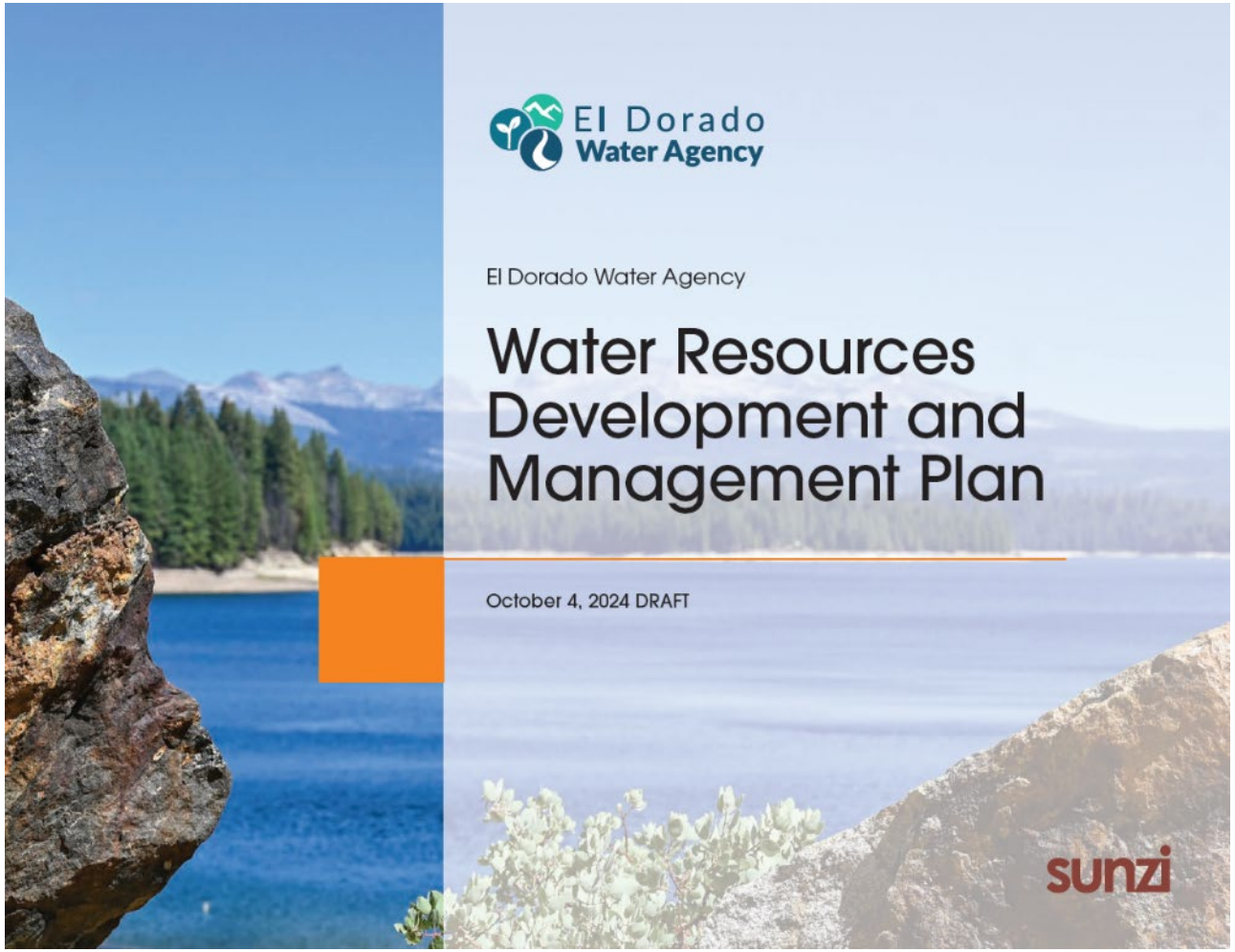
WRDMP24:

- **WRDMP and Update Focus**
  Rebecca Guo, General Manager
  El Dorado Water Agency

- **Summary of Findings**

  Yung-Hsin Sun, Senior Principal Consultant
  Sunzi Consulting

Policy E-1001 Update:
Rebecca Guo, General Manager
El Dorado Water Agency



Greenwood Creek at Lewis Ranch(Credit: Paul Cockrell, American River Conservancy).

WRDMP and Update Focus

Rebecca Guo, General Manager, El Dorado Water Agency

WRDMP Purpose

WRDMP is the cornerstone document for the Agency to align its actions with the charges provided by the 1959 El Dorado County Water Agency Act (1959 Act).

§ 96-103. Legislative finding and declaration

Sec. 103. The Legislature hereby finds that ***water problems in the county require county-wide water conservation, flood control and development of water resources****; that these problems are not general or state-wide; that the county for many years has had made investigations and engineering surveys of the county's water resources by private, public and United States engineers; that county water districts, municipalities, and water conservation districts now exist within portions of the county, have acquired property and works, developed a limited water supply, and have incurred indebtedness, but have been and are* ***unable alone*** *to economically develop an adequate water supply and control the floods of said county and for such reason it is necessary to have a* ***political entity coextensive with the geographical limits of the entire county****; that the county cannot be supplied with water from a common source or by a common system of works; that investigation having shown conditions in said county to be peculiar to it. It is, therefore, hereby declared that a general law cannot be made applicable to said county and that the enactment of this special law is* ***necessary for the conservation, development, control and use of said water for the public good and for the protection of life and property therein****.*

(Stats.1959, c. 2139, p. 5108, § 103.)

WRDMP Purpose (cont.)

WRDMP meets the requirements of County's Ordinance No. 5096 on public water planning adopted in 2018.

Section 3. Posting of Water Management Plans

Preparation and posting of the ***Countywide Water Management Plan and updates*** *and Urban Water Management plans shall be as provided for in a Memorandum of Understanding between the County of El Dorado and the El Dorado County Water Agency.*

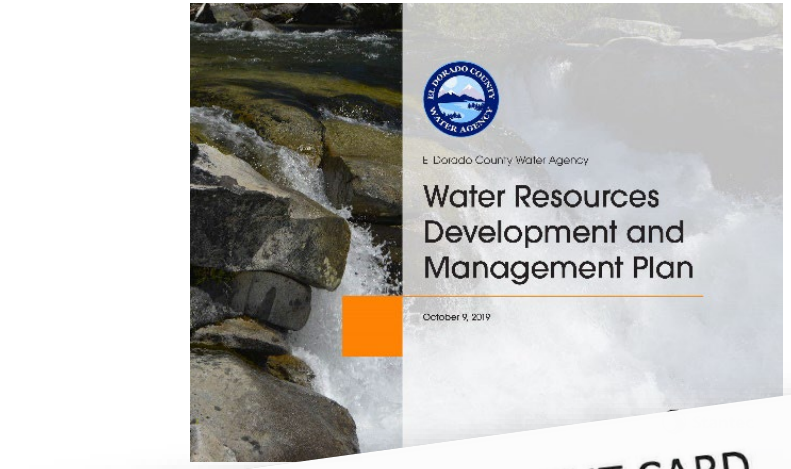
Section 5. Tahoe Regional Planning Agency Exclusion.

This ordinance shall not apply to any projects or parcels within the jurisdiction of the Tahoe Regional Planning Agency.

EDWA and Reclamation singing the Fazio Contract in 2019

2019 WRDMP: An Overhaul

- Developed through **extensive collaboration**, respecting each entity's roles and responsibilities in water resources-related management issues.
- Designed to be a concise **policy plan** with resource management strategies (RMS) and major management actions.
- Provides a **roadmap for collective implementation** by all parties for a better future with sufficient flexibility and clear objectives.
- Adopted policies and guidance by Agency's Board for its long-term implementation, providing stability and transparency. Required **5-year updates** provide adaptative capacity to address changed conditions.



A Sampling of Accomplishments

- Signed **Fazio Water Service Contract** with Reclamation
- **American River Basin Study** (with Reclamation, PCWA, cities of Roseville, Sacramento and Folsom, RWA, and SAFCA)
- **Regional Drought Contingency Plan** (with Drought Planning Task Force)
- Convened **County Drought Task Force**

- **Programmatic Watershed Plan** for the upper American River watershed (with Upper American River Watershed Group)
- Initial economic **valuation of ecosystem goods and services**

- **Tahoe Valley South Subbasin GSA** with STPUD
- Engagement with **regional groups** (RWA, IRWMs, SOFAR, etc.) and **State/Federal Agencies** (USBR, DWR, etc.)

- **Countywide Plenary for Water** (held twice per year since 2020, except some COVID years)
- **Rebranding** and Website re-design
- Organized **regional advocacy** with state and federal parties

- **Caldor Fire response and recovery support** to GFCSD and other small water systems
- Secured over **$3M in federal and state funding** to support planning, fire recovery, and more
- Contributed over **$1M to support local water-resource projects**

WRDMP24 Update Focus

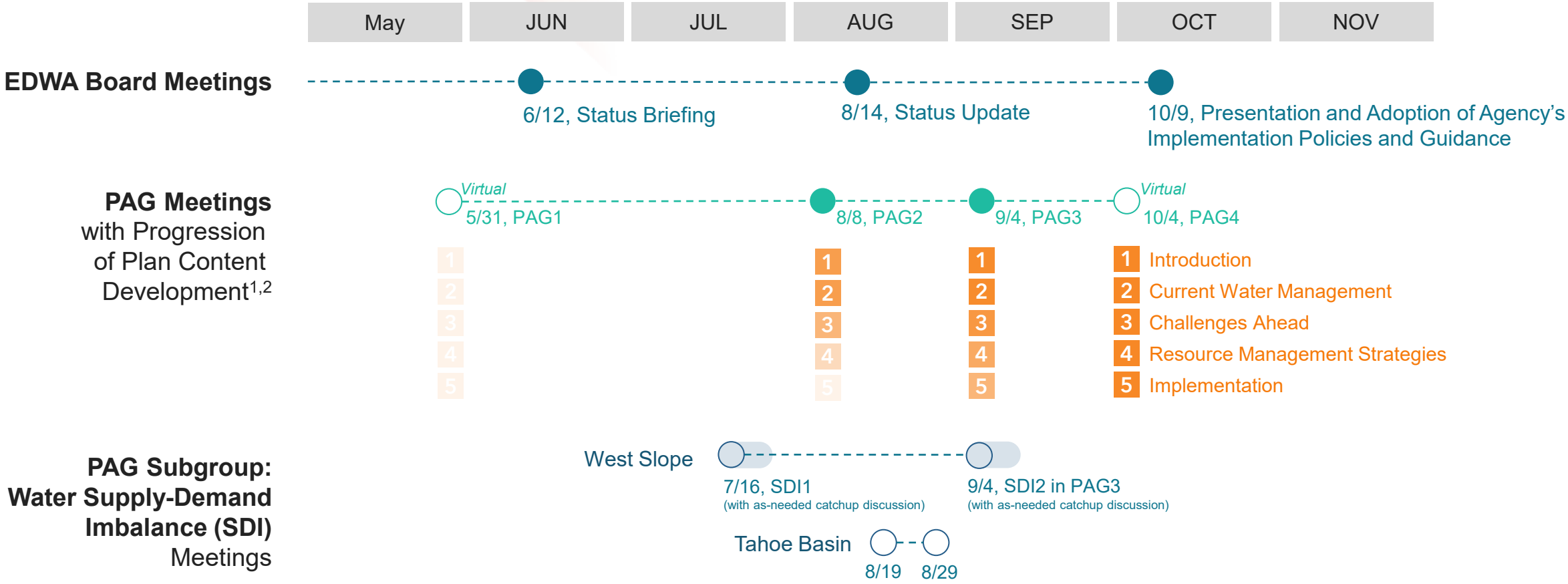
- **Address the changed conditions**
  - Land use and zoning designations (minimum)
  - Natural disasters (e.g., wildfires, flood) and associated impacts to communities and water management priorities
  - Policy and regulatory framework changes (expanded in the next slide)
  - Facility improvements (e.g., EID's flume repair, TCPUD's Water Lake Tahoe Water Treatment Plant)
  - Progress in coordinated planning for water resilience (e.g., Upper American River Watershed Programmatic Watershed Plan [PWP], Upper American River Basin Regional Drought Contingency Plan, American River Basin Study)
  - Improved Agency's partnership and collaboration with state, federal and regional/local agencies on water resource management in El Dorado County and statewide
- **Update the Resource Management Strategies (RMS) and associated management actions**
  - Incorporate PWP RMS and associated management actions, where appropriate
  - Adjust actions and focus in responding to changes
- **Review Agency's implementation policy and guidance for potential update**

WRDMP24 Update Focus (cont.)

Policy and Regulatory Framework Changes

- July 2024 State Water Board adopted **urban water use efficiency standards**, variances and performance measures per SB 606 and AB 1668 of 2018.
- October 2022, State Water Board adopted **water loss regulation** per SB 555 of 2015.
- SB 552 of 2021 and implementation regarding **drought planning for small water systems and rural communities** with additional considerations of social equity and human rights to water (AB 685 of 2012).
- **Senior water right curtailments** under emergency regulations during 2015-2016 and 2020-2022.
- Continued and evolving implementation of **Sustainable Groundwater Management Act**.
- **Wildfire resilience related legislation** and regulations (more in the background), including elevated defensible space requirements (SB 190 of 2019), home hardening disclosure (AB 38 of 2020) and County General Plan Safety Element update.
- Policy and funding preferences over **nature-based solutions**, and highly integrated multi-benefit projects with socioeconomic and equity considerations including federal's Justice40 Initiative.

WRDMP24 Timeline



Notes:

1. *As-needed topic-specific meetings were scheduled with subject matter experts within and outside of the PAG to support content development. The PAG was informed about these meetings and the results was incorporated into the plan.*
2. *For every review cycle, the PAG reviewed the then-current draft plan in its entirety for completeness and transparency.*

Lava Cap Vineyard (Photo Credit: Yung-Hsin Sun, Sunzi Consulting)

WRDMP24: Findings

Yung-Hsin Sun, PhD, PE, BC.WRE; Sunzi Consulting

WRDMP24 Outline (same as 2019 version)

Why We Do This | Who is Responsible | What Is Ahead | How We Do It (together) | What EDWA Will Do

- **Support the County to realize the vision of its adopted General Plan through prudent and integrated land use and water resources management for economic prosperity, environmental stewardship, and resident's preferred rural-agricultural way of life.**
- The Agency's cornerstone document to establish policies for EDWA's investment and actions, and the countywide water plan to establish the basis for collective implementation among all responsible parties for a shared water future.
- An effort with collaborative development among partners with mutual respect of each other's role and responsibilities in water resource management.

