

U.S. Fish & Wildlife Service

Tribal Wildlife Grant and Tribal Landowner Incentive Program

Periodic Report, 2006



Message from the Director

Dale Hall

Dale Hall is Director of the U.S. Fish and Wildlife Service.



Indian Country comprises more than 100 million acres—much of which encompasses some of the most important fish and wildlife habitat in the nation. Countless plants and animals, many of which are protected by the Endangered Species Act, thrive on Indian lands. At the same time, Indian tribes have often lacked the means to adequately manage and protect these important resources.

In the spirit of cooperative conservation, I am honored to present this report on the U.S. Fish and Wildlife Service's Tribal Wildlife Grants (TWG) and Tribal Landowner Incentive Program (TLIP). These competitive grant programs provide great flexibility for tribal governments to focus on their own fish and wildlife management priorities. During the past four years, the Service has provided nearly \$40 million to more than 125 tribes for 219 projects.

In reviewing this report, you'll see many examples of on-the-ground conservation—from the Oglala of Pine Ridge *Igmú Tanka* (mountain lion) program to the Iowa Tribe of Oklahoma's project to construct and manage the Grey Snow Eagle (Rehabilitation) House, *Bah Kho-je Xla Chi*.

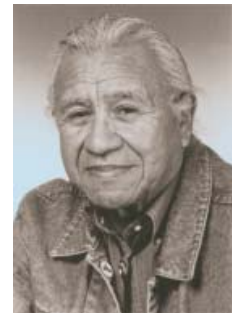
I also want to mention the work of the Sauk-Suiattle Tribe in northwestern Washington, which truly embodies the spirit of the TWG and TLIP programs. The tribe is addressing a declining population of the North Cascade mountain goat, which in turn will help the tribe maintain an important element of its traditions and culture.

I hope this report inspires you—as it inspires me—to continue working cooperatively to conserve and protect these valuable natural treasures.

Message from Tribal Leader

Billy Frank, Jr.

Billy Frank, Jr., a member of the Nisqually Indian Tribe, has served as Chairman of the Northwest Indian Fisheries Commission for more than 20 years.



Tribes have a proud and distinguished history as stewards of the land and waters of this continent. We learned long ago that to respect mother earth and to be good stewards of natural resources is among the best of legacies we can provide to all the descendants of this land. If our children are to be healthy and content, they must have clean water teeming with fish and vibrant uplands where deer and bear are sustained. These things are critical to the spirit of all people, just as the survival of fish and wildlife are, in fact, critical to long term prosperity.

The tribes work hard, as our ancestors taught us, to assure the continuation of natural resources for seven generations and beyond. But to achieve this we must have help, in the form of collaboration with non-tribal government at all levels, the cooperation of all people, and direct funding from the Federal government that must safeguard our sacred trust.

The Service's Native American Program has helped follow through with this commitment, with its Tribal Wildlife Grants (TWG) and Tribal Landowner Incentive Program (TLIP). Over the past four years, these programs have provided nearly \$40 million to about 125 tribes across the nation, including awards of more than \$4.1 million to tribes in the State of Washington.

As with other funding from other sources, this funding has been put to good use by the tribes, through programs that benefit Indian and non-Indian alike. Projects range from the monitoring of water quality to the enhancement of wildlife habitat. But the job has just begun. The United States bears a solemn responsibility to collaborate with tribes on an ongoing basis to protect and restore the habitat and natural resources so essential to all Americans.

Tribal Wildlife Grants

The Tribal Wildlife Grants (TWG) program was created by Congress within the State Wildlife Grant program in 2002, setting aside \$5 million to establish a competitive tribal grant program for Federally-recognized Indian tribes. These funds were not subject to further requirements of the formula-based State Wildlife Grant program.

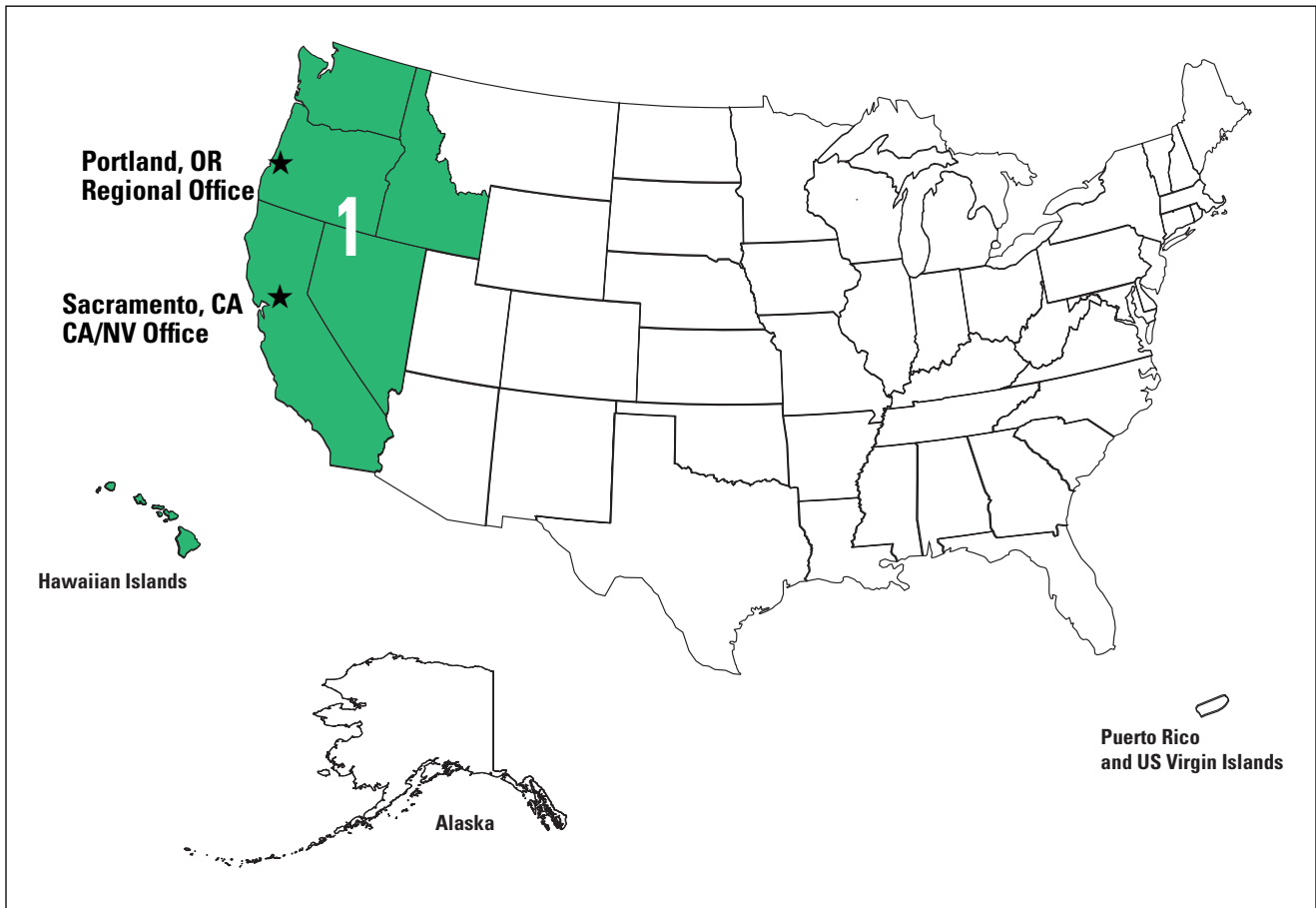
The purpose of the funding is to “provide technical and financial assistance for the development and implementation of programs that benefit fish and wildlife resources and their habitat, including species that are not hunted or fished.” The funds may be used for salaries, equipment, consultant services, subcontracts, acquisitions and travel. Proposals are evaluated by their Resource Benefit, Performance Measures, Work Plan, Budget, Capacity Building and their Partnerships and Contributions.

Tribal Landowner Incentive Program

The Landowner Incentive Program (LIP) is a competitive grant program created under the United States Department of the Interior Related Agencies Appropriations Act of 2002, from the Land and Water Conservation Fund. Within the LIP program, the Fish and Wildlife Service makes a portion of the funds available specifically to Federally recognized tribal governments.

The purpose of the funding is to “provide for the protection, restoration and management of habitat to benefit species at risk, including Federally-listed endangered or threatened species, as well as proposed or candidate species.” Funds can be used for salaries, equipment, consultant services, subcontracts, acquisitions and travel. Proposals are evaluated by their Resource Benefit, Performance Measures, Work Plan, Budget, Capacity Building and their Partnerships and Contributions.

The Northwest and California - Nevada (US Fish & Wildlife Service Region 1)



Pyramid Lake Paiute Tribe

*Pyramid Lake Fishery's Numana Hatchery Project
TLIP 2003 Grant: \$200,000, Matching: \$66,667*

Approximately 15 miles long and 11 miles wide, Pyramid Lake stands as the centerpiece and namesake of the Pyramid Lake Paiute Tribe in northwestern Nevada. The lake is named for an enormous pyramid-shaped granite peak rising from the water near the eastern shore.

Measuring 350 feet at its deepest point, Pyramid Lake is fed from Lake Tahoe through the Truckee River. It has no outlet; it is known as a terminal lake, which only allows water to leave through evaporation or seepage into the ground.

In order to protect the unique fisheries of this spectacular waterway, the Pyramid Lake Paiute Tribe has embarked on a project to upgrade their fish hatchery, funded by a 2003 Tribal Landowner Incentive Program grant.

“The lake’s resources include unimpaired water, flood reduction and sediment control, fish habitat, fish food habitat, and educational opportunities,” says Dan Fairbank, fisheries biologist for the tribe. “Protecting headwater habitat is critical to the successful recovery of Lahontan cutthroat trout, but we are also dealing with increasingly high summer temperatures and an aging hatchery infrastructure.”

The Lahontan cutthroat trout (*Oncorhynchus clarki henshawi*) and cui-ui (*Chasmistes cujus*) are both residents of the lake, and both are Federally-protected species. Because of their historic cultural kinship with of these rare fish, conservation is a priority for the Paiute people.



Lahontan cutthroat trout. Laurie Moore/USFWS



Collared lizard. Jim Williams/USFWS

Twenty-Nine Palms Band of Mission Indians of Southern California

The Old Woman Mountains Preserve

Fauna & Flora Assessment Project

TWG 2003 Grant: \$216,955, Matching: \$11,200

The Old Woman Mountains Preserve is located 40 miles west of the Colorado River, where three great American deserts converge. Relative to these three major desert systems, and along with its considerable elevation range, from 800 to 5,000 feet, the place is a natural magnet for plants and animals.

But the preserve is also not far from the high-speed development that characterizes so much of southern California. The population of the Inland Empire region (San Bernardino, Riverside, and Imperial counties) is expected to grow by almost 70 percent by the year 2020. Tribal Chairman Dean Mike had reason to be concerned after reviewing the results of the first comprehensive survey of flora and fauna on the tribe's 2,500-acre Old Woman Mountains Preserve.

"We are afraid that the wild desert lands that were home to our ancestors will one day be lost," said Mike. "It's important we know what we have. It is important that we do what we can do to leave for our children what our old people passed on to us. Knowing what we have is the first step in understanding what must be done."

The two-year long survey completed in December 2005 revealed an abundance of life on the preserve: 237 plant species, representing 35 percent of all plant families in California; 82 percent of the snakes, lizards, amphibians, and tortoises that could potentially occupy the area, including evidence of recent use of the preserve by the Federally-listed desert tortoise; 70 percent of the mammals that could potentially be found on the site, along with 81 species of birds, including 60 neotropical migratory species.

The program was designed to provide for the effective monitoring of any significant variation in plant and animal populations. The capacity to establish comprehensive base-line information, along with the ability to monitor any changes in plant and animal populations, is critical for long-term sustainable management. It also provides invaluable information for understanding how to adapt management strategies to habitat. The results of this effort will directly benefit management of desert habitat in California, Arizona, Nevada, and Utah.

Both the survey and an adaptive management plan were made possible by a 2003 Service-sponsored Tribal Landowner Incentive Grant, and help from friends. The tribe was assisted by a team of wildlife biologists, botanists, and cultural resource specialists from the San Bernardino County Museum, the Sweeney-Granite Mountain Research Station, and the Native American Land Conservancy.

Yakama Nation

*Shrub-Steppe Rehabilitation and Management
2004 TLIP Grant: \$149,280, Matching: \$96,283*

From the snowy crests of Mount Adams to the shrub-covered valley and cottonwood-dotted floodplains below, the Yakama Reservation in south central Washington is a vast landscape along the eastern slopes of the Cascade Mountain Range. Altogether, the reservation encompasses almost 1.4 million acres. For centuries, the land has provided for the many bands within the tribe.

Today, the tribe is working to restore ecological integrity to 400,000 acres of shrub-steppe on their land, where overgrazing and other land uses have led to the demise of the greater sage grouse.

Katrina Strathmann, a restoration biologist with the Yakama Nation Wildlife Resource Management Program, explains that the tribe is building on a foundation of work that was started in 2001 with the evaluation of wintering and breeding habitat for the sage grouse. “But that work,” she says, “focused solely on a portion of shrub-steppe and was geared specifically for the sage grouse.”

In contrast, the tribe’s current efforts account for the entire portion of their shrub-steppe and include considerations for a suite of species that depend on healthy shrub-steppe for both food and habitat, Strathmann said.

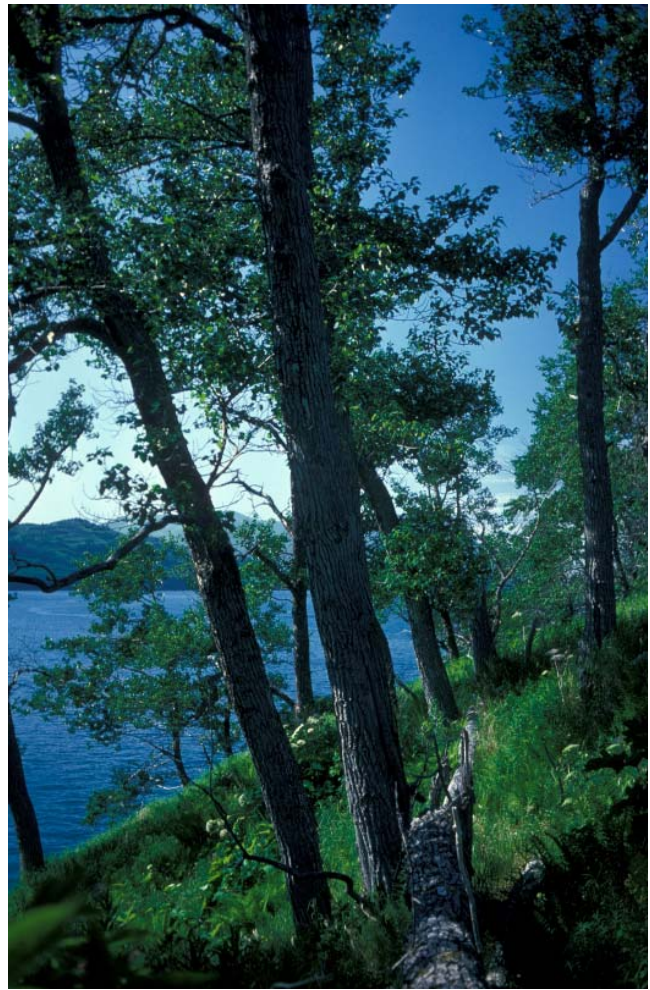
In part enabled by two Tribal Landowner Incentive Program grants, the tribe is developing a comprehensive management and restoration plan, a project that has been Strathmann’s first priority.

Once the entire shrub-steppe portion of the reservation is surveyed, the information will be used to evaluate distribution of habitat for several wildlife species, including the sage grouse. These models will provide an important basis for determining how the land should be managed and where restoration efforts should be recommended.

“If, for example, we see an area that shows certain characteristics of decline adjacent to good habitat for one of the wildlife species we’re concerned about, we may recommend changing management or beginning restoration activities in that area,” Strathmann says.

The data will also help identify and locate sites with substantial coverage of invasive plant species such as cheatgrass, which poses significant fire risks that can quickly degrade surrounding shrub steppe.

“Like nature itself, our work is a constant balancing act,” says Strathmann. “But because of the deeply held beliefs of the Yakama people, there is a very enduring respect for natural resources.”

