



— BUREAU OF —  
RECLAMATION

## FY 2021 Cooperative Watershed Management Program Phase II

### Arizona

#### **Gila Watershed Partnership of Arizona, Restoring the Riparian Forest in the Upper Gila River**

**Reclamation Funding: \$299,638**

**Total Project Cost: \$779,638**

The Gila Watershed Partnership will restore riparian vegetation along a 25 mile stretch of the Upper Gila River, from Pima to Geronimo, in southeastern Arizona. Dense forests of salt cedar, which burns more frequently and intensely than native forests, have established throughout the riparian corridor, overtaking native vegetation, and increasing wildfire frequency and intensity. The increase in fire risk imperils terrestrial and aquatic habitat, including breeding sites for the endangered southwestern willow flycatcher, water quality, and water supplies. The Partnership will remove salt cedar on 30 acres and revegetate with native species, and complete secondary weed removal on another 100 acres where salt cedars were previously removed. The implementation of this project is supported by the Riparian Restoration Framework for the Upper Gila River, which was developed to guide the Partnership's restoration efforts. The project has support from neighboring agricultural producers, local fire districts, the Arizona Department of Fire and Forestry Management, the San Carlos Apache Tribe, and local governments.

### California

#### **The Council for Watershed Health, Merced Avenue Greenway Implementation Project**

**Reclamation Funding: \$300,000.00**

**Total Project Costs: \$3,460,186**

The Council for Watershed Health will capture and treat urban stormwater runoff to improve water quality downstream within the Alhambra-Rio Hondo Watershed in South El Monte, California, a highly urbanized and economically disadvantaged community located in the San Gabriel Valley of Los Angeles County, California. The Council will plant trees and vegetation and install permeable pavement and underground infiltration chambers to capture and passively filter urban runoff along 0.65 miles of Merced Avenue, reducing urban pollutant loads discharged downstream into the Rio Hondo River, the San Gabriel River, and Legg Lake within Whittier Narrow Recreation Area, and contributing to groundwater augmentation of the San Gabriel East Basin. The project is an element of both the Enhanced Watershed Management Plan for the Upper Los Angeles River Watershed and the Greater Los Angeles County Integrated Regional Watershed Management Program. The Project design was developed and will be constructed with significant community involvement and engagement through community workshops and meetings, and with funding contributions from the City of South El Monte and California Natural Resources Agency.

## Colorado

### **Colorado Rio Grande Restoration Foundation, Conejos River Conejos River Partnership Project**

**Reclamation Funding: \$285,000.00**

**Total Project Cost: \$588,640**

The Colorado Rio Grande Restoration Foundation, in partnership with the Rio Grande Headwaters Restoration Project, a watershed group in Alamosa, Colorado, will upgrade two diversion structures and restore adjacent riparian habitat on the Conejos River in southern Colorado's San Luis Valley. The project partners will upgrade two diversion structures to allow irrigators to receive their full entitlement during low flows and will install fabricated steel headgates for more accurate water diversion and measurement. Streambank stabilization structures will be installed upstream from the diversion structures, and the streambank will be reshaped to reconnect the river with the floodplain and revegetated. These projects will improve water management and water quality and create new riparian and aquatic habitat. These projects were prioritized in the Conejos River Stream Management Plan, developed through a Reclamation Cooperative Watershed Management Program Phase I grants, and project partners include ditch companies and their shareholders, private, state, and Federal agencies, local water districts, land trusts, and environmental groups.

### **Estes Valley Watershed Coalition, Fish Creek at Cheley Camp Flood Restoration Project**

**Reclamation Funding: \$75,000**

**Total Project Cost: \$150,194**

The Estes Valley Watershed Coalition will construct a simulated beaver structure on Fish Creek to reconnect the river to the floodplain just outside of Estes Park, Colorado. Extensive flooding in 2013 scoured the channel and disconnected Fish Creek from the floodplain. The Coalition will build the simulated beaver structure downstream from a similar structure built in 2018, in an area that was a historic beaver meadow. Re-establishment of the beaver meadows will increase the wetland area, which will mitigate flood risk during high flows and storm events and allow for the slow release of water during times of drought, providing more water reliability to water users. The project will also mitigate wildfire risk, reduce erosion, improve water quality and habitat, and increase overall ecological resilience of the watershed. The project area and need for floodplain restoration are identified as a priority in the Fish Creek Corridor Plan for Resiliency. The project is supported by the Town of Estes Park, Colorado State University, the Northern Water Conservation District, and private landowners.

