

Successful Applicants from the Fiscal Year 2014 Request for Proposals from Indian Tribes & Intertribal Consortia for Nonpoint Source Management Grants Under Clean Water Act (CWA) Section 319

Tribe: Bishop Paiute Tribe
Region: 9
Federal Request: \$100,000
Award: \$100,000

The Bishop Paiute Reservation spans approximately 892 acres in the eastern Sierra Nevada Mountains. Bishop Creek splits into two tributaries (North Fork and South Fork) before it enters the reservation on the western boundary. It is a clean and relatively unimpaired waterbody. The Bishop Paiute Tribe's project is primarily aimed at minimizing potential threats to Bishop Creek caused by increasing population density on the reservation, upstream hydroelectric plants, and unrestricted livestock grazing and access to Bishop Creek.

The goals and components of the project are to: address livestock inputs to Bishop Creek, build management capacity to address nonpoint source pollution threats to Bishop Creek, education and outreach, expand enforcement control measures and develop guidelines to address NPS pollution, review and update the Bishop Creek watershed-based plan, implement erosion and sediment controls in stream and riparian areas, and evaluate performance under the grant. Collectively, these activities are expected to minimize nonpoint source pollution threats to Bishop Creek.

Tribe: Cahto Tribe of Laytonville Rancheria
Region: 9
Federal Request: \$100,000
Award: \$100,000

The Cahto Tribe of Laytonville Rancheria is located in the coastal mountains of northwestern California east of the Mendocino Range. Historical streambank restorations and a fire suppression road crossing Cahto Creek, which runs through the Laytonville Rancheria, contributed to streambank destabilization, erosion, and sedimentation. The historical streambank restorations, implemented in the 1950s and 60s, used old car bodies placed along streambanks to mitigate instream erosion. However, these car bodies had the opposite effect of mitigating erosion, and actually reduced riparian vegetation and increased erosion during high flows. The car bodies were removed in 2010, but without streambank restoration, the streambanks continue to erode into Cahto Creek. The subsequent sedimentation degraded critical aquatic habitat for the Coho Salmon, a Threatened and Endangered species.

To restore the Cahto Creek, the Cahto Tribe proposed to restore two eroding streambank/riparian areas along Cahto Creek, stabilize one fire suppression road stream crossing, and install large woody debris in Cahto Creek downstream of the project sites. The two eroding streambanks will be stabilized with native grasses and trees. The outcomes of these restoration efforts are expected to result in the attainment of the tribal water quality standards for less than 25% in stream embeddedness, and for no degradation occurring that adversely affects riparian areas which are critical to protecting the quality of a spring, wetland, stream, or tributary.

Tribe: Chemehuevi Indian Tribe

Region: 9

Federal Request: \$100,000

Award: \$100,000

The Chemehuevi Indian Tribe is located on about 39,600 acres which include 6400 acres of Lake Havasu and is across the lake from Lake Havasu City, Arizona. The reservation includes many tributaries, ephemeral washes, and bays to the lake which are culturally significant and used in fishing, crop irrigation, and recreation. In one of the bays, Catfish Bay, feral burros and hogs, and nonnative vegetation contributed to high erosion and sediment loads, resulting in an exceedance of the tribal turbidity standards.

To restore water quality to Catfish Bay, the Chemehuevi Tribe proposed measures to mitigate excess erosion. Prior to restoration, high levels of sediment from the erosion resulted in turbidity levels of 127 NTU in Catfish Bay, far in excess of the tribal standards of 25 NTU for the lake and 50 NTU for the Colorado River. Proposed restoration measures include 2300 feet of fencing to restrict feral burro and hog access to the bay, and planting native vegetation in the riparian zone and adjacent uplands. These measures are expected to create a functional riparian zone that decreases erosion, resulting in decreased sedimentation and an improvement in water quality in Catfish Bay.

Tribe: Confederated Tribes of the Colville Reservation

Region: 10

Federal Request: \$100,000

Award: \$100,000

The Confederated Tribes of the Colville Reservation (CTCR) is located on 1.4 million acres in northeastern Washington State and includes South Fork Creek, a tributary to Ninemile Creek and the Columbia River. Nonpoint source pollution from agriculture, silviculture, and roads contributes to fecal coliform, turbidity, and temperature measurements in exceedance of CTCR water quality standards.