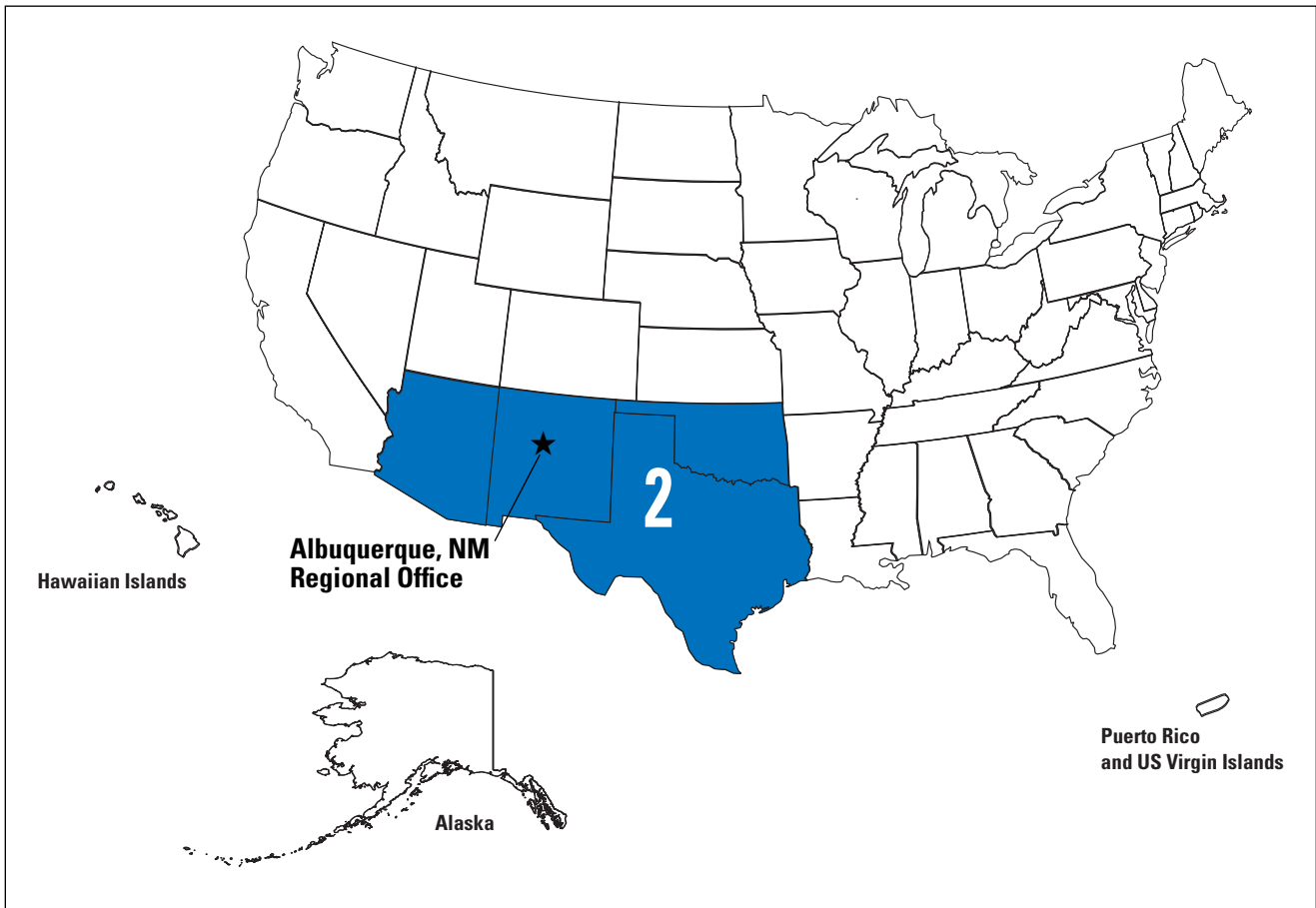


Cottonwoods. USFWS



Sage grouse. Gary Karmner

The Southwest (US Fish & Wildlife Service Region 2)



Iowa Tribe of Oklahoma

Eagle Aviary/Rehabilitation Center 2004
TWG Grant: \$250,000, Matching: \$50,000

In January 2006, the Iowa Tribe of Oklahoma honored two years of work made possible by a Tribal Wildlife Grant of \$250,000: the opening of the *Bah Kho-je Xla Chi* (Grey Snow Eagle House), an eagle aviary with a twofold purpose—to nurse sick or injured eagles back to health for eventual release back to the wild, and to provide a lifelong sanctuary for eagles whose wounds prevent them from returning to the wild. The eagles benefit—and so will the tribe, whose members will be able to use the birds' molted feathers for ceremonial purposes.

Prominently featured in healing, marriage, death and naming ceremonies, eagle feathers have always been an important part of Native American religion and culture. Both bald and golden eagles are protected by the Bald Eagle Protection Act of 1940. Recognizing the eagle's traditional importance, the Act was amended in 1962 to permit Native Americans to transport and possess eagles, eagle parts and feathers for cultural and religious uses. The new aviary represents an innovative approach to reconciling age-old cultural traditions with contemporary conservation objectives.

“We have been told that the eagle flies higher than any other bird and is the only one to have seen the face of God,” said Victor Roubidoux, wildlife manager for the Iowa Tribe. “So it is very important to us to be able to do rehabilitation.”

Roubidoux underwent intensive training to earn his wildlife rehabilitator's license and has employed his new skills treating a sick golden eagle at the new aviary.

Rehabilitated golden eagles will be released in northwestern Oklahoma, while bald eagles will be released near known nesting sites, with northern birds released during migration. Releasing rehabilitated eagles will contribute significantly in advancing the Service's eagle recovery goal.

At its current capacity, the aviary can hold a maximum of 11 birds, but the tribe is already considering expansion plans. The structure was inspired by other aviaries like those of the Zuni Pueblo in southwestern New Mexico and the Birds of Prey Foundation in Colorado, where Roubidoux received rehabilitator training. The main section features a flight cage that is 100 feet long, 18 feet tall, and 24 feet wide. A side mews measures 30 feet long, 17 feet wide, and 8 feet tall; and a quarantine cage is 8 square feet and 8 feet tall.

At the opening ceremony of *Bah Kho-je Xla Chi*, Tribal Chairwoman E. Bernadette Huber reported that for the first time in years, eagles have been appearing nearby, circling overhead in response to the call of the facility's first bird, an eagle that had been shot and required time to heal.

At January's ceremony, that bird was released.



Bald eagle. Dave Menke/USFWS



Desert landscape. Cherie Rife/USFWS

Jicarilla Apache Nation

*Habitat Improvement, Augmentation, and Monitoring of Roundtail Chub (*Gila robusta*) in the Navajo River 2003 TLIP: \$110,290. Matching: \$71,270*

For centuries, the people of the Jicarilla Apache Nation have made their home in the High Desert mountains of what is now southern Colorado and northern New Mexico. Over the past few years, the tribe has been working to maintain a home for another longtime resident, the roundtail chub, whose populations have declined on the Navajo River because of development and the introduction of non-native fish.

In the fall of 2003, the Jicarilla Game and Fish Department was awarded a Tribal Landowner Incentive Program grant to help the fish. The grant was to help restore approximately 2,700 feet of the Navajo River disturbed by past gravel mining operations and incorporate roundtail chub habitat; to augment the existing roundtail chub population in the Navajo River with fish cultured in the Colorado Division of Wildlife's J. Mumma Native Fish Rearing Facility in Alamosa; and to characterize the use of habitat and movement patterns of roundtail chub in the Navajo River using radio telemetry techniques.

With the first two goals achieved, the tribe is now focusing on characterizing the use of habitat and movement of roundtail chub in the Navajo and San Juan rivers, according to Jim White, fisheries biologist with the Jicarilla Game and Fish Department. Beginning in June 2005, White and his colleagues have so far implanted six adult roundtail chub with radio telemetry tags with one previously set tag still currently active.

"Although we are collecting data on the use of habitat by roundtail chub," White says, "we would like to focus our efforts on movement patterns because a review of the relevant scientific literature suggests that little information exists on roundtail chub movement related to pre-spawning, spawning, and post-spawning periods, particularly in the San Juan River Basin."

Fish capture, tagging, and monitoring activities resumed in early spring 2006.

Navajo Nation:

Enhancement of Navajo Nation Threatened and Endangered Species Program: Ferruginous Hawk Survey and Nest Protection
2003 TLIP: \$199,676 Matching: \$142,486

Largest of North American hawks, the Ferruginous hawk (*Buteo regalis*) is a year-round resident to the Navajo Nation where it nests primarily within the grasslands and desert badlands of northwestern New Mexico. The hawk is believed to have suffered significant declines in population in the last several decades due to human disturbances of the bird's nesting habitat. The species is listed as threatened on the Navajo Nation's endangered species list.

A portion of a Service-sponsored Tribal Landowner Incentive Program grant of \$199,676 enabled the Navajo Nation to find and record hawk nests on Navajo lands in New Mexico, and to see that the sites get long-term protection.

Initial surveys for nests were conducted in late August 2004, reports Gloria Tom, Director of the Navajo Nation's Department of Fish and Wildlife. Tom said a helicopter pilot and an observer spent 43 hours surveying 943 miles of habitat, which was 88 percent of the total potential nesting habitat. The remaining 12 percent of potential habitat was surveyed in May 2005.

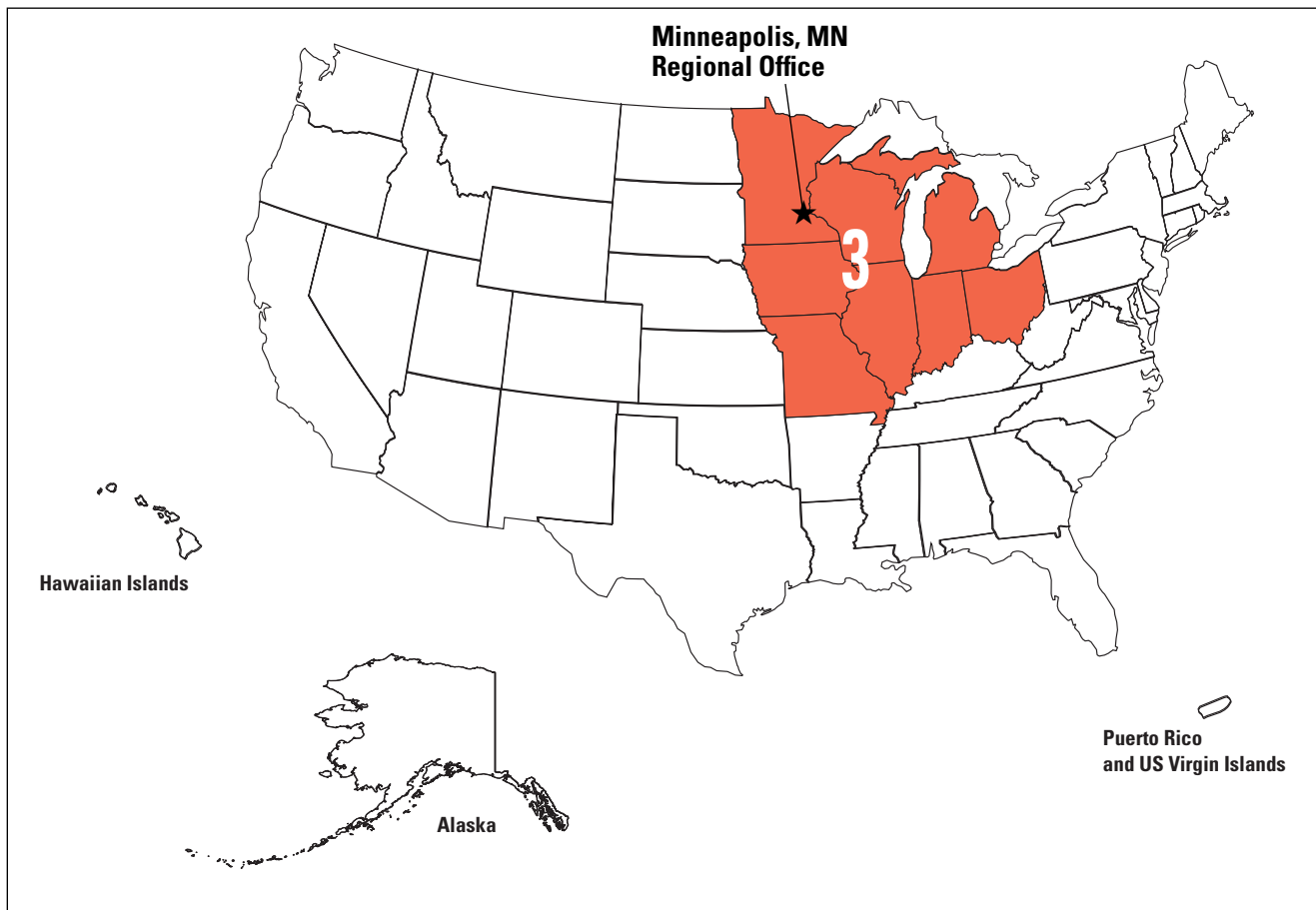
A total of 119 Ferruginous hawk nests were located in 2004 and six more were found in 2005. Of the 125 nests, 68 were newly discovered by these surveys. Nearly all nests were found on lands managed by the Navajo Nation.

Under the grant, the Navajo Department of Fish and Wildlife developed management guidelines for Ferruginous hawk nest protection. The guidelines, implemented in June 2005, outline the types of human activities that are allowed near hawk nests. Nests known to be in use receive the most protection from human activities during the breeding season, while all nests receive protection through restrictions that keep man-made disturbances at least a mile away.



Ferruginous hawk chicks. Larry Ridenhour/BLM

Great Lakes - Midwest (US Fish & Wildlife Service Region 3)



**The Bad River Band of Lake Superior
Tribe of Chippewa Indians**

Fish Hatchery Expansion

2003 TWG: \$147,784, Matching: \$16,500

In northern Wisconsin, the Kakagon River and the wetlands that surround it offer some of the most pristine and biologically diverse aquatic habitat in the entire Great Lakes. Before emptying into Lake Superior, the river flows through the Bad River Band of Lake Superior Chippewa Indians Reservation, and provides the water source for the fish hatchery the tribe has been operating since 1962. At the Raymond “Snooty” Couture Hatchery, the tribe produces walleye (*Sander vitreus vitreus*), white sucker (*Catostomus commersonii*), yellow perch (*Perca flavescens*), and Lake sturgeon (*Acipenser fulvescens*).

The hatchery fish not only benefit the Bad River Indians but other local tribes, the Wisconsin Department of Natural Resources, the Service, and a diverse population of anglers who fish on Lake Superior. The hatchery enhances tribal subsistence and provides a valuable boost for local economies that cater to recreational fishing.

Thanks to a 2003 Tribal Wildlife Grant of \$174,784, the hatchery is much more efficient. In 2005, the facility produced 12 million walleye fry, 1.2 million yellow perch fry, 13,000 extended growth walleye and 502,000 walleye fingerlings, well above the production levels that had been hindered by outdated, inadequate equipment. Target levels have been exceeded and can be maintained and even expanded in the future. The hatchery now produces walleye at the highest densities per acre of any facility in the Midwest.

Importantly, the Service Tribal Wildlife grants programs have also helped to leverage \$500,000 in additional funding from US Department of Health and Human Services, Administration for Native Americans (ANA), to further renovate the hatchery’s rearing pond facilities. Total funds leveraged since the completion of the grant have exceeded \$675,000.

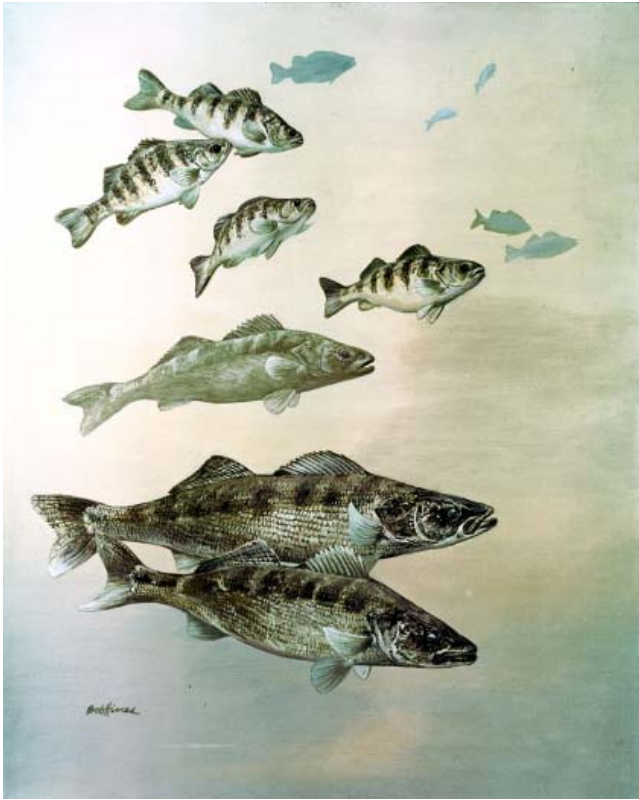
Sport fishing for walleye in Lake Superior, which has been increasingly popular in the last decade, is enjoying a dramatic jump, thanks to the hatchery’s increased production. The improved fishery has also benefited the health and welfare of Bad River tribal members and broadened the Chequamegon Bay Region’s economy.



Lake sturgeon. Eric Engbretson/USFWS



Walleye. Tim Knepp/USFWS



Walleye. Bob Hines/USFWS

Leech Lake Band of Ojibwe

Cormorant Diet Study

2004 TWG: \$209,000, Matching: \$157,220

In 1998, 73 pairs of double-crested fish-loving cormorants nested on Minnesota's Leech Lake, home to the Leech Lake Band of Ojibwe Indians. In 2004, the number of nesting cormorants had exploded to more than 2,500, raising concerns for the health of Leech Lake gamefish populations as well as other colonial waterbirds nesting on Little Pelican Island, a tribally owned and managed trust property.

But there was a lack of information about which fish the cormorants preferred. Leech Lake traditionally has had a healthy walleye population. The last strong walleye year was 1997. By 2001 walleye had become virtually non-existent in the eastern basin of Leech Lake, where cormorants feed and where angling pressure is not a factor. Confounding this issue is the fact that cormorants, a native species and also protected by the Migratory Bird Treaty Act, are still recovering from decades of poor reproduction and poisoning, both caused by DDT and other pesticides.

With money from the Service Tribal Wildlife Grant Program, the Fish, Wildlife, and Plant Resources Program of the Leech Lake Band of Ojibwe initiated a study to help determine what effect cormorants have had on game fish in Leech Lake. The Minnesota Department of Natural Resources, the US Department of Agriculture Wildlife Service, the Service, University of Minnesota, and several local community organizations helped with the project.

The study consisted of two components. The first involves collecting diet samples from both adults and nestlings to see what species of fish were being consumed, how large they were and in what numbers. The second part of the study combined those data with existing information from Minnesota fish surveys to estimate how cormorant predation affected fish populations. Information will be analyzed by two graduate students from the University of Minnesota to be able develop a model for management of double-crested cormorants on Leech Lake.

Initiated in the spring of 2005, the study has yielded the collection and analysis of about 500 samples so far. Results indicate that small yellow perch are the predominant fish consumed with shiners making up most of the remainder of the diet. Results of the study will help the Leech Lake Band of Ojibwe to address concerns about cormorant predation on game fish while maintaining a healthy cormorant population on its lands.

Little River Band of Ottawa Indians

Bobcat Protection Project

2003 TLIP Grant: \$137,644, Matching: \$74,936

Located within the northern portion of Michigan's Lower Peninsula, the Little River Band of Ottawa Indians (1836 and 1855 Reservations and Tribal territories) have provided the tribe with plentiful hunting, trapping and trading. To maintain these traditional practices for tribal members while protecting the sustainability of wildlife populations, the Little River Band has implemented a tribal bobcat program through funding sponsored by a Service's Tribal Landowner Incentive Program Grant of \$137,644.

Long valued by the Ottawa people for its value both as an essential part of the ecosystem and for its value in the fur trade, the bobcat occupies a precarious contemporary niche. Tribal fur traders and tribe members continue to trap and trade bobcat pelts on the international market at an increasing clip, while wildlife managers lack solid information on actual bobcat harvests that would help them make sound management decisions about the big cats.

