

**PRELIMINARY  
SOCIAL IMPACT ASSESSMENT  
KARUK TRIBE OF CALIFORNIA**



**Prepared by**

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## **Purpose of Report**

The Karuk Tribe of California is the second largest American Indian Tribe in California. Their ancestral territory is located in Northern California along the Klamath and Salmon Rivers in Humboldt and Siskiyou Counties. Since time immemorial Karuk people have relied directly on the land and rivers for food. With the invasion of their lands by European Americans, the life circumstances of Karuk people have changed considerably. They have experienced systematic state genocide followed by decades of extreme discrimination and human rights violations. Today, the Karuk Tribe continues to struggle to recover from both past genocide and the ongoing discriminatory policies instituted by local, state and federal governments.

Since the passage of NEPA in 1970, Federal agencies are required to prepare Environmental Impact Statements before taking actions that "significantly affecting the quality of the human environment." Within this legislation, Section 102 of NEPA requires Federal agencies to make "integrated use of the natural and social sciences" in "decision making which may have an impact on man's environment." The State of California follows a similar practice under CEQA. These social impact analyses (SIA) are intended to outline social impacts of changes in the environment as a result of proposed developments such as dam building, timber sales, or road construction. Furthermore, following California EPA requirements, cumulative impacts should be addressed in addition to accounting for social and cultural impacts from individual actions. However, few if any of past agency actions affecting the Karuk Tribe have been analyzed through social impact analyses.

The history of the Klamath Basin since contact between Europeans and Indigenous Tribes is a classic example of environmental injustice. In the past 150 years various governmental agencies have made numerous natural resource management decisions resulting in the environmental degradation of the Klamath Basin. In most cases, local Tribes have endured a disproportionate share of the burden associated with these decisions. These decisions include the approval of mining operations, timber harvest plans, the construction of dams and agricultural irrigation projects. These decisions have resulted in negative impacts to culturally significant natural resources including Tribal fisheries (Salter 2003, Stercho 2005), forest resources (Salter 2003, Lake 2007, Holmlund 2006), medicinal and edible plants, and overall water quality (Lake 2006). Other cultural and social impacts include documented changes in diet leading to increases in diabetes and heart disease among Karuk Tribal members (Jackson 2005, Norgaard 2005),

impacts on religious ceremonies requiring fish and medicinal plants (Holmlund 2006), and increase poverty rates (Norgaard 2005, Stercho 2006).

The main purpose of this document is not to provide a complete analysis of the impacts of non-Indian policy on Karuk Tribe – indeed such a task would be impossible. Rather this document has been compiled to provide a benchmark of existing documentation regarding impacts to the Karuk tribe as of 2007, to identify gaps in understanding, and as a planning tool to point the way toward next steps in the effort to fully regain traditional management and enact the full potential of the Karuk people economically, politically, socially and culturally.

In the face of 21<sup>st</sup> century moral codes of equality, and multiple legal frameworks that ostensibly protect human rights, it is vital to understand past events, legal actions and institutional frameworks in order to understand both the present circumstances of Karuk tribal members and the ways in which current government policies perpetuate discrimination against them. The discrimination and ongoing genocide experienced by American Indian people today is in part a result of the invisibility of their circumstances within the dominant society. This invisibility is twofold: a lack of knowledge about the history of Indian-non-Indian relations for most Americans, and the invisibility of the ongoing existence of traditional native lifeways in our “modern” world.

### **Introduction:**

The modern political history of the Karuk Tribe is a story of success in the face of continued injustice. Despite direct genocide, forced relocation, economic hardship and the lack of a reservation, a high percentage of tribal members continue to live in their ancestral territory. The Karuk did not gain Federal Recognition as an American Indian Tribe until 1979. The Karuk still have no reservation and have yet to receive fishing rights outside the right to fish at one specific site for ceremonial purposes. Yet since the 1960s, with federal recognition, changes in the political climate and gains in the courts for Indian people across the United States (e.g. concerning fishing rights), Karuk people have experienced a political, economic and ethnic renewal (Bell 2002, Nagel, 1996, Wilkinson 2005). Tribal members are now actively recovering cultural traditions, including language use, ceremonial practices and traditional basketweaving.

The Karuk Tribe now has an active Departments of Natural Resources, Fisheries Programs and is centrally involved in local land management.

The present day struggles of Karuk people are significant. Prior to contact with Europeans and destruction of the fisheries, the Karuk people were amongst the wealthiest in California. Today they are amongst the poorest: median income for Karuk families is \$13,000 and 90% of tribal members in Siskiyou County live below the poverty line. This dramatic reversal is directly linked to a host of events stemming from non-Indian contact, particularly the destruction of the fisheries resource base. In order to reverse these alarming trends and promote just and sustainable environmental practices in the Klamath Basin, a host of past environmental policy decisions must be scrutinized and changed. In addition, policy decisions currently under consideration must be made in such a manner as to reflect the need for environmental justice.

Social impact analyses are usually planning tools that attempt to foresee and hence avoid or minimize unintended consequences of proposed actions. Yet since no such analyses have been conducted, this document provides a preliminary description of the links between past environmental and political policies and the ensuing impacts on Tribal members' health, economic opportunities, social circumstances and cultural resources. For example, historical policy decisions affecting the Karuk Tribe at the local, state, and federal levels have resulted in dam building, irrigation diversions, poor timber practices, and destructive mining practices, all undertaken in the absence of an adequate (or in most cases any SIA). Social impact analyses (SIA) generally document impacts that are social, cultural, demographic, economic, social-psychological, and political. A complete SIA would represent a scholarly analysis and description of the social impacts resulting from the degradation of environmental and cultural resources for each action according to each of these categories.

In the past American Indian people have experienced extensive problems with social impact analyses. Analyses undertaken when the political position of indigenous people was weaker have downplayed or entirely ignored impacts to Native communities. In many cases, impact analyses have been regarded by agencies as a way to legitimate potentially controversial projects, e.g. by providing a basis for mitigating negative social impacts. In other cases, impact analyses have focused on the impact of individual developments in isolation and over the short term, ignoring cumulative and longer term impacts (see e.g. Ross 1989; Nottingham 1990, 180).

In response American Indian tribes have begun to conduct social impact analyses themselves. In so doing tribes have modified research methods and techniques to place more control in the hands of their own communities. In order to produce positive outcomes for tribes, such impact analyses may contain a focus on how the findings and recommendations generated by impact analysis apply to existing decision-making processes (O’Faircheallaigh 1996). This preliminary document for the Karuk Tribe of California is an example of work in this genre.