To restore water quality and mitigate nonpoint source pollution, the Confederated Tribes of the Colville Reservation proposes measures to reduce runoff from roads to streams, and implement erosion control in Friedlander Meadows. Nine weirs will be installed along 240 feet of stream to prevent erosion and downcutting in Friedlander Meadows, and two culverts will be replaced and 40 drain dips will be installed along two miles of Ninemile-Hellgate road to direct runoff away from streams. Additionally, grant money will be used to partially support a tribal NPS Management Coordinator. These measures are expected to reduce sediment loading to streams, thereby improving water quality. The proposed restoration work is also expected to mitigate the continued degradation of a gathering site of culturally important food sources to the Confederate tribes.

Tribe: Confederated Tribes of the Goshute Reservation

Region: 9

Federal Request: \$100,000

Award: \$100,000

The Confederated Tribes of the Goshute Reservation is located on about 110,000 acres in White Pine County Nevada, and Juab and Tooele Counties in Utah. Twelve springs in the Clear Creek Watershed, located within the reservation were identified as being impaired due to NPS sources originating from grazing pressures from livestock, wild horse, and elk. This grazing resulted in degradation of spring wetland vegetation due to trampling, and turbidity and *E. coli* measurements in excess of tribal standards.

To restore water quality and mitigate nonpoint source pollution, the Confederated Tribes of the Goshute Reservation proposed measures to prevent excess grazing in three of the twelve impaired water bodies. Prior to restoration, excess grazing in these three spring resulted in turbidity and *E. coli* levels in excess of the tribal standards of 10 NTU, and 235 MPN/100mL respectively. The proposed restoration measures will prevent grazing in and around the springs by providing gravity fed secondary water sources to grazing livestock, wild horses, and elk. According to the tribe's experience, grazing livestock and wildlife prefer watering troughs to natural springs as drinking water sources. These measures are expected to result in significant progress towards attaining tribal water quality standards in the Clear Creek Watershed.

Tribe: Confederated Tribes of the Umatilla Indian Reservation

Region: 10

Federal Request: \$ 99,968.00

Award: \$ 99,968.00

The Confederated Tribes of the Umatilla Indian Reservation are located in Eastern Oregon State. Meacham Creek, within the reservation, is negatively impacted by the effects of historical railroad and agricultural operations which have increased stream channel incision, sedimentation, and simplified channel morphology. This has resulted in increased sedimentation and stream temperatures which threaten aquatic life in Meacham Creek.

The Confederated Tribes of the Umatilla Indian Reservation propose measures to improve channel temperatures and reduce sedimentation. Prior to restoration, stream temperatures criteria of 64 degrees for salmonids, and 55 degrees for bull trout were not being met. The proposed measures to improve these conditions include improving riparian vegetation by planting 4,765 native riparian plants along Meacham Creek. These plantings are expected to increase shading, and mitigate nutrients and sediment loading to Meacham Creek.

Tribe: Crow Tribe of Indians

Region: 8

Federal Request: \$100,000

Award: \$100,000

The Crow Tribe of Indians are located in South Central Montana. Nonpoint source pollution from agriculture pastureland and rangeland livestock grazing practices resulted in increased bacterial and sediment loadings to Pryor Creek. Pryor Creek is used for recreational swimming, religious ceremonies, and supports a naturally reproducing channel catfish population. The bacterial and sediment pollution threatens these recreational, religious, and ecological uses.

To restore water quality and mitigate nonpoint source pollution, the Crow Tribe of Indians proposes measures to prevent sediment and bacterial pollution to Pryor Creek. Projects to be implemented include reducing sediment and livestock impacts on Pryor Creek at Smith Ranch through construction of livestock exclusion fencing, installing an arch culvert for cattle to cross the creek, and providing a new well to water livestock in areas with no stream access. These measures are expected to decrease bacterial loadings to and improve riparian habitat in Pryor Creek.

Tribe: Gila River Indian Community

Region: 9

Federal Request: \$80,275

Award: \$80,275

The Gila River Indian Community is located in south central Arizona. The Pee Posh Wetlands are located within the northwest corner of the community and are characterized as high quality reference wetlands. The Pee Posh Wetlands are threatened by sedimentation and floating debris originating from suburbs of Phoenix, north of the reservation boundaries.