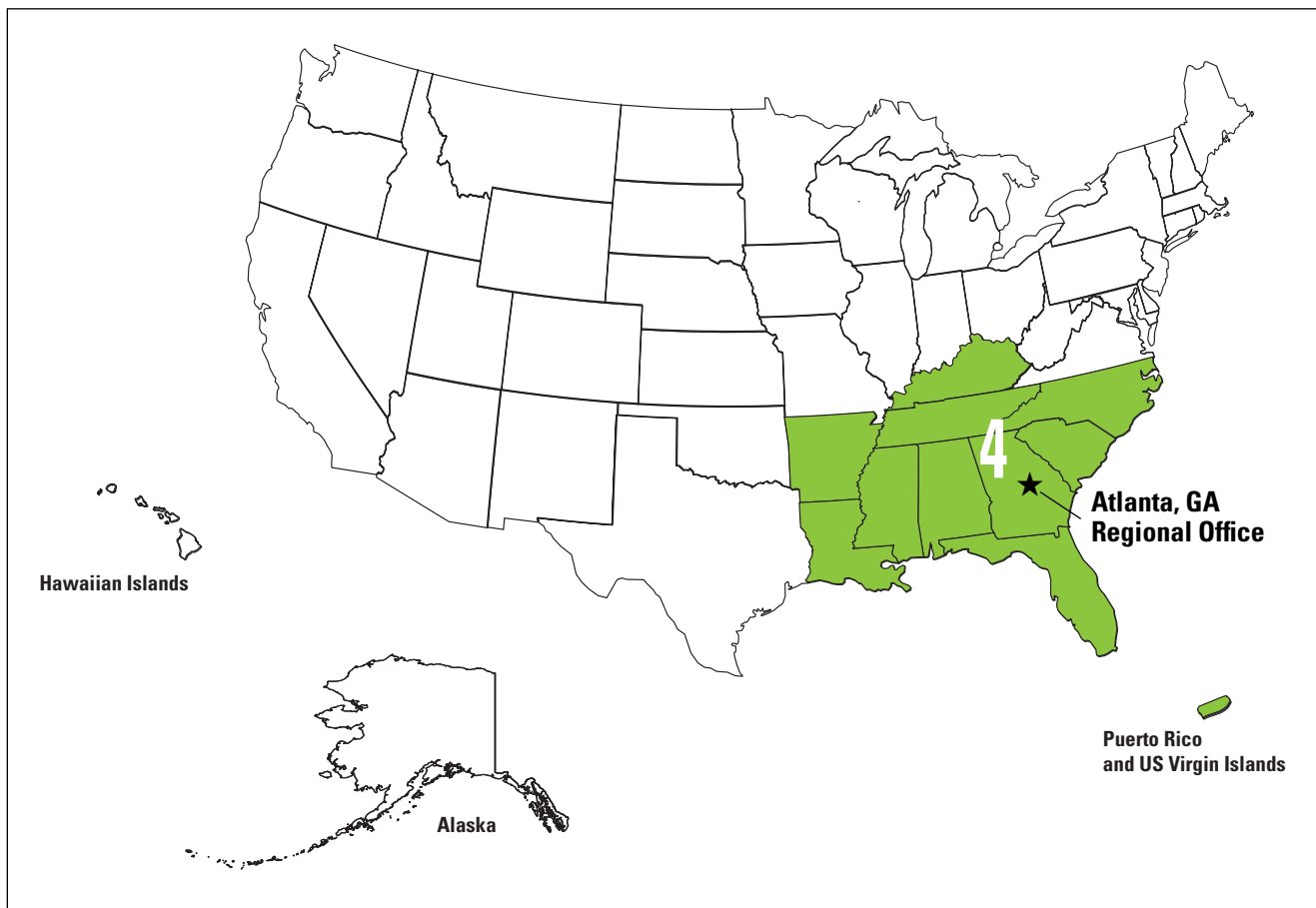
The Tribal Landowner Incentive Program has helped change that. The tribe has now been able to gather valuable baseline information on habitat use, range size and relative abundance of bobcats allowing for continued monitoring and management of these populations and habitats on a year-to-year basis. The tribe is using the spatial data to help predict bobcat presence. All of this information has allowed the tribal conservation department to write new regulations that allow for a sensible and sustainable harvest of bobcats on Ottawa lands.

This information also allows for the identification of populations that have possibly been reduced due to hunting and trapping and allows for better management to protect affected bobcat populations. The Bobcat Project remains a priority as it seeks to "...preserve and conserve the natural resources on and in the lands and waters...for the perpetual use, benefit and enjoyment of the tribes."



Bobcat. Gary Stolz/USFWS

Southeast (US Fish & Wildlife Service Region 4)



Eastern Band of Cherokee Indians

*Repair and Update of Tribal Fish Hatcheries
2003 TWG Grant: \$250,000 Matching: \$25,000*

After nearly 20 years, a fish hatchery built by the Eastern Band of Cherokee Indians to raise trout for year-round stocking began showing signs of age: concrete was cracking and breaking apart, and the raceways were in need of repair. The hatchery's truck was outdated, making stocking difficult, and the tribe lacked appropriate equipment for stocking fish in backcountry streams.

A 2003 Service-sponsored grant of \$250,000 supported efforts to repair and update the hatchery. Objectives included renovations to raceways and pipes and the purchase of new screens; the purchase of ATVs to increase stocking capacities in the back country and the purchase of equipment and machinery for routine hatchery operations.

The tribe has met nearly all objectives for repairing and updating the hatchery, restoring the raceways and improving mechanisms for water flow, and using newly-purchased screens to minimize depredation.

“Our hatchery was old and way behind technologically,” said David Ensley, Director of Fish and Game Management. “Other hatcheries have capabilities we could only dream of. But this grant has helped us buy modern equipment that we could never have afforded otherwise. We’ve gained a little bit of ground, and that’s making a big difference for our program.”

The tribe purchased a new, larger and more fuel-efficient stocking truck, which is used to stock fish on the reservation and to pick up fish at other locations and transport them to the hatchery. The tribe is now able to transport fish more quickly from other hatcheries, thereby reducing fish mortality.

Ultimately, all of this means more fish in reservation waters with less cost to maintain and provide them, more fishing, and an economic boon to the tribe.

“We were also able to purchase a lawnmower to maintain the area around the raceways, a backpack shocker for fish population counts, two all-terrain vehicles for stocking in hard-to-reach streams, and waders, gloves, and other equipment to help us do our job,” said Ensley.

The tribe expects to complete their work by the end of 2006.



New equipment. USFWS



Improved fish hatchery. USFWS



USFWS

Eastern Band of Cherokee Indians

*Natural Resources Survey for the Qualla Boundary
2003 TWG Grant: \$200,000, Contribution: \$66,718*

Surrounded on all sides by the Great Smoky Mountains National Park, the Qualla Boundary of the Eastern Band of Cherokee reservation encompasses more than 100 square miles of rolling, forested mountains. No doubt the area is rich in wildlife—but just how rich remained an open question: there had been no wildlife surveys on the reservation since 1979.

A Service-sponsored grant of \$200,000 enabled the tribe to change that.

“It had been nearly 25 years since we surveyed the reservation,” said David Ensley, Director of Fish and Game Management. “We needed to know what was out there to make smart management decisions. And the surveys found some problems on the reservation that we wouldn’t have known about otherwise.”

The tribe also created a database of species and compiled a list of culturally important plants for use by tribal members.

The tribe documented the presence of 620 plant species, including three species of concern, 31 species of fish in 26 streams, with 14 streams showing a decline in the number of fish from past surveys. Avian surveys revealed 70 species of birds, including the bald eagle and peregrine falcon. Fourteen amphibian species and five reptile species were identified, including two rare species of salamander. Ten species of bats were documented, including the Federally-endangered Indiana bat and gray bat.

The information offers an important guide for the tribe’s future forest management decisions.

Seminole Tribe of Florida

*Seminole Tribal Wildlife Program Planning
2004 TWG: \$250,000*

Eight unique clans of the Seminole Tribe have lived in harmony for generations in the forested wetlands and swamps of what is now the State of Florida. Today, the tribe is a full partner with the Federal government in the Everglades Restoration Project, a comprehensive effort to restore integrity to a vast and complex ecosystem jeopardized by years of pollution and development.

The Seminole Tribe manages nearly 90,000 acres, but has never operated a central office to address its many wildlife issues and concerns. The tribe wants to maintain and improve habitat for the Florida panther, the crested caracara and the Eastern Indigo snake, all species in decline due in part to the deteriorating Everglades ecosystem.

Enabled by a Service-sponsored Tribal Wildlife Grant, the tribe has been able to establish their first central wildlife office, hire a biologist and a technician, and create a wildlife management plan for tribal lands which is to be supported by GIS data and surveys of tribal flora and fauna.

Tribal staff have received GIS training and have been conducting weekly surveys for bald eagles and crested caracara. They have located wading bird rookeries. And the tribe is participating with the Service on the Panther Recovery Team. The tribe's overall capacity to assess the impact of activities on the reservation to wildlife has been greatly enhanced.

Staff members have also conducted outreach for school children on the reservation, and have hosted community birding events for tribal members and employees.

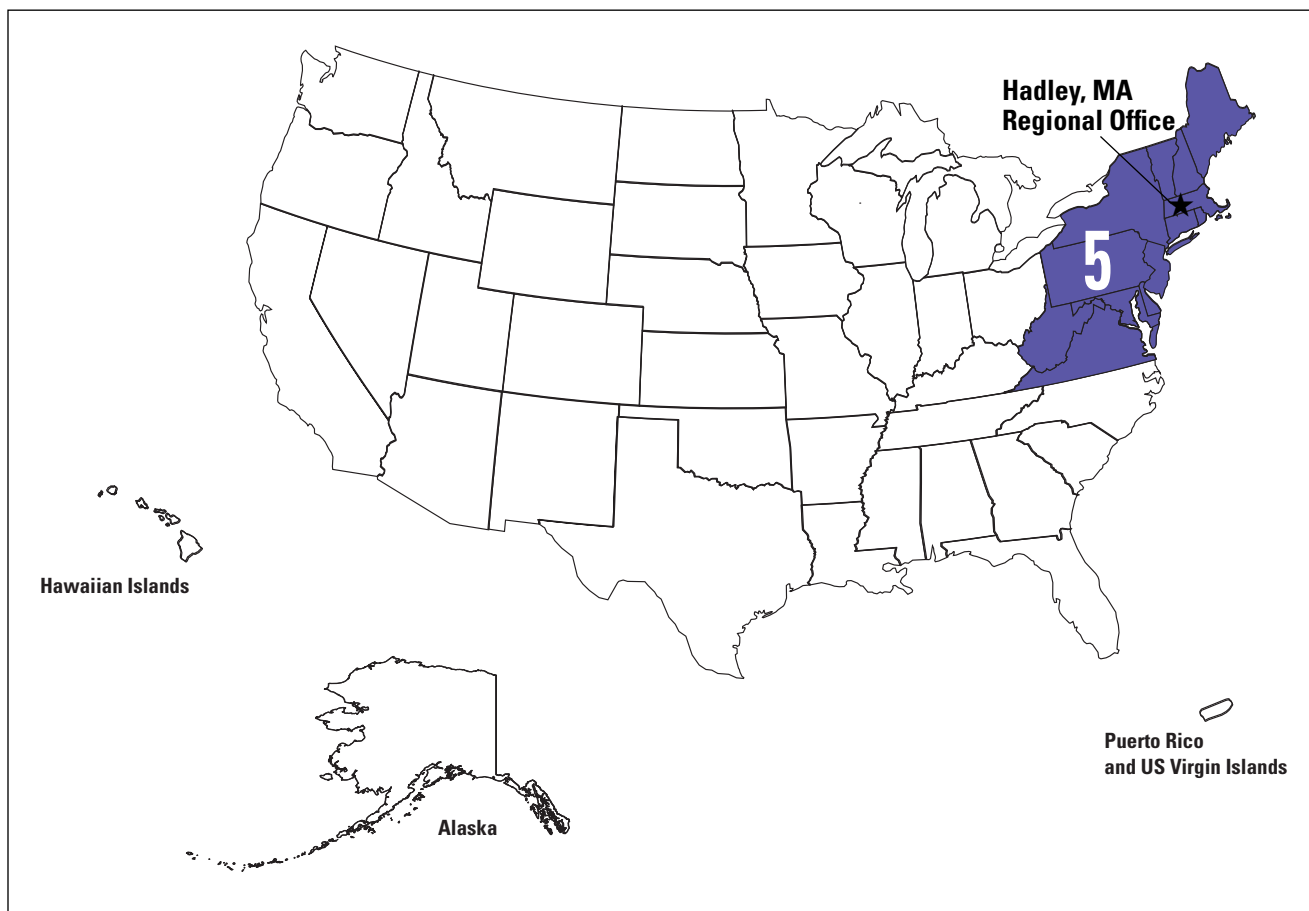


Everglades. Debbie McCrensky



Florida panther. USFWS

Northeast (US Fish & Wildlife Service Region 5)



Mashantucket Pequot Tribal Nation

Examination of Population Status, Habitat Needs, and Home Range Size of Significant Predator and Prey Species in a Suburban Environment in Connecticut

2003 TWG Grant: \$82,040, Matching: \$107,500

The history of the Mashantucket Pequot Tribal Nation, like that of many American Indian tribes, is one of breathtaking change. Prior to settlement of southeastern Connecticut by Europeans, some 8,000 Pequots inhabited 250 square miles of land; today, tribal members inhabit 1,250 acres, land that was part of settlement legislation signed by President Reagan in 1983. In between those numbers, members of the Mashantucket Pequot Tribe saw a long decline—and an eventual rebirth.

By the early 1970s, tribal members began moving back to the reservation. When land claims were eventually settled, it marked the beginning of an economic recovery that included selling firewood, maple syrup and vegetables and construction of a greenhouse. Eventually, the Foxwoods Resort Casino was born, which brought a major boon and jobs with it.

That economic revitalization has made it possible for the Mashantucket Pequots to establish their own wildlife conservation program which was the recipient of a Service tribal grant to expand one project on the red and the gray fox (animals with deep spiritual significance for the tribe), and another project to determine if New England cottontails are present on the reservation.

Both projects will make research information on all three animals available to the Connecticut Department of Environmental Protection, the Service, the scientific community and the public and will ultimately help determine how best to preserve and manage both the foxes and the cottontails.



Red fox. USFWS



Gray fox. USFWS

Penobscot Indian Nation

Katahdin to the Sea: Restoring the Penobscot River Ecosystem (Phases I and II)

2003 TLIP Grant: \$198,625, Matching: \$769,980

2005 TLIP Grant: \$149,490, Matching: \$50,372

One of the largest and most creative river restoration efforts in the nation's history, the two-phase Penobscot River Restoration Project in Maine is spread across several years. When finished, the river will again provide passage for at least five species of native fish across 500 miles of historic habitat. The newly-reopened waterway will also allow the Penobscot Indian Nation to again exercise tribal fishing rights for the first time in 100 years.

The Penobscot is New England's second largest river system and includes a watershed that covers nearly 8,600 square miles. One branch extends to the Maine/Quebec border, and to the east, there are the Allagash River headwaters. Included in the spectacular sweep of the river's landscape is Maine's highest peak, Mt. Katahdin. The main part of the river finally empties into Penobscot Bay near Bucksport, Maine.

A coalition called Penobscot Partners includes the Penobscot Indian Nation, American Rivers, Atlantic Salmon Federation, Maine Audubon, Natural Resources Council of Maine and Trout Unlimited working with the Service, Bureau of Indian Affairs and National Park Service, the State of Maine, and Pennsylvania Power and Light Corporation, which owns a number of dams on the river.

The first phase of this ambitious undertaking took place in June 2004, when all parties signed a comprehensive settlement agreement, and grant funding paid for critical scientific, political and community assessments, including analyses of proposed dam removals.

Phase II of this project is about restoring the Penobscot's ecosystem. The agreement allows the Penobscot River Restoration Trust the option to purchase three dams from Pennsylvania Power and Light and to remove the two lowermost dams, Veazie and Great Works and to build a fish bypass around Howland, the third dam. Pennsylvania Power and Light will improve fish passage at four additional dams and will have the opportunity to increase power generation at six existing dams.

Reopened habitat is expected to benefit shortnose sturgeon, Atlantic salmon, American eel, American shad and alewives; for the first time in more than 200 years, 100 percent of the migratory fish historic habitat will be reopened.

The impact of the Veazie dam was noted as far back as 1869; one observer wrote that "when the fish came in the spring they found an impassable barrier across the river as they gathered in multitudes below the dam and strove in vain to surmount it." Alewives and shad, being unable to go any further to spawn, died in huge numbers.



Shortnose sturgeon. USFWS



Atlantic salmon. Peter Steenstra/USFWS

When the entire project is complete, it is expected that the river's restoration will go a long way toward reviving populations of native sea-run fish such as the endangered Atlantic salmon; will renew opportunities for the Penobscot Indian nation to exercise fishing rights; create new opportunities for tourism, business and communities and will resolve some longstanding disputes and eliminate future uncertainties over regulation of the river.



Oysters. Index Stock Imagery

Wampanoag Tribe of Gay Head (Aquinnah)

*Bay Scallop Population Enhancement Program,
Martha's Vineyard, Massachusetts
2004 TWG Grant: \$247,500, Matching: \$171,480*

A three-year project for the Wampanoag Tribe of Gay Head to restore the bay scallop to Menemsha Pond, on Martha's Vineyard in Massachusetts, is particularly fitting: the tribe has cultural and historical roots to shellfish, which is also one of the tribe's traditional foods. Along with maize, beans and squash and the rewards of hunting and fishing, shellfish have always been an important part of the tribal diet.

The Scallop Restoration Project will dovetail with the construction of the Wampanoag Aquinnah Shellfish Hatchery, where oyster, hard clam and bay scallop shellfish seed will be produced for two sites in Menemsha Pond. Some of the seed will be offered for sale to nearby towns and to private growers; for areas like Martha's Vineyard, with a seasonal tourist-based economy, restoration of shellfisheries will be a welcome source of winter revenue.

In 2003, the Shellfish Hatchery produced several million oyster, hard clam and bay scallop seeds. That permitted the tribe to begin culture experiments with bay scallop cultures and to place the oysters and hard clam seeds as well as provide some to other growers on Martha's Vineyard.

