Introduction of the
El Dorado Water Agency

Regional Water Authority
Executive Committee
August 26, 2020
Physical Settings
El Dorado County’s Setting is distinct from the Lower American River Areas

Our common thread is the American River

- Predominantly rural-agricultural area in the foothills
- Relies on surface water
- Very limited shallow fractured rock groundwater

...thus, EDWA must tailor planning efforts to meet its specific needs while addressing the needs of the Lower American River . . .

... however, planning in the American Basin must be recognize Upper and Lower Basin Needs
EDWA’s Boundaries Encompass the entire Borders of the County
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395,785 aces (~189,720 acres in Purveyor boundaries)

- Urban: 12.9%
- Rural-Ag: 23.9%
- Private Timber: 13.0%
- State-Owned: 0.9%
- Federally Managed: 49.3%
EDWA Recognizes and Builds Around Established Functions & Responsibilities of Other Entities

El Dorado County Water Agency, cities and the County of El Dorado, public water purveyors, small private water companies, and self-supplied entities have active water resources management roles across El Dorado County.
EDWA Authority
Vision Statement:

Within the next five years, El Dorado County Water Agency will be known as the trusted, county-wide leader on water-resource issues, representing the long-term interest of our community, purveyors and residents through a dedicated team of professionals, responsive and accountable to the public we serve.
96.4 Agency Board is a Political/Corporate Body.
- Has the powers enacted in the 1959 El Dorado County Water Agency Act

96.11 Power to Order Water Made Available for present/Future Uses.
- The agency shall have the power, as limited in the Act, to do any and every lawful act necessary in order that sufficient water may be available for any present or future beneficial use or uses of the lands or inhabitants within the County, including, but not limited to, irrigation, domestic, fire protection, municipal, commercial, industrial, recreational, and all other beneficial uses and purposes.

96.12 Power Development and Sale.
- The agency shall have the power to construct, operate and maintain works to develop hydroelectric energy as a means of assisting in financing the construction, operation and maintenance of its projects for the control, conservation, diversion and transmission of water and to enter into contracts for the sale of such energy for a term not to exceed 50 years.
- Such energy may be marketed only at wholesale rates to any public agency or private entity engaged in the sale or use of electric energy, or the Federal or State Government.

96.13 Flood Control & Conservation
- The agency shall have the power to control the flood and storm waters of the agency and the flood and storm waters of streams that have their sources outside of the agency, which streams and floodwaters flow into the agency, and to conserve such waters for beneficial and useful purposes of said agency by spreading, storing, retaining and causing to percolate into the soil within or without said agency, or to save or conserve in any manner all or any of such waters and protect from damage from such flood or storm waters the watercourses, watersheds, public highways, life and property in said agency, and the watercourses outside of the agency of streams flowing into the agency.
96.14 Agency Can Store, Conserve, Reclaim, Appropriate & Import Water for Agency; Prevent interference of water sources & Powers to Prevent Contamination/Pollution

- Power to store water in surface or underground reservoirs within or outside of the agency for the common benefit of the agency;
- Conserve and reclaim water for present and future use within the County;
- Appropriate and acquire water and water rights,
- Import water into the County;
- Conserve and utilize, within or outside of the County, water for any purpose useful to the Agency;
- Commence, maintain, intervene in, defend or compromise, in the name of the Agency in behalf of the landowners therein or useful for any purpose of "the agency or of common benefit to any land situated therein;"
- Prevent interference with the natural flow of water sources (stream, surface or subterranean supply) for purposes of the Agency or of common benefit to the lands within the County or to its inhabitants;
- Prevent unlawful exportation of water from County;
- Prevent contamination, pollution or otherwise rendering unfit for beneficial use the surface or subsurface water used in County.

96.17 Agency can Conduct Water Resources Investigations and Studies.

- The Agency can carry on technical and other investigations, such as measurements, collect data, analyses, studies, and inspections pertaining to water supply, water rights, control of flood and storm waters, and use of water
- Applies to waters both within and outside Agency boundaries relating to watercourses or streams flowing in or into County.
- The agency may cooperate with any district in carrying out the powers granted by this section.

