

US EPA ARCHIVE DOCUMENT

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Tribal Summaries

This chapter provides individual summaries of the water quality assessment data reported by five American Indian tribes in their 2000 Section 305(b) reports. Tribal participation in the Section 305(b) process grew from two tribes in 1992 to eight tribes during the 1998 reporting cycle, but tribal water quality remains unrepresented in this report for the hundreds of other tribes throughout the country. Many of the other tribes are in the process of developing water quality programs and standards but have not yet submitted a Section 305(b) report. As tribal water quality programs become established, EPA expects tribal participation in the Section 305(b) process to increase rapidly. To encourage tribal participation, EPA has sponsored water quality monitoring and assessment training sessions at tribal locations, prepared streamlined 305(b) reporting guidelines for tribes that wish to participate in the process, and published a brochure, *Knowing Our Waters: Tribal Reporting Under Section 305(b)*. EPA hopes that subsequent reports will contain more information about water quality on tribal lands.

Section 305(b) of the CWA requires that the states biennially assess their water quality for attainment of the fishable and swimmable goals of the Act and report the results to EPA. The states, participating tribes, and other jurisdictions measure attainment of the CWA goals by

determining how well their waters support their designated beneficial uses. EPA encourages states, tribes, and other jurisdictions to assess waterbodies for support of the following individual beneficial uses:



Aquatic Life Support

The waterbody provides suitable habitat for protection and propagation of desirable fish, shellfish, and other aquatic organisms.



Fish Consumption

The waterbody supports fish free from contamination that could pose a human health risk to consumers.



Shellfish Harvesting

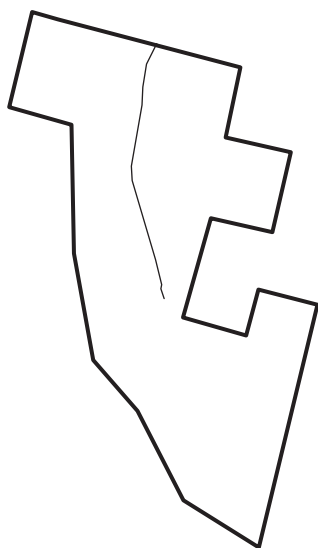
The waterbody supports a population of shellfish free from toxicants and pathogens that could pose a human health risk to consumers.



Primary Contact Recreation – Swimming

People can swim in the waterbody without risk of adverse human health effects (such as catching waterborne diseases from raw sewage contamination).

Big Sandy Rancheria



Location of Reservation

For a copy of the Big Sandy Rancheria 2000 305(b) report, contact:

Big Sandy Rancheria
Environmental Programs Office
P.O. Box 337
Auberry, CA 93602

Surface Water Quality

The Big Sandy Rancheria covers approximately 264 acres of land in Fresno County, California. Approximately 100 tribal members live on the reservation. The majority of residents are of Western Mono descent. The Rancheria consists of 30 households, a Head Start school, and a casino. In the next year, a new gaming facility and hotel will put additional demands on the water supply and wastewater treatment system.

The Rancheria's drainage area is approximately 1.75 square miles. Surface waters include the headwaters

of Backbone Creek and three unnamed tributaries. The tribe did not report on the quality of their surface waters.

Ground Water Quality

Ground water is used as the drinking water source for the Rancheria. Water is provided by five community wells, eight domestic wells, and one open well. These wells produce water from near-surface alluvium and deeper fractured bedrock. Three of the community wells are used for drinking water, and one is reserved for landscaping and fire protection. The total community well production is 70 gallons per minute. Each household consumes approximately 277 gallons of water per day.

The primary source of ground water contamination is coliform bacteria that leach from septic tanks. The community water supply is chlorinated to alleviate this problem. There does not appear to be any chemical contamination in the ground water supply.

Programs To Restore Water Quality

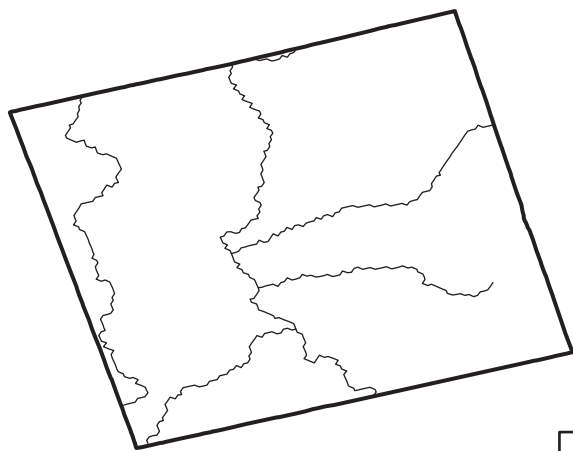
The Tribal Council has passed an ordinance to prohibit discharge of any pollutants to reservation waters. Infractions are punishable by civil fines up to \$5,000. The Environmental Programs Office (EPO) also participates in the CALFED Bay-Delta Program, which aims to restore ecological health and improve water management of the Bay-Delta system.

