

8/28/21



Serving El Dorado County Since 1925

A Brief History of El Dorado Irrigation District



The Early Days— Setting the Stage for EID

Water has been and continues to be an undeniable force in shaping the economic, ecological, and cultural face of El Dorado County. And El Dorado Irrigation District has been at the forefront of providing essential water services in the county since 1925.

The District's history is closely intertwined with early development of water resources, tracing back to California's historic gold rush days. When James W. Marshall picked up that first nugget at Coloma in January 1848, he triggered a human migration with few equals. "Gold!" was heard around the world, and tens of thousands headed for the Mother Lode.

Diarists, researchers, historians, novelists, and filmmakers have captured the recorded thoughts and deeds of these would-be miners, their families, a host of entrepreneurs, and the inevitable collection of disreputable characters who always accompany those willing to dig for their riches. Many met with hard times and broken dreams. Others persevered and prospered as farmers, ranchers, loggers, inventors, retailers, educators, and more.

Water was essential to successful mining—and to agriculture, which grew side by side with the mines. The development of hydropower production in the early 1900s brought a new competitor for water onto the scene. Water rights became more precious than gold hard-scrabbled from unforgiving ground and stubborn mountainsides.

So it remains today.



Gold panning required water to wash away sand and gravel.

January 1848: James Marshall discovers gold at Sutter's Mill, and the rush is on. From just a handful of non-natives before Marshall's discovery, El Dorado County's population jumped to more than 20,000 by 1850.

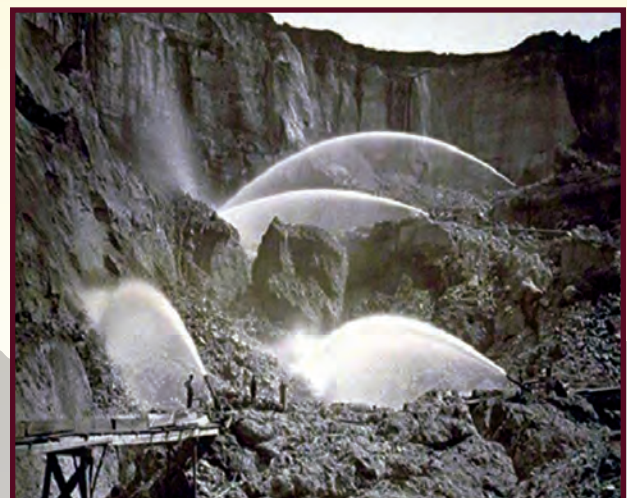
September 1850: California enters the Union. El Dorado is one of the original 27 counties.

1850s – 1880s: The state claims all water, but appropriates rights to mining interests. Ditch and canal companies spring up throughout the Mother Lode region. As disputes arise, water rights case law develops and evolves. The state legislature refines the water appropriations process, but it remains simple: Post a notice, record it with the county, and use the water. As mining declines, agriculture—fed by mining ditches—increases in economic importance.

1914: New legislation reaffirms California's rights to all unappropriated waters in the state and requires state permits for water use in the future. Still in effect, this law makes pre-1914 water rights all the more valuable.



Two major eras of ditch and canal building occurred in El Dorado County. The first (1852 – 1858) provided water for sluicing and hydraulic mining once the easy gold diggings in streams paid out. The second phase (1867 – 1880) helped for a short time to revive gold mining as one response to the nationwide depression of 1873. Agriculture and towns also benefitted from the canals.



Damage to California's croplands and streams from hydraulic mining led to a famous 1884 court decision in favor of farmer plaintiffs; Judge Lorenzo Sawyer said hydraulic mining was "a public and private nuisance."

The First 30 Years—

Securing a Reliable Water Supply

In 1925, some 77 years after Marshall's discovery of gold and in the face of growing competition for water from hydropower producers, El Dorado County residents voted to form El Dorado Irrigation District. The reasons? To protect water filings, ensure a secure water supply, keep irrigation rates reasonable, and increase the value of agricultural lands.

