

Fiscal Year 2022 Cooperative Watershed Management Program

Alaska

Native Village of Georgetown Development of a Middle and Upper Kuskokwim Watershed Council Total Project Cost: \$199,995 Reclamation Funding: \$199,995

The Native Village of Georgetown, in partnership with the Native Village of Napaimute, and the Kuskikwim Corporation, located in western Alaska, will establish the Middle and Upper Kuskokwim Watershed Council to engage diverse stakeholders across several watersheds surrounding the Kuskokwim River. The Kuskokwim River is critical to the communities' ways of life as a source of drinking water, a conduit for transit, and the habitat of several fish species with significant cultural importance. To establish the Watershed Council and assess the restoration needs within the watershed, the partners will engage a diverse set of stakeholders across the sparsely populated area, including subsistence users, villages, the City of McGrath, tribes, Alaska Native Claims Settlement Act For-Profit Corporations, small and large-scale mining operations, local businesses, and state and federal land management agencies.

Takshanuk Watershed Council Greater Chilkat Watershed Working Group Reclamation Funding: \$178,620

The Takshanuk Watershed Council located in southeastern Alaska will establish the Greater Chilkat Watershed Working Group. The Greater Chilkat Watershed covers nearly 2,000 square miles and is one of the most productive salmon fisheries on the west coast of Alaska. The

watershed is home to all five species of Pacific salmon, which have been an essential cultural, economic, and subsistence resource for the area's residents for centuries. Although local freshwater habitats are relatively intact, they face significant near-term threats, including the unpredictable effects of climate change and pressure from ongoing and proposed industrial development in the watershed. The formation of the working group will address these issues through the development of an ecosystem-based management plan and by supporting stakeholder engagement.

Total Project Cost: \$270,820

Norton Bay Inter-Tribal Watershed Council Norton Bay Watershed Restoration Plan Reclamation Funding: \$182,831

Total Project Cost: \$182,831

The Norton Bay Inter-Tribal Watershed Council will engage with watershed stakeholders to complete a watershed restoration plan for the Norton Bay Watershed, in the Bering Sea area of western Alaska. The Inupiat and Central Yupik communities located within the watershed rely on a subsistence economy. However, in recent years, diminishing sea ice in the Bering Strait and increasing freshwater temperatures resulting from climate change have begun to impact subsistance resources. While the watershed provides important salmon spawning habitat, there have been recent large-scale die-offs of otherwise healthy fish due to increased water temperatures and reduced dissolved oxygen. The Council will collect baseline watershed data on water quality and quantity, complete mapping and technical analysis of watershed data, conduct outreach to watershed stakeholders, and review watershed-specific best management practices established by federal, state, and local governments. The restoration plan will identify and prioritize watershed management projects to address impacts that stress fish communities and result in fish kills. The Council will engage a diverse group of stakeholders, including Tribal entities, federal and state agencies land management agencies, Alaska villages and regional Native corporations, and non-profit organizations.

Arizona

Trout Unlimited

Collaborative Black River Landscape Restoration Planning for Apache Trout Climate Resilience

Reclamation Funding: \$191,673

Total Project Cost: \$293,733

The Four Forest Restoration Initiative, in collaboration with Trout Unlimited, will design and acquire permits for a watershed restoration project on the West Fork of the Black River, located in the Apache-Sitgreaves National Forest in eastern Arizona. The Four Forest Restoration Initiative is a diverse working group dedicated to landscape-scale restoration planning in the area of the Kaibab, Coconino, Apache-Sitgreaves, and Tonto National Forests. Warming temperatures, changing patterns of precipitation, and historic fire suppression have left the Four Forest area especially vulnerable to catastrophic wildfire, which could significantly harm the watershed. The West Fork Black River is a major tributary of the Salt River, a key water source for over 2 million people. The river is also the location of one of the few remaining Apache trout populations. Through this effort, the group will complete plans for a cross-boundary restoration project that will consider current and future climate conditions and how aquatic restoration can be combined with upland forest treatment to build maximum resiliency in a watershed.