Programs To Assess Water Quality

The surface water quality assessment was detained due to funding constraints. However, the tribe has received a Clean Water Act Section 106 grant to resume the assessment. The EPO staff members collect all water samples with technical assistance from a consulting engineer. The surface water samples collected thus far were taken from springs located within the Rancheria boundaries and were analyzed by an outside laboratory.

The tribe is currently establishing water quality standards for the Rancheria using funds from the General Assistance Plan and Clean Water Act Section 106 Program.

Hoopa Valley Tribe



Location of Reservation

For a copy of the Hoopa Valley Tribe 2000 305(b) report, contact:

Kevin McKernan or **Ken Norton**
 Hoopa Valley Tribal EPA
 Hoopa, CA 95546
 (530) 625-5515
 e-mail: kevinmck@pcweb.net or
 kentepa@pcweb.net

Surface Water Quality

The Hoopa Valley Indian Reservation in northwestern California is home to more than 3,000 people. The reservation contains 320 miles of rivers and streams, including a portion of the Trinity River, and 3,200 acres of wetlands. It does not contain any lakes.

In the 1950s and 1960s, lumber mills that operated on the reservation resulted in degraded water quality and impaired salmon and steelhead fisheries. Areas that were prone to landslide were logged and roads were constructed within riparian zones. These practices led to significant contamination by sediments. Water diversions, such as a dam on the Trinity River above the reservation, also stressed fisheries by lowering stream volume and flow velocity. Low flow rates reduced flushing and further contributed to the

accumulation of sediment. Currently, 16% of assessed river miles support aquatic life, and 100% support swimming and fish consumption.

Ground Water Quality

In the past 4 years, domestic wells, soil, and ground water pools have been sampled to assess ground water contamination. Sampling revealed elevated levels of metals, toxic pollutants, and fecal coliform bacteria in some wells. Leaking underground storage tanks, septic systems, and abandoned hazardous waste sites contribute to ground water contamination. At Masonite Mill Creek, an underground storage tank may have leaked as much as 10,000 gallons of petroleum products. Fecal coliform bacteria from septic tanks is an increasing threat to ground water as population grows, indicating an increased need for wastewater treatment facilities. As contamination increases, it becomes more difficult to utilize ground water as a source of drinking water.

The Hoopa Valley Tribe is addressing ground water contamination in several ways. Some abandoned wells have been capped and underground storage tanks removed. Serious efforts have been concentrated on removing or cleaning contaminated sediments. At Masonite Mill Creek, no petroleum products were measured in soil and ground water samples after contaminated sediments were removed. Also, bioremediation of sediments has been implemented. This process encourages microbial activity that breaks down organic materials by aerating soil that has been mixed with wood chips.

Programs To Restore Water Quality

In 1994, a forest management plan was adopted and certified as

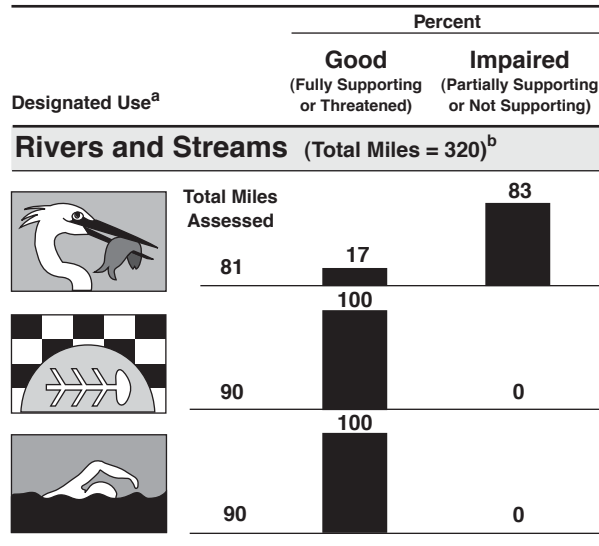
ecologically sustainable. Key points of the plan include reduction of timber sales and inactivation of 35 miles of abandoned or failing log roads. In 1997, the Tribal Environmental Protection Agency (EPA) established a water quality control plan that included beneficial uses, criteria and standards, and antidegradation policies. The tribe received a Nonpoint Source Program grant to remove contaminated soils from Supply Creek and Trinity River. The tribe is currently developing a Total Maximum Daily Load Standard for sediments in the Supply Creek watershed.