### **Purgatory Watershed Partnership, Purgatoire River Baca-Picketwire Diversion Dam Complex Restoration Project Phase II**

**Reclamation Funding: \$161,585**

**Total Project Cost: \$323,182**

The Purgatoire Watershed Partnership, will conduct a multi-component project on the Purgatoire River to improve agricultural delivery systems, create fish passage, and restore river form and function. The Partnership will upgrade the agricultural water diversion dam in Trinidad, Colorado, including installing a diversion dam cap, a trash diversion device, and an erosion protection wall, to improve water delivery efficiency and enable irrigators to receive their appropriated water right. The Partnership will also incorporate fish passage into the diversion dam, install multiple in-stream fish habitat structures, and replace invasive riparian plant species with native vegetation to improve

aquatic and riparian habitat. Project partners include the City of Trinidad, Purgatoire River Water Conservancy District, Baca Ditch Company, Picketwire Ditch Company, Colorado Parks and Wildlife, Trout Unlimited, Downtown Trinidad Development Group, Spanish Peaks-Purgatoire River Conservation District's Purgatoire Watershed Weed Management Collaborative, and Coalitions & Collaboratives. This project was prioritized in the Purgatoire River Management Plan, funded through a Reclamation Cooperative Watershed Management Program Phase I grant.

### **Roaring Fork Conservancy, Crystal River Restoration and Weaver Ditch Efficiency Project**

**Reclamation Funding: \$252,091**

**Total Project Cost: \$730,000**

Roaring Fork Conservancy, in partnership with the Town of Carbondale, Aspen Valley Land Trust, and American Rivers, will restore and enhance a half-mile, 18-acre reach of the Crystal River flowing through Carbondale, Colorado, and improve the Weaver Ditch diversion structure and headgate. The project will restore the ecological integrity of the riparian zone by stabilizing riverbanks, re-establishing native vegetation, and creating in-stream habitat to develop a long-term, self-sustaining solution to improve river channel stability and habitat. The Conservancy will upgrade the Weaver Ditch diversion structure and headgate, which will improve fish passage, and will add a maintenance access point adjacent to the headgate, eliminating the need for an excavator to drive a half mile up the streambed when flows are low enough. The project is supported by the Roaring Fork Watershed Plan and Crystal River Management Plan's restoration strategies to address the habitat, hydrologic, agricultural, and anthropogenic pressures within this reach.

### **Tamarisk Coalition (dba RiversEdge West), White River Partnership Riparian Restoration**

**Reclamation Funding: \$84,748**

**Total Project Cost: \$169,806**

The Tamarisk Coalition (dba RiversEdge West), in partnership with the White River Partnership will remove invasive Tamarisk and Russian olive and re-establish native riparian vegetation on reaches of the White River and its tributaries in northeastern Utah and northwestern Colorado. Tamarisk and Russian olive are highly invasive woody plants that have infested the White River corridor, causing ecological, social, economic, and land management problems. Removal of Tamarisk and Russian olive and revegetation with native species will improve the terrestrial and aquatic habitat, recreation and grazing access, and river channel function, including critical habitat for two endangered fish species, the Colorado pikeminnow and the razorback sucker. The project will also mitigate wildfire risk, reducing risk to water quality and water supplies. The project sites are prioritized in the White River Partnership's restoration plan, developed through a 2018 grant under Phase I of the Cooperative Watershed Management Program. Project partners include: Bureau of Land Management Vernal and White River Field Offices, Utah Conservation Corps, Western Colorado Conservation Corps, and the White River and Douglas Creek Conservation Districts.