Plan Advisory Group

Plan Advisory Group Members

Sean Barclay,* Tahoe City Public Utility District
Adam Brown,* Georgetown Divide Public Utility District
Adrian Combes,* South Tahoe Public Utility District
Elena DeLacy, American River Conservancy
Mark Egbert, El Dorado and Georgetown Divide Resource Conservation Districts
Shiva Frentzen,* El Dorado Local Agency Formation Commission
Karen Garner,* County of El Dorado, Planning and Building Department
Rebecca Guo,* El Dorado Water Agency
Kim Gustafson,* Grizzly Flats Community Service District
Carla Haas, County of El Dorado, Chief Administrative Office
Charles Mansfield, El Dorado Wine Grape Growers Association
Rafael Martinez, County of El Dorado, Department of Transportation
Tom Meyer, County of El Dorado, Office of Wildfire Preparedness and Resilience
LeeAnne Mila,* County of El Dorado, Agricultural Commissioner
Brian Mueller,* El Dorado Irrigation District
Michael Ranalli,* El Dorado County Farm Bureau
Pierre Rivas, City of Placerville
Hardeep Singh, UC Agriculture and Natural Resources
Jeffrey Warren, County of El Dorado, Environmental Management Department

Topic-Speci ic Consultations

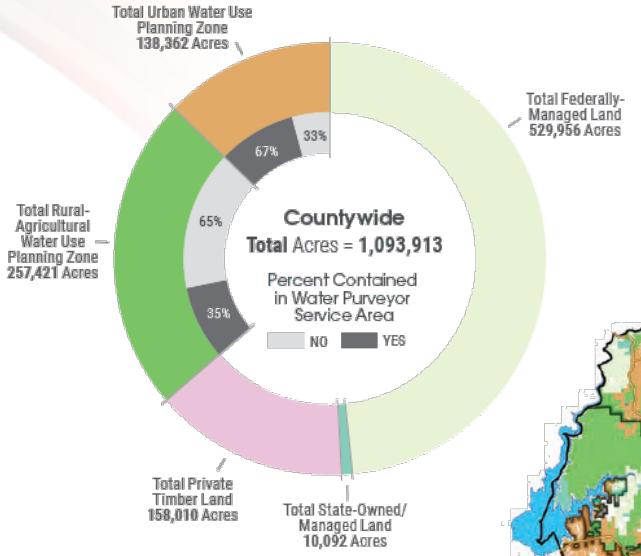
Karen Bender, County of El Dorado, Environmental Management Department
Matt Homolka,* Tahoe City Public Utility District
Kristen Hunter, City of Placerville
Dan Kikkert, County of El Dorado, Department of Transportation – Tahoe Engineering
Jon Money,* El Dorado Irrigation District
Cathy Mueller, American River Conservancy
Robert Peters,* County of El Dorado, Planning and Building Department
Amy Phillips, County of El Dorado, Stormwater Coordinator – West Slope
Mark Seelos, South Tahoe Public Utility District
Russell Wigart, County of El Dorado, Stormwater Coordinator - Tahoe Basin

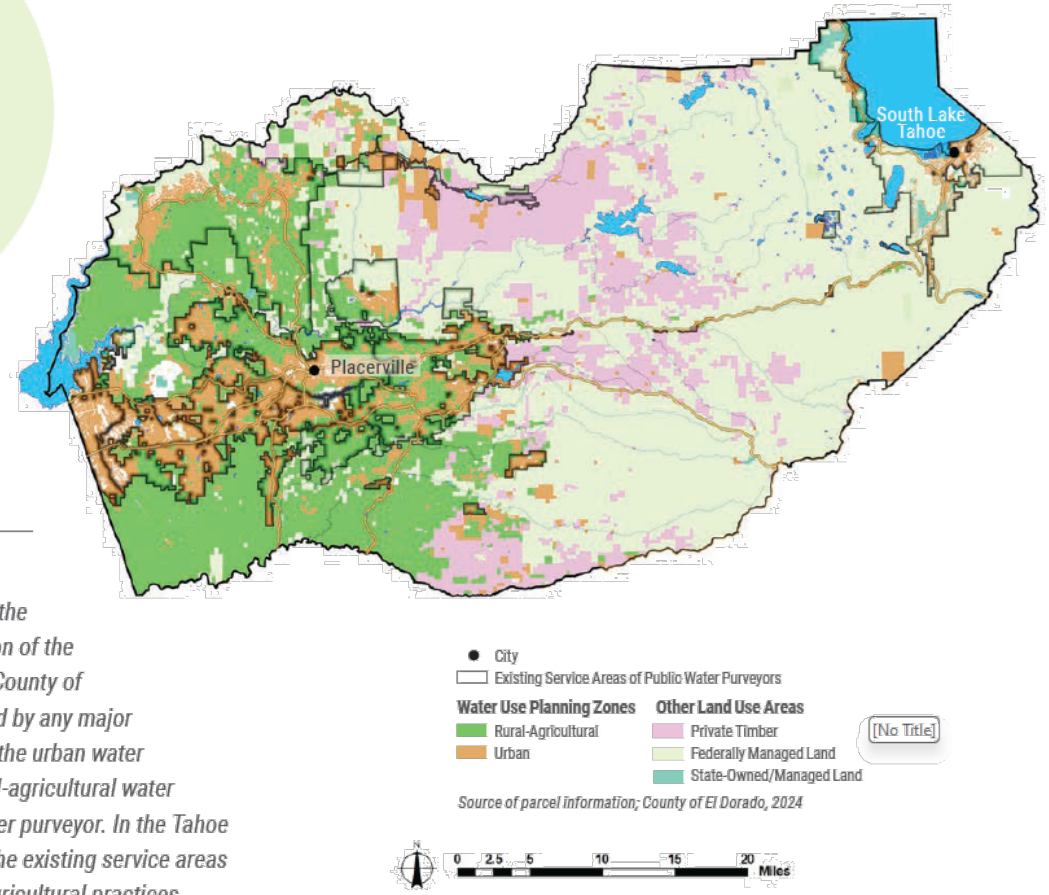
* Also member of Water Supply-Demand Imbalance Subgroup

WRDMP24 PAG meeting on August 8, 2024, at Raley's Community Room in Placerville, California

Minimum Changes in Land Use

Reconciled changes over last 5 years with County Department of Building and Planning Services (5 parcels with limited changes)

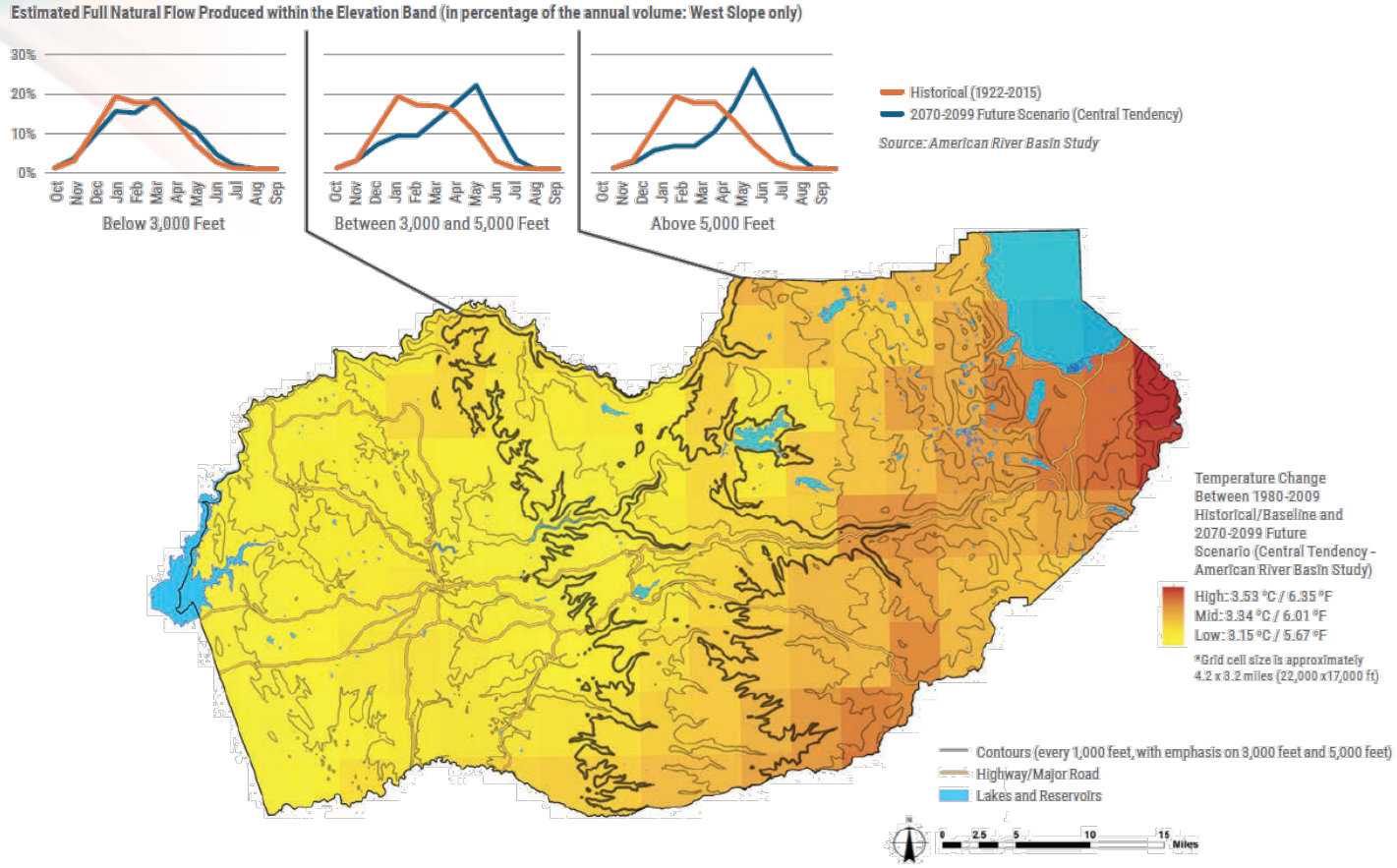




Reliable water supplies are foundational to ensure economic growth and prosperity into the future. In the West Slope, a substantial portion of the land designated for economic growth in the County of El Dorado General Plan is not currently served by any major water purveyor. Approximately 67 percent of the urban water use planning zone and 35 percent of the rural-agricultural water use planning zone are served by a public water purveyor. In the Tahoe Basin, urban water use is completely within the existing service areas of public water purveyors and there are no agricultural practices.

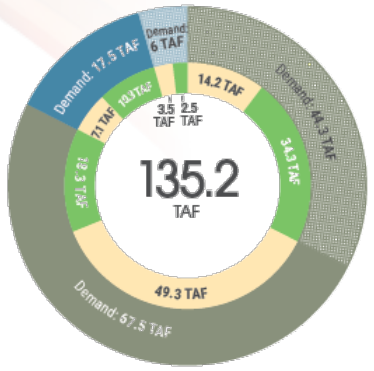
Climate Change Effects Continue to Manifest

Extremes become the new normal, reflecting in temperature, runoff, and all ecosystems and economic activities affected by climate changes.



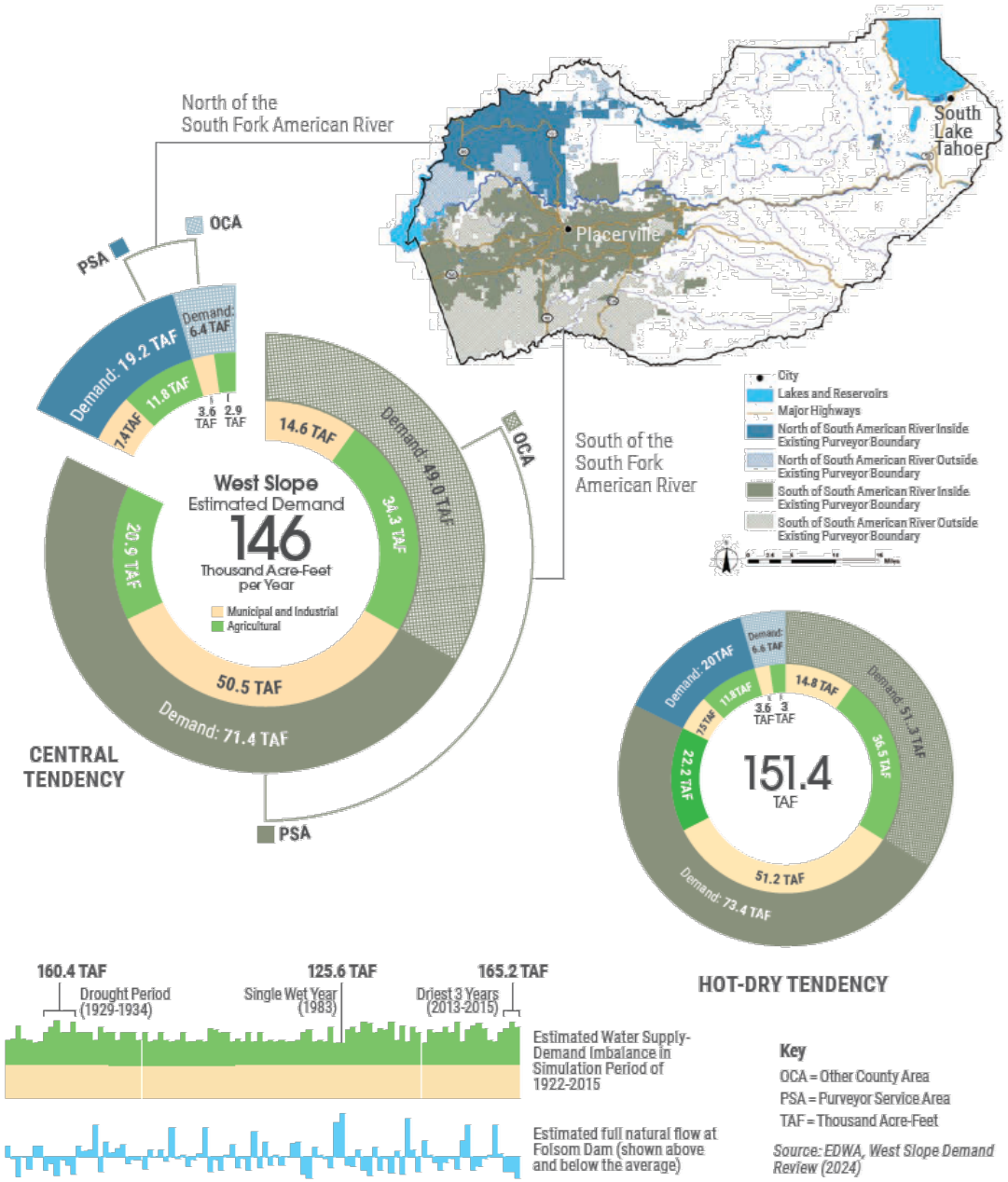
Climate change will likely result in increased runoff during winter months and reduced snowmelt in spring months for water supply. The existing facilities, which were designed and operated based on historical hydrology, will be overwhelmed and unable to provide adequate flood protection or water supply for all beneficial uses. The projected changes in hydrology vary between different elevation bands signaling potential significant impacts on the way of life in foothill communities particularly in areas above 3,000 ft in elevation.

Projected 2070 Water Supply-Demand Imbalance: West Slope

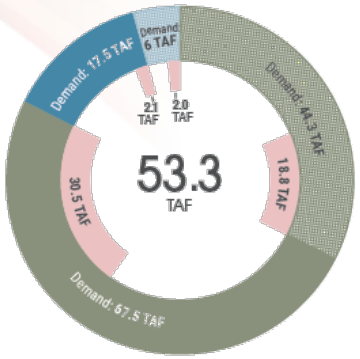


WARM-WET TENDENCY

The estimated water demands in the West Slope projected in 2070 reflects the realization of economic growth and preferred way of life envisioned in the County of El Dorado General Plan at capacity. The revised demand estimates incorporates the long-term efficient urban water use standards adopted by the State Water Resources Control Board and the Agency's economic-informed agricultural development opportunity study. The resulting water demand estimates over the 1922 to 2015 simulation period vary year by year mostly due to agricultural demand adjustments based on annual hydrologic conditions as projected by the American River Basin Study climate scenarios.

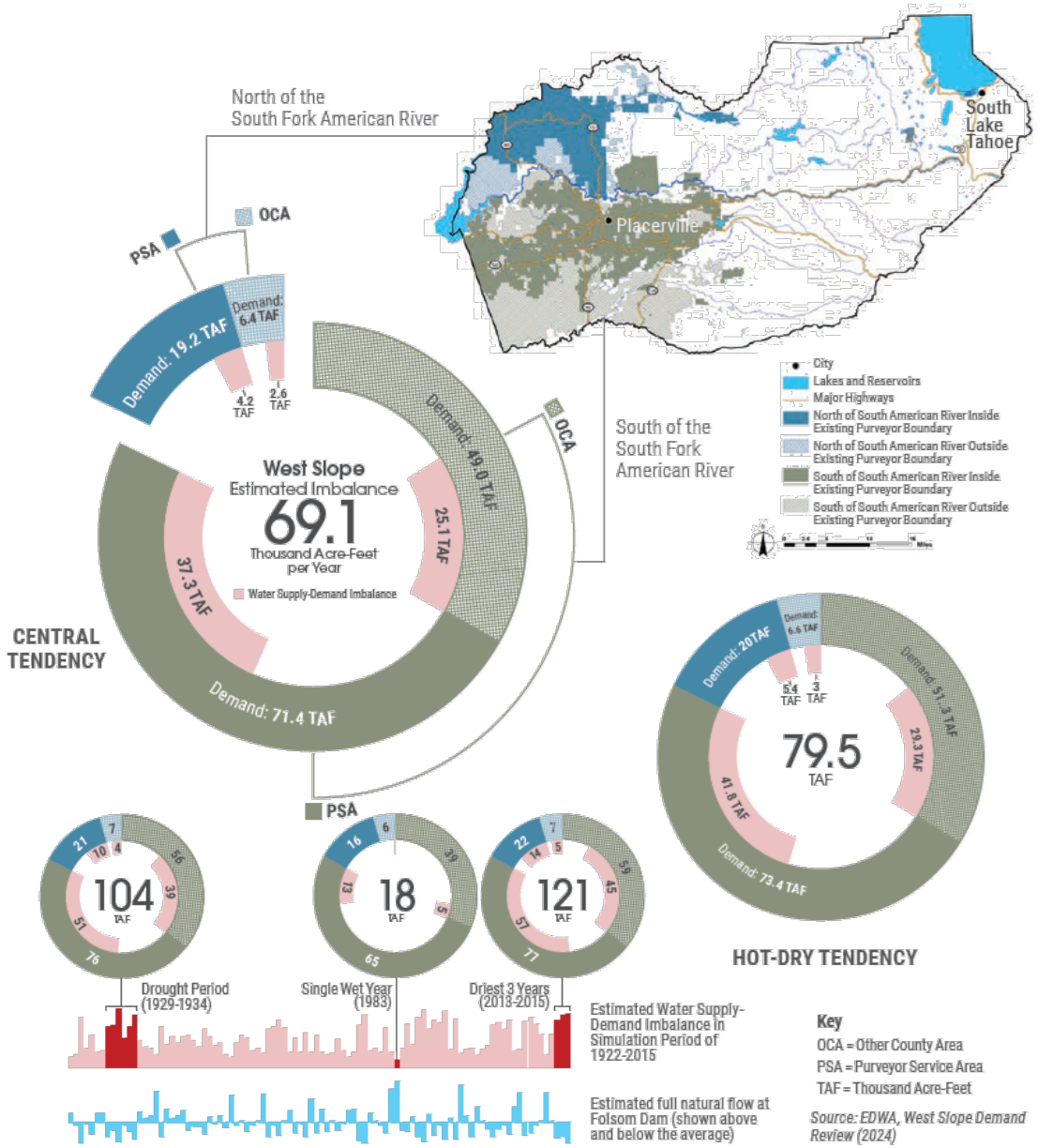


Projected 2070 Water Supply-Demand Imbalance: West Slope (cont.)