Programs To Assess Water Quality

In 1998, the tribe completed its Unified Watershed Assessment. Geographic information systems enable comprehensive analysis of watershed characteristics and impacts from land use. The Tribal Public Utilities District monitors surface and ground water quality at domestic intake locations and some posttreatment locations. The Tribal EPA monitors physical, chemical, and biological parameters in surface and ground waters. Through Clean Water Act funds, the current network of monitoring stations gives nearly complete coverage of reservation waters.

In 1999, the Tribal EPA and Humboldt University collaborated on a 1-year project funded by the U.S. EPA to locate wetlands with geographic information systems and aerial photographs. A continuing wetlands program will depend upon procurement of additional funding. The Tribal EPA is using Indian Environmental General Assistance Program funds to monitor the integrity of its wetlands and develop a Wetlands Conservation Plan.

Individual Use Support for the Hoopa Valley Tribe

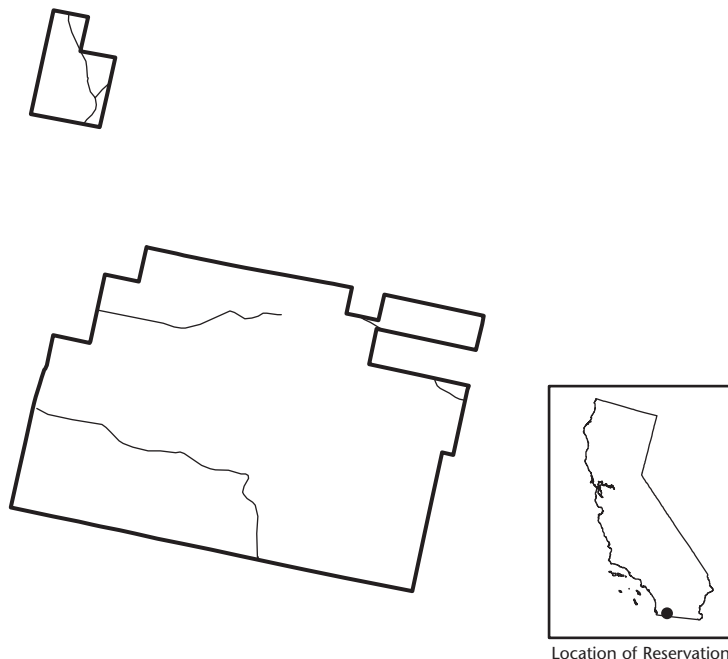


^a A subset of Hoopa Valley Tribe's designated uses appear in this figure. Refer to the tribe's 305(b) report for a full description of the tribe's uses.

^b Includes nonperennial streams that dry up and do not flow all year.

Note: Figures may not add to 100% due to rounding.

La Posta Band of Mission Indians



Location of Reservation

For a copy of La Posta Band's 2000 305(b) report, contact:

Gwendolyn Parada
Environmental Protection Office
La Posta Band of Mission Indians
P.O. Box 1048
Boulevard, CA 91905
(619) 478-2113

Surface Water Quality

La Posta Reservation is located in San Diego County in southern California. It consists of two distinct land parcels: La Posta (3,500 acres) and Little La Posta (200 acres). Nineteen of 23 tribal members reside on the reservation. La Posta contains 11.3 miles of streams, a 2-acre lake that is manmade, and 1.5 acres of wetlands. The only surface water feature in Little La Posta consists of 1 mile of intermittent stream. Springs and seeps (ground water pools) with sustained seasonal flows have been documented within the reservation. No surface water is used for drinking.

In 1994, surface water samples were collected from two springs and La Posta Creek. Radium, metals, and manganese were detected at elevated levels. In 1998, two samples were collected from La Posta Lake. Iron and manganese concentrations were measured at concentrations that exceed the U.S. EPA's maximum contaminant levels. Coliform bacteria were also measured in the water.