## Idaho

### **Friends of the Teton River, Working with Farmers and Ranchers to Improve Water Quality, Ecosystem Function, and Water Management in Teton Basin**

**Reclamation Funding: \$201,285.00**

**Total Project Cost: \$403,241**

Friends of the Teton River will work with the Teton Water Users Association and the agricultural community to implement two priority watershed management projects addressing water supply needs, water quality concerns, and conservation objectives for native Yellowstone Cutthroat Trout in the Teton River Basin in Idaho. The group will revegetate a historically grazed half-acre of riparian area along the mainstem of the Teton River and work with the landowner to develop and implement livestock watering best management practices to reduce erosion and improve water quality and habitat. In addition, the group will install a fish screen at the diversion point from South Leigh Creek, a tributary of the Teton River, into an irrigation canal, which will prevent fish entrapment in the canal. South Leigh Creek is home to one of the largest geographically distinct populations of Yellowstone Cutthroat Trout. The project is supported by the 2016 Teton Water Users Association Watershed Restoration Plan, funded through a Reclamation Cooperative Watershed Management Program Phase I grant. Implementation of these efforts will bring together diverse interests to address habitat degradation, sedimentation, elevated stream temperatures, and fish entrapment and is supported by canal companies, farmers and ranchers, county government, state fish and wildlife managers, recreationists, and the conservation interests in the watershed.

## Oklahoma

### **Lake of the Arbuckles Watershed Association, Improving Water Quality and Quantity through Soil Health Improvements**

**Reclamation Funding: \$ 135,750**

**Total Project Costs: 271,796**

The Lake of the Arbuckles Watershed Association, Inc. will implement Best Management Practices (BMPs) within the Lake of the Arbuckles watershed in southern Oklahoma to improve water quality and quantity. The Association will work with landowners to develop and implement site specific BMPs focused on soil health. Water quality in the Lake of the Arbuckles is affected by low levels of dissolved oxygen and high levels of chlorophyll-a in the lake. The Association will conduct landowner outreach on soil health BMPs, identifying and prioritizing riparian areas in need of improvements along tributaries within the watershed, carry out soil testing, and implementing field-scale soil health BMPs. This project is supported by the Lake of the Arbuckles Watershed Restoration Plan, developed by the Chickasaw Nation with funding from a Cooperative Watershed Management Program Phase I grant in 2016. The Association represents a diverse group of stakeholders, including ranchers, local business representatives, municipalities, state and federal environmental agencies, conservancy districts, the Chickasaw Nation, educational institutes, and non-profit organizations such as the Nature Conservancy. The Lake of the Arbuckles is part of the Bureau of Reclamation's Arbuckle Project.

## Oregon

### **Jefferson County Soil and Water Conservation District, Hydrologic Restoration and Flow Improvement for Upper Willow Creek through Juniper Removal**

**Reclamation Funding: \$106,647**

**Total Project Cost: \$203,036**

The Jefferson County Soil and Water Conservation District, in partnership with the Middle Deschutes Watershed Council, will remove Western Juniper from upland habitat to restore water connectivity between upland and in-stream habitats surrounding Willow Creek, in western Oregon. The vast expansion and encroachment of Juniper has caused the flow in Willow Creek to become intermittent. This project will remove Juniper trees across 460 acres using specialized excavators to ensure the removal of sub-surface roots. In-stream temperature loggers will record the impacts on stream flows and temperature. The project is supported by the Willow Creek Watershed Analysis, the Middle Deschutes Action Plan, and the Middle Deschutes Agricultural Water Quality Management Plan.

## Washington

### **Chelan County Natural Resource Department, Lower Icicle Water Quality Improvement Implementation**

**Reclamation funding: \$229,901**

**Total Project Cost: \$510,891**

The Chelan County Natural Resource Department of Washington State, in partnership with the Icicle Work Group, will restore a section of Icicle River within the Wenatchee sub-basin of the Upper Columbia River Basin in Chelan County, Washington. This section of the Icicle River is currently characterized by eroding streambanks caused by past land use practices and removal of native riparian vegetation. Through the installation of bioengineered wood structures, grading of the over-steepened bank, placement of fabric encapsulated soil lifts, and revegetating 1.1 acres of riparian area, the project will establish a riparian buffer across 850 linear feet of streambank, improve salmonid habitat conditions, and improve water quality by reducing sediment, nitrogen, and phosphorous loading. This project is an integral piece of the overall strategy to protect water supply and instream flow that was developed by the Icicle Work Group and addresses several watershed concerns documented in the Washington State Water Quality Assessment 303(d) list, the Icicle Strategy Guiding Principles, and the Upper Columbia Regional Technical Team Revised Biological Strategy for Salmon Recovery.