To mitigate nonpoint source pollution to the Pee Posh Wetlands, the Gila River Indian Community proposed measures to prevent sediment and debris from entering the Wetlands. Sediment pollution has resulted in a suspended sediment concentration of 98.7 mg/L; in excess of the tribal draft standards of 80 mg/L. Floating debris are commonly caught in native wetland vegetation and in 2007 and 2013 over 15 and 5 tons of debris were removed from the wetlands, respectively. The proposed restoration measures include the installation of both a sediment basin, and a trash control structure to prevent excess sediment and trash from entering the wetlands. These measures are expected to minimize the effects of sediment and debris on the Pee Posh Wetlands.

Tribe: Grand Traverse Band of Ottawa and Chippewa Indians

Region: 5

Federal Request: \$100,000

Award: \$100,000

The Grand Traverse Band of Ottawa and Chippewa Indians is located in Northwest Michigan. The Grand Traverse Bay watershed drains 976 square miles, and the bay is unimpaired, and used for commercial and subsistence fishing, and tourism. However, NPS pollution from runoff and hydromodification threaten these beneficial uses.

To protect water quality in Grand Traverse Bay, the Grand Traverse Band of Ottawa and Chippewa Indians will implement a restoration project on a road stream crossing across a tributary to Grand Traverse Bay. Stormwater in Belanger's Creek has shown high turbidity and nitrate levels which are believed to have been caused by runoff of nutrients, and in stream erosion due to undersized culverts. To mitigate these effects, the undersized culverts will be replaced, and the runoff entering the creek will be treated with an appropriate BMP. Additionally, outreach will be conducted to local community members on the work being done to reduce NPS pollution in the Grand Traverse Bay Watershed.

Tribe: Havasupai Tribe
Region: 9
Federal Request: \$100,000
Award: \$100,000

The Havasupai Tribe is located on 185,000 acres in north central Arizona. The reservation contains almost 140 miles of streams, 155 acres of wetlands, and several waterfalls. In 2013, a storm caused significant erosion damage to 4417 feet of streambanks on the reservation, 163 cubic yards of embedded sediment in the creek, and the potential loss of 38 acres of riparian vegetation as a result of a lowered water table – all threatening water quality and riparian habitat.

To restore water quality and mitigate nonpoint source pollution, the Havasupai Tribe proposed measures to prevent stream erosion and stabilize the riparian zone of the stream. The proposed restoration measures will mitigate continued erosion, and loss of riparian vegetation through a series of plantings and stream bank restorations. Specifically, 8834 feet of streambank pull back and reseeded including 708 tree cuttings, and 4124 tree cuttings to be planted in the new water table. These measures are expected to improve aquatic life in Havasu Creek, decrease sediment loading, and stabilize the riparian zone from Havasu Falls to Mooney Falls.

Tribe: The Hopi Tribe
Region: 9
Federal Request: \$100,000
Award: \$100,000

The Hopi Tribe reservation is located on approximately 2.5 million acres in northeast Arizona. The reservation is in a dry desert climate, but has a number of springs and wetlands. These waterbodies are utilized by the tribe for drinking, agriculture, and ceremonial use. Nonpoint source pollution from multiple pollutants including gasoline, bacteria, and nutrients threatened water quality in Tawapa Spring. Due to the current state of water quality in the spring tribal members cannot fully utilize Tawapa Spring for ceremonial purposes.

Lab results have shown nitrate samples as high as 46 mg/l (more than four times EPA's maximum contaminant level goal of 10 mg/l), and total coliform samples as high as 2416 cfu/100 ml. The presence of total coliforms are indicators of the presence of viral enteric pathogens in water samples. To restore the spring, the Hopi Tribe proposed to remove fouled spring water, excavate contaminated sediment, remove invasive plant species, construct and restore terraces around the spring, construct a barrier to prevent runoff to the spring, and construct an entrance with a gate to prevent animals from contaminating the spring. These measures are expected to, improve water quality and increase usage of Tawapa Spring for ceremonial purposes.

Tribe: Hualapai Tribe

Region: 9

Federal Request: \$99,959

Award: \$99,959

The Hualapai Tribe is located on approximately one million acres of land in northwest Arizona. The Gila River Watershed, located on the Hualapai reservation, drains 142 square miles. Nonpoint source pollution from cattle grazing, and subsequent erosion threatens water quality in the Gila River Watershed.

To mitigate the effect of cattle grazing on water quality in the Gila River Watershed, the Hualapai Tribe proposes to construct brush barriers to trap sediment in the Frazier Wells Wash area of the Gila River Watershed. Turbidity measurements of over 1000 NTU had been sampled in runoff in this area, which also tested positive for fecal coliform from livestock. The Hualapai Tribe will construct forty brush barriers in tributaries to the Frazier Wells wash to prevent these pollutants from degrading water quality. These measures are expected to reduce nonpoint source pollution inputs to, and improve water quality in, the Gila River Watershed.

