

Water Resources and Development Management Plan (WRDMP) 2024 Update

Board Meeting
August 14, 2024



Topics

WRDMP: Purpose and Update Needs

Rebecca Guo, General Manager, El Dorado Water Agency

WRDMP24: Focus and Status

Yung-Hsin Sun, Sunzi Consulting, Senior Principal Consultant



Caldor Fire recovery area near Lower Forni. (Credit: Yung-Hsin Sun, Sunzi Consulting)





Apple Hills (Credit: Yung-Hsin Sun, Sunzi Consulting).

WRDMP: Purpose and Update Needs



WRDMP Purpose

2019 WRDMP was a major overhaul of previous plans to align the Agency's charges provided by the 1959 El Dorado County Water Agency 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 (contd.)

WRDMP meets the requirements of County's Ordinance 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.



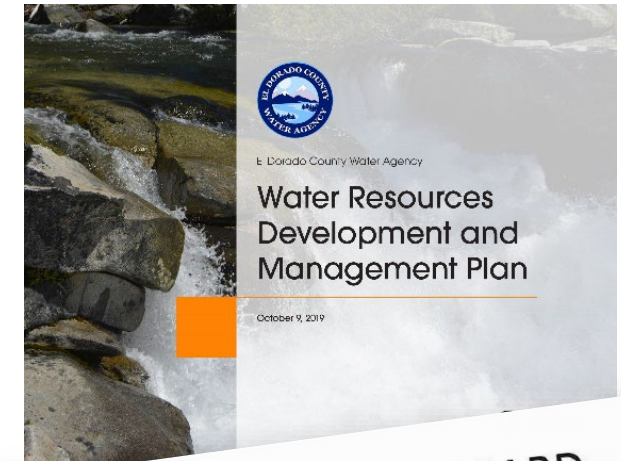
Board workshop on the draft WRDMP on October 9, 2019, during PG&E's Public Safety Power Shutoff.



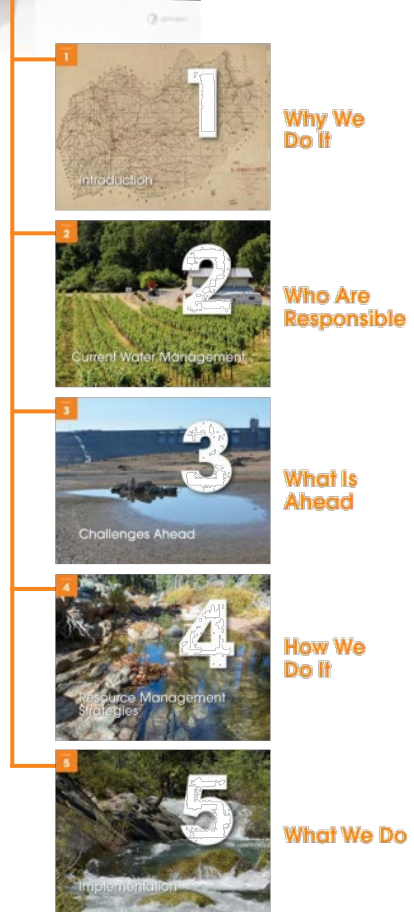
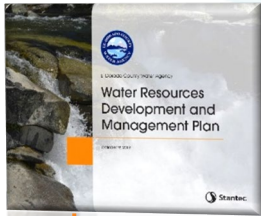
2019 WRDMP: An Overhaul

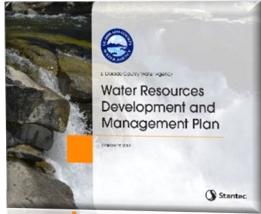
- Developed through **extensive collaboration**, respecting each entity's roles and responsibilities in water resources-related management issues.
- Designed to be a concise **policy plan** with resource management strategies (RMS) and major management actions.
- Provides a **roadmap for collective implementation** 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 adaptive capacity to address changed conditions.

See EDWA's [webpage](#) for additional details about 2019 WRDMP.



2019 WRDMP





2019 WRDMP



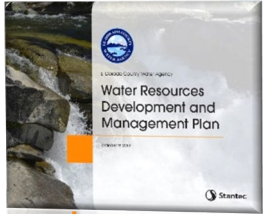
Goals:

- Assist the County of El Dorado in realizing its adopted General Plan through prudent and integrated water management.
- Plus supporting goals:
 - Develop a concise, adaptable and policy-focused plan with actions that are commensurate with the Agency's role and responsibilities.
 - Incorporate an integrated water management approach into sustainable investment strategies and implementation
 - Address changes in countywide water supply conditions, regulations, as well as the evolving understanding of climate change and its effects.
 - Promote transparency and common understanding of the Agency's investment priorities in water resource development and management.