WARM-WET TENDENCY

The estimated water supply-demand imbalance for realizing the vision of the County of El Dorado General Plan is significant under the climate change conditions in 2070 and varies greatly in different hydrologic conditions. Drought resilience is limited throughout the West Slope with varying degrees of imbalance during the 1922 to 2015 simulation period based on existing facilities and regulatory framework, projected hydrology from the American River Basin Study climate scenarios and the subsequently refined upstream watershed operation model.



Addressing Ordinance No. 5096 (West Slope)

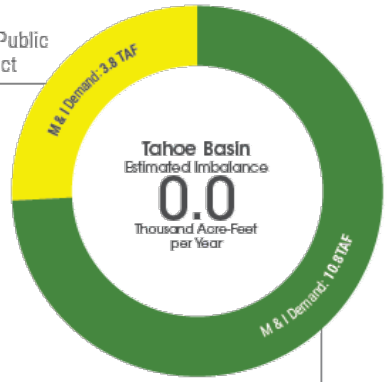
- Information provided in Section 5.3 Consistency in Water Supply and Resilience Planning; per Ordinance No. 5096, for the West Slope only.
- Neither the Agency nor public water purveyors are a land use authority. County and City of Placerville are.
- The Agency developed the WRDMP per the charge of 1959 Act, taking a proactive approach to create countywide benefits and support County in realizing the vision provided by County General Plan. Public water purveyors are subject to Urban Water Management Plan (UWMP) and Water Shortage Contingency Plan (WSCP) requirements, and generally respond to development needs on a first-come-first-serve basis.
- The WRDMP planning horizon is > 50 years. 20 years are for UWMP and WSCP.
- The WRDMP considers the economic growth potential as allowed and anticipated in County General Plan through land use policies and ordinances. These growth opportunities are mostly in OCA although some in existing service areas of public water purveyors. Most of these potential opportunities are for agricultural development. They are not considered in the UWMP or WSCP.
- Significant progress has been made to improve consistency in water supply and resilience planning
  - Consistent methodology in demand estimate
  - Use of applicable regulatory water use efficiency standards
  - Completion of the Upper American River Basin Regional Drought Contingency Plan (UARB RDCP, 2023)
  - Ongoing development of the County Drought Resilience Plan (CDRP)
- To sustain the preferred rural-agricultural way of life requires cohesive planning, investments, and implementation of other regional infrastructure and resource management to ensure a vibrant agricultural economy in El Dorado County. (e.g., PWP RMS13)

Projected Long-term Water Supply-Demand Imbalance: Tahoe Basin

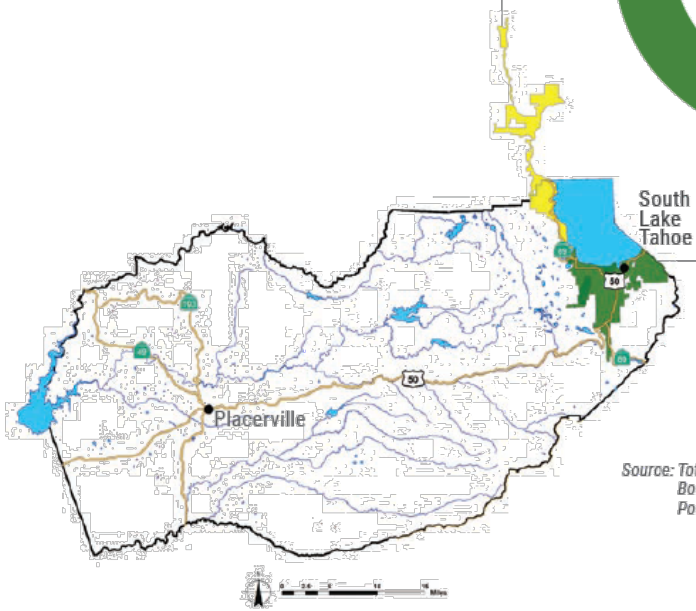
The Tahoe Basin is unlikely to have a water supply-demand imbalance because of the relatively low demands in comparison with the available snowpack and runoff, even under climate change conditions; however, seasonal populations are one of the major challenges in demand projection. Both STPUD and TCPUD are conducting continued reviews to refine their demand estimates, which are expected to be fully accommodated by California's share of 23,000 acre-feet per year along with other legal water uses.

Demand Estimate Based on Historical Trend with More Changed Conditions

Demand Estimate Based on Historical Trend with Limited Changed Conditions



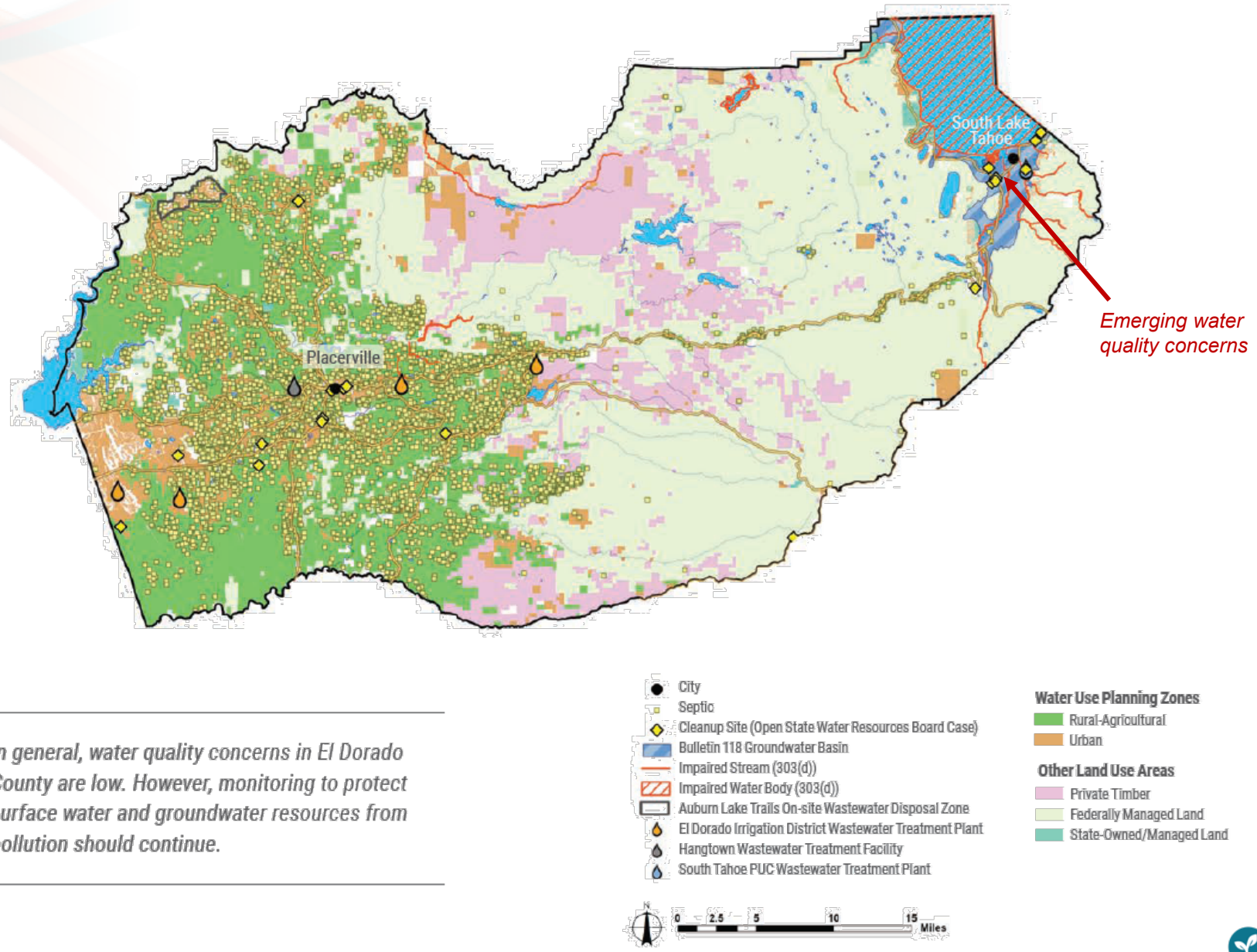
Demand Estimate Based on Historical Trend Only



Source: Total District Water Production Requirements within the Boundaries of the Public Utility Districts located in the California Portion of the Lake Tahoe Basin (Kennedy Jenks, 2020)

Groundwater Resources and Water Quality

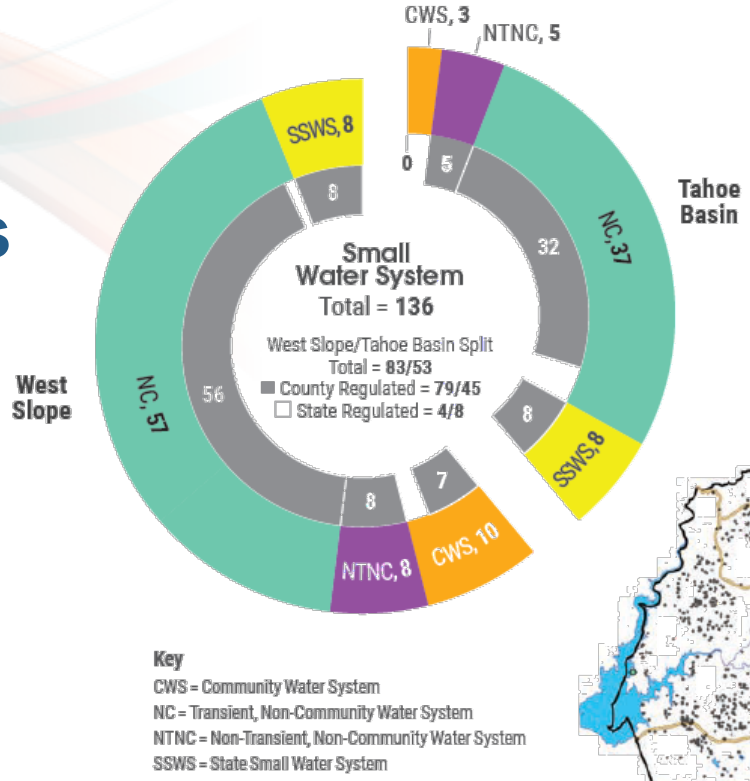
- Recognized groundwater basins are only in the Tahoe Basin.
- SGMA compliance in good standing for the Tahoe Valley South Subbasin. No specific requirements for the Tahoe Valley West Subbasin.
- West Slope fractured rock groundwater is generally unpredictable and unreliable, remaining vulnerable in drought and water shortage conditions (including Public Safety Power Shutoffs).

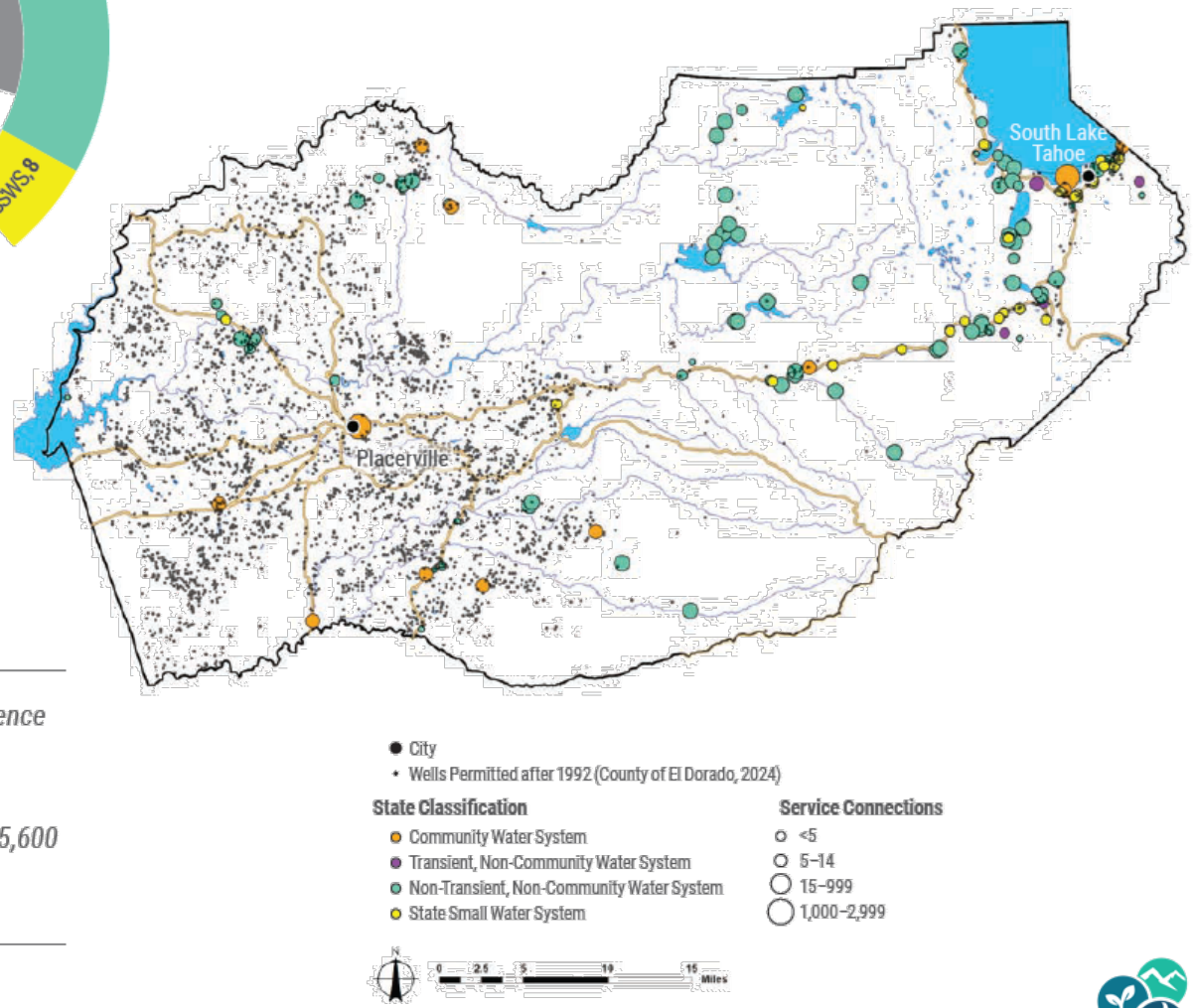


In general, water quality concerns in El Dorado County are low. However, monitoring to protect surface water and groundwater resources from pollution should continue.

Small Water Systems and Domestic Wells

- SB 552 requirements for County's Drought and Water Shortage Task Force, and County Drought Resilience Planning to alleviate impacts on small water systems and domestic wells.
- EDWA proactively includes considerations in the UARB RDCP completed in 2023.
- County requested EDWA to support the compliance and proactive planning efforts for CDRP development and implementation.



