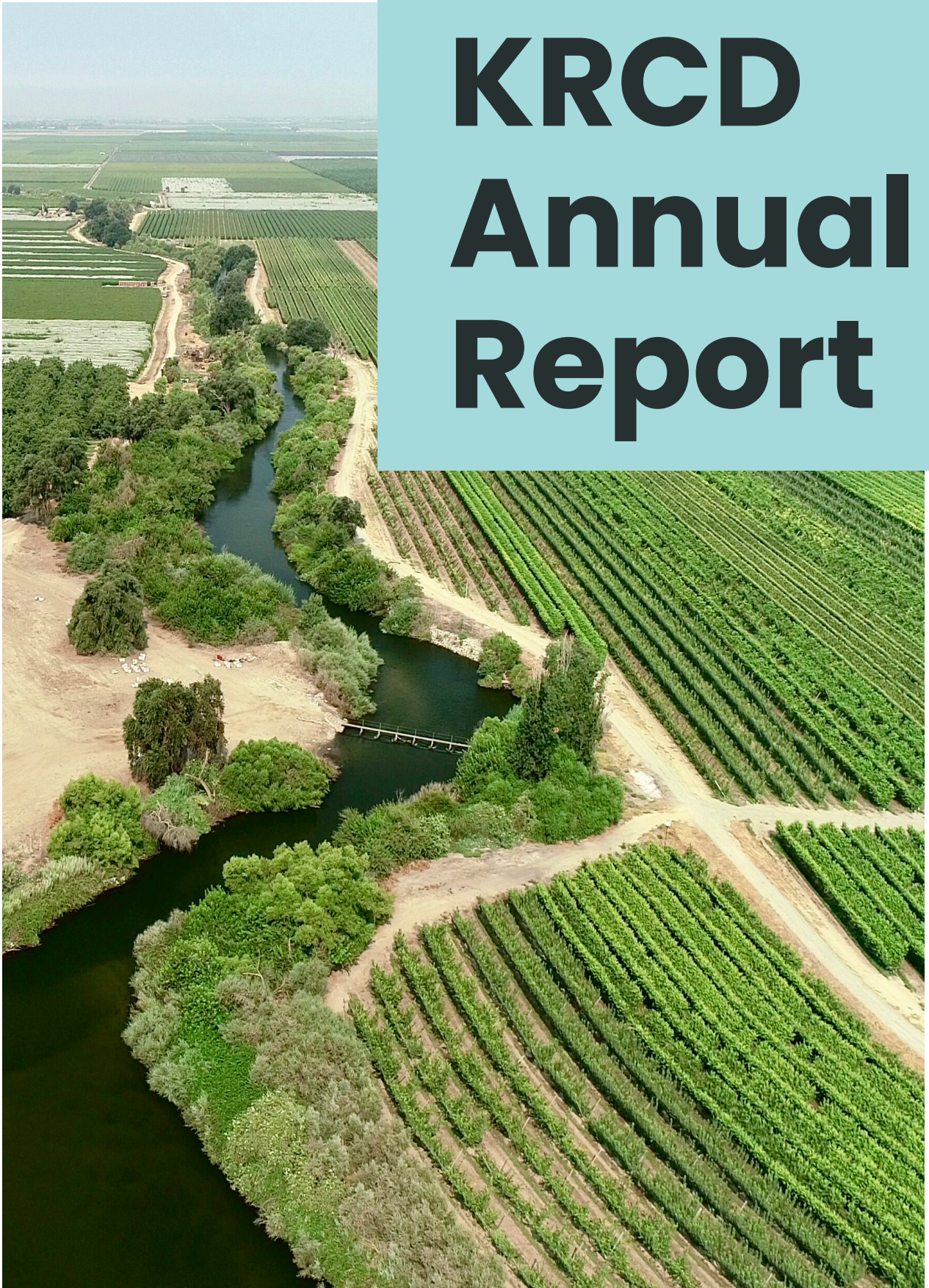


KRCD Annual Report



Kings River Conservation District

2022

About Us



Our Mission

Responsibly manage the water, energy, and environmental resources entrusted to the District.

Our Vision

Deliver the highest level of customer service and system reliability for the sustained benefit of our stakeholders.

