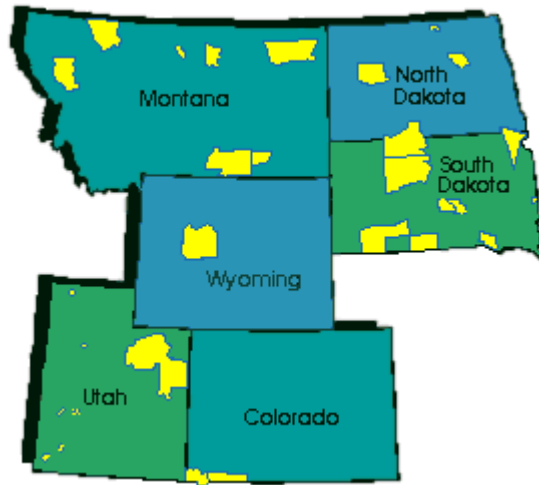


**EPA Region VIII
Tribal Water Quality Programs
Clean Water Act Section 106
Success Stories**



November, 2005

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Introduction:

Clean Water Act Section 106 funding provides for monitoring and assessment of waters of the United States. While a significant portion of the funding goes directly to states to administer their programs, a small portion also goes to tribes in each EPA region. EPA Region 8, the Rocky Mountain Region, is home to 27 tribes, and most have a CWA Section 106-funded water pollution prevention program. While each tribe has its own water pollution priorities and goals, all have benefited from the availability of funding through this program. This document showcases a handful of the water quality improvements, on-the-ground projects, and programs that have benefited greatly in EPA Region VIII Indian Country as a result of that funding mechanism.

Missionary Ridge Fire Post-Fire Water Quality Assessment Southern Ute Tribe, Southwest Colorado

The southwestern region of the United States has been experiencing extreme drought and fire conditions and as such, the Missionary Ridge Fire Complex affected La Plata County where the Southern Ute Indian Reservation is located during summer 2002.

The fire



An initial Burn Area Emergency Rehabilitation (BAER) report was completed and at that time a total of 39.8 million dollars was expended for fire suppression and air support (USFS BAER Report, July 2002). At that time mitigation measures were initiated by the BAER Mitigation Team to minimize the impact to the Animas, Florida and Pine Rivers when the monsoon rain pattern began. Unfortunately all 3 rivers were impacted with heavy sediment loading as a result of numerous mudslides that occurred and are still occurring within burn area. Current water uses on these streams include Tribal and non-member agricultural and domestic uses. The State of Colorado has designated the Pine, Florida and Animas Rivers as agriculture and drinking water supply, Aquatic Cold I and Recreation I.

Along with the sediment and organic matter being washed into the streams from the burned areas, recent drought has resulted in low flows, and thus indications of nutrient enrichment on the Pine and Animas Rivers. WQ staff has witnessed water quality impacts such as ash and debris material within the Pine, Florida, and Animas Rivers and has been monitoring for macroinvertebrates, dissolved oxygen, turbidity, pH, conductivity, and temperature, pebble counts and measures of embeddedness since the fire was officially contained in July 2002.

Ashy mud flow in burned forest watershed



For the long-term monitoring program it is important that the effects of the fire and drought be distinguished from anthropogenic effects. Monitoring for the effects of the fire parallel monitoring for the effects of nutrient enrichment and Tribal WQ staff is participating with other entities such as EPA region VI and VIII, Bureau of Reclamation (BOR), Ute Mountain Ute Tribe, New Mexico's Surface Water Quality Bureau (SWQB), Colorado Department of Public Health and Environment (CDPH&E), Colorado Department of Wildlife (CDOW) and several special interest groups to address the nutrient enrichment issue on the Animas River.

Ashy sediment clogged irrigation diversions and embedded aquatic habitat.



To complete a comprehensive study of the long-term impact from fire effects and anthropogenic effects, monitoring has been conducted and will continue for a number of years. Based on document searches and long-term research of the effects of fires on un-dammed streams that was conducted in Idaho and Yellowstone National Park, the effects of fires may be observed for approximately eight to ten years.

The successful development of the EPA-funded Southern Ute Tribal Water Quality Program laid the foundation for participation in this project. The Tribe provided valuable insight, access, and water quality data that would not have been available to this emergency response team without years of sustained water quality data collection and management by the Southern Utes. The Southern Utes have proven themselves as leaders in tribal water quality data collection and assessment and their expertise have been invaluable in the Missionary Ridge Fire Complex BAER Team post fire assessment.