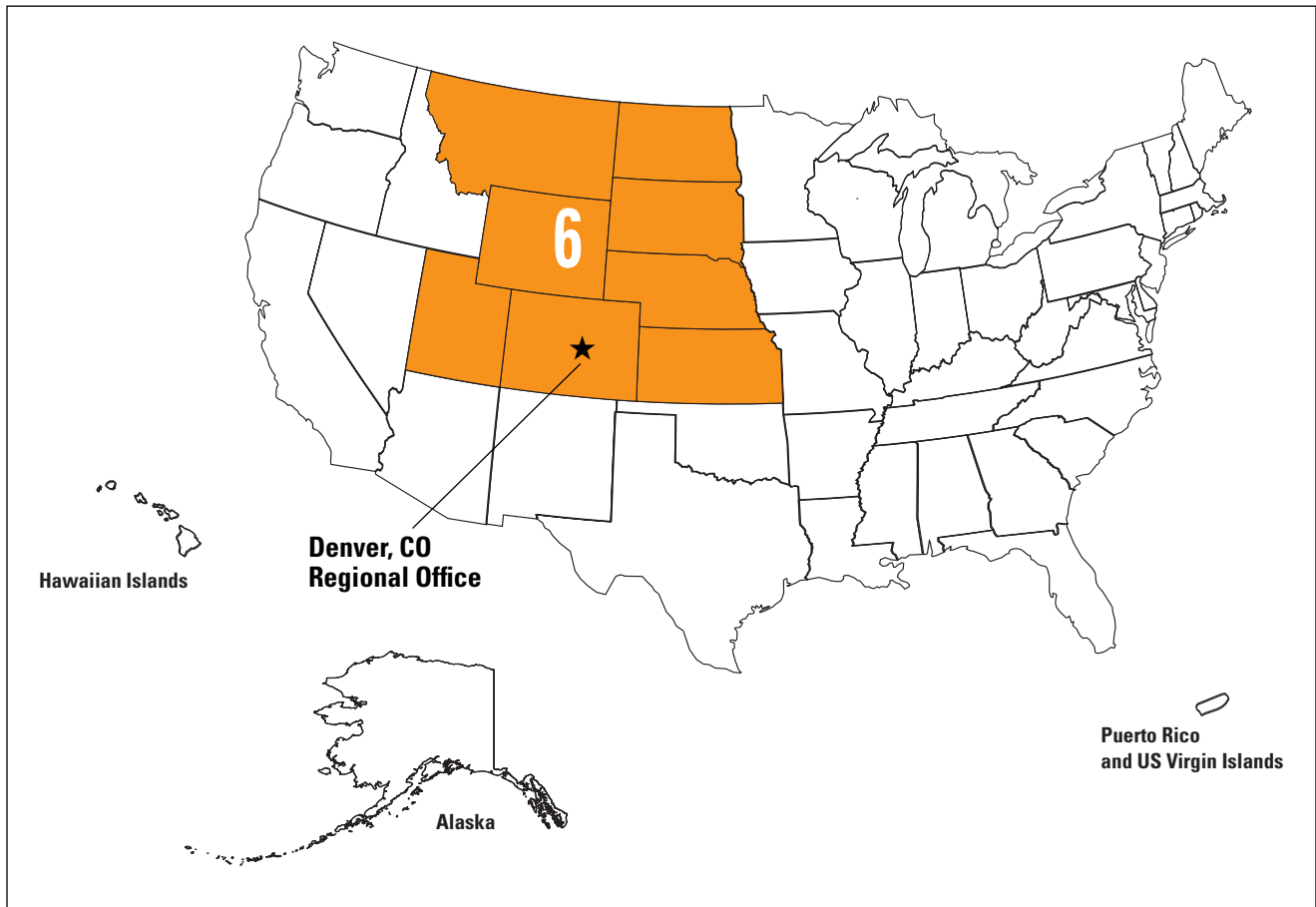
Next comes an aggressive bay scallop project, where scallop seeds will be placed in different areas of Menemsha Pond. Some seeds will be of different sizes, and different groups will be placed in different parts of the pond at different times of the year, to eventually help determine the best methods to enhance long-term scallop populations.

The shellfishery work also provides the tribe with a classroom for tribal and community students, where they can learn marine biology, water quality monitoring and aquaculture. Future programs will provide opportunities in operation of laboratory equipment. The hatchery and the laboratory are also open to the public for tours, as well as for special school projects.

The Wampanoag, who have existed in the Martha's Vineyard area at least since the 1600s, are still recovering from those early times. Like many other tribes, their existence became directly threatened once Europeans landed. Disease, religious conversion, displacement and unwanted cultural influence all led the Wampanoag to eventually declare war on the early settlers. But the war was the undoing of the Wampanoag; the few survivors that were unable to flee to other tribes in New England were sold into slavery and shipped to Bermuda, where their descendants survive to this day.

Now the Wampanoag are not only working to restore the valuable shellfishery, but they have labored since 1993 to restore their language, which fell into disuse in the 19th century. That effort is being carried out by tribal members and with help from linguists at the Massachusetts Institute of Technology. The Shellfish Hatchery represents another major development, and today, about 3,000 Wampanoag remain in southeastern Massachusetts and Rhode Island in the communities of Mashpee and Aquinnah.

Mountain Prairie West (US Fish & Wildlife Service Region 6)



**Flathead Indian Reservation/
Confederated Salish and Kootenai Tribes**

Columbian Sharp-Tailed Grouse

Conservation Program

2003 TWG Grant: \$212,050, Matching: \$24,967

The Sharp-tailed grouse, or prairie chicken, has long been important to both the Salish and Kootenai people both as food and as a spiritual inspiration. The tribes even patterned a war dance after a prairie chicken dance.

According to Indian legend, the prairie chicken was created virtually by chance. It had no place in the world that the Creator could remember, but it was happy and was left to roam the earth. The prairie chicken was so grateful for its life that it spent much of its time dancing to show its joy to its maker. Over time, the Creator became comfortable with this special praise, and smiled often upon it.

Columbian sharp-tailed grouse populations suffered sharp declines over the past century, aggravated by loss of habitat and disturbances of grouse populations caused by grazing livestock. The disappearance of the grouse was gradual; the last sighting of the bird on the Flathead Reservation occurred in 1978. As of August 2003, the only known population in Montana was located within the Blackfoot River Valley, which consisted of only 16 birds. Reintroduction of the groups in the Tobacco Plains, near Eureka, had limited success.

Biologically, the species became an important component of the grasslands that were so important to both tribes. Both practiced a cyclical way of life that focused on the harvest not only of fish and plants, but of game as well.

The project to re-establish the Columbian sharp-tailed grouse, financed to a large extent by a \$212,050 Tribal Wildlife Grant, will take place on a section of the Lower Flathead Valley within the Reservation, in Montana. This section of land includes the Ferry Basin Wildlife Management Unit and the Service National Bison Range along with some surrounding land.

Habitat protection and restoration are critical to the successful reintroduction of the grouse, but the tribes also recognize that success requires public support. Both tribes plan an aggressive education campaign, directed both at tribal members as well as the general public, with an educational lesson plan developed for use from kindergarten through the senior year of high school, and another lesson plan developed for college students.



Prairie chicken. USFWS



Black-footed ferret. Ryan Hagerty/USFWS

Lower Brule Sioux Tribe

Swift Fox and Black-Footed Ferret

Reintroduction Project

2003 TWG Grant: \$160,957, Contribution: \$47,300

For the Lower Brule Sioux Tribe, a two-year project to reintroduce the swift fox and the Black-footed ferret on the tribe's reservation in central South Dakota is about far more than rescuing two imperiled animals. It's about two animals that are critically valued links to the tribe's culture and history.

The swift fox—agile, cunning and, as its name implies, fast—is associated with the Sioux warrior society. Members of the society were said to be as agile and clever in battle as the fox, and wore fox pelts like a yoke, with the head in front and the tail in back. Members pledged to uphold ideals of bravery, generosity and honor and were noted for their compassion in peacetime and fearlessness in battle.

Tribal dancers have adorned their costumes with ferret skins and tied them to their braids; the skins were considered sacred and were usually buried with those who possessed them. For many Sioux, a chance for the ferret to return means they have a chance to help mend “the circle of life,” a term the Sioux use to describe the interrelationship of members of the tribe with wildlife. One member said, “the ferret is one of the animals we used in our medicine. Bringing back the buffalo was the first step; the return of the ferret is the final step.”

The swift fox is North America's smallest wild canine. Mostly active at night, the fox must be swift indeed to catch rabbits and smaller rodents that can quickly disappear into burrows. At top speed, the fox can clock 40 miles per hour, which comes in handy when it needs to avoid becoming a meal for coyotes, bobcats, raptors and other predators.

Swift foxes had difficulty, however, coping with the settlement of the West. Trapping, poisoning and the loss of natural prey that followed the loss of prairie grasslands pushed the swift fox into extinction in Canada and out of most of its range in the 48 states by the 1930's.

In 1981, a small population of black-footed ferrets was discovered in Wyoming and since then, a captive-breeding program has been in place in various locations across the Great Plains. An outbreak of sylvatic plague among prairie dogs, the ferrets' main prey, slowed the ferret reintroduction effort. The Lower Brule Sioux project, however, will be reintroducing ferrets in the plague-free state within the prairie dog's range: South Dakota.

The swift fox also suffered as the country expanded westward and its population dwindled by up to 90 percent as habitat was plowed or turned into pasture. Isolated pockets of swift foxes remain scattered throughout the northern portion of the animals' historic range, and the location of the Lower Brule Sioux Tribe gives their reintroduction efforts a high chance of success.

The tribe hopes that a successful reintroduction effort on behalf of both animals will in turn aid a natural comeback of the black-tailed prairie dog, the burrowing owl and others. The long-term goal is to eventually have self-sustaining populations of swift foxes and black-footed ferrets. The Lower Brule Sioux Tribe Department of Wildlife, Fish and Recreation works with the Fort Pierre National Grasslands, the Service, Badlands National Park and the South Dakota Department of Game, Fish and Parks in this important effort. The tribe is committed to establishing future partnerships and securing additional sources of funds for this project.

Southern Ute Indian Tribe

Stollsteimer Creek Restoration Project

2004 TLIP Grant: \$126,006, Matching: \$42,002

The oldest continuous residents of Colorado are the Ute Indians, who also inhabited present-day New Mexico and Utah, a state that takes its name directly from the Ute tribe. The Utes eventually became confederated into seven bands, with the Mouache and Capote composing the present-day Southern Ute population, headquartered at Ignacio, Colorado.

It is within the Southern Ute Reservation in Colorado that Stollsteimer Creek flows approximately 5 miles over land owned and managed by the Southern Ute Indian Tribe and held in trust by the Federal government. For the most part, tribal parcels along Stollsteimer Creek are undeveloped and intact, and supply critical food, water and shelter for many resident and migratory wildlife species.

The Stollsteimer Creek project calls for significant stream bank improvements throughout a 3.2 mile, tribal-owned stretch of the creek, which is a tributary of the Piedra River. There has been substantial bank erosion, caused by a combination of historical grazing practices, manipulations of the channel and banks by people and sudden, increased flows characteristic of spring runoff. Willows and Cottonwood seedlings have suffered to some extent from wintering elk.

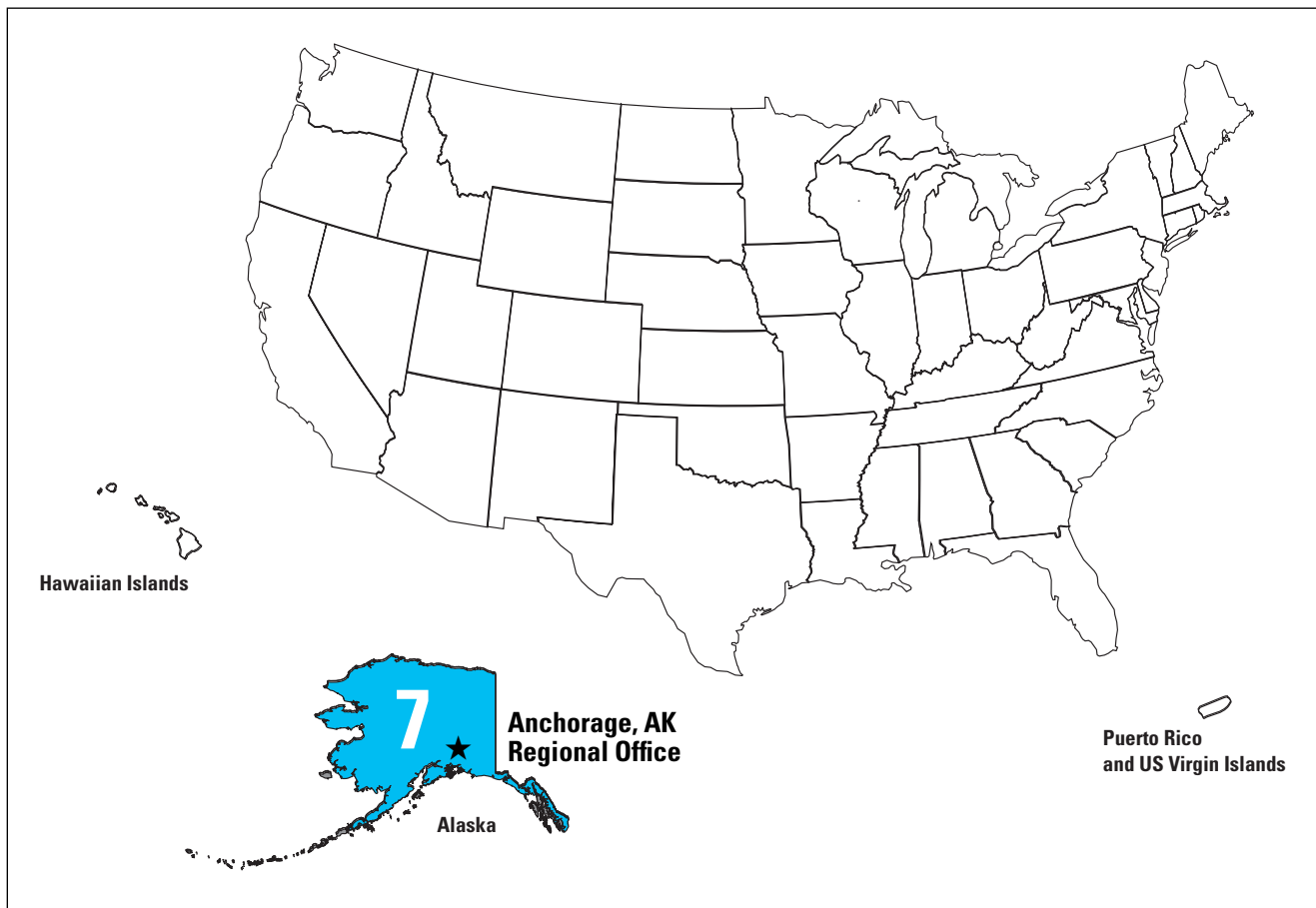
Once the restoration work is complete, this habitat should be more attractive to wintering bald eagles—a bird of special significance to virtually every Indian tribe—neotropical migratory birds, osprey, waterfowl, leopard frogs and other wildlife that depend on these areas across the Southwestern United States. In addition, the tribe hopes that the project will serve as an example to adjacent landowners, and might spur them to make similar improvements.

Completion of the project will be followed by monitoring, to see that treated stream banks and planted trees remain intact or, if necessary, repaired.



Osprey. Ed Sambolin©

Alaska (US Fish & Wildlife Service Region 7)



Native Village of Chickaloon

*Moose Creek Fish Passage Restoration Project
(Phases I and II)*

2004 TWG Grant: \$249,887

2005 TWG Grant: \$167,768, Matching: \$1,000

The Village of Chickaloon is an Ahtna Athabascan/Dene Indian community in southcentral Alaska, about a 90-minute drive north of Anchorage. The tribe's village is not central in the traditional sense, but is scattered along the Matanuska River, from the Matanuska Glacier to Cook Inlet. The Chickaloon Village Traditional Council is the government authority for the tribe and owns and manages approximately 72,000 acres of tribal land.

The tribal and surrounding land is rugged, diverse and breathtaking, with mountains soaring to 10,000 feet and punctuated by glaciers, rivers, streams, lakes and wetlands and coastal habitat. This is where the tribe harvested salmon, moose, caribou, grizzly and black bear, Dall sheep, beaver, rabbits, and numerous other animals and plants for food, medicine, tools and fiber for hundreds of years—until the suburbs of Anchorage brought dramatic change.

Those changes date back to 1900, when Chickaloon Village saw their traditional territory bear the brunt of coal and copper mining, oil and gas drilling, logging, quarrying and large-scale hydropower production. Highway and railroad construction and pesticide-intensive agriculture made their own contributions; the cost was a depletion of wildlife and moose and salmon populations were hit especially hard.

In response to all of that, the Chickaloon Village Environmental Protection Program developed a sustainable foods initiative that has embraced a challenging agenda: to restore health to the tribe's ancestral air, water, animals, forests and plants. The initiative combines traditional knowledge and science, and many of the projects are focused on loss that came by decades of industrial development.

That's where the Moose Creek Fish Passage Project comes in—an ambitious two-phase effort that seeks to rehabilitate the creek's most challenging fish passage areas and restore fish access to slower water and spawning and rearing habitat that were less affected by earlier railroad and coal mining activities.

The Moose Creek Project began in the summer of 2004, when the tribe began to reconstruct the creek's original channel and to determine, exactly, what conditions were like where the work was to be accomplished. The first phase also sought to restore fish passage around the creek's most impassable waterfall. Phase II will rehabilitate fish passage downstream, and will be finished in 2007.

Providing fish passage has been very effective in streams and waterways throughout much of the country, and with that success as a guide, the people of Chickaloon Village should begin to see sockeye, coho,



Moose Creek waterfall. USFWS



Caribou. Dave Menke/USFWS

chinook, pink and chum salmon again swimming to the reaches of Moose Creek to spawn.

For the last 80 years, tribal members have had to travel long distances to harvest salmon, a cultural centerpiece as well as a staple of their diet. Now, thanks to a total of \$417,655 in Tribal Wildlife Grant money that helped build a fish passage project, the salmon and the Chickaloon will all be closer together.



Herring locale. Heather Meuret Woody/USFWS



Herring. Heather Meuret Woody/USFWS

Sitka Tribe of Alaska

*Tribal Wildlife Sockeye Salmon and Pacific Herring
Otolith Research Grant*

2003 TLIP: \$249,958, Matching: \$112,855

The Sitka Tribe of Alaska's Tribal Council has long been involved in efforts to protect wild food resources that are central to the physical and cultural health of their tribal members, and elders have continued to express concern about diminished returns of both salmon and herring.

With \$112,855 in matching funds from the Sitka Tribe, researchers in Alaska hope to gain information that will eventually lead to better management of commercial and subsistence herring in Sitka Sound and of the sockeye salmon population.

The grant will enable the Sitka Tribe to take a long look into otoliths, a structure in the inner ear of fish that can help determine age, by showing rings of different growth for summer and winter, similar to tree rings.

Otoliths can also yield information about food that salmon and herring are feeding on, as well as migration, growth and maturation rates. Otoliths from both species will help determine what more can be done to enhance the populations of both fish.