Our Values

Excellence – Achieve a superior level of professionalism, leadership, management, teamwork, safety, and employee growth and development.

Innovation – Create new pathways to solutions that are functional, practical, politically and economically feasible, scientifically sound, and environmentally sensitive.

Integrity – Treat everyone with honesty, respect, and sincerity.



1.2 M

**Acre Service
Area**

140

**Miles of Flood
Levees**

160

**Megawatts of
Carbon-Free Energy**

41

Employees



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General Manager's Message

Despite ever-changing climatology and resulting impacts on our hydroelectric generation production, 2022 has afforded us the opportunity to accomplish significant maintenance along the Kings River Flood Project through our team's proactive response to grant opportunities. KRCD was awarded more than \$3 million in grant funding to help eliminate invasive species, remove trash dumped along the Kings River west of Highway 43 in Fresno and Kings counties, and remove sediment from portions of the river channel.

In addition, the KRCD team continued to effectively manage the ongoing pandemic and ensure 100% of our services were provided to our constituency without delay. Our workforce is made up of 41 staff and three primary locations: the Fresno District Office, the Riverdale Flood O&M shop, and the Jeff L. Taylor Pine Flat Power Plant at Pine Flat Dam. I greatly appreciate all our teams' support and dedication and how we have evolved as an organization through these times. I would also like to note the passing of Board Member David Cehrs, PhD who served on the Board from 2008 until his passing in December 2022. Dr. Cehrs represented KRCD constituents faithfully during his tenure on the Board.

While this is my 12th year with KRCD, I am also celebrating my first full year as General Manager. It has been truly rewarding working with our board of directors and leadership from the multiple agencies and organizations KRCD supports, and as your partner, ensuring the long-term success of our valley.

If there are any questions, please feel free to reach out to us.



David Merritt



2022 Board of Directors



Chris Kapheim

Division 1



Mike M. Yoshimoto

Division 2



Gregory Beberian

Division 3- Vice President



Mark McKean

Division 4



D. Paul Stanfield

Division 5- President



Ceil Howe, Jr.

Division 6



Dr. David Cehrs

Division 7

Water

Flood Control

Since 1959, KRCD has been the sponsor for the Kings River Channel Improvement Project, authorized under the provisions of the Flood Control Act of 1944. The project consists of 140 miles of flood control levees and associated channel along the Kings River.

Ongoing drought conditions in the region have allowed KRCD's Flood Operation and Maintenance (Flood O&M) team to focus on several projects throughout the Flood Project along the lower Kings River. Through multiple state grant awards, the Flood O&M team stayed very busy on priority projects removing built up sediment, eliminating illegal trash dumped along the Flood Project, along with eliminating invasive vegetation.





In 2021, KRCD partnered with the Tulare Lake Resource Conservation District and was awarded a \$1.2 million grant by the California Department of Conservation under California's Proposition 68 Riparian Restoration Grant Program. Eight miles of invasive vegetation were cleared on the Clark's Fork and South Fork of the Kings River. A total of 320,695 pounds of trash, including 1,319 tires, were removed from the Flood Project. Over 200 brush piles were chipped, instead of burned, saving approximately 400 tons of CO2 and particulate emissions released to the atmosphere. This grant also allowed KRCD to partner with the California Conservation Corps, who spent over 6,227 man hours clearing brush from levees and channel.

In 2022, a second round of the Prop 68 Riparian Restoration Grant was awarded to the North Fork Kings Resource Conservation District and KRCD, with an award value of \$2.7 million. This project focused on invasive vegetation and trash removal along the Crescent Bypass and the North Fork, downstream of Island Weir.



**320,695 lbs
of trash removed**



**6,227 hours
spent clearing vegetation**



**400 tons
of CO2 emissions saved**

The California Department of Water Resources (DWR) administered a non-competitive grant opportunity which was the first round of the Sustainable Groundwater Management Act (SGMA) Implementation Grant Program. The Tulare Lake Subbasin Groundwater Sustainability Agencies (GSAs) developed a spending plan for the SGMA Implementation Grant that included a \$1.5 million award, sponsored by the South Fork Kings GSA, to remove sediment from the Empire Weir 1 Pool of the Kings River.