Tribe: Navajo Nation

Region: 9

Federal Request: \$100,000

Award: \$100,000

The Navajo Nation located on 27,000 square miles or approximately 17,000,000 acres in a region of northeast Arizona, northwest New Mexico, and southeast Utah known as the Colorado Plateau. The Navajo Nation has approximately 39,000 miles of streams most of which are ephemeral or intermittent. The overall water quality problem of concern is sediment, caused by livestock and roads, which specifically adversely impacts the Torreon Wash within the Arroyo Chico watershed. The Navajo Nation's proposed project focuses on on-the-ground work in the Arroyo Chico watershed. Upper Torreon Wash is headwaters within the Arroyo Chico watershed.

The proposed restoration measures include stabilizing surface soil in uplands and gullies, and implementing active grazing management. Up to 200 passive rock structures such as rock vanes and weirs will be installed to facilitate stream meandering, decrease channel incision, and increase sediment aggradation and vegetation growth. Additionally, up to ten Plug & Spread structures will be installed in gully erosion sites mitigate continued erosion. Lastly, approximately one mile of fencing will be installed to create pastures within specified grazing permit areas. These practices are expected to mitigate soil loss and improve water quality in the Upper Torreon Wash target area.

Tribe: The La Jolla Band of Luiseño Indians

Region: 9

Federal Request: \$99,998

Award: \$99,998

The La Jolla Band of Luiseño Indians Reservation is located on 8,822 acres within the San Luis Rey River Watershed in northern San Diego County in California. The reservation topography is mountainous, with elevation ranging from 900 to 5,200 feet and precipitation correspondingly varying from approximately 20 to 40 inches/year. There are approximately 36 miles of rivers and streams within the reservation boundaries. Failing septic systems and campground water faucets, are a significant threat to water quality within these rivers and streams.

To mitigate the threat of failing septic systems to rivers and streams, the La Jolla Band of Luiseño Indians proposes to locate, inspect, and install BMPs on 14 septic systems. To mitigate the threat from failing campground water faucets, the faulty faucets will be replaced and infiltration basins installed at their bases to mitigate any further potential erosion. These practices are expected to improve water quality by preventing erosion and pollutants from entering streams, and minimizing water loss.

Tribe: Nez Perce Tribe

Region: 10

Federal Request: \$100,000

Award: \$100,000

The Nez Perce Reservation is located on about 770,483 acres in north central Idaho. Lawyer Creek drains a 137,000 acre watershed located mostly within the reservation. This creek is impaired by nonpoint sources of pollution originating from agriculture, forestry and roads. Runoff from these pollutant sources results in high levels of sediment and nutrients in Lawyer Creek.

The Nez Perce Tribe proposes measures to restore 30 acres of a ranch that is adjacent to Lawyer Creek. The proposed restorations are comprised of stabilizing existing fine sediment sources, increasing stream shading and channel complexity, and reconnecting portions of the floodplain with the stream channel. This 30 acre restoration is expected to result in reductions of approximately 493 tons/year of sediment, 1,582 lbs/year of nitrogen, and 609 lbs/year of phosphorous. This restoration is being supported as a cooperative effort by the Nez Perce, the Flying B Ranch (property owners), Idaho County Soil and Water Conservation District (SWCD), and the US Fish and Wildlife Service (USFWS).

Tribe: Red Lake Band of Chippewa Indians

Region: 5

Federal Request: \$100,000

Award: \$100,000

The Red lake Band of Chippewa Indians Reservation is located on about 835,000 acres in north central Minnesota. Kinney Lake, located within reservation land, is an economically and culturally important waterbody in the reservation which supports tourism and subsistence fishing. Nonpoint source

pollution to Kinney Lake from roads, highways and bridges threaten these important uses of Kinney Lake.

To protect Kinney Lake from nonpoint source pollution, the Red Lake Band of Chippewa Indians proposes measures to stabilize the road, parking, shoreline, and boat launch. Prior to restoration, turbidity levels in runoff to the Lake were 77 and 80 times the surface water standard of 10 NTU. To decrease sedimentation, the tribe will stabilize 86 feet of shoreline, 3,035 feet of lake access road, and 6,225 ft² of parking area. These measures are expected to decrease sediment and nutrient loads, thereby increasing water clarity, and preserving the fishery.