Thorough documentation of the socio-cultural impacts that poor environmental policy decisions have had on the Karuk Tribe would provide a new tool to direct natural resource management decisions and reform discriminatory policies by ensuring that environmental justice issues are considered in future decisions making processes. Cumulative effects of past impacts must also be considered in all future SIA. Some of this information is available in existing interviews and documents, much more needs to be gathered. This preliminary document provides an overview of past impacts, compiles the existing relevant studies from the Karuk Tribe, provides preliminary policy recommendations and recommendations for future research.

### **Historical Background of Social Impacts for Karuk Tribe**

Any present analysis of the social impacts of environmental actions for the Karuk Tribe must be considered in the context of cumulative effects of the past 150 years since European contact. While for many California tribes, extensive cultural disruption from contact occurred up to 500 years ago with the establishment of the mission system, tribes in the northern and more remote part of the state experienced little contact with settlers until the gold rush (Norton, 1979). As a result, they have retained much more of their culture and population base. The Yurok, Karuk and Hoopa are today the largest tribes in the state and retain more features of traditional culture including the greatest number of basketweavers, native language speakers and cultural practitioners to be found statewide.

Despite their relative intactness when compared against other American Indian tribes in California, the impacts of past activities from the gold rush to resource extraction and genocide on the lives, culture and lifeways of Karuk people are enormous (Norton, 1979). Impacts of past activities affect economic and environmental conditions as well as the ongoing cultural structure, continued existence of cultural practices today including ceremonies and traditions and

psychological health such as sense of well being, hopefulness, tendencies toward addiction, and relations with other tribal members and non-Indians. This section provides a brief narrative of such impacts. Impacts are discussed in four categories outright genocide, lack of recognition of land occupancy and title, forced assimilation and disruption of cultural management practices. Most such actions were carried out directly by the state and federal government, although the actions of individuals and private corporations are also relevant.

State driven activities affecting the Karuk Tribe during the first fifty years are so significant that they set the stage for understanding all later impacts. The four themes of genocide, lack of recognition of land occupancy and title, forced assimilation and disruption of cultural management practices continue in later periods, although via different mechanisms. Actions by individuals, although less systematic than those carried out by the state, were also significant and are therefore discussed.

### Genocide and Relocation

Major shifts in the Karuk lifeway began in the 1850's with the California gold rush. The arrival of miners, the military, and settlers into Karuk territory in 1850 was accompanied by direct genocide in which many people and much knowledge of traditional culture, foods, social and political structure was lost (Norton 1979, Bell 1991). At this time violent social dislocation, including the outright killing of three-quarters of the tribe, relocating villages, and attempts to move people onto reservations all interfered with everyday social, cultural and food gathering activities (Lowry 1999, Norton 1979, Bell 1991). Village sites were burned, overtaken by miners and made into white settlements and Karuk people were murdered. In 1851 the U.S. government negotiated a treaty with the Karuk. However, due to pressure from the Governor of California, this and other treaties of that time were never ratified by Congress. The term genocide is warranted not only due to the high percentage of people who perished, but due to the systematic and intentional nature of the project. The State of California placed a bounty on Indian people and reimbursed bounty hunters for the cost of ammunition and other supplies. In 1853 settlers in Orleans voted to shoot any Karuk person carrying a gun on sight. Significant massacres of Indian people by settlers occurred in the years 1854, 1855 1856 Within a span of 30 years from 1850 to 1880 the Karuk population is estimated to have dropped from 2700 to 800 (Bright cited in



McEvoy 1986). Throughout this process villages were relocated along the river corridor as European settlers laid claim to the most desirable land parcels. In 1864 the Hoopa Valley Indian Reservation was established and all Karuk people were ordered to leave their ancestral lands along the mid-Klamath and lower Salmon rivers and relocate to the reservation. Many people did so. Others fled to the high country or escaped and returned. After 1870 the majority of miners and settlers left Karuk ancestral territory.

This period of direct genocide created extensive social dislocation that underlies and multiplies the negative impacts of discriminatory actions taking place today. It is important to understand that this extensive genocide is quite recent – stories about specific atrocities have been passed down from grandparents to the present generation and are thus in the living memory of tribal members today. Present day psychological impacts of genocide for Indian people include despair, addiction and social dislocation (Brave Heart and DeBruyn 1998). Furthermore, due to this overt displacement and absence of a collective land base many Karuk people continue to live on the Hoopa reservation, in cities on the coast, and spread across California and Oregon.

#### Lack of Recognition of Land Occupancy and Title

After outright genocide probably the most important event underlying present circumstances Karuk people has been the lack of recognition of the legitimacy of the Karuk aboriginal occupancy and title to their land and territory. The refusal to recognize the legitimate right to control over their land began with the failure of the U.S. congress to ratify the 1851 treaty signed with the Karuk Tribe. In 1887 the Dawes Act or General Allotment Act was passed which provided that small parcels of land be allotted to Karuk families. This law thus attempted to establish the European system of private ownership onto Indian lands. It initiating government partitions of reservations and gave the federal government power to evict Indians from their current location. European and Karuk conceptions of land and land “ownership” were very different. “Prior to the infusion of Europeans into the Upper Klamath River in 1850 ownership of land by individuals was not recognized. But the tribes, and individual people did own rights to hunt, fish, gather and manage particular portions of the surrounding landscape” (Quinn, 2007). As a result of these different conceptions of land “ownership,” many Karuk sold their parcels into non-Indian hands for low prices. With the widening of State Highway 96 in the 1950s,

parcels were further decreased in size, as land was transferred by the Bureau of Indian Affairs to the state of California. By 2007, 35 of the 90 original parcels remained in the ownership of Karuk families. Ninety eight percent or 1,023,452 acres of the lands that were once occupied and managed by the Karuk are now under the management of the U.S. Forest Service (Quinn, 2007). As of 2007, of the 1,048,907 acres in Karuk Aboriginal Territory, Karuk owned lands consist of only 793 acres, just 0.0007% of their Aboriginal Territory (Quinn, 2007). As of 2007 very little of the land within Karuk ancestral territory is in private ownership. Private land is in scarce supply, driving up land values such that privately owned lands have always been too expensive for many Indian families or for the Karuk Tribe to purchase.