Reservation soils are prone to erosion during periods of heavy precipitation. Other sources of erosion include uncontrolled grazing in riparian habitats and watersheds and inadequate maintenance. The movements of nontribal cattle across reservation lands may need to be monitored. Nonpoint sources of contamination include runoff. Runoff that comes from Interstates 8 and 80 is considered a point source of pollution because it is discharged through a drain system. This contributes petroleum compounds and debris. The other potential source of pollution is an adjacent landowner who repairs and maintains automobiles. This may contribute contamination from metals, hydrocarbons, and chlorinated organics.

Ground Water Quality

Ground water is used as the source of drinking water. Five wells supply drinking water, three wells are used for monitoring, and four wells have been abandoned. Wells yield 5 to 25 gallons per minute and are located in shallow alluvium and underlying bedrock. Iron and manganese were detected in some ground water samples. Although no bacteria were detected, localized problems may occur from septic systems.

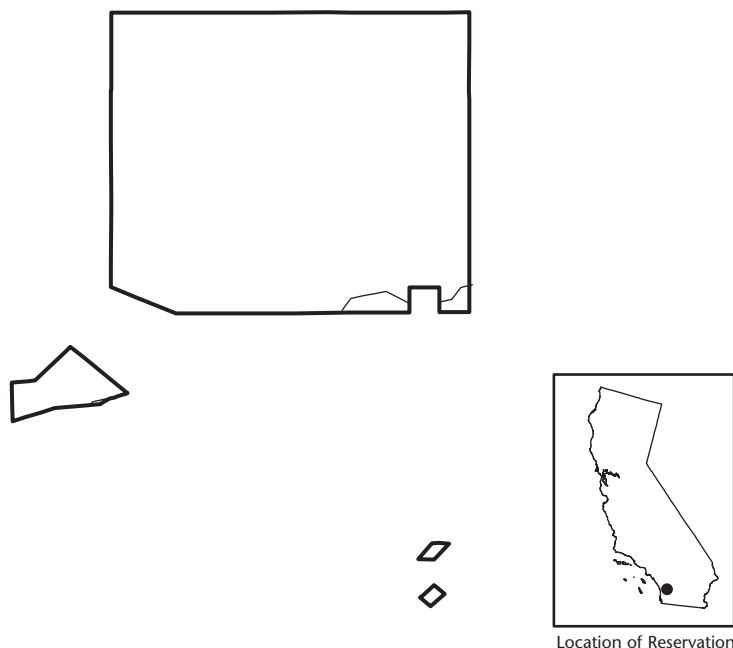
Programs To Restore Water Quality

There are no formal pollution control measures for surface or ground water on La Posta Reservation.

Programs To Assess Water Quality

Currently, waters of the reservation are subject only to federal water quality criteria. In the next 2 or 3 years, the tribe may choose to adopt these or other criteria. Until tribal standards and beneficial use designations have been adopted, the tribe will use the San Diego Regional Water Quality Control Board's Basin Plan as a guide for water quality testing, analyses, and assessment. The La Posta Environmental Protection Agency would like to establish regular surface and ground water monitoring programs.

Pauma Band of Mission Indians



Location of Reservation

For a copy of the Pauma Band 2000 305(b) report, contact:

Chris Devers
Pauma Band of Mission Indians
P.O. Box 369
Pauma Valley, CA 92061

Surface Water Quality

The Pauma Band of Mission Indians resides in southern California. The tribal lands consist of four distinct parcels: the Pauma Reservation (230 acres), the Mission Reserve (5,711 acres), and the North and South Yuima Tracts (12 acres each). Approximately 170 people of Luiseno heritage live on these lands. The reservation supports an agricultural business that grows citrus and avocados.

Surface water resources consist of 23 miles of rivers and an indeterminate amount of wetlands. Twenty of the stream miles are intermittent. Pauma Creek is used as the primary source of irrigation water. Although not used as a drinking water source, it is hydraulically linked to the aquifer that supplies drinking water. This means water quality problems in Pauma Creek could translate into problems with drinking water quality.

Nearly all of the river and stream miles assessed support aquatic life, swimming, and fish consumption. Less than 1 mile of stream was threatened for aquatic life support due to elevated levels of nitrate and sulfate. Most of the surface waters are impacted by nonpoint sources of pollution, including a closed landfill, storage tanks, orchard heaters with fuel tanks, septic systems, and fertilizers and pesticides that are applied for agriculture. The tribal lands are also extremely susceptible to erosion, and sedimentation has been the most significant problem in surface waters.