Principles:

- Respect the roles and responsibilities of water purveyors and other local agencies.
- Promote dialogue among local agencies, economic interests, and stakeholder for mutual understanding.





2019 WRDMP

7 Water Resource-Related Challenges

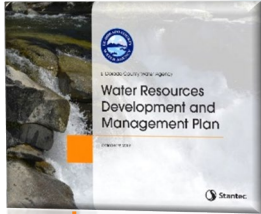


		West Slope	Tahoe Basin
C1	Long-Term Water Supply Demand Imbalance	High	Moderate High
C2	Vulnerability During Droughts	High	Moderate Low
C3	Loss of Water Supply Due to Other Resource Management Practices	Moderate High	Moderate Low
C4	Long-Term Water Quality Impacts Due to Wildfires	Moderate High	Moderate High
C5	Water Quality Impacts Due to Stormwater Runoff	Moderate Low	Moderate Low
C6	Limited Groundwater Resources	Moderate Low	Moderate Low
C7	Vulnerability to Flooding	Moderate Low	Moderate High

Level of Concern



2019 WRDMP

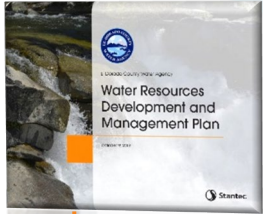


11 Resource Management Strategies (RMS)

-
- RMS1** — Secure Surface Water Supply Entitlements
 - RMS2** — Develop and Implement Demand Management
 - RMS3** — Implement Sustainable Groundwater Management
 - RMS4** — Increase Water Reuse
 - RMS5** — Secure Water Infrastructure
 - RMS6** — Manage Stormwater as a Resource
 - RMS7** — Improve Drought Preparedness and Responses
 - RMS8** — Ensure All Residents Have Water Accessibility and Affordable Water
 - RMS9** — Improve Watershed Management for Water Resource-Related Benefits
 - RMS10** — Prevent Contamination of Surface Water and Groundwater Resources
 - RMS11** — Reduce the Risk of Flooding in Communities



2019 WRDMP



5 Agency's Implementation Programs, Policies and Guidance



2024 WRDMP

Leverage the strategy built on the 2019 design for stability and flexibility

- Follow the same goals and principles including forming the Plan Advisory Group for collaboration in plan development
- Maintain the same concise format and document organization for streamlined update
- **Address the changed conditions and update the RMS and management actions**
- Enforce the same review process in collaboration with advisory groups and subject matter experts.
- Update Agency's implementation policy and guidance, if needed
- The resulting plan will be available for all parties with implementation responsibilities to further develop their corresponding policy and actions.



