

Section 5

A Focus on California's Native American Population

Tribal Potable Water and Sanitation Deficiencies

Because tribes are sovereign governments, California has no role in tribal water quality issues; U.S. EPA is their regulatory agency. However, conflict arises when tribes ask for access to State drinking water funds, but their water systems do not meet State requirements, which is a condition for access to the funds. The following discusses tribal potable water and sanitation deficiencies, but not the political issue.

American Indian tribal communities are vulnerable to housing deficiencies, which include access to safe water. The lack of infrastructure on tribal lands can be a result of low socio-economic conditions of the tribe or of the terrain the homes occupy. These deficiencies are of concern to the federal Indian Health Service (IHS) program, whose objective is to protect the health of American Indians. Federally recognized Indian tribes are sovereign nations, but many of the tribes are poor, and tribal members are still residents of California.

Most American Indian households on tribal lands have access to potable water, but some households are at risk of unsafe water. As with other rural California residents, the households may use buckets to retrieve surface water from springs or creeks, which is then hauled back to their homes. Others may use a pipeline that they lay into a creek, and the untreated water is then gravity-fed back to their house or trailer. Still others may use a community spigot or well, but still need to bring the water into their dwelling by means of a bucket. Many communities have failing septic systems that allow raw sewage to seep to the surface.

As discussed earlier, the costs of providing infrastructure to connect housing to potable water, or to repair deteriorating systems that compromise water quality and supply, are staggering to small, low-income communities. Some example projects from the California offices of the IHS were reviewed in 2001. Costs ranged from \$10,000 to provide sewage treatment to \$7.20 million to install a community sewage system to prevent septic tank failures. In the North Coast Hydrologic Region, \$2.42 million could treat communal spring surface water for 32 homes, and guarantee a water supply in the late summer months when the community lacks a sufficient quantity of water. In Humboldt County, IHS estimated that \$245,000 can provide homes with well and septic systems.

A number of American Indian homes are without water because of their location. Some housing is in remote, steep, and wet areas of the North Coast. These areas have slippery and remote terrain and are difficult to access and hard to serve. There may be community water systems on the reservation, but the higher, remote homes lack electricity to pump water uphill and provide enough pressure. The Sanitation Facilities Construction (SFC) Program of IHS reviews requests from tribes regarding

their water and sewage system problems. IHS has determined that correcting water and sanitation systems for tribal community members will result in a reduction of disease and reduce impacts on medical services needed. The IHS estimates that there has been a 91% decrease in gastrointestinal disease death rates among American Indians and Alaska Natives in the past 33 years, with the major factor being the SFC Program (IHS, 2000).

The SFC Program will send an engineer to review the water and sanitation deficiencies once a request is received, and the project will be evaluated and rated according to the extent of services lacking. A deficiency level of 5 is most severe, usually meaning that there is no water piped in or the supply is inadequate. A level 4 suggests potential health threats, such as inadequate piping, or water that does not meet quality standards, such as surface water supplies that are untreated. Level 3 is generally a maintenance problem, and includes overflowing septic fields.

In 2002, there were 370 Native American homes in California that had no potable water at all. Another 7,122 homes were rated a level 4 or 5, with inadequate water service that could pose a health risk. These ratings are given a priority. Another 5,523 homes qualified for a level 3 rating. A list of all of these sanitation needs goes to Congress and IHS requests funding. Funds generally come from EPA, USDA Rural Development, and the Department of Housing and Urban Development (HUD). The California IHS office estimates that they will receive \$2.3 million dollars in funding, with an unmet need of \$33.847 million in 2002 (IHS, 2001).

Due to funding limitations, the SFC cannot complete all needed projects. Projects are chosen according to critical need, economic feasibility, and the ability of SFC to put in a project that meets water quality standards. IHS works cooperatively with the tribe to construct sanitation facilities such as wastewater treatment plants, septic drainfields, and bathroom additions to homes. In addition, the SFC installs stand pipes, water towers, water service lines, and wells to provide potable water to homes. Tribal members can take classes from the SFC through the Tribal Operator Certification Program to learn the operation and maintenance of water systems.

According to IHS, then, a total of 7,492 Native American homes with inadequate potable water service existed in California in 2002. Because of funding constraints, the majority of these people will be unable to turn on the tap to receive potable water on demand – something that most Californians take for granted. Table 5-1 illustrates the need of Californian Native Americans for safe water and sanitary sewage disposal.¹⁵

¹⁵ Deficiency Levels: 5 = Severe deficiency, no piped-in water, or supply is inadequate.
4 = Potential health threats, i.e. inadequate piping, water not meeting standards, or untreated water.
3 = Maintenance problems, including overflowing sewage systems.