Coconino Plateau Watershed Partnership Planning to Support Sustainable Groundwater Use for the Coconino Plateau Watershed Partnership Stakeholders Reclamation Funding: \$198,529 Total Project Cost: \$217,669

The Coconino Plateau Watershed Partnership in Arizona will complete groundwater modeling, develop an ecosystem services dashboard, and complete water source and demand mapping for the Coconino Plateau area in northern Arizona. The Partnership identified the top critical concerns of the watershed as part the first phase of their Water Related Ecosystem Services Assessment, which they completed through a 2018 WaterSMART Cooperative Watershed Management Program grant. These concerns include understanding the future sustainability of the groundwater system, the potential impacts of future catastrophic wildfires on water quality and quantity, the identification of water delivery infrastructure needs including in areas of the Plateau with no running water, and the need for further assessment of water resuse. The Partnership represents a diverse group of stakeholders including, federal and state agencies, the Havasupai Tribe, Hopi Tribe, Hualapai Tribe, Navajo Nation, municipalities, water providers, and conservation organizations

California

Tule Basin Land and Water Conservation Trust Formation of the Tule Basin Watershed Coalition Reclamation Funding: \$198,385

Total Project Cost: \$198,385

The Tule Basin Land and Water Conservation Trust will collaborate with diverse watershed stakeholders to formally establish the Tule Basin Watershed Coalition, building on ongoing watershed coordination efforts. The Tule Basin watershed has experienced significant groundwater level decline, which affects water supply reliability, quality and land subsidence and impacts the area's ecosystems, communities, and agricultural producers. The coalition will formulate a charter, bylaws and standard practices, and develop an understanding of the of the impacts of groundwater decline in the project area. Additionally, they will conduct pre-planning activities such as collecting baseline information on current conditions in the basin to understand watershed related issues and restoration needs. The formation of the Tule Basin Watershed Coalition will enhance the coordination and scale of efforts to address ongoing water concerns.

Colorado

Trout Unlimited Supporting the Upper San Juan Enhancement Partnership Efforts to Implement Watershed Plan Reclamation Funding: \$198,477 Total Project Cost: \$227,882

The Upper San Juan Watershed Enhancement Partnership, located in southwestern Colorado, will expand on previous watershed planning and management efforts in partnership with Trout Unlimited. The Partnership is a grassroots, community-based collaborative comprised of diverse stakeholders that is nearing completion of an Integrated Water Management Plan for the Upper San Juan River. Water from the San Juan River is essential for local municipalities, agricultural producers, and ranchers. Additionally, a thriving river-recreation economy relies on dependable instream flows. Water supply and quality in the San Juan River are threatened by historic drought, climate change impacts, and significant regional wildfire risk. The partnership will develop articles of incorporation and bylaws, expand outreach efforts, and complete design and preliminary engineering for priority projects identified through the Partnership's ongoing planning efforts.

Hawaii

Hawaii Department of Land and Natural Resources Planning for Community Resilience Through Watershed Restoration on Molokai Reclamation Funding: \$192,086 Total Project Cost: \$192,086

The East Moloka'i Watershed Partnership, in collaboration with the State of Hawai'i, Department of Land and Natural Resources, will update their existing watershed management action plan. The Partnership is a collaborative of landowners and land managers, including the Nature Conservancy, the state of Hawai'i, the County of Maui, the Kamehameha Schools, and the Kapualei Ranch, on the east side of the island of Molokai. This effort is part of a larger vision to care for East Moloka'i's remaining native forests. These forests sit atop and help recharge Moloka'i's main aquifers, the source of residential water supplied by the County of Maui. As part of this project, the Partnership will complete design work for a fence to protect the native forests in the Kamalō-Kapualei area from non-native feral pigs, deer, and goats, which roam wild and trample and devour vegetation, and spread weeds. The Partnership will also draft the Pua'ahala watershed management plan for a recently acquired 800-acre property.

