

# RECLAMATION

*Managing Water in the West*

## **Hoopla Valley Tribe Sociocultural/Socioeconomics Effects Analysis Technical Report**

**For the Secretarial Determination on Whether to Remove  
Four Dams on the Klamath River in California and Oregon**



**U.S. Department of the Interior  
Bureau of Reclamation  
Technical Service Center  
Denver, Colorado**

**September 2011**

## **Mission Statements**

The U.S. Department of the Interior protects America's natural resources and heritage, honors our cultures and tribal communities, and supplies the energy to power our future.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

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# Acronyms and Abbreviations

ADA	American Diabetes Association
AHA	American Heart Association
BIA	Bureau of Indian Affairs
CDC	Center for Disease Control
CEQA	California Environmental Quality Act
DHA	docosahexaenoic acid
DOI	U.S. Department of the Interior
EIS/EIR	environmental impact statement/environmental impact report
EPA	eicosapentaenoic acid
ESA	Endangered Species Act
FERC	Federal Energy Regulatory Commission
HHS	Health and Human Services
HVT	Hoopa Valley Tribe
IGD	Iron Gate Dam
IHS	Indian Health Service
KBRA	Klamath Basin Restoration Agreement
KHP	Klamath Hydroelectric Project
KHSA	Klamath Hydroelectric Settlement Agreement
NEPA	National Environmental Policy Act
NOAA	National Oceanic and Atmospheric Administration
UB	Upper Basin
UKB	Upper Klamath Basin
UKL	Upper Klamath Lake
UKR	Upper Klamath River
USDA	United States Department of Agriculture
USFWS	U.S. Fish and Wildlife Service



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## 1.1 INTRODUCTION

After years of negotiations, on February 18, 2010, Klamath Basin stakeholders agreed that removing four hydroelectric dams on the Klamath River, restoring habitat, and reintroducing salmon in the Upper Klamath Basin would be the best method for managing Basin water, fish, and other resources to resolve ongoing water supply and quality problems, drought issues, fish kills, and other multiple-use challenges. Two agreements were drafted; the Klamath Hydroelectric Settlement Agreement (KHSA) and Klamath Basin Restoration Agreement (KBRA).<sup>1</sup>

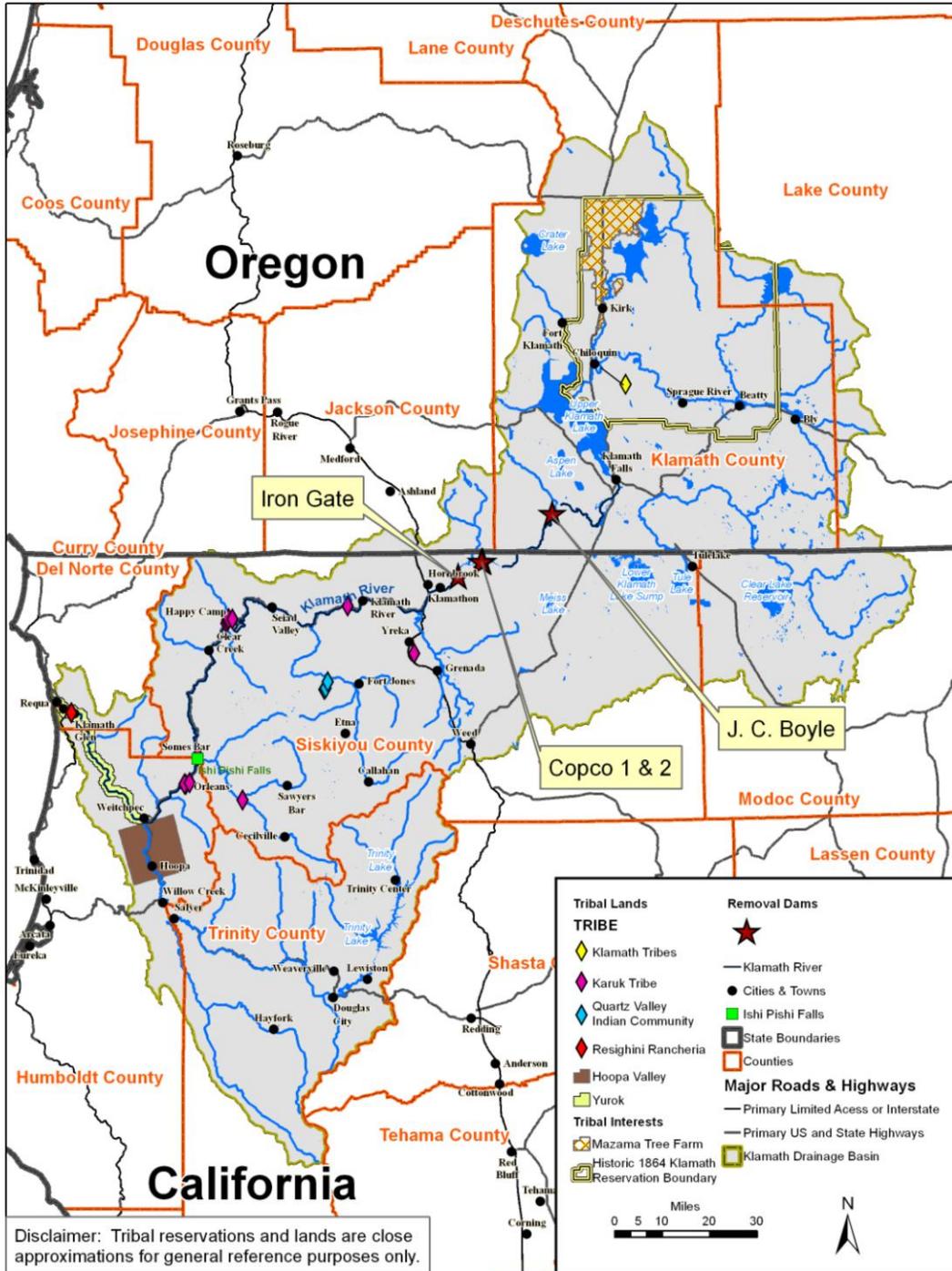
Implementation of the KHSA would remove Iron Gate, J.C. Boyle, Copco 1 and Copco 2 hydroelectric dams that prevent coho salmon, Chinook salmon, steelhead, and Pacific lamprey anadromous species from migrating through the lower Klamath River and above Iron Gate Dam to Upper Klamath Basin habitat. The KBRA specifies salmon, steelhead, and lamprey reintroduction and habitat improvement programs in the Upper Klamath Basin that are expected to benefit all native fisheries in the entire Klamath River and some ocean fisheries. The KBRA benefits would occur in large part through water management agreements that would provide more reliable water supplies for irrigation in agricultural communities and fish habitat in the National Wildlife Refuges. Although the KHSA and KBRA are separate agreements, the success of each agreement depends on mutual implementation which is the assumption throughout this technical report. The agreements specify that actions would occur during the next 50 years, with dam removal beginning in 2020, and most KBRA actions beginning in 2012, provided approval is granted to proceed from the Secretary of the Interior since implementation must be determined to be in the public interest.

This technical report is supporting socioeconomic documentation focused on the Hoopa Valley Tribe that will be used to assist the Secretary of the Interior in making a determination whether to proceed with implementing the KHSA and KBRA. There are similar individual socioeconomic technical reports for other Basin Tribes, including the Klamath Tribes, Karuk Tribe, Yurok Tribe, and Resighini Rancheria. The tribal technical reports will be used as supporting documentation for the *Klamath Dam Removal Overview Report for the Secretary of the Interior: An Assessment of Science and Technical Information*, and the *Klamath Facilities Removal Environmental Impact Statement/Environmental Impact Report (EIS/EIR)*, August 2011, that evaluated impacts of KHSA and KBRA.

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<sup>1</sup> Signatories in the KHSA and KBRA included the States of California and Oregon, the Klamath Tribes, Karuk Tribe, Yurok Tribe, and representatives of more than 50 organizations, including counties, irrigators, conservation and fishing groups, and others.

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**Figure 2.1-1.—Hoopa Valley Reservation**

Methodology primarily included issue identification from meetings with the Hoopa Valley Tribe, the draft *Trinity River Mainstem Fishery Restoration Environmental Impact Statement/Report* (USFWS, et. al., October 1999) and other sources listed in the bibliography. Members of the Economics Subteam attended meetings with the Hoopa Valley Tribe concerning potential trust resource, socioeconomic, and contemporary cultural impacts on the following dates: September 1, 2010 (socioeconomics only) and January 25, 2011 (trust resources government to government). Year 2000 (and 2010 when available) Bureau of the Census data was analyzed for most of the economic and demographic conclusions. Information from the FERC Record was consulted as well as other background documents, reports, and books.

This document is divided into two main sections; affected environment and environmental consequences.

## **2.1 AFFECTED ENVIRONMENT**

The first part of this section discusses Hoopa Valley Tribal history, followed by the present conditions portion organized by the following indicators: Fisheries, economic conditions (primarily income and employment), and health. Tribal trust resources are analyzed in two reports: *Current Effects of PacifiCorp Dams on Indian Trust Resources and Cultural Values: Background Technical Report Informing the Secretarial Determination Overview Report*, (BIA, June 2011a), and *Current Effects of PacifiCorp Dams on Indian Trust Resources and Cultural Values*; and *Potential Effects of Implementing the KHSA and KBRA on Indian Trust Resources and Cultural Values* (June 2011b)<sup>2</sup> (BIA, June 2011b). Trust resource aspects are mentioned in this report when applicable.

The Hoopa Valley Tribe (Hupa is used to refer to Hupa people) is a Federally recognized Tribe in the northeastern corner of Humboldt County in northern California with about 2,930 enrolled members. The Tribe has Federally protected trust fishing and water rights.<sup>3</sup> The Hoopa Valley Tribe has a reserved water right to water in the Trinity River to support the harvest of fishes that the Tribe requires to maintain a moderate standard of living and a reserved right to water.(BIA, June 2011a, 2011b). The Trinity River is the largest tributary to the Klamath River.

The Hoopa Valley Reservation ‘square’ is roughly 12 by 12 miles, or about 90,000 acres which makes it the largest in California (figure 2.1-1), and is bisected by the Trinity River with a small portion of the Klamath River flowing along an approximately 0.3 mile reach along the northern border. The Hoopa

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<sup>2</sup> Prepared for BIA by North State Resources, Inc.

<sup>3</sup> BIA, June 2011a, p. 3-21.

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Valley Reservation is located within about 20 to 50 percent of the total Hupa aboriginal lands or ancestral territory.<sup>4</sup> Anadromous fish that migrate to the Trinity headwaters and back to the Pacific Ocean must pass through roughly 42 miles of the lower Klamath River, which means that water quality problems that affect Klamath River fisheries impact Hoopa Valley Tribe anadromous fisheries as the fish migrate to the Trinity River headwaters to spawn. According to a report by the California Department of Fish and Game, the fish kill of 2002 affected all of the tribes along the Klamath River with a greater proportion of Trinity River fall-run Chinook adversely affected. Additionally, a segment of the Klamath River for about one third of a mile runs along the northern border of the Hoopa Reservation. Hupa people join the Yurok and Karuk in their ceremonies on the Klamath River and share water quality concerns related to ceremonies with their Klamath River neighboring tribes. The hydroelectric dams and dams in the Trinity Basin have had wide-ranging effects on the culture of the Hupa people.

The BIA described the importance of the Trinity River fisheries to the Hupa people and contemporary water quality and fish abundance limitations that have necessitated the purchase of fish for ceremonies:

“That every traditional Hupa village was located and built along the Trinity River underscores the vital importance of the river to Hupa culture and traditions. Since dams were constructed, however, fishing and traditional use sites have become clogged with debris. Poor conditions of the fishery in recent times has in some instances forced the Hupa to purchase fish from sources off their reservation to provide for all who attend ceremonies.” (BIA, June 2011a).

Like the Yurok and Karuk, the Hupa celebrate world renewal through the White Deerskin Dance and Jump Dance ceremonies that take place along the Trinity River and depend on abundant salmon populations:

“Both dances are held for a period of 10 days. The Hupa bring salmon they have caught at their fishing sites to share with the participants and attendees and offer them for the ceremony....Both [dance ceremonies] depend on a healthy river for fish, basket materials, bathing, and ambiance.” (USFWS et. al., October 1999, pp. 3-217).

Although the Tribe has actively pursued numerous economic endeavors, unemployment rates are about two to three times higher for the Hoopa Valley Reservation, particularly for the Indian populations than for the County and State, and poverty rates were often two to three times higher, which has made a subsistence lifestyle important to maintain the ‘moderate standard of living’ intended for the Hupa people from the fisheries. Overall declining anadromous

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<sup>4</sup> BIA estimates 20 percent (and based on a map in Heizer and Wallace 1978); the Hoopa Valley Tribe Web site (accessed August 2011) stated 50 percent.

fish stocks since construction of KHP dams, particularly spring-run Chinook, and water quality became noticeably worse; all of which affects Trinity River anadromous fisheries.

## **2.1.1 Hoopa Valley Tribal History**

History explains current socioeconomic, sociocultural, and related conditions for any population, as is the case for the Hoopa Valley Tribe. Federal and California State Indian policies, development, and settlement reduced Hupa aboriginal or ancestral territory. Because the federal actions setting aside the Hoopa Valley Reservation also reserved rights to an instream flow of water sufficient to protect the tribe's rights to take fishes within its reservation, the United States has the responsibility to safeguard the fishery to ensure that the tribe is able to exercise that right (BIA, June 2011a and June 2011b).

Klamath Basin Tribes are located in the southernmost area of the northwestern 'salmon culture' that stretches north to Alaska, along with its trade network. The term Hupa is a Yurok name for the Hoopa Valley and the Hupa refer to themselves as Natinook-wa, or people of the place where the trails return. The Hupa describe their past as extending thousands of years prior to non-indigenous contact with multiple village sites along the Trinity River in the Hoopa Valley. The Hupa thrived as a salmon culture with supplemental hunting and gathering in their aboriginal territory until Euro-American contact. A general timeline of major events and milestones are summarized in attachment 1.

Fur trappers and traders were the first in the area followed by gold-seekers and miners in the area around 1850. However, conflicts with Euroamericans and related issues were not as severe as with neighboring tribes which allowed the Hupa to remain in most of their territory and allowed them maintain a relatively uninterrupted practice of a traditional lifestyle and salmon culture. (Heizer and Wallace, 1978; BIA, June 2011a).

This section discusses the most relevant aspects of Hoopa Valley Tribal history to the present, including over-arching socioeconomic and sociocultural changes in salmon cultural practices and traditional food uses that were central through Hupa aboriginal times, reservation era, KHP development timeframe, and modern Tribal Self Governance and Self Determination period.

### **2.1.1.1 Aboriginal Period (Pre-1850 Conditions)**

#### **2.1.1.1.1 Aboriginal/Ancestral Territory**

Hupa ancestral territory included about 24 villages along roughly 40 miles of the Trinity River in the Hoopa Valley. The Hupa territory generally covered an area

near the Trinity-Klamath confluence to the north and the South Fork Trinity to Grouse Creek in the south along the Hoopa Valley (Heizer and Wallace, 1978, p. 172). The village of Takimildin near the middle is the center of the Hupa world, “the place where the trails return.” (Tiller, 2005).

#### **2.1.1.1.2 Socioeconomic Aspects**

Socioeconomically, the River provided the Hupa with many runs of fish, particularly salmon, and riparian vegetation for basketry and other cultural uses and as traditional food sources. The Hupa had an economy with shells and dentalia as currencies and were part of a regional trade network (Heizer and Wallace, 1978).

Various sources have documented the aboriginal and present-day value of the Trinity River and its fisheries which have been and remain central to Hupa culture and Tribal identity:

“The Trinity River is of unique and irreplaceable value to the Hupa. It is a vital natural resource that is the foundation of their social and cultural way of life. At its most basic level, the river has always been a source for food and other necessities of daily Hupa life. The river also provides basket materials, fishnet materials, and a means of transportation. Even rocks from the river are used by Hupa people... That every traditional Hupa village was located and built along the Trinity River underscores the vital importance of the river to Hupa culture and traditions. One of these villages, Me’ dilding, ‘boat-place’ was named for its proximity to the river and its central importance as a boat landing. The Trinity River is traveled during religious ceremonies and in recreational activities; it is integral to the Hupa language and its oral tradition and truly represents the binding force of their community.” (USFWS et. al., October 1999, pp. 3-215).

As with other Tribes in the Northwest Culture, the Hupa placed a high value on wealth and had a complex, stratified social structure an economy replete with several forms of currency, primarily dentalia, with prices and fees for most activities and goods in its society. For example, there were (and still are) family rights to fishing spots, and if the ‘laws’ were not honored, payment would be required, governed by rules or laws. (Heizer and Wallace, 1978).

#### **2.1.1.1.2.1 Fishery Species and Fishing Methods**

The Klamath River has been an important lifeline for salmon destined for the Trinity River (as well as the Upper Klamath River Basin) where the Hupa fished mainly using weirs:

“Salmon thronged the Trinity each spring and fall to spawn in its upper reaches. At these times the year’s supply was taken by a variety of efficient devices (Kroeber and Barrett 1960). During the spring run fishermen, standing on platforms erected over suitable pools and eddies, dipped out the salmon with long-handled nets. When the river was low in the fall, a weir of poles and withes was built across it...Fish swarming against the obstruction were scooped up by men strategically positioned on small platforms along its top. The weir was constructed communally and placed in alternate years near one of two principal settlements. Other methods of capturing salmon included gill nets set in still pools and long dragnets hauled by groups of fishermen. Where water conditions permitted, salmon were impaled with bone-pointed harpoons.” (Heizer and Wallace, 1978, pp. 164-165).

Another description:

“Each year, the Hupa built a fish dam across the Trinity River...[and] is perhaps the best example of how the material or economic aspects of Hupa life are interconnected with the spiritual, how the river is vital to Hupa experience, and how Hupa culture has been adversely impacted by declining river health [largely caused by Trinity Dam operations]...Its construction began in the summer prior to the fall salmon run (September/October) after the Yurok’s ritual establishment of the Cappell fish dam above the mouth of the Klamath River...the dam served to stop the upward migration of salmon. Small platforms built out from the dam provided fishermen places to stand while netting fish. Hupa men fished the fall salmon run at the dam until the first high water washed out the dam.” (USFWS et. al., October 1999, pp. 3-215 to 3-216).

Spring Chinook was an important run of fish, as early anthropologists observed:

“The particular importance of Spring Chinook salmon for tribes in the region is noted by early anthropologists (e.g., Gunther, 1926; Rostland, 1959). Swezey and Heizer note that, ‘Those native populations to whom anadromous fish were either the most important or a major staple in the food economy almost exclusively inhabited river drainages in which the spring salmon run occurred...With the exception of the coastal streams south of the Klamath, it appears that the most important and productive fishing areas in native California were those which could rely upon an assured and abundant early spring run of king salmon (1993, 304-305).’ (Norgaard, November 2005, p. 32).

Spring run salmon and early eel runs were celebrated:

“...the First Salmon ceremony took place when the spring run of fish began (Goddard 1903-1904; 78-81; Kroeber and Gifford 1949;57-60)...The first eel taken in the spring received similar [ceremonial] treatment.” (Heizer and Wallace, 1978, p. 176).

Steelhead and other species were also important for Hupa subsistence:

“Another fish of importance consisted of the steelhead, a sea-running trout that returned to the river to spawn. Sturgeon, valued not only for their mass of flesh but also for the glue obtained from their heads, were caught in fewer numbers. Lamprey eels, migrating upstream in the spring, were much relished. Surplus stocks of all three were preserved for future consumption by drying in the smoke of fires. Trout and other varieties of small fish present in the Trinity and its tributaries throughout the year were sometimes taken with hook and line.” (Heizer and Wallace, 1978, p. 165).

#### **2.1.1.1.2 *Redistribution and Trade***

Despite social stratification and the emphasis on wealth, Hupa culture valued sharing as a social responsibility. In terms of trade, bartering goods was an important cultural, social, and economic activity for which the Hupa and regional tribes also used currencies.

#### **2.1.1.1.3 *Sociocultural Aspects***

“Early contact and early ethnographic periods, circa 1850-1930, indicate that uses of the Trinity River by the Hupa people were directed toward fisheries and religious ceremonies.” (USFWS et. al., October 1999, pp. 3-215).

Hupa culture has always had the Trinity and Klamath Rivers as central elements. Klamath Basin tribes have held ceremonies for centuries around the timing of two runs of Chinook salmon: Spring and fall run. The World Renewal, or Deerskin Ceremony with first salmon ceremonies as components celebrated the return of Spring Chinook salmon that were performed in coordination with the upriver Yurok Tribe. Ceremonies surrounding arrival of the salmon were conducted around April when the Spring Chinook first appeared at the mouth of the Klamath. The Jump Dance Ceremony was held to support and heal ailing children.

An early anthropologist, Kroeber, documented the importance of salmon and the Klamath River to Hupa and Yurok culture, in their religious beliefs, ceremonies, fishing methods, and observances:

“The Hupa made two ceremonies of the new year or first fruits...The first salmon of the season was caught and eaten...held two Jumping dances and one Deerskin dance; in former times annually...in more recent years biennially.” (Kroeber, 1976, pp 134-135).

#### **2.1.1.1.4 Aboriginal Diet**

Salmon and acorns provided the bulk of the native Hupa diet, and although their land had abundant game, they did not hunt extensively. (Heizer and Wallace, 1978, pp. 164-165).

Norgaard's research found that salmon consumption was estimated to be about 1.2 pounds per day per person and comprised about half of the Karuk diet, and the same assumption is made for the Hupa people for the purposes of this analysis as an estimate:

“Salmon is estimated to have made up to close to 50% of the energy and total protein in the pre-contact diet of the Karuk (Hewes, 1973).” (p. 2).  
“It has been estimated that the Karuk people historically consumed about 450 pounds of salmon per person per year or 1.2 pounds per day.”  
(Norgaard, November 2005, p. 13).

Initial lamprey runs for the season occurred before and during initial salmon season, around February, and was an abundant, important nutritional food, particularly for the elderly; lamprey also meant food security. It remains nutritionally important today for regional tribes, especially for elders (Lewis, 2009, p. 19).

#### **2.1.1.2 Reservation Period (About 1850 – 1910)**

The aboriginal Hupa population was estimated at about 1,000 and later estimates placed it at about 800. Although the proportion of survivors for Hupa people was one of the highest of the California tribes, conflicts with Euroamericans and diseases decreased their population (Kroeber, 1976, pp. 130-132).

Western education in the form of boarding schools was imposed on Hupa children around 1860 who often abused children when they spoke the Hupa language and attempted to practice cultural and ceremonial traditions. In the late 1800s, children were sent to boarding schools in Chemawa in Oregon and Sherman Institute in Riverside, California.

In terms of selecting land for area tribes, the Yurok Tribe emphasized a particular example when the importance of salmon and the river was recognized in history:

“The United States' original recognition of the central importance of rivers and fish to the Indian people of the Klamath-Trinity region is exemplified by the very shape and location of the lands first set aside for their reservations. The Secretary of Interior's own instructions at the time were, 'to select these reservations from such tracts of land adapted as to

soil, climate, water privileges, and timber, to the comfortable and permanent accommodation of the Indians.” (Sloan, February 2011, p. 10).

#### **2.1.1.2.1 Treaties**

It was primarily between 1851 and 1852 that 18 treaties were negotiated with various California tribes, including the Karuk, Hoopa (1864 Treaty), and Yurok, for the purpose of avoiding further conflicts and that promised over 7 million acres of land which angered non-native Californians to the extent that the treaties were never ratified. (Heizer, et al, 1978, p. 704). The Hoopa Tribe was more fortunate than most of the other tribes since their unratified 1864 Treaty of Peace and Friendship was essentially ratified when it was recognized by an 1876 EO (attachment 2a).

#### **2.1.1.2.2 Executive Orders (EO)**

Although the 18 treaties were not ratified, issues concerning non-Indian and Indian conflicts and welfare remained, so in 1853 and 1855, Congress authorized the President to set aside seven ‘military reservations’ for all California Indians with the intention of providing them houses and a means of livelihood through farming and raising cattle (Heizer, et.al., 1978).

One of the seven ‘military’ reservations was the Klamath River Reservation (not to be confused with the Klamath Reservation in Oregon) created in 1855 (attachment 2b). It was a strip of territory that began at the Pacific Ocean and extended one mile in width on each side of the Klamath River for a distance of about 20 miles. The Klamath River Reservation was created from a small portion of Yurok aboriginal territory, however it was the intent of the Federal Government to move regional Indians to the Reservation. Ultimately only some Yurok and Tolowa were actually moved, and the forced relocation of Yurok families was described by the Tribe as traumatic (Yurok Tribe, 2007; Heizer, et al., p. 704; BIA, June 2011a).

Another one of the ‘military’ reservations was the Hoopa Valley Reservation, established in 1864 for the Hoopa Valley Tribe, the Karuk Tribe, and some others. It was a 12 mile square bisected by the Klamath River. A June 23, 1876 EO formally defined the Hoopa Valley Reservation borders (attachments 2c and 2d). An October 16, 1891 E.O. was signed by the President that ‘extended’ the Hoopa Valley Reservation. As a result of the 1864 Act, the 1876 E.O. and the 1891 E.O. laws, the Yurok Tribe lived with the Hoopa Valley Tribe on what was considered the Hoopa Valley Reservation until 1988 when the Hoopa-Yurok Settlement Act designated the separate ‘square’ as the Hoopa Valley Reservation and the ‘strip’ as the Yurok Reservation (attachment 2e).

### **2.1.1.2.3 Socioeconomic Conditions**

Although Hupa people maintained much of their cultural practices (i.e., fishing, ceremonies, Hupa language), they became self-supporting as they tilled land and raised livestock. Some found employment at the fort or seasonal work on nearby ranches, in logging, or other occupations.

### **2.1.1.3 Trinity River and KHP Development Decades (About 1930s – 1987)**

During this period, development on the Klamath and Trinity Rivers adversely affected fish abundance. Timber was profitable and proceeds were required to be dispersed to Yurok people as well as Hupas. The Hoopa constitution and bylaws were first approved on November 30, 1934, and later revisions were approved on September 4, 1952, August 9, 1963, and June 20, 1972 (Tiller, 2005).

#### **2.1.1.3.1 Subsistence Fisheries, Hydrograph, and Water Quality Changes**

It was primarily during this time period (Iron Gate Dam was constructed in 1962) that Karuk and Yurok people noticed significant changes in the lower Klamath River; the numbers of fish in the River declined, water quality declined, the timing of water releases changed. The changes were particularly apparent for upriver Karuk Tribal members as many described change in aesthetic qualities, including hydrograph changes that stranded fry and ammocetes. As another example, Lewis found that many Tribal members who had been away from the area and returned after Iron Gate Dam was built noticed a decline in water quality:

“Many people who left the area for a period, upon returning, noticed a dramatic change in the river, noting stagnant, slower flows, strong odors, dirtier water, more moss and algae, and higher temperatures. Those who used to swim in the main-stem river refuse to now because of the decline in water quality.” (Lewis, 2009, p. 25).

#### **2.1.1.3.2 Socioeconomic Conditions**

The Hupa experienced a shift to a wage economy and dependence on tribal timber funds essentially ended farming and raising livestock. By the mid 1960s, Hupa standard of living was described as far superior to other California tribes’ (Heize and Wallace, 1978, p. 176).

Dams were constructed on the upper reaches of the Trinity River between 1957 and 1962 that resulted in significant declines in fish populations and runs.

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Congress has since enacted legislation directing restoration activities for the benefit of fish populations in the Trinity River, including Pub. L. 102-575 § 3406 (b) (23), which directs action “to meet federal trust responsibilities to protect the fishery resources of the Hoopa Valley Tribe.” A Record of Decision signed in 2000 governs the Trinity River Restoration Program, but the success of the restoration is adversely affected by underfunding, low water flows, and fish disease conditions in the portion of the Klamath River through which the Trinity runs must pass (BIA, June 2011a; USFWS, et. al., October 1999).

Logging was profitable in the Hoopa square, and since timber is a trust resource, funds were held in trust for the tribes. However, by 1958 revenues from unallotted trust timberlands in the Hoopa Square were dispersed in per capita payments only to Hoopa Tribal members, which was later determined to be an unfair process for distributing proceeds which was decided in a series of Jessie Short cases. The first Jessie Short case was filed in 1963 on behalf of 16 Yuroks which grew to 3,222 plaintiffs years later. In *Jessie Short et al. v. The United States* (1973), the court ruled that Yurok land was an extension of the Hoopa Valley Reservation which meant that Yurok Tribal members were entitled to equal rights to income from timber sales on allotted trust lands.

**2.1.1.3.3 Sociocultural Conditions**

Heizer and Wallace described the fact that Hupa people retained their cultural identity during this time period, but that there were efforts to reinforce the ties:

“Notwithstanding the overwhelming preponderance of alien content in their contemporary culture, the Hupa retain a strong sense of ethnic identity (Bushnell 1968). The native language is still spoken...Efforts are being made to perpetuate or revive some of the cherished aspects of the aboriginal life.” (Heizer and Wallace, 1978, pp. 176-177).

**2.1.1.3.4 Traditional Diet**

For the neighboring Karuk Tribe, Norgaard documented the correlation between the shift from a traditional diet that included greater proportions of salmon, particularly Spring salmon to a Western diet and the appearance of diabetes soon after Iron Gate Dam was constructed. It is assumed that the same situation applied to the Hupa people as development caused declines in salmon populations (Norgaard, 2003).

#### 2.1.1.4 Self Governance and Self Determination (1988 – Present)

The Hoopa Valley Tribe October 31, 1988, Hoopa-Yurok Settlement Act (HYSA) (P.L. 100-580, 102 Stat. 2924) divided the Hoopa Reservation into a Yurok Reservation portion and the Hoopa Reservation area and required the Yurok to form a tribal government.

The Hoopa Valley Tribe serves roughly 2,930 members. Tribal government is governed by an eight member elected tribal council who each represent one of the seven districts. The Tribal chairman, vice-chair, secretary, and treasurer are elected by the Tribal Council. The Tribe was one of the first to participate in the Self Governance Demonstration Project and currently contracts all of its governmental services under PL-638 Self Determination Act (Tiller, 2005, p. 419). The Hoopa Valley Tribe holds an annual celebration of its sovereignty.

The timber industry began slowing in the 1980s recession and the spotted owl issue came to a peak in 1991 (Most, 2006, p. 181).

Although the Yurok were allowed to resume fishing in 1987, stocks began declining rapidly which has severely limited subsistence and commercial fishing. Since 1990, tribal commercial harvests have been marginal and have not provided a comfortable standard of living as originally envisioned for the Yurok in the Hoopa-Yurok Settlement Act. The Ninth Circuit Court of Appeals confirmed that the executive orders that created the Yurok Reservation vested the Yurok Tribe with “federally reserved fishing rights.” *Parravano v. Masten*, 70 F.3d 539, 541 (9<sup>th</sup> Cir. 1995), cert. denied, 518 U.S. 1016 (1996). The same court aptly observed that the salmon fishery of the Yurok Tribe is “not much less necessary to the existence of the Indians than the atmosphere they breathed.” (*Blake v. Arnett*, supra, at 909) (June 2011a, 2011b).

