

2024 Water Resources Development and Management Plan Update

PLAN ADVISORY GROUP MEETING #3

Wednesday, September 4, 2024; 11:00am – 1:00pm

El Dorado County Planning & Building Department, Lobby Conference Room

850 Fairlane Ct, Placerville, CA 95667

Draft Meeting Summary

Meeting Objective: This is the third in a series of Plan Advisory Group (PAG) meetings to support the 2024 Water Resources Development and Management Plan (WRDMP or Plan) Update process. The purpose of the meeting was the review and solicitation of PAG feedback on the updated 2024 WRDMP draft, as follows:

- Section 1 – Introduction, Section 2 – Current Water Management, and Section 3 – Challenges Ahead
 - Additional input since last meeting
- Section 4 – Resource Management Strategies (RMS)
 - Focused review and input
- Section 5 – Implementation
 - Preview only but input is welcome

The following is a summary of the meeting discussion, including comments and questions that were provided by PAG members and addressed by El Dorado Water Agency (EDWA) staff and consultants. All comments and suggested edits refer to WRDMP v. 08.29.24.

Welcome and Meeting Objectives

Yung-Hsin Sun, Senior Principal Consultant, Sunzi Consulting began the meeting with an overview of the objectives: to share key updates on the previously reviewed sections, review the water supply-demand imbalance (SDI) analysis, and review the RMS.

Rebecca Guo, General Manager, EDWA discussed the purpose of the 2024 WRDMP development to support realization of the vision of the County of El Dorado (County) General Plan. The 2024 WRDMP will guide EDWA and its partners in water resources development and management over the next five years.

Status Summary WRDMP 2024 Update

Yung-Hsin Sun, Senior Principal Consultant, Sunzi Consulting summarized the work completed to-date and reviewed the timeline for completing the 2024 WRDMP. The Plan follows the 2019 outline, but the content has been updated as needed. Sections 1-3 of the Plan are nearing completion, although some follow-up input is still anticipated.

A virtual meeting will be held with the PAG on October 4, 2024, to ensure there are no critical errors or omissions. The target date to hold a WRDMP workshop with the EDWA Board of Directors is

October 9, 2024. The WRDMP Implementation Policies and Guidance will also be presented to the Board of Directors for adoption at that time.

Water Supply-Demand Imbalance: West Slope

Yung-Hsin Sun introduced the SDI analysis as a continuation of the land use and demand types discussed in the PAG #2 meeting. Ibrahim Khadam, Senior Principal Consultant, Khadam Consulting discussed that the current SDI analysis follows a similar process as the 2019 WRDMP and uses most of the same data and analyses. The components of the SDI analysis were discussed as follows.

Climate Change Hydrology Inputs

Similar to the 2019 WRDMP, used the USBR 2070 Climate Change inputs from the American River Basin Study (ARBS) as these inputs are important for long-term projections. Also looked at DWR 2040 Climate Change Hydrology which is being used for statewide analyses.

Projected Demands

The current analysis follows the same County General Plan land use designations from the 2019 WRDMP, as the changes in land zoning were negligible. The agricultural demand projections were unchanged. There is roughly 4,000 acres of existing agricultural lands in the West Slope and up to 41,000 acres of potentially developable agricultural lands, of which about 13,000 acres were identified within El Dorado Irrigation District service area and 7,000 acres within Georgetown Divide Public Utility District service area. An applied water validation study for agricultural irrigation needs is underway and will be reflected in future updates.

Municipal and industrial (M&I) demand projections were updated to reflect recent regulatory changes. This includes the residential indoor water use standard per SB 1157 (2022), which has an associated reduction in residential indoor water demand. The M&I demand analysis updates also incorporated agency-specific water loss reductions (for El Dorado Irrigation District and Georgetown Divide Public Utility District) in accordance with State Water Boards standards. Overall, the M&I demands within the purveyor service areas were reduced by approximately 11% from the 2019 analysis due to these new standards.

Hydrologic Modeling

The updated analysis uses the American River Integrated Operations Model (ARIOps). ARIOps captures more frequent updates in hydrology than the previously used CalSim 3 model and uses a daily time scale to track system responses. Both models are consistent by design as part of the ARBS process.

Water Supplies

The existing water supplies represent the water available based on water rights and contracts, adjusted for future climate change conditions. The water supplies used in the analysis are

consistent with the 2020 Urban Water Management Plans for El Dorado Irrigation District and Georgetown Divide Public Utility District.