Little Badger Creek Restoration Project Blackfeet Tribe, Northwest Montana

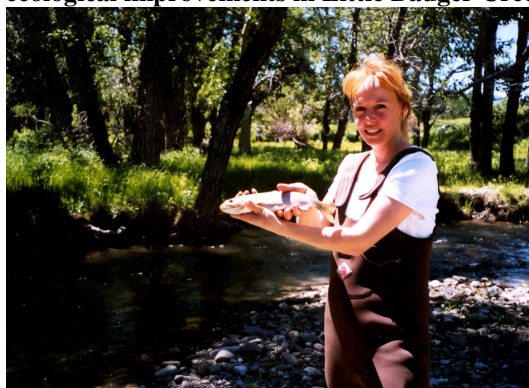
This project was undertaken in partnership with the Blackfeet Water Resources Dept., a landowner-- Bernard St. Goddard, and the U.S. Fish and Wildlife Service. Clean Water Act Section 106 Special Studies Project Funds were used to accomplish most of the work with an in-kind and cash cost-share with the other entities.

Project Location:



Little Badger Creek was in need of restoration due to stream bank erosion, head-cutting, lack of lateral migration, chemical water quality degradation, and subsequent loss of aquatic wildlife habitat. The project sought to implement water quality improvement measures while providing incentives to the land owner.

Blackfeet water quality staff used fish metrics to evaluate ecological improvements in Little Badger Creek.



Physical streambank and structural improvements included re-sloping of banks to reduce erosion and sloughing where banks had been severely eroded and down-cut. Also, in-stream structures based on “Rosgen” stream classification and restoration design were installed to improve aquatic habitat and dissipate energy. Tribal staff attended Rosgen training workshops to learn the restoration techniques used in this project as part of their annual CWA Section 106-funded water pollution prevention program.

Chemical water quality analyses performed at the Blackfeet Environmental facilities and in the field guided the specific needs for the project and laid the foundation for assessing improvements in Little Badger Creek.



Water quality improvements detected through post-project monitoring included: reduced nutrient loading, reduced sediment loading, reduced fecal coliform loading, reduced temperatures, increased dissolved oxygen, and improved fish and benthic macroinvertebrate habitat. The national goal for waters of the U.S. to be “fishable and swimmable” was brought to fruition for Little Badger Creek by this project. Also, this project was a true “win-win” because the landowner also had several incentives that improved his property value and ranching operations. Ranch improvements were directly linked to reductions in sedimentation, nutrient and bacteria loading when best management practices were implemented.



Above, before project at upstream end of project; Below, after the project—note root wads, in-stream structure, riparian exclusion fencing and riparian vegetation.



Total project costs were: \$125,000 from EPA-administered CWA Section 106 allocations; \$12,000 from Blackfeet Water Resources Office; and \$2,000 from the U.S. Fish and Wildlife Service. Of the EPA funds, approximately \$35,000 was for heavy equipment contracting; \$26,000 was for materials such as root wads, rocks, and vegetation; \$27,000 for landowner incentive sustainable (ecologically-friendly) ranching improvements (including 5% landowner match); and the rest in design costs, construction oversight, administrative and miscellaneous costs.

Below, examples of win-win landowner incentive—fencing to keep livestock from riparian corridor; off-site water improvement from this well so livestock can drink from structures outside of riparian corridor.



Above, another location on Little Badger Creek before improvements—note severe bank erosion; below, after the project—resloped banks, root wads, and riparian vegetation.



Saline Well Plugging Project Ute Mountain Ute Tribe, Southwest Colorado

This project was funded through a Clean Water Act Section 106 Special Studies Project grant with in-kind contributions from the Ute Mountain Ute Tribe and the Bureau of Indian Affairs. Until the availability of CWA Section 106 Special Studies funding, various environmental grants had been sought but never received to undertake the project.

The need for the project arose from a clause in the oil field development leases that the Bureau of Indian Affairs administers for the benefit of the Tribe. The clause roughly states that during exploration when water is found it is to be documented, and when a well is either depleted or not worth putting into production, then the Tribe has an option to request the drilling company to cap it at the usable aquifer for a water resource. Following the procedure, the Tribe is thereby responsible for the well. In 1959, the Calco-Superior Ute Tribe #3 Well was drilled and did not produce enough to warrant putting it into production. Per the letter of the lease, the company approached the Tribe and offered a water resource in the desert near the western boundary of the Reservation. The Tribe accepted their offer and they capped the well at an aquifer that provided artesian water. From there it is a mystery what followed—either the water was never tested originally or there was a mechanical failure in the well casing allowing in water from another aquifer, but the water was extremely saline. Livestock and wild horses in the area would not drink it, so it was not serving any purpose.

Monitoring data from the CWA Section 106-funded Water Pollution Prevention Program showed electrolytic conductivity measurements on the order of 16,000 to 20,000 uS/cm, or Total Dissolved Solids in the 12,000 to 15,000 range. Flow approximations put the daily load of salt into [the San Juan River Basin and] Colorado River Basin at **1 ton per day**. This, while various federal agencies had spent \$77.1 million dollars from 1994-1996 to reduce salinity in the Colorado River Basin. It seemed like a logical expenditure of Clean Water Act funds, and EPA funded the project.

Breaching pond next to well to allow access for drill rig



The actual process was relatively simple: the pond that had formed was breached to dry the area out enough to get a drill rig in; the well was filled with a cement plug while diverting water into a tank during plugging; a dry hole

Drill rig on site over well



marker was welded on the cap; the area was graded and seeded for reclamation; and the road to the well was reclaimed.