The Yurok and Hoopa Tribes emphasize that in 1993, the Solicitor of the Department of the Interior determined that the Yurok and Hoopa Valley tribes are entitled to a sufficient quantity of fish to support a moderate standard of living, or 50 percent of the Klamath fishery harvest in any given year, whichever is less. (Holt et. al., 1990, p. 98-109; BIA, June 2011a). Increasingly over the decades however, tribal subsistence fishing has been severely limited due to low numbers of fish. For example, Lewis (2009) found that all Karuk and Yurok fishermen he interviewed noticed that Pacific lamprey populations began to decline rapidly in the 1960s:

“One...[tribal member] recalled that the last time he had seen a full smokehouse was more than 45 years ago. Nowadays, most smokehouses are smaller and hold only about 100 lampreys, but even that size is difficult to fill in a whole season....Participants remember that in the

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1980s, an eeler was lucky to catch 50 - 100 lampreys, which was considered a lot. By the 1990s, they were lucky to harvest any.” (Lewis, 2009, p. 20).

The Hoopa Valley Tribe sponsors language classes on the Reservation, which is a sign of cultural revitalization, which in many ways is synonymous with culture.

## **2.1.2 Present Conditions**

The Hoopa Valley Tribe has been relatively aggressive compared with most regional tribes in economic development, and is the second largest employer in Humboldt County. Despite its strengths, the Tribe remains at a disadvantage primarily from losing ancestral territory, its remote location, and depressed anadromous fish populations. Tribal government includes a self governance office, fisheries department, recreation department, judicial system, law enforcement, and others.

Poverty and unemployment rates remain high and median incomes low. Although the Tribe has been fortunate relative to other Klamath Basin tribes to experience a relatively uninterrupted history of practicing cultural traditions, declining salmon populations threaten Hupa culture:

“Unfortunately, the poor condition of the inriver fishery in recent times has in some instances forced the Hupa and Yurok to purchase fish from sources off their reservations in order to feed all who attend their ceremonies. Nelson stated: ‘A lack of fish has resulted in the scaling down or even cancellation of ceremonies. The continual practice of ceremonies represents an important means for keeping tribal members who live off the reservations connected to their culture and families. However, without enough salmon, many do not come back; and the planning of ceremonies, once a time to appreciate nature’s abundance and of spiritual celebration, often brings significant anxiety to the region’s native peoples.’ (Byron Nelson, personal communication, November 1996).” (USFWS et. al., October 1999, pp. 3-216).

The main Tribal headquarters are located in the town of Hoopa. Hupa language classes are held each week in Hoopa which is another expression of the desire of the Hupa people to retain Hupa culture to the extent possible. The Hoopa Valley Tribe is a Self Governance Tribe, and prides itself on being one of the first to implement self governance. The Tribe has many departments and operates numerous programs. The Tribe operates a strong Tribal Fisheries Program.

### **2.1.2.1 Subsistence Fisheries**

According to Hoopa Tribal representatives, about 70,000 fish died in the 2002 Klamath River fish kill that were destined for the Trinity River and Hoopa Valley Reservation (Dan Jordan, socioeconomic meeting date). The four KHP dams cause poor water quality (including temperatures and hydrograph) that also contribute to low fish populations, human health warnings, and is aesthetically unappealing River water (often described as ‘pea soup’).

#### **2.1.2.1.1 Socioeconomic Conditions**

The Hoopa Valley Tribe has a federally protected right sufficient to support a moderate standard of living or 50 percent of the total available harvest which has been jeopardized by water quality problems on the Klamath River (as well as Trinity Dam operations).<sup>5</sup> Diminished fish stocks affect Hoopa Valley Tribal trust fishing rights as the ability of members to provide for their families is negatively impacted

##### **2.1.2.1.1.1 Fishing Methods, Locations, and Species**

The Yurok Tribe has maintained the traditional ownership-social structure for fishing places:

The Hupa relied, and to the extent possible, still relies primarily on the following anadromous species and would like all of them to be available in sufficient numbers for subsistence fishing in the future: Spring- and fall-run Chinook Salmon, coho salmon, steelhead trout, bull trout, sturgeon, and Pacific lamprey eel.

##### **2.1.2.1.1.2 Quality of Subsistence Fisheries: Water Quality, Hydrograph, and Channel Habitat**

Lower Klamath River toxic algae problems and health advisories have been described by the Karuk and Yurok Tribes as causing, or having the potential to cause an almost complete cessation of subsistence and commercial fishing with devastating consequences. The Yurok and Karuk Tribes directed comments, in the form of an analysis of water quality impacts from the dams, to the FERC concerning coverage of issues the Tribes considered to be inadequate in the FERC draft environmental impact statement for hydropower relicensing (FERC Project No. 2082-027). The descriptions of the effects of the dams described by the Tribe and Tribal members in survey interviews and comments to FERC are supported

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<sup>5</sup> Additional detail about Hoopa Tribal reserved fishing and water rights can be found in BIA technical reports (June 2011a and June 2011b).

by water quality and recreation analysis conclusions in the *Klamath Facilities Removal Environmental Impact Statement/Environmental Impact Report* water quality analysis, and as reviewed by the BIA (June 2011b) (DOI, August 2011).

#### **2.1.2.1.2 Sociocultural Conditions**

The Brush Dance, White Deerskin Dance, and the Jump Dance are performed yearly (Tiller, 2005). Like the Yurok and Karuk, the Hupa celebrate world renewal through the White Deerskin Dance and Jump Dance ceremonies that take place along the Trinity River and depend on abundant salmon populations:

“Both dances are held for a period of 10 days. The Hupa bring salmon they have caught at their fishing sites to share with the participants and attendees and offer them for the ceremony....Both [dance ceremonies] depend on a healthy river for fish, basket materials, bathing, and ambiance.” (USFWS et. al., October 1999, pp. 3-217).

Reduced populations of salmon may adversely affect the ability of the Hupa to practice their ceremonies since salmon are a central element and/or participate in surrounding tribes’ ceremonies. For example, the First Salmon Ceremony is practiced by the Yurok and Karuk and currently cannot be practiced traditionally since the spring-run Chinook Salmon have essentially disappeared which has meant that the timing of the First Salmon Ceremony has had to be modified. The continuance of the religious ceremonies and associated cultural practices is impacted as ability of area tribes to pass fishing on as a religious and cultural value to future generations is jeopardized. Health concerns and health effects from contact with the water during ceremonies are discussed in the Health section.

The Klamath River is integral to Hupa culture and the water supply, hydrograph, and quality affect religious ceremonies of neighboring tribes in which Hupa members participate that include River water drinking, cooking, ceremonial bathing, and other water-contact uses.

Ceremonies remain vitally important to current generations as a way of coping with the disconnect between their traditional past and the present. Low or non-existent fisheries limit the transfer of cultural, traditional knowledge from generation to generation.

#### **2.1.2.1.3 Social Conditions**

Klamath Basin Tribes have experienced a diminished ability to practice a traditional lifestyle, particularly fishing for subsistence as a result of the hydroelectric dams and other development, resulting in a loss of cultural identity (but not of cultural values), social trauma, and ‘cultural genocide.’

The significance of the loss of Tribal identity associated with resources no longer available and resulting social conditions from the loss were described further in a BIA report that also cited Norgaard:

“When a people’s identity and cultural practices are closely associated with a species that no longer thrives, a sense of connection and belonging is lost [Norgaard, Chapter 5, 2005]. Young people feel this loss of belonging especially intensely...When tribal celebrations require that the tribe and visitors feast on salmon and no salmon is to be found... it is disheartening to have to make a trip into town to purchase imported fish from a grocery chain store. The results can be depression, alienation, and withdrawal...creating a malaise that lingers among the people subject to these conditions.” (BIA, June 2011a, pp. 1-7).

Grief resulting from the loss of aboriginal territory and struggle to maintain a subsistence fishery despite development, with associated cultural disruption, creates conditions under which symptoms of social trauma and dysfunction may increase. This syndrome, although experienced to a lesser extent for the Hupa, has been described by social workers Brave Heart and DeBruyn as an ‘Indian holocaust’ and has resulted in symptoms of social dysfunction:

“[most] American Indians and Alaska Natives are plagued by high rates of suicide, homicide, accidental deaths, domestic violence...and alcoholism as well as other social problems... We suggest that these social ills are primarily the product of a legacy of chronic trauma and unresolved grief across generations, (Brave Heart and DeBruyn 1998, p. 60).” (Norgaard, 2005, p. 65).

As Norgaard described, there has been a diminishment of social and cultural relationships between generations as a result of historical events and declining salmon stocks and changes fish-run timing, which have contributed to some signs of social dysfunction. Any possible direct and indirect mortality rates caused by social and cultural disruption (and more recently also the lack of healthy foods) may compound cultural challenges by taking elders (the Tribes’ ‘intellectual capital’), away too soon as they are the primary means through which social and cultural lifestyles and values are transmitted to following generations.

#### **2.1.2.1.4 Subsistence Fisheries and Traditional Diet**

Contractions in all subsistence fisheries species decrease the availability of traditional, healthy foods that has the potential to have a negative effect on health. Similarly, water quality problems have the potential to limit consumption of traditional foods as many Hupa people are concerned about consuming anadromous species from the Klamath River because of bioaccumulation concerns.

### **2.1.2.2 Economic Conditions**

The Hoopa Valley Tribe has been relatively aggressive compared with most regional tribes in economic development, and is the second largest employer in Humboldt County. Tribal government includes a self governance office, fisheries department, recreation department, judicial system, law enforcement, and many others. The Hoopa Valley Tribal Fisheries is funded in part by the Bureau of Reclamation, the Bureau of Indian Affairs (BIA) Compact, and the National Marine Fisheries Service, and among other functions, monitors and reports on Trinity River fisheries.

Much of the Reservation is classified as commercial timberland. Historically, other large employment sectors in the region were canneries, agriculture, fishing and tourism/recreation, and timber industries, all of which gradually declined, resulting in relatively high unemployment rates (Tiller, 2005). The Hoopa Valley Tribe has taken an active role in self governance and began managing federal programs on the Reservation relatively early, an approach maintained today which makes the Tribe somewhat economically stronger than other Klamath Basin tribes and most California tribes (Tiller, 2005).

Following the gold rush, the economy of the region shifted from a mining to fisheries-based economy with a large timber industry that peaked in the mid-1900s, declined in the 1970s and 1980s and remained slow in the early 1990s. Since the end of WWII, the primary economic activity on the reservation has been timber-related. About 55,000 acres are classified as timber harvestable areas. Since the late 1980s, the tribal government managed its timber resources for a sustained yield of about 12 million board feet that brought in roughly 5 million in annual revenue. The 1988 Hoopa-Yurok Settlement Act divided the Hoopa Valley Reservation into the ‘square,’ the Hoopa portion, and the ‘strip’ exclusively for the Yurok and required that part of the timber proceeds at the time be distributed to Yurok Tribal members (Tiller, 2005).

Tsemeta Forest Regeneration Complex is a Tribal enterprise that supplies seedlings for restocking reservation timberland and sells seedlings to the Forest Service and other off-reservation entities. The approach uses a technique that results in the production of superior quality trees that have a low mortality rate. The nursery is also a certified organic producer of medicinal herbs and grows ornamental and native grasses and provides custom services and provides processing and packaging of specialty plant materials (Tiller, 2005).

Although there is land suitable for agriculture, fragmented land ownership patterns prohibit large scale commercial farming. For this reason, agricultural production is limited to gardens, some grains, and native hay. Individuals also raise horses and cattle (Tiller, 2005).

The Tribe owns the California Indian Manpower Corporation that provides employment services to tribes, organizations, and individuals. The company provides individual applicants with job training, referral, and assistance. The Tribe owns and operates a small casino, Lucky Bear Casino located in Hoopa that contains about 85 slot machines; however, it is a modest enterprise given its remote location. The remote location prevents economic endeavors from expanding beyond initial development. The Tribe operates a sustainable logging timber company, Hoopa Forest Industries (HFI). The HFI employs about 40 members full time and 60 seasonal jobs. The HFI is a model for Indian forestry programs throughout Indian country. The Tribe is developing a manufacturing plant that will produce modular homes, expected to employ 145 people (Tiller, 2005). Other sectors that provide sizeable employment to Reservation residents include construction and mining. The Tribe owns and operates the Hoopa Valley Aggregates and Redi-Mix Enterprises, and is exploring its other mineral reserves. The Tribal owns the Best Western Tsewenaldin Inn (the Tribal museum is next to the hotel).

Despite the Tribe's economic strengths, poverty (nearly twice as high as the county and triple the State percentage) and unemployment rates remain high (about triple the County and State percentages) and median incomes low. It is estimated that about 35 percent of the Hupa people are in poverty with an unemployment rates that could be as high as 40 percent (Census, 2000 and 2010; BIA, 2005).

#### ***2.1.2.2.1 Unemployment, Income, and Poverty Rates***

The Hoopa Tribal Government employs over 450 people, and is the second largest employer in the county. Nevertheless, unemployment rates remain high. A 2005 BIA labor force report showed 1,893 enrolled Tribal members (year 2010 enrollment is about 2,930 ), and about 1,983 Indians reside on or near the Hoopa Reservation who are eligible for BIA services, and of those, about 40 percent were unemployed (BIA, 2005).

Census 2000 data for the Hoopa Valley Reservation showed a high (relative to other Census area percentages) unemployment rate of 14 percent, a low median household income and per capita income, especially for the Indian population, with roughly 32 percent of the population in poverty. Over half (about 55%) of families with a female householder, no husband present with children were below the poverty level on the Reservation (table 2.1-1).<sup>6</sup> Unemployment was at least double and in some cases three times higher for the Reservation (total or Indian-only) population than for the immediate area, county, and State populations.

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<sup>6</sup> "One race alone" Census category; not "two or more races" category. An explanation of what is included in the poverty thresholds and the dollar amounts according to family size for the 2000 Census is included in attachment 3.

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**Table 2.1-1.—Census 2000 unemployment, income, and poverty**

<b>Geographic areas</b>	<b>Census unemployment (%)</b>	<b>BIA unemployment (%)<sup>7</sup></b>	<b>Median household income (1999 dollars)</b>	<b>Per capita income (1999 dollars)</b>	<b>Poverty status (%)</b>	<b>Poverty – families, female householder, no husband, children under 5 (%)</b>	<b>Poverty – families, female householder, no husband, children under 18 (%)</b>
Hoopa Valley Reservation	14.0	–	23,384	10,400	32.3	55.7	54.4
Indian	15.7	40	22,695	9,757	34.4	56.9	54.6
Humboldt County	5.26	–	31,226	17,203	19.5	61.0	44.6
Indian	12.0	–	25,281	11,532	31.0	64.0	54.5
Trinity-Klamath CCD	9.4	–	24,297	12,979	27.8	59.4	59.1
Indian	14.8	–	21,360	9,407	36.9	64.8	60.1
California	4.3	–	47,493	22,711	14.2	44.0	32.5
Indian	6.8	–	36,547	15,226	21.9	52.6	42.9

Notes: American Indian and Alaska Native Census data is “Indian alone” as opposed to Indians alone or in combination with other races since that is the only option for Census sample data. BIA figure is for 2005, and for further information, including definitions, see attachment 3. CDP is a city/town, and CCD is a larger area around a CDP.

Concerning high poverty and unemployment rates, the subsistence fishing-income connection was analyzed by Norgaard for the Karuk Tribe, which is applicable to this analysis, and was found to have a high value:

“Cost replacement analysis conducted in the Spring of 2005 puts the cost of purchasing salmon at over \$4,000 per [Karuk] tribal member per year (Stercho, 2005).” (Norgaard, 2005, p. 59).

The 2000 Census poverty rates for the Hoopa Valley Reservation were about 33 percent which is about twice as high as the percentage State-wide.

Overall, at 14 percent unemployed on the Reservation in the year 2000 census, nearly 16 percent for the Indian population, the Hoopa Reservation had one of the highest unemployment rates in the area, averaging about three times that of the County and California. The Census 2005 to 2009 American Community Survey

<sup>7</sup> Based on 2005 BIA data, not 2000 Census data.

estimates show that unemployment may have eased slightly, but poverty rates may have increased in 2009 compared to year 2000 (2005-2009 estimates are in attachment 3b).

### **2.1.2.2.2 Employment by Occupation**

On the Hoopa Reservation, the year 2000 Census showed that most were employed in management occupations at about 32 percent, and a relatively small percentage (5.1) were employed in fisheries, forestry (and presumably little farming) occupations, shown in table 2.1-2. The next highest percentage (average about 22.5) were employed in services and sales and office occupations (Tiller, 2005, p. 507). Although the farming, fishing, and forestry category only had about 5-6 percent on the Reservation, that rate is about triple the county percentage and about four to five times that of the State.

**Table 2.1-2.—Census 2000 percentages of workforce by occupation**

<b>Geographic areas</b>	<b>Management</b>	<b>Services</b>	<b>Sales and office...</b>	<b>Farming, fishing, and forestry</b>	<b>Construction, extraction...</b>	<b>Production, transportation...</b>
Hoopa Valley Reservation	32.1	22.2	23.5	5.1	10.6	6.6
Indian	32.0	21.7	23.2	6.0	10.3	6.7
Humboldt County	31.5	19.6	24.9	2.6	8.8	12.6
Indian	26.0	24.3	23.3	5.2	7.9	13.3
Trinity-Klamath CCD	35.0	20.1	19.6	4.3	12.1	8.9
Indian	32.8	19.3	22.3	7.0	11.2	7.5
California	36.0	14.8	26.8	1.3	8.4	12.7
Indian	28.3	18.2	27.1	1.4	10.9	14.1

Notes: Full category titles: Management, professional, and related occupations; service occupations; sales and office occupations; farming, fishing, and forestry occupations; construction, extraction, and maintenance occupations; production, transportation, and material moving occupations. For more information, including definitions, see attachment 3.

### **2.1.2.2.3 Demographics**

Around 1770, it was estimated that there were about 1,000 Hupa people, a number that declined to about 500 by 1910 as a result of Euroamerican conflicts, diseases, and related factors (Kroeber, 1976(1925), table 11, p. 883). Hoopa Valley Tribal enrollment was 2,930 in 2010. Also in 2010, the Census counted 3,041 people on the Hoopa Valley Reservation, which was an increase of 13.4 percent from the 2000 Census, and the Indian population increased 14.4 percent as shown in table 2.1-3.

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**Table 2.1-3.—1990, 2000, and 2010 Census population**

<b>Geographic areas</b>	<b>1990</b>	<b>2000</b>	<b>1990 - 2000 Change (%)</b>	<b>2010</b>	<b>2000 - 2010 Change (%)</b>
Hoopa Valley Reservation	2,199	2,633	16.5	3,041	13.4
Indian	1,780	2,230	20.2	2,506	11.0
Percent	80.9	84.7		82.4	
American Indian Alone or in Combination with Other Races	na	2,282	na	2,667	14.4
Percent	na	86.7	--	87.7	--
Humboldt County	119,118	126,518	5.8	134,623	6.0
Indian	6,568	7,241	9.3	7,726	6.3
Percent	5.5	5.7	--	5.7	--
Trinity-Klamath CCD	4,885	5,437	10.2	na	Na
Indian	2,314	2,835	18.4	na	na
Percent	47.4	52.1	--	na	--
California	29,760,021	33,871,648	12.1	37,253,956	9.1
Indian	242,164	333,346	27.4	362,801	8.1
Percent	0.8	1.0	--	1.0	--

Sources: Reservation data from table 2. Race and Hispanic Origin 1990. Social and Economic Characteristics. Sources: Reservation data from table 2. Race and Hispanic Origin 1990. Social and Economic Characteristics. Table DP-1 General Population and Housing Characteristics 1990. Table DP-1 Profile of General Demographic Characteristics: 2000. Table QT-PL Race, Hispanic or Latino, Age, and Housing Occupancy: 2010 Census Redistricting Data Summary File. Table P2 Hispanic or Latino, and Not Hispanic or Latino by Race 2010 Census Redistricting Data. Table GCT-PL1 Race and Hispanic or Latino - State -- County Subdivision 2010 Census Redistricting Data Summary File .

Although Hoopa Valley Tribally enrolled membership includes those who also live elsewhere, it appears that most live on the Hoopa Reservation and that the population is growing.

**2.1.2.2.3.1 Race and Ethnicity**

The American Indian population comprised about 88 percent of the total population which is relatively high compared to most other reservations (table 2.1-4). The proportion of Indians was also relatively high in the Trinity-Klamath CCD at over 55 percent (2000 census) since it is comprised primarily of Hupa, Yuroks, and Karuks.

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**Table 2.1-4.—Census 2000 and 2010 race and ethnicity percentages of total population**

	Total population	Non-Hispanic					Hispanic
		White (%)	African American (%)	American Indian (%)	Asian and Pacific Isl. (%)	Other races (%)	Hispanic or Latino (%)
<b>Hoopa Valley Reservation</b>							
2010	3,041	16.0	0.4	87.7	1.1	0.7	6.2
2000	2,633	13.4	0.6	86.7	0.9	0.9	4.3
<b>Humboldt County</b>							
2010	134,623	86.6	2.0	8.9	3.9	4.5	9.8
2000	126,518	88.8	1.4	8.3	2.7	3.5	6.5
<b>Trinity-Klamath CCD</b>							
2010	na	na	na	na	na	na	na
2000	5,437	45.5	0.7	55.3	1.5	1.7	4.7
<b>California</b>							
2010	37,253,956	61.6	7.2	1.9	15.7	18.9	37.6
2000	33,871,648	63.4	7.4	1.9	13.0	19.4	32.4

Source: Census table DP-1. Each race category includes that race alone or in combination with other races, and for more information and definitions, see attachment 3. CCD data in California for 2010 were not yet available.

**2.1.2.2.3.2 Median Age and Population Growth**

The Indian population median age in 2000 was relatively young at about 23 years of age on the Hoopa Valley Reservation which was generally 10 or more years younger than the County and State population (shown in table 2.1-5). The difference is likely due to a moderately high birth rate. The Tribe has grown fairly rapidly as shown by the increases in enrollment and Reservation census counts.

**Table 2.1-5.—Census 2000 median age**

Geographic areas	Total population median age			Indian population median age		
	Total	Male	Female	Total	Male	Female
Hoopa Reservation	26.0	25.2	26.8	23.0	22.4	24.1
Humboldt County	36.3	35.0	37.6	26.5	25.0	28.0
Trinity-Klamath CCD	35.5	35.8	35.3	24.7	22.9	26.1
California	33.3	32.2	34.4	29.3	28.5	30.1

Source: 2000 Census, tables PCT4.

#### **2.1.2.2.4 Barter System**

Concerning the ancient and contemporary regional barter system, salmon has remained an important socioeconomic factor for Tribal members, which has become more limited over the years as salmon runs and stocks decline. During a meeting with the Yurok Tribe, a member described the economic importance of the substitution income provided by trade and, in the example he provided, it helps with such large expenses as purchasing school clothes for children. Over time, salmon has increased in value as supplies continue to decline:

Norgaard described how the barter system and subsistence fishing elevated the Karuk people economically, which also applies to the Hupa:

“Although salmon was not bought and sold as part of a cash economy, the presence of this food meant that people didn’t need to spend money buying other foods at the grocery store or be forced to rely on government commodities, as is now the case.” (Norgaard, November 2005, p. 60).

#### **2.1.2.2.5 Redistribution**

Redistribution of wealth, in this case, of fish to Tribal members and families, particularly dependent portions of the population, remains an important socioeconomic value; however, low fish populations limit the ability of Tribal members to continue this practice.

#### **2.1.2.2.6 Land Base and Uses**

The Hoopa Valley Aboriginal Territory includes about 80 to 60 percent more land than the current-day Reservation which is close to 90,000 acres. The Hupa area was reduced for the Reservation in a series of steps described in the Tribal History section of this document. By about 1887, the General Allotment Act contributed to some of the checkerboard ownership; however, it is relatively minimal compared to most tribes. The Hoopa Valley Reservation is divided into seven districts. Much of the Tribe’s lands are timberlands managed by its natural resources department (Tiller, 2005).

#### **2.1.2.3 Health**

Health effects include impacts of the KHP on fish populations and availability, and water quality problems which have contributed to direct and indirect health effects. The connection between higher diabetes, heart disease, obesity, and mortality rates and diminishing quantities of traditional foods, particularly salmon was documented for the Karuk Tribe in a November 2005 report by Norgaard in *Effects of Altered Diet on the Health of the Karuk People*. Indications from

Hoopa Valley Tribe and other factors show that it has a similar experience. Additionally, water quality problems are believed to cause a decline in consumption of anadromous species directly or indirectly, especially around the periods when health advisories have been posted.

Salmon and other anadromous species destined for the Trinity River are adversely affected by Klamath River water quality problems and altered hydrograph. Fewer fish may translate into higher diabetes, heart disease, and related disease, disability, and mortality rates, especially for elders who are some of the most important tribal members for enabling tribes to continue traditions.

“Traditional food is at the very heart of culture continuity...[and its absence] leads to further social disruption. When elders die young they are not available to pass information...on to the youngest generations. Denied access to traditional foods must be understood in the broader context of cultural genocide,” (Norgaard, November 2005, p. 68).

The K’ima:w Medical Center is tribally owned and provides services to tribal members and non-tribal members. It also provides community outreach programs to address the prevention of injury and violence and operates the senior nutrition program and transportation services. The K’ima:w Field Health and Outreach Department provides health screenings, home visits, and other support services. The Tribe operates a dental clinic. The Tribe’s human services provides programs related to mental health, drug and alcohol rehabilitation, domestic violence, child welfare, and other services. (Tiller, 2005, p. 508).

The Hoopa Valley Tribe appears to have experienced an increase in obesity, diabetes and heart disease rates that coincided with the declining availability of traditional foods, particularly salmon, and that has the potential to result in higher disability and mortality rates. The high poverty rates and remoteness of much of the Reservation has created the need for an estimated half of Reservation Tribal members to rely heavily on USDA commodity foods that are connected with poor nutrition and associated health problems (as Norgaard found when analyzing the Karuk disease rates and change from a traditional diet to one that included more processed foods). In addition, Tribal members are concerned about potential human health bioaccumulation of contaminants in fish for consumption, given the serious health advisory warnings upstream at Iron Gate Dam and Copco Reservoirs (attachment 4).

#### **2.1.2.3.1 Traditional Foods**

Norgaard and the Northwest Portland Area Indian Health Board documented and described a tremendous shift in the Indian diet for the Karuk Tribe and other salmon-based tribes in the Portland area from one of traditional foods (hunting, fishing, and gathering) to an increased reliance on purchased food and Federal

food program commodities which have been notorious for providing limited choices of foods with a large amount of bad fats and long shelf-lives (i.e., white flour, cheese, canned high fat meats, etc.) (Northwest Portland Area Indian Health Board, accessed August 2010).

The decline in the availability of Hupa traditional foods, primarily salmon, other fish, eels, and traditional foods, and extreme poverty shifted the Hupa diet beginning as early as the 1950s with dams and over fishing, resulting in higher obesity, diabetes, and heart disease rates. Research on the Karuk Tribe experience, which applies to a large extent to the Hupa, Norgaard found that as traditional food consumption has declined, the time and energy spent finding, securing, processing, and physically transporting traditional foods has contributed to a more sedentary lifestyle that contributes to diabetes, heart disease, and obesity (Norgaard, November 2005). Furthermore, the Yurok Tribe conducted a survey of members concerning lifetime consumption patterns that documented diet changes as well.

#### ***2.1.2.3.2 Trust Responsibility and Health Care***

In terms of trust responsibility, the Federal Government is required to provide health services to Federally recognized Tribes by the trust doctrine (*Cherokee Nation v. Georgia*, 1831) and the Indian Health Care Improvement Act, (P.L. 94-437), as reauthorized March 2010, to ensure health care parity and a standard of living for Indians comparable to non-Indian society (attachment 5a and 5b).

#### ***2.1.2.3.3 Mortality Rates***

Mortality rates increase from higher diabetes and heart disease rates. American Indians are twice as likely as Caucasian adults to have diabetes. If current trends continue, one in three Americans will develop diabetes in their lifetime and will lose, on average, 10 to 15 years of life. Diabetes was the sixth leading cause of death nationally in 2006 and overall, the risk of death among people with diabetes is about twice that of non-diabetics, (CDC, accessed September 2010).

In terms of prevention and treatment, recent studies show that lifestyle (including diet) changes can prevent or delay the onset of type II diabetes among people at high risk. For example, prediabetics can reduce the rate of onset type II diabetes by 58 percent by losing 5-7 percent of their weight and exercising at least about 2 hours per week, (CDC, accessed September 2010).

#### ***2.1.2.3.4 Heart Disease***

Heart disease is the leading cause of death and morbidity for American Indians, as well as the general population. Several medical conditions and lifestyle choices

put people at a higher risk for heart disease, including: high cholesterol (high 'bad' fats and low 'good' fats, like omega 3 fatty acids found in salmon), high blood pressure, diabetes, overweight/obesity, poor diet, and three other factors. Five of the eight factors either are diet-related or are closely tied to diet.

The American Heart Association (AHA) recommends eating fish at least twice a week (every day for those with heart disease), particularly fatty fish like salmon which are high in two kinds of omega-3 fatty acids: eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA), which have demonstrated benefits for reducing heart disease. Omega 3 fatty acids have been found to help with other such diseases as diabetes (Norgaard, 2005) (American Heart Association, accessed September 2010). Spring Chinook salmon were particularly important:

“Of the many fish species...the Spring Chinook salmon have historically been the most important...Spring Chinook had the highest volume of fish, a reliable run, higher fat content, was in the best physical condition, tasted better, and came in the Spring, a critical time for food...The particular importance of Spring Chinook salmon for tribes in the region is noted by early anthropologists (e.g. Gunther 1926, Rostland 1959).” (Norgaard, November 2005, p. 32).

#### **2.1.2.3.5 Diabetes**

Diabetes is a major contributor to morbidity and is the fourth leading cause of death among all American Indians. According to an analysis of Karuk Tribal medical records, which is assumed to be similar for Hupa (and most tribes), diabetes rates are nearly four times the national average, and 70 percent of Tribal members over age 60 reported having diabetes (Norgaard, 2005, pp. 39-40).

In terms of prevention and treatment, recent studies show that lifestyle changes can prevent or delay the onset of type II diabetes among people at high risk. For example, prediabetics can reduce the rate of onset type II diabetes by 58 percent by losing 5-7 percent of their weight and exercising at least about 2 hours per week, (CDC, accessed September 2010).

In addition, from a socioeconomic standpoint Norgaard found that diabetes is costly in several respects:

“Diabetes is a costly disease not only in terms of medical care costs but also in terms of human costs. Of patients with Type II diabetes, 20 percent develop kidney disease, 45 percent develop cardiovascular related diseases and 50 percent suffer from hypertension. And the rates for these conditions are even higher for American Indian people (Joe and Young, 1993, p. 3).” (Norgaard, 2005, p. 39).

The Norgaard report also noted that nerve damage resulting from high blood glucose levels often leads to amputations and/or infections, and that the CDC reported additional such complications as blindness, disability, decreased quality of life and premature death that affect Indians disproportionately (Norgaard, 2005, p. 39, 47).