Tribal Wildlife Grant and Tribal Landowner Incentive Program

Periodic Report, 2006

*Summaries by State and Tribe,
FY 2003-2006*

CALIFORNIA

Agua Caliente Tribe

TWG 2004

Federal grant: \$200,956

Contribution: \$20,095

Title: *Perform Research Studies on Riparian Birds and Amphibians, Endangered Peninsular Bighorn Sheep and Tribally Important Bat Species*

Goals/Objectives: Develop monitoring protocols for riparian obligate species found within the Mountains and Canyons Conservation Area identified in tribe's Habitat Conservation Plan. The plan identifies two distinct areas on the Reservation: the Valley Floor Conservation Area and the Mountains and Canyons Conservation Area.

Hoop Valley Tribe

TWG 2003

Federal grant: \$249,957

Contribution: \$45,000

Title: *Northern Spotted Owl Demographic Analysis and Fisher Habitat Use, Population Monitoring and Dispersal Feasibility Study*

Goals/Objectives: Advance the tribe's capacity to make informed forest management decisions and make adjustments to the tribe's forest management practices to protect key wildlife habitat elements with emphasis on northern spotted owl (*Strix occidentalis caurina*) and fisher (*Martes pennanti*) habitat.

TLIP 2004

Federal grant: \$149,925

Contribution: \$79,000

Title: *Improve Habitat Protection during Timber Sale Layout and Implementation*

Goals/Objectives: Develop tribal capacity to protect habitat elements critical to Federally-listed Threatened and Endangered, Sensitive, as well as culturally important wildlife and plant species.

Hopland Band of Pomo Indians

TWG 2005

Federal grant: \$119,417

Contribution: \$7,335

Title: *Hopland Band of Pomo Indians Creek Habitat Restoration Project*

Goals/Objectives: Restore healthy fisheries habitats to the riparian areas on tribal lands under the Russian River Basin Plan. Specifically, three erosion sites are being restored and further surveys will identify additional sites in need of restoration or protection management.

Los Coyotes Band of Cahuilla Indians

TLIP 2004

Federal grant: \$78,680

Contribution: \$27,760

Title: *Los Coyotes Re-vegetation and Land Restoration Project*

Goals/Objectives: Address much needed re-vegetation and land restoration activities for preserving, protecting and maintaining at-risk species indigenous to the tribal lands. Establish habitat management and restoration plan for the Los Coyotes Reservation.

Robinson Rancheria of Pomo Indians

TWG 2004

Federal grant: \$249,511

Contribution: \$24,738

Title: *Clear Lake Hitch Study and Recovery Project*

Goals/Objectives: Restore fish passage routes for the Clear Lake Hitch (*Lavinia exilicauda chi*), a fish of extreme cultural importance to the six tribes of the Clear Lake Basin. This species is unique to the basin and in addition to restoration work, the Robinson Rancheria Pomo Indians are assessing spawning dynamics and participating in the Hitch Stewardship Council and other local conservation groups.

Round Valley Indian Tribes

TLIP 2005

Federal grant: \$95,300

Contribution: \$168,041

Title: *Mill Creek Habitat Restoration Project and Fisheries and Wildlife Management Plan Development*

Goals/Objectives: Three separate projects are undertaken in this program. The *Mill Creek Habitat Restoration Project* develops and connects a single, primary channel system with a functional riparian corridor through an area nearly two miles long to restore its natural hydrology. The *Mill Creek Enhancement Module* adjusts and modifies or otherwise enhances previously completed restoration work. Mill Creek is one of the few streams that still support native runs of both chinook salmon (*Oncorhynchus tshawytscha*) and steelhead (*Oncorhynchus mykiss*). The *Fisheries and Wildlife Management Plan* section of this effort supports the tribe's Deer Herd Management Program, a potential hatchery, and the Tribal Fish and Wildlife Management Codes.

Region 1 (*California, Hawaii, Idaho, Nevada, Oregon, and Washington*)

TLIP 2006

Federal grant: \$118,135

Contribution: \$596,472

Title: *Mill Creek Restoration Project and Wildlife Management Plan Project*

Goals/Objectives: This tribal grant provides funds to six tribes in northern California to develop a long-term comprehensive wildlife management plan regarding approximately 30,000 acres under their stewardship. The primary goal is to preserve, enhance, and restore Mill Creek stream, a two mile stretch of river supporting culturally significant and subsistence fishing populations of salmon (*Oncorhynchus spp.*) and steelhead (*Oncorhynchus mykiss*). There is a declining trend, thus a high concern among tribal members in the numbers of these fish bearing populations

Rumsey Tribe

TWG 2003

Federal grant: \$250,000

Contribution: \$250,000

Title: *Cache Creek Cultural Restoration Project*

Goals/Objectives: Control invasive species, restore habitat, and re-vegetate culturally important plant species on 34 acres of the Cache Creek Cultural Restoration Project and implement stream bank stabilization, riparian forest management techniques. This project work also will increase tribal management capacity for future conservation efforts.

Susanville Rancheria

TLIP 2005

Federal grant: \$28,525

Contribution: \$15,675

Title: *Cradle Valley Indigenous Landscape Enhancement Project*

Goals/Objectives: Return 160 acres near Cradle Valley to pre-settlement conditions and develop a cultural center and Tribal Stewardship Area to help educate the public about traditional ways of Native Americans. As a cultural preserve, the area will provide an area for Native Americans to hold ceremonies and traditional or spiritual gatherings. The project work focuses on measures to exclude livestock and re-vegetation of degraded areas including traditional-use plants to restore and improve habitat for many tribally significant fish and wildlife species including at-risk species associated with restored wetland, riparian and forested habitats.

TWG 2006

Federal grant: \$250,000

Contribution: \$87,935

Title: *Freshwater Mussel Survey on Ancestral Homelands of the Susanville Indian Rancheria*

Goals/Objectives: Determine the current distribution, abundance and character of freshwater mussel (*Anodonta californiensis*) populations in five watersheds on the Lassen National Forest located within ancestral homelands of the Susanville Indian Rancheria and the Confederated Tribes of the Umatilla Indian Reservation. Not only will this further develop cooperative partnerships among tribes and Federal entities, it will enable historical and archaeological data to be collected, establishing a baseline on this freshwater mussel in the northern Sierra Nevada/Cascade region.

Twenty-Nine Palms Tribe

TWG 2003

Federal grant: \$216,955

Contribution: \$11,200

Title: *The Old Woman Mountains Preserve Program*

Goals/Objectives: Provide for effective monitoring of significant variation in plant and animal populations. Establish capacity to build comprehensive base-line inventory and monitor changes in plant and animal populations for long-term sustainable management. Support management strategies to manage critical habitat and desert habitat in California, Arizona, Nevada, and Utah.

TWG 2005

Federal grant: \$249,847

Contribution: \$17,200

Title: *Old Woman Mountain Preserve Project*

Goals/Objectives: Continuation of a 2003 TWG project (see above).

IDAHO

Coeur d'Alene Tribe

TWG 2005

Federal grant: \$182,399

Contribution: \$73,960

Title: *Detecting the Presence of Fisher and Lynx on the Ceded Territory of the Coeur d'Alene Indian Tribe*

Goals/Objectives: Conduct an intensive survey of the Ceded Territory of the Coeur d'Alene Tribe to detect the presence of fisher (*Martes pennanti*) and lynx (*Lynx canadensis*). The information from this study coupled with information from the Idaho Department of Fish and Game and US Forest Service, will contribute to the body of knowledge for better understanding these forest carnivores in northern Idaho.

Region 1 (*California, Hawaii, Idaho, Nevada, Oregon, and Washington*)

Nez Perce Tribe

TWG 2003

Federal grant: \$236,310

Contribution: \$11,000

Title: *Developing Monitoring Protocol*

Goals/Objectives Research and establish a modern and more appropriate approach to monitoring post de-listing wolf populations. To date, recovering gray wolf (*Canis lupus*) populations in Idaho have been estimated by using radio telemetry. This was appropriate when there was a very small population but the success of the reintroduction program has rendered radio telemetry too expensive and labor intensive.

TLIP 2004

Federal grant: \$149,999

Contribution: \$93,197

Title: *Rare Plant Surveys on Nez Perce Tribe Fee and Trust Lands in Idaho, Oregon and Washington*

Goals/Objectives: conduct an inventory of tribal lands for federally listed and culturally important plant species. Many plant species are gathered by tribal members on a daily basis and as land use priorities change, productive gathering areas become harder to locate. This inventory will help to protect and recover protected species and better manage the traditional plant species on tribal lands.

TLIP 2006

Federal grant: \$150,000

Contribution: \$69,933

Title: *Conservation Strategy Development for Rare Palouse Prairie Plants on Nez Perce Tribal Lands*

Goals/Objectives: Provide further conservation strategy development for three rare Palouse Prairie plants located on and immediately adjacent to the Nez Perce Tribal reservation in north-central Idaho. The resulting plan will not only provide the tribe with a framework for integrating sustainable use of natural resources within the tribe's social and cultural values, but also assist the Service with knowledge regarding these plants' basic life history characteristics and reproductive issues.

NEVADA

Duck Valley - Shoshone-Paiute Tribes

TWG 2004

Federal grant: \$249,583

Title: *Survey, Monitor and Management of the Sage-grouse Populations and Habitat on the Duck Valley Indian Reservation*

Goals/Objectives: Develop a complete inventory and assessment of sage grouse (*Centrocercus urophasianus*) populations and their breeding, nesting, brooding and winter habitat. This information is critical to improving tribal capacity for response to reservation management needs and cultivation of partnerships with outside communities concerned with sage grouse conservation.

TLIP 2005

Federal grant: \$149,347

Contribution: \$49,782

Title: *Survey Wildlife and Habitat in the Blue Creek Wetlands for the Development of a Wetlands Management Plan*

Goals/Objectives: Develop a comprehensive wildlife survey and habitat assessment for species supported by Blue Creek. The Blue Creek Wetlands complex is a 10,846-acre cultural and biological priority habitat supporting several at-risk species. This inventory will provide guidance in tribal land and livestock management strategies and be incorporated into the Tribal Wetlands Management Plan, grazing ordinances, and Range Management Plan.

Duckwater Tribe

TWG 2003

Federal grant: \$250,000

Contribution: \$25,000

Title: *Railroad Valley Springfish Critical Habitat Restoration Project*

Goals/Objectives: Secure a conservation easement for permanent habitat conservation for Railroad Valley Springfish (*Crenichthys nevadae*) critical habitat on the Big Warm Spring and Little Warm Spring on Duckwater Shoshone tribal lands, Railroad Valley, Nevada.

TLIP 2003

Federal grant: \$200,000

Contribution: \$64,000

Title: *Railroad Valley Springfish Critical Habitat Restoration Project*

Goals/Objectives: This TLIP funding provides for the recovery of the Railroad Valley Springfish through a partnership between the Duckwater Shoshone Tribe, Federal and State governments. These entities are developing a Habitat Restoration and Management Plan that will identify the opportunities to restore this threatened species to historical habitats.

Region 1 (*California, Hawaii, Idaho, Nevada, Oregon, and Washington*)

Pyramid Lake Paiute Tribe

TLIP 2003

Federal grant: \$200,000

Contribution: \$66,667

Title: *Pyramid Lake Fishery's Numana Hatchery Project*

Goals/Objectives: Protect the unique fisheries resources of Pyramid Lake's headwaters resources to promote unimpaired water flow, flood reduction and sediment control, fish habitat, and fish food habitat. This project lends itself to educational opportunities for tribal members. Protection of these headwaters is of critical importance because as a terminal lake—with no drainage outlet—Pyramid Lake is subject to the effects of all upstream impacts.

TLIP 2004

Federal grant: \$145,500

Contribution: \$78,920

Title: *Truckee River Barrier Removal and Riparian Restoration Project*

Goals/Objectives: 1. Remove fish passage barriers on the Truckee River. 2. Restore selected reaches of the lower Truckee River. The project is primarily intended to help Cui-ui (*Chasmistes cujus*) and Lahontan cutthroat trout (*Onchorhynchus clarki henshawi*).

Washoe Tribe of Nevada and California

TLIP 2004

Federal grant: \$142,000

Contribution: \$57,814

Title: *Lahontan Cutthroat Trout Habitat Assessment and Restoration Project*

Goals/Objectives: Restore over 1,000 feet of Lahontan cutthroat trout (*Onchorhynchus clarki henshawi*) habitat on Clear Creek. This effort paves the way for restoration of the native trout above a natural fish passage barrier and opens important breeding habitat for the species.

OREGON

Burns Paiute Tribe

TLIP 2006

Federal grant: \$109,070

Contribution: \$249,245

Title: *Eliminate Fish Loss on Burns Paiute Deeded Lands*

Goals/Objectives: Work with the Oregon Department of Fish and Wildlife to design and construct screens on the irrigation ditches and provide a fish ladder on the diversion dam. This project shall also restore habitat conditions for the long term goal of spring Chinook salmon reintroduction.

Confederated Tribes of Grand Ronde

TWG 2006

Federal grant: \$120,000

Contribution: \$131,330

Title: *Black-tailed Deer Assessment of the Grand Ronde Reservation*

Goals/Objectives: Assess the population of Columbian black-tailed deer (*Odocoileus hemionus*), establish baseline information, and build tribal capacity to monitor deer population trends over time. Specific objectives of the project are to estimate the black-tailed deer population in a study area on the reservation, determine fawn and doe survival, determine age and sex structure of the population, and monitor disease.

TWG 2006

Federal grant: \$129,913

Contribution: \$95,099

Title: *Upstream Migration Study of Pacific Lamprey in the Willamette Basin, Oregon*

Goals/Objectives: Study upstream migration habits of Pacific lamprey (*Lampetra tridentata*) in the Willamette River Basin, Oregon. Radio tag Pacific lamprey in the Willamette River and track their movements as they migrate upstream to spawning grounds. Benefits include understanding the timing of Pacific lamprey migration, identification of important over-wintering locations, and determining the relative use of primary tributaries for spawning.

Confederated Tribes of Umatilla

TLIP 2003

Federal grant: \$150,000

Contribution: \$159,086

Title: *Umatilla River Floodplain Habitat Acquisition*

Goals/Objectives: Secure important floodplain habitat for the benefit of threatened summer steelhead (*Oncorhynchus mykiss*), bull trout (*Salvelinus confluentus*), and bald eagles (*Haliaeetus leucocephalus*). These habitats are an integral component in ongoing river ecology research conducted by the tribe and partnering universities.

Confederated Tribes of Warm Springs

TWG 2004

Federal grant: \$239,237

Contribution: \$15,000

Title: *Lower Deschutes River Adult Pacific Lamprey Radio Telemetry Study*

Goals/Objectives: Addresses major uncertainties surrounding the life-history of Pacific lamprey eel (*Lampetra tridentata*) and enable the tribe to identify critical habitat use needs for updating their Integrated Resource Management Plan.

Region 1 (*California, Hawaii, Idaho, Nevada, Oregon, and Washington*)

Klamath Tribe

TWG 2003

Federal grant: \$50,000

Contribution: \$102,173

Title: *Mule Deer Distribution, Habitat Use and Population Project*

Goals/Objectives: Conduct a comprehensive Mule Deer Distribution, Habitat Use and Population Project. Project objectives are to determine timing and distribution of migratory mule deer (*Odocoileus hemionus*) and their migration routes, determine which habitat variables are associated with adult survival and fawn production, and surveys to generate population estimates for summer and winter deer herds to develop an annual deer inventory model.

WASHINGTON

Colville Tribe

TLIP 2004

Federal grant: \$147,202

Contribution: \$49,647

Title: *Shrub Steppe Habitat Conservation and Sustainability Project*

Goals/Objectives: Develop inventory maps and analyze shrub-steppe habitat for the sustainability and conservation of sagebrush, bunch grass and riparian communities on the Colville Indian Reservation. Land cover data generated by remote sensing/GIS technologies and field sampling provides: 1. Baseline data on existing conditions; 2. Tracking habitat alterations; 3. Environmental analysis; and 4. Identification of potential habitat improvements and land acquisition.

Lummi Indian Nation

TLIP 2004

Federal grant: \$150,000

Contribution: \$75,000

Title: *Acme-Saxon Phase I Habitat Restoration Project*

Goals/Objectives: Salmon habitat restoration activities that benefit treaty-protected fisheries and Federally listed endangered species recovery in the South Fork Nooksack River.

TLIP 2005

Federal grant: \$150,000

Contribution: \$64,645

Title: *Upper South Fork In-stream Project Design*

Goals/Objectives: Utilize empirically derived data to prescribe, prioritize and provide permit-ready project design for restoration work addressing critical habitat needs of South Fork chinook (*Oncorhynchus tshawytscha*) and other priority salmonids. The Upper South Fork In-stream Project Design will address habitat diversity, habitat quality, channel stability, sediment load, and water quality with an emphasis on habitat needs for adult holding, fry colonization and egg incubation.

TWG 2006

Federal grant: \$250,000

Contribution: \$83,958

Title: *Upper South Fork Nooksack In-stream Project*

Goals/Objectives: Improve endangered species populations, providing high quality critical habitat, and building tribal technical resources in the Nooksack River basin. The project will remove a failing bridge and associated fill and provide for the restoration of spawning and holding habitat in a historically significant bull trout (*Salvelinus confluentus*) and chinook salmon (*Oncorhynchus tshawytscha*) spawning reach.

TLIP 2006

Federal grant: \$150,000

Contribution: \$75,000

Title: *Suggler's Slough Fish Passage Project*

Goals/Objectives: Remediate three sites with fish passage blockages on Smuggler's Slough in the Nooksack River estuary significant to recovery of chinook salmon (*Oncorhynchus tshawytscha*.) The project will design, permit and implement treatments that restore fish passage to salmonid rearing and migratory habitats blocked by impassable culverts and tide gates. This project will also restore natural hydrology in the project area without adversely impacting adjacent landowners. The treatments will restore fish passage and tidal hydrology, removing or retrofitting existing tide gates with fish-passage tide gates.

Region 1 (*California, Hawaii, Idaho, Nevada, Oregon, and Washington*)

Muckleshoot Tribe

TWG 2004

Federal grant: \$203,500

Contribution: \$213,500

Title: *Managing Elk and Deer for Sustainable Harvest in a Habitat-limited and Predator-rich Landscape*

Goals/Objectives: Help ailing wildlife populations and their habitats that are the foundation of Muckleshoot cultural tradition. Local big game populations have declined dramatically resulting in hardship for many tribal families. The Muckleshoot Tribe is leading the effort to restore these wildlife populations to healthy levels.