Water



Kings Basin Water Authority

The Kings Basin Water Authority (KBWA), which is administered by KRCD, is made up of a collaborative group of local public, private, and nongovernmental agencies that has the goal of managing water resources in the Kings Groundwater Subbasin. During this last year, the KBWA collaborated on four projects that addressed different water-related issues within its boundaries.

Project 1

East Orosi Community Services District Well and Pipeline Design and Environmental Documents Project: The project will help EOCSD address nitrate contamination issues by providing an additional supply of water to the community. Project was awarded \$159,144.

Project 2

Malaga County Water District Replace Well 3 Project: Funding for this project was used to prepare 70 percent of the preliminary designs and documents needed for the replacement of a well contaminated with DBCP. Project was awarded \$90,856.

Project 3

Sultana Community Services District and Monson Storm Water Project: Funding for this project was used to prepare topographical surveys and a feasibility study of new storm water management infrastructure, including a storm water collection system and recharge basins, for the communities of Sultana and Monson. Project was awarded \$142,000.

Project 4

Fresno Metropolitan Flood Control District Basin "CF" Stormwater Recharge and Flood Protection Project: The goal of this project is to increase groundwater recharge and localized flood protection by building a basin relief pipeline that will connect a stormwater basin with a nearby canal. Project was awarded \$1,113,033.

Kings River Water Quality Coalition



Since 2009, the Kings River Water Quality Coalition (KRWQC) has been helping growers within the region comply with the Central Valley Regional Water Control Board regulations. Staffed by KRCD, KRWQC conducts regional monitoring and reporting and assists members in compliance with the regulations. This past year, the KRWQC represented 3,604 members and 712,274 irrigated acres.

Per the 2013 Waste Discharge Requirements General Order for Growers within the Tulare Lake Basin Area, the KRWQC is required to report on the water quality of surface and groundwater within its boundaries. During the last year, KRCD staff conducted 24 surface water monitoring samples at 8 sites and 40 groundwater quality monitoring well samples. These were recorded and submitted to the Central Valley Regional Water Quality Control Board in the form of the 2021 Annual Monitoring Report and the Groundwater Trend Monitoring Annual Status Report.

KRCD staff also maintain three water fill stations in Kerman, Hanford, and Dinuba that are offered to residents who need free and safe drinking water. The combined average gallons collected by residents per day equaled 270. Funding for these fill stations comes from groundwater dischargers within KRWQC.



Water



Kings Water Alliance

Back in 2019, the State Water Resources Control Board adopted the Nitrate Control Program intended to solve the nitrate-contamination problem affecting the domestic drinking water of residential well owners. As a response, the Kings Water Alliance Management Zone was formed in the Kings and Tulare Lake Subbasins and became a non-profit public benefit organization in 2020.



333 private well tests collected



192 households receiving bottled water

In 2021, KRCD staff launched the Kings Water Alliance and began offering free well tests to private residential well owners. Over the year, a total of 333 well tests were performed by KRCD staff. All households with well test results that showed nitrates above the Maximum Contaminant Level were offered free bottled water deliveries to their homes. At the end of the year, a total of 192 households were receiving bottled water.

Groundwater

Because of the 2014 Sustainable Groundwater Management Act (SGMA), twelve local Groundwater Sustainability Agencies (GSAs) within KRCD's boundaries have been established to manage groundwater. KRCD provides technical, administrative, financial, and outreach assistance to two local GSAs.

During the last year, KRCD helped the North Fork Kings and South Fork Kings GSAs revise their Groundwater Sustainability Plans (GSP) based on comments from the Department of Water Resources. KRCD also assisted in the development of the spending plans for the SGMA Round 1 Implementation Grant. Lastly, due to the Governor's Executive Order requiring GSAs to review new well permit applications, KRCD is collaborating with both Fresno and Kings county's permitting departments and the two GSAs to implement a well permit process.

Back in 2010, KRCD began measuring subsidence intermittently within the service area. For the last three years, KRCD staff has conducted an annual subsidence survey in the Kings Subbasin, Tulare Lake Subbasin, and along the Kings River levees. The data collected is a part of the SGMA monitoring network that local GSAs use in the GSP annual reports.