#### **2.1.2.3.6 Obesity**

Obesity is strongly related to altered diet and is frequently a cause of the increase in the incidence of diabetes (Norgaard, November 2005, p. 44). Nutrition is an important factor in obesity, and being overweight is a leading contributor to heart disease and the most prevalent form of diabetes, type II. Relatively small weight losses are associated with large decreases in risks associated with developing and managing heart disease and diabetes (American Heart Association, September 2010).

A study of California childhood obesity found that some racial groups had declining rates of obesity, but for American Indian girls, obesity rates increased while rates for their male counterparts saw no change to a modest decline. Because of the serious health consequences and increasing rates of obesity, childhood weight data will be collected by IHS for 2010 reports on Indian Country health. Traditional foods require physical activity and are low calorie and more specifically, a daily portion of fish is recommended by the American Heart Association for people with heart disease, and at least two to three times per week as a preventative measure.

Obesity is the leading contributor to the onset of type II diabetes, and rates for children have been increasing. In “Disparities in Peaks, Plateaus, and Declines in Prevalence of High BMI Among Adolescents,” it was found that there was a decline in obesity prevalence for California’s Caucasian and Asian youth since 2005, but a continuation of increases for American Indian girls and remained about the same for American Indian boys (only the top percentile group had a decline). Data was analyzed from 2001 to 2008. The trends may indicate greater disparities over time, particularly for the severely obese.

#### **2.1.2.3.7 Diet and Nutrition**

The Subsistence Fishery part of the Present Conditions section of this document discussed the quantities of salmon historically consumed (about 1.5 pounds per person per day) by Tribal members and the relatively low levels of today. This section discusses details of the nutritional value of fish, especially salmon, the link with diseases, and the USDA Commodity Food Program.

#### **2.1.2.3.7.1 *Omega-3 Fatty Acids and Fish***

A daily portion of fish is recommended by the American Heart Association (AHA) for people with heart disease, and at least two to three times per week as a preventative measure, primarily for the omega 3 fatty acids which are highest in wild salmon, (AHA Web site accessed November 2010). Norgaard researched and described some of the omega 3 benefits:

“Omega-3 fatty acids have been linked with a number of significant health benefits including reduced risk of heart attacks, strokes and Alzheimer, prevention of osteoporosis, a diabetic treatment, improved mental health and improved brain development in infants...A number of studies indicate beneficial effects of omega-3 fatty acids on various forms of depression...(Bruinsma 2000, Hibbeln 1998).“ (Norgaard, 2005, pp. 50-51).

Norgaard listed the potential health benefits of omega-3 fatty acids: Improved brain development in infants and mental health for all ages; reduced risk of stroke, heart attack, and Alzheimer’s disease; reduction of triglyceride levels; and possible diabetic treatment, prevention of osteoporosis (Norgaard, November 2005, p. 50).

#### **2.1.2.3.7.2 *Shift from Traditional to Western Diet and Disease***

Assuming the Hupa people experience conditions similar to their upstream neighbors, Norgaard’s report analyzed Karuk Tribal survey results in which members stated that overweight, diabetes, and heart disease were relatively new and coincided with the shift from a traditional to a Western diet. For example, 66 percent of Karuk members surveyed reported that diabetes appeared in their families for the first time since 1970, which is when salmon runs declined significantly in the lower Klamath River reach. More specifically, Norgaard found that the correlation was strongest with the disappearance of spring Chinook salmon. Norgaard listed numerous studies in which a Western diet was introduced to American Indian Tribes and other native groups and within a month or so, they began to experience diabetes, and in some cases, heart disease as well (Norgaard, 2005, p. 51-53), and a primary example has been the U.S. Department of Agriculture’s (USDA) commodity food program.

#### **2.1.2.3.7.3 *USDA Commodity Food Program***

The commodity food program distributes food to Indian reservations, and has been comprised mainly of high sugar/simple carbohydrates, low fiber, highly processed foods that are often high in ‘bad’ fats. Commodity food programs appear to be linked to obesity among Indians:

“Significant concern has been expressed about commodity foods distributed to Indian people as a cause of obesity (USDA Food and Nutrition Service 1991) since the use of this program is high among Indian populations. Other studies have discussed the poor availability of high fiber, low fat foods in commodity food programs and called for change in these programs (Burhansstipanov and Dresser, 1994).” (Norgaard, 2005, p. 46).

#### ***2.1.2.3.8 Social Conditions: Food Insecurity, Poverty, Stress, and Health Implications***

Hupa Tribal members have the added stress of meeting basic needs. Previous sections of this document discussed high poverty rates that indicate many families are food insecure and/or have difficulty in meeting other basic needs. Norgaard’s research and observations for the Karuk Tribe revealed the social and psychological stress associated with food insecurity when she stated that: “Difficulty in meeting basic needs results in overwhelming physical and psychological stress,” that can directly and indirectly compound existing health conditions (Norgaard, 2005, p. 57).

#### ***2.1.2.3.9 Health Care Costs***

This section discusses higher health care costs nationwide resulting from heart disease, diabetes, and obesity.

##### ***2.1.2.3.9.1 Heart Disease Costs***

In 2010, heart disease will cost the United States \$316.4 billion, and includes the cost of health care services, medications, and lost productivity. Since 1998, the CDC has funded state health departments' efforts to reduce the number of people with heart disease and stroke. Health departments in 41 states and the District of Columbia currently receive funding. The program stresses policy and education to promote heart-healthy and stroke-free living and working conditions (CDC, accessed September 2010).

Large amounts of Federal funding are allocated for direct services to Tribes for diabetes and heart disease, and for research and education programs specific to American Indians designed to reduce the high rates of heart disease and diabetes. Direct costs of the top diseases and causes of death have been monetized for the general population and are included in this section. In terms of indirect costs, there are numerous Federal programs that are researching these problems and educational programs expressing the benefits of a traditional diet, or of the need to eat foods that happen to be part of a traditional diet such as that of the Klamath Tribes. For example, the CDC’s Native Diabetes Wellness Program (NDWP) has

recognized the need and importance of trying to influence diet choices to curb the diabetes epidemic by using culturally sensitive information and education of Indian children.

#### ***2.1.2.3.9.2 Diabetes Costs***

The prevalence of diabetes continued to grow with the total reaching 17.5 million by 2007. Medical costs for people diagnosed with diabetes are about 2.3 times higher than the rest of the population. Total costs (direct and indirect) of diabetes was estimated to be \$174 billion, with direct medical costs at about \$116 billion and indirect costs (disability, work loss, premature death) at \$58 billion nationwide (2007 dollars). Hospital inpatient care was the largest percentage of costs at about half, medication and supplies were about 12 percent, prescriptions 11 percent, and physician office visits about 9 percent. In terms of direct medical costs, annual excess expenditures for the diabetic population was found to be \$3,808 for people under 45 years old, \$5,094 for people ages 45-64, and \$9,713 for people over age 65. The report noted that “the actual national burden of diabetes is likely to exceed the \$174 billion estimate because it omits the social cost of intangibles such as pain and suffering, care provided by nonpaid caregivers, excess medical costs for health care expenditure categories such as health care system administrative costs, over-the-counter medications, clinician training programs, and research and infrastructure development.” (ADA, “Economic Costs of Diabetes in the U.S. in 2007,” CDC, accessed October 2010).

#### ***2.1.2.3.9.3 Obesity Costs***

Recently, the national estimated cost of obesity totaled about \$147 billion (2008 dollars) (Finkelstein, E.A., et al., 2009). Researchers investigated the average annual increase in medical spending associated with obesity, and found it to be 37.4 percent, or about \$732 more per patient (2002 dollars) (Finkelstein, Fiebelkorn, and Wang, 2003). Research results were similar in a 2002 study that found obese adults annually incur about \$395, or 36 percent higher medical expenditures than normal-weight adults under age 65 (Sturm, March/April 2002).

#### ***2.1.2.3.10 Water Quality Concerns***

There have been health warnings about water quality problems in Iron Gate and Copco reservoirs which concern and affect Tribal members for fishing, ceremonies, swimming, gathering basketry materials, and engaging in other uses of the Klamath River by Tribal members.

Klamath River water quality concerns affect or potentially affect Hupa health mainly from concerns about consumption of potentially contaminated fish species, which may involve avoidance or reduced reliance on traditional foods as

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a result of concerns about contaminated fisheries. Impacts of not having access to (or in this case, avoiding) sufficient amounts of fish, lamprey, and other species were discussed in the first part of this Health section. It is important to note that the Yurok Tribe's Environmental Program is sampling frequently to enable it to better inform its members (and likely Hupa and Karuk) of potential health threats.

As an example of potential effects on perceptions of water quality problems and health, the Yurok Tribe conducted the *Healthy River, Healthy People, Traditional Foods Survey* in which respondents indicated that poor water quality has had a detrimental effect on various activities, and not only during the 2005 cyanobacterial bloom, but various times from about 2000 to 2005. The categories of River water uses that were most curtailed included fishing, bathing, drinking, and recreational uses. The same pattern and similar degrees of change were found for the proportion of respondents who changed their use of the Klamath River in 2005 in response to the Microcystin Public Health Notice for the Klamath River. (Sloan, February 2011, p. 105).

**2.1.2.3.10.1 Direct Klamath River Water Contact/Consumption**

This category may possibly apply mainly to the short stretch of river that runs along the northern border of the Hoopa Valley Reservation. Ceremonies and ceremonial leaders are potentially adversely affected by the need to commune directly with the Klamath River water. Upriver, Karuk Tribal members described instances of open sores becoming infected when swimming in the River (Salter, 2003). Similar to the Karuk Tribe, the Yurok are concerned that Iron Gate and Copco Reservoirs are responsible for the high levels of cyanobacteria, which produce microcystin toxins (blue-green algae, or *Microcystis aeruginosa*), that lead to massive blooms downriver. The Karuk Tribal analysis showed that the blue green algae and toxins supplied by the reservoirs "...persisted and occasionally re-grew down river, and was detected in the Klamath River estuary (Kann, 2006)." The Karuk Tribe has had similar experiences with toxic algae effects and stated that the hydroelectric dams and reservoirs create taste and odor compounds in the Klamath River that adversely impact recreational and subsistence fisheries (Karuk Tribe, December 1, 2006).

The recreation analyses for the Klamath Facilities Removal EIS/EIR and SDOR described present conditions as they relate to recreation and human health (although reservoir recreation may not be entirely directly applicable to the Karuk Tribe which is downstream), and additional information, including a copy of the health advisory notice that was posted at the reservoirs (attachment 4):

"In recent years, water quality problems related to the existence of blue-green algae within Copco and Iron Gate reservoirs have necessitated the issuance of health advisories. These advisories recommend avoiding ingestion of or contact with water containing visible algae blooms,

avoiding use of water for cooking or washing dishes, and limiting or avoiding consumption of fish from these reservoirs. The advisories also suggest that children and pets are at greatest risk. Recreational exposure to toxic blue-green algae can cause eye irritation, allergic skin rash, mouth ulcer, vomiting, diarrhea, cold and flu-like symptoms, tingling, headaches, numbness and shaking. Liver failure, nerve damage and death have occurred in rare situations where large amounts of contaminated water were directly ingested (U. S. EPA, et al. 2009). To date, health advisories have not been issued for J. C. Boyle reservoir. This may be because this reservoir is relatively small and water flushes through rapidly.” (DOI, August 2011).

Water quality impacts on recreation were analyzed in the *Klamath Facilities Removal EIS/EIR*:

“In response to the [PacifiCorp recreation visitor] survey question “Has water quality ever affected your visit to the Klamath River area?” approximately two-thirds of recreational users of the subject reservoirs had negative perceptions of water quality, commenting on its color, turbidity, and odor. The source of visitor concerns was primarily the brown, foamy water in free-flowing reaches and regular, extensive algae blooms that occur throughout the reservoirs. Visitors reported that the algae produces bad odors, fouls fishing lines, and reduces the area available for fishing, swimming, and wading (FERC 2007).” (DOI, August 2011 [February draft pp. 3.20-3.21]).

In another section of the analysis, public health effects were described that extend to the lower Klamath River:

“As discussed in Section 3.2, Water Quality, concentrations of chlorophyll-a and *Microcystis aeruginosa* have exceeded World Health Organization guidelines for protection from adverse effects in recent years, in both Copco 2 and Iron Gate reservoirs, as well as reaches of the Klamath River downstream of Iron Gate Dam. In 2005 and 2008, the NCRWQCB, Karuk Tribe, USEPA and other local, state, and federal agencies issued a warning to residents and recreational users of the river to use caution when near these algal blooms due to possible health effects of exposure to *Microcystis aeruginosa* and its microcystin toxin. Effects range from mild, non-life threatening skin conditions to permanent organ impairment and death, depending upon exposure time and intensity (FERC 2007). As identified in comments received during the scoping period for this EIS/EIR, these water quality issues and public health warnings have resulted in reduced recreational activity in affected river segments in recent years.” (Ibid).

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Another analysis of water quality described present conditions in the *Klamath Facilities Removal EIS/EIR*, stated that the middle and lower reaches of the Klamath River are listed as impaired by the State of California for a number of factors:

“The entire middle and lower reaches of the Klamath River, beginning at state line (RM 208.7) and moving downstream, are listed as impaired under California’s Section 303(d) list for temperature, dissolved oxygen, and nutrients (State Water Resources Control Board [SWRCB] 2010a. Potential sources of impairment include hydroelectric operations, upstream impoundment, and flow regulation, among others (SWRCB 2010).” (DOI, August 2011 [April 11, 2011 draft, pp. 3.2-7]).

**2.1.2.3.10.2 Aquatic Plant, Fish/Shellfish Species, and Water Consumption**

The Hoopa Valley Tribe has concerns about the safety of consuming fish and other species from the Klamath River. Concerning the short stretch of Klamath River on the Hoopa Valley Reservation, basketry materials, edible plants, medicinal plants, and other uses are a concern in terms of water quality for consumption and processing.

Tissue advisories and shellfish consumption advisories for toxins in aquatic life due to high blue-green algae bloom toxin levels were issued for areas in the hydroelectric reach, including Iron Gate dam, from about 2007 to 2008, they purportedly did not affect aquatic life in the River reach below Iron Gate Dam and were limited to the reservoirs:

“In 2007, a particularly extreme MSAE bloom prompted a Yurok Tribe health advisory along multiple affected reaches in the Klamath River (Kann 2007a–2007d); 85 percent of fish and mussel tissue samples collected during July through September 2007 in the Klamath River, including Iron Gate and Copco 1 Reservoirs, exhibited microcystin bioaccumulation (Kann 2008). Results indicated that all of the WHO total daily intake guideline values were exceeded, including several observations of values exceeding acute total daily intake thresholds (Kann 2008). In a retrospective letter to PacifiCorp (August 6, 2008), the California OEHHA stated that they “would have recommended against consuming mussels from the affected section of the Klamath River, and yellow perch from Iron Gate and Copco Reservoirs, because their average concentrations exceeded 26 nanograms per gram (ng/g),” which is the OEHHA upper bound of advisory tissue levels fish or shellfish consumption (for a single serving per week based on 8 ounces uncooked fish)” (p. 3.2-37). “...results clearly illustrate that the majority of exceedences to all guidelines and thresholds occurred in the reservoirs in the Hydroelectric Reach (as compared with downstream riverine sites)...” (DOI, August 2011 [April 2011 draft, pp. 3.2-38]).

[And]

“Although concentrations of both MSAE and microcystin toxin in the Klamath River downstream of the Hydroelectric Reach are lower relative to the reservoirs (Section 3.2.3.1 and Figure 3.2-33), WHO guidelines for exposure to microcystin (i.e., < 4 µg/L) have been exceeded downstream of Iron Gate Dam on numerous occasions (Kann 2004, Kann and Corum 2009, Kann and Corum 2010), including a particularly intense late-summer/early-fall MSAE bloom in September 2007 from Iron Gate Dam (RM 190.1) to the mouth of the Klamath River (RM 0.0). Health Advisories were posted along this reach of the Klamath River (Iron Gate Dam to Shasta River in 2009 and 2010, due to elevated microcystis cell counts and/or microcystin concentrations in river water.” (DOI, August 2011 [April 2011 draft, pp. 3.2-66]).

The Water Quality chapter of the internal working draft, *Klamath Facilities Removal EIS/EIR* stated that aluminum concentrations potentially exceeded the USEPA concentration for freshwater aquatic life:

“Aluminum concentrations (26.30–280.0 µg/L) potentially exceeded the USEPA continuous concentration for freshwater aquatic life protection (87 µg/L) on 23 of 59 site visits (39 percent exceedance rate), exceeded the USEPA secondary MCL for drinking water (50 µg/L) on 37 site visits (63 percent exceedance rate), and exceeded the California Department of Health Services secondary MCL for drinking water (200 µg/L) on five site visits (8 percent exceedance rate) (NCRWQCB 2008).” (DOI, August 2011, [internal draft pp. 3.2-68]).

Other analyses concerning contaminants in fish tissue and potential human exposure were conducted and mercury was found to be above recommended levels in Iron Gate Reservoir, particularly for subsistence fishers:

“Separate assessments of contaminants in fish tissue for the Hydroelectric Reach have been undertaken by SWAMP and PacifiCorp. SWAMP data include sport fish tissue samples collected during 2007 and 2008 to evaluate accumulated contaminants in nearly 300 lakes statewide. Sport fish were sampled to provide information on potential human exposure to selected contaminants and to represent the higher aquatic trophic levels (i.e., the top of the aquatic food web). In the Hydroelectric Reach, fish tissue samples were collected in Copco 1 and Iron Gate Reservoirs and analyzed for total mercury, selenium, and PCBs (Iron Gate Reservoir only) (Davis et al. 2010). SWAMP data for Iron Gate and Copco reservoirs (Table 3.2-6) indicate mercury tissue concentrations above the USEPA criterion of 300 ng/g methylmercury in fish tissue to protect the health of consumers of noncommercial freshwater fish; and greater than the OEHHA public health guideline levels advisory tissue level (Klasing and Brodberg, 2008) for consumption for 3 and 2 servings per week (70 and 150 ng/g wet weight, respectively) and the fish contaminant goal (220 ng/g wet weight).

Measured selenium concentrations were 3–4 orders of magnitude lower than OEHHA thresholds of concern (2,500–15,000 ng/g wet weight) and PCB concentrations were below the lowest OEHHA threshold (i.e., fish contaminant goal of 3.6 ng/g wet weight) (Davis et al. 2010). (p. 3.2-42 to 3.2-42). “...measured fish tissue levels of total mercury (2.3–2.5 ng/g) in samples from Copco 1 and Iron Gate Reservoirs as compared to the wildlife screening level of 2.27 ng/g (Table 3.2-7), and measured fish tissue levels of arsenic (<0.3 ug/g) that PacifiCorp indicated may equal or exceed the toxicity screening level **for subsistence fishers** (0.147 ug/g) in samples of largemouth bass from J.C. Boyle, Copco 1, and Iron Gate Reservoirs (DOI, April 2011, pp. 3.2-42).

A study is underway to evaluate the potential for chemicals in sediment and elutriate samples to bioaccumulate in aquatic species at concentrations above screening levels for human health. The chemical investigation includes invertebrates (Asian clams, *Corbiucla*, and Black worms, *Lumbriculus variegatus*), which have been exposed to reservoir-derived sediments in a laboratory setting, and fish (yellow perch and bullhead), which were collected from the reservoirs during late September 2010.” (DOI, internal draft April 2011, pp. 3.2-44).

### **3.1 ENVIRONMENTAL CONSEQUENCES**

This section compares the No Action Alternative, or existing conditions projected into the future (dams in) and Action Alternative that includes implementation of the KHSA and KBRA.<sup>8</sup> Fish destined for the Trinity must pass through roughly 42 miles of lower Klamath River water and therefore are affected by Klamath River conditions. According to a report by the California Department of Fish and Game, the fish kill of 2002 affected all of the tribes along the Klamath River with a greater proportion of Trinity River fall-run Chinook adversely affected. The hydroelectric dams and dams in the Trinity Basin have had wide-ranging effects on the culture of the Hupa people. About one third of a mile of the Klamath River runs along the northern Hoopa Reservation border, and the while the impacts to the Klamath River and to the Tribe are similar to those described in reports for the other Klamath Basin tribes, the scale of the impacts are significantly smaller; therefore impacts to that segment of the River and Reservation are mentioned briefly or not at all. A comparison of impacts between the two alternatives is summarized in table 3.1-1.

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<sup>8</sup> The two agreements have language specifying their interdependence as a condition of execution.

**Table 3.1-1.—Hoopa Valley Tribe impacts summary table**

Indicators	No Action	Dam Removal
<b>KHSA (Facilities Removal) and KBRA</b>		
Fisheries	Continuation of the likelihood that there would be insufficient abundance of fall- and spring-run Chinook, Pacific Lamprey, and steelhead destined for the Trinity River and available for subsistence fisheries. Potential for more limited opportunities to practice a traditional lifestyle and support ceremonies that center on a salmon. Trust fishing rights less protected. Salmon for barter may become more limited. Continuation of unnatural hydrograph that contributes to algae toxins, higher summer water temperatures, and other water quality conditions that adversely affect the fisheries, health of the river, and traditional uses.	Stable or increasing subsistence fisheries, primarily as a result of improved lower Klamath River water quality. An improved availability of anadromous species, especially salmon, for subsistence 2020 to 2060 would be expected. Greater stability and consistency in salmon abundance that would enable continuation of a traditional lifestyle and support of ceremonies. Trust fishing rights better protected. Likelihood of more stable salmon abundance for barter. Over the long run, a more natural hydrograph would improve algae toxins, water temperatures, and other water quality conditions that adversely affect fisheries.
Employment and Income	Lower subsistence fisheries abundance would likely limit opportunities to offset high poverty, unemployment, and low median income conditions, and barter. Potential for boosting social conditions related to poverty would be relatively limited.	Stable or increasing subsistence fisheries would provide a means of food security for those in high poverty, unemployment, and/or low median income, and improved barter opportunities between about 2020 and 2060. Potential to improve high unemployment, poverty, and low median income conditions directly or indirectly from dam deconstruction around 2020. Potential for improved social conditions related to poverty.

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**Table 3.1-1.—Hoopa Valley Tribe impacts summary table**

<b>Indicators</b>	<b>No Action</b>	<b>Dam Removal</b>
Health	Reduced opportunity to change high diabetes, heart disease, and obesity rate trends with associated high costs, disability, and mortality rates. Continued relatively heavy reliance on commodity/processed foods. Some degree of poor water quality conditions and hydrograph are expected to continue with potential associated health concerns and negative effects on cultural practices and lifestyle.	From about 2020 to 2060, there may be additional opportunities for improvement in diabetes, heart disease, and obesity rate trends and associated high costs, disability rates, and mortality rates. Greater subsistence abundance or consistent stocks would be expected to lessen reliance on commodity foods and other processed foods. Improved water quality and hydrograph would likely reduce or eliminate associated health concerns and have a positive effect on cultural practices and lifestyle.

In terms of the action alternative, execution of the KHSAs would remove Iron Gate, J.C. Boyle, Copco 1 and Copco 2 hydroelectric dams. The KHP reservoirs promote proliferation of toxic algae, increase water temperatures, change the hydrograph, and exacerbate other water quality conditions that contribute to higher anadromous fish disease and mortality rates. The goals of the KBRA are to restore and maintain ecological functionality and connectivity of historic fish habitats and re-establish and maintain naturally sustainable fish populations, including harvest opportunities. Under implementation, an increase in the amount and availability of fish is expected to restore much of the cultural, social, economic, and health deterioration of the past and would enhance the trust responsibility for Hoopa Valley Tribe fishing rights, water rights, and economic, social, and health conditions.

### **3.1.1 No Action: Potential Impacts without the KHSAs and KBRA**

Adverse effects are expected to continue to impact subsistence fisheries, socioeconomic conditions, and health conditions. Expert panel, biological subgroup draft Synthesis report, draft Klamath Facilities Removal EIS/EIR, and BIA report information (June 2011a and b) were used for drawing conclusions about potential impacts to species.<sup>9</sup>

#### **3.1.1.1 Subsistence Fisheries**

According to the biological subgroup report the Klamath Basin was once the third-largest producer of salmon in the United States (Institute for Fisheries Resources 2006) that produced large runs of steelhead, Chinook salmon, coho salmon, green sturgeon, eucelone, coastal cutthroat trout, and Pacific lamprey (Hamilton, et al., 2010, p. 11).

The BIA found described the importance of the Trinity River fisheries to the Hupa people:

“That every traditional Hupa village was located and built along the Trinity River underscores the vital importance of the river to Hupa culture and traditions. Since dams were constructed, however, fishing and traditional use sites have become clogged with debris. Poor

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<sup>9</sup> Hamilton, et al. November 23, 2010, Synthesis of the effects to fish species of two management scenarios for the Secretarial Determination on removal of the lower four dams on the Klamath River, Final Draft.

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conditions of the fishery in recent times has in some instances forced the Hupa to purchase fish from sources off their reservation to provide for all who attend ceremonies.” (BIA, June 2011a).

For centuries, the Tribe has depended on Spring- and fall-run Chinook Salmon, coho salmon, steelhead, and Pacific lamprey that travel up the lower Klamath River to the Trinity River (BIA, 2011a). Spring- and fall-run Chinook are central components of multiple ceremonies that include the World Renewal Ceremony (also known as the White Deerskin Ceremony). Lamprey is another important species that has important nutrients, particularly for elders.

Table 3.1-2 summarizes projected current conditions (no action) without KHSA and KBRA actions. The plentitude of fish species passing through the lower Klamath River to the Trinity was a large part of the Tribe’s seasonal round, food security, and culture that has gradually declined over passing decades, especially after IGD was constructed around 1962. Karuk and Yurok Tribal members described adverse changes they experienced to subsistence fisheries as a result of the KHP, particularly IGD over several generations.

**Table 3.1-2.—Summary of No Action Alternative conditions by species**

Coho salmon (threatened)	Significant impact on essential fish habitat and continuation of downward trend.
Spring Chinook salmon	Significant impact on essential fish habitat and continuation of low levels, possibly become extinct.
Fall Chinook salmon	Significant impact on essential fish habitat and continuation of downward trend.
Pacific lamprey	Trends range from little change in current low levels to a decline.
Steelhead trout	Some uncertainty, but likely decline.

Sources: See attachment 6.

Under No Action, or conditions without the KHSA and KBRA, salmon in particular would continue to be in danger of going below harvest levels or potentially be unsafe for human consumption due to water quality problems — all of which have significant fishing and water rights implications, and economic, social, and cultural trust responsibility impacts, as described by the BIA:<sup>10</sup>

“The Hoopa Valley Indian Tribe has fishing rights for in-river Klamath River basin fishes that use the Trinity River of the approximately 1/3 mile of the Klamath River that is within the Hoopa Indian Valley Reservation for migration and spawning in an amount sufficient to

<sup>10</sup> The Federal Government has a trust responsibility to support the health, economic, and social welfare of federally recognized tribes. For additional trust information, see the trust section of the Klamath Settlement EIS/EIR and BIA, June 2011a, June 2011b.

support a moderate standard of living. The tribe also has subsistence and ceremonial fisheries....Under the Dams In Scenario, the Hoopa Valley Indian Tribe fisheries are likely to remain insufficient for even a moderate standard of living. Anadromous fish are important for the Hupa people for ceremonial purposes, some of which are schedules around fishing activities...[which would] continue to be affected by reduced fish populations....Effects of project reservoirs on water quality issues, such as the growth of toxin-producing nuisance algae, elevated water temperatures and modified temperature regimes, high pH, and increased toxicity, currently adversely impact the Hoopa Valley Indian Tribe cultural values.” (BIA, June 2011b, pp. 3-38 to 3-39).

### **3.1.1.1.1 Subsistence Fisheries**

Spring run Chinook salmon would continue to be essentially absent and could become extinct, and fall-run Chinook salmon populations would continue to decline. Coho salmon is expected to remain threatened and continue declining. Salmon is estimated to traditionally comprise up to about half of the Hupa diet, based in part on research by Norgaard for the Karuk Tribe (Norgaard, 2005; Heizer and Wallace, 1978). Pacific Lamprey populations are projected to range from essentially no change in current low levels to declines. Steelhead trout were, and remain another important fishery that is likely to decline under No Action.

Concerning the small segment of Klamath River that runs along the northern Hoopa Reservation border, green sturgeon is expected to remain at low levels and eulachon stocks are projected to remain essentially absent or improve slightly given existing water quality restoration efforts.

Overall trust, economic, social, cultural, and health resource impacts of having insufficient or intermittent fish runs and stocks available for traditional uses would continue. Water temperatures have risen, contributing to fish runs shifting later into the season that resulted in more fish disease and mortality. Existing water quality trends would be expected to continue to impact anadromous fisheries to some extent (DOI, August 2011 [EIS/EIR water quality; Biological Subteam report]).

A Yurok Tribal elder described the changes in salmon, eel, and sturgeon populations and the hydrograph that he has seen which are trends expected to continue and that apply in large part to the conditions of anadromous species destined for the Trinity River:

“As a kid there were abundant salmon because you could see the salmon thick in the river from the bridges. You had to row your boat out to rocks that you can walk out to now. Before I went to Vietnam in 1967 the River was high; when I came back after the Dam was built the water had dropped. In my lifetime I have watched the salmon, sturgeon, and eels become depleted. Salmon, eels, and sturgeon were our main food...

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Now we get fish only occasionally. This year we have not had any fish. My children may not have any salmon in the future.' (Yurok Tribal Member Survey Respondent 2006)." (Sloan, February 2011, p. 111).

Declining spring and fall run Chinook could, at some point in the project period make practicing Hupa religious ceremonies more difficult or essentially impossible. Yurok religious practices and world view (shared by Hupa people) are adversely impacted by an unhealthy river caused largely by an unnatural hydrograph and poor aesthetics from water quality problems resulting from the hydroelectric dams:

"The Brush Dance held in many of the traditional village sites along the Klamath River, requires the proper scenic river qualities and the availability of river resources. As a brush dance unfolds over a four day period it attests to the wealth that the riverine environment provides. Baskets made of plant materials collected at the water's edge are used to hold food and ceremonial medicine. Acorns, cooked in the baskets, are converted into a nourishing mush that is rendered by placing special hot rocks gathered off of specific river bars into the acorn flour and water placed in the baskets. Regalia that adorns the dancers are constructed out of the various plant and animal products that the riverine environment provides. Ceremonial bathing in the River and its tributary creeks is a requirement for some Dance participants. Ceremonialists also prepare themselves by listening to the River's sounds. While many guests today arrive by car, many more arrive by the traditional transportation method: boats. (Sloan, February 2011).

A BIA analysis concerning trust protected reserved water rights and fishing rights described adverse impacts from the dams on hydrology, water temperature, suspended and bedload sediment, nutrients, dissolved oxygen, pH, algal toxins, chlorophylls, inorganic and organic contaminants, and their effects on fisheries and fishery disease and parasites (BIA, June 2011a and June 2011b).

If fisheries abundance continues to be adversely affected, the potential exists for a deterioration of Hupa socioeconomic and sociocultural values transmitted to successive generations by teaching and practicing concepts of redistribution of wealth (fish) to extended family and dependent populations.