The emphasis on agriculture was understandable. By 1920, thousands of acres were in crop production, fed mostly by old mining ditches that relied on uncertain precipitation patterns and little storage. Indeed, adequate water for agricultural irrigation and domestic needs was the focus of the EID Board of Directors' first meeting: "The question arose as to the water shortage for the coming irrigation season, and it was the consensus that every effort be made to bring about immediate relief."

Two years later, the District purchased the water storage and distribution system of the financially troubled El Dorado Water Corporation. Facilities and infrastructure consisted of about 70 miles of main laterals and ditches as well as Weber Reservoir, which the corporation completed in 1924.

For the next few decades, EID sought new water supplies. Faced with the Great Depression and other woes, finances were tight. But demand for water continued to rise, spurred by more land in agricultural production and a growing population. By the 1950s, there were nearly as many people in El Dorado County as there were during the apex of the 1850s – 1860s mining days.

The culmination of a long-held dream came with completion of the Sly Park reservoir, now known as Jenkinson Lake, in the mid-1950s. Built by the U.S. Bureau of Reclamation as part of California's Central Valley Project, the reservoir and surrounding recreation lands were officially transferred into EID ownership in late 2003. Trace the steps to Sly Park's completion in the sidebar on the next page.



1883 sketch of the Wakamatsu Tea and Silk Farm, the first Japanese colony in North America. Now a historical site and memorial, the farm—located in the Gold Hill area of El Dorado County—was initially settled in 1869.

Mileposts along the road to the District's formation

1873 – 1910: John Kirk and partners sell their interests in the El Dorado Canal project to El Dorado Water and Deep Gravel Mining Company. The project evolves from water storage and delivery to include hydropower production. American River Electric Company completes the first hydroelectric power facility on the South Fork American River and sells it to Western States Gas and Electric in 1910.

1917: The newly organized El Dorado Water Users Association (mostly farmers) files a complaint with the state's Railroad Commission to decide the issue of using water for agriculture or hydropower generation. The resulting 1919 agreement does not ensure enough water for irrigation.

1919 – 1922: El Dorado Water Company forms in 1919 to control water and associated facilities in the county. In 1922, the new El Dorado Water Corporation plans to build a Hazel Valley water storage project, but chooses Weber Reservoir instead. Both groups run into financial difficulties.

1925: Water supplies continue to be inadequate during dry years for agriculture and domestic needs. County residents vote in favor of an irrigation district. On October 5, the El Dorado County Board of Supervisors certifies the election results, and El Dorado Irrigation District is born.

ORGANIZATION MEETING EL DORADO IRRIGATION DISTRICT

The Board of Supervisors of the County of El Dorado, State of California, having heretofore, to wit: on the 5th day of October, 1925, said time being the time fixed by law for canvassing the vote of the El Dorado Irrigation District, met and canvassed the votes cast at the election held September 22nd, 1925, for the purpose of determining whether said El Dorado Irrigation District be organized and said Board of Supervisors having met and canvassed said vote and having declared said El Dorado Irrigation District formed

Water Rights—Key to Present and Future Water Supplies

The District's search for reliable water supplies was not wholly centered on lower elevation ditches, canals, and reservoirs. EID also looked to the high Sierra, particularly the El Dorado Canal project that had its beginnings in 1856. That's when John Kirk, an engineering consultant from Pennsylvania who had made his way to Placerville, posted his first notice claiming waters of the South Fork American River.

With that, Kirk initiated a vast water storage and conveyance system, now called Project 184, that includes Lake Aloha; Echo, Silver, and Caples lakes; 22.3 miles of flumes and canals; Forebay Reservoir in Pollock Pines; and a powerhouse.

This accomplishment involved hard labor, fantastic engineering feats, mechanical ingenuity, and inventive solutions to the challenges of storing and distributing high-Sierra water in the late 19th and early 20th centuries.