Table 5.1
2001 Indian Health Service Sanitation Deficiencies

Community	Funding needed	Deficiency level	Problem
Humboldt County	\$245,000	5	10 homes with no water or no sewer.
Dry Creek Rancheria	\$ 78,000	4	Water shortages in the summer months. Out of water 60 days per year.
Greenvale Rancheria	\$100,000	4	Well and creek source, pumphouse, pressure tank. System is poorly designed and fails frequently. Surface water source with no treatment.
Grindstone Indian Rancheria	\$500,000	4	Surface water supply does not meet Surface Water Treatment Rule and will not meet upcoming water quality standards.
Hoopaa Valley Reservation	\$100,000	4	3 homes on contaminated wells hauling water; 5 homes without adequate sewer systems.
Hoopaa Valley Reservation	\$250,000	4	Surface water supply will not meet Interim Enhanced Surface Water Treatment Rule (water quality standards).
Hoopaa Valley Reservation	\$250,000	4	20 homes on contaminated wells or hauling water.
Hoopaa Valley Reservation	\$320,000	4	Well is under the influence of surface water, intermittent high iron and manganese, water outages 6 times per year due to breaks.
Hoopaa Valley Reservation	\$750,000	4	Community water systems including filtration and disinfection. Redwood storage tanks in disrepair.
Hoopaa Valley Reservation	\$2,420,000	4	Individual and communal spring surface water sources for 32 homes. Untreated sources, insufficient quantity in late summer.
Karuk Tribe	\$850,000	4	Pressure filter treatment system. Is not meeting current or upcoming turbidity standards during storm events.
Karuk Tribe, Redding	\$250,000	4	Untreated surface water supply.
Laytonville Rancheria	\$2,466,000	4	Existing arsenic in well at 60 ppb. Additional storage required for fire flows. Miscellaneous water system improvements.
Santa Rosa Reservation	\$ 60,000	4	New DHUD home with no water. Well attempted and failed. Need to connect to community water system approximately one mile.
Smith River Rancheria	\$395,000	4	Failing intake, water mains old and leaking, supply inadequate (10 days/year out of water), redwood tanks unsanitary and need replacing.
X-L Ranch Reservation	\$400,000	4	Two community systems do not meet upcoming standards. One community has dilapidated well.
X-L Ranch Reservation (Pit River Indian Tribe)	\$264,000	4	Scattered homes untreated individual systems or no water.
Big Sandy Rancheria	\$500,000	3	Failing drainfields. Surfacing sewer. Community wells within 100 feet.

Community	Funding needed	Deficiency level	Problem
Blue Lake Rancheria	\$175,000	3	Individual homes on wells, most inadequate. Failing individual septic tank and drainfield systems. Surfacing sewage.
Cahuilla Reservation	\$ 10,000	3	Drainfield is failing. Septage on the ground during rainy season.
Dry Creek Rancheria	\$100,000	3	Documented drainfields failing and sewage surfacing. Homes on portable toilets.
Hoop Valley Reservation	\$160,000	3	Numerous septic tank/drainfield failures reported with correlation to hepatitis outbreaks.
Hoop Valley Reservation	\$370,000	3	Old sewage treatment facilities not meeting discharge limits.
Hoop Valley Reservation	\$830,000	3	Individual septic systems with problems. High groundwater, no replacement area.
Hoop Valley Reservation	\$7,200,000	3	Numerous septic tank/drainfield failures reported with correlation to hepatitis outbreaks.
Jamul Indian Village	\$ 50,000	3	Community drainfield failing. Existing liftstations requires renovations. Runoff fills septic tanks.
La Jolla Reservation	\$ 12,000	3	Existing septic system failing. Sewage surfacing.
La Jolla Reservation	\$ 40,000	3	Community drainfield systems failing. Sewage surfacing.
Laytonville Rancheria	\$100,000	3	Conventional septic tank-drainfields (5) experiencing seasonal failures due to high groundwater and surfacing drainfield effluent.
Pinoleville Rancheria	\$522,000	3	20 homes have drainfield failures. Sewage surfacing.
Rincon Reservation	\$ 15,000	3	Standing water in sewer lines, drainfields appear undersized and close proximity to community well.
Rohnerville Rancheria Of Bear River	\$515,000	3	Individual septic tank and drainfield systems. Failure in drainfields has been occurring due to seasonal high groundwater.
Round Valley Reservation	\$3,795,000	3	Numerous drainfield failures due to poor soils throughout the reservation.
Smith River Rancheria	\$700,000	3	Surfacing effluent on two properties due to high ground water. Suspect other failures. One effluent system caved in.
Susanville Indian Rancheria	\$3,824,000	3	Water mains, storage tank are undersized. New source of water required. Old Army unsealed sewage lagoons are condemned by the State.
Susanville Rancheria	\$155,000	3	No vehicle access to water storage tank. Tank in disrepair. Run out of water approximately 8 times a year.
Torres-Martinez Reservation	\$ 30,000	3	Failed septic systems with sewage surfacing.
Torres-Martinez Reservation	\$200,000	3	4 existing rental mobile home parks have well and pressure system problems. Wastewater disposal inadequate. Field visits indicated sewage on surface.
Trinidad	\$600,000	3	Individual drainfields failing. Sewage surfacing.
Tule River Indian Reservation	\$1,085,000	3	Numerous failing drainfields due to poor soils within the community.

Community	Funding needed	Deficiency level	Problem
Tuolumne Rancheria	\$222,000	3	Scattered homes with failing drainfields and poor soils.
Upper Lake Rancheria	\$828,000	3	31 homes with surfacing sewage in winter. Documented high bacteria counts. High groundwater.

Source: IHS SDS Narrative Report 02/08/01