The lack of recognition of the legitimacy of the Karuk aboriginal occupancy and title to their land and territory is an enormous feature underlying the impacts of any actions undertaken today. A land base is important in providing access to traditional foods and medicine and other resources necessary to maintain a Karuk way of life and support the continuance of their specialized culture. A land base provides access to traditional food and medicine as well as other resources necessary to maintain a Karuk way of life and support the continuance of a specialized culture including traditional environmental knowledge and practice, land provides an economic base and housing. A land base is further important to provide shelter in the form of housing, which in turn facilitates the return home of tribal members who have dispersed. It serves as a collective gathering area, creating the proximity needed for day to day social communication through which language can be used and culture carried out. Without this land base Karuk people are dispersed, making it more difficult to maintain ceremonies, continue language use, maintain and strengthen cultural identity or carry out other vital cultural practices. While some tribal members do travel to participate in ceremonies on the ancestral territory, many aspects of cultural practice cannot be continued in these distant locations. In addition to the cultural impacts from dispersing people, the absence of a land base makes for poverty, as Karuk people cannot use the land for subsistence or other income, and must instead pay rent to inhabit lands “owned” by others. Although the number of Karuk people who remain in the ancestral territory is significant considering the lack of resources and hardships they face, their numbers are small when measured against historical populations. As a result those Karuk people who continue to reside in the ancestral territory face an enormous burden to carry out cultural management,

ceremonies and other cultural activities. The absence of a critical mass of people to disperse these tasks, leads also to mental stress on the fewer individuals. Those who remain face an enormous stress from struggling to cope. For many it is easier to give up than to “be an Indian,” but even these cannot escape their “Indianess.” Furthermore, inability to manage the land according to Karuk custom and for Karuk cultural needs leads to poverty for Karuk people by decreasing the quality, quantity and access to food and other resources that can be produced.

### Forced Assimilation

Following the period of outright genocide during the 1800s came the ongoing period of forced assimilation into the dominant culture and society through boarding schools and other institutional processes. Boarding schools for Indian children ages 5-18 were mandated from the end of the 1880s up through the mid 1900s. Like youth from tribes throughout Canada and the United States, Karuk children were separated from families at young ages and taken to Bureau of Indian Affairs boarding schools in Oregon and California for the specific purpose of assimilation. They were prevented from speaking their native language and practicing their native customs and forced to eat a diet of “Western” foods. The result was that Karuk children were separated from families, communities, culture and traditional foods, often for many years. They were unable to learn fishing, gathering, management practices and cultural ceremonies:

One thing I do know that changed with a lot of the salmon too was all of the kids got shipped off the river to the boarding schools. My father took initiative and he learned the fishing part of his culture. His best friend didn't really catch the fishing part as much as he knows language and a lot of the ceremonial stuff. My

dad never danced in a ceremony. Four years ago was the first time he'd ever danced, because he was beat for even trying to be Indian.

Carrie Davis, Karuk Tribal Member

Karuk people still struggle today to recover economically, socially, politically and mentally from the devastation of these policies. The process of forced assimilation is ongoing today, although its vehicles may be less overt. For example, forced assimilation is manifest through requirements to adhere to the deadlines, management practices and communication norms of non-Indian agencies (including those required for the completion of this Social Impact Analysis). As will be discussed under the section on Current Status and Issues, many cultural practices are still illegal today. The present day impacts of past disruption of cultural practices by state action include hunger, poverty and the loss of traditional ecological knowledge.

#### Disruption of Cultural Practices by State Action

In addition to outright genocide state actions by the military and later the emergence of the U.S. Forest Service, cultural management practices from burning to fishing have been made illegal by federal, state and other agencies. For example, Europeans did not understand the role of fire in the forest ecosystem. Since the gold rush period, Karuk people have been forcibly prevented from setting fires needed to manage the forest, prolong spring run-off, and create proper growing conditions for acorns and other foods (Margolin 1993, Anderson, personal communication). For many years following white settlement in their territory Karuk people were simply shot for engaging in cultural practices such as setting fires.

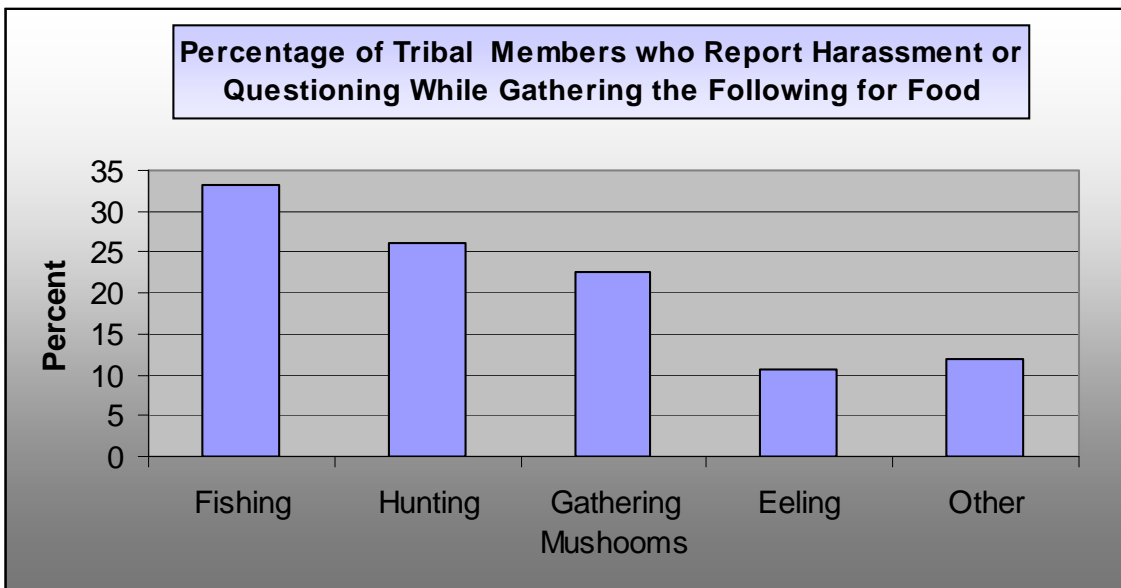
Whereas long standing cultural traditions existed for regulating and sharing fish and other resources both within the Karuk Tribe and between neighboring tribes, the entry of non-Indian groups into the region led to conflict and dramatic resource depletion (McEvoy 1986). During the 1970's the Federal government denied Karuk people the right to continue their traditional fishing practices (Norton 1979) by arresting them and even incarcerating them. Karuk fishing rights have yet to be acknowledged by the U.S. government. Non-Indian fishing regulations such as those developed and enforced through California Department of Fish and Game have often failed to take into account the Karuk as original inhabitants, their inalienable right to subsistence harvesting and the sustainable nature of Karuk harvests. As a result they have attempted to

balance the subsistence needs of Karuk people with recreational desires of non-Indians from outside the area. Vera Davis notes the imbalance and injustice of this view:

We had supplies from the river the year round. We hadn't been told that we couldn't get our fish any time of the year. That was put there for us by the Creator and when we were hungry we went to the river and got our fish.