Nooksack Tribe

TWG 2003

Federal grant: \$204,000

Contribution: \$67,000

Title: *Nooksack Cumulative Watershed Effects Assessment South Fork Nooksack In-Stream Restoration Project*

Goals/Objectives: Implement restoration activities in the Nooksack River basin in support of salmon recovery. The project addresses high priority threatened fish stocks including native Nooksack early chinook (*Oncorhynchus tshawytscha*) and bull trout (*Salvelinus confluentus*).

TWG 2005

Federal grant: \$216,416

Contribution: \$55,000

Title: *South Fork Nooksack Floodplain Restoration Lower Acme Reach Project*

Goals/Objectives: Construct engineered logjams and reforest select areas of the floodplain of the South Fork Nooksack River. This work provides considerable benefit to the South Fork native chinook (*Oncorhynchus tshawytscha*) and Nooksack bull trout (*Salvelinus confluentus*), both of which are Federally listed and are of great significance to the tribal members. This effort is a continuation of the Nooksack Tribe's long-standing efforts to protect treaty-protected endangered salmon stocks.

TLIP 2003

Federal grant: \$200,000

Contribution: \$66,710

Title: *South Fork Nooksack (Phase I) In-stream Restoration Project*

Goals/Objectives: In partnership with the Lummi Tribe, restore habitat along in the South Fork Nooksack River to historic conditions to benefit native early chinook (*Oncorhynchus tshawytscha*) and Nooksack bull trout (*Salvelinus confluentus*). This project is a critical component to the Nooksack Tribe's long-standing effort to recover treaty-protected, endangered salmonid stocks.

TLIP 2005

Federal grant: \$103,000

Contribution: \$38,000

Title: *Replacement of Multiple Fish Passage Barriers Identified by the WRIA I Drainage Structure Inventory and Fish Passage Assessment Project*

Goals/Objectives: Provide benefits to South Fork native early chinook (*Oncorhynchus tshawytscha*) and Nooksack bull trout (*Salvelinus confluentus*)—both species are Federally listed and of great cultural significance to the Nooksack people. This project is the result of an ongoing cooperative planning effort to restore access to fragmented spawning and rearing habitat, isolated by man-made drainage structures. It is for the benefit of priority salmonid species throughout the Water Inventory Resource Area 1.

Puyallup Tribe

TWG 2003

Federal grant: \$166,147

Contribution: \$15,000

Title: *Mount Rainier National Park and South Rainier Elk Herd Study*

Goals/Objectives: There is great concern among the Medicine Creek Treaty Tribes that the status of the South Rainier elk (*Cervus elaphus*) herd be fully assessed. The goal of this project is to better understand the local herd dynamics and to maintain a healthy and harvestable population. Aerial surveys, radio tracking, and critical habitat evaluation and protection are utilized to provide reliable quantitative data relied upon for a sustainable elk herd.

TWG 2005

Federal grant: \$244,343

Contribution: \$24,188

Title: *South Rainier Elk Herd Management and Habitat Protection Project*

Goals/Objectives: Better understand the dynamics of the South Rainier elk (*Cervus elaphus*) herd and maintain healthy sustainable numbers. Information gathered through the monitoring of 20 to 30 radio collared elk will provide a sightability model for future herd management decisions. The Nooksack Tribe will also acquire land and conservations easements for critical elk wintering habitat.

Region 1 (*California, Hawaii, Idaho, Nevada, Oregon, and Washington*)

TWG 2006

Federal grant: \$205,844

Contribution: \$23,202

Title: *South Rainier Elk Herd Management and Habitat Enhancement Project*

Goals/Objectives: Continue necessary elk (*Cervus elaphus*) management activities and conduct specific habitat improvement projects in the critical winter habitat range of the South Rainer elk herd. Two main project elements include forging a foundation for maintaining sustainable elk populations for years to come. This includes elk management activities such as conducting spring and fall elk surveys for annual herd composition, herd size estimates, and opening up winter woodland forage.

Quileute Tribe

TWG 2003

Federal grant: \$75,019

Contribution: \$9,346

Title: *Population, Harvest Numbers and Health Survey of Roosevelt Elk in Quileute Treaty Area*

Goals/Objectives: Provide sufficient data to continue prior studies by the Quileute Tribe and others to analyze population and habitat for the elk (*Cervus elaphus roosevelti*) herds of the Northwest. Hunting and habitat degradation have had a significant impact on population, herd dynamics and habitat.

Sauk-Suiattle Tribe

TWG 2003

Federal grant: \$172,724

Contribution: \$49,151

Title: *Cooperative Mountain Goat Habitat Modeling and Habitat Use and Sighting Surveys*

Goals/Objectives: Develop baseline information on habitat manipulation modeling of both winter and summer habitat for the North Cascade mountain goat (*Oreamnos americanus*) whose numbers have been on a steady declining trend. Provide consistent survey protocols for population studies and determines habitat use areas. Provide land managers with information to make decisive effective management decisions to rehabilitate the North Cascade mountain goat which is an important traditional and cultural resource of the Sauk-Suiattle Tribe.

Stillaquamish Tribe

TLIP 2006

Federal grant: \$117,000

Contribution: \$39,000

Title: *Stillaquamish River Mile 22 Restoration Project*

Goals/Objectives: This is a restoration project on the North Fork Stillaguamish River. Project objectives are to introduce engineered logjams in the river adjacent to and upstream of 65 acres of protected riparian forest, and update and expand the draft Habitat Conservation Plan to include all Tribal Wilderness areas and strategic goals for watershed stewardship.

Swinomish Indian Tribal Community

TLIP 2004

Federal grant: \$142,000

Contribution: \$271,530

Title: *Fornsby Creek / Smokehouse Floodplain Tidal Wetland Restoration Project*

Goals/Objectives: Restore tidal influence to the channels in Fornsbey Creek and Smokehouse Floodplain Tidal Wetland project area, re-establish fish passage and, increase the amount of blind channel, distributary and tributary for associated salmonids.

Upper Skagit Tribe

TLIP 2004

Federal grant: \$12,000

Contribution: \$4,000

Title: *Skagit River Groundwater Channel Feasibility Investigation*

Goals/Objectives: The Upper Skagit Tribe has initiated an investigative study on the potential for sufficient groundwater for spawning and rearing channels. This study helps in identifying potential off-channel habitat restoration sites critical to all salmon species in the Skagit River.

Yakama Indian Nation

TWG 2003

Federal grant: \$249,720

Title: *Survey and Groundwork for the Yakama Reservation Wildlife Management Plan*

Goals/Objectives: The Yakama Nation has undertaken the development of a comprehensive wildlife management and stewardship plan for its 1.4 million acre reservation and ceded lands (under the Treaty of 1855.) This initial effort, the Yakama Nation Wildlife Resource Management Program, concentrates on reserved lands. Resulting work will provide baseline population and habitat dynamics for numerous culturally important and Federally protected species and will be integrated with tribal range and forest management practices.

TWG 2004

Federal grant: \$249,827

Title: *Second Year Survey and Groundwork Program for a Yakama Reservation Wildlife Management Plan*

Goals/Objectives: Research and quantify the need to provide an overall wildlife management plan for the Yakama Reservation and the Ceded Lands of the Yakama People. The Yakama Nation Wildlife Resource Management Program concentrates on the initial planning and assessments within the 1.4 million acre reservation boundary.

Region 1 (*California, Hawaii, Idaho, Nevada, Oregon, and Washington*)

TLIP 2003

Federal grant: \$199,841

Contribution: \$243,587

Title: *Shrub-Steppe Rehabilitation and Management Plan*

Goals/Objectives: Restore and protect shrub-steppe habitat for the benefit of several obligate and facultative shrub steppe wildlife species of State, Federal, and cultural concern.

TLIP 2004

Federal grant: \$149,280

Contribution: \$96,283

Title: *Shrub Steppe Assessment and Management Project*

Goals/Objectives: Continue work begun in 2004 (see above). Restore and protect shrub-steppe habitat for the benefit of several obligate and facultative shrub steppe wildlife species of State, Federal, and cultural concern.

TLIP 2005

Federal grant: \$149,981

Contribution: \$68,437

Title: *Shrub-Steppe Rehabilitation and Management Project*

Goals/Objectives: Based on previously completed work (see above), the tribe is developing a comprehensive management and restoration plan.

TWG 2006

Federal grant: \$249,853

Contribution: \$16,000

Title: *Yakama Reservation 2007 Wildlife Management Plan Development Project*

Goals/Objectives: Increase tribal capacity to protect a diverse array of wildlife species across their 1.4 million acre reservation through development of a long-term Comprehensive Forest and Range and Wildlife Management Plan. The program will continue focal species survey and habitat mapping work begun in 2004 and continued in 2005, to provide basic information needed for this plan. The program places increased emphasis on establishing streamlined sampling methods for monitoring sensitive species, assessing condition of meadow habitats, and identifying restoration needs and opportunities. Pilot restoration activities are planned for streams through reintroduction of beavers (*Castor canadensis*); restoring aspen stands by removing conifers and creating barriers to grazers, and restoring habitat for pronghorn and other shrub-steppe species by repairing fences to allow recovery from over-grazing.

ARIZONA

Hopi Tribe

TWG 2005

Federal grant: \$250,000

Contribution: \$130,192

Title: *Hopi Golden Eagle Nest Inventory, Population, Productivity Survey and Ethnographic Study*

Goals/Objectives: Develop a dedicated management initiative to sustain the golden eagle population on the Hopi Reservation. The golden eagle (*Aquila chrysaetos*) is culturally significant to the Hopi people. This effort enables the tribe to conduct a data analysis and prepare a sound research design to allow the collection of information on golden eagle populations and productivity, and to conduct research on Hopi ethnography as it relates to the cultural relationship and knowledge of golden eagles.

Hualapai Tribe

TWG 2003

Federal grant: \$249,376

Contribution: \$14,900

Title: *Hualapai Tribe Native Fish Rearing Facility*

Goals/Objectives: Construct four 1/2 acre ponds, two 100' raceways with plumbing and connections to the recirculating system, and a housing unit with septic and domestic water supply for one full-time employee. The ponds and raceways will rear razorback sucker (*Xyrauchen texanus*), humpback chub (*Gila cypha*) and other native fishes for reintroduction into the Colorado River and its tributaries. Provide economic, employment and training opportunities for tribal members in fish culture and aquatic biology. It will also enhance the Native Tree Nursery by providing a better irrigation system using effluent from the facility.

Navajo Nation

TLIP 2003

Federal grant: \$199,676

Contribution: \$78,500

Title: *Navajo Nation Heritage Program: Mesa Verde Cactus Conservation Plan, Biotics Conversion, Ecologist, and Ferruginous Hawk Survey and Nest Protection*

Goals/Objectives: Develop and implement a conservation plan for the Mesa Verde cactus (*Sclerocactus mesaeverde*). Find and record all Ferruginous hawk (*Buteo regalis*) nesting occurrences on Navajo lands in New Mexico, and provide long-term protection strategies for these sites.

TLIP 2006

Federal grant: \$150,000

Contribution: \$50,000

Title: *Distributional Analysis of Gunnison's Prairie Dog on the Navajo Nation and Reservation of the Hopi Tribe*

Goals/Objectives: Enable both the Navajo Nation and Hopi Tribe to conduct Gunnison's prairie dog (*Cynomys gunnisoni*) population distribution analysis on their lands through aerial photo interpretation and ground verification. Information obtained will be available to tribal, State and Federal entities in order to assist in the determination of the species status and help determine which regulations, policies, and/or management plans are necessary to manage this species in future years.

San Carlos Apache Tribe

TLIP 2004

Federal grant: \$99,583

Contribution: \$66,625

Title: *Habitat Use, Population Structure, and Dispersal Pattern of Juvenile Mexican Spotted Owls on the San Carlos Apache Reservation*

Goals/Objectives: Develop the tribe's capability to manage their lands to benefit the Mexican spotted owl (*Strix occidentalis lucida*.) Collect data on movements of juvenile owls using radio telemetry and banding data. Genetic analysis of Mexican spotted owls will also be completed. This effort will contribute to the body of knowledge on the historic and more recent dispersal patterns of the species.

TWG 2005

Federal grant: \$249,596

Contribution: \$42,740

Title: *Assessment of Domestic Cattle Mortality in an Area of Mexican Wolves and Three Other Sympatric Carnivores on the San Carlos Apache Reservation*

Goals/Objectives: Provide research on the impact of endangered Mexican wolves (*Canis lupus baileyi*), black bear (*Ursus americanus*), coyotes (*Canis latrans*), and mountain lions (*Puma concolor*) on livestock within tribal lands of the San Carlos Apache Reservation. Contribute to the goals of identifying methods for reducing livestock mortality and producing data that can be used to develop fair compensation programs. Tribal members will be trained in wildlife monitoring techniques and forensic analysis of livestock mortality.

NEW MEXICO

Jicarilla Apache Nation

TLIP 2003

Federal grant: \$110,290

Contribution: \$14,000

Title: *Habitat Improvement, Augmentation, and Monitoring of Roundtail Chub (Gila robusta) in the Navajo River, Jicarilla Apache Nation, New Mexico*

Goals/Objectives: Restore roundtail chub (*Gila robusta*) habitat in a one half mile reach of the Navajo River that was degraded by past gravel mining operations. Augment the existing roundtail chub population in the Navajo River with progeny cultured in the Colorado Division of Wildlife's J. Mumma Native Fish Rearing Facility in Alamosa, CO. Characterize the use of habitat and movement patterns of roundtail chub in the Navajo River using radio telemetry techniques.

TLIP 2004

Federal grant: \$17,700

Contribution: \$22,740

Title: *Non-native Fish Reduction in the Navajo River, Jicarilla Apache Nation*

Goals/Objectives: Eliminate or reduce the number of invasive exotic fish species entering the Navajo River from a series of off-channel settling ponds. The ponds will be screened off and the effectiveness of the installed screens at keeping out non-native fish will be monitored. NOTE: The Tribal Utility Authority that manages these ponds is in the process of redesigning them. Based on the proposed redesign, the Jicarilla Game and Fish Department has determined that the GA project is no longer necessary and will return the funds.

Mescalero Apache Tribe

TWG 2005

Federal grant: \$249,923

Contribution: \$118,398

Title: *Bringing Native Fish to Native Peoples: A Plan To Raise and Distribute Rio Grande Cutthroat Trout at the Mescalero Tribal Fish Hatchery, Mescalero, NM*

Goals/Objectives: Expand the capacity of the Mescalero Tribal Fish Hatchery to raise native Rio Grande cutthroat trout (*Oncorhynchus clarki*), address staff technical needs to attend to the cutthroat program, and obtain a distribution truck and associated equipment for local and regional distribution needs. This project will re-establish the native Rio Grande cutthroat trout to formerly occupied and suitable habitat on tribal lands throughout the Southwest.

Pueblo of Acoma

TWG 2003

Federal grant: \$249,203

Contribution: \$343,496

Title: *Habitat Improvements on the Pueblo of Acoma Indian Reservation*

Goals/Objectives: 1. One-full time Wildlife Technician will be hired to fulfill the objectives of the project. 2. Aerial population monitoring of Rocky Mountain elk (*Cervus elaphus*), mule deer (*Odocoileus hemionus*), and pronghorn (*Antilocapra americana*) will occur to establish total numbers, sex ratios, and seasonal distribution, recruitment, and harvest levels. 3. Water developments for big game will be completed in Miguel Chavez Canyon and the Broom Mountain areas. 4. Forest thinning operations on 200 acres of densely forested areas will occur to enhance forage/cover ratios for big game and reduce fire danger. 5. Restore 200 acres of Cane Cholla cactus (*Opuntia imbricata*) infested areas in Mosca Canyon with native vegetation to benefit Rocky Mountain elk, mule deer, pronghorn, and scaled quail (*Callipepla squamata*).

TWG 2005

Federal grant: \$250,000

Contribution: \$299,390

Title: *Wildlife Management on the Pueblo of Acoma: Assessment of Bighorn Sheep Habitat and Seasonal Movements, Population Characteristics and Habitat use of Rocky Mountain Elk*

Goals/Objectives: Determine feasibility of reintroducing bighorn sheep (*Ovis canadensis*) to tribal lands by assessing suitable habitat and to monitor Rocky Mountain elk (*Cervus elaphus*) movements using GPS collars. Identify migration patterns, seasonal use, and critical use areas and develop a region-wide management plan based on this study. The Pueblo will also conduct aerial population monitoring surveys for Rocky Mountain elk, mule deer (*Odocoileus hemionus*), and pronghorn antelope (*Antilocapra americana*) to determine total numbers, sex ratios, seasonal usage, recruitment, and sustainable harvest levels.

Pueblo of Isleta

TLIP 2004

Federal grant: \$150,000

Contribution: \$50,321

Title: *Rio Grande Silvery Minnow Habitat - Pueblo of Isleta*

Goals/Objectives: Design and construct habitat for endangered Rio Grande silvery minnow (*Hybognathus amarus*) and provide habitat for Southwestern willow flycatcher (*Empidonax traillii extimus*). Restored habitat will provide for the rearing of silvery minnows for release into the Rio Grande and reestablish natural pre-development habitat of the minnow.

Region 2 (Arizona, New Mexico, Oklahoma, and Texas)

Pueblo of Jemez

TWG 2005

Federal grant: \$162,691

Contribution: \$51,120

Title: *Pueblo of Jemez Wildlife Management Proposal*

Goals/Objectives: Hire a Wildlife Manager to manage the Wildlife Program for two years to conduct surveys for golden eagles (*Aquila chrysaetos*), peregrine falcons (*Falco peregrinus*), and other tribally important species with emphasis on big game. Develop a wildlife database to be shared with other wildlife agencies, and develop and implement a wildlife management plan that will support wildlife management ordinances and regulations.

Pueblo of Laguna

TWG 2006

Federal grant: \$246,100

Contribution: \$722,546

Title: *Baseline Characterization of Resources and Riparian Habitat Restoration*

Goals/Objectives: 1. Improve tribal aquatic habitats by protecting, conserving and improving valuable riparian river systems and natural spring sources. 2. Develop new, and enhance existing, water resources, as a means of habitat enhancement, in historically drought-stricken areas. 3. Focus on the development of a critically needed Comprehensive Wildlife Management Plan through the collection of baseline floral and faunal data. 4. Promote environmental education and public awareness by creating a quarterly newsletter and coordinating educational programs at schools, villages, and events.