Idaho

Trout Unlimited Development of the Priest River Watershed Group Reclamation Funding: \$156,109

Total Project Cost: \$156,109

Trout Unlimited will establish the Priest River Watershed Group to support and enhance the native cold-water fishery in the Lower Priest Watershed in the northwest panhandle of Idaho. The Priest River is designated as critical habitat for Bull Trout, a threatened species under the Endangered Species Act, and a Special Resource Water, meaning it requires intensive protection to preserve outstanding characteristics or to maintain current beneficial uses. Through the project, a broad-base of federal, state, local, Tribal, and non-governmental stakeholders will work collaboratively to exchange information, identify issues, and analyze data. The group will prioritize major watershed concerns, including water temperature, water quality, land-use impacts, and increasing recreational use, in order to identify and prioritize potential restoration projects.

Trout Unlimited Establishment of a New Watershed Group in the South Fork of the Boise River Watershed in Southwest Idaho Reclamation Funding: \$199,038 Total Project Cost: \$308,753

Trout Unlimited will establish a new watershed group in the lower section of the South Fork Boise River in southwestern Idaho. The group will focus on three main segments of the South Fork Boise River below Anderson Ranch Dam, a Reclamation facility. The watershed group, comprised of landowners, local governments, recreation and conservation groups, state, federal and Tribal agencies, and other affected stakeholders, will complete organizational development activities and stakeholder outreach, and conduct research and stakeholder interviews to identify watershed needs, and complete an outline for a future restoration plan. A recent population boom in the area has been accompanied by a dramatic increase in outdoor recreation, causing erosion and impacting fish and wildlife habitat along the river corridor. The watershed group will serve as a forum to allow for open dialogue between water users competing for limited water supplies from Anderson Ranch Reservoir and will facilitate the development of collaborative solutions to meet diverse stakeholder needs.

Valley Soil and Water Conservation District Establishing the North Fork Payette River Watershed Coalition Reclamation Funding: \$198,220 Total Project Cost: \$198,220

The Valley Soil and Water Conservation District will establish the North Fork Payette River Watershed Coalition to address watershed and water quality issues on the North Fork Payette River in west-central Idaho. The North Fork Payette River watershed, critical to local domestic, agricultural, and recreational water use, has been impacted by nutrient loading, contributing to harmful algae blooms that threaten the health of water users and wildlife. The new watershed group will recruit a diverse set of stakeholders to coordinate various interests in the development of a North Fork Payette River Watershed Restoration Plan. The Coalition will represent public land and resource managers, municipalities, Idaho Power, irrigators, livestock grazing, recreationists, private developers and landowners, and the general public.

Montana

Clarks Fork Yellowstone Partnership Watershed Group Development and Restoration Planning for the Lower Clarks Yellowstone River Reclamation Funding: \$147,620 Total Project Cost: \$147,620

The Clarks Fork Yellowstone Partnership, located in the southeast corner of Montana, will complete outreach to diversify membership, conduct river assessments, and complete restoration planning for the lower and middle reaches of the river. Human-caused water quality impairments, including nutrient loading and sedimentation, have been recognized and studied within the Lower Clarks Fork Yellowstone River watershed for over half a century but limited restoration planning and project implementation has occured. The Partnership will prioritize potential restoration projects previously identified in the Partnership's 2019 River Assessment, will use existing data to develop a preliminary water budget, and develop river health scorecards for the river's lower reaches. The Partnership will also complete initial river assessments to document and understand river conditions in the middle reach.

Gallatin Water Collaborative

Stakeholder Coordination, Community Engagement and Project DevelopmentReclamation Funding: \$200,000Total Project Cost: \$200,000

The Gallatin Watershed Council, an established watershed group, headquartered in Bozeman, Montana, serves as a forum for the communication and coordination of activities to address watershed issues in the Gallatin River watershed in southwest Montana. The Gallatin River watershed, which supports irrigation for prime farmland, municipal water use, and recreational tourism, is challenged by a rapid rate of population growth and development contributing to water quality degradation, water supply and availability issues, and declining ecological resilience. Bozeman's rapid urbanization has contributed to non-point sources water quality concerns, with impermeable surfaces mobilizing pollutants into streams after storm events. The Council will increase community awareness of watershed concerns, advance prioritized actions through the development and coordination of task forces, and complete the design and engineering of on-the-ground restoration projects in the lower part of the Gallatin River Watershed.