Final Reclaimed well site



Total hard cost for the project was \$51,925.20, with in-kind help from the Ute Mountain Ute Tribe's Energy Department and the Bureau of Indian Affairs Petroleum Engineer. With a savings of approximately 365 tons of salt per year at the cost above, it equates to a cost of \$23.71 per ton per year for the six years that it has been plugged. **2190 tons of salt has been prevented from reaching the Colorado River Basin** during that time.

Water Quality Training for Region VIII, Fort Peck Assiniboine & Sioux Tribes, Northeast Montana—benefiting all of Region 8



NATION/TRIBE: Fort Peck Assiniboine & Sioux Tribes

DESCRIPTION AND SCOPE OF WORK:

The Water Quality Training Program Project for Region VIII Tribes actively began in 2002, using monies from the Clean Water Act § 106 Special Project Monies, with matching funds from the Fort Peck Assiniboine & Sioux Tribes Office of Environmental Protection (OEP). The project implements a multi-phased approach to meeting the requests from the Tribes within Region VIII for a water quality training curriculum taught primarily by Tribal Water Quality Professionals within the Region and specifically tailored to meet Tribal personnel needs.

Fort Peck Assiniboine & Sioux Tribes, working in conjunction with the Institute for Tribal Environmental Professionals (ITEP) at Northern Arizona University (NAU), and EPA Region VIII personnel, has developed and begun to implement a regional tribal water quality certification program offering professional certification on increasingly technical levels.

The certification program is loosely built around the college curriculum format based on classroom interaction time, whereby 8 hours of training equates to 1 credit. To progress from one level to the next, program participants are required to complete specific core classes, as well as complete a specific number of elective credit hours. A standardized protocol and a review board consisting of EPA personnel, Tribal professionals, and educational representatives approve core and elective course curriculums. All courses implement and enforce a stringent attendance policy, pre and post course testing, as well as completion of out of class assignments.

The certification program currently offers certification to water quality staff on three separate levels: (Level I Certification) Water Quality Technician; (Level II) Water Quality Specialist; and (Level III) Environmental Specialist. Core requirements for certification on these levels include classes such as the Basic Monitoring Course, Data Entry/Introduction to Data Analysis, Monitoring Design, Advanced Data Analysis, and 305(b) Report Writing.

OBJECTIVES, TASKS, ACCOMPLISHMENTS:

To date, curriculums for Data Entry/Introductory Data Analysis, Monitoring Design, Basic Water Quality Monitoring, Advanced Data Analysis, Biological Monitoring, and Wilderness First Aid classes have been developed and held at different locations around the Region. Additional monies still remain from the original project grant extended through September 30, 2006, which will be spent on additional training courses and repeat training courses.

***Upper Missouri River EMAP (Environmental Monitoring and Assessment Program-
Surface Waters)***

Fort Peck Assiniboine & Sioux Tribes, Northeastern Montana



Demarcating the entire southern boundary of the Fort Peck Indian Reservation, the Missouri River is an import resource to the people in northeastern Montana. The Missouri provides a source of drinking water, irrigation water, sport fishing, and recreation in addition to providing critical habitat for several endangered species of fish and birds. However, the Missouri River is one of the largest rivers in North America presenting a challenge to anyone who wants to characterize the ecological condition through established water quality monitoring protocols.

In response to the need for large river monitoring protocols, the Office of Research and Development (ORD) of the U.S. Environmental Protection Agency had developed the Great Rivers Environmental Monitoring and Assessment Program. Also, the ORD had initiated a project on the Upper Missouri called the UMR EMAP. During this same time period, the State of Montana listed the segment of the Missouri River from the Fort Peck Dam face to the North Dakota state line on the 303(d) list for threatened and impaired waters.

As a result of this listing, water quality information was needed on metals and temperature. EMAP provided the protocols necessary for a determining the ecological condition in statistically valid process. The Fort Peck Tribes' Office of Environmental Protection (OEP), as one of the cooperators on the Total Maximum Daily Load (TMDL) workgroup, was selected to assist with monitoring on the Missouri River. The OEP selected EMAP as a method to determine the quality of the Missouri River after consultation with EPA.