96.23 Agency can Sale, Lease or Transfer Water within/outside the County.

- Any water or rights to the use of the works of the agency for the conservation, control or transportation of water may be sold, leased or otherwise transferred by the agency to member units,
- Agency may fix and collect rates and charges for such purposes.
- Agency can only execute short-term transfer such any water or use of works of the Agency to non-member units for the use in or outside the County upon a temporary or short-term basis
  1. Board must adopt that the water or works exceed the needs of the other units.
  2. Each contract for or sale of surplus water or use of such facilities shall expressly state that the sale or disposition is subject to prior right to use of such water or facilities by or for member units.

96.25 Establishes the Agency cannot serve as a Retail Entity.

- The Agency must not engage in the retail sale of water; that is, the sale of water to the ultimate consumer.

96.32 Recognize the Water Resources Responsibilities of the Agency and Cooperation with other entities.

- The agency may cooperate and act in conjunction and contract with the United States, State of California, any municipality, district, public or private corporation, or any person; in the purchase and sale of water, in the acquisition of water or a water supply, in the construction of any works for the controlling of flood or storm waters in the agency, or for the protection of property, watersheds, watercourses, highways and life, or for the purpose of conserving and transporting said waters for beneficial uses and purposes, including recreational uses and the generation of electric energy, and for the use, operation and management and ownership of such works.
- The agency also may make and perform any agreement with the United States, the State, any county, municipality, district, public or private corporation, or any person for the joint acquisition, disposition, operation or management of any property, works, water or water supply of a kind which might be acquired, disposed of, or operated by the agency.
96.38 County Employees are ex officio Representatives of the Agency.
- Officers of the county, assistants, deputies, clerks and employees, shall be ex officio officers, assistants, deputies, clerks and employees respectively of the Agency.

96-99 Co-existence of multiple agencies with similar powers.
- The Legislature found that because of conditions special to the county, it “declares its intent to permit within the limits of the El Dorado County Water Agency, the existence of more than one district, municipality or combination thereof, having similar powers over similar territory in regard to flood control, reclamation and water conservation, storage, distribution, sale, use or development” of water.

96.103 State Legislature’s finding:
The Legislature found that:
- Water problems in the County require county-wide:
  1. Water conservation,
  2. Flood control and
  3. Development of water resources.
- County, for many years, has had made investigations/engineering surveys of the County's water resources through private, public and federal engineers,
- The County has water districts, municipalities, and water conservation districts that exist within portions of the county, have acquired property and works, developed a limited water supply, and have incurred indebtedness.
- These entities are unable alone to economically develop an adequate water supply and control the floods of the County.
- It was 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 common systems.
- The Act is necessary for the control of water for the public good and proportion of property.
Recent EDWA Activities

El Dorado Water Agency

A public agency created under the 1959 El Dorado County Water Agency Act.
EDWA has engaged a variety of stakeholders for our WRDMP.

**Plan Advisory Group Members**
- Brian Mueller – El Dorado Irrigation District
- Charlene Carveth (LeeAnne Mila: Alternate) – County of El Dorado
- Jodi Lauber – Grizzly Flats Community Services District
- Kenneth Payne – El Dorado County Water Agency
- Sean Barclay – Tahoe City Public Utility District
- Shannon Cotulla (John Thiel: Alternate) – South Tahoe Public Utility District
- Steve Palmer (Adam Brown: Alternate) – Georgetown Divide Public Utility District
- Tiffany Schmid (Anne Novotny, Brendan Ferry: Alternates) – County of El Dorado

**Agricultural Advisory Group Members**
- Brian Mueller – El Dorado Irrigation District
- Charlene Carveth (LeeAnne Mila: Alternate) – County of El Dorado
- Christa Campbell (Tom Heflin: Alternate) – Rainbow Orchards, El Dorado County Chamber of Commerce
- Dave Pratt – El Dorado County Farm Bureau
- Dedrian Kobervig – El Dorado Agricultural Water Quality Management Corporation
- Doug Leisz – Citizens for Water, El Dorado County Chamber of Commerce
- Greg Boeger – Boeger Winery, El Dorado Wine Grape Growers Association
- Kenneth Payne – El Dorado County Water Agency
- Lloyd Walker – Walker Vineyard, El Dorado Wine Grape Growers Association
- Lynn Wunderlich – University of California Cooperative Extension
- Merv de Haas – El Dorado County Farm Bureau