Pueblo of San Juan

TWG 2004

Federal grant: \$237,146

Contribution: \$47,569

Title: *Habitat Restoration for Southwestern Willow Flycatchers and Other Riparian Species at San Juan Pueblo*

Goals/Objectives: Restore riparian and wetland habitat for the benefit of Southwestern willow flycatcher, bald eagle, and other riparian species on 40 acres along a 1,500 foot strip of the Rio Grande's west bank. The project expands a known flycatcher nesting territory by creating a side channel along the Rio Grande and areas of open water in the Bosque. Native willows and other riparian vegetation will be planted to create additional flycatcher and migratory bird habitat.

TWG 2006

Federal grant: \$249,990

Contribution: \$42,691

Title: *Wetland Restoration at Ohkay Owingeh Fish Pond*

Goals/Objectives: Restore 50 acres of riparian and wetland habitat for the benefit of Southwestern willow flycatcher (*Empidonax traillii extimus*), bald eagle (*Haliaeetus leucocephalus*), aquatic birds, and other riparian species of cultural significance. Recreate a spring-fed pond formerly existing within the Rio Grande Bosque, re-open areas of open water in the Bosque, and plant willows and other native riparian and wetland plants. Clear invasive species, excavate to re-open a silted over spring, expand open water and wetland area, replant native trees, shrubs, and herbaceous plants, control invasive spouting, and monitor vegetation and habitat development in the restored area.

Pueblo of Sandia

TLIP 2005

Federal grant: \$78,094

Contribution: \$26,032

Title: *Wetland/Bosque Pond Restoration Project for Habitat Creation for the Southwestern Willow Flycatcher (*Empidonax traillii extimus*)*

Goals/Objectives: Restore wetland/pond in the Pueblo of Sandia's Bosque. Restoration of habitat for the endangered southwestern willow flycatcher, elimination of non-native invasive species and improved in-stream flow and water quality for the endangered silvery minnow are the project's main goals. This project is part of the Pueblo's ongoing effort to enhance the 114 wetlands in the Bosque and to restore the health of 1,300 acres of riparian habitat.

Pueblo of Santa Ana

TWG 2003

Federal grant: \$210,301

Contribution: \$12,520

Title: *Release, Monitor, and Manage a Viable Population of Merriam's Turkey (*Meleagris gallopavo merriami*) on the Pueblo of Santa Ana, Sandoval County, New Mexico*

Goals/Objectives: Restore the culturally important wild turkey (*Meleagris gallopavo*) which has been extirpated for 40 years to the Rio Grande Bosque. With successful restoration, the project will allow members to engage in traditional ceremonies and restore an important component to the Pueblo's identity. It also allows building of internal professional management capacity through involvement in monitoring, management, and protection of a priority wildlife species.

Region 2 (Arizona, New Mexico, Oklahoma, and Texas)

TWG 2004

Federal grant: \$249,939

Contribution: \$87,428

Title: *Restoration Monitoring of the Pueblo of Santa Ana Rio Grande Bosque Restoration Project*

Goals/Objectives: To complement the Pueblo's effort at restoring the Rio Grande Bosque, develop a long-term ecological monitoring program to detect ecosystem responses to the restoration efforts and to provide scientifically based information for future management decisions. Emphasis is placed on evaluating the implications of the restoration project on wildlife and vegetation.

TLIP 2004

Federal grant: \$149,947

Contribution: \$66,669

Title: *Willow Swale Development and Surveys for the Southwestern Willow Flycatcher (*Empidonax traillii extimus*) and the Yellow-billed Cuckoo (*Coccyzus americanus*) on the Pueblo of Santa Ana, Sandoval County, New Mexico*

Goals/Objectives: Enhance critical habitat critical for the southwestern willow flycatcher and the Yellow-billed cuckoo through the development of a three and one-half acre willow swale. Conduct surveys for these two species across suitable restored, created, and existing habitats on Pueblo lands.

TLIP 2005

Federal grant: \$149,997

Contribution: \$94,715

Title: *Pueblo of Santa Ana Rio Grande Restoration Program: Rio Grande Silvery Minnow Survey and Habitat Assessment*

Goals/Objectives: Evaluate trends in the Rio Grande silvery minnow (*Hybognathus amarus*) in the Santa Ana Reach of the Rio Grande; evaluate Rio Grande silvery minnow utilization of restored habitat features—including egg retention and young of year; and assessment of the restored habitats. The results of this project will be used to assess the feasibility of augmenting populations within the Santa Ana Reach of the Rio Grande.

Pueblo of Santa Clara

TWG 2006

Federal grant: \$249,411

Contribution: \$37,020

Title: *Riparian and Wetland Habitat Re-creation at Santa Clara Pueblo*

Goals/Objectives: Permanently restore riparian and wetland habitat for the benefit of many avian species, including southwestern willow flycatcher (*Empidonax traillii extimus*) bald eagle (*Haliaeetus leucocephalus*), songbirds (many of which are neotropical migrants), and terrestrial riparian species of concern to the Pueblo. At least 15 acres will be turned into dense, multi-story riparian habitat along open water.

Pueblo of Santo Domingo

TLIP 2006

Federal grant: \$148,348

Contribution: \$70,754

Title: *Rio Galisteo Restoration Project*

Goals/Objectives: Implement the developing Watershed Management Plan which includes the re-vegetation of mulch areas in the Rio Galisteo in an effort to restore quality wildlife habitat for possible future use by the endangered southwestern willow flycatcher (*Empidonax traillii extimus*) and bald eagle (*Haliaeetus leucocephalus*). This project is one step in many to the eventual restoration of an ecosystem that will have far reaching positive impacts in the Rio Grande.

Pueblo of Taos

TWG 2004

Federal grant: \$249,941

Contribution: \$453,129

Title: *Developing Management Capabilities and Baseline Assessments for the Pueblo of Taos*

Goals/Objectives: Bighorn sheep (*Ovis canadensis*) are being brought back to tribal lands. The objectives in this grant are to conduct a study to evaluate feasibility of completing the transfer; trap up to 25 bighorn sheep from Taos Tribal and/or State lands and relocate them to suitable habitat in the Rio Grande Gorge; and radio-collar and monitor the population for up to one year after release. Tribal members are being trained in wildlife capture, care, and monitoring protocols, and other aspects of wildlife science.

TWG 2006

Federal grant: \$249,829

Contribution: \$85,412

Title: *Restoring Bighorn Sheep along the Northern Rio Grande, New Mexico*

Goals/Objectives: Continue bighorn sheep (*Ovis canadensis*) re-introduction to tribal lands begun in 2004 (see above).

OKLAHOMA

Iowa Tribe of Oklahoma

TWG 2004

Federal grant: \$250,000

Contribution: \$50,000

Title: *Eagle Rehabilitation Program - Iowa Tribe*

Goals/Objectives: Construct and manage the Grey Snow Eagle House, "Bah Kho-je Xla Chi". The facility's primary use will be to rehabilitate sick and injured eagles for eventual release back into the wild, making it the first tribal rehabilitation center in the country. For birds that are deemed non-releasable due to permanent injuries that would severely jeopardize survival in the wild, the aviary will serve as a lifelong sanctuary.

Region 2 (*Arizona, New Mexico, Oklahoma, and Texas*)

Peoria Tribe of Indians of Oklahoma

TWG 2005

Federal grant: \$240,000

Contribution: \$10,000

Title: *Endangered Species of Spring and Neosho River Neosho Madtom, Neosho Mucket*

Goals/Objectives: Conduct surveys for endangered Neosho mucket (*Lampsilis rafinesqueana*) and the threatened Neosho madtom (*Noturus placidus*) in the Spring and Neosho Rivers in Ottawa County, Oklahoma. These surveys will help ensure the proper management of these two culturally important species.

TWG 2006

Federal grant: \$249,997

Contribution: \$10,000

Title: *Development of Culturing Capability of the Neosho Madtom, for Future Reintroduction and Reintroduction of the Neosho Mucket, to the Spring and Neosho Rivers of Oklahoma*

Goals/Objectives: Conduct a study on the feasibility of artificial propagation of the Neosho madtom as recommended in the Neosho Madtom (*Noturus placidus*) Recovery Plan, and reintroduce the Neosho mucket (*Lampsilis rafinesqueana*). These species will be reintroduced into the Spring and Neosho Rivers in Oklahoma.

TEXAS

Alabama-Coushatta Tribe of Texas

TWG 2003

Federal grant: \$149,938

Title: *Alabama-Coushatta Tribe of Texas Tribal Fish and Wildlife Management Program*

Goals/Objectives: Build capacity to establish a management program for the benefit of fish, wildlife and the tribal community. Develop a strategic plan for establishment of hunting and fishing regulations, maintenance of red-cockaded woodpecker (*Picoides borealis*) habitat, implementation of animal damage monitoring and control, wildlife population counts, and reclaiming and stocking the tribal lake for recreation purposes. This project also identifies and protects culturally important plant and animal species.

TWG 2006

Federal grant: \$209,277

Contribution: \$35,124

Title: *Alabama-Coushatta Fish and Wildlife Inventory and Habitat Preservation Project*

Goals/Objectives: Continued development and implementation of the Tribal Fish and Wildlife Management Plan (see above). This plan promotes restoration and preservation of fish and wildlife species and habitat, including endangered species, culturally and traditionally important species, game species, and species that are not hunted or fished. A comprehensive resource inventory will be developed through the use of GPS equipment and GIS software.

MICHIGAN

Grand Traverse Band of Ottawa and Chippewa

TWG 2003

Federal grant: \$160,000

Contribution: \$171,439

Title: *Evaluate and Enhance American Marten and Other Predatory Furbearer Populations*

Goals/Objectives: Evaluate the status of American marten (*Martes americana*) and other predatory furbearers within the Manistee National Forest and the adjacent Pere Marquette State Forest. Specifically, the project evaluates habitat availability and use, population growth and limiting factors, and relationships between marten and other predatory furbearers.

TWG 2005

Federal grant: \$250,000

Contribution: \$41,800

Title: *Engineering and Feasibility Study of the Potential Removal of the Boardman River Dams*

Goals/Objectives: Prepare engineering and feasibility studies for the potentiality of removing the Boardman River dams as a cooperative effort to restore the Boardman River to a free flowing cold water system.

TLIP 2005

Federal grant: \$17,800

Contribution: \$5,957

Title: *Inventory and Protection of White Ash "Baapaagimaak" and Black Ash "Aagimaack"*

Goals/Objectives: Develop and implement a preservation and prevention plan for the black and white ash (*Fraxinus spp.*) which are important to the tribe for cultural, traditional and economic purposes. These species are being threatened by the exotic species of beetle, the emerald ash borer that targets and kills ash trees.

Keweenaw Bay Indian Community

TWG 2003

Federal grant: \$120,000

Contribution: \$25,000

Title: *Native Fish Species Projects on the L'Anse Indian Reservation and Adjacent Waters*

Goals/Objectives: Restore native "coaster" brook trout (*Salvelinus fontinalis*), lake trout (*Salvelinus namaycush*), lake sturgeon (*Acipenser fulvescens*), and walleye (*Sander vitreus vitreus*). Four project components are: evaluation of "coaster" brook trout stocking program; complement efforts to understand lake trout spawning on the reefs of Keweenaw Bay of Lake Superior; walleye fingerling production capacity; and assess and document adult lake sturgeon status in Keweenaw Bay.

TWG 2004

Federal grant: \$197,128

Contribution: \$89,728

Title: *Wildlife and Plant Habitat Inventory and Management on the L'Anse Indian Reservation*

Goals/Objectives: Acquire, restore, and protect 60 wetland acres near wild rice beds at Sand Point Slough and adjacent to Huron Bay Refuge. Funding also provides the tribe the ability to conduct plant and animal species inventories on 3,000 wetlands acres within the L'Anse Reservation.

Lac Vieux Desert Band of Lake Superior Chippewa

TWG 2006

Federal grant: \$27,975

Contribution: \$46,370

Title: *Lac Vieux Desert Walleye Conservation Program*

Goals/Objectives: Develop a 1.2 acre rearing pond system capable of producing 50,000 1.5 inch walleye (*Sander vitreus vitreus*) fingerlings needed to stock lakes tribal fishers select for harvest. Thirty one lakes selected by tribal fishers depend on routine or intermittent stocking of walleye as they provide a source of local stock to historic fisheries.

Little River Band of Ottawa Indians

TWG 2003

Federal grant: \$133,500

Contribution: \$70,000

Title: *Assessment of Riparian Habitat Restoration in the Manistee River Corridor*

Goals/Objectives: Restore road-stream crossings, stabilize stream banks, and improve access in coordination with the Manistee River Watershed Initiative. Monitor substrate, fish, and macro invertebrate communities conducted before and after implementation to determine impacts on the river and riparian habitat.

TLIP 2003

Federal grant: \$137,644

Contribution: \$74,936

Title: *Study the Status and Habitat use of Bobcat (*Lynx rufus*) in the Northern Counties of MI*

Goals/Objectives: Gather baseline information on habitat use, home range size and relative abundance of bobcats (*Lynx rufus*) allowing for continued monitoring and management of these populations and habitats on a year-to-year basis. Create GIS spatial models that can help predict bobcat presence. The information gathered has allowed the tribal conservation department to set scientifically-based regulations that allow for the sustainable harvest of bobcats on the reservations and tribally-ceded lands.

Region 3 (Illinois, Indiana, Michigan, Minnesota, Missouri, Ohio, and Wisconsin)

TLIP 2004

Federal grant: \$110,881

Contribution: \$45,625

Title: *Status of Black Bear “Mkwa” In Northern Counties of Michigan’s Lower Peninsula*

Goals/Objectives: Research black bear (*Ursus americanus*) population size and densities, and genetic diversity in the northern counties of Michigan’s Lower Peninsula. Information will be used in determining future management decisions regarding the species.

TLIP 2005

Federal grant: \$149,805

Contribution: \$119,815

Title: *Comprehensive Management Plan for White-Tailed Deer; “Wawaashkesh”*

Goals/Objectives: Ensure the stability of whitetail deer populations through the development of a monitoring program and comprehensive deer management plan. Whitetail deer (*Odocoileus virginianus*) are of tremendous cultural importance to the entire Anishinaabek Nation (including the Little River Band of Ottawa).

Little Traverse Bay Band of Odawa Indians

TWG 2004

Federal grant: \$129,261

Contribution: \$85,945

Title: *LTBB Tribal Wildlife Project - Bald Eagle and WyCamp Lake Comprehensive Management Plans*

Goals/Objectives: Develop and implement the Little Traverse Bay Band Reservation Bald Eagle “*mgizii*” Management Plan and the WyCamp Lake Comprehensive Management Plan. Bald eagles (*Haliaeetus leucocephalus*) are of great cultural significance to the tribe. These plans enable the tribe to examine and understand the relationships of all of those species that are part of the lake community and to implement management strategies to properly manage and preserve these resources.

TWG 2005

Federal grant: \$250,000

Contribution: \$90,545

Title: *Little Traverse Bay Bands Of Odawa Indians Tribal Wildlife Project - Gray Wolf Management Plan*

Goals/Objectives: Assess gray wolf (*Canis lupus*) numbers and project populations to ensure their existence now and for the next seven generations. The data and tools produced as a result of this project ultimately enable the tribe to successfully manage these precious resources. The gray wolf is highly regarded within the Little Traverse Bay Band community.

Nottawaseppi Huron Band of Potawatomi

TWG 2003

Federal grant: \$249,839

Contribution: \$14,900

Title: *Develop a Comprehensive Wildlife Management Plan - 3 projects (Plan, Greenhouse and Invasive Species Control)*

Goals/Objectives: Further develop tribal Environmental Department to encompass wildlife and habitat improvements. Critical goals are: 1. the development of a comprehensive wildlife habitat assessment and restoration plan; 2. establishment of a greenhouse; and assessment of invasive species impacts upon resident flora.

MINNESOTA

Bois Forte Band of Chippewa

TLIP 2004

Federal grant: \$142,241

Contribution: \$47,500

Title: *Re-Establishing Wild Rice in Nett Lake, MN: The Restoration of a Cultural, Spiritual and Sustenance Resource through Holistic Ecosystem Management Initiatives*

Goals/Objectives: Restore a sub-boreal zone wild rice basin on Nett Lake that is culturally and spiritually important to the people of the Boise Forte Band of Chippewa. The restoration of wild rice on Nett Lake involves a multi-faceted approach including land management considerations, aggressive wildlife management for specific target species, and in-lake engineering and biological management efforts.

Fond du Lac Band of Lake Superior Chippewa

TLIP 2003

Federal grant: \$200,000

Contribution: \$477,575

Title: *Fond du Lac Wild Rice Restoration Project - 4 Lakes*

Goals/Objectives: Restore about 200 wetland acres on four lakes within the Fond du Lac Reservation. The principle goal is to enhance wild rice habitat for the benefit of the people, plants and creatures that depend upon this important resource.

TWG 2003

Federal grant: \$42,506

Contribution: \$15,120

Title: *Sturgeon Population Study on the upper St. Louis River*

Goals/Objectives: Determine the recruitment and survival of sturgeon (*Acipenser fulvescens*) stocked between 1998 and 2003 in the upper St. Louis River system. This effort is part of a cooperative project to restore sturgeon populations on the upper St. Louis River and its tributaries.

Region 3 (*Illinois, Indiana, Michigan, Minnesota, Missouri, Ohio, and Wisconsin*)

TWG 2003

Federal grant: \$133,150

Title: *Moose Population Dynamics and Census Techniques Research*

Goals/Objectives: Address new aspects of an ongoing Moose (*Alces alces*) population study on Fond du Lac's 1854 Ceded Territory. Census techniques are being improved, calf survival and recruitment will be assessed, and adult moose will be radio collared to maintain an adequate population sample.

TWG 2003

Federal grant: \$60,920

Contribution: \$133,194

Title: *Angler Exploitation of Select Walleye Populations in the 1854 Ceded Territory of MN*

Goals/Objectives: Expand traditional walleye (*Sander vitreus vitreus*) population monitoring assessments and include two years of tag return and creel data. Information provides estimates of angler exploitation within the 1854 Ceded Territory of Minnesota.

Grand Portage Band of Chippewa Indians

TLIP 2003

Federal grant: \$84,911

Contribution: \$21,980

Title: *Wetland and Wild Rice Restoration on Grand Portage Tribal Lands, Grand Portage, MN*

Goals/Objectives: Restore native historic wild rice "manomen" beds. In addition to benefiting several hundred acres of wetlands and associated wetland species, the Chippewa people are restoring their traditional harvest of this culturally important source of sustenance.

TWG 2003

Federal grant: \$104,025

Contribution: \$38,470

Title: *Continued Assessment and Rehabilitation of Native, At-Risk Species in Lake Superior and Adjoining Tributaries in and around the Area of Grand Portage, MN including the Pigeon River and Bay*

Goals/Objectives: Continue with tribal Coaster brook trout (*Salvelinus fontinalis*) stocking and walleye (*Sander vitreus vitreus*) rearing efforts. A small scale fish hatchery will be built to supplement these stocks as well as lake sturgeon.