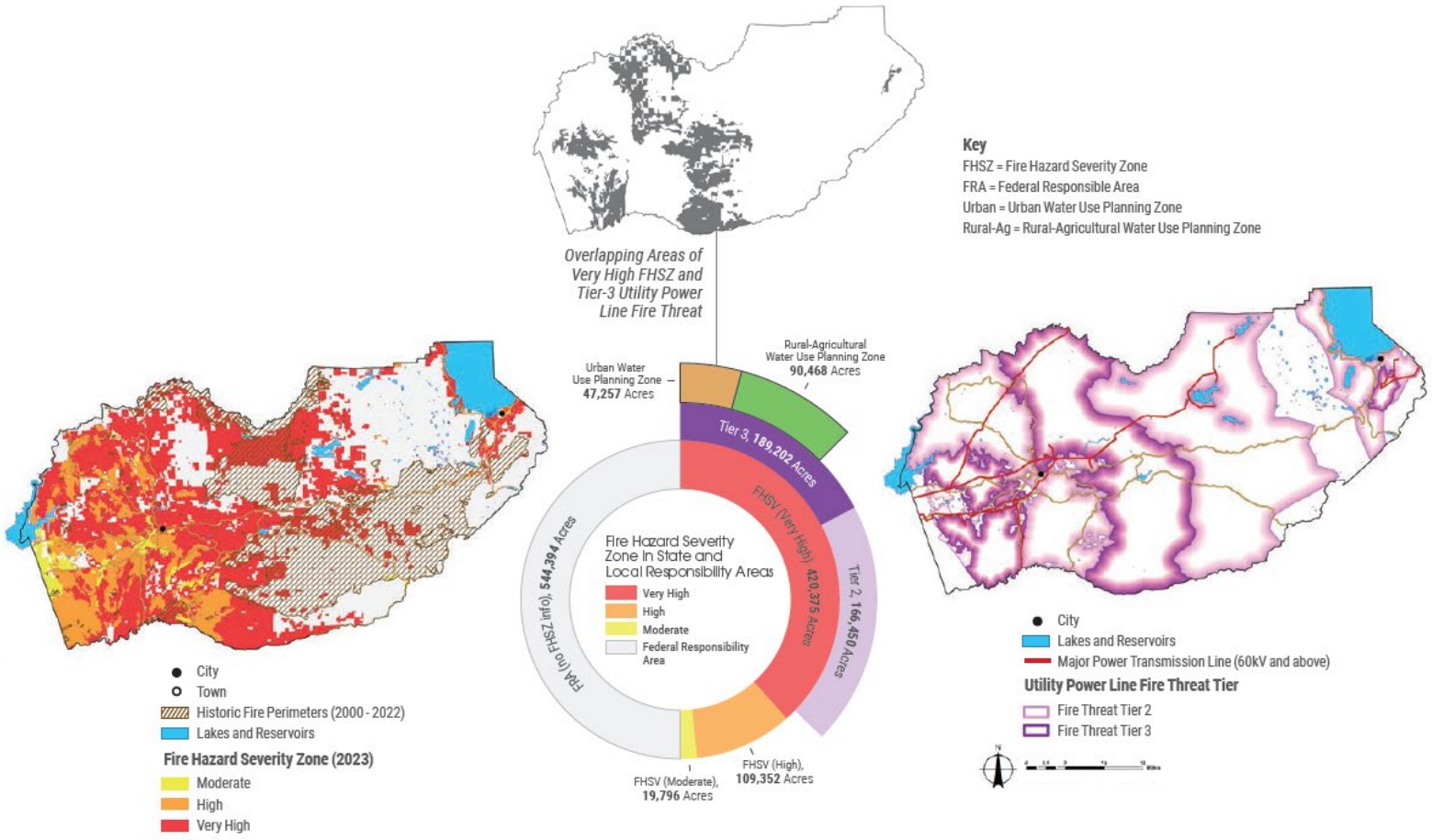


Upon completion of the County Drought Resilience Plan per SB 552, El Dorado County will have complete drought planning coverage for all residents. Based on County's records, around 5,600 domestic wells are active in El Dorado County.

Wildfires – a Symptom of Many Wrongs

Underlying issues of forest managements and other related issues were addressed in the Programmatic Watershed Plan.

Water availability, regulation, and storage are among impacted by mismanagement of forests in headwaters.

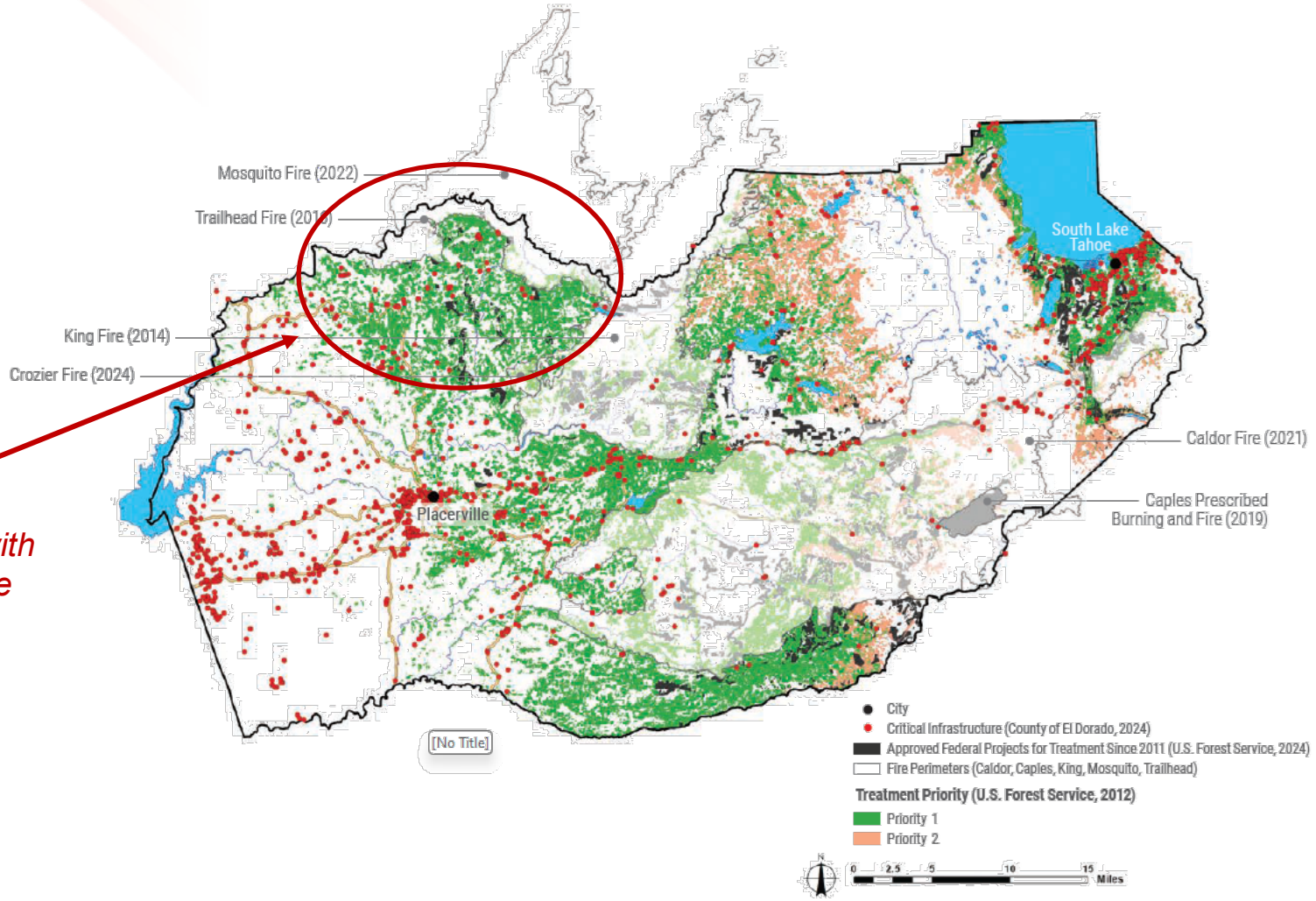


The overlapped areas of the Very High Fire Hazard Severity Zone and Tier 3 Utility Power Line Fire Threat area are of the most concern in the West Slope with planned development shown by water use planning zone designations. There is also a small overlapping area in the Tahoe Basin.

Wildfires – a Symptom of Many Wrongs (cont.)

Despite progress, significant risks remain. At the same time, the devastating impacts on communities have been realized repeatedly.

Overly dense forests reduce water yield and increase wildfire risks to the communities and critical infrastructure. Approved forest treatments need to be at an increased pace to prevent additional catastrophic wildfire events, especially in the Georgetown-Quintette area.



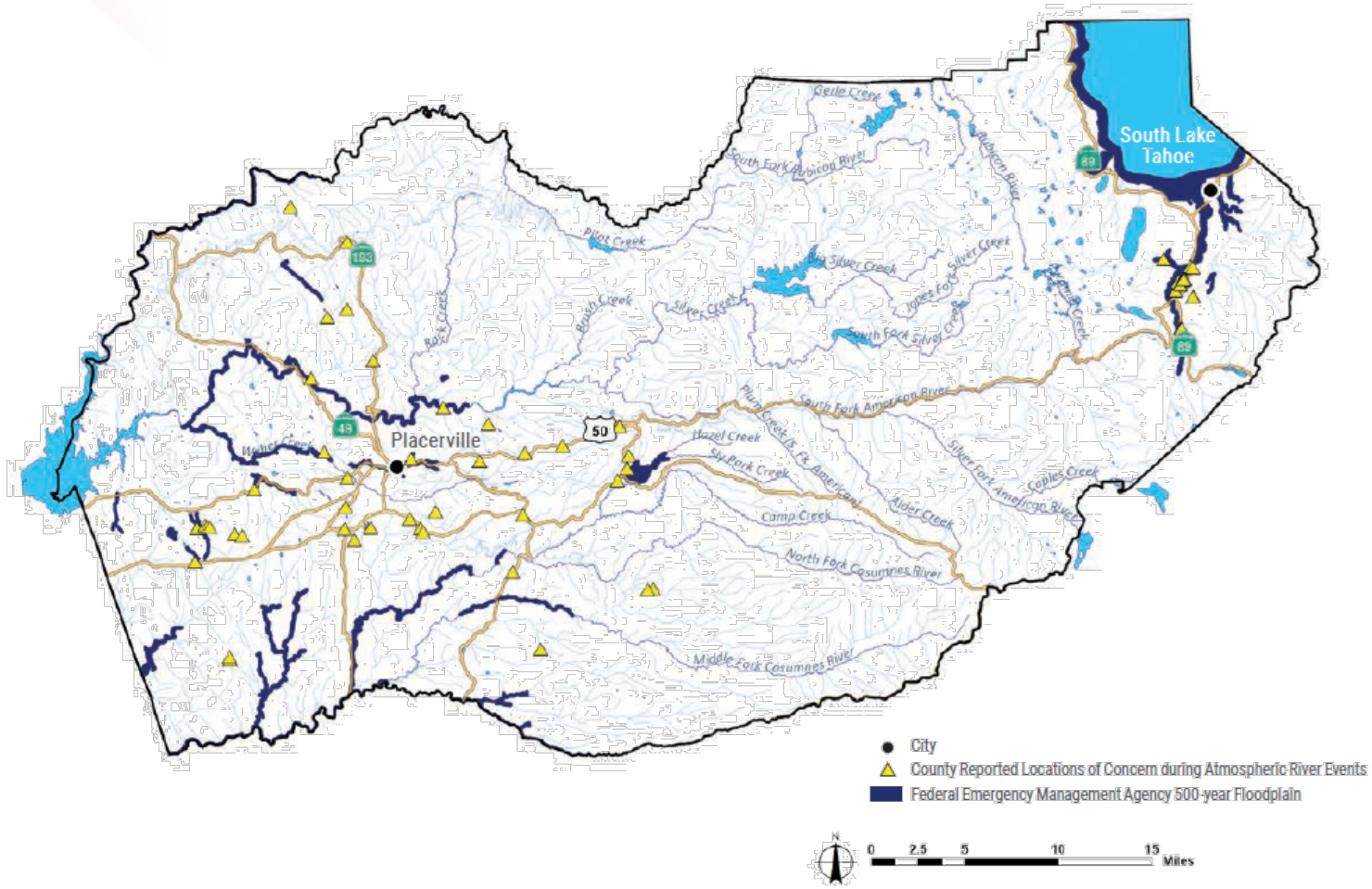
The Agency is exploring collaboration opportunities with USFS in this area to combine resources for multi-benefit outcome.

Flooding

A redefined challenge for foothill communities and evolving understanding about the major driving force for events with increasing intensity and volume.

Additional collaboration in improving data acquisition and forecasting skills is also under development.

Most flooding in the West Slope is localized and often constrained by drainage conveyance capacity. In the Tahoe Basin any flooding generally results from rain-on-snow events. In addition to the floodplain information used for Federal Emergency Management Agency's National Flood Insurance Program, County's Department of Transportation also identified locations of concern that the local drainage systems could be overwhelmed during intense atmospheric river events. Atmospheric rivers are narrow bands of concentrated water vapor in the atmosphere, typically extending from the tropics to mid- and high latitudes. In California, up to 50 percent of total annual precipitation and streamflow can come from a few intense atmospheric rivers during fall and winter.



Water-Resource Related Challenges in the West Slope

Water Supply			Water Quality			Public Safety
Long-Term Water Supply-Demand Imbalance	**Vulnerability During Droughts**	**Loss of Water Supply Due to Other Resource Management Practices**	**Long-Term Water Quality Impacts Due to Wildfires**	**Water Quality Impacts Due to Stormwater Runoff**	**Concerns Over Groundwater Contamination**	**Vulnerability to Flooding**
▪ Expected increase in demands and less reliable supplies due to limited availability of groundwater from local fractured rock aquifers and changes in surface water availability. ▪ Climate change-impacted hydrology and loss of snowpack result in long-term reduction in reliable water supply. ▪ The Other County Area is not serviced by a water purveyor and therefore may lack reliable water supply for planned economic growth	▪ There is no meaningful groundwater supply in the region and water supply can be vulnerable due to reliance on a single source of water (surface water). ▪ Small water systems and domestic wells are vulnerable to water shortage due to drought or other contributing factors including power shutoff during extreme weather conditions. ▪ Increasing agricultural well permitting requests in small residential parcels served by public water purveyors create administrative challenges and increase drought vulnerability	▪ Dense forests prevent snow from reaching the ground, resulting in a reduction in water supply availability. ▪ Stormwater is managed as a hazard and for water quality compliance purposes but not as a potential resource for broader benefits. ▪ Water infrastructure includes historic dams, canals, and wooden flumes that are susceptible to destruction by fires or landslides. Loss of these major conveyance structures would hinder water deliveries.	▪ Increasing frequency and intensity of wildfires result in both temporary and long-term water quality degradation on a landscape scale. ▪ Increase in sediment, turbidity and algae growth in source water due to lack of trees after wildfires.	▪ Stormwater runoff may impact water quality, especially along the highway corridor and recreation and other use areas. ▪ Wastewater discharges or spills from damaged facilities located near surface water could create water quality concerns.	▪ Septic tank systems and pollution from runoff pose potential threats to local groundwater quality, although no significant issues have been identified to-date. ▪ Natural occurrence of arsenic in the West Slope could affect water quality in certain areas.	▪ Riverine flooding is not a substantial threat in the West Slope; however, localized flooding is common in some communities with chronic drainage problems and increase in storm intensity. ▪ Runoff patterns due to long-term climate change and short-term wildfire impacts can overwhelm local drainage systems.