Ground Water Quality

There are four distinct aquifers that supply ground water. Three wells that are used to supply domestic water have elevated levels of nitrate, although none of the concentrations exceeded Safe Drinking Water Act regulations. The most significant threats to ground water quality are nitrate and bacteria from individual sewage disposal systems and chemicals used in agriculture. Elevated levels of iron and turbidity present aesthetic problems.

Programs To Restore Water Quality

The tribe supports several water pollution control programs, including a Water Quality Management Program, the Wellhead Protection Plan, the Nonpoint Source Management Plan, and the Multi-Media Environmental Assessment. The Wetlands Management Plan provides a framework for protecting wetland and riparian resources. The Agribusiness Environmental Management Plan recommends Best Management Practices to minimize the impact of agricultural activities on water resources and the environment. The Air Quality Management Plan

addresses air quality issues that are related to deposition and recycling of pollutants between the atmosphere, water, and land. The tribe is attempting to establish a Tribal Environmental Protection Agency.

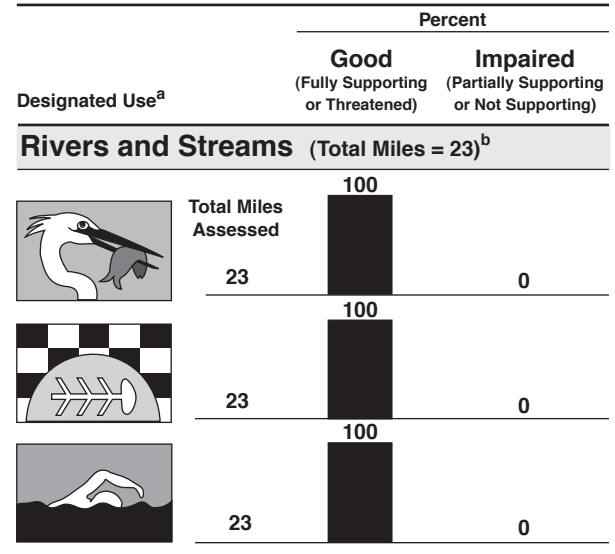
Programs To Assess Water Quality

The surface water monitoring program has been active since 1996 due to a Section 106 grant under the Clean Water Act. Most of the monitoring has focused on Pauma Creek, as it is used for agriculture and also impacts the aquifer that supplies drinking water. Monthly sampling was conducted at one location upstream of the reservation. Some monitoring has also been conducted at other streams and springs. Tribal personnel have been largely responsible for sampling and testing the water as well as maintaining a database. A consulting firm provided assistance and managed the final database that was used to generate the 2000 305(b) report. Five wells are sampled as part of the ground water monitoring effort. The tribe is currently developing water quality standards. This process will include the establishment of designated beneficial uses or the adoption of California water quality standards.

Additional surface water, soil, and ground water monitoring was conducted under the General Assistance Program. Under this program, an EPA-approved laboratory conducted analyses for metals and other inorganic compounds.

Wetlands were mapped using the National Wetland Inventory database, although sufficient detail was not included to delineate the total area of wetlands in the tribal lands. Full implementation of wetland protection activities depends upon procurement of additional funds.