**Municipal and Industrial Advisory Group Members**
- Brian Mueller – El Dorado Irrigation District
- Jodi Lauber – Grizzly Flats Community Services District
- Kenneth Payne – El Dorado County Water Agency
- Sean Barclay (Matt Homolka: Alternate) – Tahoe City Public Utility District
- Shannon Cotulla – South Tahoe Public Utility District
- Steve Palmer (Adam Brown: Alternate) – Georgetown Divide Public Utility District
- Tiffany Schmid (Anne Novotny, Brendan Ferry: Alternates) – County of El Dorado

**EDCWA Board of Directors**
- Brian Veerkamp
- Shiva Frentzen
- Kelly Sheehan
- Lori Parlin
- George Osborne/Lori Anzini

**Topic-Specific Consultations**
- Cynthia Freeland – County of El Dorado
- Frederic Schaefer – El Dorado County Water Agency
- Greg Stanton – County of El Dorado
- Jeffrey Warren – County of El Dorado
- Jose Crummett – County of El Dorado
- Kathryn Jeanfreau – County of El Dorado
- Olivia Byron-Cooper – County of El Dorado
- Patty Moley-Dunn – County of El Dorado

**Plan Development Team**
- Kenneth Payne – El Dorado County Water Agency
- Maritza Flores Marquez – Stantec
- Rebecca Guo – Stantec
- Vanessa Nishikawa – Stantec
- Yung-Hsin Sun – Stantec

**Technical Support**
- Brandon Ertlis – Davids Engineering
- Duncan MacEwan – ERA Economics
- Grant Davids – Davids Engineering
- Harriett Ross – ESA
- Kimberly Olyma – Stantec
- Kristen Hunter – EN2
- Leslie Moulton-Post – ESA
- Raymond Hoang – Stantec
- Rick Lind – EN2
- Robert Eckard – ESA
- Sachiko Itagaki – Kennedy Jenks
- Samuel Price – Stantec
- Tracey Eden-Bishop – EN2
Strategic Plan (2016-2020) In Review

- Transitional Agency
- Organizational Changes
- County-wide Role & Responsibilities Evolved (*WRDMP*)

- 2019 WRDMP
- Stormwater Management Plan (*County, City of Placerville, City of South Lake Tahoe*)
- SMUD Agreement
- 1999 Fazio Water Contract (*CVP Water*)
- Renewed CABY JPA & grants
- Formed a GSA with STPUD for SGMA
- Outline Small System needs in Other County Areas (outside purveyor boundaries)
- PERS Contract
- Inter-Agency Agreement w/ County
From Challenges to Resource Management Strategies

**Water Resources Management Challenges in El Dorado County**

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

**Similar Characteristics**

- **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

**Different Characteristics**
SP25+ Challenges & Opportunities
2019 Water Resources Development and Management (WRDMP) Implementation Strategy

- Risk Distribution for Board & Agency
- Opportunistic Perspective
- Spread topics allows focused efforts when appropriate
- Maintain the “role” of the Agency based on the Agency Policies.
  - Water Resources Development Plan
  - 1959 Water Act
  - Strategic Plan

- Stormwater (Placerville)
- Water Demand
- WRP
- Stormwater Management (Flood control as well as Inflow and Infiltration)
- Drought Planning and Monitoring (Drought Contingency Plan and Drought Monitoring Network)
- Headwaters/Watershed Management (recent draft report)
- Water System Storage (Small Water System Upgrades, Water Tanks, and Alder Res) – address in “Service Area Assessments”
- Sierra Tahoe IRWM projects
- CABY 2020 projects
### RMS1 – Secure Surface Water Supply Entitlements