Summary

The results of the analysis project a water supply-demand imbalance of 74 thousand acre-feet (TAF) in the West Slope under the 2070 Central Tendency condition. As this analysis has a much longer planning horizon than most agency-specific plans and also considers potential agricultural development consistent with the County General Plan, the water supply-demand imbalance is greater than those in local Urban Water Management Plans.

PAG Comments and Questions:

- El Dorado Irrigation District – Does EDWA have the El Dorado Irrigation District Master Plan and is this analysis consistent?
 - Response: Yes, EDWA has reviewed the El Dorado Irrigation District Master Plan. The M&I demand is the same in both documents, but the agricultural demand differs because this analysis includes the demand for additional agricultural development opportunities that are consistent with the County General Plan. EDWA has had discussions with Brian Mueller, Engineering Manager, El Dorado Irrigation District regarding these agricultural projections about the likelihood of identified agricultural demand to be realized. The current analysis follows the WRDMP goal for assessing needs to realize County’s General Plan vision.
- UC Agriculture and Natural Resources – Out of the project water supply-demand imbalance of 40 TAF under the 2070 Central Tendency for Purveyor Service Areas South of the South Fork American River, how much of that imbalance is attributed to agricultural demands?
 - Response: Most of the imbalance is due to agricultural demands. Ibrahim Khadam will provide the volume based on agriculture specifically.
- UC Agriculture and Natural Resources and El Dorado County Farm Bureau – More education is needed to bolster implementation of water conservation practices in agriculture, such as irrigation management systems. There have been numerous advancements in tools and technology over time, but agricultural producers need to be brought up to date.
 - Response: Agreed. Please review the RMS in Section 4 to ensure that this educational strategy is included adequately.

Water Supply-Demand Imbalance: Tahoe Basin

Yung-Hsin Sun explained that the situation in the Tahoe Basin is significantly different than in the West Slope. Though there is water supply reliability due to the proximity to Lake Tahoe and the snowpack, the main challenge in the Tahoe Basin is related to the Truckee River Operating Agreement. California’s total annual allocation for the Lake Tahoe Basin (including both groundwater and surface water) is 23,000 acre-feet. This water right is shared between the three water purveyors in the basin (South Tahoe Public Utility District, Tahoe City Public Utility District, and North Tahoe Public Utility District).

For the demand estimates, a separate discussion with STPUD and TCPUD resulted in the agreement to use their 2020 demand study developed for their water right applications as the basis. This is consistent with the information used for 2019 WRDMP when the 2020 demand study was near completion. There is no agricultural component; all the water use is for M&I purposes. The large presence of seasonal populations presents a challenge in estimating M&I demands.

PAG Comments and Questions:

None.

WRDMP Review and Discussion: Section 1-3

Yung-Hsin Sun discussed the updates that have been underway since the previous PAG #2 meeting. This includes the GIS files provided by the County Department of Transportation for the locations of historical flooding due to atmospheric rivers in the Tahoe Basin.

The small water systems data is still being worked through with the County Environmental Management Department (Page 52). There appears to be discrepancies based on regulatory definitions and jurisdictions.

PAG Comments and Questions:

- El Dorado County Farm Bureau – What are the thresholds for designating small water systems?
 - Response: Small water systems are generally defined as those with less than 3,000 service connections. The 2024 WRDMP is also being updated to incorporate the County’s responsibilities under SB 552 requirements, which include State small water systems (between 5 and 14 connections) and domestic wells (with 4 connections or less).

WRDMP Review and Discussion: Section 4 – Resource Management Strategies (RMS)

EDWA’s Programmatic Watershed Plan (PWP) has a broader scope than the WRDMP, so the water resource-related issues that the WRDMP focuses on are part of it but not all of it. The 2024 WRDMP includes enhancements to RMS9 and RMS11 based on the PWP, but no additional RMS were added. Therefore, the 2024 WRDMP includes the same list of RMS with only the management actions updated. The changes within each RMS are not called out in plan, as some management actions were combined or modified during the update, some that are no longer relevant were removed, and some were completed. As a reminder, the RMS represent broad approaches, not specific project lists.

The Principal Implementing Agencies listed in the Plan will not necessarily work on every aspect of the associated RMS. The Lead (L), Facilitator (F), and Supporting (S) roles are identified for EDWA’s actions; each implementation agency can identify their own roles similarly for each identified management actions.

RMS1 – Secure Surface Water Supply Entitlements

This RMS is to help secure a pool of resources for future needs. It was noted that the meaning of the word “secure” related to water rights has changed, as senior water rights holders were curtailed during the 2012-2016 drought.

PAG Comments and Questions:

None.

RMS2 – Develop and Implement Demand Management

This RMS is based on State regulatory requirements and the water supply-demand analysis findings. It is important that we have our own local plans such as the WRDMP to drive water management.