Vera Davis (quoted in Salter 2003, p.32).

Even more dramatic is the outright refusal of recognition of the Karuk fishery. In the 2005 Karuk Health and Fish Consumption Survey individuals were asked whether members of their household had been questioned or harassed by game wardens while fishing for a number of aquatic food species. As indicated in Figure 1 below (from Norgaard 2005) a significant percentage of tribal members have had such experiences:



To be fined or have a family member imprisoned imposes a significant economic burden on families. This is a risk that many are unwilling or unable to take. Thirty six percent of survey respondents reported that they had decreased their subsistence or ceremonial activities as a result of such contacts.

State Regulations affect not only fishing and burning but also hunting, mushroom gathering and gathering of basketry materials. Tribal Vice-Chairman and Ceremonial Leader, Leaf Hillman describes this situation: “The act of harvesting a deer or elk to be consumed by those in attendance at a tribal ceremony was once considered an honorable, almost heroic act. Great admiration, respect and celebration accompanied these acts and those who performed them. Now these acts (if they are to be done at all) must be done in great secrecy, and often in violation of Karuk custom, in order to avoid serious consequences.” As Hillman further explains it, government regulations force assimilation to the point of criminal indictment.

In order to maintain a traditional Karuk lifestyle today, you need to be an outlaw, a criminal, and you had better be a good one or you’ll likely end up spending a great portion of your life in prison. The fact of the matter is that it is a criminal act to practice a traditional lifestyle and to maintain traditional cultural practices necessary to manage important food resources or even to practice our religion. If we as Karuk people obey the “laws of nature” and the mandates of our Creator, we are necessarily in violation of the white man’s laws. It is a criminal act to be a Karuk Indian in the 21<sup>st</sup> century.

– Leaf Hillman, 2004

In the 2005 Karuk Health and Fish Consumption Survey tribal members were asked whether members of their household had been questioned or harassed by game wardens while gathering a variety of other cultural and subsistence items. Twelve percent reported such contacts while gathering basketry materials, and over 40 percent indicated harassment while gathering firewood. Twenty percent of survey respondents reported that they had decreased their subsistence or ceremonial activities as a result of such contacts. Denied access to traditional management at the hands of non-native agencies has significant health, cultural and spiritual impacts including denying them access to healthy foods (see Jackson 2005, Norgaard 2005). Yet Karuk lifeways continue to be practiced both overtly (when they can get away with it) and covertly when they cant. Continuance of these traditional lifeways and practices is essential to the maintenance of cultural and tribal identity, pride, self-respect and above all, basic human dignity.

### Disruption of Cultural Management Practices by Individuals and Corporations

In addition to the outright killing by bounty hunters and through resource conflict, the presence of gold miners and others on Karuk lands restricted their ability to carry out traditional management practices and sustain a steady supply of some food sources, including fish and wild game, although they did not initially destroy these populations. These disruptions produced profound cultural, social and political structure and dietary changes. Especially since the turn of the century, Karuk people have faced increased competition in the use of resources from non-Indians. The Klamath River was once the third largest salmon producing river in the West. Yet as of 2007, the wild salmon populations of the Klamath River have been reduced to roughly 4% of previous productivity. Commercial canneries set up at the mouth of the Klamath severely impacted salmon runs during the 1920s. The building and operation of dams on the Klamath River beginning in 1916 with Copco I further decreased fish populations over the following decades. Fisheries scientists identify the five dams on the mainstem Klamath as a major obstacle to fisheries health.

The presence of non-Indians continues to profoundly disrupted cultural management techniques in the present day. For example, in the 1990s when Matsutakes mushrooms were “discovered” to be in the area, large numbers of people came to harvest them. Mushroom patches were significantly reduced. Patches that were within walking distance for Karuk elders were often destroyed first. Furthermore, there are impacts from the decreasing relevance of tribal customs and laws relating to resource management and harvest practices. Leaf Hillman notes that “when non-native people and government agencies ignore and disregard Karuk customs (laws and practices) these customs become irrelevant within our own culture.” Hillman provides multiple examples:

Karuk customs (laws and practices) concerning the management and harvesting of Tan Oak Mushrooms e.g. family/village responsibility for management and harvesting rights in certain defined geographic areas, remained largely intact until very recently. This can be explained by the lack of interest on the part of non-natives and government agencies alike. Because no one else cared and these customs did not interfere with anyone else, they remained relevant within Karuk culture. However, all of this disappeared virtually overnight when it was learned that tan Oak Mushrooms were in fact, Matsutakes and that a lucrative market existed for this species in Japan and other Asian markets. Large numbers of

outsiders and locals flooded the forests within Karuk territory, and big money was to be had at the local buying stations that sprung up overnight in our communities. In our local river communities where unemployment rates are extremely high and employment opportunities are almost non-existent, local people including Karuk quickly realized that they could make more money in a few days picking and selling mushrooms, than they ordinarily would expect to earn in an entire year or even two. In this environment, following Karuk customs simply meant that they could not compete with the hoards of outsiders flooding the area, and even if they did not violate Karuk customs (laws and practices), there would be hundred of others that certainly would. Therefore, the customs themselves along with their underlying purpose and intention, no longer had relevance in Karuk culture.

Disruption of land management practices has led to damage of social relations (Norgaard 2005), religious customs (Salter 2003, Holmlund 2006), traditional ecological knowledge (Lake 2007), decreased food supplies (Norgaard 2005) in addition to obvious impacts to subsistence economy (Stercho 2005) and ecological conditions (Salter 2003, Lake 2007).

A summary of the above narrative is provided according to standard categories used in Social Impact Analyses in Table 1 below. This is a cursory coverage of these events. A comprehensive Social Impact Analysis would use archival, scholarly and interview data to provide extensive detail for each box.