It also centered on questions about who should hold rights to the water. Kirk himself was involved in the early years of claims, counterclaims, and court decisions that attempted to settle such questions. Today, legal disputes still dot the water rights landscape.

Kirk's grandly envisioned canal project evolved to include hydropower production, and in 1928, Pacific Gas and Electric Company bought the system from Kirk's successors. Seventy-one years later, in 1999, PG&E conveyed the system to EID. Operating under a renewed, 40-year federal license, Project 184 delivers water for EID customers and produces up to \$10 million worth of hydropower each year.

Since 1925, the District has secured rights to nearly 80,000 acre-feet of water. This includes the 33,400 acre-feet at Jenkinson Lake; more than 32,000 acre-feet in the high-Sierra water delivery system; 7,550 acre-feet of Central Valley Project water; and 4,560 acre-feet of water from ditch systems and Weber Reservoir.

Most of the ditch water rights date back to the 1800s and are not subject to the lengthy and costly permitting process that the state of California enacted in 1914. Today's customers owe much to early 20th century farmers and townspeople who laid the foundation for EID's water system in the solid bedrock of pre-1914 water rights.

* An acre-foot (325,851 gallons) is equal to one acre covered by a foot of water.

Building and Filling Jenkinson Lake

1927 – mid-1930s: After an EID Board-sanctioned engineering study, residents pass a \$1.3 million bond to finance development of Hazel Valley for water storage and delivery. The Great Depression, bank failures, and defaulted taxes contribute to financial troubles. Work at Hazel Valley stops. Supplemental water from Diamond Ridge Ditch helps, but is subject to fluctuating streamflows.

1938 – 1939: EID's engineer/manager develops the first plans for a reservoir at Sly Park, but the District's Securities Commission says no.

1943 – 1946: Demand for water continues to go up. Raising Blakely Reservoir five feet helps, but not enough. In 1944, the District sets aside \$5,000 for a study of Sly Park and Squaw Hollow Creek as reservoir sites and asks the U.S. Bureau of Reclamation to assess the study. In late 1945, the Bureau agrees to examine the Sly Park site.

1946 – 1955: As EID and the Bureau work on the Sly Park site, the federal government contemplates a large dam on the American River near Folsom. Enlisting the support of Congressman Clair Engle, EID and citizens push for inclusion of a Sly Park unit in the legislation authorizing the dam at Folsom. Success is achieved. The first water from Sly Park Reservoir is delivered in the summer of 1955.



The formal dedication ceremony for Sly Park Reservoir (Jenkinson Lake) took place May 6, 1956.

Today, more than 300,000 visitors a year enjoy the amenities of Sly Park Recreation Area. Jenkinson Lake, the centerpiece of the park, is the District's single largest water storage area for agricultural irrigation and domestic consumption.

Wastewater—A New Means to Supplement Water Supplies

When EID got into the sewage business, it was 1960 and at the request of Cameron Park leaders, who asked the District to assume operation and maintenance of the community's sewer system.

EID Board members were willing to do so because they viewed recycled water produced at wastewater treatment plants as a resource. The idea was to use the recycled water, rather than drinking water, for landscape irrigation.

In the years since 1960, the District has constructed, expanded, and renovated many portions of the sewer system to ensure that customers receive reliable service.

The work also reflects the need to meet ever-changing, more stringent state and federal regulations that govern the treatment and discharge of wastewater.

And the District is fulfilling the Board's 1960 vision to use recycled water as a supplemental water supply. EID produces recycled water from both the Deer Creek and El Dorado Hills wastewater treatment plants. A separate piped system delivers the recycled water to front and back yards at approximately 4,000 homes as well as to commercial and public landscapes.

Every drop of recycled water used is a drop saved in the drinking water bank.

Highlights of Wastewater Treatment

1960 to the present: At Cameron Park's request, EID takes over that community's sewer system.