Level of Concern

High | Moderate High | Moderate Low | Low

Rating change

Water-Resource Related Challenges in the Tahoe Basin

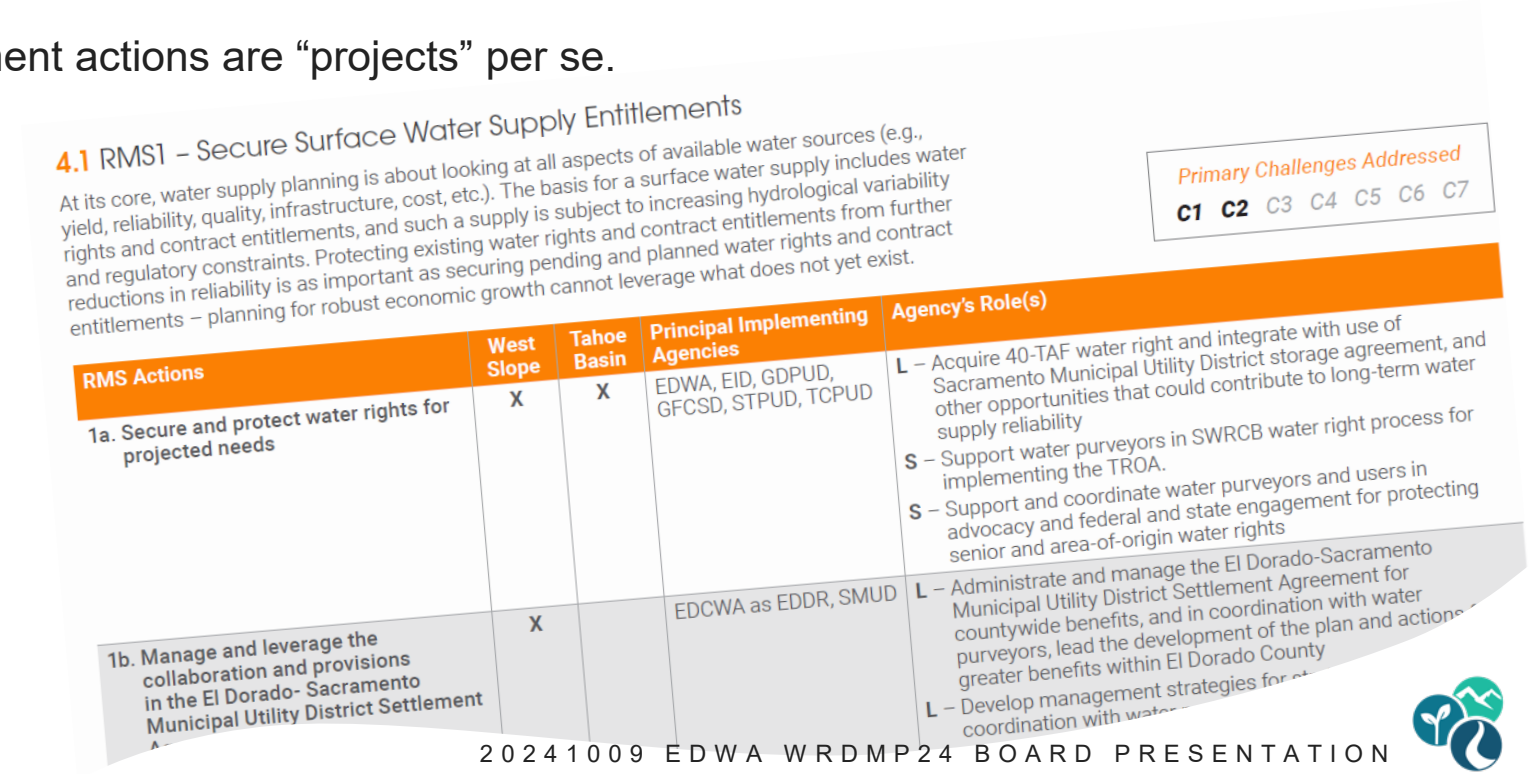
Water Supply			Water Quality			Public Safety
Long-Term Water Supply-Demand Imbalance	**Vulnerability During Droughts**	**Loss of Water Supply Due to Other Resource Management Practices**	**Long-Term Water Quality Impacts Due to Wildfires**	**Water Quality Impacts Due to Stormwater Runoff**	**Concerns Over Groundwater Contamination**	**Vulnerability to Flooding**
• The planned economic growth areas are covered by the existing service areas of major water purveyors, although many small water systems exist. • The growth restrictions and land use in the Tahoe Regional Plan significantly reduce the risk of water supply-demand imbalance • Emerging needs of using surface water due to groundwater contamination threat • Uncertain outcomes of ongoing water right proceeding for the California's share of Truckee River	• The Tahoe Basin is less susceptible to extended droughts, relying on both surface water and groundwater. • Existing drought ordinances do not provide coverage to the entire Tahoe Basin, although most areas have human consumption. • Small water systems and domestic wells are susceptible to water shortage due to drought or other contributing factors including power shutoff during extreme weather conditions.	• Dense forests prevent snow from reaching the ground, resulting in reduced water supply available to the Tahoe Basin as groundwater via recharge. • Stormwater is presently being managed as a hazard and for water quality compliance purposes but not as a potential resource for broader benefits. • Water quality impacts form historical and emerging contamination in groundwater basin restricts existing water supply.	• Increasing frequency and intensity of wildfires result in both temporary and long-term water quality degradation.	• Stormwater runoff may impact water quality in Lake Tahoe, groundwater resource, and water bodies along highway corridors.	• Septic tanks are not prevalent in the Tahoe Basin, but leakage could affect groundwater quality. • Long-term groundwater availability is less of a concern because runoff and snowmelt, even under climate change, are adequate for recharge. • Historical contamination of Perchloroethylene, Methyl tert-butyl ether, uranium, and natural occurring arsenic, and emerging PFAS/PFOA contamination.	• Riverine flooding is not a substantial threat in the Tahoe Basin; however, rain on snow often causes extensive street flooding in certain areas. • Inflow and infiltration during flooding may overload the sewer system and prevent access sewer lines running through low-lying meadows.

Level of Concern

High | Moderate High | Moderate Low | Low

Resource Management Strategies and Actions

- Each RMS represents what needs to be done on a broad, strategic level and contain:
  - Management actions with focus and purposes in the West Slop and Tahoe Basin
  - Primary implementing agencies on the local level, who are responsible in El Dorado County, and will coordinate with regional, state, and federal agencies and other interested parties as needed
  - The Agency's role (lead, facilitate or support)
- No one RMS can address all identified challenges. They are mutually supportive for coverage, efficiency, and effectiveness.
- Neither RMS nor the various management actions are "projects" per se.
- Some highlighted actions are included in the following RMS discussion.



4.1 RMS1 – Secure Surface Water Supply Entitlements

At its core, water supply planning is about looking at all aspects of available water sources (e.g., yield, reliability, quality, infrastructure, cost, etc.). The basis for a surface water supply includes water rights and contract entitlements, and such a supply is subject to increasing hydrological variability and regulatory constraints. Protecting existing water rights and contract entitlements from further reductions in reliability is as important as securing pending and planned water rights and contract entitlements – planning for robust economic growth cannot leverage what does not yet exist.

Primary Challenges Addressed
C1 **C2** C3 C4 C5 C6 C7

RMS Actions	West Slope	Tahoe Basin	Principal Implementing Agencies	Agency's Role(s)
1a. Secure and protect water rights for projected needs	X	X	EDWA, EID, GDPUD, GFCSD, STPUD, TCPUD	**L** – Acquire 40-TAF water right and integrate with use of Sacramento Municipal Utility District storage agreement, and other opportunities that could contribute to long-term water supply reliability **S** – Support water purveyors in SWRCB water right process for implementing the TROA. **S** – Support and coordinate water purveyors and users in advocacy and federal and state engagement for protecting senior and area-of-origin water rights
1b. Manage and leverage the collaboration and provisions in the El Dorado- Sacramento Municipal Utility District Settlement	X		EDCWA as EDDR, SMUD	**L** – Administrate and manage the El Dorado-Sacramento Municipal Utility District Settlement Agreement for countywide benefits, and in coordination with water purveyors, lead the development of the plan and actions greater benefits within El Dorado County **L** – Develop management strategies for [illegible] coordination with [illegible]

Water Resources Management Challenges in El Dorado County

C1	Long-Term Water Supply Demand Imbalance
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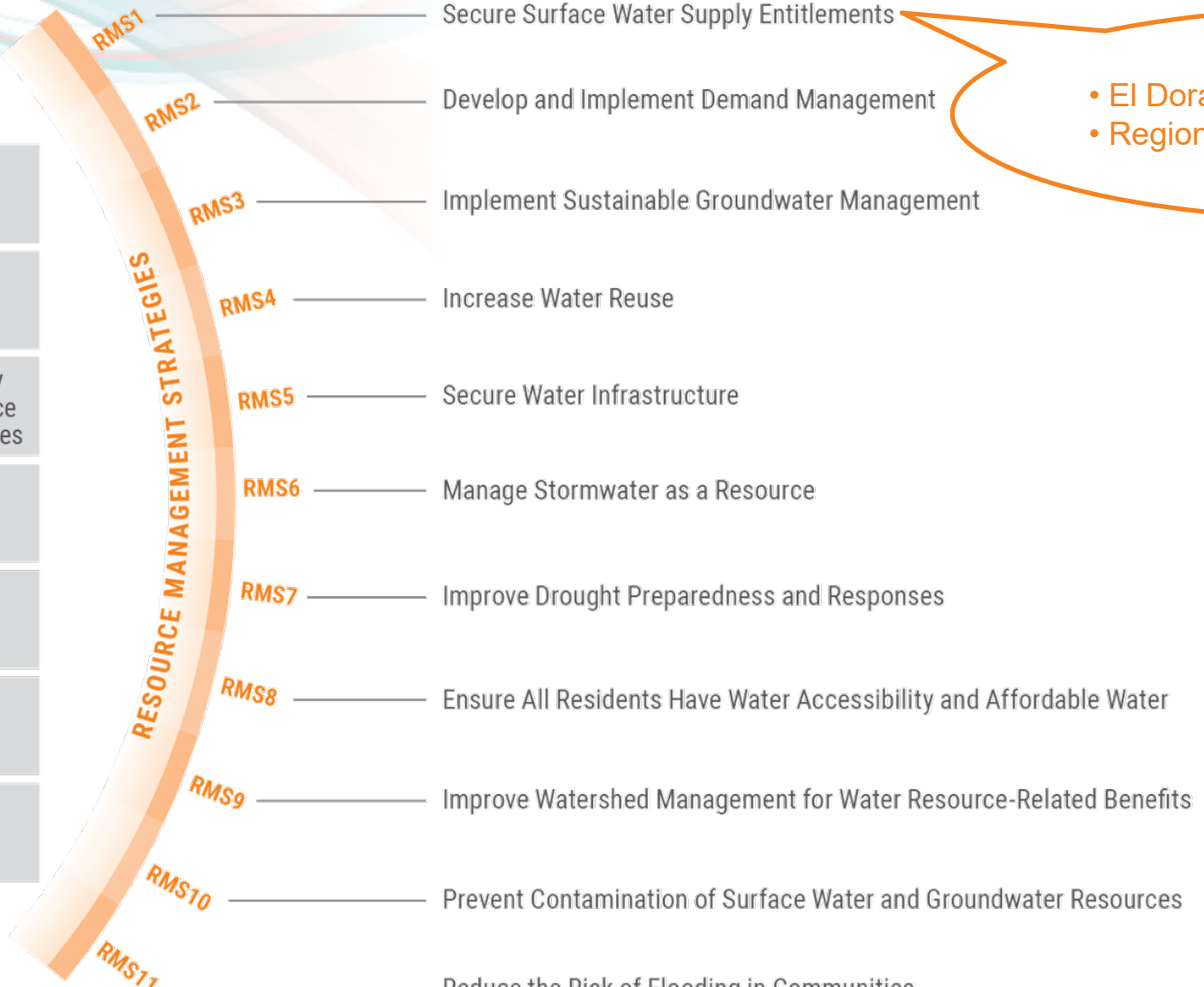

- El Dorado Water Reliability Project
- Regional water master plan

Water Resources Management Challenges in El Dorado County

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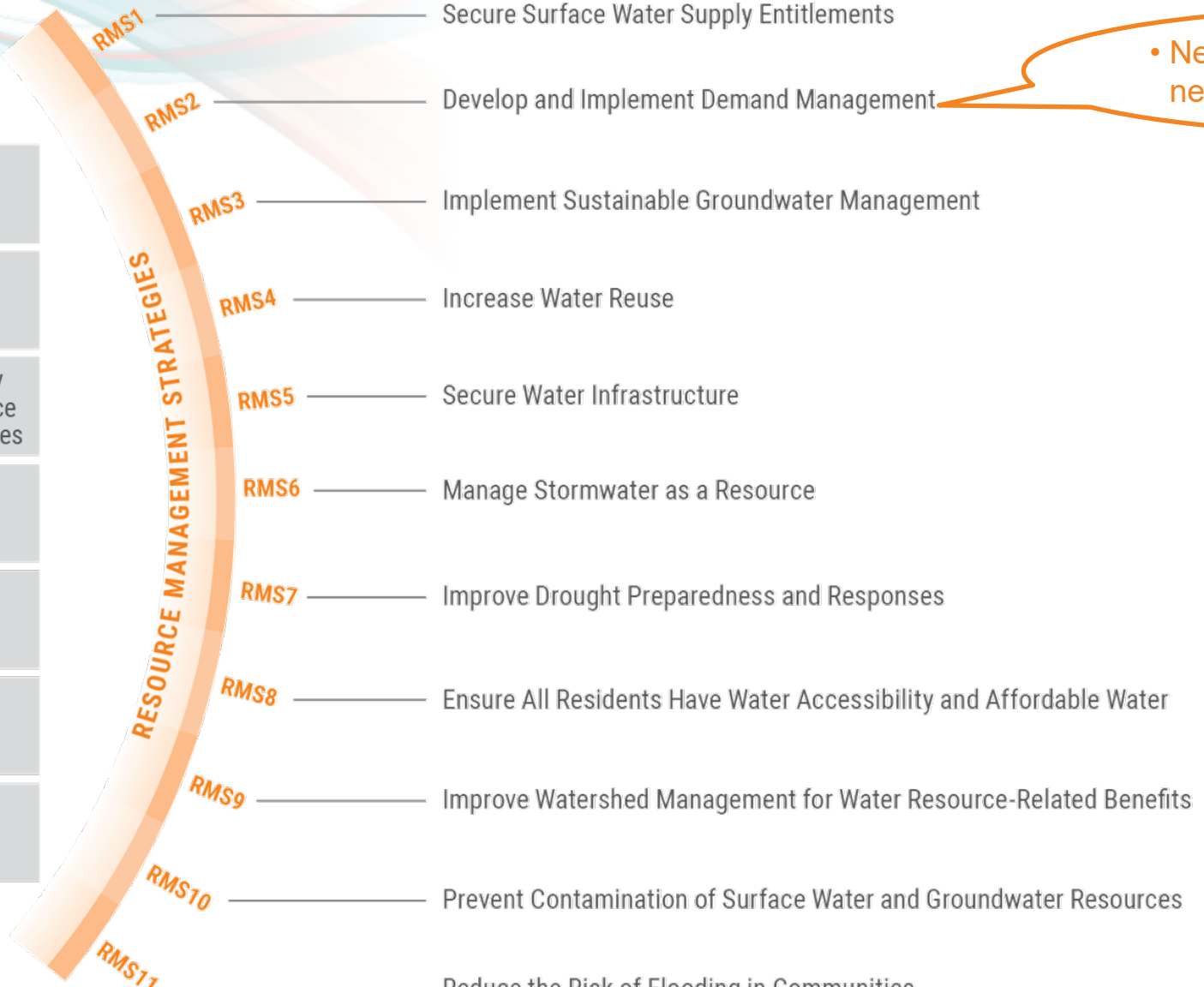

- New regulation compliance needs

Water Resources Management Challenges in El Dorado County

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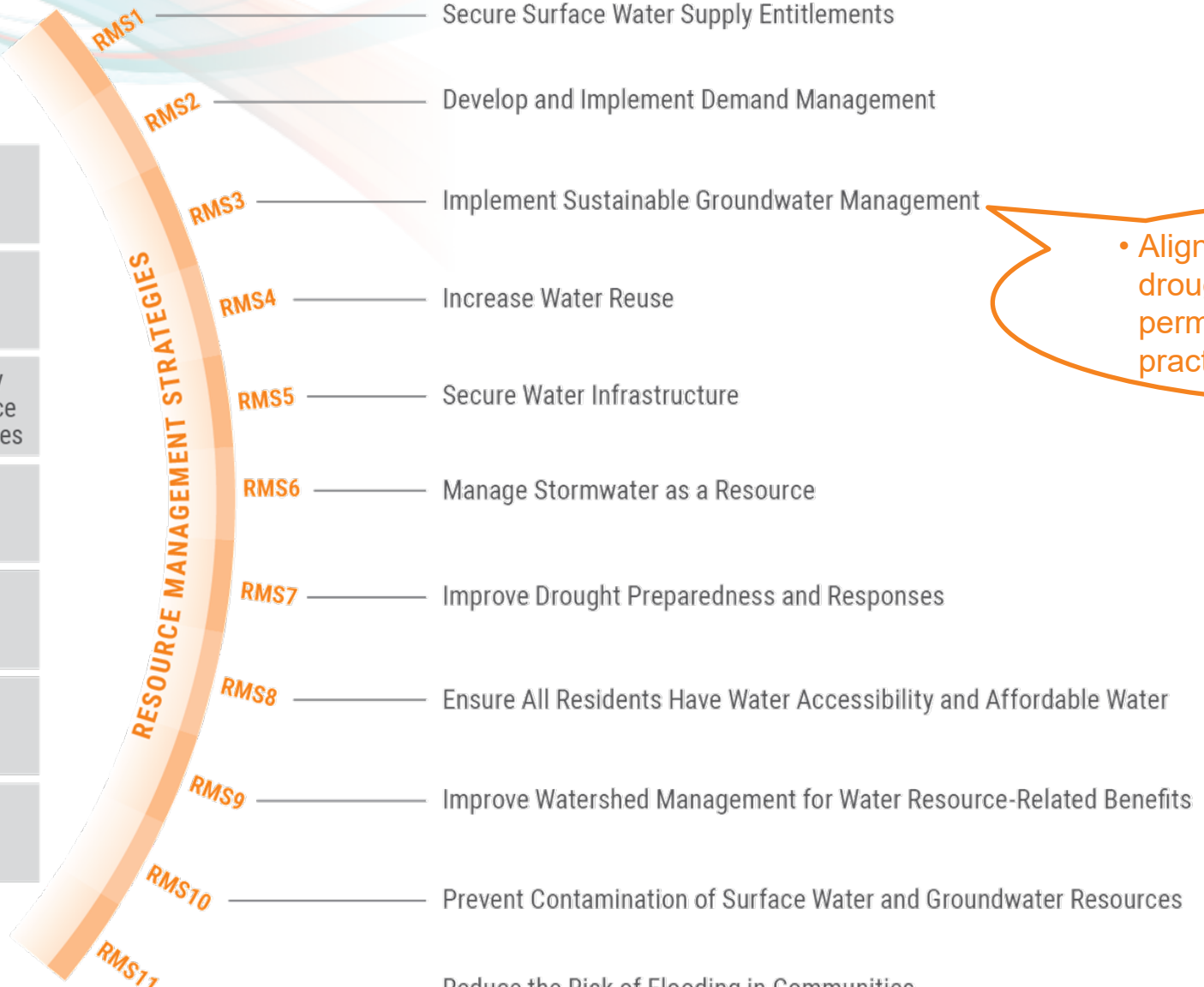