Nevada

Nevada Land Trust One Truckee River Vegetation Management and Restoration Planning Reclamation Funding: \$199,998 Total Project Cost: \$221,498

Nevada Land Trust will facilitate the further development of the One Truckee River Partnership, a diverse watershed coalition including 24 actives partners and 130 stakeholder entities, to expand efforts to support sustainable management within the urban stretch of the Truckee River in the Reno-Sparks area of Nevada. The Partnership identified the project area of importance due to increased human activity resulting in the loss of native vegetation which stabilizes the river banks, leading to concern for public safety and degradation of water quality. The project partners will synthesize river condition data and prioritize watershed restoration projects. This project will leverage the Partnership's Framework Plan and the collaboration of the Partnership's Vegetation Management Technical Working Group, funded through a previous WaterSMART Cooperative Watershed Management Program Phase I grant, to build momentum to complete the site-specific project planning.

New Mexico

Amigos Bravos Improving the Ecological Function of the Rio Fernando Through Hydrology and Streambank Restoration Planning Reclamation Funding: \$178,750 Total Project Cost: \$178,750

The Amigos Bravos, located near Taos, New Mexico, will expand the Rio Fernando de Taos Revitalization Collaborative and investigate restoration alternatives. The watershed is vital to the health of the Taos Community, supplying an important water resource to the residents and the aquatic ecosystem. The Collaborative has identified this segment of the Rio Fernando and Los Pandos Road as a critical area needing restoration due to the seasonal loss of continual flow. When the river moves underground, the aquatic and terrestrial species are negatively impacted, and irrigators cannot receive their allocated supply. As part of this project, the collaborative will conduct a hydrology analysis of the river and water table to understand why the water moves underground and explore restoration options.

Santa Cruz Irrigation District

Watershed Group Development and Watershed Restoration Planning for the Rio Santa Cruz Watershed Northern New Mexico Reclamation Funding: \$200,000 Total Project Cost: \$200,000

The Santa Cruz Irrigation District, based in Santa Cruz, New Mexico, will establish a watershed group to address key issues in the Rio Santa Cruz watershed in northern New Mexico. The Rio Santa Cruz watershed serves several disadvantaged communities, provides water to two pueblos, and is essential for irrigating agriculture. Improving the watershed's health has been

identified as a critical issue, particularly the need for a plan to mitigate the effects of postcatastrophic fire debris flows and runoff on streams and the Santa Cruz Reservoir. The watershed group will complete sedimentation modeling and post-fire debris flow analysis to identify critical areas for watershed thinning and habitat improvement projects. The new watershed group will recruit a diverse set of stakeholders, including tribal interests, state and federal agencies, and water users to determine critical watershed needs and develop a holistic watershed restoration and management plan to maintain stream flows, increase water quality and water supply reliability for all users within the Rio Santa Cruz watershed.

North Dakota

McLean County Water Resources Board Turtle Creek Cooperative Watershed Group Development and Management Plan Reclamation Funding: \$69,148 Total Project Cost: \$69,148

The McLean County Water Resource Board, located in central North Dakota, will establish a new watershed group and prepare a watershed management plan to guide water management in the Turtle Creek watershed. Turtle Creek is a rural watershed comprised of prairie, livestock production, irrigated agriculture, and waterfowl habitat. The McClusky Canal, a major water conveyance, crosses east-west in the upper watershed and can release water into Turtle Creek at several locations. However, watershed stakeholders have limited stream flow data and lack the ability to control water releases from McClusky Canal into Turtle Creek. Currently, the canal releases flows into Turtle Creek during already high flows, while no water is released from the canal during periods of drought when water releases are most important for fish and wildlife habitat . As part of this project, the group will install a stream gage to provide information on streamflow rates throughout the year to inform management decisions for the McClusky Canal. The development of this watershed group will also improve communication between stakeholders and assist in the development of remediation plans for impaired waters within the watershed.