"When a people's identity and cultural practices are closely associated with a species that no longer thrives, a sense of connection and belonging is lost [Norgaard, Chapter 5, 2005]. Young people feel this loss of belonging especially intensely...When tribal celebrations require that the tribe and visitors feast on salmon and no salmon is to be found... it is disheartening to have to make a trip into town to purchase imported fish from a grocery chain store [or consider substituting other species]. The results can be depression, alienation, and withdrawal... creating a malaise that lingers among the people subject to these conditions." (BIA, June 2011a, pp. 1-7).

Adverse cultural and social impacts would include problems stemming from the continuation of impaired Tribal and cultural identity. The Yurok have many ceremonies in common with the Karuk and Hupa, such as the Jump Ceremony, White Deerskin or World Renewal Ceremony (which includes the Boat Dance Ceremony). Ritual bathing in the River is a necessary component for them all. The World Renewal Ceremony (or White Deerskin Ceremony) with the First Salmon Ceremony as a crucial initial component, would not have the potential of being reinstated in the Spring with the first salmon run as had traditionally been done for centuries. In addition to its cultural and religious significance, the Hupa World Renewal Ceremonies, including the First Salmon Ceremony, served an important resource management role.

The regional barter system that was a thriving economy prior to European contact would continue to be adversely affected if there salmon supplies are insufficient for trade/barter purposes.

### **3.1.1.2 Employment and Income**

The trend of declining varieties and populations of fish for subsistence fishing to supplement low incomes, improve poverty levels, for barter, and to boost the Tribal economy overall would remain unchanged for a growing Tribal population. Fishing has been considered an essential component of a family's security which would continue to be threatened under no action and such considerable social and health implications as food insecurity is stressful (Norgaard, 2005).

The Hoopa Valley Reservation and surrounding areas where many Tribal members live are projected to continue to have high unemployment and poverty rates and low incomes compared with surrounding non-Indian populations and the County and State. Hoopa Valley Reservation unemployment was about two to three times that of the County and State, per capital income was nearly half that of the County and State, and about half the population was in poverty. Additionally, many (Census 2000) or most (Census 2009 estimates) families with a female head of household, no husband present, with children under 18 years of age were in poverty.

Low fish stocks and poor water quality threaten to reduce opportunities for improving high unemployment and low incomes. The main industry in the region has been timber-based which remains weak, and Tribal members tend to be at a disadvantage in terms of education, training, and discrimination for other relatively few area jobs. Potential for improved social conditions related to poverty is limited. For these reasons, the development and growth of Tribal education, job training, and employment programs has been important. However, future Tribal economic development, encouraged by the Federal policy of self governance, could be constrained by the lack of abundant fisheries.

### **3.1.1.3 Health**

A no action scenario could mean a continuation of lower fish populations as a contributor in the trend of increasing diabetes, heart disease, and related disease with high mortality rates. Low fish migration abundance from the Klamath River could mean that the relatively heavy reliance on commodity foods would continue and could increase. Higher disease rates are correlated with higher costs to the Tribe and Federal Government and are inconsistent with the intent of the Federal trust responsibility to Federally recognized tribes in providing social, economic, and health well being. Poor water quality may create health concerns related to food (anadromous fish) safety, which can contribute to traditional food-avoidance because of human health concerns.

Trends, documented by Norgaard, began with a shift from a traditional diet resulting largely from declining salmon populations that accelerated during the 1970s when the spring run Chinook essentially disappeared. Changes were described as dramatic and correlated with the appearance of diabetes and other disease rate in the neighboring Karuk Tribe (Norgaard, 2005). The decline in traditional food available in the Hupa Tribal diet has had adverse effects as it was largely replaced by USDA commodity foods which are highly processed, high sugar and fat foods that many tribes have had to rely on to help feed their people given high unemployment and poverty rates. Norgaard found that omega-3 fatty acids, abundant in salmon (especially spring Chinook), have been linked with a number of significant health benefits, including: <sup>11</sup>

“...reduced risk of heart attacks, strokes and Alzheimer, prevention of osteoporosis, a diabetic treatment, improved mental health and improved brain development in infants...[and] beneficial effects ...on various forms of depression...(Bruinsma 2000; Hibbeln 1998).” (Norgaard, 2005, pp. 50-51).

For the Karuk Tribe, the diet shift resulted in high heart disease, diabetes, and obesity rates with associated high direct and indirect social and monetary costs and higher mortality rates. Tribal health problems are compounded by food insecurity and other poverty-related stress. Diabetes in particular tends to have a higher rate of complications that result in disability. High disease rates and associated social and cultural costs would include a continuation of high rates of premature disabilities and death in older age groups that limit ‘intellectual capital;’ the ability of elders to pass along Tribal culture and social structure to younger generations. The types of high economic costs estimated for the national population are about \$316 billion annually in 2010 dollars for heart disease, \$174 billion annually in 2007 dollars for diabetes, and about 36 percent more health care expenses for obese people would continue with a no action scenario.

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<sup>11</sup> The American Heart Association recommends consuming fish, especially salmon, at least two to three times a week as a preventative measure for heart disease and obesity.

Although existing efforts are expected to improve water quality (full implementation of Oregon and California TMDLs) eventually (decades), the extent is not clear, and algal blooms would likely still be present, especially Iron Gate Dam:

“Continued impoundment of water at the Four Facilities would continue to support growth conditions for toxin-producing nuisance algal species such as MSAE, resulting in high seasonal concentrations of cyanotoxins (e.g., microcystin) and chlorophyll-a transported into the lower Klamath River downstream of Iron Gate Dam...” (pp. 3.2-109, April 11, 2011).

In terms of the short stretch of River along the northern Hoopa Valley Reservation border, recreation water contact health advisories are likely to continue during mid to late summer months for microcystis aeruginosa, or blue-green algae toxins. Water quality would continue to be a health concern in the River for Tribal members’ contact with the water for any potential ceremonial or cultural uses, and could potentially be risky for children (attachment 4).

Concerning potential bioaccumulation in fish tissue and health impacts, it should be noted that a study supporting the Secretarial Determination is underway to evaluate the potential for chemicals in sediment and elutriate samples to bioaccumulate in aquatic species at concentrations above screening levels for human health. The chemical investigation includes invertebrates (Asian clams, *Corbiucla*, and Black worms, *Lumbriculus variegatus*), which have been exposed to reservoir-derived sediments in a laboratory setting, and fish (yellow perch and bullhead), which were collected from the reservoirs during late September 2010 (DOI, August 2011, [April, 2011, pp. 3.2-44]).

### **3.1.2 Action Alternative: Potential Impacts of the KHSA and KBRA**

Overall, if the KHSA and KBRA were implemented, conditions measured by the indicators; subsistence fisheries, employment and income, and health are projected to improve, as described in the following sections and summarized in table 3.1-1.

Impacts would be positive for all species in the long run (sometime soon after 2021). For this reason, any resurgence in the spring run Chinook in the lower Klamath River reach that has not occurred since about the 1930s is perceived as a significant benefit regardless of whether all fisheries would be at harvestable levels. Therefore, it is assumed that more fishing opportunities would lead to the practice of a traditional lifestyle on a greater scale than is currently taking place which would strengthen social ties and economic stability. Additionally, it is important to note that although this analysis focuses mainly on subsistence

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fisheries, the fact that the Action Alternative would mean preservation of some species that are projected to possibly become extinct under No Action is critically important to the Tribe.

The variety and plentitude of fish species in the Basin was a large part of the Tribes’ seasonal round and food security that has gradually declined over passing decades, beginning with construction of Copco 1 and 2, and particularly IGD in 1962 (and the Trinity Division in the 1950 and 60s). Historically the Hupa depended heavily on salmon, particularly spring and fall run Chinook. Table 3.1-3 summarizes impacts by species and additional detail is in attachment 6.

**Table 3.1-3.—Summary of action alternative conditions by species**

Coho salmon (threatened)	Below IGD, significant negative short term impacts and long term effect range from marginal to beneficial. UB, uncertain whether they would reoccupy the area.
Spring Chinook salmon	Below IGD, negative short run impacts (about 2020) due to dam removal sediment, positive long run effects (roughly 2021-2060). UB, Spring Chinook would be reoccupy, possibly substantial increase, but not to historic levels.
Fall Chinook salmon	Negative short run impacts (around 2020) due to dam removal sediment, especially in the lower Klamath. Positive long run effects (about 2021-2060). Fall Chinook would reoccupy the UB, possibly substantial increase, particularly helpful in years when production is low.
Pacific lamprey	Below IGD, short run, 2012-2020 no change and around 2020-2025/30 decline due to dam removal sediment. Long run (about 2025/30 -2060), population would increase up to 10%. Potential to occupy UB, but uncertain.
Steelhead trout	Below IGD, some short term adverse sediment impacts (approximately 2020-2026), and long term increased numbers, possibly substantial. UB, reestablish and increase, possibly substantial.

Sources: See attachment 6.

**3.1.2.1 KHSA Facilities Removal**

Dam removal on the Klamath River is expected to benefit Hoopa Valley Tribal subsistence fisheries on the Trinity River, which in turn should contribute to the consistent practice of ceremonies that require salmon, improve socioeconomic conditions, contribute to an improved health status, and provide greater protection of trust fishing and water rights.

### **3.1.2.1.1 Subsistence and Commercial Fisheries**

The trust responsibility of the U.S. Government to protect fishing and water rights, in addition to the overall health, social, economic, and welfare of the Hoopa Valley Tribe would be strengthened with facilities removal (June 2011a; June 2011b).

Water quality would begin to improve rapidly compared with leaving dams in, and likely to a greater extent than under no action which would benefit species and Tribal fishing and water rights. Dam removal would begin in 2020, and there would be adverse short term impacts to Klamath River species below Iron Gate Dam resulting from the release of sediment that has accumulated for decades in the four reservoirs that would impair water quality downstream. However, within about five years or less of dam removal, populations of spring- and fall-run Chinook, steelhead, lamprey, sturgeon, trout, and eucelone are expected to improve, in large part because of additional habitat and improved water quality.

The Hoopa Valley Tribe would like to be able to reinitiate the First Salmon Ceremony with Spring-run Chinook and have enough salmon to celebrate its other ceremonies with corresponding religious and cultural views. The low fish stocks and unnatural hydrograph also affect Hupa participation in Karuk and Yurok ceremonies as well.

Positive subsistence fishing impacts of dam removal would include:

- Culturally, the First Salmon Ceremony would have the potential of being reinstated as it would become available in sufficient numbers to hold the Ceremony, and possibly eventual harvest. The Jump Dance, Boat Dance, White Deerskin Dance and Brush Dance Ceremonies and associated cultural values and social interactions (i.e., community celebrations) that revolve around salmon and community gatherings would be more likely to continue, and to continue consistently.
- The Tribes' social and economic gains and cultural base would be supported through improved abundance of spring and fall Chinook, coho salmon, Pacific Lamprey, and steelhead; most other fish species traditionally used would improve as well along the short part of the River along the northern Reservation border.
- The regional barter system would be revitalized since Tribal members would likely have sufficient salmon supplies for trade/barter for game or other food and goods with other tribes.

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- A traditional lifestyle, social values, and methods for achieving economic well-being could continue to be transmitted to successive generations by teaching and practicing concepts of survival through fishing.
- Additional opportunities for elders to teach youth how to catch salmon, lamprey, steelhead, sturgeon, and other species, and be socially responsible by giving away a portion of their catch, usually to elders.
- Youth could continue to learn to catch salmon, steelhead, lamprey, and other species for elders and others. Tribal identity would improve and there would likely be a greater sense of what it means to be Hupa for youth and other Tribal members that would lead to some degree of improvement in social trauma and overall socioeconomic conditions (depression, substance abuse, and others).
- Water quality would improve more rapidly than under no action which would benefit aquatic species.

Tribal member Jill Sherman described effects of water quality problems:

“Even when there are salmon in the rivers, tribal nets fill with moss because flows aren’t adequate to keep the water cool, a depressing reminder that the rivers are no longer healthy. Watching the rivers deteriorate each year, unable to protect those resources they so cherish, has had a tremendous adverse psychological effect on the region’s native peoples.” (BIA, June 2011a, pp 3-29).

Water quality would improve, particularly toxic algae levels, MSAE, which would minimize the incidence of fish disease and mortality, leading to an increased harvestable stock, easing concerns related to human health fish consumption and contact with water, and no longer interfering with fishing success when algae accumulates on dip nets:

“A healthy river is required for a healthy Tribe, as articulated by multiple respondents in the Yurok Tribe’s 2006 Healthy River, Healthy People Traditional Foods Survey (Yurok Tribe Environmental Program 2006). Water quality issues on the Klamath River, including toxic algal blooms, have severely impacted many Yurok activities on and around the River, with many respondents indicating they stayed away from the River the summers of 2005-2010 out of concerns over public health warnings on recurring annual toxic algal blooms within the watershed... Gathering of basketry plants and medicine plants is done along the shores, requiring one to wade in the river while following the shoreline. Similarly fishing, accessing fishing places, gillnetting, and dipnetting expose fishers to splashing water and frequent immersion. Eeling is done from the shoreline near areas of high, splashing water and rapid currents. In all cases the possibility and frequency of exposure to River water is

extremely high. As a result, ... Tribal members remain very concerned about the toxic algae and other persistent toxins that may be entering the watershed from upstream sources. Degrading water quality not only has a disproportionate adverse impact on downstream tribes and tribal trust resources, but also on cultural activities. The River plays a central role in Yurok ceremonial life and as such water quality and quantity have a direct and significant impact on Yurok ceremonial and religious practices. (Sloan, February 2011, p. 46).

A more natural hydrograph would decrease or eliminate the stranding of fry and ammocoetes, improve the timing of runs so that they align more closely to traditional seasons and natural timing for Tribal ceremonies, and fish runs would be expected to last longer, resulting in greater subsistence fishing opportunities.

### **3.1.2.1.2 *Employment and Income***

Byron Nelson, a Hupa elder described the connection between a unhealthy rivers, subsistence fisheries, and socioeconomic conditions:

“Though many Hupa and Yurok still hold to traditional beliefs and engage in certain time-honored practices such as shamanism and basketry, the decline of the rivers’ health, the center of their culture and spirituality, has led to a loss of self-esteem, an increase in cynicism, and has greatly hurt the cohesiveness and health of these tribal communities. The rivers are the focalizing element of the society; with their loss, it seems much of the hope has also been lost. According to Nelson, cultural stress related to an unhealthy river has resulted in a broad spectrum of social and educational problems, including the disruption of traditional occupations and the loss of opportunities for religious practice and community participation in tribal culture.” (BIA, June 2011a, pp. 3-29).

Beginning around 2021, dam deconstruction could directly and/or indirectly improve employment and incomes. Increases in fishery populations, particularly salmon and steelhead, are expected to:

- Improve income, poverty, and food insecurity problems since there would be more salmon for subsistence and barter and additional salmon stocks for commercial fishing.
- Enhance the functioning of the existing Tribal redistribution of wealth (fish) to extended family and dependent populations, primarily elders, within the community to better support dependent Tribal members.

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- Water quality improvements, together with improved fish populations, would have a possibility of increasing recreation and tourism opportunities (i.e., tribal fishing guides, rafting guides, indirect effects, etc.) and related individual and/or tribal endeavors (described in Present Conditions section of this document) and employment and income above no action levels.

**3.1.2.1.3 Health**

There would likely be an increase in salmon migrating to the Trinity River as a result of improved water quality, including Spring Chinook which is considered one of the best foods for preventing heart disease and ranks high in the same regard for diabetes and obesity. Pacific Lamprey populations are expected to increase, and is considered to be particularly nutritious for elders (BIA, June 2011; Lewis, 2009). In short, all species are projected to remain stable or increase in the long run.

Using the Karuk Tribe as an example of Hupa conditions overall, in Norgaard's report (2005), Karuk Tribal members stated that diabetes and heart disease were relatively new and coincided with the shift from a traditional to a Western diet. For example, 66 percent of Karuk members surveyed reported that diabetes appeared in their families for the first time around 1970, which is when salmon runs declined significantly in the lower Klamath River reach. More specifically, Norgaard found that the correlation was strongest with the disappearance of Spring Chinook salmon:

“Spring Chinook was the most important source of salmon in the Karuk diet in terms of both volume and nutritional quality...self-reported information about when consumption of Spring Chinook salmon stopped or became an insignificant food source and when diabetes first appeared in Karuk families shows almost a perfect match, with the rise in diabetes following the loss of Spring Chinook in the diet.” (Norgaard, 2005, pp. 39-53).

Hupa Tribal members appear likely to suffer disproportionately high rates of diabetes, and positive effects of increased salmon, other fish species, and lamprey populations available for consumption would likely be reduced rates of some of the highest incidences of disease. Improvements are expected to be greatest for the elderly population since, proportionately, they tend to be more consistently supplied with salmon and lamprey when available and have higher rates of disease compare to the rest of the Tribal population. Anticipated health improvements (even if slight) could include:

- A reduced reliance on USDA commodity foods and other processed foods.
- Lower diabetes rates and associated costs

- Reduced heart disease rates and associated costs.
- Lower disability rates especially associated with diabetes, but also those that arise from heart disease and all associated costs.
- Less interrelated compounding effects between these diseases and associated costs.
- A reduction in mortality rates, particularly for elders and associated social and cultural costs and a lower likelihood for premature disabilities and death to limit the process of elders passing along Tribal culture and social structure to younger generations.
- Reduced occurrence of other illnesses, including depression, Alzheimer's, and osteoporosis (Norgaard, 2005, p. 50-51).
- Improved health conditions, reinforcing "...the federal trust responsibility to uphold treaty responsibilities for health care to Indians..." (IHS Fact Sheets, accessed September 2010).
- Fewer health problems that result from food-insecurity and associated poverty-related stress.

Water quality improvements would ease health concerns for ceremonial uses, fishing, fish consumption, recreation, and many other uses.

Reduced levels of toxic algae (*microcystis aeruginosa*) would minimize human health concerns about skin contact with the water, particularly for children and pets which are at a greater risk:

"Dam removal is expected to result in long-term improvements in water quality, notably decreased prevalence of *microcystin* (see Section 3.2, Water Quality). As discussed in Section 3.2, Water Quality and 3.20.3.2 above, *microcystin* has been associated with public health risks for recreational bathing waters and health warnings issued in 2005 and 2008 by the USEPA and other agencies warned recreation visitors to use caution due to potential health effects. In addition, about two-thirds of recreation visitors to the subject reservoirs had negative perceptions of water quality, stating concerns of bad odors and algae blooms, which restrict areas available for fishing, swimming and wading. These adverse effects related to water quality negatively influenced the quality of the recreational experience for visitors and also resulted in safety risks to the recreational visitors. Because existing conditions for water-contact-based recreational activities are considered adverse due to water quality, improved water quality conditions would result in long-term beneficial impacts." (DOI, August [recreation, February 2011, pp. 3.20-38 to 39]).

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In the short term, dam removal has a slight potential for human exposure through fish consumption exposed to reservoir sediment released, although the extent could not be adequately assessed, and toxicity issues for human exposure will be covered in a forthcoming document.

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## **Attachments**

- 1 The Hoopa Valley Tribe Historical Timeline
- 2 Treaty of Peace and Friendship (unratified) and Executive Orders.  
Klamath River Reservation and Hoopa Valley Reservation  
Depictions
- 3a Bureau of the Census Maps
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## **Attachment 1**

The Hoopa Valley Tribe Historical Timeline



## Attachment 1

## The Hoopa Valley Tribe Historical Timeline

Era or Event	Year	Description
<i>Pre-European Contact</i>		Hupa people lived and sustained themselves on the banks of the Trinity River for thousands of years. Elaborate economies with barter and extensive trade networks among regional tribes and ceremonies that centered on the Klamath River and all that depended on it as central. Hupa people lived on an abundance of foods; acorns, salmon, deer meat and berries.
<i>Missionaries</i>	1500s-1846	Spanish missionaries explore area on and off and later used Indian slave labor to build missions and begin claiming lands.
<i>Reservations Established</i>	1812-1870	Treaties between Indians and England were over when England lost the war of 1812 and treaties were made between the U.S. and tribes, increasingly used to accommodate rapid settlement.
<i>Trust Relationship Established</i>	1831	<i>Cherokee Nation v. Georgia</i> case established the guardian-ward, or trust relationship between the U.S. and Indian tribes, or “domestic dependent nations.”
<i>Gold Rush</i>	1849	Miners and prospectors began to arrive in the Klamath Basin in search of gold.
<i>Reservation Period - Treaties</i>	1851	Klamath River Peace Treaty, California Treaty Q, was signed by some Yurok members at Camp Klamath. The treaty was never ratified.
<i>Reservation Period - Treaties and EO Reservation Period - EO</i>	1855	Klamath River (military) Reservation (not to be confused with the Klamath Reservation in Oregon) created by executive order, intended for Yurok and other area tribes.
	1857	Fort Terwer was established at Terwer Creek to keep peace between the Indians and the growing number of miners and traders trying to move onto Reservation.
	1864	Treaty of Peace and Friendship with the Hupa and other bands. Hoopa Valley Reservation created by executive order, intended for Hoopa, Karuk, and some other area tribes.
<i>Missionaries</i>	1865	Reservation schools were established under Christian organizations in 1865.
<i>Reservation Period - EO</i>	1876	Executive order makes Hoopa Valley Reservation borders official.
<i>First Commercial Fishery</i>		Despite Yurok protests, the first non-Indian commercial fishery is opened at the mouth of the Klamath.
<i>Assimilation - Boarding Schools</i>	1878	Boarding schools were established to assimilate and educate Indian children away from their homes and families.
	1883	The Code of Indian Offenses, which the courts implemented, outlawed many traditional Indian ceremonies and practices.
<i>‘Military’ Reservations</i>	1884	Congress authorizes President to establish a limited number of Indian Reservations, one of which was the Hoopa Valley Reservation where many Yurok and other local Indians were sent to live.
<i>Reservation Period -EO</i>	1891	Executive order connects Klamath Reservation and Hoopa Valley Reservation to create a larger Hoopa Valley Reservation that included Yurok and Hupa people.

<b>Era or Event</b>	<b>Year</b>	<b>Description</b>
<i>Allotments, - Assimilation, and Land Loss</i>	1892	Congress enacted legislation allotting lands of the former Klamath River Military Reservation to Yuroks. Under the Dawes Act, Congress allowed for 'surplus' land on the Reservation to be sold to the general public.
	1893	Indian allotments were granted to the Tribe on the Klamath River Military Reservation for three traditional villages (Rek-woy, Hop-ew, and Saa) totaling 70 acres.
	1887-1934	Dawes Act (25 U.S.C. 31) et seq. divided reservations into parcels to encourage individual Indians to become farmers, and leftover land was given to non-Indians. Indian-held lands declined from 138 million acres to 48 million.
<i>Assimilation- Boarding Schools</i>	1900s	Forced boarding school attendance ended and day schools on reservations begin.
<i>Development, Copco 1</i>	<b>1910</b>	Copco 1 construction began, blocking salmon and other anadromous species' migration to the Upper Klamath Basin.
<i>Disease</i>	1912	Flu epidemic.
<i>Development, Copco 2</i>	<b>1925</b>	Copco 2 Dam constructed without fish ladders for salmon passage up the Klamath River to Klamath Tribal areas.
<i>Allotments, - Assimilation, and Land Loss</i>		Another large group of allotments were taken out of trust status.
<i>Disease</i>	1920s-30s	TB epidemic.
<i>Allotments, - Assimilation, and Land Loss</i>	1931	With creation of the Redwood National Forest, the USFS targeted reservation lands, including 780 acres of the Klamath River Military Reserve and 2,110 acres of Indian allotments.
<i>Trust Fishing Rights</i>	1934	Klamath River Indians were banned from commercial fishing and gill-netting. Despite the ban, Yurok people continued to fish, but did so under the threat of being arrested and jailed.
<i>Self Governance Period</i>	1934-1953	<b>Indian Reorganization Act (IRA)</b> ended allotments and encouraged tribal self government through tribal constitutions and protected/expanded some tribal land bases.
<i>Assimilation</i>	1940s-50s	BIA relocation programs meant a sudden loss of some tribal members to cities.
<i>WWII</i>	1940s	Relatively large proportion of men away at war made continuing ceremonies difficult during this time period.
<i>Allotments, - Assimilation, and Land Loss</i>	1953	Many Indians in the region were encouraged to sell their allotments through questionable and forced fee patents, resulting in at least 60% of the lands taken out of trust status and sold to logging companies which were booming after WWII.
<i>Cash Settlement – Trust Responsibility</i>	1940s-70s	From 1946 to 1978, Congress moved to resolve remaining 102 docket cases transferred to the U.S. Claims Court: Indian claims for compensation for lands ceded under treaties.
<i>Termination and Relocation Programs</i>	1954-1966	Congress passed statutes terminating the Federal relationship with 109 Indian tribes and over 11,400 individuals lost "recognized" Indian status. About 1.5 million acres of Indian land were taken out of trust. At about the same time, relocation programs encouraged Indians to leave reservations for cities.
<i>Development - Trinity River Dam</i>	1955-1964	The Trinity River Act allowed the construction of the Trinity River Dam, and by 1964 the Dam was completed and contracts for water were signed. The Trinity is the Klamath River's largest tributary.
<i>Development, J.C. Boyle</i>	1958	J.C. Boyle hydroelectric dam constructed, blocking salmon passage up the Klamath River to Klamath Tribal areas.

<b>Era or Event</b>	<b>Year</b>	<b>Description</b>
<i>Trust</i> <i>Hoopa Timber</i>		Revenues from unallotted trust timberlands in the Hoopa Square were dispersed in per capita payments to Hoopa Tribal members only (later determined to be erroneous in the Jesse Short case).
<i>Development,</i> <b>Iron Gate Dam</b>	<b>1962</b>	Iron Gate Dam constructed without fish ladders for salmon passage up the Klamath River to Klamath Tribal areas.
<i>Trust (timber)</i> <b>Jessie Short v. U.S.</b>	<b>1963</b>	Short v. U.S. filed March 27, 1963 on behalf of 16 Yurok Indians asserted that Yurok Tribal members should share proceeds from the selling of Hoopa Reservation timber.
<i>Trust (fishing rights)</i> <b>Elser v. Gill Net Number One</b>	1966	Elser v. Gill Net Number One held that Yurok Indians (Grover Reed and Dewey George) were enrolled members of a federally recognized tribe and had recognized tribal rights, thereby meeting the tribal roll requirements which exempted them from provisions of the Fish and Game Code and the State of California had no right to regulate Yurok gill net fishing on the Reservation.
<i>Trust Responsibility: health care</i>	1976	The Indian Health Care Improvement Act, 25 U.S.C. 1601, was passed “reflecting the Federal Government’s trust responsibility to provide economic and social services necessary to ensure a standard of living for Indians comparable to non-Indian society.”
<i>Indian Self Determination Act</i>	1975	The Act enabled tribes to operate federally run tribal programs. Overall, widespread implementation was relatively slow, with most activity beginning in the 1990s, but the Hoopa Valley Tribe participated immediately.
<i>Trust (timber)</i> <b>Jessie Short v. U.S. (Short I)</b>	<b>1973</b>	Jessie Short et. al. v. U.S. concluded that the Reservation was not a separate entity, but actually an extension of the Hoopa Valley Reservation and therefore Yurok Tribal Members were entitled to equal rights to income from timber sales on allotted trust lands.
<i>Trust (fishing rights)</i> <b>Mattz v. Arnett</b>		Mattz v. Arnett upheld that the Reservation was still considered “Indian Country” therefore the State of California had no jurisdiction.
<i>Trust (fishing rights)</i> <b>Arnett v. 5 Gill Nets</b>	<b>1976</b>	The court ruled that the State of California lacked jurisdiction to regulate Indian fishing on the Reservation and that Yurok Indians had a right to commercial fishing practices which affirmed federally protected fishing rights for Yurok commercial fishers.
<i>Beginning of ‘fish wars’</i>	<b>1978</b>	The USFWS implemented a moratorium on commercial gill net fishing on the Klamath River, starting what is known as the ‘fish wars’ between the Yurok and Federal Government.
<i>Trust - Fishing Rights</i>	<b>1980</b>	The Trinity River Stream Rectification Act passed to protect the Trinity River fishery which was one of the first steps towards Trinity River restoration.
<b>Hoopa-Yurok Settlement Act</b>	<b>1988</b>	The Hoopa-Yurok Settlement Act partitioned the former joint reservation and recognized and established traditional Yurok Indian homelands as the Yurok Reservation.
<i>Development, CVPIA</i>	1992	The CVPIA required water and power purchasers to pay restoration costs and required implementation of the Trinity River Restoration Program.

Era or Event	Year	Description
Trust - Fishing Rights	1993	Solicitor John Leshy confirmed that federal reserved fishing rights of the Hoopa Valley Tribe to take anadromous fish within its reservation were established at the time the reservation was established. The right entitles the Tribe to a moderate standard of living to be derived from up to 50 percent of the fishery resource.
Trust - Fishing Rights	1995	<i>Parravano v. Masten</i> confirmed that the Tribe's fishing rights are applicable law under the Magnuson Act; that the Secretary of Commerce shares in federal trust responsibility for the tribal fishery, and that ocean harvest can be restricted to protect the in-river tribal fishery.
Development, Trinity Program	2000	Trinity ROD signed providing increased Trinity River flow, channel rehabilitation, sediment management, and watershed protection activities to address degraded fisheries habitat that resulted from the Central Valley Project's (CVP) Trinity River Division in the early 1960s.
Development, KHP - fish kills	2002	Over 60,000 migrating adult salmon died in September in the lower Klamath River on their way up to the Trinity River and Upper Klamath Basin to spawn. Water quality problems devastated the Hupa fall-run Chinook fishery.
Development- Trinity Program	2004	Following years of litigation, the 9 <sup>th</sup> Circuit Court of Appeals ordered immediate implementation of the 2000 ROD, and found that Trinity River restoration was unlawfully overdue.
Concluded Hoopa-Yurok Settlement Act	2007	The Yurok Tribe concluded its portion of the Hoopa-Yurok Settlement Act and received its portion of the funds.
Self Governance and Self Determination	Beyond 2010	Tribal emphasis has been on ensuring Trinity restoration and sufficient flows for fisheries continues and improving social and economic conditions, in part through the continued strengthening of Hupa cultural practices.

Note: CVPIA - Central Valley Project Improvement Act.

Timeline adapted from A Brief History of the Hoopa Valley Tribe and the Trinity River. Prepared by the Hoopa Tribal Fisheries Department 4/2/0/2010.

## **Attachment 2**

Treaty of Peace and Friendship (unratified) and Executive Orders.  
Klamath River Reservation and Hoopa Valley Reservation Depictions



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will leave their places this fall, trusting to the government to pay them for their improvements.

The title to the whole of the lands in the valley is vested in the government. and as the improvements only are to be purchased, a very large sum will not be required. A good flouring mill and a fine saw-mill are there. The valley is beautifully located, surrounded by high mountains, well watered, with land enough in cultivation to feed all the Indians that are there or that may come there. Trinity river affords them fish during the spring and fall season, and the mountains on either side abound with acorns, berries, seed, &c.

At present there are about six hundred Indians in the valley. I appointed L. C. Beckwith a temporary special agent there at the request of the Indians themselves. I authorized him to assist them in building new houses, (their old ones having been burned during the war,) and to incur such expense as was absolutely necessary in preparing shelter for them before winter set in.

Enclosed please find a rough sketch of the valley, which, without being accurate in detail, will give you some idea of its situation and the location of the improvements.