PAG Comments and Questions:

- UC Agriculture and Natural Resources to add an educational component to RMS2b (Page 67).

RMS3 – Implement Sustainable Groundwater Management

To meet the Sustainable Groundwater Management Act requirements in the Tahoe Valley South Subbasin, South Tahoe Public Utility District and EDWA co-convened to form a Groundwater Sustainability Agency. The original and amended Groundwater Management Plans have been approved.

Regarding the West Slope, there is very little understanding of fractured rock. Since the reliance on a single source of water presents a threat to water security, it is important to work toward securing another water source in the future.

PAG Comments and Questions:

- County Agricultural Commissioner – Is EDWA advocating for the State’s efforts to regulate and meter domestic wells? There would be a detrimental effect on agriculture in the county.
 - Response: No. Rather, EDWA’s advocacy for the county and rural communities is necessary to ensure the regulations consider our unique foothill community challenges versus the traditional focus on more densely populated urban areas.
- El Dorado County Farm Bureau commented that there seems to be a focus in the State with regulating over-drafted basins.
 - Response: El Dorado County Farm Bureau to provide input on RMS3d (Page 69).

RMS4 – Increase Water Reuse

This RMS is to maintain alignment with the State’s efforts toward water reuse. El Dorado Irrigation District’s Master Plan includes exploring other opportunities for water reuse, but there are limited options. South Tahoe Public Utility District cannot purvey recycled water in the basin, so it is exported.

PAG Comments and Questions:

- El Dorado Irrigation District – RMS4a discusses water reuse implementation “where possible,” but this should be rephrased as “where supplies are available.” Wastewater flows are declining, especially with increased indoor water use efficiency. Also, “cost effective” is subjective and may not be feasible if funding is not available.
 - Response: Agreed and will modify.

RMS5 – Secure Water Infrastructure

This RMS includes both existing and potential opportunities for new infrastructure. Replacement infrastructure is needed as existing infrastructure becomes damaged or aged. Additionally, future infrastructure planning is critical to prepare for climate change and other hazards and to maximize use of existing water supply sources.

PAG Comments and Questions:

- El Dorado Irrigation District commented that though some sections of wooden flumes have been replaced, there is still a substantial length of wooden flumes remaining in the system. To replace this infrastructure will require roughly \$100 million in projects. Furthermore, sediment runoff at Sly Park and Res 1 is a major challenge. Influent water quality was historically pristine, and the facilities were not designed to handle these impacts. It is difficult to quantify the costs of these short-term disruptions, but process improvements are necessary because there is currently no redundancy in treatment capacity.
- PAG members further commented on the increase in sediment in reservoirs and the environmental and hazardous waste concerns associated with dredging.
- It was also noted that when comparing the ratio between the major reservoir storage vs the volume of total runoff of its associated watershed, Folsom Reservoir is the smallest among all major tributaries in Sacramento and San Joaquin watersheds.
- County Office of Wildfire Preparedness and Resilience commented that the Community Wildfire Protection Plan development currently underway is considering the need for additional water storage for fire protection in remote areas. Work is also in progress to identify existing water sources that could be potentially used in an emergency. During the Mosquito Fire, it took approximately 1.5 hours for fire trucks to refill with water in Volcanoville. There have also been some discussions of additional water storage in the Grizzly Flats area following the Caldor Fire. These storages are believed to be for fire protection not for drinking water purposes; however, Office of Wildfire Preparedness and Resilience will verify the information.
 - Response: Once receiving the information, the team will review to consider including in the plan.

- El Dorado County Farm Bureau commented that in some remote areas, the poor condition of roads (such as Wentworth Springs Road) would not be suitable for fire trucks to haul water even if the sources were available.

RMS6 – Manage Stormwater as a Resource

PAG Comments and Questions:

None.

RMS7 – Improve Drought Preparedness and Response

EDWA is preparing a County Drought Contingency Plan for small water systems and domestic wells. This plan is required by counties per SB 552 (2021).

PAG Comments and Questions:

None.

RMS8 – Ensure All Residents Have Water Accessibility and Affordable Water

This RMS is related to the California Water Code Section 106.3 for the ‘Human Right to Water.’ Unlike other areas of the state, water system consolidation in the county is not necessarily applicable, especially in remote areas

PAG Comments and Questions:

None.

RMS9 – Improve Watershed Management for Water Resource-Related Benefits

This RMS incorporates updates from the PWP developed in 2023.

PAG Comments and Questions:

None.