**Table 1: Overview of Impacts to Karuk Tribe During 19<sup>th</sup> Century**

	<b>1850-1900</b>
Events:	Entry of European Americans into Karuk Territory with Gold Rush, California Land Settlement Act of 1851, failed treaty ratification in 1852, conflict with miners, hydraulic placer and other mining, U.S. military presence, direct genocide, General Allotment Act of 1887, passage of Forest Reserve Act in 1891.
Demographic	Decrease in population size from x to y, movement from traditional territory to Hoopa Valley Indian Reservation, movement within traditional territory as village sites occupied by military, movement into mountains
Economic	Disruption of subsistence economy
Political	Disruption of political structure



Social	Extensive social impacts include loss of family relations, change of community structure, .change in social dynamics.
Cultural	Loss of cultural knowledge including knowledge of land management practices, change in cultural norms and values
Health	Loss of food security, emergence of disease
Social-psychological	Grief, loss of identity, sense of ontological security

Both the State of California and the federal government participated in actions occurred under the guise of development projects that negatively and disproportionately impacted Karuk tribal members such as the development of hydroelectric dams on the Klamath river, permits for environmentally harmful mining activities and allowances of logging practices that led to the extraction of wealth from Karuk communities. These are the sort of activities that after 1970 would later be regulated under the SIA process.

**Table 2: Overview of Impacts to Karuk Tribe from 1900-1950**

	<b>1900-1950</b>
Events:	Klamath National Forest in 1901, Building of first Klamath dams, development of agriculture in upper basin. Canneries at mouth of Klamath R. Land lost from highway widening, fire suppression, logging. Movement of Karuk children into boarding schools.
Demographic	Population shifts in age structure and to urban areas due to movement of Karuk children into boarding schools, many later move to urban areas, other programs to move Indian people into urban centers.
Economic	Employment from timber industry, extraction of wealth from community, further disruption of subsistence economy with forced assimilation to modern lifestyle
Political	Lack of formal political structure, unfavorable climate within U.S. for Indian people generally.
Social	Loss of family and wider community relationships as children removed from communities, loss of cultural sharing and knowledge

Cultural	Loss of cultural knowledge including knowledge of land management practices, change in cultural norms and values, changes in food preferences
Health	Loss of traditional diet, decrease in exercise, new diseases
Social-psychological	Loss of family ties, changes in identity, sense of shame, desire to assimilate.

### **Current Status and Issues**

Past activities carried out by federal, state and local agencies have directly resulted in poverty, the lack of recognition of land occupancy and title, decreased control over resource management, loss of cultural practices including language and ceremonies, food insecurity and disease for Karuk Tribal members. As of 2007 the fundamental cultural, political and economic issues faced by the Karuk Tribe revolve around environmental policies affecting the Klamath River anadromous fishery and related cultural and natural resources. A number of recent events highlight the importance of land management in the Klamath River Basin for the tribes. These include political and legal battles over water deliveries from the agricultural users in the upper basin, the largest adult fish kill in U.S. history in 2002, the presence of aquatic diseases causing massive annual juvenile fish mortality, the Federal relicensing of the Klamath River Hydroelectric Project in 2006 and serious water quality concerns, including toxic blue green algae (Lake 2006). Large fires in the summer of 2006 highlighted the importance of returning fire to the forest ecosystem. As the global climate warms the forest and riverine resources of Karuk people will continue to be stressed by changes in temperature and precipitation.

One important step to increased visibility of tribal land management needs has been the communication of tribal health and economic needs into state and federal legal and policy process. Existing academic scholarship on the link between human and environmental health has focused primarily on health hazards linked with toxic contamination (Brown and Mikkelsen 1997). American Indian tribes and Alaskan Natives have conducted research on contamination of their traditional foods with mercury, heavy metals and persistent organic pollutants. Yet contamination is only one of the dimensions linking environmental decline and declining human health on the Klamath. The Karuk tribe has been conducting research on the relationship

between environmental quality, food security and diet related diseases (see e.g. Norgaard 2005, Lake 2006).

The continued relationship between ecological and cultural well being for Karuk people is almost completely invisible to Federal and State agencies who are charged with managing Karuk resources. As a result, resources are managed in ways that interfere with the ability of Karuk people to carry out their culture. This situation represents an ongoing manifestation of culturicide. Ultimately management of Karuk traditional resources must be returned to the hands of the Karuk tribe. Table 3 outlines relationships between four areas of traditional Karuk ecological management and the direct impact of declining ecological conditions from non-Indian management on seven elements of tribal culture. This table provides a summary sketch of these relationships. A complete Social Impact Analysis would provide extensive documentation of the contents of each cell.

**Table 3: Relationship Between Ecological Conditions and Social Impacts for Karuk Tribe**

	Water Quality	Water Quantity	Land Base	Fire
Social Relationships	Gathering at river, social relationships from food and ceremonial activities,	Gathering at river, social relationships from food and ceremonial activities	Places for people to live so that families can live in ancestral territory	Multiple people needed, passing of knowledge from one generation to next
Fishing	Species must be present in adequate abundance. Safety concerns conducting practice (e.g. exposure to toxic blue green algae)	Needed for fish, e.g. temperatures cool enough for Fall Chinook to enter river and migrate to Ishi Pishi Falls	Access to fishing sites. Ability to manage upslope to protect river resources (e.g. roads, logging, fire)	Upslope conditions to keep river cool for fish
Ceremonies	Drinking from river, river resources needed for ceremonies such as fish	River resources needed for ceremonies such as fish	Access to ceremony sites. Ability to manage upslope to protect river resources (e.g. roads, logging, fire)	Fire as part of ceremonies. Fire needed to create conditions for acorns and other foods and plants used in ceremonies
Food Security	Species must be present in adequate abundance. Safety concerns from food consumption.	Species must be present in adequate abundance.	Access to gathering sites for mushrooms, etc.	Fire needed to create conditions for acorns and other foods from forest
Weaving	Safety concerns conducting practice (e.g. exposure to toxic blue green algae)	Flow patterns affect quality of willow shoots	Access to gathering sites, use of herbicides on gathering sites	Fire needed for creating conditions for basket materials
Language	In all categories, the social interactions are opportunities for the transfer of cultural knowledge including language. Specific words are associated with activities and food species. When these activities change, or food species disappear, so does the language.			
Health	Safety concerns from food consumption. Presence of healthy foods	Presence of healthy foods	Access to activities for healthy foods	Fire needed to create conditions for herbs and medicines from forests

## **Existing Studies**

Existing information about the status of Karuk Tribal members, the impacts of past and present activities and the relationships in the individual cells in Tables 1, 2 and 3 has been compiled within six documents that have been assembled by or for the Karuk Tribe in the past five years. Earlier work in the form of government documents, masters and doctoral theses, as well as scholarly articles whose central focus is not on the Karuk, but which nonetheless contain relevant information also exists. A bibliography of all such documents should first be assembled. Secondly, these documents should be obtained, reviewed and where appropriate, incorporated into future analysis. For the purpose of the present study, these six documents will be summarized below. Complete documents available with the electronic edition of this report, or from the Karuk Tribe Department of Natural Resources.