- Align groundwater management, drought resilience, and well permitting and management practice

Water Resources Management Challenges in El Dorado County

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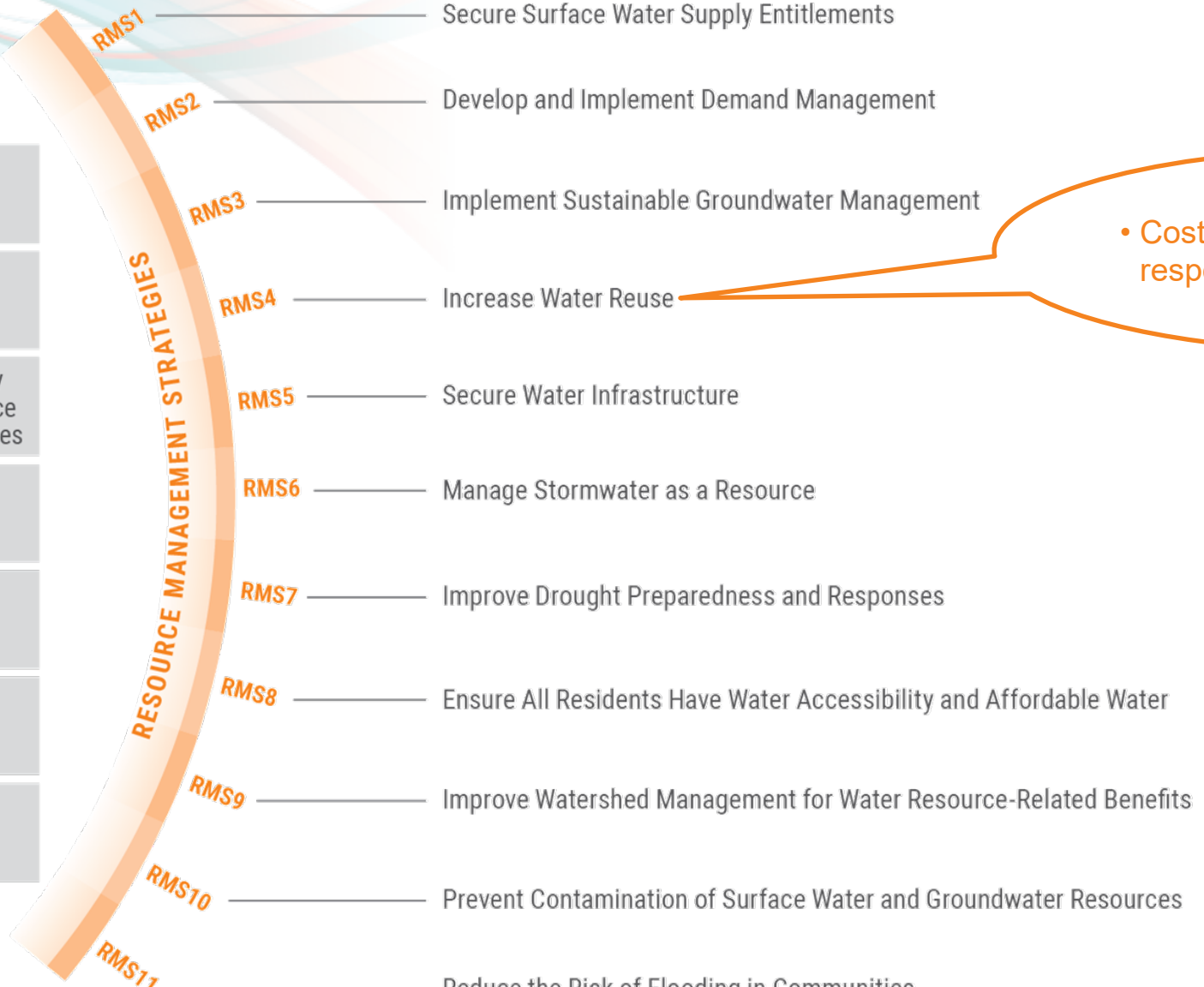

- Cost effective and financial responsible water reuse

Water Resources Management Challenges in El Dorado County

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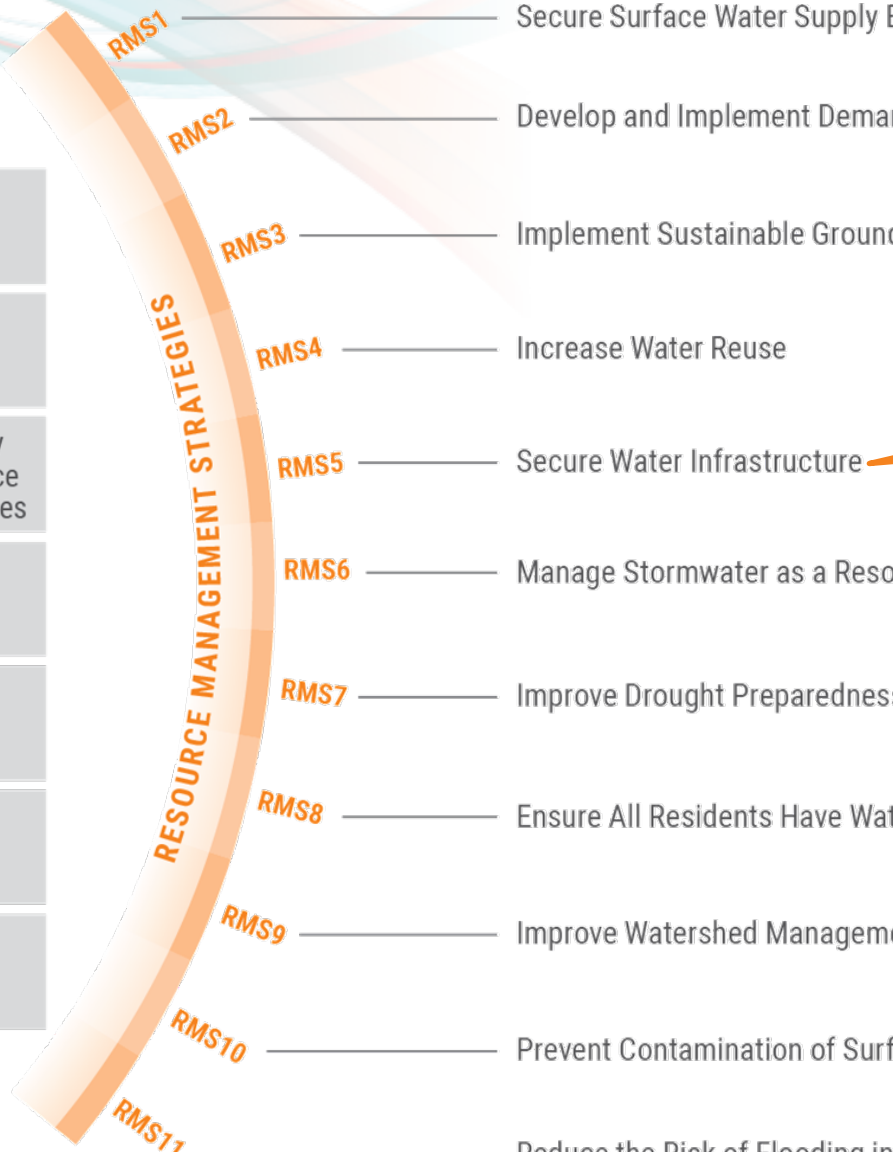
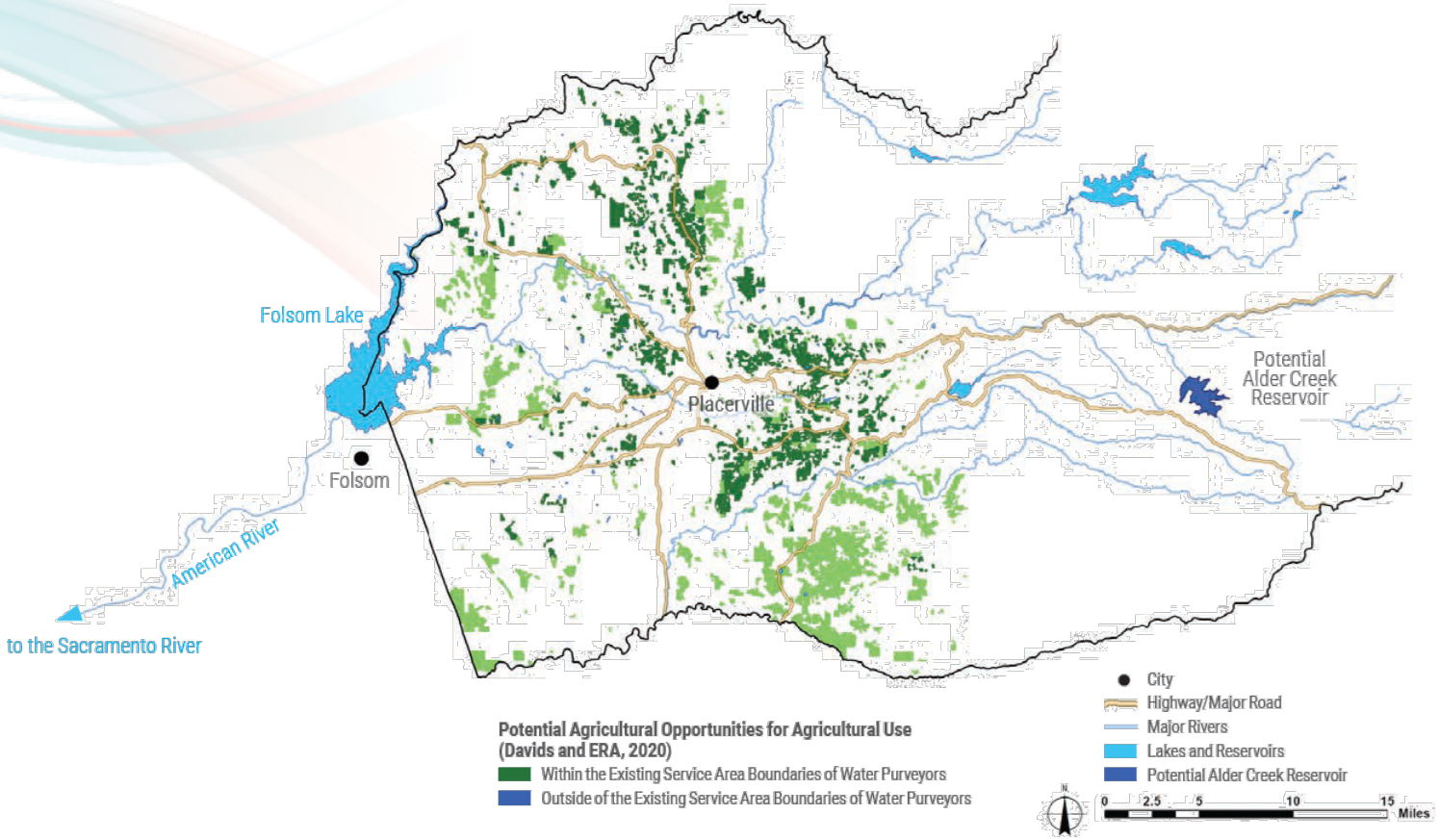


- High elevation, off-stream storage for climate adaptation (Alder Creek Storage and Conservation Project)



The high-elevation, off-stream Alder Creek Storage and Conservation project can help our vulnerable headwater communities, which rely on the snowpack for water supply to adapt to a changing climate. Conceptually described in the American River Basin Study with a storage of up-to 168,000 acre-feet (18 percent of Folsom Lake), the potential Alder Creek Reservoir of could provide needed water supply under a changing hydrology to accommodate agricultural development opportunities, generate affordable hydropower to reduce the energy cost burden in foothill communities, and contribute to flood risk reduction for local communities and downstream metropolitan areas. It offers additional opportunities for Reclamation to enhance its operational flexibility of Folsom Reservoir by satisfying CVP water contract delivery to El Dorado contractors and potentially the City of Folsom in most years. The Agency is collaborating with Reclamation to initiate a feasibility study that was previously authorized by Congress in 2005.

Water Resources Management Challenges in El Dorado County

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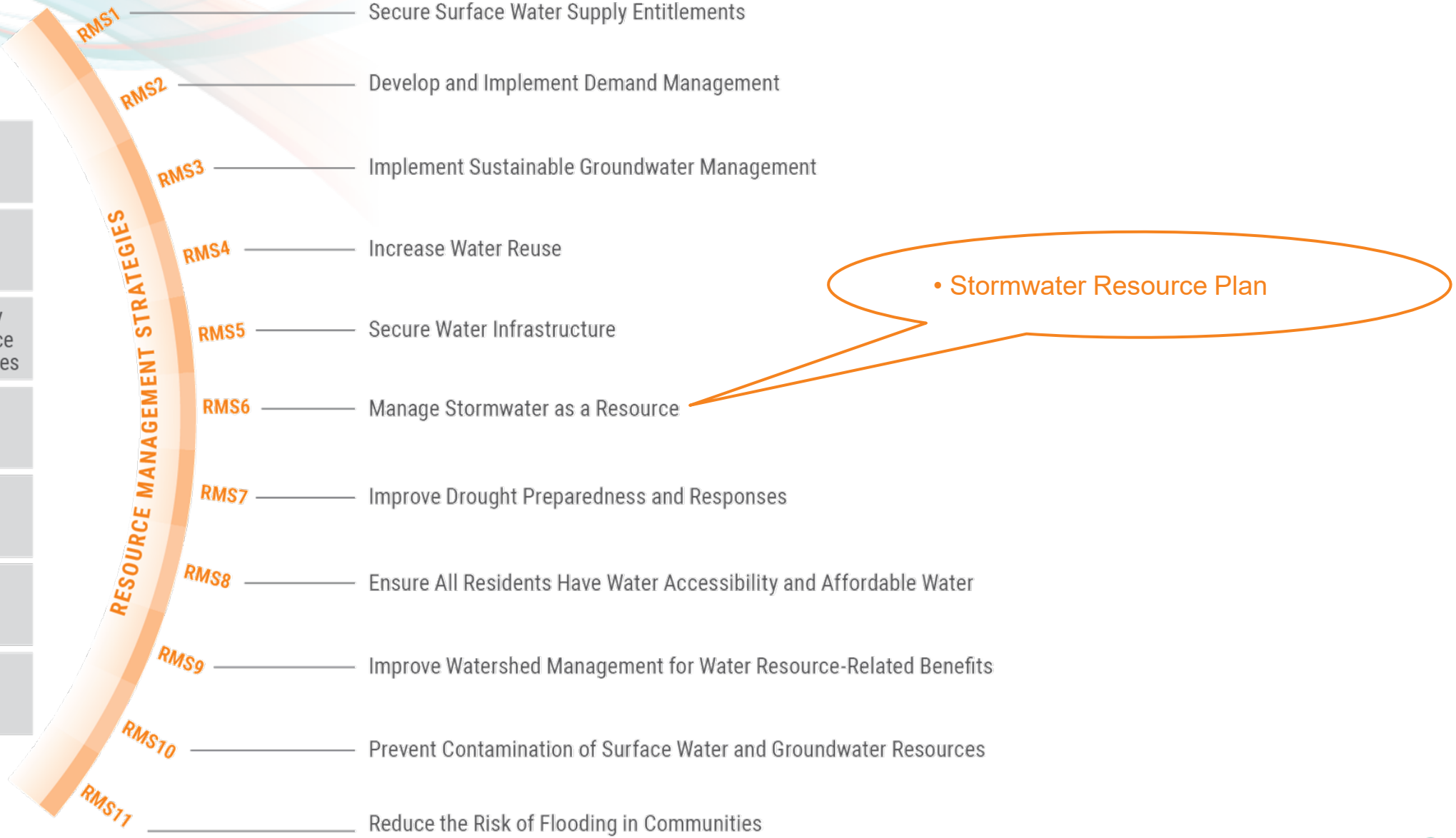