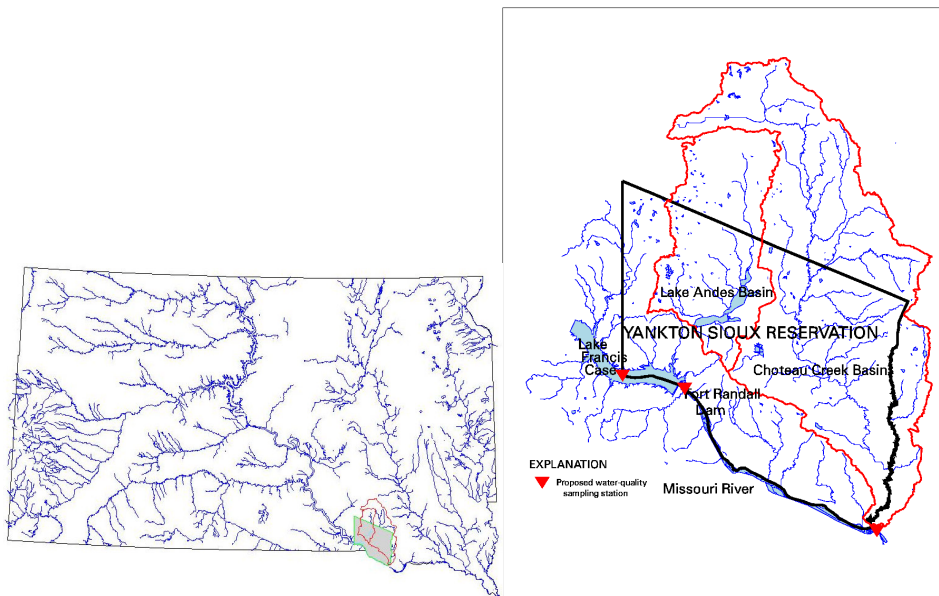
The Fort Peck Tribes' team was responsible for monitoring and assessing 256 river miles of the upper Missouri River Reach. Aquatic habitats evaluated included open water, backwater, and shoreline. In the last four years 36 open water sites were sampled for water chemistry, macroinvertebrates, and evaluated based on flow and habitat. The backwater sites proved less favorable for sampling and totaled 21 and were evaluated based on water chemistry, macroinvertebrate communities, canopy cover, and habitat assessments. Shoreline sites totaled 51, these sites were evaluated based on water chemistry, macroinvertebrates, bank measurements, canopy cover, and habitat assessments.

To date, three years of data have been collected on the Missouri River. After completion of the identification of the benthic community samples, the data will be submitted to EPA's ORD for metric development and evaluation. In addition, nested sites that were strictly on the Reservation will be used to develop a condition for the Missouri as it crosses the Reservation. Sites on the reservation will be revisited in the future in order to determine condition over time.

***Missouri River Water Quality Monitoring in Partnership with the U.S. Geological Survey
Yankton Sioux Tribe, Southeast South Dakota***

The Yankton Sioux Tribe (YST) partners with the U.S.G.S. to monitor the Missouri River on the Yankton Sioux Reservation in South Dakota. This effort is made possible by Clean Water Act Section 106 funding. The purpose and premise for the need for these data is that the YST Reservation occurs at a significant location with respect to the water-quality dynamics of the Missouri River. The Missouri River also forms the natural boundary along the southern edge of the Reservation.

Project Location:



Parameters that are sampled and analyzed include:

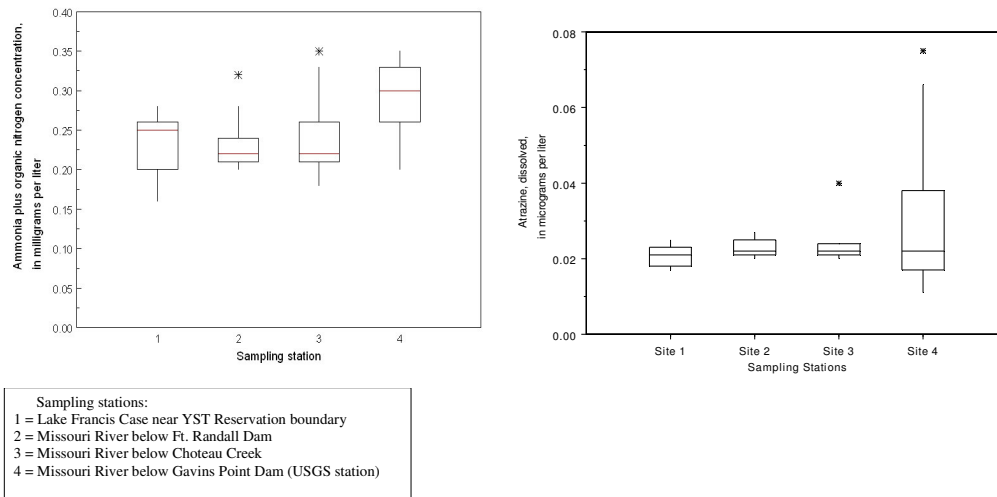
- Major Ions (9 ions), TDS and turbidity
- Trace elements (17 metals)
- Nitrogen and Phosphorus nutrients (8 constituents)
- Suspended sediment
- Synthetic organic pesticides (48)
- Chlorophyll-a and organic carbon

4 sample sites are sampled, 3 on the flowing Missouri and 1 at Lake Francis. Sampling frequency is based on a hydrograph from approximately 12,000 to 36,000 cf/s, with six sampling events (per year). Data assessment uses box plots, stiff diagrams, and a geographic information system to interpret results of analyses.