### **1) Salter, John 2003 “WHITE PAPER ON BEHALF OF THE KARUK TRIBE OF CALIFORNIA A Context Statement Concerning the Effect of Iron Gate Dam on Traditional Resource Uses and Cultural Patterns of the Karuk People Within the Klamath River Corridor.”**

From the Executive Summary:

This paper documents Karuk tribal uses of resources found within the Klamath River corridor which may be affected by the Klamath Hydroelectric Project. This great range of resources includes plants, animals, and fish as well as locations long enshrined in mythic accounts of legendary events. From millennia of dependence on these resources and location in the specific environment of the Klamath River corridor, a dense web of cultural practices and social institutions has developed that define the Karuk People. In order to establish the depth and unity of these cultural utilizations with the environment and their consequent vulnerability to influences inimical to the environment, the following strategy has been developed. Section I presents a reconstruction of the natural setting and patterns of early habitation of Karuk Ancestral Territory. Particular attention is paid to those cultural elements which are directly dependent on the Klamath River health and upon fish-based resources.

Section II follows this establishment of setting and duration of cultural adaptations with a series of ethnographic interviews of Karuk people and knowledgeable individuals. Interviewees were presented with an extensive series of questions and issues concerning cultural and natural resources of the Karuk, and other Klamath River corridor tribes, which may be subject to effects caused by Iron Gate Dam. This same inventory has been incorporated in a series of white papers being written on behalf of these other tribes in

conjunction with the upcoming Federal Energy Relicensing Commission (FERC) proceedings concerning relicensing of Iron Gate Dam. The utilization of similar inventories of questions and issues is intended to produce a body of information approaching the Klamath River as an extended ethnographic landscape reaching from the region of Klamath Lake and the territory of the Klamath Tribe to the River's mouth at the Pacific Ocean where the Yurok live. Interview transcripts have been coded according to the issues addressed by the informants. This section of ethnographic interviews and empirically-based observations is followed by Section III, Current Conditions and Historical Factors Affecting Fish Populations and River Health, a discussion of water quality and fish passage issues drawn from ethnographic and recent scientific literature.

This paper ends with a Summary and Conclusion which summarizes the material developed in the text as described, bringing together, within an ethnographic context, the conclusions of formal articles with those of the Karuk informants concerning the effect of Iron Gate Dam on the cultural and natural resources of the Karuk Tribe and People. *Contains interviews, 121 pages.*

## **2) Norgaard, Kari Marie 2005 "The Effect of Altered Diet on the Health of the Karuk People" Karuk Tribe of California.**

From the Executive Summary:

The Karuk people are intimately dependent upon salmon both physically and culturally. Salmon has been both the primary food and the basis of the prosperous subsistence economy of the Karuk people since time immemorial. The elimination of traditional foods including multiple runs of salmon, Pacific Lamprey, Sturgeon and other aquatic species has had extreme adverse health, social, economic, and spiritual effects on Karuk people. With the loss of the most important food source, Spring Chinook salmon in the 1970s, the Karuk people hold the dubious honor of experiencing one of the most recent and dramatic diet shifts of any Native tribe in the United States.

This report details the health effects of the loss of traditional foods on the Karuk Tribe. Physical health is linked to food quantity and quality, culture, economic conditions and mental health. In addition to data on disease rates, this report addresses the broader social, economic and cultural impacts of the loss of traditional food on Karuk tribal health. Particular attention is paid to salmonid species because of their central importance as food, their remarkably recent and dramatic decline, and the link made by fisheries scientists between salmonid species decline and the presence of the Klamath River dams currently up for re-licensing under FERC.

This report expands the documentation and analysis of the Preliminary Report released in 2004. Data on health and economic status of the Karuk Tribe have been updated, and in some cases new disease frequencies are reported to replace earlier calculations. The methodology of this study builds on the preliminary report in three important ways: it contains additional analysis of health records, reports data from the Karuk Health and Fish Consumption Survey (a 61 question survey with a response rate of 34%) and 18 additional in depth interviews. The Karuk Health and Fish Consumption Survey allowed for the

collection of quantitative data regarding economic patterns, health conditions and fish consumption that has been long absent in the broader discussion of tribal impacts of declining riverine health. Mental health impacts of the loss of culture and food supply are also expanded. Finally, this report contains analysis of the health care costs stemming from the altered diet of the Karuk Tribe.

The loss of traditional food sources is now recognized as being directly responsible for a host of diet related illnesses among Native Americans including diabetes, obesity, heart disease, tuberculosis, hypertension, kidney troubles and strokes. Around the world when Native people move to a “Western” diet rates of these diseases skyrocket. The estimated diabetes rate for the Karuk Tribe is 21%, nearly four times the U.S. average. The estimated rate of heart disease for the Karuk Tribe is 39.6%, three times the U.S. average. Despite their epidemic levels, diabetes has recently appeared in the Karuk population. Most families report the first appearance of diabetes in the 1970s. Data from the 2005 Karuk Health and Fish Consumption Survey show that the loss of the most important food source, the Spring Chinook Salmon run, is directly linked to the appearance of epidemic rates of diabetes in Karuk families.

Identified health consequences of altered diet for the Karuk people include high rates of Type II diabetes, heart disease and hypertension. These health consequences stem from changes in the specific nutrient content of traditional foods such as salmon and acorns, as well as decrease in the physical benefits of exercise associated with their gathering. Mental, emotional, cultural and spiritual health benefits of eating and harvesting traditional Karuk foods exist as well.

Genocide and forced assimilation over the past century have led to a loss of traditional knowledge of relationships with the land (including preparation and acquisition of traditional foods) and a change in the tastes and desires of people. Yet despite these dramatic earlier events, the testimony of elders about foods they ate until recently indicate that considerable changes have also occurred within the last generation. These most recent changes are largely due to denied access to traditional foods. There are at least 25 species of plants, animals and fungi that form part of the traditional Karuk diet to which Karuk people are currently denied or have only limited access. Furthermore, the foods that were most central in the Karuk diet, providing the bulk of energy and protein: salmon and tan oak acorns are amongst the missing elements. The result is that Karuk people are currently denied access to foods that represented upwards of 50% of their traditional diet. Traditional fish consumption is estimated at 450 pounds per person per year (Hewes, 1973). In contrast, the present day Karuk people consume less than 5 pounds of salmon per person per year. Now so few fish exist that even ceremonial salmon consumption is limited.