Water Resources Management Challenges in El Dorado County

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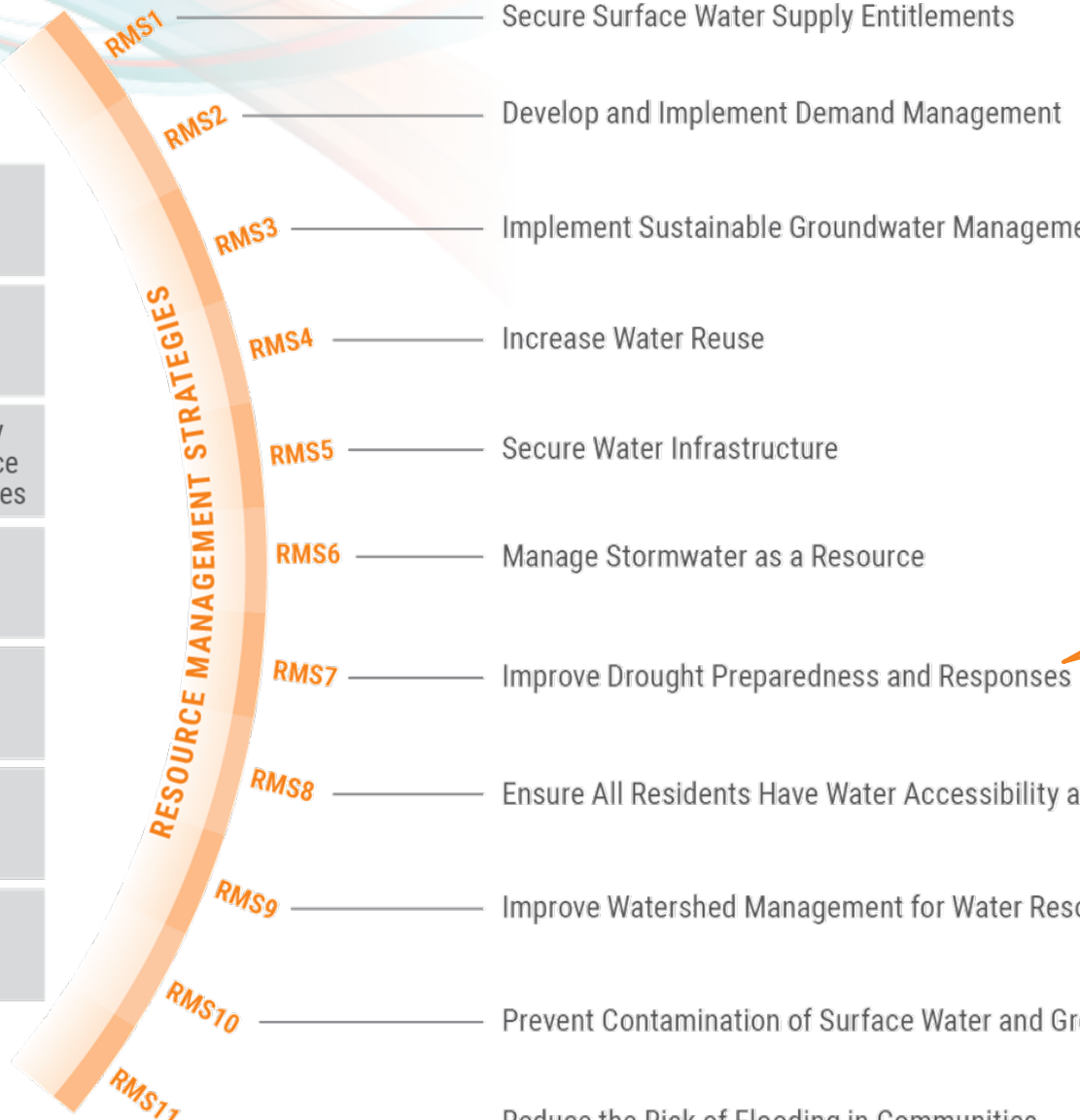

- County Drought and Water Shortage Task Force
- County Drought Resilience Plan

Water Resources Management Challenges in El Dorado County

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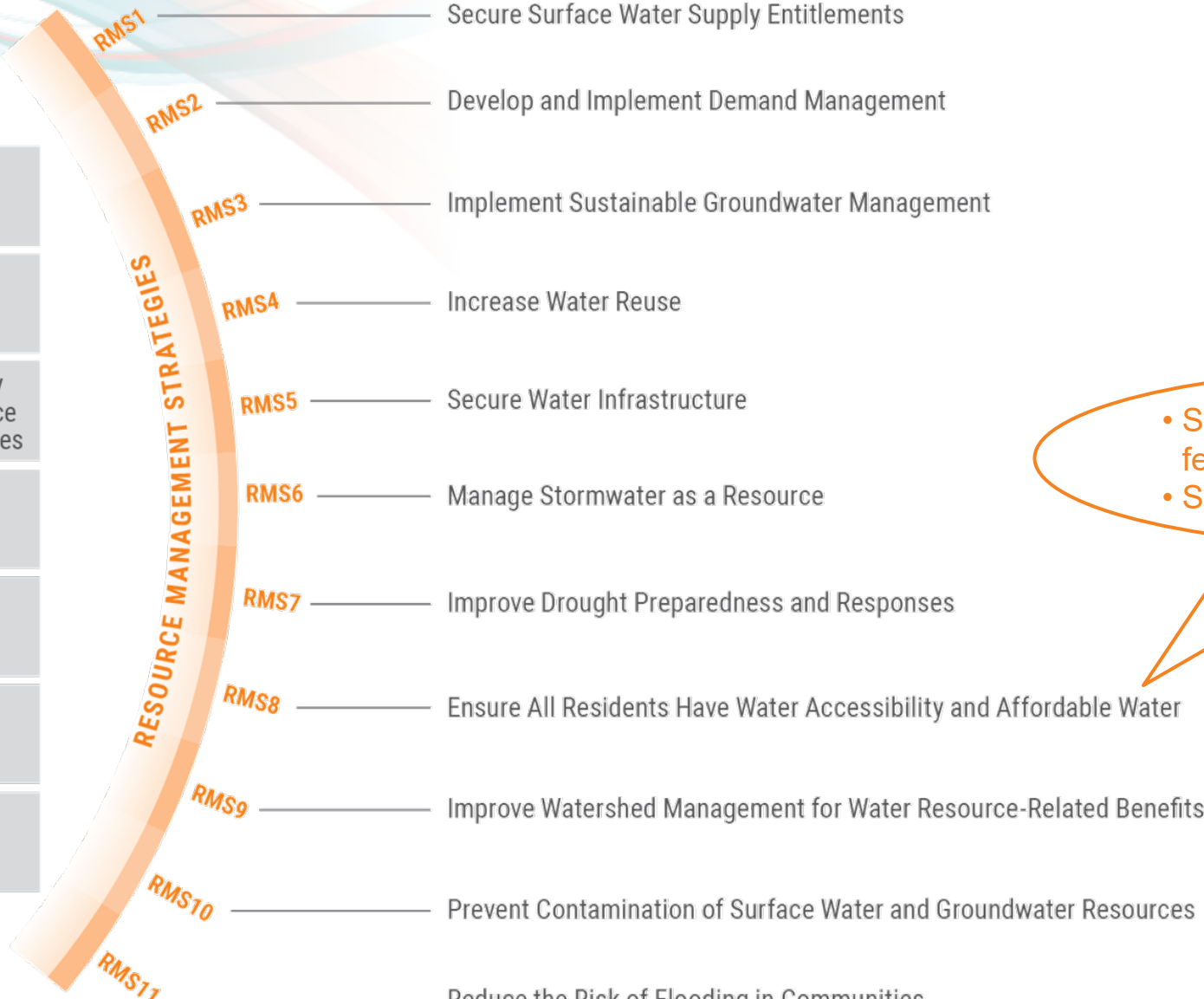

- Support consolidation where feasible and with willing parties
- State policy coordination

Water Resources Management Challenges in El Dorado County

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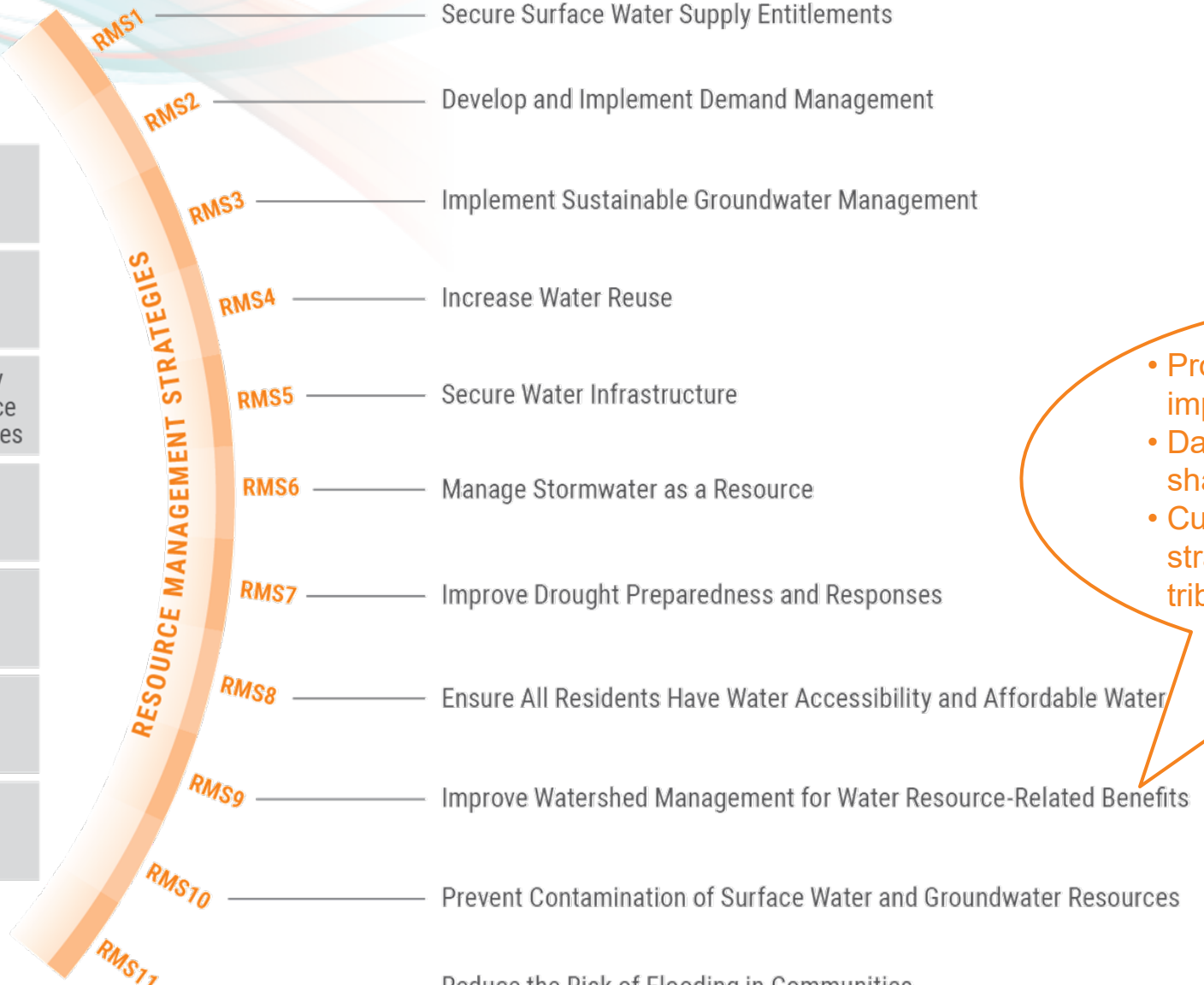

- Programmatic Watershed Plan implementation
- Data portal and information sharing
- Cultural heritage management strategy in collaboration with tribes

Water Resources Management Challenges in El Dorado County

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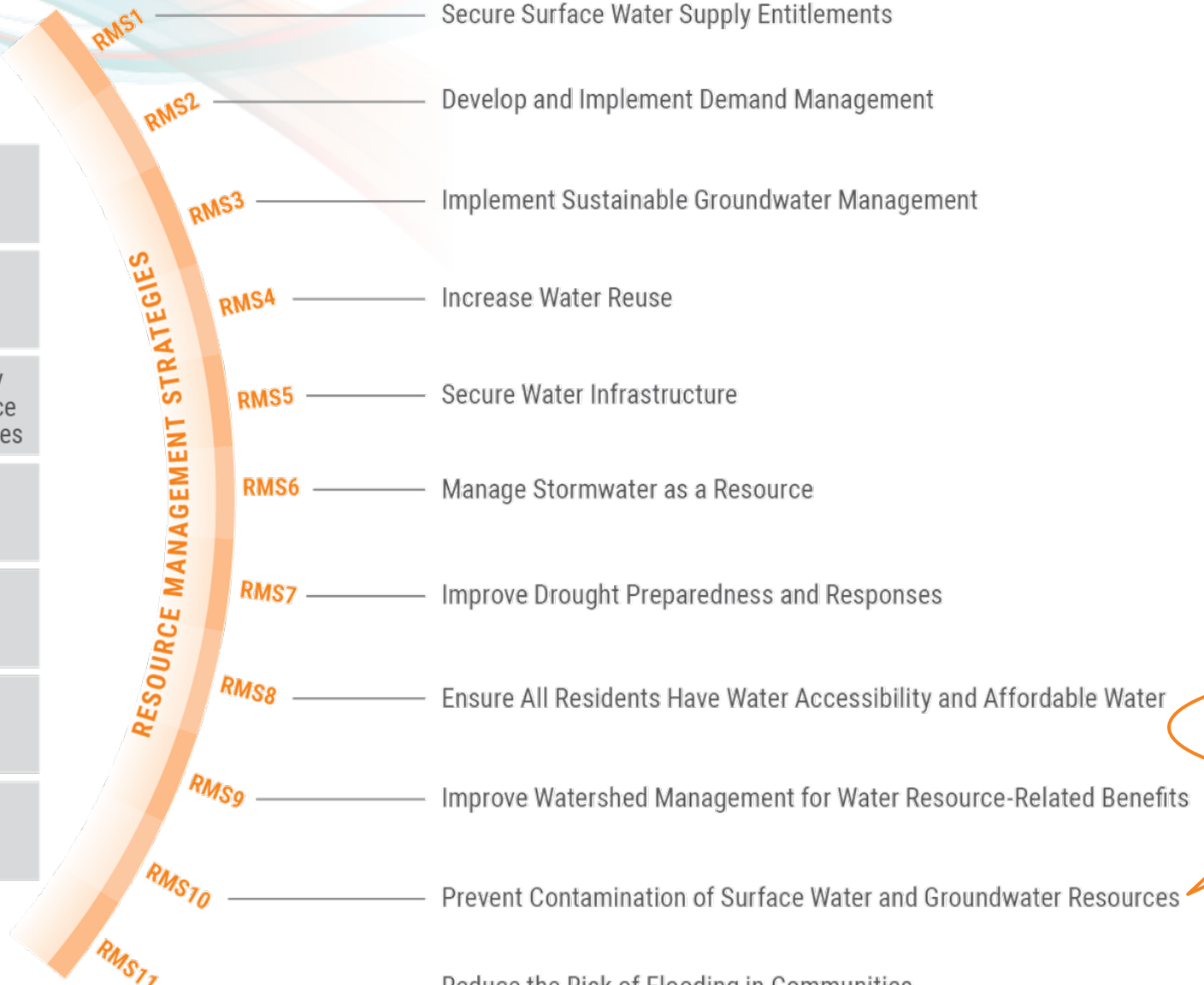