Power

Jeff L. Taylor Pine Flat Power Plant

Since its opening in 1984, the Jeff L. Taylor Pine Flat Power Plant has been a significant source of carbon free generation. All energy produced in the Power Plant is purchased by the California Department of Water Resources for use in the State Water Project's pumping facilities. This past year, the low annual rainfall and below average snowpack paired with the continued drought conditions have posed a challenge to Pine Flat Power Plant's energy generation output.

Although it was a limited season in terms of energy generation, the Plant was able to utilize all the water demand available to maximize generation while maintaining all Federal Energy Regulatory Commission (FERC) regulations. The gross power generated by the Plant equaled **110,866 megawatts** for the 2022 year.

During the year, the Plant staff completed multiple activities and improvement projects, further restoring long-term availability:

- Upgraded the generator and transformer protection system from electro-mechanical relays to micro-processor relays for all three generating units.
- Performed annual maintenance on Unit 3 generator and penstock.
- Repaved original 1983 plant access road.

In December 2021, the District applied for a non-capacity amendment of license with FERC for the addition of a small renewable 6-megawatt hydroelectric turbine generator. The new unit would utilize bypass lows from the dam that are too small for the existing installed units. Throughout 2022, work on this project continued with respective regulatory agencies, and the project was issued a Water Quality Certification from the California State Water Resource Control Board in December. Regulatory planning will continue into 2023.



Environment

Kings River Fisheries Management Program

Since its creation in 1999, the Kings River Fisheries Management Program (KRFMP) has proven to be a successful addition to the conservation of the Kings River. Through a cooperative effort between the Kings River Water Association, the California Department of Fish and Wildlife, and KRCD, the KRFMP has been able to enhance the Kings River's fishery habitat and environment over the past 23 years.

The KRFMP activities for the year included the annual Kings River fall population electrofishing survey. This survey helps the KRFMP scientifically gain a better understanding of the estimated fish species and their populations as well as the health of the rainbow trout within the fishery. With the help of KRCD staff, Kings River Water Association, and California Department of Fish and Wildlife, and along with several volunteers from the general public, the KRFMP was able to collect and analyze 5,738 fish. The figure (on the right) breaks down the fish collected in the population survey by species.

Another KRFMP activity is the seasonal rearing and release of rainbow trout fry. This last year, the trout incubator building, located below Pine Flat Dam, hatched 220,000 rainbow trout eggs. After hatching and growing to about one inch long, the rainbow trout fry were released in multiple locations between Pine Flat Dam and Highway 180. None of this would have been possible without the help of public volunteers who donated 84 hours of their time to assist the KRFMP with the daily care and release of the rainbow trout fry.

The purchasing, rearing, and releasing of rainbow trout fry along with supplemental trout stocking have been vital in supporting the trout population in the Kings River. Between the months of November and April, the KRFMP released 26,009 pounds of catchable rainbow trout from the Calaveras Trout Farm into the Kings River totaling 34,675 fish weighing an average of 0.75 pounds.

The KRFMP plans to continue its efforts to enhance and conserve the fishery habitat and ecosystem of the Lower Kings River for years to come.