I propose to take the whole of the valley and to the summit of the mountains on each side, which is about five miles. There are no improvements upon the proposed reservation excepting those within the valley.

I trust my action will be approved, and that no time will be lost by the department in having the improvements appraised. We shall wait to commence ploughing there in November for our next year's crop, and the sooner the citizens and Indians know that the valley is to be the property of the latter, the better it will be for all concerned.

Soliciting your earliest attention to this matter, I remain, very respectfully, your obedient servant,

AUSTIN WILEY,  
*Superintendent of Indian Affairs, California.*

Hon. WILLIAM P. DOLE,  
*Commissioner.*

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*Treaty of peace and friendship between the United States government and the Hoopa, South Fork, Redwood, and Grouse Creek Indians.*

ARTICLE I.

SEC. 1. The United States government, through Austin Wiley, superintendent of Indian affairs for the State for California, by these presents doth agree and obligate itself to set aside for reservation purposes for the sole use and benefit of the tribes of Indians herein named, or such tribes as may hereafter avail themselves of the benefit of this treaty, the whole of Hoopa valley, to be held and used for the sole benefit of the Indians whose names are hereunto affixed as the representatives of their tribes.

SEC. 2. Said reservation shall include a sufficient area of the mountains on each side of the Trinity river as shall be necessary for hunting grounds, gathering berries, seeds, &c.

SEC. 3. The United States government shall provide suitable clothing and blankets for the men, women, and children, which shall be distributed each year by the agent in charge.

SEC. 4. Suitable instructions shall be given the squaws to enable them to make their own clothing, take proper care of their children, and become generally efficient in household duties.

SEC. 5. An agent and a sufficient number of employés to instruct the In-

dians in farming and harvesting shall be appointed, to reside upon the reservation, and no other white men shall be permitted to reside upon said reservation, except such as are in the military service of the United States or employed in government service.

SEC. 6. A physician shall be appointed to reside upon the reservation, whose duty it shall be to minister to the wants of the sick and look to their health and comfort.

#### ARTICLE II.

SEC. 1. All Indians included among those subscribing to this treaty must obey all orders emanating from the agent in charge.

SEC. 2. No Indians belonging to either of the tribes herein enumerated shall go beyond the limits of said reservation without a written pass from the agent in charge. All so offending shall not be deemed friendly, and shall be hostile Indians.

SEC. 3. All Indians who have taken part in the war waged against the whites in this district for the past five years shall be forgiven and entitled to the same protection as those who have not been so engaged.

SEC. 4. All guns and pistols shall be delivered to the commanding officer at Fort Gaston, to be held in trust by him for the use and benefit of the Indians, to be used by them in hunting only, in such numbers and for such length of time as the agent may direct. All ammunition in their charge to be turned over to the agents and paid for at its actual value in Indian money.

#### INDIAN RESERVATION NOTICE.

By virtue of power vested in me by an act of Congress approved April 8, 1864, and acting under instructions from the Interior Department, dated at Washington city, D. C., April 26, 1864, concerning the location of four tracts of land for Indian reservations in the State of California, I do hereby proclaim and make known to all concerned that I have this day located an Indian reservation, to be known and called by the name and title of the Hoopa Valley reservation, said reservation being situated on the Trinity river, in Klamath county, California, to be described by such metes and bounds as may hereafter be established by order of the Interior Department, subject to the approval of the President of the United States.

Settlers in Hoopa valley are hereby notified not to make any further improvements upon their places, as they will be appraised and purchased as soon as the Interior Department may direct.

AUSTIN WILEY,

*Sup't Indian Affairs for the State of California.*

FORT GASTON, CAL., *August 21, 1864.*

No. 45.

OFFICE OF INDIAN AFFAIRS,  
*San Francisco, California, October 5, 1864.*

SIR: I have just returned from a visit to Round valley, where business of importance suddenly called me.

It affords me pleasure to report that the affairs on the reservation at that place are in a most flourishing condition. As I predicted in former communication, the Indians on the different branches of Eel river, contiguous to that reservation, known as the "Eukas" and "Wylackies," are coming in continually and settling upon the reservation. Over two hundred came in while I was there,

*Klamath River Reserve.*

DEPARTMENT OF THE INTERIOR,  
Office of Indian Affairs, November 10, 1855.

SIR: Referring to your communication of the 8th of August last to the Acting Commissioner of Indian Affairs, advising him of the approval by the President of the United States of the recommendation of the Department that it was expedient to expend the money appropriated on the 3rd of March last for removing the Indians in California to two additional military reservations, I have the honor now to make the following report:

On the 15th of August last the Acting Commissioner inclosed a copy of your letter of the 8th of that month to the superintendent of Indian affairs in California, with directions to select these reservations from such "tracts of land adapted as to soil, climate, water-privileges, and timber, to the comfortable and permanent accommodation of the Indians, which tracts should be unincumbered by old Spanish grants or claims of recent white settlers," limiting the dimensions of the reserves to within 25,000 acres each, and to report to this office a description of their geographical position in relation to streams, mountain ranges, and county lines, etc., and indicating the same upon a map. A copy of that letter is herewith, marked A. By the last mail from California, I have received from Superintendent Thomas I. Henley a report upon this subject, dated the 4th ultimo (a copy of which is herewith, marked B), by which it appears he recommends as one of the reservations aforesaid "a strip of territory one mile in width on each side of the (Klamath) river, for a distance of 20 miles." The superintendent remarks upon the character of the country selected, and incloses an extract from a report (also herewith, marked C) to him of the 19th of June last, by Mr. S. G. Whipple, which contains in some detail a description of the country selected, habits and usages of the Indians, etc., but no map is furnished.

It will be observed from this report of the superintendent that he has deemed it important to continue the employ of an agent and to prepare for raising a crop in order to assure the Indians of the good faith of the Government and to preserve the peace of the country. Considering the great distance of this reserve from the seat of Government and the length of time it necessarily requires to communicate with an agency at the Klamath, it is desirable that some definite action be taken, if practicable, before the sailing of the next steamer, to leave New York on the 20th instant.

I, therefore, beg leave to ask your attention to the subject, and if you shall be of the opinion from the representations made by the superintendent in California and Mr. Whipple that the selection at the mouth of the Klamath River is a judicious and proper one, that it be laid before the President of the United States for his approval, but with the provision, however, that upon a survey of the tract selected that a sufficient quantity be cut off from the upper end of the proposed reserve to bring it within the limitation of 25,000 acres, authorized by the act of 3d March last.

I also inclose herewith a copy of another letter from Superintendent Henley, of 4th ultimo (marked D), in which he states, in relation to the other reserve, that it is intended to locate it "between the headwaters of Russian River and Cape Mendocino." In reference to both of these proposed reserves, and as connected with the means to be used to maintain peaceable relations with the Indians, the superintendent is of opinion that it is of great importance to provide for crops, and that to do so an agent in each instance is necessary. As this last-named selection has not been defined by any specific boundaries, and no sufficient description is given as to soil, climate, and suitability for Indian purposes, to enable the Department to determine the matter under-

standingly, of course nothing definite can now be done. But it may not be improper to consider the subject in connection with the general intent as to the particular locality in which it is proposed to make the location.

The reserve proposed on the Klamath River and Pacific coast does not appear from the map of the State of California to be very far removed from Cape Mendocino, or a point between that and Russian River; and as provision is made only for two reserves in the State other than those already in operation, the question arises whether it should not be situated farther in the interior, or perhaps eastern part of the State, than the point referred to. The Noome Lacke Reserve is situated in one of the Sacramento valleys, at about the latitude of 40 degrees north and 122 degrees of longitude west, about the center of that portion of the State north of the port of San Francisco. As, therefore, the proposed Klamath Reserve, being northwest from the Noome Lacke Reservation, would appear to be adapted to the convenient use of the Indians in that direction, the question is suggested whether the other reserve should not be located farther east and north, say on the tributaries of either Pitt or Feather Rivers. As in the case of the proposed reserve of the Klamath, I am desirous of obtaining your opinion and that of the President of the United States, with such decision as may be arrived at under the circumstances, in season to communicate the same by the next California mail, for the government of the action of superintendent Henley.

Very respectfully, your obedient servant,

GEO. W. MANYPENNY,  
*Commissioner.*

Hon. R. McCLELLAND,  
*Secretary of the Interior.*

DEPARTMENT OF THE INTERIOR,  
*Washington, D. C., November 12, 1855.*

SIR: I have the honor to submit herewith the report from the Commissioner of Indian Affairs of the 10th instant, and its accompanying papers, having relation to two of the reservations in California for Indian purposes, authorized by the act of 3d March last.

The precise limits of but one of the reservations, viz, a strip of territory commencing at the Pacific Ocean and extending 1 mile in width on each side of the Klamath River, are given, no sufficient data being furnished to justify any definite action on the other.

I recommend your approval of the proposed Klamath Reservation, with the provision, however, that upon a survey of the tract a sufficient quantity be cut off from the upper end thereof to bring it within the limit of 25,000 acres authorized by law.

Respectfully, your obedient servant,

R. McCLELLAND,  
*Secretary.*

The PRESIDENT.

Let the reservation be made, as proposed.

FRANKLIN PIERCE.

NOVEMBER 16, 1855.

*Mendocino Reserve.*

DEPARTMENT OF THE INTERIOR,  
*Office of Indian Affairs, April 16, 1856.*

SIR: Referring to the report I had the honor to submit for your consideration on the 10th of November last, relative to the establishment

*Yuma Reserve.*

(For order relating to Yuma Reserve in ARIZONA, see California, post page 831.)

## CALIFORNIA.

*Hoopa Valley Reserve.*

[Occupied by Hunsatung, Hupa, Klamath River, Miskeet, Redwood, Saiaz, Sermolton, and Tishlanaton tribes; area, 156 square miles; established by act of April 8, 1864 (13 Stat., 39), and Executive orders.]

By virtue of power vested in me by an act of Congress approved April 8, 1864, and acting under instructions from the Interior Department, dated at Washington City, D. C., April 26, 1864, concerning the location of four tracts of land for Indian reservations in the State of California, I do hereby proclaim and make known to all concerned that I have this day located an Indian reservation, to be known and called by the name and title of the Hoopa Valley Reservation, said reservation being situated on the Trinity River, in Klamath County, California, to be described by such metes and bounds as may hereafter be established by order of the Interior Department, subject to the approval of the President of the United States. Settlers in Hoopa Valley are hereby notified not to make any further improvements upon their places, as they will be appraised and purchased as soon as the Interior Department may direct.

AUSTIN WILEY,

*Superintendent Indian Affairs for the State of California.*

FORT GASTON, CAL., August 21, 1864.

EXECUTIVE MANSION, June 23, 1876.

It is hereby ordered that the south and west boundaries and that portion of the north boundary west of Trinity River surveyed, in 1875, by C. T. Bissel, and the courses and distances of the east boundary, and that portion of the north boundary east of Trinity River reported but not surveyed by him, viz: "Beginning at the southeast corner of the reservation at a post set in mound of rocks, marked 'H. V. R., No. 3'; thence south  $17\frac{1}{2}$  degrees west, 905.15 chains, to southeast corner of reservation; thence south  $72\frac{1}{2}$  degrees west, 480 chains, to the mouth of Trinity River," be, and hereby are, declared to be the exterior boundaries of Hoopa Valley Indian Reservation, and the land embraced therein, an area of 89,572.43 acres, be, and hereby is, withdrawn from public sale, and set apart for Indian purposes, as one of the Indian reservations authorized to be set apart, in California, by act of Congress approved April 8, 1864. (13 Stats., p. 39.)

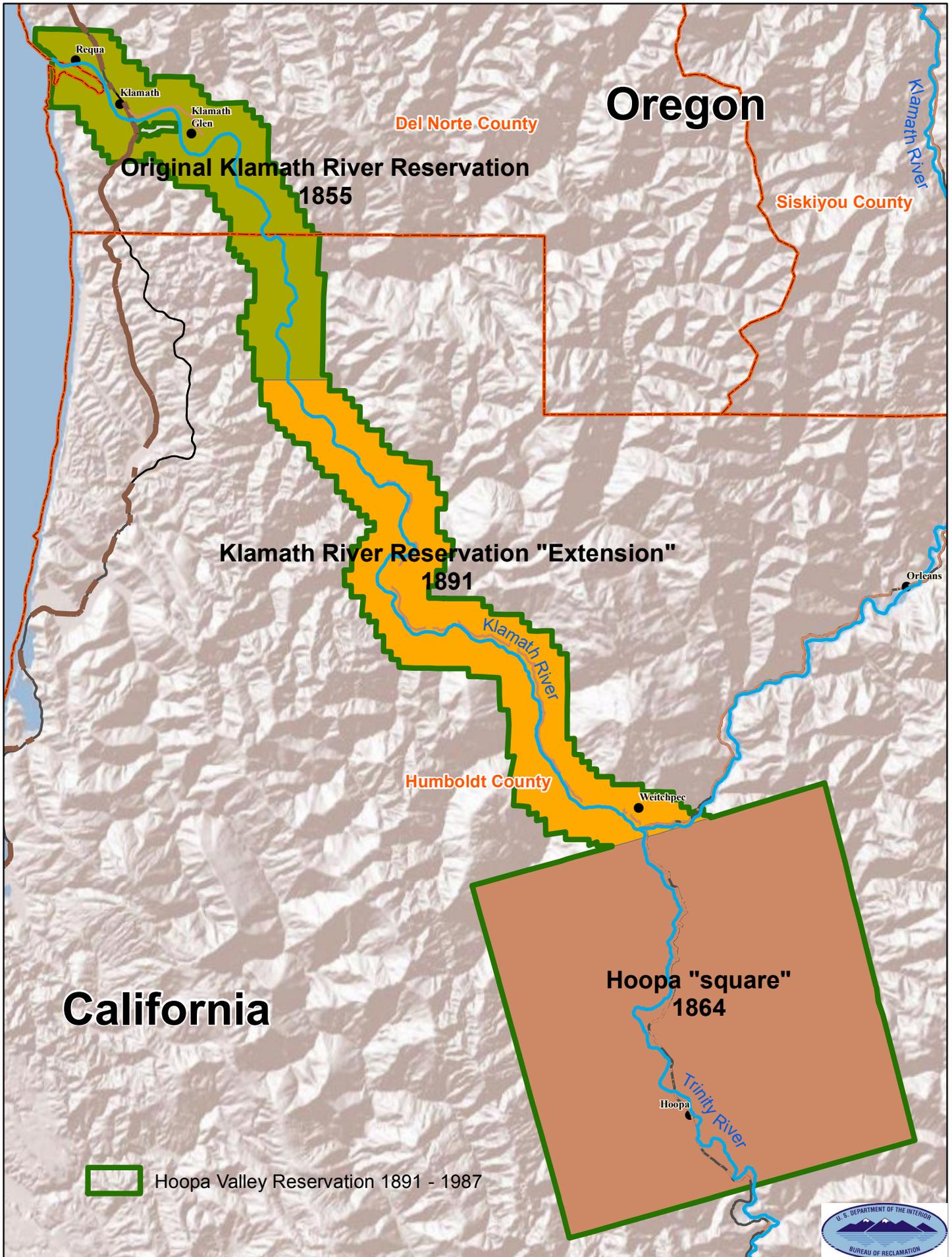
U. S. GRANT.

EXECUTIVE MANSION, October 16, 1891.

It is hereby ordered that the limits of the Hoopa Valley Reservation in the state of California, a reservation duly set apart for Indian purposes, as one of the Indian reservations authorized to be set apart, in said State, by Act of Congress approved April 8, 1864, (13 Stats., 39), be and the same are hereby extended so as to include a tract of country one mile in width on each side of the Klamath River, and extending from the present limits of the said Hoopa Valley reservation to the Pacific Ocean; *Provided, however,* That any tract or tracts included within the above described boundaries to which valid rights have attached under the laws of the United States are hereby excluded from the reservation as hereby extended.

BENJ. HARRISON.

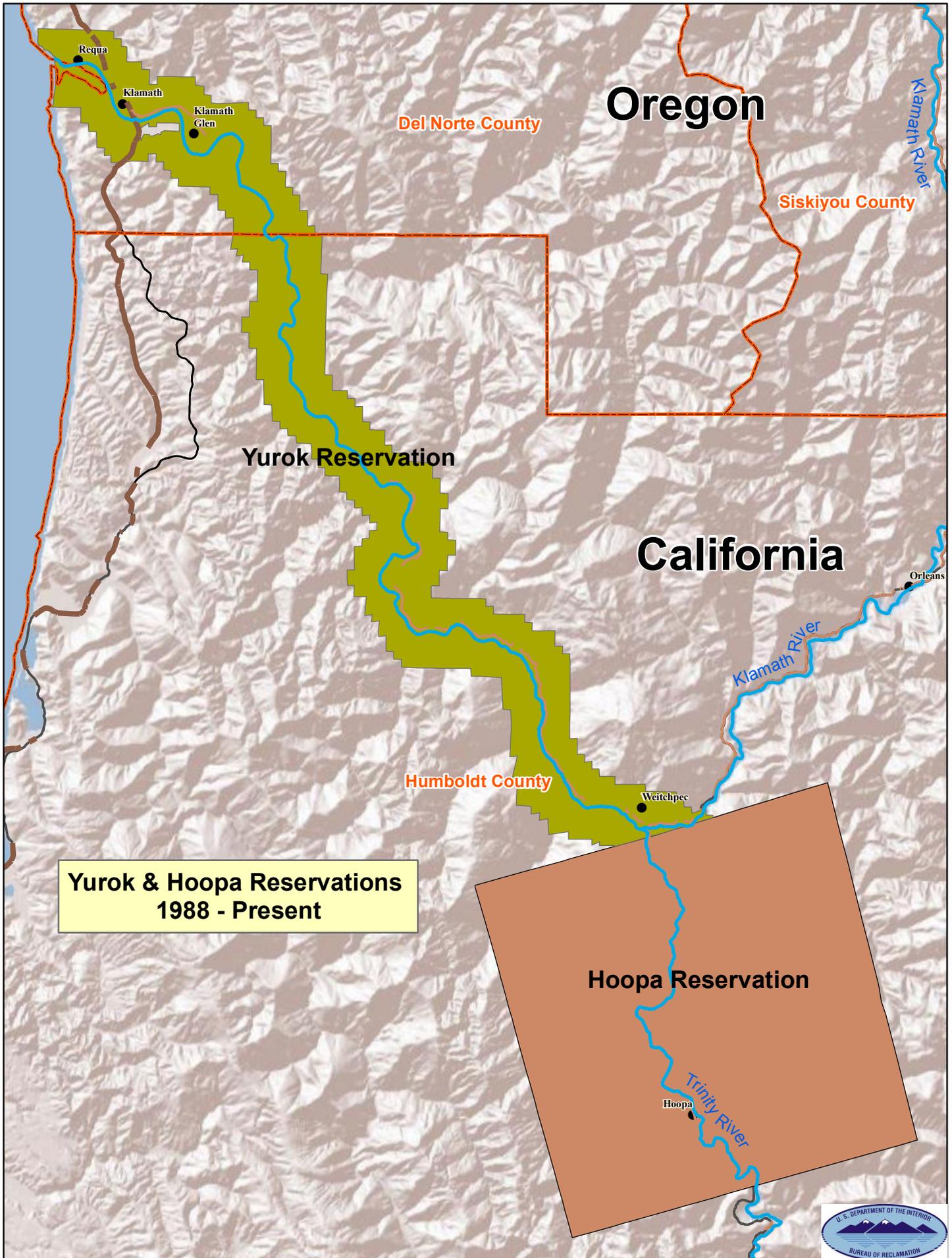




 Hoopa Valley Reservation 1891 - 1987







**Yurok & Hoopa Reservations  
1988 - Present**





## **Attachment 3**

- 3a Bureau of the Census Maps
- 3b Hoopa Valley Tribe 2005 - 2009 Unemployment, Income and Poverty Estimates
- 3c Bureau of the Census Definitions
- 3d Bureau of Indian Affairs Labor Force Report Definitions



## **Attachment 3a**

Bureau of the Census Maps

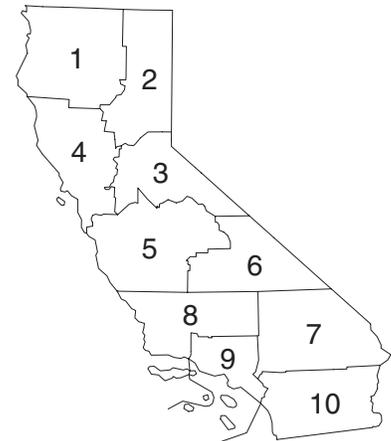


# County Subdivision Outline Map Legend and County Location Index

## Map Legend

---	International
	<b>CAMPO</b> American Indian Reservation (Federal)
	<b>ZIA</b> Off-Reservation Trust Land
	<b>Tetlin</b> Tribal Designated Statistical Areas
---	State
	<b>ERIE</b> County
---	YORK County Subdivision <sup>1</sup>
---	ROME Incorporated Place <sup>1</sup>
---	Zena Census Designated Place
	<i>Lake Erie</i> Large River, Lake, Water Body, or Shoreline
	A fishhook joins contiguous and/or discontinuous parts of the same geographic entity

## Map Sections



<sup>1</sup> A "\*" following a place name indicates that the place is coextensive with a separate county subdivision. The county subdivision name is shown only if different than the name of the place.

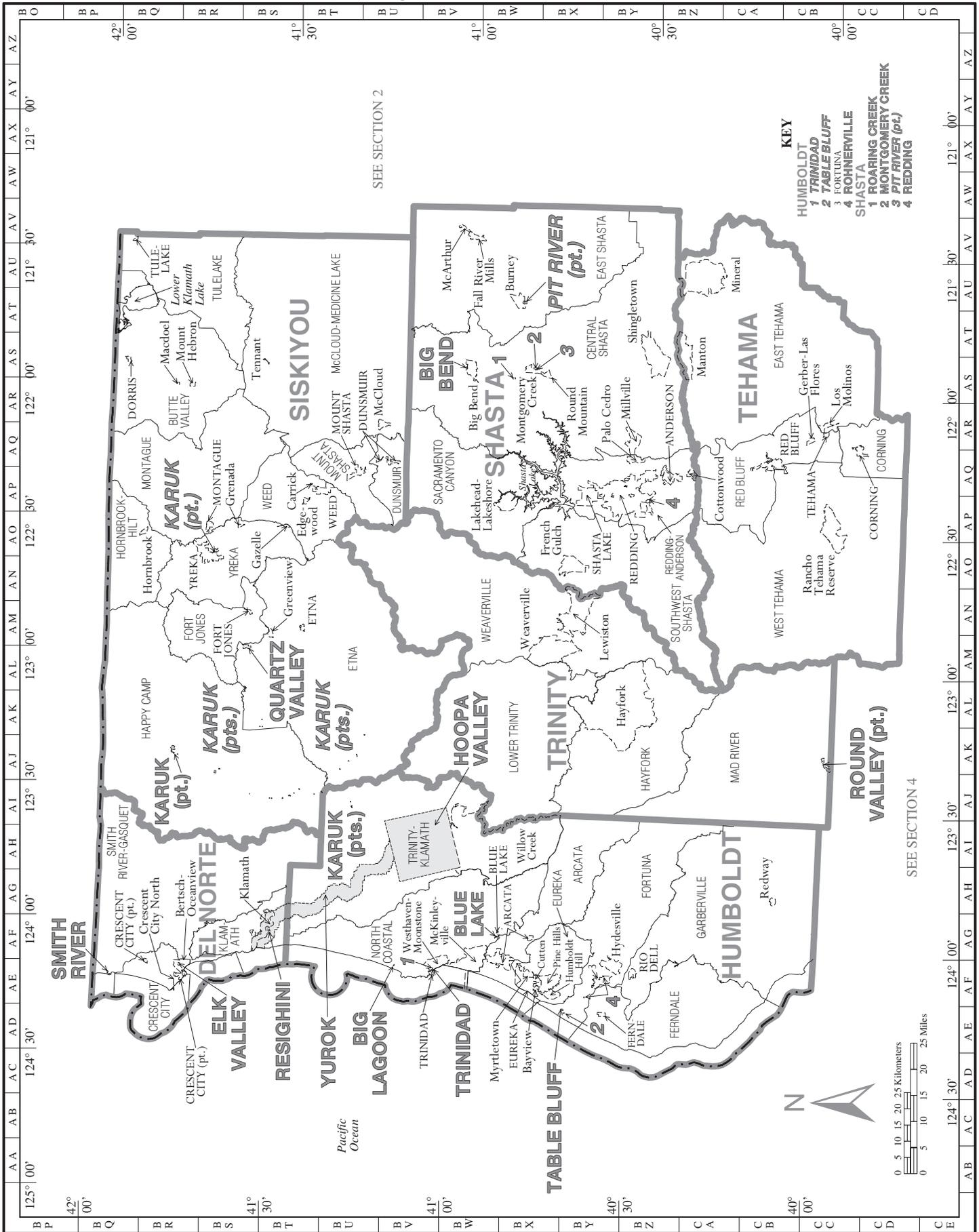
Note: All legal boundaries and names are as of January 1, 2000. Where international, state, county, and/or county subdivision boundaries coincide, the map shows the boundary symbol for the highest level of these geographic entities. The county boundary is always shown. Where a county subdivision boundary coincides with a place boundary, the map does not show the place boundary symbol. Any geographic entity name may include '(pt.)' if some portion of the entity extends beyond the limits of the map area displayed on the page, or if multiple discontinuous pieces of the entity have been discretely labeled on the page. A geographic entity name may include '(pts.)' if many discontinuous pieces exist for that entity that cannot be discretely labeled. The boundaries shown on this map are for Census Bureau statistical data collection and tabulation purposes only; their depiction and designation for statistical purposes does not constitute a determination of jurisdictional authority or rights of ownership or entitlement.

## County Location Index

This list presents the reference coordinates for each county on the county subdivision outline map. Map section numbers refer to the county subdivision outline maps only.

COUNTY	MAP SEC	MAP REF	COUNTY	MAP SEC	MAP REF	COUNTY	MAP SEC	MAP REF
Alameda.....	4	AS-CQ	Napa.....	4	AQ-CK	Tuolumne.....	3	BE-CN
Alpine.....	3	BF-CK	Nevada.....	2	AZ-CG	Ventura.....	9	BJ-DJ
Amador.....	3	BA-CL	Orange.....	9	BR-DN	Yolo.....	4	AS-CJ
Butte.....	2	AU-CE	Placer.....	3	AZ-CH	Yuba.....	2	AV-CG
Calaveras.....	3	BA-CM	Plumas.....	2	AY-CB			
Colusa.....	4	AQ-CG	Riverside.....	10	CC-DN			
Contra Costa.....	4	AS-CO	Sacramento.....	3	AV-CL			
Del Norte.....	1	AG-BR	San Benito.....	5	AX-CW			
El Dorado.....	3	BA-CJ	San Bernardino.....	7	CA-DG			
Fresno.....	5	BG-CV	San Diego.....	10	BX-DR			
Glenn.....	4	AP-CE	San Francisco.....	4	AP-CP			
Humboldt.....	1	AG-BX	San Joaquin.....	3	AW-CO			
Imperial.....	10	CF-DR	San Luis Obispo.....	8	BB-DD			
Inyo.....	6	BT-CW	San Mateo.....	4	AP-CR			
Kern.....	8	BL-DD	Santa Barbara.....	8	BD-DH			
Kings.....	5	BF-CZ	Santa Clara.....	5	AT-CS			
Lake.....	4	AN-CH	Santa Cruz.....	5	AR-CT			
Lassen.....	2	BA-BX	Shasta.....	1	AR-BX			
Los Angeles.....	9	BO-DJ	Sierra.....	2	BA-CE			
Madera.....	5	BF-CS	Siskiyou.....	1	AO-BS			
Marin.....	4	AN-CN	Solano.....	4	AS-CM			
Mariposa.....	5	BE-CQ	Sonoma.....	4	AM-CK			
Mendocino.....	4	AJ-CF	Stanislaus.....	5	AY-CQ			
Merced.....	5	AZ-CS	Sutter.....	4	AT-CH			
Modoc.....	2	AZ-BS	Tehama.....	1	AQ-CB			
Mono.....	3	BK-CO	Trinity.....	1	AL-BY			
Monterey.....	5	AW-CY	Tulare.....	6	BL-CY			

**American Indian Areas, Counties, County Subdivisions, and Places - Section 1**



## **Attachment 3b**

Hoop Valley Tribe 2005 - 2009 Unemployment, Income and Poverty Estimates



## Attachment 3b

### Hoopa Valley Tribe and Area 2009 Five-year Census Unemployment, Income, and Poverty Estimates

Geographic areas	Census unemployment (%)	BIA unemployment (%) <sup>1</sup>	Median household income (2009 dollars)	Per capita income (2009 dollars)	Poverty status (%)	Poverty – families, female householder, no husband, children under 5 (%)	Poverty – families, female householder, no husband, children under 18 (%)
Hoopa Valley Reservation	9.4	40	29,079	13,312	27.0	71.4	41.3
Humboldt County	4.8	na	39,124	23,496	18.2	63.0	43.3
Trinity-Klamath CCD	8.1	na	29,094	15,837	23.5	93.1	51.0
California	5.0	na	60,392	29,020	13.2	36.9	32.2

Source: Census American Community Survey Selected Economic Characteristics: 2005-2009 5-Year Estimates.  
<http://factfinder.census.gov>.

Notes: All Census data have higher margins of error than decennial census data. Poverty data are for 2009 only; all other data are 2005-2009 period.

<sup>1</sup> Based on 2005 BIA data.



## **Attachment 3c**

Bureau of the Census Definitions



## Attachment 3c

Census Bureau - Glossary (online): [http://factfinder.census.gov/home/en/epss/glossary\\_e.html#employed](http://factfinder.census.gov/home/en/epss/glossary_e.html#employed).

### **American Indian Area, Alaska Native Area, Hawaiian Home Land (AIANAHH)**

A Census Bureau term referring to these types of geographic areas: federal and state American Indian reservations, American Indian off-reservation trust land (individual or tribal), Oklahoma tribal statistical area (in 1990 tribal jurisdictional statistical area), tribal designated statistical area, state designated American Indian statistical area, Alaska Native Regional Corporation, Alaska Native village statistical area, and Hawaiian home lands.

### **American Indian off-reservation trust land**

Lands held in trust by the federal government for either a tribe or an individual member of that tribe. They may be located on or outside of the reservation; the Census Bureau recognizes and tabulates data only for the off-reservation trust lands because the tribe has primary governmental authority over these lands.

### **American Indian reservation**

Land that has been set aside for the use of the tribe. There are two types of American Indian reservations, federal and state. These entities are designated as colonies, communities, pueblos, ranches, rancherias, reservations, reserves, tribal towns, and villages.

### **American Indian Reservation - federal**

Areas with boundaries established by treaty, statute, and/or executive or court order recognized by the federal government as territory in which American Indian tribes have primary governmental authority. The U.S. Census Bureau contacts representatives of American Indian tribal governments to identify the boundaries. The Bureau of Indian Affairs (BIA) maintains a list of federally recognized tribal governments.

### **American Indian Reservation - state**

Lands held in trust by state governments for the use and benefit of a given tribe. A governor-appointed state liaison provides the names and boundaries for state reservations. The names of the American Indian reservations recognized by state governments, but not by the federal government, are followed by "(state)" in the data presentations.