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**



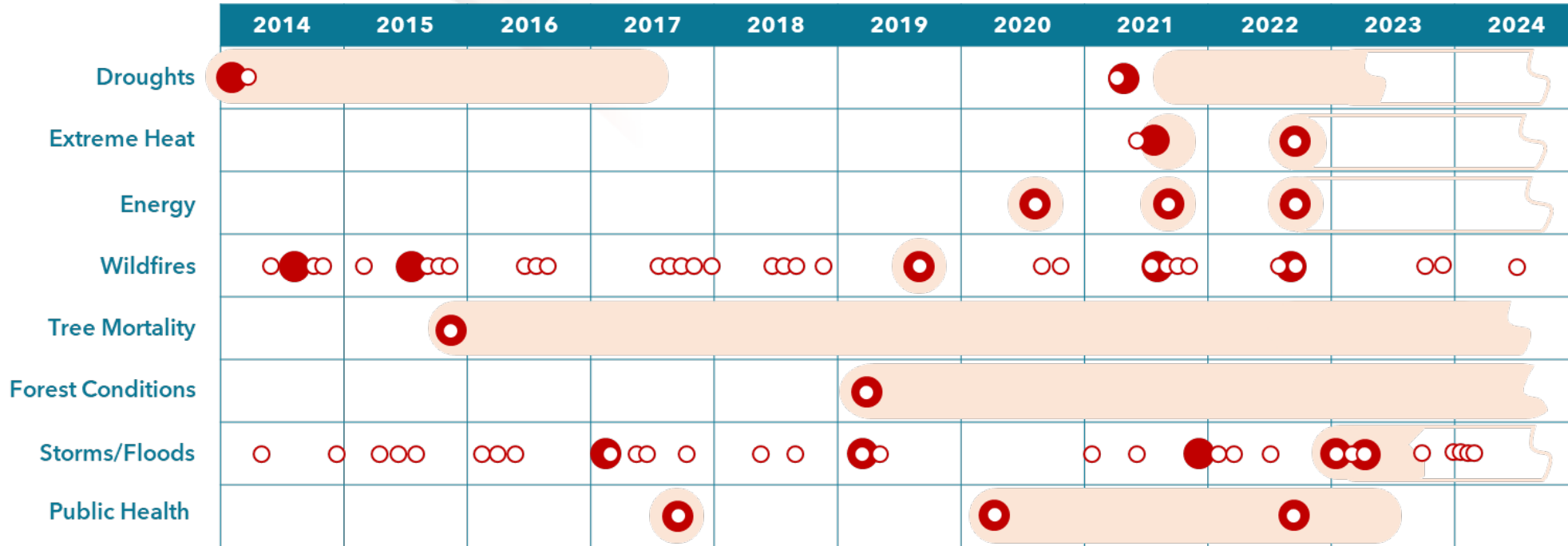


Horsetail Falls near Twin Bridge, El Dorado County (Stock photo used with permission from El Dorado Water Agency)

WRDMP24: Focus



Highlights of Changed Conditions



Compilation Date: July 2024

Notes:

1. Not all end dates of emergency were noted. Emphases were on droughts, forest conditions, and public health for context.
2. Periods of emergency were compiled based on Governor's Office of Emergency Services, Executive Orders, and communications from Governor's Office.

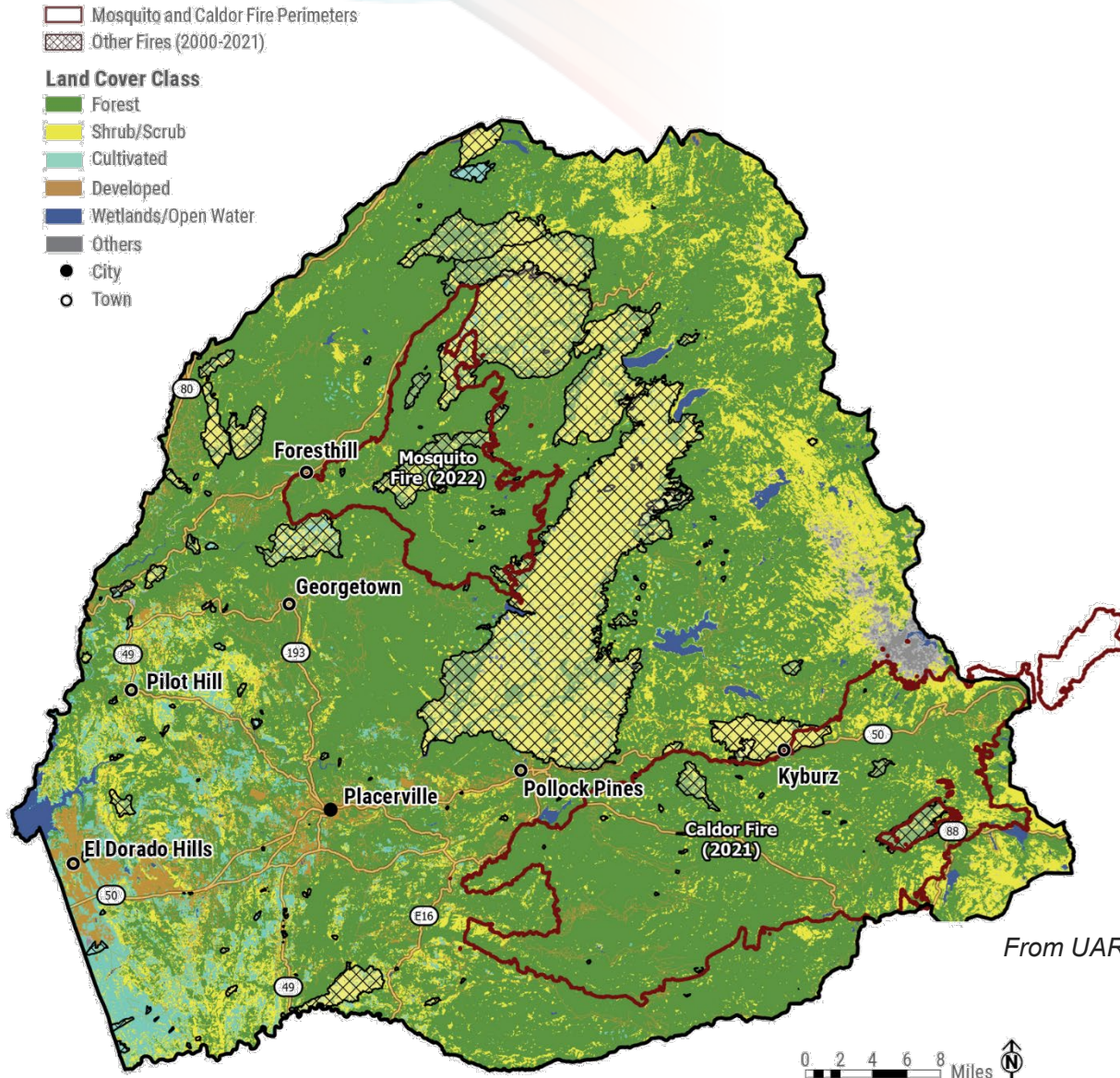
Affected Areas by Governor's Proclamation of a State of Emergency

- Counties other than El Dorado
- Counties including El Dorado
- Statewide
- Statewide with certain active status or selective areas

Modified from UARWG, 2023. Programmatic Watershed Plan for the Upper American River Watershed.



