El Dorado Water Agency
STORMWATER RESOURCE INITIATIVE

El Dorado Water Agency

As incorporated in its 2019 Water Resources Development and Management Plan, EDWA recognizes that stormwater as a resource is a critical element to achieving our mission – *Ensure El Dorado County has adequate water for today, and the future.*

Managing stormwater as a resource helps El Dorado County recognize the interconnection of various water management challenges and the importance of integrated, multi-benefit projects. This understanding and subsequent approach helps address many water resource challenges in El Dorado County, including reducing the water supply-demand imbalance, reducing localized flooding, improving water quality, and providing environmental protection and habitat enhancement. EDWA's stormwater resource initiative will promote such a practice in collaboration with stormwater managers, natural resource managers, and stakeholders. This initiative focuses on applying this practice in the West Slope of El Dorado County, as this has already been adopted in the Tahoe Basin through the Tahoe Regional Planning Agency.

EDWA STORMWATER PARTNERSHIPS

- American River Conservancy
- Caltrans
- City of Placerville
- El Dorado County
- El Dorado County and Georgetown Divide Resource Conservation Districts
- El Dorado Irrigation District
- U.S. Forest Service

In 2018, EDWA, El Dorado County, and the City of Placerville completed the West Slope Stormwater Resource Plan consistent with the Stormwater Resource Planning Act in collaboration with many partners, including El Dorado County and Georgetown Divide Resource Conservation Districts, El Dorado Irrigation District, American River Conservancy, U.S. Forest Service, and California Department of Transportation. The West Slope is located in a unique setting as the terrains are generally steep with granite formation and groundwater only exists in limited fractured rock aquifers. Recognizing this unique setting, the partners formulated a Stormwater Resource Plan with a nexus to high-elevation offstream storage to replace the functions of losing snowpack under climate change and broader watershed management activities. This novel integration highlights the importance for policy makers and regulators to appreciate the needs of, and viable solutions for, the Sierra Nevada foothills and headwaters as they are drastically different from areas like the Central Valley or coastal region. Investments in the foothills and headwaters, including the West Slope, greatly benefit the downstream Central Valley in both water supply and flood management. The associated water supply benefits have potential to reach the entire State of California.

PARTNERS: County

COST: $650,000

SCHEDULE: Completion 2021

Zero Discharge Headington Wash Rack Facility

Project includes modifying the existing wash and maintenance facility to be a zero discharge facility which is used by the County for maintaining its vehicles and equipment. The zero discharge facility will house a contained wash system that automatically treats and reuses the wash water for vehicle and equipment cleaning and maintenance.

- Eliminates sewer discharges, improves stormwater management at the facility by enclosing and containing pollutant sources and pollutant generating activities (i.e. washing and stored materials) from potential contact with stormwater, and contributes to TMDL requirements.
- Improves water supply reliability and promotes water conservation by nearly eliminating domestic water supply used for equipment maintenance through the reuse of the treated cleaning water, using rain tanks for rainwater storage through the dry months, and disconnecting the facility from the sewer.
- Provides environmental benefits by improving the natural flow of Weber Creek.
- Provides jobs during construction, and opportunities for public education. Located in a disadvantaged community.

PARTNERS: City of Placerville, EDWA

COST: Estimated $4 million

SCHEDULE: Anticipated Construction May 2023, Completion September 2023

Hangtown Creek Sewer Relocation

Relocating the Hangtown Creek sewer between Clay Street and Locust Avenue will improve water quality by reducing sanitary sewer overflows into Hangtown Creek, as well as diminish high flow impacts to the Hangtown Creek Water Reclamation Facility. Additionally, construction of the project will create short-term employment opportunities.

- Improves water quality by reducing overflows into creek.
- Reduces sanitary sewer overflows.
- Provides jobs during construction, public education, and provides community involvement.

PARTNERS: EDWA, County, El Dorado County Fair Association

COST: Estimate unavailable

SCHEDULE: Completion 2021

Water Quality Improvements at the El Dorado County Fairgrounds

This project will incorporate technology that captures and uses stormwater on site, treats impervious runoff, provides groundwater infiltration, incorporates drainage ditch enhancements, reduces runoff, and prevents non-point source pollution.

- Reduces the occurrence of erosion, captures and uses stormwater on site, treats impervious runoff, incorporates drainage ditch enhancements, and reduces non-point source pollution. Near the roads, grass swales will be added for stormwater conveyance to treat and percolate runoff into the ground and contribute to TMDL requirements.
- Promotes water conservation and improves water supply reliability by incorporating a rooftop rainwater capture system for non-potable water use on site.
- Mitigates and reduces offsite runoff and provides groundwater infiltration. Ditches will be added to divert stormwater runoff to the swales and grass filter strips.
- Improves the environment by re-introducing natural drainage systems. Low-impact development approaches.
- Treats surface flow from the adjacent impervious areas with the addition of grass filter strips around the paved areas of the fairgrounds. Demonstrates to the public the technology to treat, capture, and reuse stormwater runoff, as well as ensures year-round recreation, short-term jobs, and increases urban green space.

PARTNERS: EDWA, City of Placerville

COST: Preliminary estimates $2.8-4M

SCHEDULE: Start 2025, Completion 2032

Cedar Ravine Road Drainage Improvement and Sewer Main Removal

Drainage improvements will replace the open channel, which is often constricted by property improvements and trees, with approximately 800 linear feet of box culverts. As a result, the creek will be widened and provide necessary capacity for the flow of the channel, and diminish ongoing damage to the road.

- Removes in-channel sewer main to create water quality benefits, increases filtration and treatment of runoff, and contributes to TMDL requirements.
- Reduces flood risk by reducing rate and volume of runoff.
- Restores creek and reestablishes natural flow. Provides opportunities for low-impact development.
- Enhances public safety and use through construction of pedestrian walkway and cyclist access, provides jobs, and provides benefits to disadvantaged communities.

PARTNERS: EDWA, County, Cameron Park CSD, El Dorado Hills CSD

COST: Estimate unavailable

SCHEDULE: Estimated Completion 2022

Cameron Park Drainage Improvements

Drainage improvements will address the occurrence of critical flooding due to inadequate and aging infrastructure, including the addition of culverts, replacing culverts, adding ditches, cleaning out current ditches, cleaning up local streams and creeks used for drainage, adding storm sewers and drains to areas that experience critical flooding, and stabilizing banks on local creeks and tributaries.

- Improves water quality through filtration and treatment of stormwater runoff, nonpoint source pollution control, and reestablishes the natural drainage and treatment of stormwater runoff.
- Improves overall drainage to reduce runoff rate and volume.
- Reestablishes the natural drainage and treatment of stormwater runoff.
- Provides jobs during construction, public education, and opportunities for community involvement.

- **Water Quality** – Improves quality of surface and groundwater supplies. Contributes to total maximum daily load (TMDL) requirements by treating runoff and overflows.
- **Water Supply** – Creates potable and reliable drinking and agriculture water supply.
- **Flood Risk Reduction** – Mitigates and reduces flood risk through capture, diversion, or reduction of the rate and volume of runoff.
- **Environmental** – Improves snowpack retention and natural watershed enhancements, such as stream flows, wetlands, riparian and habit. Reduces energy use and greenhouse gas emissions. Includes opportunities for low-impact development.
- **Community** – Creates jobs, enhances or creates community amenities, and/or provides improved public safety. Includes improvements in disadvantaged communities (DACs).
- **Water Reuse** – Improves domestic water supply reliability by capturing stormwater or wastewater for reuse.