<table>
<thead>
<tr>
<th>RMS Actions</th>
<th>West Slope</th>
<th>Tahoe Basin</th>
<th>Principal Implementing Agencies</th>
<th>Agency’s Role(s)</th>
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| 1a. Secure CVP long-term water service contracts with Reclamation          | X          | X           | EDCWA, EID, GDPUD                | L – Complete contract negotiation and execution for 15-TAF CVP (Fazio) Water Service Contract, and in coordination with water purveyors and regional partners, lead the development of additional plan and actions for full utilization  
S – Support water purveyors and regional partners in engagement with Reclamation and federal advocacy |
| 1b. Secure water rights for projected needs                                | X          | X           | EDCWA, 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 water right proceedings  
(e.g. surface water and groundwater rights) and advocacy |
| 1c. Develop water infrastructure to meet projected needs                   | X          | X           | City of Placerville, EDCWA, EID, GDPUD, GFCSD, STPUD, TCPUD | L – Represent OCA in water supply and infrastructure planning  
F – Coordinate with water purveyors on water supply needs, to improve overall countywide infrastructure planning and Agency’s actions |
| 1d. Manage and leverage Sacramento Municipal Utility District storage agreement | X          | X           | EDCWA                            | L – Administer and manage the El Dorado Sacramento Municipal Utility District Agreement for countywide benefits, and in coordination with water purveyors, lead the development of the plan and actions for full utilization  
L – Develop management strategies for strategic use in coordination with water purveyors and other potential water users |
| 1e. Develop operational agreements as needed for flexible use of water supply entitlements | X          | X           | City of Placerville, EDCWA, EID, GDPUD, GFCSD, STPUD, TCPUD | L – Develop additional agreements with water purveyors and regional partners for use of Fazio contract and EDCWA’s water rights, when acquired  
F – Coordinate with water purveyors on compatible strategy for water use |
| 1f. Determine water purveyors for OCA                                     | X          | X           | County, EDCWA, El Dorado County LAFCO | L – Develop work plan and actions for the determination in collaboration with County, and coordinate with El Dorado County LAFCO for approval process |
Evolving Changes – Vulnerability of Small Public Water Systems

- A less complicated example of continued changes and adaptive management prompted by drought protection needs and regulatory requirements.
Connect to the NAB RDCP in the Lower Basin

Incorporate related management actions such as including droughts in County’s Hazard Mitigation Plan & possibly, human rights to water.

Incorporate potential County drought planning for small water systems and rural communities.
Reclamation’s Requirements for a RDCP:
RDCP Approach Similar to RWA Approach

An RDCP will answer:

1. How will we recognize the next drought in the early stages?
2. How will drought affect us?
3. How can we protect ourselves from the next drought?

- **Drought Monitoring**: Establish a monitoring, collection, and analysis process as well as metrics/triggers to indicate drought conditions.
- **Vulnerability Assessment**: Assess risks to critical resources within the planning area and factors contributing to those risks.
- **Mitigation Actions**: Identify, evaluate, and prioritize mitigation actions and activities that will build long-term resiliency to drought.
- **Response Actions**: Identify, evaluate, and prioritize response actions and activities that can be implemented during a drought.
- **Operational and Administrative Framework**: Identify who is responsible for the actions necessary to implement each element of the RDCP.
- **Plan Update Process**: Define a process and schedule for monitoring, evaluating, and updating the RDCP.
UARB RDCP is Unique

- Predominantly rural-agricultural area in the foothills
- Relies mostly on surface water
- Very limited shallow fractured rock groundwater

... thus, EDWA is tailoring the RDCP to meet its specific needs
Initiating focus on Watershed Management
Initiating focus on Watershed Management

Integrating water resources protection with other watershed needs:

- Infrastructure (roads, broadband, reservoirs, rural communities, etc.)
- Forest management
- River/Stream Protections
- Recreation
- Etc.
Other Challenges

Preservation Areas

Headwaters
Evolving Changes – Hydrology under Climate Change (ARBS)


Source: American River Basin Study; Preliminary Information
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 the climate change conditions.
Evolving Changes - Water Supply-Demand Imbalance (West Slope)

The projected water demand associated with the economic activities and way of life at the capacity level envisioned in the County of El Dorado General Plan is assumed to be realized by 2070. The preliminary results from ongoing economic-based agricultural development opportunity and municipal and industrial demand review incorporates considerations of foreseeable demand management practices, technology advancement, and regulatory changes. The climate change also affects agricultural demands and municipal and industrial outdoor demands.
The preliminary results from applying the demand projection and climate hydrology in 2070 suggest a significant water supply-demand imbalance, especially during drought conditions, based on existing facilities and operations. Additional adaptation strategies are required for sustaining the socioeconomic conditions and way of life in the West Slope.
Need to Address long-term Planning for Rural-Ag Areas
Next: Rural-Ag Demand Overview for Upper Portions of ARB
Questions / Comments