Highlights of Changed Conditions



- Caldor Fire (2021) and Mosquito Fire (2022) had the most on-the-ground impacts of all things countywide.
- Intensified localized flooding (2023 and 2024) in atmospheric river events that increases in frequency.
- Changes in federal and state regulatory frameworks, management strategies, and funding priorities to address climate change, social preference, and other factors.

From UARWG, 2023. Programmatic Watershed Plan for the Upper American River Watershed.



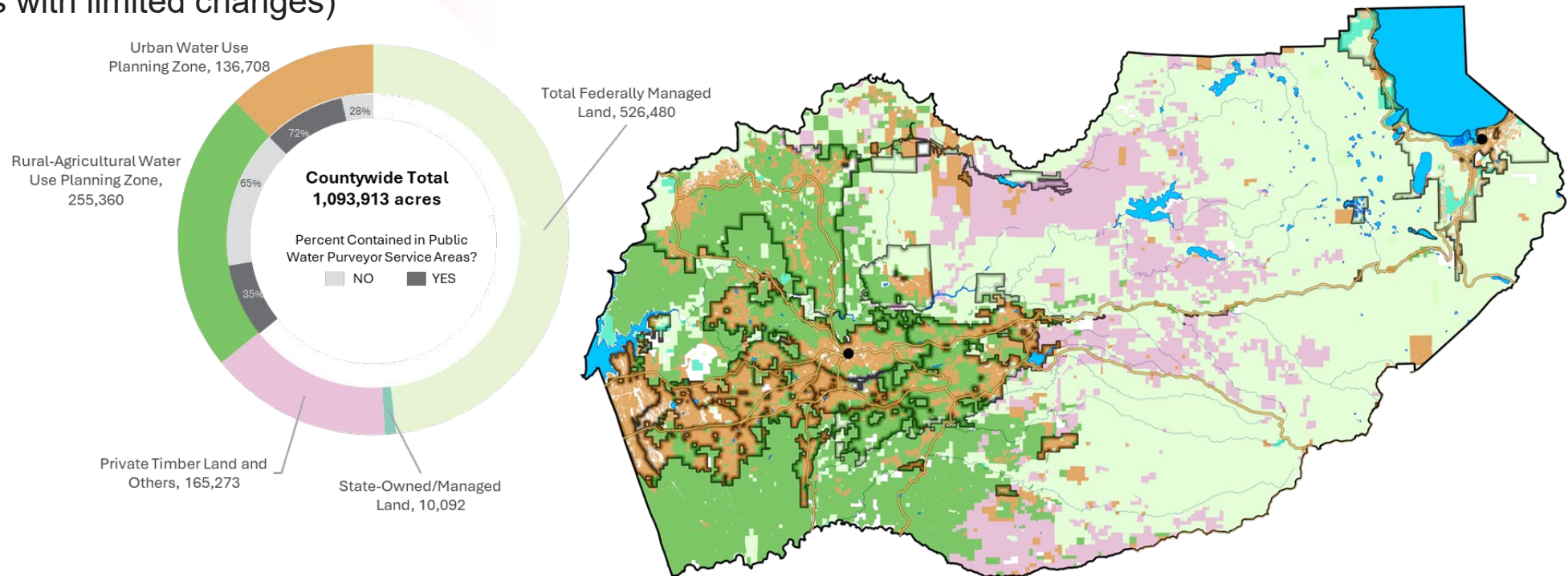
Policy and Regulatory Framework Changes

- 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.