Individual Use Support for the Pauma Band of Mission Indians

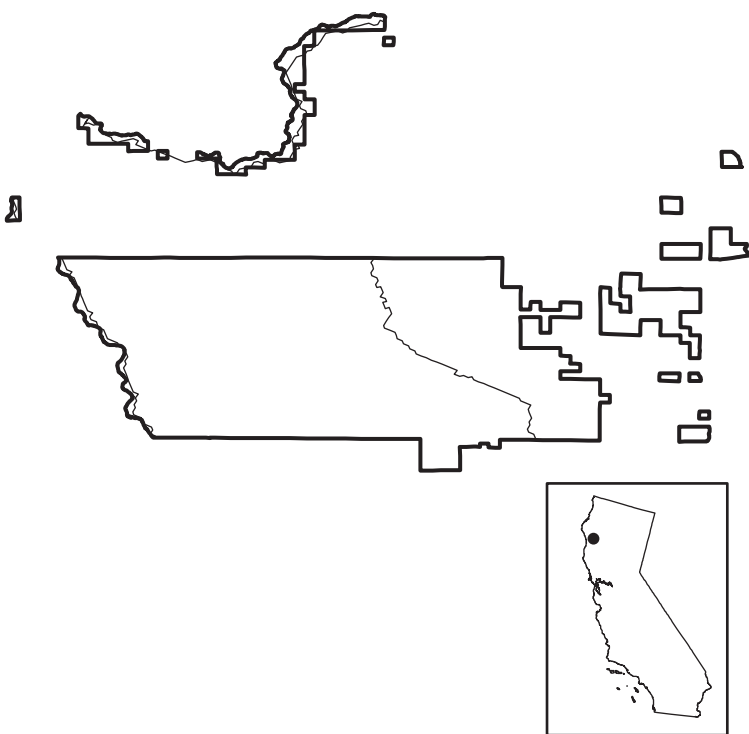


^a A subset of Pauma Band of Mission Indians' designated uses appear in this figure. Refer to the tribe's 305(b) report for a full description of the tribe's uses.

^b Includes nonperennial streams that dry up and do not flow all year.

Note: Figures may not add to 100% due to rounding.

Round Valley Indian Tribes



Location of Reservation

For a copy of the Round Valley Indian Tribes' 2000 305(b) report, contact:

Steven Casebier, Director
Tribal Environmental Protection
Agency
Round Valley Indian Tribes
P.O. Box 448
Covelo, CA 95428
(707) 983-8478

Surface Water Quality

The Round Valley Indian Tribes consist of seven tribes (Yuki, Pit River, Achomawi, Pomo-Concow, Wailaki, Nomelaki, and Wintun). Approximately 800 people live on the Round Valley Indian Reservation, which is located in northern California. The reservation consists of 45 square miles of land that support rural housing, ranching, and farming. The surface water consists of 424 miles of river, 1.5 acres of reservoir, and an indeterminate amount of wetlands. The Eel River forms the western boundary of the reservation and is the principal drainage for the region.

The State Water Resources Control Board (SWRCB) has not designated beneficial uses for the stream reaches within the reservation. Surface waters are currently used for ground-water recharge, wildlife habitat, and recreation. Flow through

the reservation has decreased greatly as a result of upstream diversions by industrial facilities. Low flows may result in high water temperature and low dissolved oxygen conditions that impair fish populations. However, the Eel River and its tributaries support their existing uses. The primary sources of contamination are agriculture, grazing, timber operations, resource extraction, and hydrologic and habitat modification. High levels of iron have been detected.

The tribes did not report on the condition of wetlands.

Ground Water Quality

Ground water is the primary source of water supporting the reservation. Approximately 230 wells supply irrigation, stock, and drinking water. Increased ground water withdrawals outside of the reservation have lowered the ground water table and caused some wells to dry up intermittently. High levels of turbidity, iron, manganese, and sulfur have been measured in the ground water. There are no known occurrences of ground water contamination on the reservation. However, the potential does exist from storage tanks, unregulated dumping, septic tanks, mine drainage, biocide and fertilizer use, and sewage lagoons. Leachate from a community dump that receives solid wastes and sludge from the Covelo sewage treatment plant may enter the ground water system and appear in wells.

The levels of iron and manganese detected in surface and ground water can be removed through treatment and do not necessarily preclude the water from being used.

Programs To Restore Water Quality

The tribes lack any pollution prevention or control programs. Only six regulated point source discharges

occur within the reservation. The Regional Board oversees monitoring and remediation at one of these sites. The tribe is seeking Section 106 Authority from the EPA, which will permit them to adopt water quality standards and regulate waste discharges to waters within their jurisdiction. Until then, the tribes will continue to use water quality standards from the EPA and SWRCB for domestic use, irrigation, industrial use, and fishing.

The tribes received a Set-Aside Grant from the Indian Health Services to upgrade their sewage treatment systems. They also used General Assistance Program (GAP) funds to certify tribal members as water treatment plant operators. In the future, they will be using GAP funding to develop a tribal Sewage Treatment Plant.

Soil excavation and removal alleviated contamination occurring from an old sawmill. Soils in this area were contaminated with petroleum hydrocarbons, pentachlorophenol (a known carcinogen), and tetrachlorophenol.

Programs To Assess Water Quality

A monitoring program began in 1997 and is highly dependent on continued funding for implementation as a permanent program. The data contained in this report were collected from 10 surface water sites and 10 wells. The samples were analyzed for physical and chemical parameters, including boron, iron, and manganese. All ground water monitoring sites are sampled quarterly. In the future, the tribes would like to incorporate total and fecal coliform bacteria testing for drinking water wells and areas of suspected septic system failure.