Water Quality Specialist Cliff Johnson (center) with Steve Sando and Roy Bartholomay of USGS

Examples of results and reporting/assessment techniques:



Results of the monitoring effort have concluded that:

- Substantial changes in major-ion and nutrient chemistry occur in a fairly short reach of the Missouri River in vicinity of YST Reservation
- Continued monitoring and more detailed analysis of existing data will help to better define trophic processes
- Results of the YST Missouri River monitoring have significant implications with respect to management of the Missouri River

***Water Quality Laboratory Construction, Operation and Cost Savings
Flandreau Santee Sioux Tribe, Eastern South Dakota***

The Flandreau Santee Sioux Tribe (FSST) Clean Water Act 106 program began focusing on monitoring the quality of the water on the Flandreau Santee Sioux reservation in August 2000. A baseline of the quality of the water needed to be established in order to protect and restore the quality of tribal waters, and samples needed to be collected and analyzed over a two or three year period in order to observe seasonal and climactic variations to establish a baseline. The FSST 106 grant applications for FY01 and FY02 requested funding for laboratory equipment because there was no water quality data available and proposed contract laboratory analyses were \$1,256.00 per sample and equivalent to approximately \$217,566.00 per year.

The idea to start an analytical laboratory and the request for purchase of laboratory equipment was practical because the water quality specialist is a chemist with 20 years of laboratory experience, and analyzing the samples in-house is about ¼ of the cost of contract lab analyses. EPA did not immediately fund the equipment and it is generally EPA policy that paying for a contract laboratory to perform the analysis is preferable to purchasing laboratory equipment. EPA recognized that there are many tribal laboratories where there is equipment, but no personnel to perform the analyses. The Flandreau Santee Sioux Tribe contacted several of the Region 8 Water Quality Coordinators looking for unused lab equipment, and the tribe that could provide equipment was the Southern Ute Tribe. The EPA's Region 8 Tribal Assistance Program Manager authorized and made arrangements for the equipment to be transferred to the FSST. In August 2002 the Flandreau Water Quality Coordinator and General Assistance Program coordinator drove to Ignacio, Colorado in a Tribal van to pick up the lab equipment. The FSST water lab was set up using about \$50,000.00 in equipment donated from the Southern Ute Tribe supplemented by \$9,449.00 of the unspent money originally budgeted for contract laboratory analyses. Then in late 2002, FSST water lab began performing all of its water analysis except metals, pesticides, and phosphorus. This resulted in a savings of \$160.00 per sample.

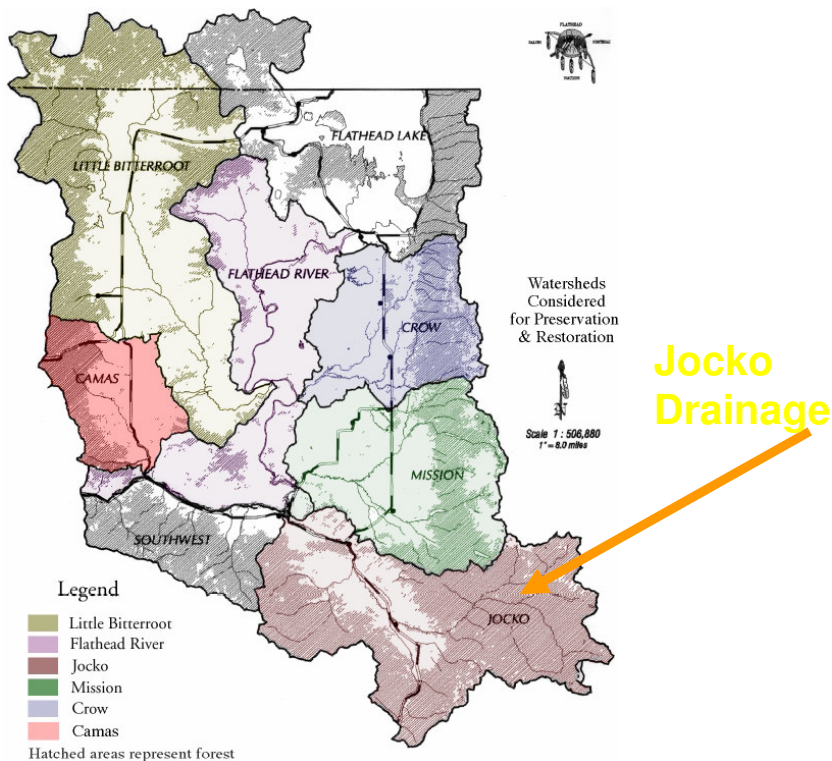
In FY04 \$17,000.00 of unspent CWA 106 money was used to purchase a gas chromatograph. This piece of laboratory equipment will be used to analyze water for pesticides. This will reduce the cost of laboratory analysis on the CWA 106 FY05 grant by \$715.00 per sample or \$24,850.00 during the FY05 grant year.

Despite the original reservations about the capability of the Flandreau Santee Sioux Tribe to successfully staff and operate their own laboratory, it is good that EPA was persuaded to authorize the inter-tribal transfer of dormant equipment and to allow the Tribe to construct and operate their own laboratory. In times of budget cuts and greater accountability for monitoring dollars, this will increase the monitoring capacity of the Flandreau Santee Sioux Tribe for years to come, potentially offering services that will benefit the other tribes in the region also.