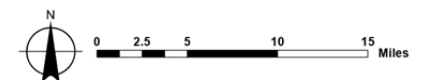


Minimum Changes in Land Use

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

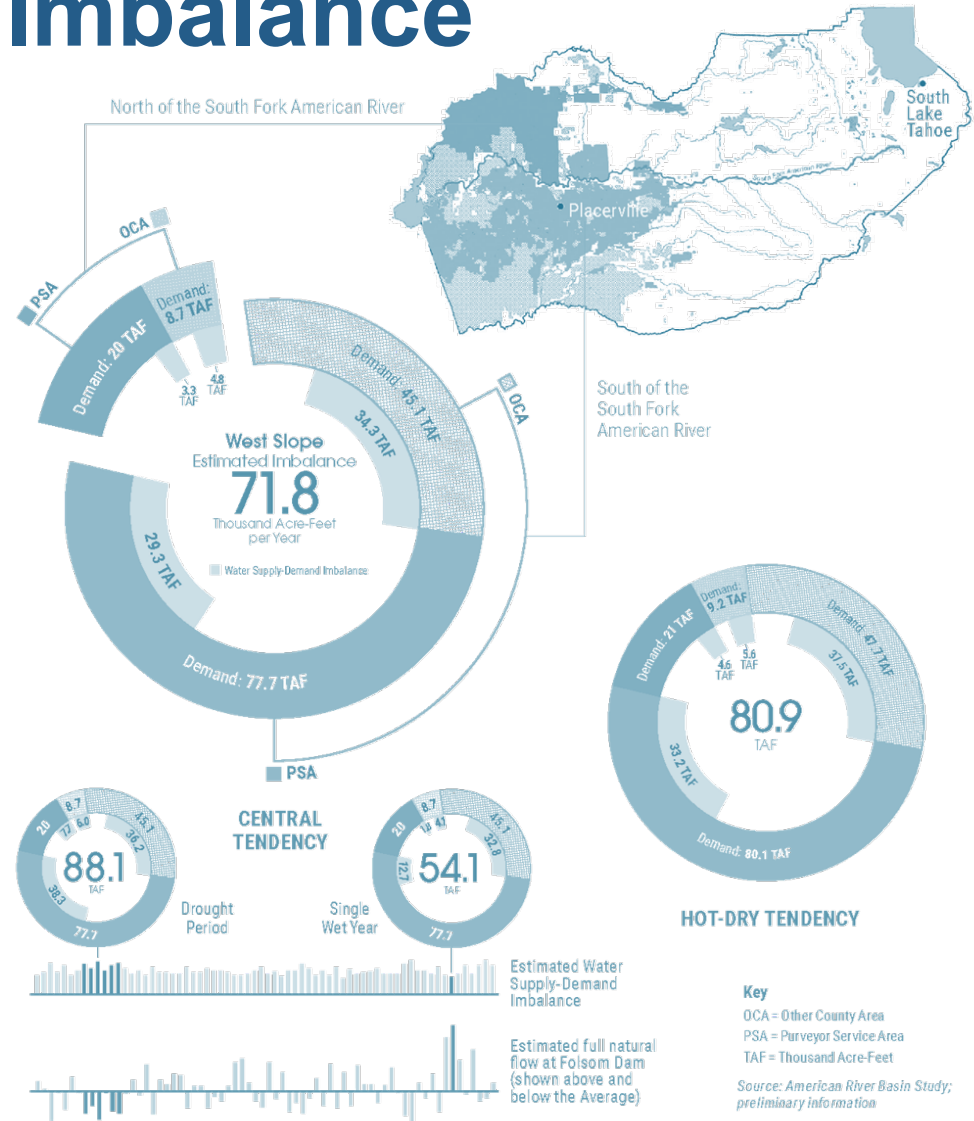


- City
- Existing Water Purveyor Service Area
- Water Use Planning Zones**
- Rural-Agricultural
- Urban
- Other Land Use Areas**
- Private Timber
- Federally Managed Land
- State-Owned/Managed Land



Water Supply-Demand Imbalance (West Slope)

- Most updates are on demand estimate for new regulatory requirements.
- Long-term water supply-demand imbalance with assumed realized conditions per County General Plan (>50 years of planning horizon and broader considerations than purveyor-specific UWMPs)
- Updates will be based on recent long-term climate forecast information.