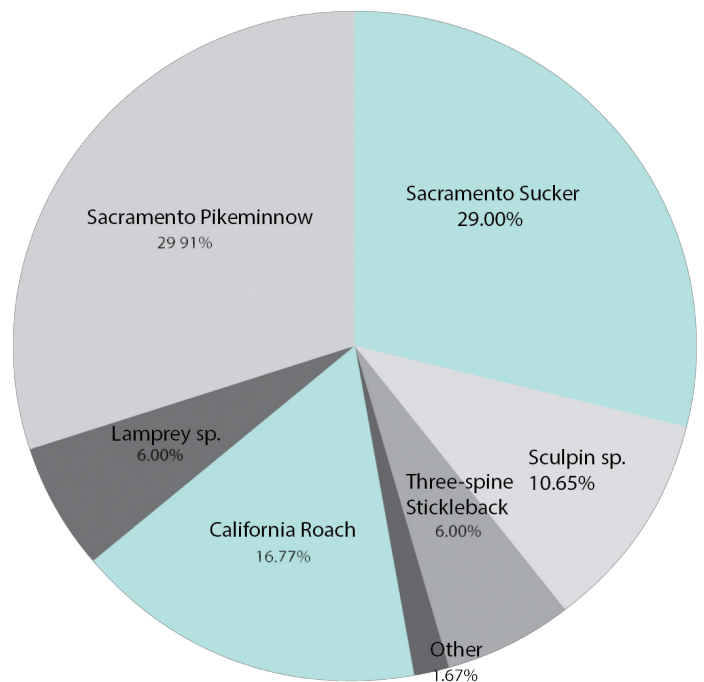
34,675 fish

Between the months of November and April, 26,009 pounds of catchable rainbow trout were released into the river totaling 34,675 fish weighing an average of 0.75 pounds.

220,000 eggs

The trout incubator building, located below Pine Flat Dam, hatched 220,000 rainbow trout eggs that were released in multiple locations along the river.

Population Breakdown by Fish Species



Kings River Cleanups

Over the year, the Kings River Fisheries Management Program partnered with the Kings River Conservancy, the U.S. Army Corps of Engineers, and the California Department of Fish and Wildlife to launch the first ever Kings River Cleanup event to clean up trash along the river. Since July 2021, the Kings River Cleanups have occurred once every month with a steady presence of volunteers coming to pick up trash.

After a year of Kings River Cleanups, about 150 bags of trash including tires, furniture, and graffiti have been removed from the Kings River. A total of 286 volunteers have dedicated a Saturday morning to participate in the Kings River Cleanups. The Kings River Fisheries Management Program plans to continue to host a Kings River Cleanup every third Saturday of the month. For more information please visit www.krfmp.org.

External Affairs

Advocacy and Outreach

KRCD's External Affairs Team provides communication and advocacy programs. External Affairs also provides outreach services to partnering agencies including the South Fork Kings Groundwater Sustainability Agency, North Fork Kings Groundwater Sustainability Agency, Kings River Water Quality Coalition, Kings Water Alliance, and Kings River Fisheries Management Program.

There were several legislative bills and regulatory issues that KRCD engaged in during 2022. KRCD worked on opposing several bills that would have negative impacts on water resource management and KRCD landowners. Assembly Bill 2201, which failed passage, targeted the permitting of new agricultural wells. Assembly Bill 2639, which failed passage, would have prohibited the State Water Resources Control Board from approving a new water right permit that would result in new or increased diversions to surface water storage from the Sacramento River/San Joaquin River watershed. Senate Bill 840 and Assembly Bill 1624, both which failed passage, would have had a detrimental impact on GSA efforts to achieve groundwater sustainability.

A priority issue for KRCD is the continual increase of State regulatory fees on agriculture. In 2022, KRCD strongly advocated at the State level to support using State general funds to augment the 100 percent fee-based funding source for programs, like the Irrigated Lands Regulatory Program.

KRCD was a recipient of several outreach awards in 2022 including the Public Relations Society of America Program Award-Campaign of the Year, the Association of California Water Agencies Huell Howser Excellence in Communications Award, and was a finalist in the 2022 Groundwater Resources Association GSA Stakeholder Award.

KRCD worked on funding for four priority projects in 2022 to improve the resiliency of water, power, and environmental resources for Valley residents. The projects included:

Kings River Fisheries Project

Gravel augmentation and habitat enhancement



Airborne Snow Surveys

Improve analysis of snowpack conditions



Aquifer Storage and Recovery

Improve local groundwater storage and recovery in areas where soil is not suitable for conventional groundwater recharge methods



Pine Flat Hydropower Unit 4

An addition of a fourth hydroelectric generating unit at the Pine Flat Powerhouse to expand renewable energy sources