***Jocko River Restoration Project
Confederated Salish and Kootenai Tribes of the Flathead Reservation,
Northwest Montana***

Following the settlement of several landmark lawsuits that resulted from mine waste discharges in the Upper Clark Fork River Basin, aboriginal territory for the Salish and Kootenai, the Tribes entered into an agreement to “create, restore, or enhance 800 acres of wetland or riparian area or expend a specified amount of money toward this goal, and to expend a specific amount of money towards bull trout restoration.”

The Tribes decided to undertake restoration on their Reservation instead of in the Upper Clark Fork River Basin (UCFRB) and targeted the Jocko River Basin for the project because of its similarity in size to Silver Bow Creek, the primary area of injury in the UCFRB; because both streams have substantial zones of groundwater upwelling; and because each watershed has similar extensive wetland-riparian resources.



In the settlement of the case and as a result of the decisions made by the Tribes, some very unique opportunities for stream restoration presented themselves:

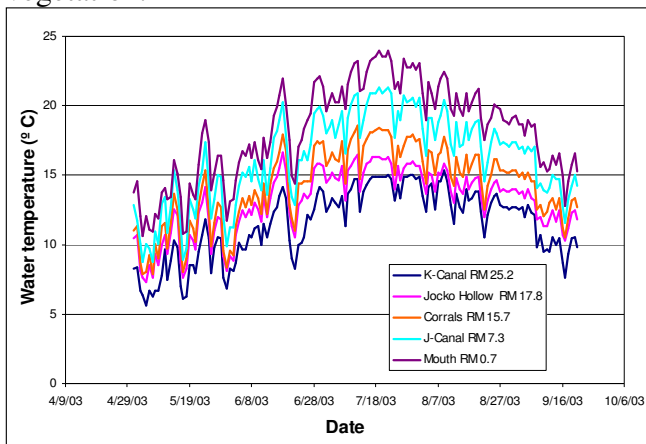
- ☐ Majority of watershed owned and managed by CS&KT
- ☐ CS&KT dedication to use settlement money in a single watershed
- ☐ Ability to use money for land acquisition
- ☐ Settlement monies can be used to leverage additional funds

A technical team is established for the project, and a master plan developed to implement the project. The long-term plan involves 5 steps: assessment to determine watershed history, existing condition, and desired future condition --and to identify areas for restoration and determine source of degradation; protection to identify the best habitats and protect them; passive restoration to stop or reduce disturbances; active restoration; and monitoring.

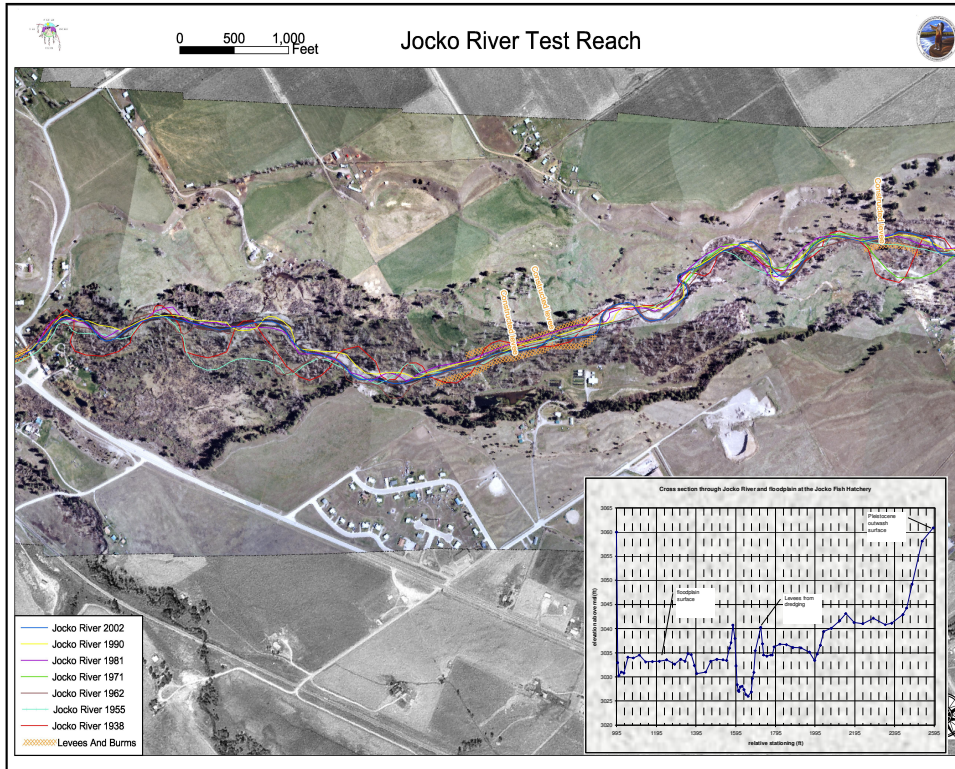


The Jocko River is core habitat for riverine bull trout populations

Extensive research was conducted to evaluate historic and existing conditions using aerial photography, water quality data and biological assessments of aquatic biota and riparian vegetation.