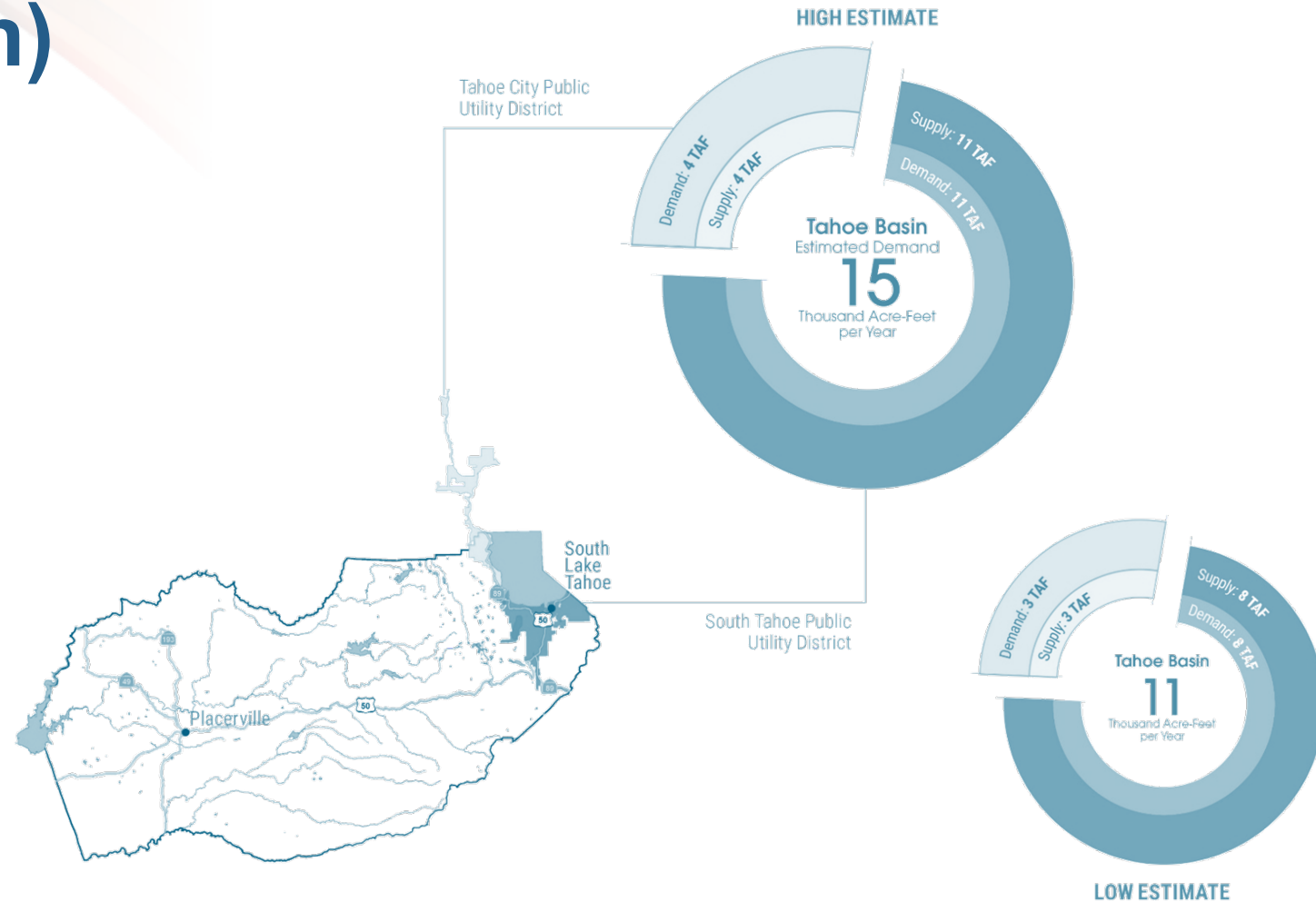


Modified from 2019 WRDMP, using final ARBS modeling results; subject to update.



Water Supply-Demand Imbalance (Tahoe Basin)

- Long-term water supply-demand imbalance per Tahoe Area Planning Agency, the Truckee River Operating Agreement, and associated water right process before the State Water Resources Control Board



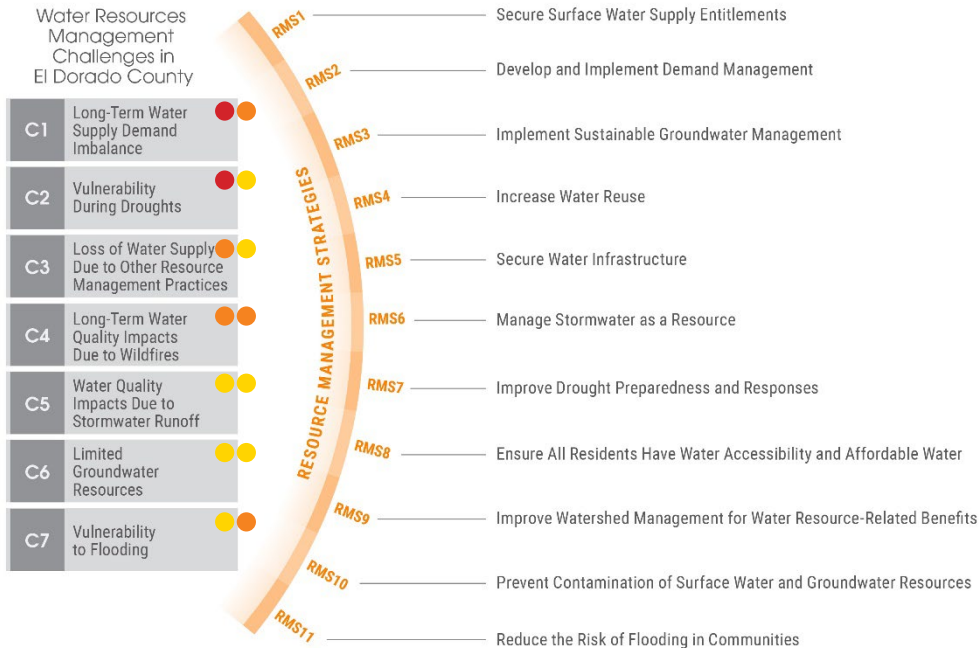
From 2019 WRDMP; subject to update.