- Existing plans and implementation

Water Resources Management Challenges in El Dorado County

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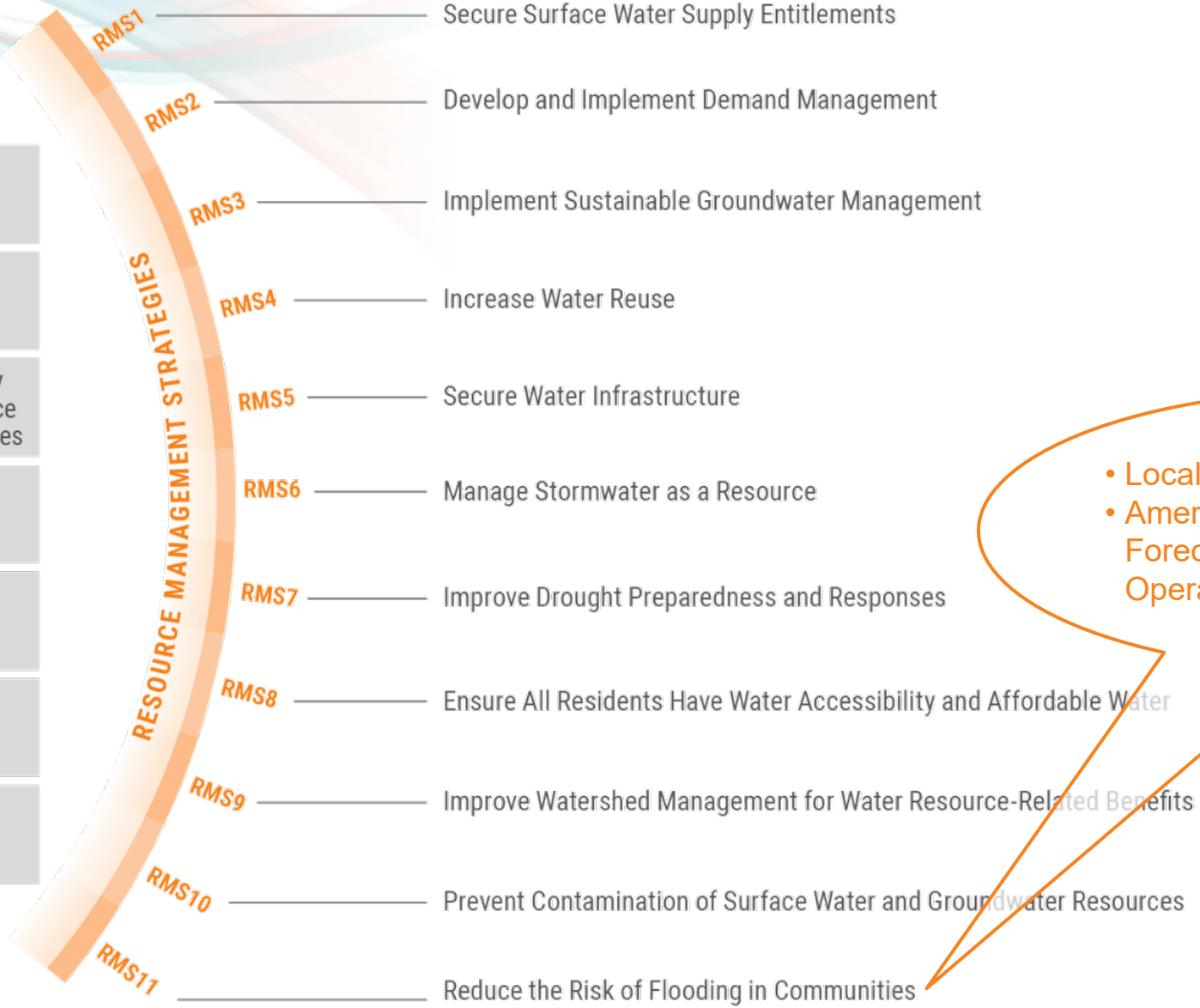
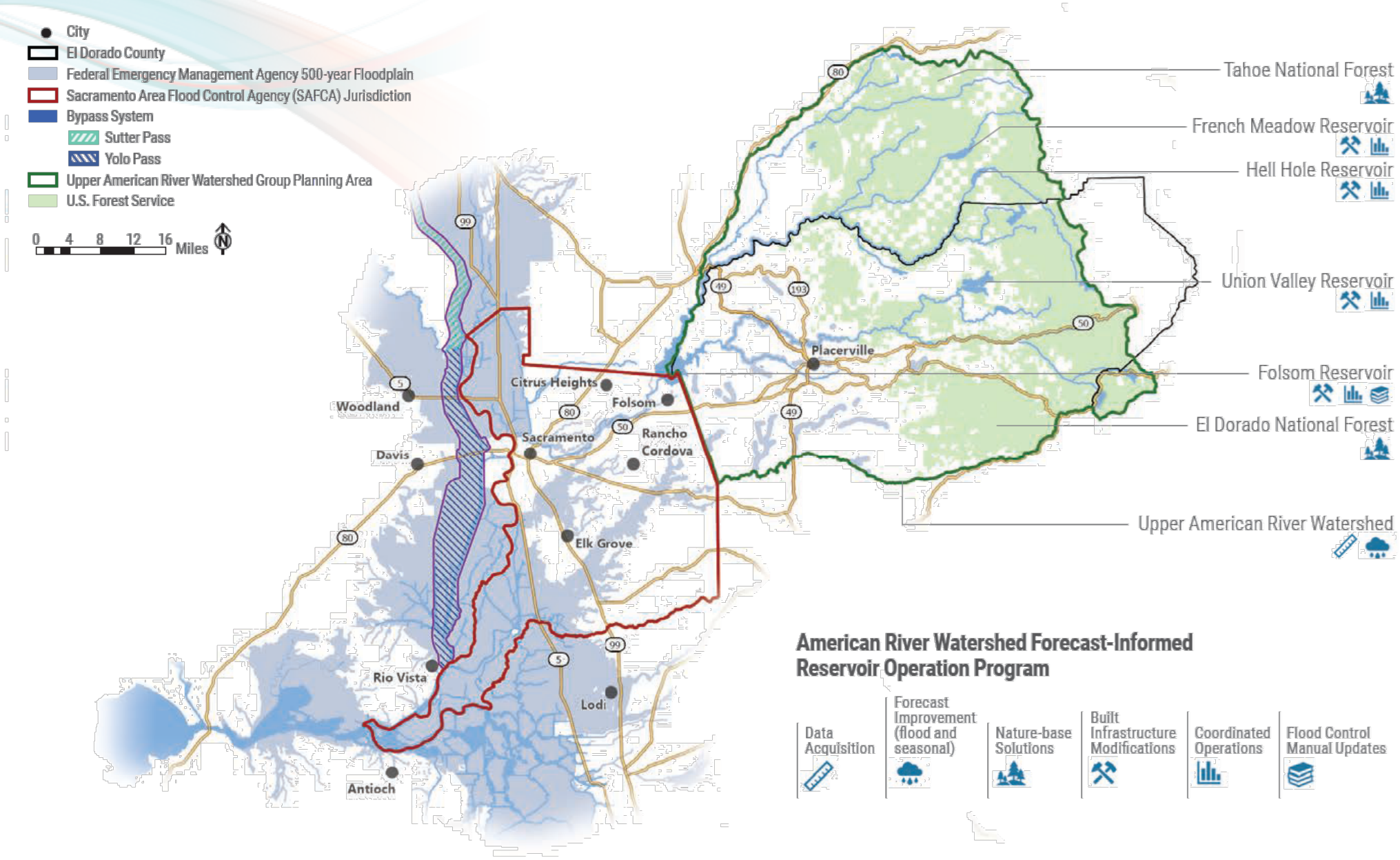
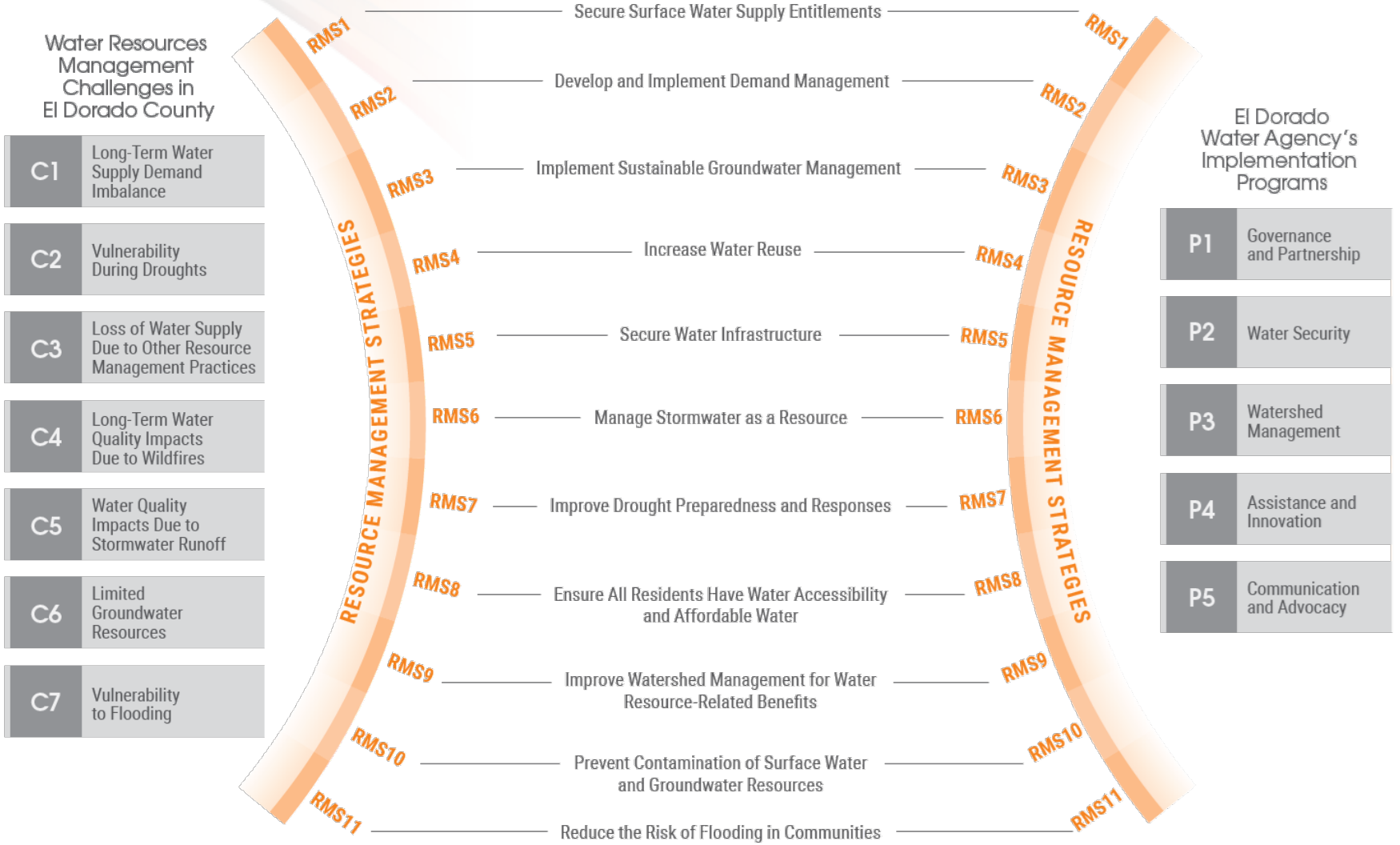


- Localized flood risk mitigation
- American River Watershed Forecast-Informed Reservoir Operation Program


City
El Dorado County
Federal Emergency Management Agency 500-year Floodplain
Sacramento Area Flood Control Agency (SAFCA) Jurisdiction
Bypass System
Sutter Pass
Yolo Pass
Upper American River Watershed Group Planning Area
U.S. Forest Service
0 4 8 12 16 Miles
N
Tahoe National Forest
French Meadow Reservoir
Hell Hole Reservoir
Union Valley Reservoir
Folsom Reservoir
El Dorado National Forest
Upper American River Watershed
Placerville
Citrus Heights
Folsom
Woodland
Sacramento
Rancho Cordova
Davis
Elk Grove
Rio Vista
Lodi
Antioch
American River Watershed Forecast-Informed Reservoir Operation Program
Data Acquisition
Forecast Improvement (flood and seasonal)
Nature-base Solutions
Built Infrastructure Modifications
Coordinated Operations
Flood Control Manual Updates

The resource management strategies with focused actions identified in the Water Resources Development and Management Plan align with the water resource-related challenges in El Dorado County and the El Dorado Water Agency's existing and future implementation programs.



Implementation Policies and Guidance

- The Board adopted Policy E-1001, Water Resources Development Management Plan, to support the Agency's WRDMP implementation in 2019.
- The Board also adopted Policy E-1002, Upper American River Watershed Plan, to support the Agency's PWP implementation in 2023. The PWP is a supporting plan for the Agency's WRDMP implementation.
- Recommendation: Minor revisions on provisions of E-1001 for consideration of readoption.

TCPUD intake for the West Lake Tahoe Water Treatment Plant

EID Outing dale dam after rehabilitation

EID Flume 30 after repair

Echo Lake (Photo credit: Yung-Hsin Sun, Sunzi Consulting)

Questions?

Union Valley Reservoir, Tailrace (Credit: Yung-Hsin Sun, Sunzi Consulting)

Policy E-1001 Update

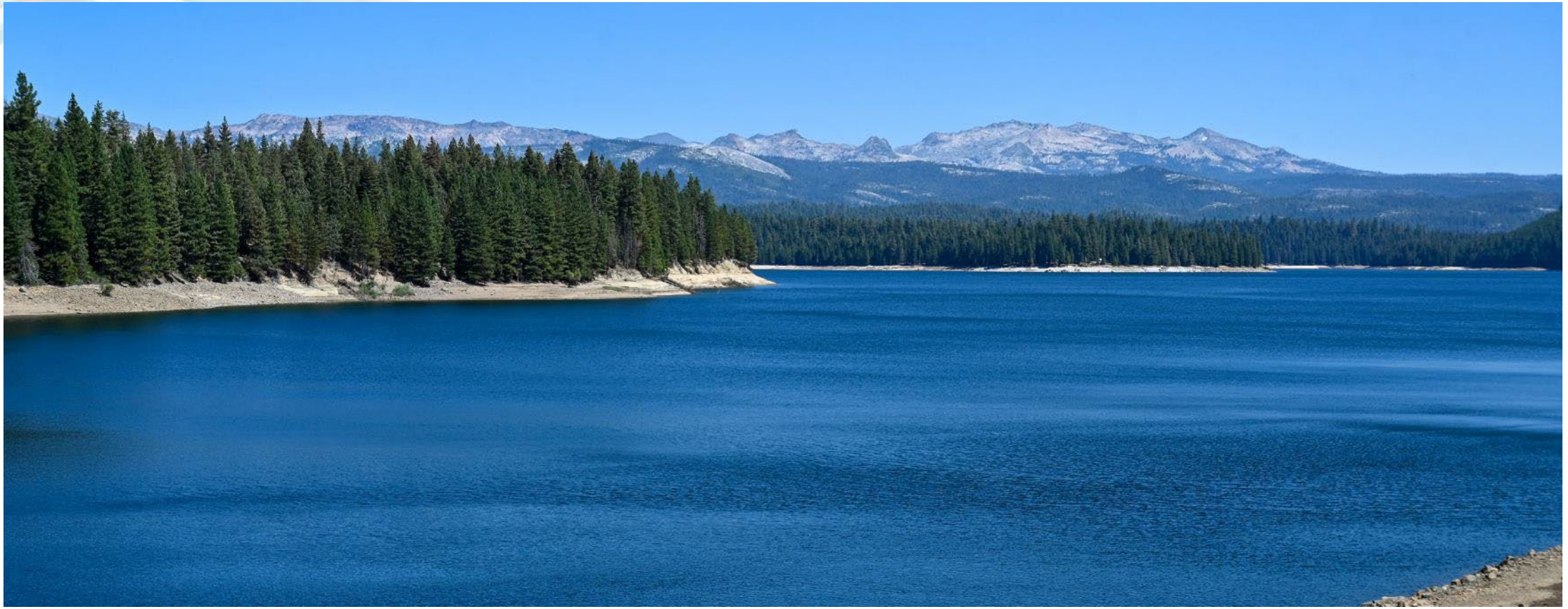
Rebecca Guo, General Manager

Implementation Policies

- **Policy WRDMP-01:** The WRDMP shall be the countywide water plan to support the realization of the vision established in the County General Plan.
- **Policy WRDMP-02:** The WRDMP shall include resource management strategies to improve water resources management in El Dorado County, with anticipated economic and public benefits accrued in all communities throughout El Dorado County.
- **Policy WRDMP-03:** The WRDMP shall identify and prioritize the Agency's implementation actions and priorities consistent with the authority and roles provided by the Act.
- **Policy WRDMP-04:** The implementation of the WRDMP shall be based on collaborative principles for developing partnership with regional, state, and federal agencies who share resource management responsibilities and cooperate in creating mutual benefits.
- **Policy WRDMP-05:** The WRDMP shall be updated every 5 years ~~by June 30~~ in years ending in 4 and 9 to address changed conditions, assess progress of implementation, and realign priorities of the Agency's actions.

Implementation Guidance

- **Guidance WRDMP-01:** The Agency shall convene a chartered Countywide Plenary for Water (Plenary) to foster collaboration on the water resources development and management in El Dorado County. The Agency shall convene the Plenary up to twice per year with representation from, at a minimum, the County's planning department, cities, water purveyors, and other water-resource related resource management entities.
- **Guidance WRDMP-02:** The Agency shall develop alternative revenue sources to support incentives and innovations to improve countywide water management.
- **Guidance WRDMP-03:** The Agency shall maximize available state and federal technical and financial assistances in implementation actions, where feasible.
- **Guidance WRDMP-04:** The Agency shall allocate cost of project development and implementation fairly among beneficiaries.
- **Guidance WRDMP-05:** The Agency shall leverage significant opportunities for hydropower generation in El Dorado County in its project development, where feasible, as a cost-offset mechanism.
- **Guidance WRDMP-06:** The Agency shall consider regional and statewide water market transfers in its project development, where appropriate, as a cost-offset mechanism. No water market transfers can result in water supply impacts within El Dorado County.



Union Valley Reservoir (Photo credit: Yung-Hsin Sun, Sunzi Consulting)

Discussion