Temperature data was used to determine optimum conditions for bull trout



Existing stream channels and desired stream channels were measured and designed using cross-sections, elevation profiles and sinuosity planning for energy dissipation.

The Tribe's Water Quality Standards were used to assess Aquatic Life Use Attainability for the bull trout, based on the current "impaired" conditions and project goals:

Cause of Impairment	Source of Impairment
Flow Alteration	Hydromodification, Impoundments
Habitat alteration	Channelization, bank destabilization, removal of riparian vegetation
Thermal alteration	Channelization, removal of riparian vegetation

Passive restoration activities involve land purchase, acquiring conservation easements, and rededication of land uses. These activities are required to make the project succeed. Without significant changes in land use management, riparian restoration will be reduced. Rededication of land to different uses and significant riparian fencing are also required to mitigate grazing impacts.

Active restoration includes road abandonment and decommissioning, and BMP upgrades on open roads; stream channel restoration; wetland-riparian restoration; fish passage and protection; fish management actions; and revegetation.



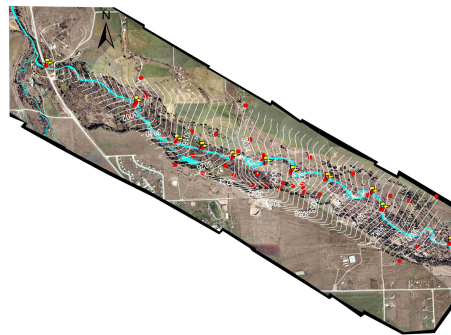
Restored channel



Wetland enhancement



Revegetation



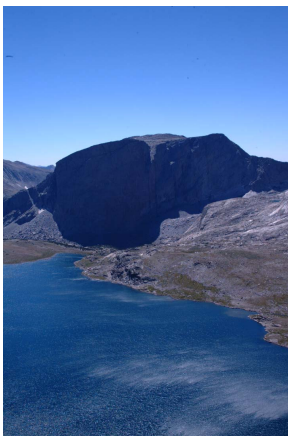
Water table monitoring—piezometers in flood plain, 2004

***Alpine Lakes Study
Shoshone and Northern Arapahoe Tribes of the Wind River Reservation,
Western Central Wyoming***

The Shoshone and Northern Arapahoe Tribes of the Wind River Reservation undertook a cutting-edge research project on their Reservation to better define the aquatic ecosystems and water quality of their alpine lakes and streams. Seventy-two sites were sampled on one hundred and twenty five visits. Thirty Lakes, eleven pond/wetlands, twenty-seven streams, and five snowfields were sampled. Seasonal data with visits in the spring, summer and fall were mostly collected from the base camp locations in Twenty lakes Basin (TL) in 2002 and in Wilson Creek Basin (WC) in 2001.



Twenty Lakes Basin, Wind River Reservation, WY



Water quality staff collected various chemical, physical, and biological data at the sites.

**At left, Baptiste Lake looking at Mount Hooker (Continental Divide):
One location in Alpine Lakes Study and also location of National Fish
Tissue Study**



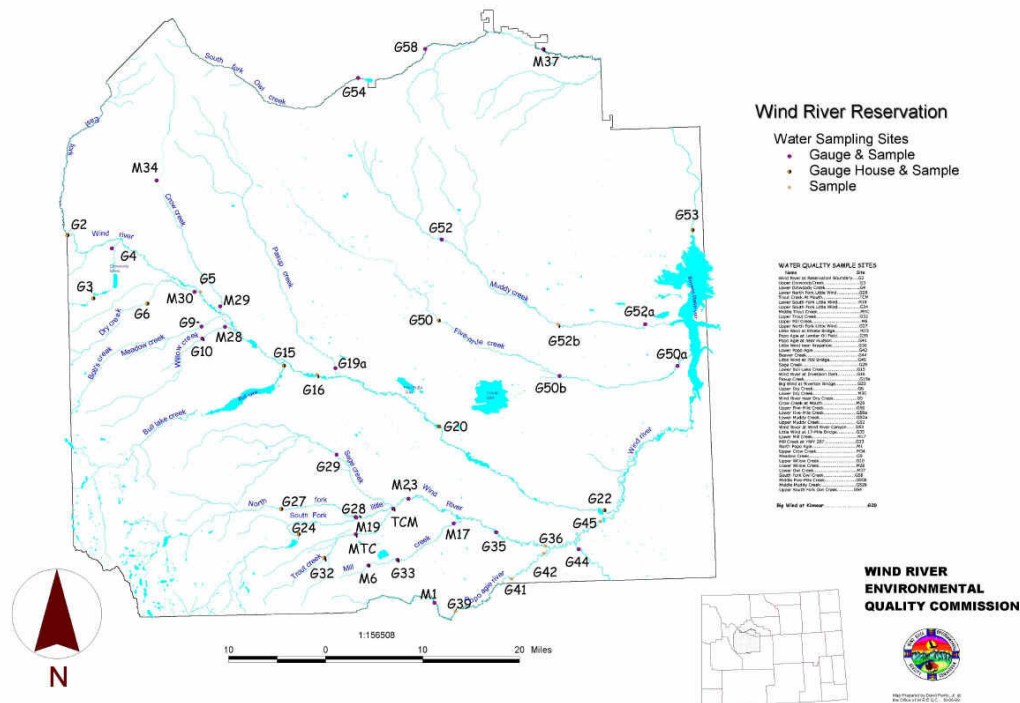
Above, Nate Shoutis doing field chemistry and, below, Art Shoutis in float tube collecting water and plankton samples during the study.