Source: Tahoe Basin Ongoing Assessment



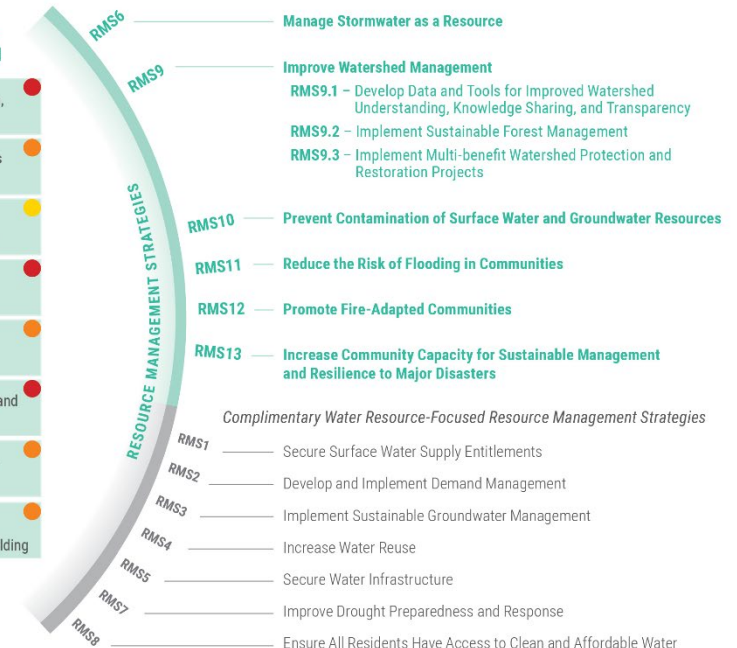
Incorporate PWP's RMS and Management Actions

Update/consolidate/reconcile the challenges and RMS of WRDMP and PWP



Management Challenges in the Upper American River Watershed

Category	Challenge	Level of Concern
Natural Capacity	1 Lack of cohesive watershed vision, policy, and implementation	High
	2 Rapid loss of ecosystem functions and quality	Moderate High
	3 Threats to native species and protected plants from urban development and other stressors	Moderate Low
Built Capacity	4 Insufficient built infrastructure to provide needed watershed regulating capacity	High
	5 Increased vulnerability of infrastructure to wildfires and other threats	Moderate High
Social Capacity	6 Insufficient public understanding and trust for cooperation	High
	7 Insufficient community workforce development	Moderate High
	8 Disconnect between community economic development and watershed health and capacity building	Moderate High



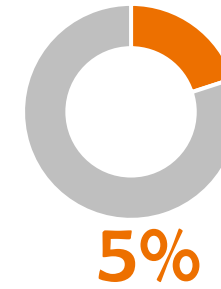
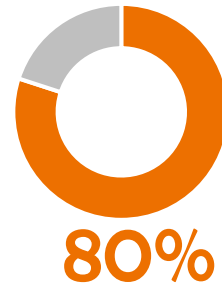
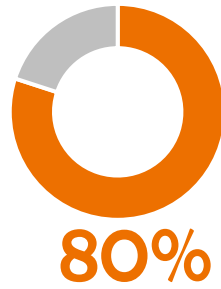
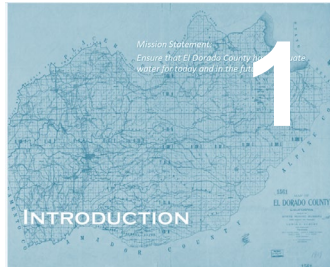


Apple Hills Vineyard (Credit: Yung-Hsin Sun, Sunzi Consulting)

WRDMP24: Status



WRDMP24 Progress Update



Major Piece:
Water Supply-Demand
Scenarios



Plan Advisory Group



County of El Dorado:

- Carla Haas, Chief Administrative Office
- Jeffrey Warren, Environmental Management Department
- Karen Garner, Planning and Building Department
- Robert Peters, Planning and Building Department
- LeeAnne Mila, Agricultural Commissioner
- Rafael Martinez, Department of Transportation
- Tom Meyer, Office of Wildfire Preparedness and Resilience