Oklahoma

The Chickasaw Nation Development of the Lake Texoma Watershed Management Association Reclamation Funding: \$199,831 Total Project Cost: \$253,264

The Chickasaw Nation, located in Ada, Oklahoma, will establish the Lake Texoma Watershed Management Association to address water quantity and quality concerns in the lake and Upper Red River Basin that spans parts of New Mexico, Oklahoma, and Texas. Water quality impairments in Lake Texoma Watershed present water supply vulnerability for users and overall economic development in this rapidly growing region. Lake sedimentation and excessive algal growth threaten lake water quality and quantity; these impacts are especially evident in the Washita River arm of the lake in Oklahoma. Lake Texoma is a vital water supply essential to the region's current and projected economic growth. The Association will establish a board, develop mission and vision statements, and develop the Lake Texoma Watershed management Plan, which will prioritize and phase strategies focused on implementing soil health practices and related measures to improve and protect the watershed and lake.

Oregon

Deschutes River Conservancy Development of an Upper Deschutes Subbasin Water Management Plan Reclamation Funding: \$199,500 Total Project Cost: \$199,500

The Deschutes River Conservancy, located in Bend, Oregon, will support the Deschutes Basin Water Collaborative, an existing watershed group representing more than 40 groups, in developing the Upper Deschutes Sub-Basin Water Management Plan to guide the implementation of watershed management projects to meet the needs for rivers, agriculture, and growing communities. Recent studies by the Collaborative have identified shortages for instream and out-of-stream water demands of up to 400,000 acre-feet. These shortages affect river function, water quality, and habitat for native fish species and Oregon spotted frog, a threatened species under the Endangered Species Act. Shortages also affect the viability of irrigated agriculture and growing communities. Through this project, the Collaborative will develop a plan that will provide a roadmap to meet long-term needs in the Upper Deschutes and give the basin a powerful platform to ensure implementation outcomes maximize benefits for the resource and communities.

Texas

The University of Texas at Austin Establishing the Lower Rio Grande/Río Bravo Watershed Council and Watershed Restoration Plan Reclamation Funding: \$141,026 Total Project Cost: \$154,326

The University of Texas at Austin will establish a watershed council that will serve as a permanent, binational forum for information exchange and collaboration among stakeholders of the Lower Rio Grande below Falcon International Reservoir. The new group will include water managres, agencies, cities, agricultural organizations, and non-profit organizations in both the U.S. and Mexico. This stretch of The Rio Grande provides critical irrigation and drinking water supply to nearby population centers but has historically had difficulties attaining compliance with Texas water quality criteria. Current water quality issues include low dissolved oxygen and elevated nutrients, ammonia, and fecal coliform. The development of this watershed group will establish a mechanism to sustain the impaired watershed by engaging stakeholders, providing technical services such as data analysis and modeling, and developing a binational watershed-based plan to restore and protect water quality.

United States Virgin Islands

The Coral Bay Community Council Stormwater Management Device Toolkit Reclamation Funding: \$190,289

Total Project Cost: \$208,047

The Coral Bay Community Council, located on the island of St. John in the U.S. Virgin Islands, will create and implement a stormwater management device toolkit to assist neighborhoods in identifying, maintaining, and improving stormwater management devices. The island's rapid development led to increased flooding and erosion concerns due to road development and a lack of stormwater runoff controls, slope stabilization, natural resource protections, and solid waste management. The island's torrential rains regularly wash out roads and carry excess surface runoff from hillside developments, impacting the sensitive marine ecosystem. The Council will implement a management strategy identified in the Coral Bay Watershed Management Plan, a plan created under a previous Cooperative Watershed Management Program Phase I grant, building community resiliency and protecting the health of the Coral Bay Watershed.