### **American Indian Tribal Subdivision**

Administrative subdivisions of federally recognized American Indian reservations, off-reservations trust lands, and Oklahoma tribal statistical areas (OTSAs), known as an area, chapter, community, or district. Internal units of self-government or administration that serve social, cultural, and/or economic purposes for American Indians. Provided in 1980 as "American Indian subreservation areas." These areas were not available in 1990.

### **American Indian tribe/Selected American Indian categories**

Self-identification among people of American Indian descent. Many American Indians are members of a principal tribe or group empowered to negotiate and make decisions on behalf of the individual members.

### **Employed**

Employed includes all civilians 16 years old and over who were either (1) "at work" -- those who did any work at all during the reference week as paid employees, worked in their own business or profession, worked on their own farm, or worked 15 hours or more as unpaid workers on a family farm or in a family business; or (2) were "with a job but not at work" -- those who did not work during the reference week but had jobs or businesses from which they were temporarily absent due to illness, bad weather, industrial dispute, vacation, or other personal reasons. Excluded from the employed are people whose only activity consisted of work around the house or unpaid volunteer work for religious, charitable, and similar organizations; also excluded are people on active duty in the United States Armed Forces. The reference week is the calendar week preceding the date on which the respondents completed their questionnaires or were interviewed. This week may not be the same for all respondents.

**Household**

A household includes all the people who occupy a housing unit as their usual place of residence.

**Labor force**

The labor force includes all people classified in the civilian labor force, plus members of the U.S. Armed Forces (people on active duty with the United States Army, Air Force, Navy, Marine Corps, or Coast Guard). The Civilian Labor Force consists of people classified as employed or unemployed.

**Median age**

This measure divides the age distribution in a stated area into two equal parts: one-half of the population falling below the median value and one-half above the median value.

**Median income**

The median income divides the income distribution into two equal groups, one having incomes above the median, and other having incomes below the median.

**Occupation**

Occupation describes the kind of work the person does on the job. For employed people, the data refer to the person's job during the reference week. For those who worked at two or more jobs, the data refer to the job at which the person worked the greatest number of hours. Some examples of occupational groups shown in this product include managerial occupations; business and financial specialists; scientists and technicians; entertainment; healthcare; food service; personal services; sales; office and administrative support; farming; maintenance and repair; and production workers.

**Per capita income**

Average obtained by dividing aggregate income by total population of an area.

**Poverty**

Following the Office of Management and Budget's (OMB's) Directive 14, the Census Bureau uses a set of money income thresholds that vary by family size and composition to detect who is poor. If the total income for a family or unrelated individual falls below the relevant poverty threshold, then the family or unrelated individual is classified as being "below the poverty level."

**Race**

Race is a self-identification data item in which respondents choose the race or races with which they most closely identify.

*For Census 2000:*

In 1997, after a lengthy analysis and public comment period, the Federal Office of Management and Budget (OMB) revised the standards for how the Federal government would collect and present data on race and ethnicity. The new guidelines reflect "the increasing diversity of our Nation's population, stemming from growth in interracial marriages and immigration."

These new guidelines revised some of the racial categories used in 1990 and preceding censuses and allowed respondents to report as many race categories as were necessary to identify themselves on the Census 2000 questionnaire.

*How the new guidelines affect Census 2000 results and the comparison with data from 1990:*

Census 2000 race data are not directly comparable with data from 1990 and previous censuses. See the Census 2000 Brief, "[Overview of Race and Hispanic Origin](#)".

Race Alone categories (6):

Includes the minimum 5 race categories required by OMB, plus the 'some other race alone' included by the Census Bureau for Census 2000, with the approval of OMB.

- White alone
- Black or African-American alone
- American Indian or Alaska Native alone
- Asian alone
- Native Hawaiian or other Pacific Islander alone
- Some other race alone

Race Alone or in combination categories (63):

There will be other tabulations where 'race alone or in combination' will be shown. These tabulations include not only persons who marked only one race (the 'race alone' category) but also those who marked that race and at least one other race. For example, a person who indicated that she was of Filipino and African-American background would be included in the African-American alone or in combination count, as well as in the Asian alone or in combination count. The alone or in combination totals are tallies of responses, rather than respondents. So the sum of the race alone or in combination will add to more than the total population.

Some tabulations will show the number of persons who checked 'two or more races'.

In some tables, including the first release of Census 2000 information, data will be tabulated for 63 possible combinations of race:

- 6 race alone categories
- 15 categories of 2 races (e.g., White and African American, White and Asian, etc.)
- 20 categories of 3 races
- 15 categories of 4 races
- 6 categories of 5 races
- 1 category of 6 races
- =63 possible combinations

Some tables will show data for 7 race categories: the 6 (mutually-exclusive) major race-alone categories (White, African-American, American Indian and Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, and some other race) and a 'two or more races' category. The sum of these 7 categories will add to 100 percent of the population.

**Unemployed**

All civilians 16 years old and over are classified as unemployed if they (1) were neither "at work" nor "with a job but not at work" during the reference week, and (2) were actively looking for work during the last 4 weeks, and (3) were available to accept a job. Also included as unemployed are civilians who did not work at all during the reference week, were waiting to be called back to a job from which they had been laid off, and were available for work except for temporary illness.





March 14, 2001

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**Question:** Can data users compare data by race from Census 2000 with previous censuses?

**Answer:** Data on race from Census 2000 are not directly comparable with those from the 1990 census and previous censuses due, in large part, to giving respondents the option to report more than one race. Other factors, such as reversing the order of the questions on race and Hispanic origin and changing question wording and format, also may affect comparability.

**Question:** Why didn't the Census Bureau allow respondents to report more than one race in previous censuses?

**Answer:** The decision to use the instruction "mark one or more races" was reached by the Office of Management and Budget in 1997 after noting evidence of increasing numbers of children from interracial unions and the need to measure the increased diversity in the United States. Prior to this decision, most efforts to collect data on race (including those by the Census Bureau) asked people to report one race.

**Question:** What census data products will include data by race.

**Answer:** Data by race will appear in most Census 2000 data products. A large portion of Census 2000 data products will be made available on the Internet through the American FactFinder web page. Data on race also will be made available through paper reports and computer media such as CD-ROM and DVD. A description of our data products and a schedule for their release can be found on our web site at [www.census.gov](http://www.census.gov). Click on "Schedule", which will take you to the "Census 2000 Products at a Glance."

**Question:** How will data on race be presented?

**Answer:** Data on race will be shown using several different options. For example, in the Public Law 94-171 (redistricting) file, data will be shown for 63 racial categories. These include White alone, Black or African American alone, American Indian and Alaska Native alone, Asian alone, Native Hawaiian and Other Pacific Islander alone, Some other race alone and 57 possible combinations of the above six categories.

In data products where it will not be possible to show 63 racial categories, such as the Demographic Profiles, data will be shown for seven mutually exclusive and exhaustive categories. The seven categories are White alone, Black or African American alone, American Indian and Alaska Native alone, Asian alone, Native Hawaiian and Other Pacific Islander alone, Some other race alone, and Two or more races. The two or more races category represents all those respondents who reported more than one race.

A third option provides data about people who reported a race either alone or in combination with one or more other races. For example, the White alone or in combination category consists of those respondents who reported White, whether or not they reported any other races. In other words, people who reported only White or who reported combinations such as "White *and* Black or African American," or "White *and* Asian *and* American Indian and Alaska Native" are included in the White alone or in combination category. Using this option there are six alone or in combinations groups: White alone or in combination; Black or African American alone or in combination, American Indian and Alaska Native alone or in combination, Asian alone or in combination, Native Hawaiian and Other Pacific Islander alone or in combination, and Some other race alone or in combination. If the number of people in these six categories is calculated, it will equal the total number of responses and will generally exceed the total population.

**Question:** How were decisions made on which census data products would and would not contain data on race?

**Answer:** The decision on which products would include which tabulation option for race was determined through consultations with data users, especially our race and ethnic advisory committees. Ultimately, the decision was based on the Census Bureau's ability to provide data users with reliable and accurate data without violating respondents' confidentiality.

**Question:** Will the Census Bureau develop methods to facilitate comparisons between the race data in Census 2000 and previous censuses?

**Answer:** An OMB federal agency working group is studying possible bridging methods for comparing Census 2000 data on race with data from previous censuses. The Census Bureau did not develop these methods, but it is participating with the working group that is evaluating them. The Census Bureau is conducting evaluation studies to understand better the impact of changes to the question on race. For example, during the summer of 2001, the Census Bureau will implement a Census Quality Survey, gathering data from approximately 50,000 households, to assess the reporting of race and Hispanic origin in Census 2000. The purpose of this study is to produce a data file that will assist users in developing ways to make comparisons between Census 2000 data on race, where respondents were asked to report one or more races, and data on race from other sources that asked for only a single race.

**Question:** Does the Census Bureau have a policy on which tabulation options data users should use when comparing data on race from Census 2000 and previous censuses?

**Answer:** The Census Bureau is providing different tabulation options so that users may decide which option best satisfies their needs. In addition, the Census Bureau will provide a data file, using results from the Census Quality Survey to be conducted in the summer of 2001, that will assist users in developing ways to make comparisons between Census 2000 data on race, where respondents were asked to report one or more races, and data on race from other sources that asked for only a single race.

**Question:** What are the race groups that federal agencies are to use to comply with the Office of Management and Budget's guidance for civil rights monitoring and enforcement?

**Answer:** The categories (made available in OMB Bulletin No. 00-02, "Guidance on Aggregation and Allocation of Data on Race for Use in Civil Rights Monitoring and Enforcement") to be used are:

1. American Indian and Alaska Native
2. Asian
3. Black or African American
4. Native Hawaiian and Other Pacific Islander
5. White
6. American Indian and Alaska Native *and* White
7. Asian *and* White
8. Black or African American *and* White
9. American Indian and Alaska Native *and* Black or African American
10. >1 percent: Fill in if applicable with multiracial combinations greater than 1% of the population
11. Balance of individuals reporting more than one race
12. Total

The use of these categories, including the identification of specific two or more race combinations greater than 1 percent, is mandatory for civil rights monitoring and enforcement agencies. For more information, see [www.whitehouse.gov/omb/bulletins/b00-02.html](http://www.whitehouse.gov/omb/bulletins/b00-02.html)

**Question:** If data users combined a single race group, such as White, with all of the possible combination groups that include White, such as "White *and* Black or African American," "White *and* American Indian and Alaska Native *and* Asian," will such entries equal the total race population for White for a given jurisdiction?

**Answer:** While this total provides the maximum number of people who identify with being White, regardless of what other races were reported, it cannot be used with other racial categories to add to the total population. This

White total includes race combinations such as "White *and* Black or African American" that also would be included in the total of people who reported Black or African American regardless of other races reported.

By contrast, the "one-race" categories added to the "Two or more races" category equals the total population. See example below:

---

	<b>Population Counts for City X</b>
Total Population	500,000
One Race - Total	450,000
White	400,000
Black or African American	10,000
American Indian and Alaska Native	5,000
Asian	500
Native Hawaiian and Other Pacific Islander	100
Some Other Race	34,400
Two or more races - Total	50,000

---

**Question: How does the Census Bureau define race and ethnicity?**

**Answer:** Census Bureau complies with the Office of Management and Budget's standards for maintaining, collecting, and presenting data on race, which were revised in October 1997. They generally reflect a social definition of race recognized in this country. They do not conform to any biological, anthropological or genetic criteria.

In accordance with the Office of Management and Budget definition of ethnicity, the Census Bureau provides data for the basic categories in the OMB standards: Hispanic or Latino and Not Hispanic or Latino. In general, the Census Bureau defines ethnicity or origin as the heritage, nationality group, lineage, or country of birth of the person or the person's parents or ancestors before their arrival in the United States. People who identify their origin as Spanish, Hispanic, or Latino may be of any race.

According to the revised Office of Management and Budget standards noted above, race is considered a separate concept from Hispanic origin (ethnicity) and, wherever possible, separate questions should be asked on each concept.

**Question: How did the Census Bureau handle multiple responses to the race question in the 1990 census?**

**Answer:** The 1990 Census data capture system was not designed to capture multiple circles being filled by respondents. When individuals marked the Other race circle and provided a multiple write in, the response was assigned according to the first write in. For example, a write in of "Black-White" was assigned a code of Black, a write in of "White-Black" was assigned a code of White. Separate codes were assigned to the various combinations of write ins for research and evaluation purposes.

Information gathered prior to the 1990 census indicated that less than one half of one percent of the population would mark more than one circle.

**Question: Will multiple responses be captured for the question on Hispanic origin?**

**Answer:** The Census Bureau followed the recommendation of its Hispanic Advisory Committee and captured multiple responses to the question on Hispanic origin for research purposes. However, multiple responses ultimately were assigned a code of one category for the official Census 2000 data.

**Question: Is the multiracial population in the U.S. growing? Do we know the size of this population?**

**Answer:** This is the first census that collected and tabulated data on people reporting two or more races, so we do not have an exact measure of change in the multiracial population. However, Census Bureau research shows

that the number of children living in mixed-race families has been increasing in the past two decades. In 1970, the number of children living in mixed-race families totaled 460,000. This number increased to 996,070 in 1980 and reached almost 2 million in 1990. In 1990, children in mixed-race households accounted for 4 percent of all children in households.

The Census Bureau's 1996 National Content Survey and the Bureau of Labor Statistics' 1995 Current Population Survey Supplement on Race and Ethnicity indicated that, nationwide, less than 2 percent of the population self-identified as multiracial.

### Additional Information:

Number of Children Living in Mixed-Race Families	
<u>Year</u>	<u>Number</u>
1970	460,000
1980	996,070
1990	1,937,496

**Question:** How will data for people reporting two or more races be tabulated beyond showing a total number of people reporting two or more races?

**Answer:** The Census Bureau will use two approaches in its standard data products, to present data for people reporting two or more races. One approach, which will be implemented in selected data products, is to show the 57 possible combinations of the six race groups (White, Black or African American, American Indian and Alaska Native, Asian, Native Hawaiian and Other Pacific Islander, and Some other race). These detailed categories can be combined, if desired, to show the number of people with two races, the number with three races, and so forth.

The second approach, which also will be implemented in selected data products, is to show the number of times a respondent reports one of the six race categories either alone in or combination with the other five race categories. Thus, the tabulation category "Black or African American alone or in combination with one or more other races" will include all people who reported only Black or African American and people who reported Black or African American in combination with any of the other five race categories.

**Question:** Will people who report two or more races be counted twice?

**Answer:** No. Individuals will be counted only once. However, in tabulation approaches including the 6 race groups shown *alone or in combination* with one or more other races, respondents will be tallied in each of the race groups they have reported. For example, people who reported "Asian *and* Black or African American" would be counted both in the "Asian alone or in combination" population and also in the "Black or African American alone or in combination" population. Consequently, the total of the six alone or in combination groups will exceed the total population whenever some people in the group of interest reported more than one race.

**Question:** How will people who do not mark any check box in the question on race, but provide a write-in entry of "Black and White" be counted in the census?

**Answer:** These individuals will be counted in the category "Two or more races." In tabulations where specific combinations are shown, these individuals will be tabulated in the category "White *and* Black or African American."

Source: U.S. Census Bureau | Public Information Office | (301) 763-3030  
Last Revised: May 28, 2010 at 10:32:57 AM

# Occupations: 2000

Census 2000 Brief

Issued August 2003

C2KBR-25

By  
Peter Fronczek  
and  
Patricia Johnson

"What do you do for a living?" is a question frequently asked in contexts ranging from social conversation to scientific research. A person's occupation has often been a defining characteristic, so much so that many of today's surnames reflect the occupation of a long ago relative.

Census 2000 counted 281.4 million people in the United States on April 1, 2000, of whom 129.7 million were employed civilians aged 16 and over (Table 1).<sup>1</sup> The census classifies occupations at various levels, from the least-detailed summary level — six occupational groups — to the most detailed level — 509 occupation categories. This Census 2000 Sample Brief examines occupations of the employed civilian population 16 years old and older.

Census 2000 occupation classifications were based on the government-wide 2000 Standard Occupation Classification (SOC) system, whereas the 1990 census occupations were based on the 1980

<sup>1</sup> The text of this report discusses data for the United States, including the 50 states and the District of Columbia. Data for the Commonwealth of Puerto Rico are shown in Table 6 and Figure 3 only.

Figure 1.

## Reproduction of the Questions on Occupation from Census 2000

### 28 Occupation

a. What kind of work was this person doing?  
(For example: registered nurse, personnel manager, supervisor of order department, auto mechanic, accountant)

b. What were this person's most important activities or duties?  
(For example: patient care, directing hiring policies, supervising order clerks, repairing automobiles, reconciling financial records)

Source: U.S. Census Bureau, Census 2000 questionnaire.

SOC. The SOC was overhauled in 1998 (with additional revisions in 2000) to create a classification system that more accurately reflected the occupational structure in the United States at the time of the revisions. As a result, comparisons of occupation data from the 1990 census and Census 2000 are not recommended and therefore are not attempted in this report.

At the least-detailed summary level, the highest proportion of civilian workers 16 and older, 33.6 percent, were in

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U.S. CENSUS BUREAU

United States  
Census  
2000

Table 8.  
**Occupational Groups by Industry Groups for the United States: 2000**

(Data based on a sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see [www.census.gov/prod/cen2000/doc/sf3.pdf](http://www.census.gov/prod/cen2000/doc/sf3.pdf))

Industry groups	Occupational groups						
	Employed civilian population 16 years and over	Management, professional and related occupations	Service	Sales and office	Farming, fishing, and forestry	Construction, extraction, and maintenance	Production, transportation, and material moving
<b>Totals</b> .....	<b>129,721,512</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>
Agriculture, forestry, fishing and hunting, and mining....	2,426,053	2.2	0.4	0.4	82.2	1.9	1.2
Construction .....	8,801,507	2.9	0.4	1.9	0.4	51.4	2.6
Manufacturing .....	18,286,005	10.3	1.6	7.5	2.9	10.6	50.5
Wholesale trade .....	4,666,757	1.9	0.3	6.8	6.2	2.3	5.7
Retail trade .....	15,221,716	4.1	2.9	30.0	2.4	6.1	9.0
Transportation and warehousing, and utilities .....	6,740,102	2.0	1.5	5.5	0.7	5.3	15.8
Information .....	3,996,564	4.5	0.4	3.9	0.0	3.3	1.0
Finance, insurance, real estate, and rental and leasing ..	8,934,972	8.0	1.6	13.8	0.0	1.6	0.7
Professional, scientific, management, administrative, and waste management services .....	12,061,865	14.3	9.9	8.5	2.3	2.3	3.6
Educational, health and social services .....	25,843,029	36.7	28.4	10.1	0.5	2.3	3.0
Arts, entertainment, recreation, accommodation and food services .....	10,210,295	4.2	33.5	4.0	0.6	1.2	2.0
Other services (except public administration) .....	6,320,632	3.3	9.7	3.0	0.3	9.9	4.0
Public administration .....	6,212,015	5.5	9.4	4.6	1.5	1.9	0.9

Source: United States Census 2000, Sample Edited Detail File.

areas in the ten highest had about 3 out of 10 workers employed in sales and office occupations.

**Nine out of ten metropolitan areas with the highest percentage of construction, extraction, and maintenance workers were in the South.**

Nine out of ten metropolitan areas with the highest percentage of workers in construction, extraction, and maintenance occupations were in the South in 2000. The only area not in the South was Casper, WY, which was in the West. All of the ten were relatively small, with none having more than 200,000 workers.

Similarly, each of the ten metropolitan areas with the highest percentage of workers in production, transportation, and material moving occupations in 2000 was small: only one had more than 100,000

workers. The leading metropolitan areas in this group were Hickory-Morganton-Lenoir, NC, and Elkhart-Goshen, IN, with 34.3 percent and 32.7 percent<sup>14</sup> of their workforce in production, transportation, and material moving occupations.

**ADDITIONAL FINDINGS**

**\* How does occupation differ from industry?**

People often confuse industry and occupation data. Industry refers to the kind of business conducted by a person's employing organization; occupation describes the kind of work that person does on the job.

Some occupation groups are related closely to certain industries. Operators of transportation

<sup>14</sup> The difference between these two metropolitan areas was not statistically significant.

equipment, farm operators and workers, and health care providers account for major portions of their respective industries of transportation, agriculture, and health care. However, the industry categories include people in other occupations. For example, people employed in agriculture include truck drivers and bookkeepers; people employed in transportation include mechanics, freight handlers, and payroll clerks; and people in the health care industry include occupations such as security guard and secretary.

The industry classification system used during Census 2000 was developed for the census and consists of 265 categories classified into 13 major industry groups. The Census 2000 industry classification was developed from the 1997

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North American Industry Classification System (NAICS), which is an industry description system that groups establishments into industries based on activities in which they are primarily engaged. Several census data products use the aggregation structure shown in this report, while others, such as Summary File 3 and Summary File 4, use more detail.

**Some occupational groups have a closely related industry counterpart.**

About 82.2 percent of farming, fishing, and forestry workers were employed in agriculture, forestry, fishing and hunting, and mining industries. A little more than half (51.4 percent) of construction, extraction, and maintenance occupation workers were in the construction industry. Similarly, over half (50.5 percent) of workers in production, transportation, and material moving occupations were in manufacturing industries. Service occupations was the only occupational group to have a substantial percent of workers in two industry areas — arts, entertainment, recreation, accommodation and food service, with 33.5 percent; and educational, health and social services, with 28.4 percent. More than one-third (36.7 percent) of workers in management, professional and related occupations worked in the educational, health and social services industries. About 30.0 percent of sales and office workers worked in retail trade industries.

**ABOUT CENSUS 2000**

**Why Census 2000 asked about occupation.**

The study of occupations is important because it facilitates a better understanding of the economy by tracking labor force trends and identifying new and emerging occupations, such as those related to computers or the Internet. It also provides a window on changes taking place in society, reflected by the work people do.

Specifically, information on occupations is used by a number of federal agencies to distribute funds, to develop policy, and to measure compliance with laws and regulations. For example, occupation data are required by the Bureau of Economic Analysis to develop state per capita income estimates, which are used in the allocation formulas or eligibility criteria of more than 20 federal programs. Data are used to help the Environmental Protection Agency, under the Toxic Substances Control Act, to identify occupations that expose people to harmful chemicals and that adversely affect the environment. They are also used by the Equal Employment Opportunity Commission, under the Civil Rights and Equal Pay Acts, to monitor compliance with federal law and to investigate complaints where employment discrimination is alleged. Occupation data are used by the Department of Labor to formulate policies and programs for employment, career development, and training.

**Accuracy of the Estimates**

The data contained in this product are based on the sample of households who reported to the Census 2000 long form. Nationally, approximately 1 out of every 6 housing units was included in this sample. As a result, the sample estimates may differ somewhat from the 100-percent figures that would have been obtained if all housing units, people within those housing units, and people living in group quarters had been enumerated using the same questionnaires, instructions, enumerators, and so forth. The sample estimates also differ from the values that would have been obtained from different samples of housing units, people within those housing units, and people living in group quarters. The deviation of a sample estimate from the average of all possible samples is called the sampling error.

In addition to the variability that arises from the sampling procedures, both sample data and 100-percent data are subject to nonsampling error. Nonsampling error may be introduced during any of the various complex operations used to collect and process census data. Such errors may include: not enumerating every household or every person in the population, failing to obtain all required information from the respondents, obtaining incorrect or inconsistent information, and recording information incorrectly. In addition, errors can occur during the field review of the enumerators' work, during clerical handling of

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the census questionnaires, or during the electronic processing of the questionnaires.

Nonsampling error may affect the data in two ways: (1) errors that are introduced randomly will increase the variability of the data and, therefore, should be reflected in the standard errors; and (2) errors that tend to be consistent in one direction will bias both sample and 100-percent data in that direction. For example, if respondents consistently tend to underreport their incomes, then the resulting estimates of households or families by income category will tend to be understated for the higher income categories and overstated for the lower income categories. Such biases are not reflected in the standard errors.

While it is impossible to completely eliminate error from an operation as large and complex as the decennial census, the Census Bureau attempts to control the sources of such error during the data collection and processing operations. The primary sources of error and the programs instituted to control error in Census 2000 are described in detail in *Summary File 3*

*Technical Documentation* under Chapter 8, "Accuracy of the Data," located at [www.census.gov/prod/cen2000/doc/sf3.pdf](http://www.census.gov/prod/cen2000/doc/sf3.pdf).

All statements in this Census 2000 Brief have undergone statistical testing and all comparisons are significant at the 90-percent confidence level, unless otherwise noted. The estimates in tables, maps, and other figures may vary from actual values due to sampling and nonsampling errors. As a result, estimates in one category may not be significantly different from estimates assigned to a different category. Further information on the accuracy of the data is located at [www.census.gov/prod/cen2000/doc/sf3.pdf](http://www.census.gov/prod/cen2000/doc/sf3.pdf). For further information on the computation and use of standard errors, contact the Decennial Statistical Studies Division at 301-763-4242.

**For More Information.**

The Census 2000 Summary File 3 data are available from the American Factfinder on the Internet ([factfinder.census.gov](http://factfinder.census.gov)). They were released on a state-by-state basis during 2002. For information on confidentiality protection,

nonsampling error, sampling error, and definitions, also see [www.census.gov/prod/cen2000/doc/sf3.pdf](http://www.census.gov/prod/cen2000/doc/sf3.pdf) or contact the Customer Services Center at 301-763-INFO (4636).

Information on population and housing topics is presented in the Census 2000 Brief series, located on the Census Bureau's Web site at [www.census.gov/population/www/cen2000/briefs.html](http://www.census.gov/population/www/cen2000/briefs.html). This series, which will be completed in 2003, presents information on race, Hispanic origin, age, sex, household type, housing tenure, and social, economic, and housing characteristics, such as ancestry, income, and housing costs.

For additional information on occupations in the United States, including reports and survey data, visit the Census Bureau's Internet site at [www.census.gov/hhes/www/occupation.html](http://www.census.gov/hhes/www/occupation.html).

To find information about the availability of data products, including reports, CD-ROMs, and DVDs, call the Customer Services Center at 301-763-INFO (4636), or e-mail [webmaster@census.gov](mailto:webmaster@census.gov).

## Poverty Thresholds 2000

(Use landscape & legal printer options to print this table)  
 Poverty Thresholds for 2000 by Size of Family and Number of Related Children Under 18 Years

Size of family unit	Weighted Average Thresholds	Related children under 18 years											
		None	One	Two	Three	Four	Five	Six	Seven	Eight or more			
One person (unrelated individual).....	8,794												
Under 65 years.....	8,959	8,959											
65 years and over.....	8,259	8,259											
<hr/>													
Two persons.....	11,239												
Householder under 65 years.....	11,590	11,531	11,869										
Householder 65 years and over.....	10,419	10,409	11,824										
<hr/>													
Three persons.....	13,738	13,470	13,861	13,874									
Four persons.....	17,603	17,761	18,052	17,463	17,524								
Five persons.....	20,819	21,419	21,731	21,065	20,550	20,236							
Six persons.....	23,528	24,636	24,734	24,224	23,736	23,009	22,579						
Seven persons.....	26,754	28,347	28,524	27,914	27,489	26,696	25,772	24,758					
Eight persons.....	29,701	31,704	31,984	31,408	30,904	30,188	29,279	28,334	28,093				
Nine persons or more.....	35,060	38,138	38,322	37,813	37,385	36,682	35,716	34,841	34,625	33,291			
<b>Source:</b> U.S. Census Bureau													

Source: U.S. Census Bureau | Poverty | Last Revised: September 16, 2010

## Poverty Thresholds 2009

Poverty Thresholds for 2009 by Size of Family and Number of Related Children Under 18 Years

Size of Family Unit	Weighted Average Thresholds	Related children under 18 years											
		None	One	Two	Three	Four	Five	Six	Seven	Eight or more			
One person (unrelated individual) .....	10,956												
Under 65 years .....	11,161	11,161											
65 years and over .....	10,289	10,289											
Two people .....	13,991												
Householder under 65 years .....	14,439	14,366	14,787										
Householder 65 years and over .....	12,982	12,968	14,731										
Three people .....	17,098	16,781	17,268	17,285									
Four people .....	21,954	22,128	22,490	21,756	21,832								
Five people .....	25,991	26,686	27,074	26,245	25,603	25,211							
Six people .....	29,405	30,693	30,815	30,180	29,571	28,666	28,130						
Seven people .....	33,372	35,316	35,537	34,777	34,247	33,260	32,108	30,845					
Eight people .....	37,252	39,498	39,847	39,130	38,501	37,610	36,478	35,300	35,000				
Nine people or more .....	44,366	47,514	47,744	47,109	46,576	45,701	44,497	43,408	43,138	41,476			

**Note:** The poverty thresholds are updated each year using the change in the average annual Consumer Price Index for All Urban Consumers (CPI-U). Since the average annual CPI-U for 2009 was lower than the average annual CPI-U for 2008, poverty thresholds for 2009 are slightly lower than the corresponding thresholds for 2008.

**Source:** U.S. Census Bureau

Source: U.S. Census Bureau | Poverty | Last Revised: September 16, 2010

## **Attachment 3d**

Bureau of Indian Affairs Labor Force Report Definitions



## **Service Population**

The total 2005 Service Population of 1,731,178 represents an increase of 143,659 Indian residents or 9 percent over the 1,587,519 reported in the 2003 Labor Force Report.

The total 2005 Service Population represents an increase of 470,972 or 37 percent over the 1,260,206 total Service Population reported in 1995, and an increase of 996,283 or 136 percent over the total Service Population of 734,895 reported in 1982 (the earliest year for which historical data is available).

The 2005 increase in Service Population is attributed to increased record-keeping and improved data collection methods, as well as eligible Indian individuals and families who came to reside in a tribe's service area to benefit from opportunities and services unavailable to them in off-reservation communities. The trend, wherein enrolled Indians returned to reside on or near a reservation, continued in 2005.

## **Employment**

Unemployment, as a percent of the available labor force, did not change between 2003 and 2005, remaining at 49 percent.

The total 2005 workforce (i.e., those available for work) of 872,483 increased by 71,955 individuals, a 9 percent increase over the total workforce of 800,528 reported in 2003. The total 2005 workforce increase is, in part, attributable to the increase of 84,771 reservation residents in the Service Population who were age 16 to 64, as well as the increase in the number of Indians who were available for work.

Between 2003 and 2005, private sector employment increased by 14 percent or 24,439 (from 178,692 in 2003 to 203,131 in 2005). During the same time period, public sector employment increased by 8 percent or 18,195 (from 227,131 in 2003 to 245,326 in 2005). Hence, the total number of employed Indians increased by 11 percent (from 405,823 to 450,511) over the two-year period.

In 2005, Indian individuals employed but earning wages below the poverty level increased by 494 or less than 1 percent between 2003 (131,728) and 2005 (132,222). Even so, the percentage of those employed below the poverty guidelines decreased from 32 percent in 2003 to 29 percent in 2005.

Since the total number of employed Indians increased by 11 percent, from 2003 to 2005, and the number of Indians who were employed under the poverty guidelines increased by less than 1 percent in the same two-year period, this yielded a slight net decrease (3 percent) in the proportion of the Indian reservation population who were employed below the poverty guideline.