Lack of traditional food impacts the Karuk Tribe not only due to decreased nutritional content of specific foods, but results in an overall absence of food, leaving Karuk people with basic issues of food security. The destruction of the Klamath river fishery has led to both poverty and hunger. Prior to contact with Europeans and the destruction of the fisheries, the Karuk, Hupa and Yurok tribes were the wealthiest people in what is now known as California. Today they are amongst the poorest. This dramatic reversal is directly linked to the destruction of the fisheries resource base. The devastation of the resource base, especially the fisheries, is also directly linked to the disproportionate unemployment and low socio-economic status of Karuk people today. Before the impacts of dams, mining and over fishing the Karuk people subsisted off salmon year round for tens of thousands of years.

Now poverty and hunger rates for the Karuk Tribe are amongst the highest in the State and Nation. The poverty rate of the Karuk Tribe is between 80 and 85%. The poverty rate is even higher for tribal members living in Siskiyou County.

Diet change also leads to a loss of culture and identity. The present ongoing destruction of the resource base leads to further cultural disruption for Karuk people today. Just as ceremonies surrounding fish and the more everyday activities of fishing, eeling and gathering mushrooms and huckleberries create and maintain community ties and provide identity, so too does their absence and decline lead to further cultural disruption. The present decreasing access to traditional foods must therefore be understood in the broader context of cultural genocide. Access to traditional food sources of salmon are also a basic human right. Access to salmon is also a matter of religious freedom. Numerous international treaties recognizes the right to food security and food sovereignty

The fact that Karuk tribal members are denied access to the healthy foods that supported them since time immemorial also costs society. When an entire Tribe faces epidemic rates of expensive conditions such as diabetes, sizable state, county and tribal medical resources will be used to address this problem. Recent research by the American Diabetes Association reveals that diabetes patients have an average annual per capita cost of health care at \$13,243 per person per year in the United States. Given the 148 diabetic Tribal Members within the ancestral territory in 2004, the annual cost for Karuk Tribal members is estimated over 1.9 million dollars. However these increased medical care costs, paid by society as a whole, are not reflected in PacifiCorp's dam operation expenditures, nor are they withdrawn from the profits PacifiCorps receives from the production of electricity in a manner which damages the health of the Klamath riverine system. Instead the higher health care costs of increased diabetes in the Karuk population are borne by society as a whole. PacifiCorps does not reimburse the Karuk Tribe, nor Siskiyou nor Humboldt Counties for the increased cost of health care that comes from the destruction of an abundant source of healthy food in the Klamath river. Any cost-benefit analysis of the dams should include the 1.9 million annually to provide medical services for the artificially high incidence of diabetes in the Karuk Tribe. *Contains interviews, 106 pages.*

**3) Stercho, Amy 2005 "The Importance of Place Based Fisheries to the Karuk Tribe of California A Socio-Economic Study." Master's Thesis, Humboldt State University, Arcata CA.**

From the Opening:

The leases on the PacifiCorp dams will expire in 2006 and the relicensing process is in motion (North Coast Journal, July 14, 2005). During the 2004 Lower Klamath Basin Science Conference, Ronnie Pierce, speaking for the Klamath River InterTribal Fish and Water Commission, stated that there are large gaps in studies regarding the socio-economic impacts of the federal and state management decisions on Klamath Basin Tribes. The intent of this report is to determine the socio-economic impacts to the Karuk Tribe of California caused by the loss of healthy salmon and eel fisheries on the Klamath and Salmon Rivers.



Barbier et al. (1994) and Costanze and Folke (1997) maintain that ecological, social, and economic consequences, and the linkages between the three, must be considered in all policy and management decisions. Daily et al. (2000) reaffirm these statements adding that though it is rare that sufficient knowledge exists to fully understand the impacts of decisions, it is valuable to try to quantify social and biophysical consequences. In the (1982) Meyer-Zangri Associates, Inc. report addressing the historic and economic value of Trust Species to the tribes in Washington, Oregon, and Idaho, the authors suggest that project impacts that must be looked at include:

- 1) Potential project effects on salmon/ salmon fishing and on other Treaty fisheries.
- 2) Potential project effects on game/ game hunting.
- 3) Potential project effects on plants used for food and/or medicines.
- 4) Potential project effects on usual and accustomed places for fishing, hunting or gathering.
- 5) Potential project effects on the overall assets and well-being of the referent tribes.

(p. 16)

This report will be heavily weighted toward impacts on fisheries, but an attempt will also be made to acknowledge and explain how management decisions and regulations have negatively influenced other Tribal Trust species.

Chapter One of this report lays the theoretical foundation for subsequent chapters and Chapter Two provides background information on the Klamath River Basin. As the Karuk Tribe recognizes that there is not one agency or event that is solely to be held accountable for problems the Tribe is facing (Ron Reed, personal communication, 2005), Chapter Three through Chapter Five of this report give a comprehensive view of events, regulations, laws, and actions leading to the decline of fisheries and the changes in subsistence opportunities for Karuk people. Chapter Six looks at statistics relating the economic health and opportunities for the Karuk Tribe and Chapter Seven gives a statistical review of the social well-being of the Tribe. Chapters Eight and Nine return to topics specifically related to the relicensing of the dams on the Klamath River and also to specific management decisions that are stressing salmon, steelhead, and Pacific lamprey upon which the Karuk Tribe depends. *Contains interviews, 144 pages.*

#### **4) Jennifer Jackson, Jennifer 2005 “Nutritional Analysis of Traditional and Present Foods of the Karuk People.” Karuk Tribe of California**

From the Introduction:

This report compares traditional Karuk foods with foods commonly consumed by the Karuk people today, including commodity foods distributed by the food distribution program. Furthermore, this report identifies the health implications of today’s altered diet. Chapter Two will discuss current and traditional Karuk diets including information

on the food distribution program. Chapter Three contains an in depth nutrition analysis of present and traditional diets as well as discussion of the health consequences stemming from the diet shift. The report concludes with strategies for restoring the traditional Karuk food system in order to restore the health of the Karuk people. Appendices include recommendations for future research and nutrition education materials designed to reach the Karuk people to promote positive change and to bring awareness of the consequences of the current altered diet.