Soon to follow were:

- Sanitation District No. 1, serving the Camino Heights area
- Sanitation District No. 2, serving the El Dorado and Diamond Springs areas
- The El Dorado Hills sewer treatment plant, built by developers in 1961 to serve the greater El Dorado Hills area

Major projects to improve the facilities, construct new infrastructure, and meet strict regulatory requirements over the past decade include:

- Replacement of the Mother Lode force main
- Upgrades to the New York Creek lift station
- Projects to ensure regulatory compliance at the Deer Creek wastewater plant
- Replacement of the Silva Valley sewer line
- Phase III improvements at the El Dorado Hills wastewater plant
- Decommissioning the Rancho Ponderosa wastewater plant
- Recycled water pump station at Bass Lake



El Dorado Hills wastewater treatment plant is one of four such plants at the District.



EID produced 2,063 acre-feet (672 million gallons) of recycled water in 2010.

EID Today—Essential Services

to Meet Diverse Needs

Some things have changed quite a bit in El Dorado County since the vote to form EID was certified in 1925. The county's population in the early 1920s was about 6,400; in 2011, it was more than 181,000. And EID's service area has grown from 31,500 acres in 1925 to 140,800 acres today.

Other things haven't changed much. Clean water originating in the high Sierra continues to help shape economic, ecological, and cultural aspects of the county. Agriculture remains an economic cornerstone. Rural attributes and outdoor recreation opportunities still attract visitors and new residents. And EID has never ceased working to secure new water rights.

The District's commitment to provide customers with high-quality services and products hasn't changed either. That's been a constant since 1925.



El Dorado Hills water treatment plant processed 6 million gallons of water per day when EID took over its operation in early 1973. At that time, the facility was in the middle of undeveloped land. Today, residences, a school, and a community park surround the plant. Its treatment capacity has been increased to 26 million gallons per day.

In part to meet increasingly stringent regulations and to increase safety and reliability, EID has upgraded its wastewater treatment plants at considerable cost over several years. (r) The odor-reducing biofilter system at EID's El Dorado Hills wastewater treatment plant cost \$2.1 million. It is part of Phase IIIA, a multi-year project completed in 2010 at a total cost of more than \$64 million.



Services and Benefits

The number and types of services EID provides have evolved to meet the demands of a growing, diverse population and to adhere to ever-changing, more strict regulatory requirements.

Treat and deliver water

- 39,987 accounts, 1,245 miles of pipeline, 50 miles of canals and ditches, 5 treatment plants, 36 storage reservoirs/ tanks, 38 pump stations

Collect and treat wastewater

- 20,687 accounts, 560 miles of pipeline and force mains, 4 treatment plants, 64 lift stations

Produce and distribute recycled water for landscape irrigation

- 4,079 accounts, 54 miles of pipeline, 2 treatment plants, 5 storage reservoirs/tanks, 5 pump stations

Generate hydroelectric and solar power

- Every year, EID's 21-megawatt hydroelectric power plant accounts for \$6 million to \$10 million in revenue.
- EID's 1-megawatt solar facility saves up to \$250,000 a year on the District's electricity bills and helps keep the lights on in California.

Use energy efficiently

- Membership in PG&E's energy efficient, demand-reduction programs saves \$250,000 to \$300,000 each year on EID's electricity bills and frees up energy for the state's grid during peak-use times.

Partner with customers through water conservation initiatives

- Water-efficient irrigation systems for homes, businesses, and agriculture save an average of more than 2,000 acre-feet of water per year.

Work to perfect and secure water rights

- With the county, pursuing the rights to an additional 40,000 acre-feet of water

Manage recreation sites at Sly Park and along the Project 184 water delivery system

- Jenkinson Lake, Silver Lake campground and boat launch, Caples Lake boat launch, Forebay Reservoir

**2890 Mosquito Road
Placerville, CA 95667
www.eid.org
530.622.4513
916.965.0930**



Produced in-house by EID's Communications and Community Relations Department, December 2011