## Report Coverage

Each tribe that responded designated a tribal labor force coordinator who used a standardized survey reporting form to collect data and provide estimates on their enrolled members and members from other tribes who lived “on-or-near” the reservation and who were eligible to use the tribe’s BIA-funded services. The aggregated total of those eligible to use the services constituted the tribe’s Indian “Service Population.” Excluded from each tribe’s 2005 Service Population total and other report totals were members who, for example, were serving in the Armed Forces or attending post-secondary institutions and not residing on tribal lands. Members were also excluded from the tribe’s Service Population if they had relocated for purposes of direct employment or were incarcerated or confined to a long-term treatment facility.

The data within the Regional section of this Report are provided by Tribe, by BIA Agency, and by BIA Region. The Navajo Nation is listed by BIA Agency under the BIA Navajo Region. Alaska Native entities are listed individually or grouped by consortium.

### Definitions Used for the Report (from 25 CFR § 20.1)

**Indian** means any person who is a member of a federally recognized Indian tribe. Some tribes have enrollment criteria that allows their members to have a blood quantum less than the one-fourth specified in 25 CFR § 20.1.

**Indian Tribes** are tribes, bands, nations, rancherias, pueblos, colonies, communities, and Alaska Native groups recognized as eligible for funding and services from the BIA and included in the current list of tribal entities, pursuant to Section 104 of the Act of November 2, 1994 (Pub. L. 103-454; 108 Stat. 4791). The list was last published in the Federal Register on November 25, 2005.

**Near Reservation** means those areas or communities adjacent or contiguous to a reservation, which are designated by the Assistant Secretary upon recommendation of the local BIA Superintendent. The recommendation is based upon consultation with the tribal governing body of those reservations on the basis of such general criteria as:

- ▶ Number of Indian people native to the reservation residing in the area;
- ▶ A written designation by the tribal governing body that members of their tribe and family members who are Indians and residing in the area are socially, culturally, and economically affiliated with the tribe and the reservation;
- ▶ Geographic proximity of the area to the reservation; and
- ▶ Administrative feasibility of providing an adequate level of service.

For Alaska, the term includes the entire State, since Alaska Native tribes are typically isolated from each other and are not formed as reservations, except for the Metlakatla Indian Community on the Annette Island Reserve in southeast Alaska.

**On Reservation** means American Indians who live within present reservation boundaries and who are eligible for BIA-funded services.

**Resident Indian** means American Indians living on or near Federal reservations who are considered part of the tribe's service population.

### **Report Headings/Terms**

**Tribal Enrollment** is the total number of tribal enrollees who are certified as being tribal members by their tribe's leader or designate. Pursuant to tribal governing documents, tribal enrollees may live on-reservation or anywhere outside the reservation – for example, in distant towns, cities, or foreign countries.

**Total Service Population** is the tribe's estimate of all American Indians and Alaska Natives, members and non-members, who are living on or near the tribe's reservation during the 2005 calendar year and who are eligible to use BIA-funded services. The aggregated sum of those reported as "Age Under 16", "Age 16-64", and "Age 65 and Over" sub-totals of a given tribe equals the tribe's "Total Service Population". Typically, Indians included in a tribe's Service Population live within a reasonable distance of the reservation from where they can access the tribe's services. Such Indians typically do not live in distant cities, towns, or foreign countries.

**Not Available for Work** is the total estimated number of individuals who were age 16 and over and who were included in a tribe's Service Population, but because of personal circumstances were unable to assume or sustain gainful employment.

**Available for Work** represents the tribe's 2005 "Total Work Force" and is the sum of the "Age 16-64" and "Age 65 and Over" sub-totals minus the number of individuals who were "Not Available for Work".

**Number Employed** is determined by aggregating the tribe's estimated subtotals of the number of individuals in its Service Population who were employed by either public, private, or tribal entities.

**Number Not Employed** is determined by subtracting the "Number Employed" from the tribe's number of individuals in the tribe who were "Available for Work".

**Unemployed as a percent of the Labor Force** is determined by dividing the "Number Not Employed" by the "Total Workforce" (also called the "Available for Work" total).

**Employed, but Below Poverty Guidelines** is determined by using the U.S. Department of Health and Human Services (DHHS) 2005 Poverty Guidelines. The tribe estimated the number of its employed workforce whose annual earned income was below the poverty guidelines. For example, for a family of two the poverty threshold of combined earned income was \$12,830 and for a family of four the poverty threshold of combined earned income was \$19,350 (for Alaska, \$16,030 and \$24,190, respectively). Additionally, the report tables show the percent of those employed below the “Poverty Guideline.” This percent is derived by dividing the tribe’s estimated total number of “Employed, but Below Poverty Guidelines” by the “Number Employed”.

### **Description of Report Tables**

#### **State**

This table provides information, by state, on the number of Indians who reside on or near a reservation in that state.

#### **Regional**

This series of tables provides information on those tribes which were under each BIA Region. In addition, a Self-Governance Table provides information on self-governing tribes.

#### **Alphabetical**

This table provides a quick reference tool to locate a specific tribe.

#### **Report Participation**

This table provides information on how current and complete the data are for this report. The data included in the 2005 biennial report are reasonably current in that 73 percent of the reporting entities submitted data for the 2005 reporting period and an additional 18 percent submitted data in 2003. Therefore, 91 percent of the data in the report are no older than the previous reporting period (2003). This report participation analysis was not preformed in prior reporting periods.

### **Additional Information**

Any questions regarding a specific tribe’s labor market information can be directed to the tribe’s BIA Agency, Field Office, or Regional Office. The current BIA Tribal Leaders Directory, with contact information for BIA Regional and Agency offices and the federally recognized tribes, can be accessed at [www.doi.gov/leaders.pdf](http://www.doi.gov/leaders.pdf). This report can be accessed at [www.doi.gov/triballaborforce2005.pdf](http://www.doi.gov/triballaborforce2005.pdf).

### Note to Readers

The process for collecting data included in the *American Indian Population and Labor Force Report* has remained unchanged since 1999. Tribes are provided written instructions and technical assistance, if requested, to report the data. Data is certified by the tribe. In most cases, BIA reports data as reported by the tribes. An analysis of the data provided in this report, however, reveals problems in the population data reported by the tribes. Users of this report should also be aware that the unemployment data detailed in the report is calculated pursuant to the law that requires the report and that this definition of employment is not the same as that used by the Federal Bureau of Labor Statistics.

Population Data includes “Tribal Enrollment” and the “Total Eligible for Services” data reported by Tribes. Tribes are instructed to report “Tribal Enrollment” as well as the “Total [number of individuals] Eligible for Services” within the tribal domain. The distinction is made because services provided through BIA funding are only available to tribal members living on or near the reservation. The numbers differ because not all enrolled members live on or near the tribal reservation (because they are serving in the armed forces or attending colleges or live in another part of the country, for example.) Conversely, in many cases members of one tribe may live on or near another tribe’s reservation (because of marriage, for example). These individuals are eligible for services provided through BIA funding from the tribe on whose reservation they live on or near.

A review of the reported population data indicates that many tribes do not report these numbers as instructed. For example, there are many cases where “Tribal Enrollment” and the “Total Eligible for Services” are identical, which while possible, is not probable, especially to the extent reported in this document. BIA believes that many of the reporting issues may be the result of misunderstandings of how to fill out the data submission form. To address this problem, as part of the 2007 data collection, the BIA will re-examine its data collection process and train the tribes on how to fill out the submission forms so that future Labor Force Reports reflect a truer depiction of Tribal enrollment and BIA service population in Indian Country.

Unemployment Data is calculated consistent with the methodology included in the Indian Employment, Training and Related Services Demonstration Act of 1992 (P. L. 102-477), which differs from the methodology used by the Federal Bureau of Labor Statistics. The BLS unemployment rates includes adults who do not have a job, are currently available for work, and who have actively looked for work in the last 4 weeks. The BIA definition includes the BLS definition plus those who would like a job but who are no longer actively looking for work. The difference in calculations generally leads to the Tribes reporting significantly higher unemployment rates than those reported by BLS for counties and states in proximity to the reservations.



## **Attachment 4**

Health Advisory



# HEALTH ADVISORY



## **AVOID WATER CONTACT IN IRON GATE AND COPCO RESERVOIRS**

Pollution has resulted in high levels of blue-green algae that can produce harmful toxins. This has resulted in violations of the State's water quality standards

- Do not use this water for drinking or cooking
- Fish from these waters previously tested positive for an algal toxin. Limit or avoid consuming fish as the risk to human health is being evaluated by public health agencies
- Do not consume fish innards, and wash fillets with drinking water

**Children and pets are at greatest risk**

For more information contact staff at:

North Coast Regional Water Quality Control Board

(707) 576-2220



## **Attachment 5**

5a Indian Health Care Improvement Act Made Permanent by Health  
Care Reform Legislation

5b 90 Stat. 1400 1976



## **Attachment 5a**

Indian Health Care Improvement Act Made Permanent by Health Care Reform Legislation



## Indian Health Care Improvement Act Made Permanent By Health Care Reform Legislation

By Craig A. Conway, J.D., LL.M. (Health Law)  
caconway@central.uh.edu

Included in the recently-passed Patient Protection and Affordable Care Act<sup>1</sup> signed into law by President Obama was the reauthorization of the Indian Health Care Improvement Act (IHCIA)<sup>2</sup> – considered to be the cornerstone legal authority for the provision of progressive health care services to American Indians and Alaska Natives (AI/AN).<sup>3</sup> Viewed as a victory for individuals and tribes that have requested the legislation for the past ten years, the reauthorization of the IHCIA affirms the federal government's trust responsibility to provide health care to AI/ANs across the country.<sup>4</sup>

### Background

During the 1890s, the federal government began to advocate the assimilation of Native Americans into mainstream American life.<sup>5</sup> As part of that assimilation process, the government sought to increase the tribes' dependence on medicine practiced by physicians of the West and decreased reliance on Tribal practices. The Bureau of Indian Affairs oversaw congressional appropriations used for health care programs offered to American Indians. Since that time, the responsibility for their health care oversight has bounced around and currently is placed with the Indian Health Service (IHS), a division of the U.S. Department of Health and Human Services.

The IHS provides health care services to 1.9 million of the estimated 3.3 million nationwide AI/ANs belonging to 562 federally-recognized tribes in 35 states.<sup>6</sup> The agency does this through a network of 63 health centers, 29 hospitals, and 28 health stations which are managed by 161 service units and 12 Area Offices.<sup>7</sup> Health care services are delivered in three ways: (1) directly through IHS services; (2) through tribal medical services; or (3) by contract with non-IHS service providers.<sup>8</sup>

Better quality and increased health care services provided to AI/ANs has been met with some success in the last 30 years. Life expectancy among the Indian people has

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<sup>1</sup> Patient Protection and Affordable Care Act, H.R. 3590, Pub. L. No. 111-148, 111th Cong. (2010).

<sup>2</sup> Indian Health Care Improvement Act, Pub. L. No. 94-437, 94th Cong. (Sept. 30, 1976).

<sup>3</sup> See Nat'l Indian Health Bd., Press Release, *America Reaffirms Health Care for Indian Country*, (Mar. 21, 2010), <http://www.nihb.org/docs/03212010/PR-03.21.10%20FINAL.pdf>.

<sup>4</sup> *Id.*

<sup>5</sup> Gary D. Sandefur, *Federal Policy Toward Minorities, 1787-1980*, 10 FOCUS 21 (1987), available at <http://www.irp.wisc.edu/publications/focus/pdfs/foc102c.pdf>.

<sup>6</sup> Indian Health Serv., *Indian Health Service Introduction*, [http://www.ihs.gov/PublicInfo/PublicAffairs/Welcome\\_Info/IHSintro.asp](http://www.ihs.gov/PublicInfo/PublicAffairs/Welcome_Info/IHSintro.asp) (last accessed Apr. 3, 2010).

<sup>7</sup> Indian Health Serv., *IHS Year 2010 Profile*, <http://info.ihs.gov/Profile2010.asp> (last accessed Apr. 3, 2010).

<sup>8</sup> Indian Health Serv., *Quick Look*, <http://info.ihs.gov/QuickLook2010.asp> (last accessed Apr. 3, 2010). See also Holly T. Kuschell-Haworth, *Jumping Through Hoops: Traditional Healers And The Indian Health Care Improvement Act*, 4 DEPAUL J. OF HEALTH CARE L. 843 (Summer 1999).

increased by more than 9 years since 1973 while mortality rates have decreased for infant deaths, tuberculosis, pneumonia, influenza, homicide, suicide, and alcoholism.<sup>9</sup> However, disparities for each of those categories still exist compared with the U.S. general population. Indian life expectancy is still nearly 5 years less than the average American while death rates for various illnesses and other causes are significantly higher across the board.<sup>10</sup>

### Federal Legislation Governing AI/AN Health Care

The duty of the federal government to provide health services to Indian Tribes derives from a number of different sources, including negotiated treaties to ceded lands, settlements, agreements, and legislation.<sup>11</sup> The principal legislation authorizing federal funds for health services to American Indians is the Snyder Act of 1921.<sup>12</sup> That legislation authorized funds for “the relief of distress and conservation of health...[and]...for the employment of...physicians...for Indian Tribes throughout the United States.”<sup>13</sup> Following the Snyder Act, Congress created a patchwork process for transferring the responsibility of overseeing health programs to tribal governments in 1975.

By enacting the Indian Self-Determination and Education Assistance Act of 1975,<sup>14</sup> Congress sought to provide Indian Tribes with a greater role in governing their own health care and education programs. The 1975 Act contained two provisions: (1) the Indian Self-Determination Act, which established procedures by which Tribes could eventually administer their own education and social service programs, and (2) the Indian Education Assistance Act, which sought to increase parental involvement in Indian education.<sup>15</sup> Since 1975 the Act has been amended several times. The following year, Congress passed a health care-specific bill designed to provide the quality and quantity of health care services necessary to elevate the health status of AI/ANs to the highest possible health status and to provide existing Indian health services with all resources necessary to effect that policy.

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<sup>9</sup> *Id.*

<sup>10</sup> *Id.* For example, tuberculosis (500% higher), alcoholism (519% higher), diabetes (195% higher), unintentional injuries (149% higher), homicide (92% higher), and suicide (72% higher).

<sup>11</sup> Nat’l Indian Health Bd., *supra* note 3. See also Holly T. Kuschell-Haworth, *Jumping Through Hoops: Traditional Healers And The Indian Health Care Improvement Act*, 4 DEPAUL J. OF HEALTH CARE L. 843 (Summer 1999).

<sup>12</sup> Pub. L. No. 67-85, 42 Stat. 208 (Nov. 2, 1921), *codified at* 25 U.S.C. 1 *et seq.* (2001), *available at* [http://www.ihs.gov/adminmngresources/legislativeaffairs/legislative\\_affairs\\_web\\_files/key\\_acts/snyder\\_act.pdf](http://www.ihs.gov/adminmngresources/legislativeaffairs/legislative_affairs_web_files/key_acts/snyder_act.pdf).

<sup>13</sup> *Id.* See also Indian Health Serv., *Fact Sheet*, [http://www.ihs.gov/PublicAffairs/Welcme\\_Info/ThisFacts.asp](http://www.ihs.gov/PublicAffairs/Welcme_Info/ThisFacts.asp) (last accessed Apr. 3, 2010).

<sup>14</sup> Pub. L. No. 93-638, 88 Stat. 2203 (1975), *codified as* 25 U.S.C. §§ 450a-450n, and as amended in scattered sections of 25 U.S.C, 42 U.S.C, and 50 U.S.C.).

<sup>15</sup> *Id.* See also GEORGE CASTILE, *TO SHOW HEART: NATIVE AMERICAN SELF-DETERMINATION AND FEDERAL INDIAN POLICY, 1960–1975* (Univ. of Ariz. Press, 1998); THOMAS CLARKIN, *FEDERAL INDIAN POLICY IN THE KENNEDY AND JOHNSON ADMINISTRATIONS, 1961–1969*, (Univ. of N.M. Press, 2001).

In 1976, Congress found that many IHS facilities were “inadequate, outdated, inefficient, and undermanned,” and enacted the Indian Health Care Improvement Act (IHCIA)<sup>16</sup> to “implement the Federal responsibility for the care and education of the Indian people by improving the services and facilities of Federal Indian health programs and encouraging maximum participation” in those programs.<sup>17</sup> Specific portions of the IHCIA contained language that would ensure that AI/ANs could obtain access to high-quality, comprehensive health care services when needed and also established procedures for the IHS to assist tribes in developing infrastructure to manage their health programs. Since 1976, the legislation has been amended numerous times,<sup>18</sup> including substantive changes in 1992 which extended the act’s purpose of raising the health status of AI/ANs over a specified period of time to the level of the general U.S. population.<sup>19</sup>

During the late 1990s, the IHS worked closely with Indian Tribes and governments to draft amendments to IHCIA that would provide greater administrative capabilities to tribal health programs and increase quality of care given.<sup>20</sup> In 1999, a National Steering Committee was established to review those proposed recommendations and complete a final legislative draft. By late 1999, the Committee’s final proposal was in the hands of the Congressional leadership as well as the White House. However, nothing ever materialized.

The IHCIA expired in 2000, but was extended through 2001 in the belief that Congress would reauthorize it shortly thereafter. Yet, since 2001 Congress has only held hearings on various proposals but enacted no substantive changes to the IHCIA until the recently-passed health care reform legislation was passed.

### Reauthorization of IHCIA

The version of the IHCIA signed into law on March 23, 2010, differs in several ways from the original 1976 version. It includes many major changes and improvements to effectuate the delivery of health care services to AI/ANs, including:

- Enhances the authority of the IHS Director, including the responsibility to facilitate advocacy and promote consultation on matters relating to Indian health within the Department of Health and Human Services.

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<sup>16</sup> Pub. L. No. 94-437, 90 Stat. 400, 94th Cong. (Sept. 30, 1976); *Ariz. Health Care Cost Containment Sys. v. McClellan*, 508 F.3d 1243, 1246 (9th Cir.2007).

<sup>17</sup> *Id.*

<sup>18</sup> Pub. L. No. 94-437, 90 Stat. 400, 94th Cong. (Sept. 30, 1976), as amended by Pub. L. No. 96-537 (Dec. 17, 1980), Pub. L. No. 100-579 (Oct. 31, 1988), Pub. L. No. 100-690 (Nov. 18, 1988), Pub. L. No. 100-713 (Nov. 23, 1988), Pub. L. No. 101-630 (Nov. 28, 1990), Pub. L. No. 102-573 (Oct. 29, 1992), Pub. L. No. 104-313 (Oct. 19, 1996), and Pub. L. No. 106-417 (Nov. 1, 2000). A copy of the marked-up legislation may be found at <http://www.ihs.gov/adminmngresources/ihcia/documents/ihcia.pdf>.

<sup>19</sup> *Id.* See also Holly T. Kuschell-Haworth, *supra* note 8.

<sup>20</sup> Indian Health Serv., *Indian Health Care Improvement Act*, <http://info.ihs.gov/TreatiesLaws/Treaties3.pdf> (last accessed Apr. 3, 2010).

- Provides authorization for hospice, assisted living, long-term, and home- and community-based care.
- Extends the ability to recover costs from third parties to tribally operated facilities.
- Updates current law regarding collection of reimbursements from Medicare, Medicaid, and CHIP (Children’s Health Insurance Program) by Indian health facilities.
- Allows tribes and tribal organizations to purchase health benefits coverage for IHS beneficiaries.
- Authorizes IHS to enter into arrangements with the Departments of Veterans Affairs and Defense to share medical facilities and services.
- Allows a tribe or tribal organization carrying out a program under the Indian Self-Determination and Education Assistance Act and an urban Indian organization carrying out a program under Title V of IHCA to purchase coverage for its employees from the Federal Employees Health Benefits Program.
- Authorizes the establishment of a Community Health Representative program for urban Indian organizations to train and employ Indians to provide health care services.
- Directs the IHS to establish comprehensive behavioral health, prevention, and treatment programs for Indians.<sup>21</sup>

The inclusion of the IHCA in the reform legislation was hailed by the National Indian Health Board as a much-needed provision. “No one can deny the intense political climate that has been present in the debates regarding health care reform. However, there is one issue that has remained consistently agreed upon: Indian Country is in dire need of health care reform,” said Reno Franklin, Chairman of the National Indian Health Board.<sup>22</sup> Adding to that sentiment, President Obama remarked after he signed the reform legislation that he “believes it is unacceptable that Native American communities still face gaping health care disparities.”<sup>23</sup>

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<sup>21</sup> Pub. L. No. 94-437, 90 Stat. 400, 94th Cong. (Sept. 30, 1976); Patient Protection and Affordable Care Act, H.R. 3590, Pub. L. No. 111-148, 111th Cong. (2010) at Sec. 10221; U.S. Dep’t of Health & Human Servs., Press Release, *Indian Health Care Improvement Act Made Permanent*, (Mar. 26, 2010), <http://www.hhs.gov/news/press/2010pres/03/20100326a.html>.

<sup>22</sup> Nat’l Indian Health Bd., Press Release, *America Reaffirms Health Care for Indian Country*, Mar. 21, 2010, <http://www.nihb.org/docs/03212010/PR-03.21.10%20FINAL.pdf>.

<sup>23</sup> The White House, Office of the Press Sec’y, *Statement by the President on the Reauthorization of the Indian Health Care Improvement Act*, Mar. 23, 2010, <http://www.whitehouse.gov/the-press-office/statement-president-reauthorization-indian-health-care-improvement-act>; U.S. Dep’t of Health &

## Conclusion

Federal funding for the IHCIA has contributed billions of dollars to improve the health status of Indian people, yet significant health care disparities still exist compared with the U.S. general population. Hopefully, the inclusion of the IHCIA in the reform legislation will be a significant step towards reducing those disparities.

### **Health Law Perspectives (April 2010)**

Health Law & Policy Institute

University of Houston Law Center

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## **Attachment 5b**

90 Stat. 1400 1976



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Public Law 94-437  
94th Congress

An Act

Sept. 30, 1976  
[S. 522]

To implement the Federal responsibility for the care and education of the Indian people by improving the services and facilities of Federal Indian health programs and encouraging maximum participation of Indians in such programs, and for other purposes.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That this Act may be cited as the "Indian Health Care Improvement Act".*

Indian Health  
Care  
Improvement  
Act.  
25 USC 1601  
note.  
25 USC 1601.

FINDINGS

SEC. 2. The Congress finds that—

(a) Federal health services to maintain and improve the health of the Indians are consonant with and required by the Federal Government's historical and unique legal relationship with, and resulting responsibility to, the American Indian people.

(b) A major national goal of the United States is to provide the quantity and quality of health services which will permit the health status of Indians to be raised to the highest possible level and to encourage the maximum participation of Indians in the planning and management of those services.

(c) Federal health services to Indians have resulted in a reduction in the prevalence and incidence of preventable illnesses among, and unnecessary and premature deaths of, Indians.

(d) Despite such services, the unmet health needs of the American Indian people are severe and the health status of the Indians is far below that of the general population of the United States. For example, for Indians compared to all Americans in 1971, the tuberculosis death rate was over four and one-half times greater, the influenza and pneumonia death rate over one and one-half times greater, and the infant death rate approximately 20 per centum greater.

(e) All other Federal services and programs in fulfillment of the Federal responsibility to Indians are jeopardized by the low health status of the American Indian people.

(f) Further improvement in Indian health is imperiled by—

(1) inadequate, outdated, inefficient, and undermanned facilities. For example, only twenty-four of fifty-one Indian Health Service hospitals are accredited by the Joint Commission on Accreditation of Hospitals; only thirty-one meet national fire and safety codes; and fifty-two locations with Indian populations have been identified as requiring either new or replacement health centers and stations, or clinics remodeled for improved or additional service;

(2) shortage of personnel. For example, about one-half of the Service hospitals, four-fifths of the Service hospital outpatient clinics, and one-half of the Service health clinics meet only 80 per centum of staffing standards for their respective services;

(3) insufficient services in such areas as laboratory, hospital inpatient and outpatient, eye care and mental health services, and services available through contracts with private physicians, clinics, and agencies. For example, about 90 per centum of the surgical operations needed for otitis media have not been performed, over 57 per centum of required dental services remain to be provided, and about 98 per centum of hearing aid requirements are unmet;

(4) related support factors. For example, over seven hundred housing units are needed for staff at remote Service facilities;

(5) lack of access of Indians to health services due to remote residences, undeveloped or underdeveloped communication and transportation systems, and difficult, sometimes severe, climate conditions; and

(6) lack of safe water and sanitary waste disposal services. For example, over thirty-seven thousand four hundred existing and forty-eight thousand nine hundred and sixty planned replacement and renovated Indian housing units need new or upgraded water and sanitation facilities.

(g) The Indian people's growth of confidence in Federal Indian health services is revealed by their increasingly heavy use of such services. Progress toward the goal of better Indian health is dependent on this continued growth of confidence. Both such progress and such confidence are dependent on improved Federal Indian health services.

#### DECLARATION OF POLICY

SEC. 3. The Congress hereby declares that it is the policy of this Nation, in fulfillment of its special responsibilities and legal obligation to the American Indian people, to meet the national goal of providing the highest possible health status to Indians and to provide existing Indian health services with all resources necessary to effect that policy.

25 USC 1602.

#### DEFINITIONS

SEC. 4. For purposes of this Act—

25 USC 1603.

(a) "Secretary", unless otherwise designated, means the Secretary of Health, Education, and Welfare.

(b) "Service" means the Indian Health Service.

(c) "Indians" or "Indian", unless otherwise designated, means any person who is a member of an Indian tribe, as defined in subsection (d) hereof, except that, for the purpose of sections 102, 103, and 201(c)(5), such terms shall mean any individual who (1), irrespective of whether he or she lives on or near a reservation, is a member of a tribe, band, or other organized group of Indians, including those tribes, bands, or groups terminated since 1940 and those recognized now or in the future by the State in which they reside, or who is a descendant, in the first or second degree, of any such member, or (2) is an Eskimo or Aleut or other Alaska Native, or (3) is considered by the Secretary of the Interior to be an Indian for any purpose, or (4) is determined to be an Indian under regulations promulgated by the Secretary.

(d) "Indian tribe" means any Indian tribe, band, nation, or other organized group or community, including any Alaska Native village or group or regional or village corporation as defined in or established pursuant to the Alaska Native Claims Settlement Act (85 Stat. 688), which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.

43 USC 1601  
note.

(e) "Tribal organization" means the elected governing body of any Indian tribe or any legally established organization of Indians which is controlled by one or more such bodies or by a board of directors elected or selected by one or more such bodies (or elected by the Indian population to be served by such organization) and which includes the maximum participation of Indians in all phases of its activities.

(f) "Urban Indian" means any individual who resides in an urban center, as defined in subsection (g) hereof, and who meets one or more

of the four criteria in subsection (c) (1) through (4) of this section.

(g) "Urban center" means any community which has a sufficient urban Indian population with unmet health needs to warrant assistance under title V, as determined by the Secretary.

(h) "Urban Indian organization" means a nonprofit corporate body situated in an urban center, composed of urban Indians, and providing for the maximum participation of all interested Indian groups and individuals, which body is capable of legally cooperating with other public and private entities for the purpose of performing the activities described in section 503(a).

## TITLE I—INDIAN HEALTH MANPOWER

### PURPOSE

25 USC 1611.

Sec. 101. The purpose of this title is to augment the inadequate number of health professionals serving Indians and remove the multiple barriers to the entrance of health professionals into the Service and private practice among Indians.

### HEALTH PROFESSIONS RECRUITMENT PROGRAM FOR INDIANS

Grants.  
25 USC 1612.

Sec. 102. (a) The Secretary, acting through the Service, shall make grants to public or nonprofit private health or educational entities or Indian tribes or tribal organizations to assist such entities in meeting the costs of—

(1) identifying Indians with a potential for education or training in the health professions and encouraging and assisting them (A) to enroll in schools of medicine, osteopathy, dentistry, veterinary medicine, optometry, podiatry, pharmacy, public health, nursing, or allied health professions; or (B), if they are not qualified to enroll in any such school, to undertake such post-secondary education or training as may be required to qualify them for enrollment;

(2) publicizing existing sources of financial aid available to Indians enrolled in any school referred to in clause (1)(A) of this subsection or who are undertaking training necessary to qualify them to enroll in any such school; or

(3) establishing other programs which the Secretary determines will enhance and facilitate the enrollment of Indians, and the subsequent pursuit and completion by them of courses of study, in any school referred to in clause (1)(A) of this subsection.

Application,  
submittal and  
approval.

(b)(1) No grant may be made under this section unless an application therefor has been submitted to, and approved by, the Secretary. Such application shall be in such form, submitted in such manner, and contain such information, as the Secretary shall by regulation prescribe: *Provided*, That the Secretary shall give a preference to applications submitted by Indian tribes or tribal organizations.

Amount and  
payment.

(2) The amount of any grant under this section shall be determined by the Secretary. Payments pursuant to grants under this section may be made in advance or by way of reimbursement, and at such intervals and on such conditions as the Secretary finds necessary.

Appropriation  
authorization.

(c) For the purpose of making payments pursuant to grants under this section, there are authorized to be appropriated \$900,000 for fiscal year 1978, \$1,500,000 for fiscal year 1979, and \$1,800,000 for fiscal year 1980. For fiscal years 1981, 1982, 1983, and 1984 there are authorized to be appropriated for such payments such sums as may be specifically authorized by an Act enacted after this Act.

## HEALTH PROFESSIONS PREPARATORY SCHOLARSHIP PROGRAM FOR INDIANS

SEC. 103. (a) The Secretary, acting through the Service, shall make scholarship grants to Indians who—

(1) have successfully completed their high school education or high school equivalency; and

(2) have demonstrated the capability to successfully complete courses of study in schools of medicine, osteopathy, dentistry, veterinary medicine, optometry, podiatry, pharmacy, public health, nursing, or allied health professions.

(b) Each scholarship grant made under this section shall be for a period not to exceed two academic years, which years shall be for compensatory preprofessional education of any grantee.

(c) Scholarship grants made under this section may cover costs of tuition, books, transportation, board, and other necessary related expenses.

(d) There are authorized to be appropriated for the purpose of this section: \$800,000 for fiscal year 1978, \$1,000,000 for fiscal year 1979, and \$1,300,000 for fiscal year 1980. For fiscal years 1981, 1982, 1983, and 1984 there are authorized to be appropriated for the purpose of this section such sums as may be specifically authorized by an Act enacted after this Act.

Scholarship grants, eligibility requirements.  
25 USC 1613.

Two-year limitation.

Appropriation authorization.

## HEALTH PROFESSIONS SCHOLARSHIP PROGRAM

SEC. 104. Section 225(i) of the Public Health Service Act (42 U.S.C. 234(i)) is amended (1) by inserting "(1)" after "(i)", and (2) by adding at the end the following:

"(2) (A) In addition to the sums authorized to be appropriated under paragraph (1) to carry out the Program, there are authorized to be appropriated for the fiscal year ending September 30, 1978, \$5,450,000; for the fiscal year ending September 30, 1979, \$6,300,000; for the fiscal year ending September 30, 1980, \$7,200,000; and for fiscal years 1981, 1982, 1983, and 1984 such sums as may be specifically authorized by an Act enacted after the Indian Health Care Improvement Act, to provide scholarships under the Program to provide physicians, osteopaths, dentists, veterinarians, nurses, optometrists, podiatrists, pharmacists, public health personnel, and allied health professionals to provide services to Indians. Such scholarships shall be designated Indian Health Scholarships and shall be made in accordance with this section except as provided in subparagraph (B).