Financial Statements

2021/2022 Fiscal Year

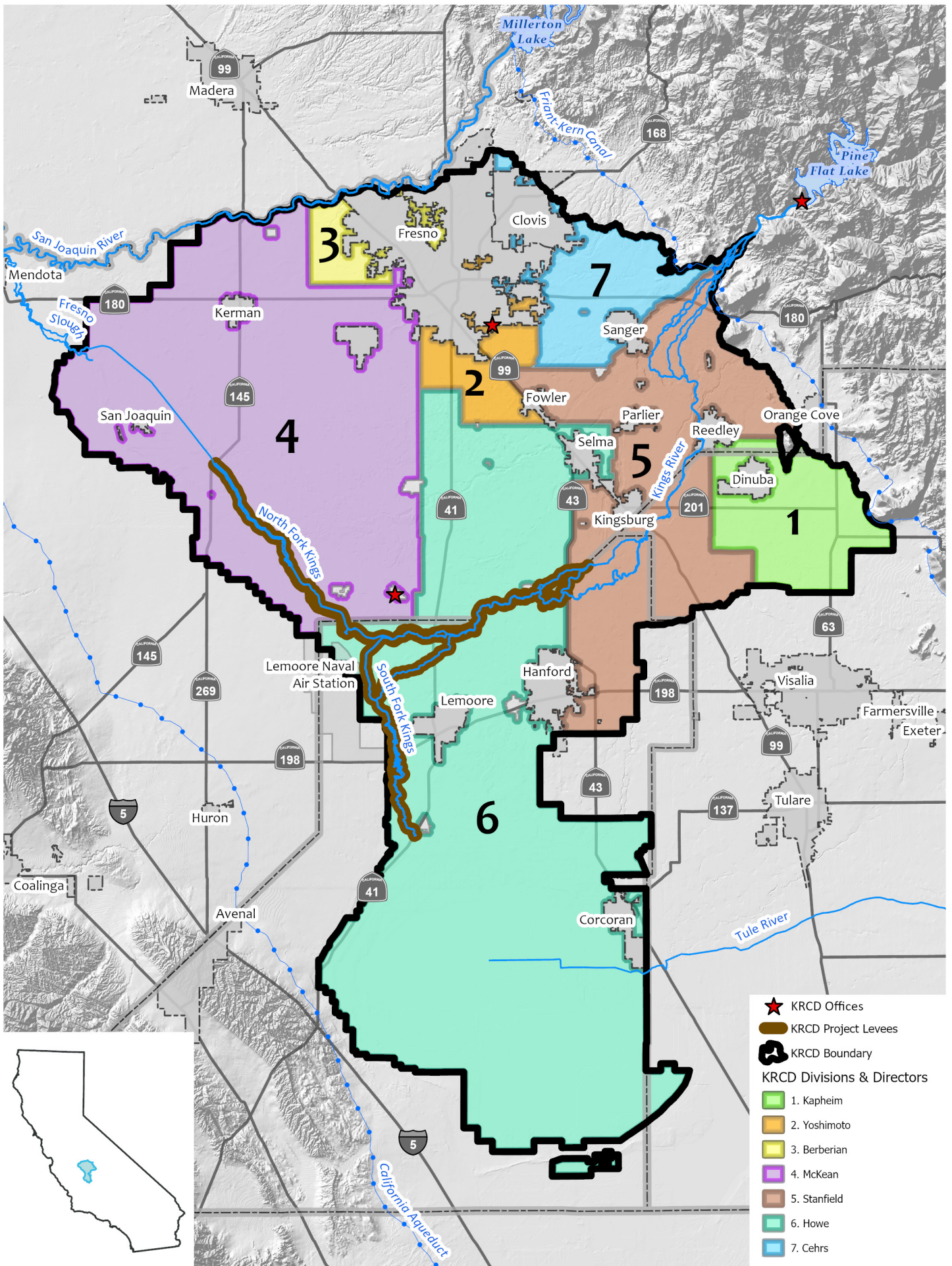
Sources of Funds

Pine Flat Power Benefit	\$291,314
Pine Flat O&M	\$7,248,758
Fiscal Agent, Program Coordinator Reimbursements	\$1,500,896
Other Revenue	\$1,975,320
Grant Revenue	\$986,025
Taxes, Subventions and Abatements	\$1,417,415
Interest Income	\$273,866
Total	\$13,693,594

Uses of Funds

General and Administrative	\$2,617,538
Pine Flat O&M	\$6,884,851
Grant Expenditures	\$1,173,004
River Maintenance	\$900,550
Capital Improvements	\$370,080
Water, Power Resources Development	\$1,747,571
Total	\$13,693,594

KRCD Division Map





KRC D

Kings River Conservation District

Reliable resources for the Valley

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www.krcd.org

2022

Annual Report