Tribe: The San Carlos Apache Tribe

Region: 9

Federal Request: \$100,000

Award: \$100,000

The San Carlos Apache Reservation is located on about 1,854,396 acres in southeast Arizona. The reservation includes the San Carlos River Watershed and borders the White Mountain Apache Indian Reservation. Within the San Carlos watershed there are 10 stream road crossings which result in sediment loss due to the streambank modification and riparian vegetation impairment.

The San Carlos Apache Tribe proposed measures to mitigate the effects of three of the 10 road stream crossings. Turbidity levels at these three sites were higher downstream of the crossings than upstream: 7.3 NTUs upstream vs. 155 NTUs downstream at the San Carlos River Holy Ground Site, 6.1 NTUs upstream vs. 291 NTUs downstream at the San Carlos River Upper Road Site, and .81 NTUs upstream vs. 75.6 NTUs downstream at the Cassadore Creek Road site. To restore these three crossings, the tribe will mitigate sedimentation loss by stabilizing the crossings and stream channels with cobble, plant 131 willow and 130 cottonwood cuttings along 280 feet of streambank and 0.9 acres of riparian area, and plant 100 culturally important wetland plants. These measures are expected to result in the stabilization of the three road crossings, and reduced turbidity levels to below the standards of 50 NTU.

Tribe: Shoshone Tribes of Duck Valley

Region: 9

Federal Request: \$100,000

Award: \$100,000

The Duck Valley Indian Reservation (DVIR) straddles the Idaho/Nevada border in the remote Owyhee Desert. The reservation is 289,820 acres of wetlands, farms, high sagebrush steppe, and mountains. Perennial streams, springs, and spring creeks, as well as, over 10,000 acres of wetlands make Duck Valley an ecologically diverse and important area. The DVIR is a ranching community with an estimated 15,000 head of cattle and horses combined. Livestock production and agricultural activities associated with livestock production are the primary economic resources for tribal members on the reservation and consequently the largest source of NPS pollution. Water quality monitoring results indicate levels of nutrients, bacteria, sediments, and temperature elevate as waters flow through the main valley, at times exceeding state standards and tribally passed standards.

Four priority locations for restoration and protection projects were selected from a priority list of sites requiring mitigation: lower Jones Creek, Indian Creek, a portion of Owyhee River in the southwest section of the reservation, and Owyhee River in the northwest section of the reservation. Projects across the four sites include: stabilizing a one mile stretch of streambank and installing off site watering at both lower Jones Creek and Indian Creek; and installing off site watering at both Owyhee River sites. Project implementation is expected to improve water quality by reducing bacterial levels; reducing sediment loading; decreasing nutrient levels; and decreasing water temperatures due to the protection of DVIR water resources from livestock and agricultural damage. The project also includes water quality monitoring to determine effectiveness of the on the ground practices.

Tribe: Smith River Rancheria

Region: 9

Federal Request: \$100,000

Award: \$100,000

The Smith River Rancheria Reservation is located on over 500 acres in northwestern California. The Smith River Rancheria relies on Lopez Creek, which drains an 800 acre watershed, as its sole source of drinking water supply. However, this drinking water supply is threatened by the slope failure of Lopez Creek's streambanks.

These critical failures were occurring just upstream of drinking water intakes and necessitate more frequent backwashing of the filter and higher chlorine applications to the water supply. This project is expected to stabilize the slope, mitigating the risk of high turbidity levels in Lopez Creek, and is estimated to prevent 93,125 cubic feet of sediment from entering the stream.

Tribe: Southern Ute Indian Tribe

Region: 8

Federal Request: \$100,000

Award: \$100,000

The Southern Ute Indian Tribe reservation is located in Southwest Colorado on 1,059 square miles. The primary goals of the Southern Ute Indian Tribe's NPS program is to reduce pollutant loading from NPS impaired rivers and streams within the Los Pinos and Animas Watersheds. Nutrient and sediment loading to these watersheds degrades water quality and threatens aquatic life.