RMS10 – Prevent Contamination of Surface Water and Groundwater Resources

Overall, surface water and groundwater resources are of good quality in the county.

PAG Comments and Questions:

- County Agricultural Commissioner – The Nutrient Management Plan in RMS10c (Page 83) is not managed by the County. Individual growers report to the El Dorado Agricultural Water Quality Management Corporation, who then reports to the Regional Water Quality Control Board for compliance.
 - Response: Noted and will modify. EDWA will coordinate with Director Melissa Neal of the El Dorado Agricultural Water Quality Management Corporation to replace the County as the Principal Implementing Agency in the Plan.

- County Environmental Management Department confirmed that regarding RMS10d, the County reports data every year to the State, including the number of septic permits, septic repairs, complaints, and liquid waste haulers.
- County Agricultural Commissioner suggested UC Agriculture and Natural Resources (Central Sierra) to be added to RMS10e for educational opportunities, and other similar actions.
 - Response: Agreed.

RMS11 – Reduce the Risk of Flooding in Communities

This RMS addresses localized flooding as historically most flooding has been localized due to the terrain and geographic location.

PAG Comments and Questions:

None.

WRDMP Preview: Section 5 – Implementation

This section provides the policies and guidance for how EDWA will approach implementation actions and engage with other agencies over the next five years.

PAG Comments and Questions:

None.

Action Items and Next Steps

The final draft of the 2024 WRDMP will be discussed in the virtual PAG #4 meeting on October 4, 2024. All input is requested by Friday, September 13, 2024.

- All are encouraged to review the plan for additional comments and input.
- Water Supply-Demand Imbalance: West Slope
 - Ibrahim Khadam to provide the estimated imbalance values for M&I and ag separately for reference.
- Section 1 – Introduction
 - Karen Garner (County Planning and Building Department) to provide alternative language to Section 1.2 Goals related to General Plan.
- Section 3 – Challenges Ahead
 - Jeff Warren (County Environmental Management Department) to help reconcile small water system information (Page 52).
- Section 4 – RMS
 - Lead agencies to review their respective RMS actions.
 - Hardeep Singh (UC Agriculture and Natural Resources) to identify any RMS actions relevant to educational opportunities, including RMS2b (Page 67) and RMS10e (Page 83).

- Mike Ranalli (El Dorado County Farm Bureau to review and provide input on RMS3d (Page 69).
- Tom Meyer (County Office of Wildfire Preparedness and Resilience) to provide more information on water storage for wildfire preparedness.
- Rebecca Guo (EDWA) to engage Melissa Neal of the El Dorado Agricultural Water Quality Management Corporation regarding RMS10c (Page 83) for grower's actions in nutrient management.

Participation

Organization	Name
PAG Members	
County of El Dorado	Jeffrey Warren, Director, Environmental Management Department Karen Garner, Director, Planning and Building Department LeeAnne Mila, Agricultural Commissioner/Sealer of Weights and Measures Thomas Meyer, Program Manager, Office of Wildfire Preparedness and Resilience
El Dorado County Farm Bureau	Michael Ranalli, President
El Dorado Irrigation District	Jon Money, Senior Civil Engineer
El Dorado Water Agency	Kyle Ericson, Water Resources Principal Rebecca Guo, General Manager Hannah Romero, Water Resources Principal
UC Agriculture and Natural Resources	Hardeep Singh, Local Food Systems Advisor, Central Sierra Cooperative Extension
Consultants	
Khadam Consulting	Ibrahim Khadam, Senior Principal Consultant
Sunzi Consulting	Yung-Hsin Sun, Senior Principal Consultant

Additional Invited PAG Members

Organization	Name
PAG Members	
American River Conservancy	Elena DeLacy, Executive Director
County of El Dorado	Carla Haas, Deputy Chief Administrative Officer Rafael Martinez, Director, Department of Transportation
City of Placerville	Pierre Rivas, Director, Development Service Department Kristen Hunter, Associate Planner

Organization	Name
El Dorado Irrigation District	Brian Mueller, Director of Engineering
El Dorado and Georgetown Divide Resource Conservation District	Mark Egbert, District Manager
El Dorado Local Agency Formation Commission	Shiva Frentzen, Executive Director
El Dorado Wine Grape Growers Association	Charles Mansfield, President
Georgetown Divide Public Utility District	Adam Brown, Operations Manager
Grizzly Flats Community Service District	Kim Gustafson, General Manager
South Tahoe Public Utility District	Adrian Combes, Senior Engineer
Tahoe City Public Utility District	Sean Barclay, General Manager
City of South Lake Tahoe	TBD
Shingle Springs Band of Miwok Indians	TBD