Other Local Agencies:

- Mark Egbert, El Dorado and Georgetown Divide Resource Conservation Districts
- Pierre Rivas, City of Placerville
- Rebecca Guo, El Dorado Water Agency
- Shiva Frentzen, El Dorado Local Agency Formation Commission
- TBD, City of South Lake Tahoe (invited)

Tribes:

- TBD, Shingle Springs Band of Miwok Indians (invited)

Public Water Purveyors:

- Adam Brown, Georgetown Divide Public Utility District
- Adrian Combes, South Tahoe Public Utility District
- Brian Mueller, El Dorado Irrigation District
- Sean Barclay, Tahoe City Public Utility District
- Kim Gustafson, Grizzly Flats Community Service District

Business Interests:

- Charles Mansfield, El Dorado Wine Grape Growers Association (invited)
- Mike Ranalli, El Dorado County Farm Bureau

NGO and Academics:

- Elena DeLacy, American River Conservancy
- Hardeep Singh, UC Agriculture and Natural Resources

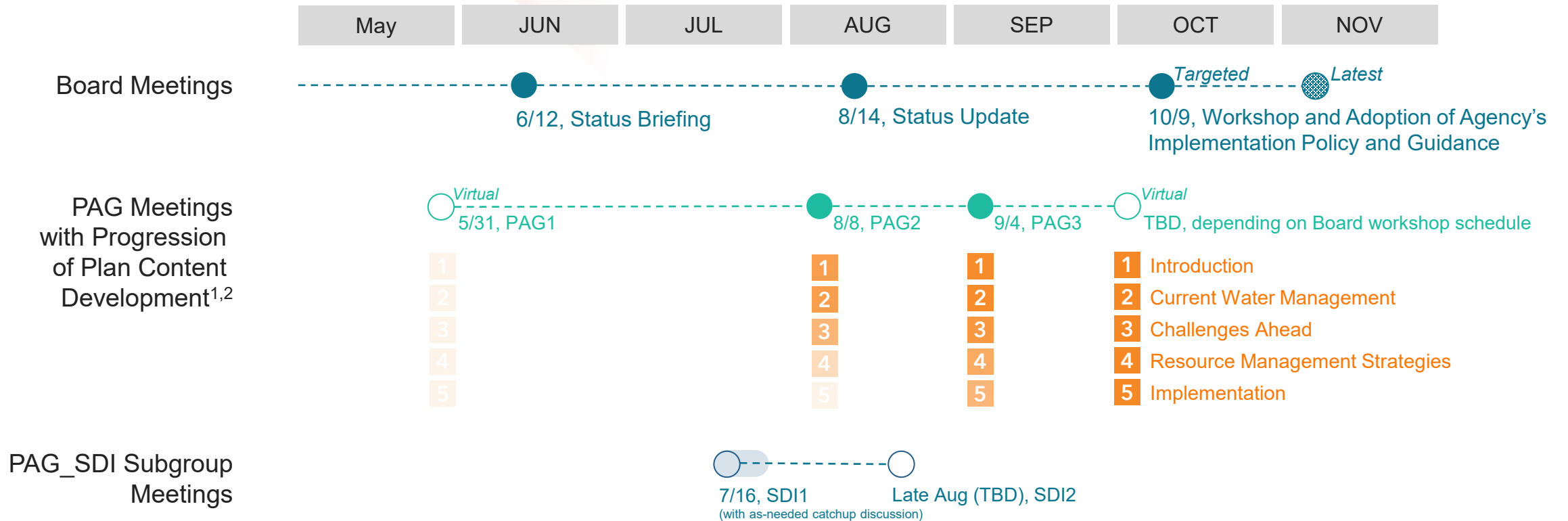


Preliminary Findings, Subject to Change

- There is a lot work ahead, but collectively, we have made much progress.
- Projected water supply-demand imbalance at the capacity level per General Plan is lower than 2019 estimates mainly due to demand reductions imposed by regulatory changes
- Climate change effects reflected in more frequent and intense extreme events (e.g., droughts, floods) and associated events (e.g., wildfires)
- The RMS and management actions in the PWP to be incorporated in the WRDMP will be modified to include Tahoe Basin considerations
- The Agency has a primary role in developing, maintaining and implementing the WRDMP; however, the Agency's role in PWP is the convener with only certain areas of interests and responsibilities. The role and responsibilities need to be carefully and clearly delineated when incorporating relevant RMS and management actions from the PWP into WRDMP. (Currently, an area of attention)
- The previously adopted policies and guidance for the Agency's WRDMP implementation are durable (as intended) with only minimal revisions, if any.



Planning Schedule



Notes:

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





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

Questions?