**5) Holmlund, Robert Croy 2006. “Fish, Forests, Fire, and Freedom: Infringements of Karuk Religious Freedom Through Federal Natural Resource Management.” Master’s Thesis, Humboldt State University, Arcata CA.**

From the Abstract:

Religious freedom is necessarily a broad concept since it must apply to a wide range of religions. Yet, the religious freedom in the United States rooted in the First Amendment, which was created for a limited set of religions (i.e. Protestant Christian faiths) by a group of men with a limited range of knowledge about other religions and cultures at a time when slavery was legal and the mass extermination of Native Americans was common. These historically-based limitations of the First Amendment remain today, meaning that for Native Americans religious freedom is not as easily secured as it is for the Christian people for whom the First Amendment was originally intended. Among the many challenges facing American Indian attempts to obtain full religious freedom, Native religions are inherently bound in environmental relationships. Therefore, actions that lead to environmental or ecological alterations can be a violation of Native American religious freedom. The right to free exercise, for many Indians, must include the right to engage in the spiritually-enriched environmental relationships that are foundational to their particular faiths. The viability of this right is directly dependent upon the health and integrity of select ecosystems. In this way, religious freedom is intimately linked to environmental issues. American Indian Tribes have repeatedly appealed to the Supreme Court in pursuit of religious freedom protections related to environmental concerns, but have yet to receive a favorable verdict.

The Karuk Tribe of California is among the Tribes currently seeking religious freedom protections. In particular, the Tribe seeks to practice their spiritually-guided systems of ecological management. Religious freedom for the Karuk requires more than separation of church and state; the right to the free exercise of religion for Karuk peoples hinges upon the ecological integrity of the Klamath River and its surrounding biomes. As a series of interviews conducted specifically for this study indicates, Karuk tribal members believe their religious freedom is being violated in several ways, particularly through environmental alterations perpetuated by Federal Natural Resource Agencies. These violations must be acknowledged by the federal government, for each individual person within each generation must have the autonomy and opportunity to practice the tenets of their religious beliefs. This is the heart of a universal religious freedom that all people inherently deserve. Yet, if the conditions that make tribal religions possible –

social, cultural, or ecological – are in any way eliminated, the religious freedoms of current and coming generations are destroyed. *Contains interviews, 274 pp.*

**6) Lake, Frank 2006 "The impacts and effects of exposure to river water for activities of the Karuk people" Karuk Tribe of California, Happy Camp, CA**

From the Introduction:

The Karuk people have lived along the course of the Klamath River for thousands of years. The Karuk developed an intimate relationship with the Klamath River and its' major tributaries over millennia. The Karuk people rely on aquatic and riparian habitats of the Klamath River and tributaries for water consumption, bathing/cleansing, food, medicines, materials, and ceremonial purposes. The majority of exposure or interaction with water occurs with ceremonial, subsistence, basketry, recreation and other cultural activities.

Historically, water quality and quantity of the Klamath River and tributaries fluctuated. Today's conditions of the Klamath River and tributaries are degraded compared to historical conditions according to Karuk traditional ecological knowledge and scientific water quality monitoring results. There has had minimal documentation on the Karuk people of the direct and indirect impacts of reduced water quantity and quality. The health and well being of the Karuk people is directly linked to the quality of the Klamath River. Developing relative units, such as Total Daily Maximum Loads, to assess river quality is useful if those units can be correlated with quality of life or health of the public or other animal and plant species who also depend on the river for various life history requirements.

This document and the accompanying calendar provide a spatial and temporal representation of the main activities Karuk people engage in with the Klamath River and tributaries. The activities are divided into several dominant sections, with similar sub-sections. The main sections identified are: General Activities, Ceremonies, Subsistence and Basketry Materials. Sub-sections include additional specific activities with descriptions of what type of activities and targeted source of food, medicine, material, or religious items. There is repetition of many sub-activities to demonstrate the specificity of particular actions for different main sections. The calendar visually depicts the time of the event and the types of water contact activities. The goal of this document is to improve an understanding of various Karuk activities during the year and how might the condition of the Klamath River and its' tributaries impact those activities or health of Karuk people. *7 pages plus charts.*

## **Next Steps: Research Recommendations**

The following research directions will further the twin goals of regaining tribal resource management and elevating the economic, cultural, psychological and physical conditions of the Karuk Tribe. This is not an exhaustive list.

- Expand documentation of historical events including social and political events and ecological conditions.
- Undertake a comprehensive Social Impact Analysis. Include exhaustive list of all state and federal decisions with negative impacts on Karuk tribe and people.
- Use focus groups and/or other research techniques to assess present day circumstances and needs of tribal members in all age groups and demographic categories (e.g. location in and out of ancestral territory).
- Undertake further research illustrating the health benefits of the traditional Karuk diet and lifeways.
- Continue research illustrating linkages between traditional cultural management and social and cultural continuity.
- Continue research illustrating the ecological value of traditional Karuk management techniques along the line of the work of Dr. Frank Lake (“Traditional Ecological Knowledge to Develop and Maintain Fire Regimes in Northwestern California, Klamath-Siskiyou Bioregion: Management and Restoration of Culturally Significant Habitats” Oregon State University, 2007).
- Undertake further research that outlines how Federal and State agency actions interfere with Karuk management (parallel to work submitted to California State Water Board on TMDL process that outlines water quality needs of the Tribe).
- Compile historical records and documents into Tribal library with digital and hard copies.

## **Preliminary Policy Recommendations**

As a result of the tribal testimonies, interviews and other forms of existing documentation, the following policy recommendations are suggested to further the twin goals of regaining tribal resource management and promoting the economic, cultural, psychological and physical conditions of the Karuk Tribe. These recommendations are placed into the three categories of organizational capacity, community development and traditional ecological management. This is not an exhaustive list.

### **Tribal Organizational Capacity**

- Develop organizational capacity to participate in traditional management. This will likely involve steps of increased fund-raising to provide the economic base for tribal employment on the one hand, and increased social services (education, health care, other resources) to support those tribal members seeking jobs on the other.
- Strengthen ties with Native Rights and other advocacy organizations. This may build organizational capacity overall and provide insight into strategic opportunities to expand traditional management.

### **Community Development**

- Develop educational institutions that teach Karuk values, history and traditional management techniques, as well as those offering a variety of employable skills (writing, management, computing).
- Develop facilities to support tribal members returning from prison so that they may be better supported and integrated into the community.
- Develop health care system that furthers integration between physical, cultural and mental health by incorporating knowledge of Karuk diet, values, cultural and ecological activities and social relationships.

### **Traditional Ecological Management**

- Expand presence of Karuk management techniques in the process of agencies, similar to implementation of Karuk Cultural and Subsistence Needs into the TMDL process through the State Water Board in 2006.

- Identify strategic opportunities for intervention in State and Federal agencies to increase role of Karuk management over long term.
- Expand participation in decision making process of Federal and State agencies regarding Karuk resources wherever possible.
- Develop Tribal Cultural Committee.

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