The Southern Ute Indian tribe proposes to support the implementation of agricultural BMPs within the Los Pinos and Animas Watersheds. The Los Pinos and Animas Watersheds are designated to support Aquatic Life Cold 1, Recreation 1, Drinking Water Supply and Agriculture beneficial uses. The implementation of agricultural BMPs, such as livestock exclusion fencing, and field filter strips and buffers within these watersheds will improve water quality and the attainment of these beneficial uses. Additionally, the Southern Ute Indian Tribe will implement a riparian enhancement project on three miles of Stollsteimer Creek, a tributary to the Piedra River. This work will further improve water quality through reducing the quantity of pollutants entering Stollsteimer Creek.

Tribe: Spokane Tribe of Indians
Region: 10
Federal Request: \$100,000
Award: \$100,000

The Spokane Tribe of Indians reservation is located on over 150,000 acres in Eastern Washington State. The reservation contains over 100,000 acres of forest, 8,000 acres of agricultural land, and 10,328 lakes. Nonpoint source pollution from a historic railroad dike increases sedimentation to Chamokane Creek. This sedimentation threatens fish egg survival and invertebrate production in Chamokane Creek. Temperature impairments in the creek are an additional concern as well.

The Spokane Tribe of Indians proposes measures to reduce sediment loading and improve water temperatures in Chamokane Creek. Approximately 536 yds³ of the historic railroad rail bed has eroded into the stream, and approximately 813 more yds³ are estimated to be lost without mitigation. The existing conditions resulted in maximum turbidity levels of 173 NTUs and total suspended solid (TSS) concentrations of 274 mg/L. To improve these conditions, the Spokane Tribe plans to implement a number of measures including removing a historic railroad dike, reconnecting the creek to the original channel, and planting riparian vegetation. These measures are expected to result in decreased turbidity and stream embeddedness. Stream temperatures are also expected to improve with the reestablishment of more natural channel morphology.

Tribe: The Upper Skagit Indian Tribe
Region: 10
Federal Request: \$ 100,000.00
Award: \$ 100,000.00

The Upper Skagit Indian Tribe is located in Washington State. Dairy Tributary of the Hansen Creek Watershed, runs through the Upper Skagit Indian Tribe reservation, and historically supported Coho and Chum salmon populations which migrated to the stream from the Pacific Ocean to spawn. However, hydromodification of the Dairy Tributary degrades salmon habitat and water quality.

An undersized culvert caused in-channel aggradation and scour in the Dairy Tributary. This destabilized the stream channel and riparian habitat, resulting in raised stream temperatures and turbidity. Salmon migration and spawning are also impaired as a result of these impacts from the culvert. To reverse these impacts, the Upper Skagit Indian Tribe plans to replace the culvert, install stream cobble and large woody debris, and plant native riparian vegetation. These measures are expected to decrease sedimentation and temperature, and improve salmon habitat.

Tribe: Yavapai-Apache Nation
Region: 9
Federal Request: \$ 100,000
Award: \$ 100,000

The Yavapai-Apache Nation is located in central Arizona. The Verde River, which flows through the reservation, supports a wide variety of wildlife and fish including 12 species of native fish. However,

nonpoint source pollution from livestock and impacted riparian areas in the Verde River, which fails to attain its designated use for warm water fishery.

The Yavapai-Apache Nation proposed several measures to improve water quality in the Verde River. To improve water quality, the Yavapai-Apache Nation will install 2.5 miles of livestock exclusion fencing to protect 190 acres of riparian area and wetland. Invasive Tamarisk will be removed and native vegetation will then be planted within this protected area. These efforts are expected to improve riparian habitat, and reduce sediment and nutrient loading thereby improving water quality in the Verde River.

Tribe: Walker River Paiute Tribe

Region: 9

Federal Request: \$100,000

Award: * \$19,672 (partial funding due to exhaustion of funds)

The Walker River Paiute Tribe reservation is located on 323,466 acres in midwest Nevada. The Walker River, which flows through the reservation, supports a wide variety of wildlife and fish including the Lahontan Cutthroat Trout, an endangered species. However, nonpoint source pollution from irrigation return flows increase sediment and pollutant loadings to the Walker River, degrading water quality and threatening aquatic life.

The Walker River Paiute Tribe proposed several measures to moderate pollutant loadings from irrigation return flows to the Walker River. The Tribe has approximately 2,100 acres of irrigated agriculture and one return flow ditch drains about 1,000 of these acres. The tribe plans to install a sediment basin and re-vegetate this ditch with native grasses to decrease pollutant loads from the 1000 acres of irrigated farmland. This is expected to improve water quality and mitigate threats to aquatic life. Community outreach will also be conducted to educate the public about progress of this project and the importance of managing nonpoint source pollution.