"(B) (i) The Secretary, acting through the Indian Health Service, shall determine the individuals who receive the Indian Health Scholarships, shall accord priority to applicants who are Indians, and shall determine the distribution of the scholarships on the basis of the relative needs of Indians for additional service in specific health professions.

"(ii) The active duty service obligation prescribed by subsection (e) shall be met by the recipient of an Indian Health Scholarship by service in the Indian Health Service, in a program assisted under title V of the Indian Health Care Improvement Act, or in the private practice of his profession if, as determined by the Secretary in accordance with guidelines promulgated by him, such practice is situated in a physician or other health professional shortage area and addresses the health care needs of a substantial number of Indians.

"(C) For purposes of this paragraph, the term 'Indians' has the same meaning given that term by subsection (c) of section 4 of the

Appropriation authorization.

Distribution.

Active duty service obligation.  
*Post*, p. 1410.

"Indians."

*Ante*, p. 1401. Indian Health Care Improvement Act and includes individuals described in clauses (1) through (4) of that subsection.”

#### INDIAN HEALTH SERVICE EXTERN PROGRAMS

25 USC 1614. SEC. 105. (a) Any individual who receives a scholarship grant pursuant to section 104 shall be entitled to employment in the Service during any nonacademic period of the year. Periods of employment pursuant to this subsection shall not be counted in determining the fulfillment of the service obligation incurred as a condition of the scholarship grant.

(b) Any individual enrolled in a school of medicine, osteopathy, dentistry, veterinary medicine, optometry, podiatry, pharmacy, public health, nursing, or allied health professions may be employed by the Service during any nonacademic period of the year. Any such employment shall not exceed one hundred and twenty days during any calendar year.

(c) Any employment pursuant to this section shall be made without regard to any competitive personnel system or agency personnel limitation and to a position which will enable the individual so employed to receive practical experience in the health profession in which he or she is engaged in study. Any individual so employed shall receive payment for his or her services comparable to the salary he or she would receive if he or she were employed in the competitive system. Any individual so employed shall not be counted against any employment ceiling affecting the Service or the Department of Health, Education, and Welfare.

Appropriation  
authorization.

(d) There are authorized to be appropriated for the purpose of this section: \$600,000 for fiscal year 1978, \$800,000 for fiscal year 1979, and \$1,000,000 for fiscal year 1980. For fiscal years 1981, 1982, 1983, and 1984 there are authorized to be appropriated for the purpose of this section such sums as may be specifically authorized by an Act enacted after this Act.

#### CONTINUING EDUCATION ALLOWANCES

25 USC 1615. SEC. 106. (a) In order to encourage physicians, dentists, and other health professionals to join or continue in the Service and to provide their services in the rural and remote areas where a significant portion of the Indian people resides, the Secretary, acting through the Service, may provide allowances to health professionals employed in the Service to enable them for a period of time each year prescribed by regulation of the Secretary to take leave of their duty stations for professional consultation and refresher training courses.

Appropriation  
authorization.

(b) There are authorized to be appropriated for the purpose of this section: \$100,000 for fiscal year 1978, \$200,000 for fiscal year 1979, and \$250,000 for fiscal year 1980. For fiscal years 1981, 1982, 1983, and 1984 there are authorized to be appropriated for the purpose of this section such sums as may be specifically authorized by an Act enacted after this Act.

## TITLE II—HEALTH SERVICES

### HEALTH SERVICES

25 USC 1621. SEC. 201. (a) For the purpose of eliminating backlogs in Indian health care services and to supply known, unmet medical, surgical,

dental, optometrical, and other Indian health needs, the Secretary is authorized to expend, through the Service, over the seven-fiscal-year period beginning after the date of the enactment of this Act the amounts authorized to be appropriated by subsection (c). Funds appropriated pursuant to this section for each fiscal year shall not be used to offset or limit the appropriations required by the Service under other Federal laws to continue to serve the health needs of Indians during and subsequent to such seven-fiscal-year period, but shall be in addition to the level of appropriations provided to the Service under this Act and such other Federal laws in the preceding fiscal year plus an amount equal to the amount required to cover pay increases and employee benefits for personnel employed under this Act and such laws and increases in the costs of serving the health needs of Indians under this Act and such laws, which increases are caused by inflation.

(b) The Secretary, acting through the Service, is authorized to employ persons to implement the provisions of this section during the seven-fiscal-year period in accordance with the schedule provided in subsection (c). Such positions authorized each fiscal year pursuant to this section shall not be considered as offsetting or limiting the personnel required by the Service to serve the health needs of Indians during and subsequent to such seven-fiscal-year period but shall be in addition to the positions authorized in the previous fiscal year.

(c) The following amounts and positions are authorized, in accordance with the provisions of subsections (a) and (b), for the specific purposes noted:

(1) Patient care (direct and indirect): sums and positions as provided in subsection (e) for fiscal year 1978, \$8,500,000 and two hundred and twenty-five positions for fiscal year 1979, and \$16,200,000 and three hundred positions for fiscal year 1980.

(2) Field health, excluding dental care (direct and indirect): sums and positions as provided in subsection (e) for fiscal year 1978, \$3,350,000 and eighty-five positions for fiscal year 1979, and \$5,550,000 and one hundred and thirteen positions for fiscal year 1980.

(3) Dental care (direct and indirect): sums and positions as provided in subsection (e) for fiscal year 1978, \$1,500,000 and eighty positions for fiscal year 1979, and \$1,500,000 and fifty positions for fiscal year 1980.

(4) Mental health: (A) Community mental health services: sums and positions as provided in subsection (e) for fiscal year 1978, \$1,300,000 and thirty positions for fiscal year 1979, and \$2,000,000 and thirty positions for fiscal year 1980.

(B) Inpatient mental health services: sums and positions as provided in subsection (e) for fiscal year 1978, \$400,000 and fifteen positions for fiscal year 1979, and \$600,000 and fifteen positions for fiscal year 1980.

(C) Model dormitory mental health services: sums and positions as provided in subsection (e) for fiscal year 1978, \$1,250,000 and fifty positions for fiscal year 1979, and \$1,875,000 and fifty positions for fiscal year 1980.

(D) Therapeutic and residential treatment centers: sums and positions as provided in subsection (e) for fiscal year 1978, \$300,000 and ten positions for fiscal year 1979, and \$400,000 and five positions for fiscal year 1980.

(E) Training of traditional Indian practitioners in mental health: sums as provided in subsection (e) for fiscal year 1978, \$150,000 for fiscal year 1979, and \$200,000 for fiscal year 1980.

**Employment  
during seven-  
fiscal-year period.**

**Appropriation  
authorization.**

(5) Treatment and control of alcoholism among Indians: \$4,000,000 for fiscal year 1978, \$9,000,000 for fiscal year 1979, and \$9,200,000 for fiscal year 1980.

(6) Maintenance and repair (direct and indirect): sums and positions as provided in subsection (e) for fiscal year 1978, \$3,000,000 and twenty positions for fiscal year 1979, and \$4,000,000 and thirty positions for fiscal year 1980.

(7) For fiscal years 1981, 1982, 1983, and 1984 there are authorized to be appropriated for the items referred to in the preceding paragraphs such sums as may be specifically authorized by an Act enacted after this Act. For such fiscal years, positions are authorized for such items (other than the items referred to in paragraphs (4) (E) and (5)) as may be specified in an Act enacted after the date of the enactment of this Act.

Research funds.

(d) The Secretary, acting through the Service, shall expend directly or by contract not less than 1 per centum of the funds appropriated under the authorizations in each of the clauses (1) through (5) of subsection (c) for research in each of the areas of Indian health care for which such funds are authorized to be appropriated.

Appropriation authorization.

(e) For fiscal year 1978, the Secretary is authorized to apportion not to exceed a total of \$10,025,000 and 425 positions for the programs enumerated in clauses (c) (1) through (4) and (c) (6) of this section.

### TITLE III—HEALTH FACILITIES

#### CONSTRUCTION AND RENOVATION OF SERVICE FACILITIES

25 USC 1631.

Sec. 301. (a) The Secretary, acting through the Service, is authorized to expend over the seven-fiscal-year period beginning after the date of the enactment of this Act the sums authorized by subsection (b) for the construction and renovation of hospitals, health centers, health stations, and other facilities of the Service.

Appropriation authorization.

(b) The following amounts are authorized to be appropriated for purposes of subsection (a):

(1) Hospitals: \$67,180,000 for fiscal year 1978, \$73,256,000 for fiscal year 1979, and \$49,742,000 for fiscal year 1980. For fiscal years 1981, 1982, 1983, and 1984, there are authorized to be appropriated for hospitals such sums as may be specifically authorized by an Act enacted after this Act.

(2) Health centers and health stations: \$6,960,000 for fiscal year 1978, \$6,226,000 for fiscal year 1979, and \$3,720,000 for fiscal year 1980. For fiscal years 1981, 1982, 1983, and 1984, there are authorized to be appropriated for health centers and health stations such sums as may be specifically authorized by an Act enacted after this Act.

(3) Staff housing: \$1,242,000 for fiscal year 1978, \$21,725,000 for fiscal year 1979, and \$4,116,000 for fiscal year 1980. For fiscal years 1981, 1982, 1983, and 1984, there are authorized to be appropriated for staff housing such sums as may be specifically authorized by an Act enacted after this Act.

(c) Prior to the expenditure of, or the making of any firm commitment to expend, any funds authorized in subsection (a), the Secretary, acting through the Service shall—

Consultation.

(1) consult with any Indian tribe to be significantly affected by any such expenditure for the purpose of determining and, wherever practicable, honoring tribal preferences concerning the

size, location, type, and other characteristics of any facility on which such expenditure is to be made; and

(2) be assured that, wherever practicable, such facility, not later than one year after its construction or renovation, shall meet the standards of the Joint Committee on Accreditation of Hospitals.

CONSTRUCTION OF SAFE WATER AND SANITARY WASTE  
DISPOSAL FACILITIES

SEC. 302. (a) During the seven-fiscal-year period beginning after the date of the enactment of this Act, the Secretary is authorized to expend under section 7 of the Act of August 5, 1954 (42 U.S.C. 2004a), the sums authorized under subsection (b) to supply unmet needs for safe water and sanitary waste disposal facilities in existing and new Indian homes and communities. 25 USC 1632.

(b) For expenditures of the Secretary authorized by subsection (a) for facilities in existing Indian homes and communities there are authorized to be appropriated \$43,000,000 for fiscal year 1978, \$30,000,000 for fiscal year 1979, and \$30,000,000 for fiscal year 1980. For expenditures of the Secretary authorized by subsection (a) for facilities in new Indian homes and communities there are authorized to be appropriated such sums as may be necessary for fiscal years 1978, 1979, and 1980. For fiscal years 1981, 1982, 1983, and 1984 for expenditures authorized by subsection (a) there are authorized to be appropriated such sums as may be specifically authorized in an Act enacted after this Act. Appropriation authorization.

(c) Former and currently federally recognized Indian tribes in the State of New York shall be eligible for assistance under this section. New York Indian tribes, eligibility for assistance.

PREFERENCE TO INDIANS AND INDIAN FIRMS

SEC. 303. (a) The Secretary, acting through the Service, may utilize the negotiating authority of the Act of June 25, 1910 (25 U.S.C. 47), to give preference to any Indian or any enterprise, partnership, corporation, or other type of business organization owned and controlled by an Indian or Indians including former or currently federally recognized Indian tribes in the State of New York (hereinafter referred to as an "Indian firm") in the construction and renovation of Service facilities pursuant to section 301 and in the construction of safe water and sanitary waste disposal facilities pursuant to section 302. Such preference may be accorded by the Secretary unless he finds, pursuant to rules and regulations promulgated by him, that the project or function to be contracted for will not be satisfactory or such project or function cannot be properly completed or maintained under the proposed contract. The Secretary, in arriving at his finding, shall consider whether the Indian or Indian firm will be deficient with respect to (1) ownership and control by Indians, (2) equipment, (3) bookkeeping and accounting procedures, (4) substantive knowledge of the project or function to be contracted for, (5) adequately trained personnel, or (6) other necessary components of contract performance. 25 USC 1633.

(b) For the purpose of implementing the provisions of this title, the Secretary shall assure that the rates of pay for personnel engaged in the construction or renovation of facilities constructed or renovated in whole or in part by funds made available pursuant to this title are not less than the prevailing local wage rates for similar work as determined in accordance with the Act of March 3, 1931 (40 U.S.C. 276a-276a-5, known as the Davis-Bacon Act). Construction personnel, pay rates.

40 USC 276a  
note.

SOBOBA SANITATION FACILITIES

SEC. 304. The Act of December 17, 1970 (84 Stat. 1465), is hereby amended by adding the following new section 9 at the end thereof:

“SEC. 9. Nothing in this Act shall preclude the Soboba Band of Mission Indians and the Soboba Indian Reservation from being provided with sanitation facilities and services under the authority of section 7 of the Act of August 5, 1954 (68 Stat. 674), as amended by the Act of July 31, 1959 (73 Stat. 267).”.

42 USC 2004a.

TITLE IV—ACCESS TO HEALTH SERVICES

ELIGIBILITY OF INDIAN HEALTH SERVICE FACILITIES UNDER MEDICARE PROGRAM

SEC. 401. (a) Sections 1814(c) and 1835(d) of the Social Security Act are each amended by striking out “No payment” and inserting in lieu thereof “Subject to section 1880, no payment”.

42 USC 1395f, 1395n.  
42 USC 1395x.

(b) Part C of title XVIII of such Act is amended by adding at the end thereof the following new section:

“INDIAN HEALTH SERVICE FACILITIES

“SEC. 1880. (a) A hospital or skilled nursing facility of the Indian Health Service, whether operated by such Service or by an Indian tribe or tribal organization (as those terms are defined in section 4 of the Indian Health Care Improvement Act), shall be eligible for payments under this title, notwithstanding sections 1814(c) and 1835(d), if and for so long as it meets all of the conditions and requirements for such payments which are applicable generally to hospitals or skilled nursing facilities (as the case may be) under this title.

Hospital or skilled nursing facility, eligibility for payments.  
42 USC 1395qq.

“(b) Notwithstanding subsection (a), a hospital or skilled nursing facility of the Indian Health Service which does not meet all of the conditions and requirements of this title which are applicable generally to hospitals or skilled nursing facilities (as the case may be), but which submits to the Secretary within six months after the date of the enactment of this section an acceptable plan for achieving compliance with such conditions and requirements, shall be deemed to meet such conditions and requirements (and to be eligible for payments under this title), without regard to the extent of its actual compliance with such conditions and requirements, during the first 12 months after the month in which such plan is submitted.

Ineligible hospital or skilled nursing facility, submittal of plan for compliance.

“(c) Notwithstanding any other provision of this title, payments to which any hospital or skilled nursing facility of the Indian Health Service is entitled by reason of this section shall be placed in a special fund to be held by the Secretary and used by him (to such extent or in such amounts as are provided in appropriation Acts) exclusively for the purpose of making any improvements in the hospitals and skilled nursing facilities of such Service which may be necessary to achieve compliance with the applicable conditions and requirements of this title. The preceding sentence shall cease to apply when the Secretary determines and certifies that substantially all of the hospitals and skilled nursing facilities of such Service in the United States are in compliance with such conditions and requirements.

Fund for improvements.

“(d) The annual report of the Secretary which is required by section 701 of the Indian Health Care Improvement Act shall include (along with the matters specified in section 403 of such Act) a detailed

Post, p. 1413.  
Post, p. 1410.

statement of the status of the hospitals and skilled nursing facilities of the Service in terms of their compliance with the applicable conditions and requirements of this title and of the progress being made by such hospitals and facilities (under plans submitted under subsection (b) and otherwise) toward the achievement of such compliance.”

(c) Any payments received for services provided to beneficiaries hereunder shall not be considered in determining appropriations for health care and services to Indians.

(d) Nothing herein authorizes the Secretary to provide services to an Indian beneficiary with coverage under title XVIII of the Social Security Act, as amended, in preference to an Indian beneficiary without such coverage.

42 USC 1395qq  
note.

Services to an  
Indian  
beneficiary.  
42 USC 1395qq  
note.  
42 USC 1395.

#### SERVICES PROVIDED TO MEDICAID ELIGIBLE INDIANS

SEC. 402. (a) Title XIX of the Social Security Act is amended by adding at the end thereof the following new section:

#### “INDIAN HEALTH SERVICE FACILITIES

“SEC. 1911. (a) A facility of the Indian Health Service (including a hospital, intermediate care facility, or skilled nursing facility), whether operated by such Service or by an Indian tribe or tribal organization (as those terms are defined in section 4 of the Indian Health Care Improvement Act), shall be eligible for reimbursement for medical assistance provided under a State plan if and for so long as it meets all of the conditions and requirements which are applicable generally to such facilities under this title.

“(b) Notwithstanding subsection (a), a facility of the Indian Health Service (including a hospital, intermediate care facility, or skilled nursing facility) which does not meet all of the conditions and requirements of this title which are applicable generally to such facility, but which submits to the Secretary within six months after the date of the enactment of this section an acceptable plan for achieving compliance with such conditions and requirements, shall be deemed to meet such conditions and requirements (and to be eligible for reimbursement under this title), without regard to the extent of its actual compliance with such conditions and requirements, during the first twelve months after the month in which such plan is submitted.”

(b) The Secretary is authorized to enter into agreements with the appropriate State agency for the purpose of reimbursing such agency for health care and services provided in Service facilities to Indians who are eligible for medical assistance under title XIX of the Social Security Act, as amended.

(c) Notwithstanding any other provision of law, payments to which any facility of the Indian Health Service (including a hospital, intermediate care facility, or skilled nursing facility) is entitled under a State plan approved under title XIX of the Social Security Act by reason of section 1911 of such Act shall be placed in a special fund to be held by the Secretary and used by him (to such extent or in such amounts as are provided in appropriation Acts) exclusively for the purpose of making any improvements in the facilities of such Service which may be necessary to achieve compliance with the applicable conditions and requirements of such title. The preceding sentence shall cease to apply when the Secretary determines and certifies that substantially all of the health facilities of such Service in the United States are in compliance with such conditions and requirements.

Eligibility for  
reimbursement.  
42 USC 1396j.

*Ante*, p. 1401.

Facilities,  
submittal of plan  
for compliance.  
42 USC 1396j  
note.

42 USC 1396j  
note.

42 USC 1396.

*Supra*.

- 42 USC 1396j note. (d) Any payments received for services provided recipients hereunder shall not be considered in determining appropriations for the provision of health care and services to Indians.
- Federal medical assistance percentage. 42 USC 1396d. (e) Section 1905(b) of the Social Security Act is amended by inserting at the end thereof the following: "Notwithstanding the first sentence of this section, the Federal medical assistance percentage shall be 100 per centum with respect to amounts expended as medical assistance for services which are received through an Indian Health Service facility whether operated by the Indian Health Service or by an Indian tribe or tribal organization (as defined in section 4 of the Indian Health Care Improvement Act)."
- Ante*, p. 1401.

## REPORT

- 25 USC 1671 note. SEC. 403. The Secretary shall include in his annual report required by section 701 an accounting on the amount and use of funds made available to the Service pursuant to this title as a result of reimbursements through titles XVIII and XIX of the Social Security Act, as amended.
- 42 USC 1395, 1396.

## TITLE V—HEALTH SERVICES FOR URBAN INDIANS

## PURPOSE

- 25 USC 1651. SEC. 501. The purpose of this title is to encourage the establishment of programs in urban areas to make health services more accessible to the urban Indian population.

## CONTRACTS WITH URBAN INDIAN ORGANIZATIONS

- 25 USC 1652. SEC. 502. The Secretary, acting through the Service, shall enter into contracts with urban Indian organizations to assist such organizations to establish and administer, in the urban centers in which such organizations are situated, programs which meet the requirements set forth in sections 503 and 504.

## CONTRACT ELIGIBILITY

- 25 USC 1653. SEC. 503. (a) The Secretary, acting through the Service, shall place such conditions as he deems necessary to effect the purpose of this title in any contract which he makes with any urban Indian organization pursuant to this title. Such conditions shall include, but are not limited to, requirements that the organization successfully undertake the following activities:
- (1) determine the population of urban Indians which are or could be recipients of health referral or care services;
  - (2) identify all public and private health service resources within the urban center in which the organization is situated which are or may be available to urban Indians;
  - (3) assist such resources in providing service to such urban Indians;
  - (4) assist such urban Indians in becoming familiar with and utilizing such resources;
  - (5) provide basic health education to such urban Indians;
  - (6) establish and implement manpower training programs to accomplish the referral and education tasks set forth in clauses (3) through (5) of this subsection;
  - (7) identify gaps between unmet health needs of urban Indians and the resources available to meet such needs;

(8) make recommendations to the Secretary and Federal, State, local, and other resource agencies on methods of improving health service programs to meet the needs of urban Indians; and

(9) where necessary, provide or contract for health care services to urban Indians.

(b) The Secretary, acting through the Service, shall by regulation prescribe the criteria for selecting urban Indian organizations with which to contract pursuant to this title. Such criteria shall, among other factors, take into consideration:

Urban Indian organizations, selection criteria.

(1) the extent of the unmet health care needs of urban Indians in the urban center involved;

(2) the size of the urban Indian population which is to receive assistance;

(3) the relative accessibility which such population has to health care services in such urban center;

(4) the extent, if any, to which the activities set forth in subsection (a) would duplicate any previous or current public or private health services project funded by another source in such urban center;

(5) the appropriateness and likely effectiveness of the activities set forth in subsection (a) in such urban center;

(6) the existence of an urban Indian organization capable of performing the activities set forth in subsection (a) and of entering into a contract with the Secretary pursuant to this title; and

(7) the extent of existing or likely future participation in the activities set forth in subsection (a) by appropriate health and health-related Federal, State, local, and other resource agencies.

#### OTHER CONTRACT REQUIREMENTS

SEC. 504. (a) Contracts with urban Indian organizations pursuant to this title shall be in accordance with all Federal contracting laws and regulations except that, in the discretion of the Secretary, such contracts may be negotiated without advertising and need not conform to the provisions of the Act of August 24, 1935 (48 Stat. 793), as amended.

25 USC 1654.

(b) Payments under any contracts pursuant to this title may be made in advance or by way of reimbursement and in such installments and on such conditions as the Secretary deems necessary to carry out the purposes of this title.

49 Stat. 793.  
40 USC 270a-270d.

(c) Notwithstanding any provision of law to the contrary, the Secretary may, at the request or consent of an urban Indian organization, revise or amend any contract made by him with such organization pursuant to this title as necessary to carry out the purposes of this title: *Provided, however,* That whenever an urban Indian organization requests retrocession of the Secretary for any contract entered into pursuant to this title, such retrocession shall become effective upon a date specified by the Secretary not more than one hundred and twenty days from the date of the request by the organization or at such later date as may be mutually agreed to by the Secretary and the organization.

Contract revision or amendment.

(d) In connection with any contract made pursuant to this title, the Secretary may permit an urban Indian organization to utilize, in carrying out such contract, existing facilities owned by the Federal Government within his jurisdiction under such terms and conditions as may be agreed upon for their use and maintenance.

Government facilities, use.

(e) Contracts with urban Indian organizations and regulations adopted pursuant to this title shall include provisions to assure the fair and uniform provision to urban Indians of services and assistance under such contracts by such organizations.

#### REPORTS AND RECORDS

Report to  
Secretary of the  
Interior.  
25 USC 1655.

SEC. 505. For each fiscal year during which an urban Indian organization receives or expends funds pursuant to a contract under this title, such organization shall submit to the Secretary a report including information gathered pursuant to section 503(a) (7) and (8), information on activities conducted by the organization pursuant to the contract, an accounting of the amounts and purposes for which Federal funds were expended, and such other information as the Secretary may request. The reports and records of the urban Indian organization with respect to such contract shall be subject to audit by the Secretary and the Comptroller General of the United States.

Audit.

#### AUTHORIZATIONS

25 USC 1656.

SEC. 506. There are authorized to be appropriated for the purpose of this title: \$5,000,000 for fiscal year 1978, \$10,000,000 for fiscal year 1979, and \$15,000,000 for fiscal year 1980.

#### REVIEW OF PROGRAM

Submittal to  
Congress.  
Legislative  
recommendations.  
25 USC 1657.

SEC. 507. Within six months after the end of fiscal year 1979, the Secretary, acting through the Service and with the assistance of the urban Indian organizations which have entered into contracts pursuant to this title, shall review the program established under this title and submit to the Congress his assessment thereof and recommendations for any further legislative efforts he deems necessary to meet the purpose of this title.

#### RURAL HEALTH PROJECTS

25 USC 1658.

SEC. 508. Not to exceed 1 per centum of the amounts authorized by section 506 shall be available for not to exceed two pilot projects providing outreach services to eligible Indians residing in rural communities near Indian reservations.

### TITLE VI—AMERICAN INDIAN SCHOOL OF MEDICINE; FEASIBILITY STUDY

#### FEASIBILITY STUDY

25 USC 1661.

Report to  
Congress.

SEC. 601. The Secretary, in consultation with Indian tribes and appropriate Indian organizations, shall conduct a study to determine the need for, and the feasibility of, establishing a school of medicine to train Indians to provide health services for Indians. Within one year of the date of the enactment of this Act the Secretary shall complete such study and shall report to the Congress findings and recommendations based on such study.

## TITLE VII—MISCELLANEOUS

## REPORTS

SEC. 701. The Secretary shall report annually to the President and the Congress on progress made in effecting the purposes of this Act. Within three months after the end of fiscal year 1979, the Secretary shall review expenditures and progress made under this Act and make recommendations to the Congress concerning any additional authorizations for fiscal years 1981 through 1984 for programs authorized under this Act which he deems appropriate. In the event the Congress enacts legislation authorizing appropriations for programs under this Act for fiscal years 1981 through 1984, within three months after the end of fiscal year 1983, the Secretary shall review programs established or assisted pursuant to this Act and shall submit to the Congress his assessment and recommendations of additional programs or additional assistance necessary to, at a minimum, provide health services to Indians, and insure a health status for Indians, which are at a parity with the health services available to, and the health status, of the general population.

Report to the President and Congress.  
25 USC 1671.

Program review, submittal to Congress.

## REGULATIONS

SEC. 702. (a) (1) Within six months from the date of enactment of this Act, the Secretary shall, to the extent practicable, consult with national and regional Indian organizations to consider and formulate appropriate rules and regulations to implement the provisions of this Act.

Consultation.  
25 USC 1672.

(2) Within eight months from the date of enactment of this Act, the Secretary shall publish proposed rules and regulations in the Federal Register for the purpose of receiving comments from interested parties.

Publication in Federal Register.

(3) Within ten months from the date of enactment of this Act, the Secretary shall promulgate rules and regulations to implement the provisions of this Act.

(b) The Secretary is authorized to revise and amend any rules or regulations promulgated pursuant to this Act: *Provided*, That, prior to any revision of or amendment to such rules or regulations, the Secretary shall, to the extent practicable, consult with appropriate national or regional Indian organizations and shall publish any proposed revision or amendment in the Federal Register not less than sixty days prior to the effective date of such revision or amendment in order to provide adequate notice to, and receive comments from, other interested parties.

Rules or regulations, proposed revision or amendment; publication in Federal Register.

## PLAN OF IMPLEMENTATION

SEC. 703. Within two hundred and forty days after enactment of this Act, a plan will be prepared by the Secretary and will be submitted to the Congress. The plan will explain the manner and schedule (including a schedule of appropriation requests), by title and section, by which the Secretary will implement the provisions of this Act.

Submittal to Congress.  
25 USC 1673.

## LEASES WITH INDIAN TRIBES

- 25 USC 1674.       **SEC. 704.** Notwithstanding any other provision of law, the Secretary is authorized, in carrying out the purposes of this Act, to enter into leases with Indian tribes for periods not in excess of twenty years.

## AVAILABILITY OF FUNDS

- 25 USC 1675.       **SEC. 705.** The funds appropriated pursuant to this Act shall remain available until expended.

Approved September 30, 1976.

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**LEGISLATIVE HISTORY:**

**HOUSE REPORTS:** No. 94-1026 pt. I and 94-1026 part IV (Comm. on Interior and Insular Affairs), No. 94-1026 pt. II (Comm. on Ways and Means), and No. 94-1026 pt. III (Comm. on Interstate and Foreign Commerce) all accompanying H.R. 2525.

**SENATE REPORT** No. 94-133 (Comm. on Interior and Insular Affairs).

**CONGRESSIONAL RECORD:**

Vol. 121 (1975): May 16, considered and passed Senate.

Vol. 122 (1976): July 30, considered and passed House, amended, in lieu of H.R. 2525.

Sept. 9, Senate concurred in House amendment with an amendment.

Sept. 16, House concurred in Senate amendment.

**WEEKLY COMPILATION OF PRESIDENTIAL DOCUMENTS:**

Vol. 12, No. 40: Oct. 1, Presidential statement.

Public Law 94-438  
94th Congress

Joint Resolution

Making supplemental appropriations for the Department of Defense for the repair and replacement of facilities on Guam damaged or destroyed by Typhoon Pamela, and for other purposes.

Sept. 30, 1976  
[H.J. Res. 1096]

*Resolved by the Senate and House of Representatives of the United States of America in Congress assembled,* That the following sums are appropriated, out of any money in the Treasury not otherwise appropriated, for the period ending September 30, 1976, the fiscal year ending September 30, 1977, and for other purposes, namely:

Supplemental  
appropriation,  
1977.

DEPARTMENT OF DEFENSE, MILITARY

RESTORATION OF FACILITIES ON GUAM, DEFENSE

For replacement, repair, and restoration of supplies, equipment, and facilities on Guam, for the period ending September 30, 1976, \$122,033,000, and in addition, \$30,900,000, of which \$20,861,000 shall be derived by transfer from "Military Personnel, Navy, 1976", \$3,700,000 shall be derived by transfer from "Military Personnel, Army, 1976" and \$6,339,000 shall be derived by transfer from "Military Personnel, Air Force, 1976", to be immediately available, to be transferred as follows:

"Operation and maintenance, Navy," \$19,960,000;

"Operation and maintenance, Air Force," \$10,940,000;

"Military construction, Navy," \$65,699,000;

"Military construction, Air Force," \$25,843,000;

"Family housing, Defense," \$30,491,000, to be obligated and expended in the Family Housing Management Account established pursuant to section 501(a) of Public Law 87-554, in not to exceed the following amounts:

For the Navy and Marine Corps: Construction, \$12,250,000;

For the Air Force: Construction, \$18,241,000;

*Provided*, That amounts provided for construction shall remain available until expended: *Provided further*, That amounts provided for operation and maintenance shall be transferred, in whole or in part, to the designated appropriations which are available for obligation through September 30, 1976, or, to the extent obligations cannot be incurred as of September 30, 1976, for the purpose of this resolution, to fiscal year 1977 successor appropriations, to be merged with and to be available for the same purposes and for the same time period as the appropriation to which transferred.

42 USC  
1594a-1.

## **Attachment 6**

Hoop Valley Tribe Subsistence Species Impacts