Data from the study will assist the Tribe in writing standards for water quality for the unique alpine environment they are trying to protect. Those data will also assist federal and state water quality researchers and managers in understanding and protecting those environments.

***Clean Water Act Section 106 Program Development and Administration
Shoshone and Northern Arapahoe Tribes of the Wind River Reservation,
Western Central Wyoming***

The Wind River Environmental Quality Commission has worked since 1997 to develop a comprehensive Clean Water Act Section 106-funded monitoring, assessment and regulation program to protect water quality on the Wind River Reservation in Wyoming. The Tribe has established 50 surface water quality monitoring sites throughout the reservation. Sampling is conducted quarterly or monthly for water quality chemistry samples, field data, and bacteria samples.



Surface Water Sample Sites on the Wind River Reservation

Physical habitat assessments are conducted and biological samples are also collected, specifically benthic macroinvertebrates. In the course of collecting biological samples, a species of fresh water mussels was discovered. Following the discovery of the clam/mussel in Little Wind River; the Tribes conducted a reconnaissance-level study of mussel distribution in Little Wind River's main stem.



Travis Shakespeare and Everett McGill collecting Macroinvertebrates at site G 28, Lower North Fork of the Little Wind River during the index period (March, April, May) before spring run-off.

One of the main responsibilities of the water quality staff is to review and audit the NPDES-permitted facilities on the Reservation. Thirty-eight facilities are permitted on the Reservation. The staff provides comments to EPA regarding permit limits and the requirements of their environmental codes. To better understand these discharges, the staff has conducted a reconnaissance-level study of a sulfuric acid plant discharge. They have also conducted reconnaissance-level studies of oil and gas discharges.



Dean Goggles and Lokilo St.Clair gathering water and sediment at the Rolff lake NPDES discharge site; 1 of the 38 NPDES permits on the Wind River Reservation

Using their insight, water quality staff participate in local, state and federal advisory committees to represent the interests of their Tribes in protecting water quality. They are a member of State of Wyoming DEQ TMDL Workgroup and they are a member of the State of Wyoming Water Development Commission Bighorn-Wind River Basin Advisory Group.

The Tribes have used their monitoring information, training and expertise to prepare a variety of assessments and management strategies. Specifically, they have prepared a draft Clean Water Act Section 305(b) report of Reservation water quality. They have conducted and written a draft Clean Water Act Section 319(a) Nonpoint Source Assessment and written a 319(b) Management Plan. They have also drafted water quality standards for surface waters, and they are currently working with water quality staff in EPA Region 8's Ecosystems Protection Division to refine those standards and get them approved by EPA.

In addition to the alpine lakes research and other accomplishments described above, the Tribes of the Wind River Reservation have undertaken several Clean Water Act Section 106-funded Special Studies Projects:

- * Conducted study of constructed wetlands for oil and gas field discharge water treatment. Cooperated with Marathon Oil Company, NRCS, and U.S. Fish and Wildlife Service.
- * Conducted study on ground water, surface water, vegetation, and aquatic biota within and around Riverton Uranium Mill Tailings Remediation Act (UMTRA) site.
- * Conducted paired watershed study on Surrell Creek and Timmico Creek watersheds.
- * Prepared groundwater monitoring design in cooperation with U.S. Geological Survey.
- * Conducted study on effects of wildfire on South Fork Little Wind River.
- * Participated in National Fish Tissue Study. Cooperated with EPA Headquarters.

Author and Disclaimer:

This document was prepared by Scott Clow, *Water Quality Specialist* of Ute Mountain Ute Tribe. Only one of the *Success Stories* documented here is the result of his work. The rest are the result of several dozen hard-working tribal water quality professionals in Region 8 Indian Country. At the annual Regional Tribal Water Quality Coordinators' Meeting in Denver, CO in April 2005, a decision was made by the tribal water quality professionals whose work is showcased here to undertake this project, and Mr. Clow volunteered to lead the project. Drafts of this document were reviewed by each Tribe that submitted a success story. The opinions expressed in this document do not necessarily reflect the opinion of the Ute Mountain Ute Tribe. Credits for all individuals' quotations, mapping, data and photography were not possible. It is understood that the information contained herein is not proprietary.