TWG 2004

Federal grant: \$249,000

Contribution: \$37,370

Title: *Use of Telemetry Gear to Delineate Critical Habitat for Juvenile and Sub-Adult Lake Sturgeon "Name" Ogimaa Giigonh" in the Lower St. Louis and Pigeon and Associated Nearshore Areas on a Seasonal Basis*

Goals/Objectives: Work cooperatively with the Service and other partners (tribal, Federal and State) to restore lake sturgeon (*Acipenser fulvescens*). In order to map critical habitat and seasonal movements, passive integrated transponder tags are used for juvenile and sub-adult lake sturgeon in the lower St. Louis and Pigeon and associated nearshore areas. This information will identify areas that warrant rehabilitation in both estuaries. Lake sturgeon were extirpated from the Pigeon and St. Louis Rivers in the early 1900s.

TLIP 2005

Federal grant: \$141,616

Contribution: \$47,495

Title: *Identification of Suitable Habitat for Canada Lynx "Bizhiw"*

Goals/Objectives: Identify suitable habitats for Canada lynx (*Lynx canadensis*) on and adjacent to reservation lands (including the 1854 Ceded Territory), identify land management activities that would benefit Canada lynx, and document use patterns by radio telemetry. The Canada lynx is of great cultural significance to the Anishinabeg people in the Great Lakes region. It was listed as a "threatened species" under the Endangered Species Act in 2000 in the conterminous United States.

TWG 2006

Federal grant: \$249,750

Contribution: \$129,500

Title: *Using Pack Size, Territory Size and Interstitial Area of Gray Wolf to Estimate Wolf Density and Determine Predator/Prey Relationships with Moose and White-Tailed Deer*

Goals/Objectives: Enhance existing research and evaluations on the ecology and population dynamics of gray wolf (*Canis lupus*), moose (*Alces alces*), and white-tailed deer (*Odocoileus virginianus*), occurring on the Grand Portage reservation and 1854 ceded territory lands in northeastern Minnesota and southern Ontario. Information on the correlation of wolf density estimates to densities of moose and deer help determine sustainable moose harvest parameters, as well as determine stable predator/prey relationships, enabling the tribe to better manage its wildlife resources.

Region 3 (*Illinois, Indiana, Michigan, Minnesota, Missouri, Ohio, and Wisconsin*)

Leech Lake Band of Ojibwe

TWG 2003

Federal grant: \$209,708

Contribution: \$124,700

Title: *Wildlife Habitat Assessment with an Emphasis on Rare and Culturally Important Species - Including Wild Rice Inventory*

Goals/Objectives: Under this program the Leech Lake Band of Ojibwe, Fish, Wildlife, and Plant Resources Program conduct resource inventories of tribal lands for rare, threatened and endangered species and their habitats. Comprehensive inventories of the tribe's natural wild rice resources (integral to the Great Lakes' indigenous culture) are also included. In addition to management plan narrative, all data is also entered as GIS data layers.

TLIP 2003

Federal grant: \$133,858

Contribution: \$120,000

Title: *Rare, Threatened, and Endangered Species Habitat Enhancement and Wetland Projects*

Goals/Objectives: Assess threatened, and endangered species habitat on tribal lands and enhance wetland habitats with emphasis on the common tern (*Sterna hirundo*). The common tern is a Federal species of concern as well as a state and tribally listed species.

TWG 2004

Federal grant: \$209,000

Contribution: \$157,200

Title: *Assessment of Double-Crested Cormorant Food Habits and predation on Selected Fish Species in Leech Lake*

Goals/Objectives: Determine what effect cormorant (*Phalacrocorax auritus*) predation has on game fish in Leech Lake. Collaborating on the study are the Minnesota Department of Natural Resources, USDA Wildlife Service, US Fish and Wildlife Service, University of Minnesota, and several local community organizations through a two-part study: 1. Collect diet samples from both adults and nestlings to see what species of fish are being consumed, how large they are and in what numbers; and 2. Utilize this data to make estimates of how cormorant predation affects selected fish populations like walleye (*Sander vitreus vitreus*) and yellow perch (*Perca flavescens*).

Red Lake Band of Chippewa Indians

TWG 2003

Federal grant: \$247,007

Contribution: \$21,500

Title: *Red Lake Wildlife Habitat Preservation and Maintenance, Enhancement and Evaluation Project (Phase I)*

Goals/Objectives: Maintain and enhance wildlife habitats associated with a cultivated wild rice farm and large wildlife management area in northwest Minnesota. Past management activities are also being evaluated and quantified to enhance management recommendations for this and similar habitat resources.

TWG 2005

Federal grant: \$241,788

Contribution: \$50,614

Title: *Red Lake Wildlife Habitat Maintenance, Enhancement and Evaluation Project, (Phase II)*

Goals/Objectives: Preserve habitat, maintain and enhance, and evaluate past and proposed management activities. All activities are conducted by the tribal Department of Natural Resources at the 2,5000 acre Red Lake Farm (an active cultivated rice farm) and adjacent 7,000 acre Kiyosay Wildlife Area. The Red Lake Band of Chippewa Indians has undertaken a number of multi-partner projects at these sites since 1996 and this project is a continuation of the development of the exceptional wildlife potential of this area.

TLIP 2006

Federal grant: \$159,152

Contribution: \$60,800

Title: *Red Lake Wildlife Habitat Maintenance, Enhancement and Evaluation Project, (Phase II)*

Goals/Objectives: Initiate a long term sturgeon (*Acipenser fulvescens*) restoration plan for the Red River of the North watershed located on the Reservation. It is the goal of the tribe to reintroduce 20,000 sturgeon into the headwaters of this river's largest tributary, and fully recover over the next 20-30 years this once abundant, culturally and traditionally important species. Lake sturgeon have been extirpated from the entire Red River of the North watershed since the 1950s.

Region 3 (*Illinois, Indiana, Michigan, Minnesota, Missouri, Ohio, and Wisconsin*)

White Earth Band of Chippewa

TLIP 2004

Federal grant: \$100,000

Contribution: \$200,000

Title: *Heiberg Dam Passage*

Goals/Objectives: Remove fish passage barriers that, not only limit lake sturgeon (*Acipenser fulvescens*) migration, but also impede many other significant species from migrating through the Red River watershed. The long range primary goal is to restore lake sturgeon, not only to the White Earth Reservation, but to the entire Red River watershed.

TWG 2005

Federal grant: \$155,000

Contribution: \$112,000

Title: *Lake Sturgeon Restoration Plan*

Goals/Objectives: Collect brood fish from Rainy River and test for viral disease annually, conduct periodic sampling to document population and recovery status, install fish passage structures, and initiate a public education program about the project. The White Earth Reservation Lake Sturgeon Recovery Plan requires 13,000 sturgeon (*Acipenser fulvescens*) fingerlings to be reared and stocked in White Earth and Round Lakes.

WISCONSIN

Bad River Band of Lake Superior Chippewa

TWG 2003

Federal grant: \$147,784

Contribution: \$16,500

Title: *Restoration of the Raymond "Snooty" Couture Fish Hatchery and Rearing Ponds*

Goals/Objectives: Restore the Raymond "Snooty" Couture Hatchery where the Tribe cultures walleye (*Sander vitreus vitreus*), white sucker (*Catostomus commersonii*), yellow perch (*Perca flavescens*), and lake sturgeon (*Acipenser fulvescens*). The fish the hatchery produces not only benefit the Bad River Indians but also other local tribes, the Wisconsin Department of Natural Resources, the Service, and a diverse population of anglers who fish the near-shore zones on Lake Superior.

Ho-Chunk Nation

TWG 2003

Federal grant: \$50,000

Contribution: \$27,609

Title: *Monitoring and Management of Gray Wolf (*Canis lupus*) in the Central Forest Region of WI*

Goals/Objectives: Implement a comprehensive gray wolf monitoring program, develop a GIS database and create an education program focusing on the gray wolf and other protected species resident to tribal lands.

Lac Courte Oreilles Band of Chippewa (LCO)

TWG 2003

Federal grant: \$249,800

Title: *LCO Fisheries Program Development Including Lake and Stream Surveys*

Goals/Objectives: Establish a fisheries program to manage fish populations in the 21 lakes and 26 miles of rivers and streams on their reservation. Activities include survey of lakes, rivers, and streams; development of management plans; invasive/exotic species issues; and public and agency cooperative projects. Project goals are to determine habitat health, food conditions, quality of spawning areas, chemical and biological environments, and population structure. This project covers five lakes and three streams of the highest priority waters.

Lac du Flambeau Band of Chippewa

TWG 2003

Federal grant: \$120,330

Contribution: \$13,379

Title: *Lac du Flambeau Lake Sturgeon Restoration Project on the Lac du Flambeau Chain of Lakes and Bear River*

Goals/Objectives: Establish or restore and maintain a harvestable population of lake sturgeon (*Acipenser fulvescens*) in the Lac du Flambeau Chain of Lakes and the Bear River. Because lake sturgeon are slow growing, long lived and become sexually mature between the ages of 13-15 years for males and 22-24 for females, the restoration, establishment and maintenance of a sustainable population will take a minimum of 25 years.

TWG 2004

Federal grant: \$126,025

Contribution: \$14,003

Title: *Lac du Flambeau Lake Sturgeon Restoration Project on the Lac du Flambeau Chain of Lakes and Bear River*

Goals/Objectives: Continue the previously funded Lac du Flambeau Lake Sturgeon Restoration Project on the Lac du Flambeau Chain of Lakes and Bear River (see above). Establish or restore and maintain a harvestable population of lake sturgeon (*Acipenser fulvescens*) in the Lac du Flambeau Chain of Lakes and the Bear River (see above).

TWG 2005

Federal grant: \$134,234

Contribution: \$14,915

Title: *Lac du Flambeau Lake Sturgeon Restoration Project on the Lac du Flambeau Chain of Lakes and Bear River*

Goals/Objectives: Continue the previously funded Lac du Flambeau Lake Sturgeon Restoration Project on the Lac du Flambeau Chain of Lakes and Bear River (see above).

Region 3 (*Illinois, Indiana, Michigan, Minnesota, Missouri, Ohio, and Wisconsin*)

Menominee Indian Tribe of Wisconsin

TWG 2003

Federal grant: \$91,031

Title: *Lake Sturgeon Restoration Project*

Goals/Objectives: Continue stocking lake sturgeon (*Acipenser fulvescens*) and initiate a population monitoring procedure to attain a sustainable fishery. Lake sturgeon, an important species to the Menominee culture, were extirpated from the Menominee Indian Reservation until 1994 when Federal, State, and tribal biologists began implementing reintroduction strategies.

TWG 2003

Federal grant: \$55,986

Title: *Timber Wolf Reintroduction*

Goals/Objectives: Continue collaborative work with Wisconsin Department of Natural Resources to reintroduce the timber wolf (*Canis lupus*) to its historic range on and around the Menominee Reservation. This project monitors movement using radio telemetry and develops a management plan and annual population assessment.

TWG 2006

Federal grant: \$196,782

Contribution: \$60,309

Title: *Menominee Tribal Wildlife Grant Program*

Goals/Objectives: This project continues research on lake sturgeon restoration. The project will continue the reintroduction of adult lake sturgeon (*Acipenser fulvescens*), stock yearling lake sturgeon, monitor behavior and habitat use using radio-telemetry, and conduct annual population assessments on reintroduced populations. These activities will enable the identification of preferred habitat for lake sturgeon and bring the population to a self-sustaining level.

Red Cliff Band of Lake Superior Chippewa

TLIP 2006

Federal grant: \$148,088

Contribution: \$140,000

Title: *Increasing the Red Cliff Natural Resources Department Capacity through the Procurement and Operation of a Research Vessel*

Goals/Objectives: Procure a research vessel capable of biological and environmental sampling in Lake Superior and along the reservation shoreline. The project will complete a wide variety of biological and environmental sampling to produce baseline data for the tribe.

Stockbridge-Munsee Community

TWG 2003

Federal grant: \$250,000

Contribution: \$19,474

Title: *Stockbridge - Munsee Fish and Wildlife Project*

Goals/Objectives: Develop a fish and wildlife management plan to ensure species sustainability. Target species are deer, bear, trout, and waterfowl. Hire a wildlife biologist that will also implement riparian habitat improvement projects, propose future restoration exercises, conduct bear (*Ursus americanus*) and deer (*Odocoileus virginianus*) density studies and assess the presence of nuisance species.

ALABAMA

Poarch Band of Creek Indians

TWG 2003

Federal grant: \$250,000

Contribution: \$38,000

Title: *Magnolia Branch Expansion Project*

Goals/Objectives: Acquire approximately 40 acres of high quality wildlife habitat adjacent to the tribe's Magnolia Branch wildlife management area. Conduct water quality and invertebrate sampling on creeks and streams on the Magnolia Branch, increasing wildlife management capabilities. Young tribal members will be involved in this sampling and presentation of the resulting information to tribal members, further increasing the tribe's long-term interest in natural resource management and protection.

TWG 2005

Federal grant: \$225,000

Contribution: \$20,000

Title: *Box Turtle, Migratory Duck and Longleaf Pine Ecosystem Recovery Project on the Magnolia Branch Wildlife Reserve*

Goals/Objectives: Restore approximately 1,000 acres of longleaf pine habitat. Target species are Eastern box turtle (*Terrapene carolina*), gopher tortoise (*Gopherus polyphemus*), red cockaded woodpecker (*Picoides borealis*) and a variety of migratory birds. The Eastern box turtle is of critical cultural importance to the tribe. This project also takes measures to increase surface water/wetlands habitat to increase migratory waterfowl populations that frequent the Magnolia Branch Wildlife Reserve.

Miccosukee Tribe of Indians

TWG 2004

Federal grant: \$250,000

Contribution: \$157,419

Title: *A Viable Fisheries Resource for the Miccosukee Tribe of Indians*

Goals/Objectives: Sample a three-mile section of canal near tribal members' homes to determine concentrations of mercury in fish, water and sediments. This information is critical in the environmental restoration of the canal and in providing safe subsistence and cultural fishing opportunities for tribal members.

Seminole Tribe of Florida

TWG 2004

Federal grant: \$250,000

Contribution: \$22,605

Title: *Wildlife Program for the Seminole Tribe of Florida*

Goals/Objectives: Establish and staff a Tribal Wildlife Resources office (one biologist and one technician) and develop and implement a wildlife management plan for tribal lands. Some examples of project work include: Geographic Information Systems training, weekly surveys for bald eagles (*Haliaeetus leucocephalus*) and crested caracara (*Polyborus plancus*); inventory of wading-bird rookeries; and participation on the Florida Panther Recovery Team. Staff conduct outreach programs for school children on the reservation, and have hosted community birding events for tribal members and employees.

TWG 2005

Federal grant: \$250,000

Contribution: \$33,374

Title: *Development of an Invasive Species Management Plan for Fish and Plant Species on Lands of the Seminole Tribe of Florida*

Goals/Objectives: Develop an Invasive Species Management Plan on the Big Cypress and Brighton reservations to restore habitat in areas currently used by protected species such as the wood stork (*Mycteria americana*), Audobon's crested caracara (*Polyborus plancus*), bald eagle (*Haliaeetus leucocephalus*) and Florida panther (*Puma concolor coryi*). Restoration work will entail the removal of invasive exotic plant species. These habitats also support numerous migratory bird species. Research is also being conducted to assess the impact of non-indigenous fish on native populations which are vital sources of prey for many local bird species and animals as well as being important food sources for tribal members.

TWG 2006

Federal grant: \$250,000

Contribution: \$22,605

Title: *Wildlife Management Plan Implementation*

Goals/Objectives: Continuation of environmental stewardship efforts on Florida Seminole tribal lands associated with the tribe's Wildlife Management Plan (see above). Specifically, habitat protection and management of Federally listed, proposed, candidate, or other at-risk species remain the primary focus.

NORTH CAROLINA

Eastern Band of Cherokee Indians

TWG 2003

Federal grant: \$250,000

Contribution: \$25,000

Title: *The Repair and Update of Tribal Fish Hatcheries*

Goals/Objectives: Renovate raceways, pipes and screens in the outdated tribal fish hatchery and purchase ATVs to increase stocking capacities in remote areas of the reservation. Replace worn out equipment and machinery necessary in routine hatchery operations.

TLIP 2003

Federal grant: \$200,000

Contribution: \$66,718

Title: *Natural Resources Survey for the Qualla Boundary*

Goals/Objectives: Conduct a periodic survey of its wildlife and plant species to determine a composite species assessment for the reservation based on a similar 1979 baseline inventory. Conduct a systematic survey on reservation lands for fish, bird, amphibian, reptile, and bat species and their habitats. Develop a database of species and compile a list of culturally important plants for use by tribal members. The information garnered from the comprehensive survey will serve as a guide for tribal forest management decisions.

TWG 2006

Federal grant: \$250,000

Contribution: \$24,708

Title: *Eastern Band of Cherokee Indians Wildlife Resource Studies*

Goals/Objectives: Gather critical population data for all wildlife species, both game and non-game. Develop and implement general surveys to aid in the establishment of a baseline data set for the American black bear (*Ursus amercanus*) and Eastern wild turkey (*Meleagris gallopavo silvestris*) populations as well as habitat reevaluation. While collecting this baseline data the tribe hopes to build in house capacity for performing wildlife management surveys by employing tribal members of the Eastern Band of Cherokee Indians.

TLIP 2006

Federal grant: \$150,000

Contribution: \$120,000

Title: *Natural Resources Surveys for the Cherokee Indian Reservation Lands*

Goals/Objectives: Continue collection of baseline information on the Natural Resources of the Cherokee Indian Reservation. This grant will fund research on the plants, mussels, fish, bats, and flying squirrels on the reservation. Emphasis during the survey will be placed on identification of Federally listed species and Federal species of concern. The project will investigate two new areas that have no information at present, the mussel population on the tribal holdings in Cherokee County and the Carolina northern flying squirrel (*Glaucomys sabrinus*) population on the Reservation.

SOUTH CAROLINA

Catawba Indian Nation

TWG 2003

Federal grant: \$250,000

Title: *Catawba Wildlife Lands Acquisition*

Goals/Objectives: Acquire 233.5 acres of wildlife habitat in York County, South Carolina. These lands are managed to incorporate both traditional and scientific wildlife management practices into a wildlife management program and provides the tribe with hunting opportunities that they have not had for over a century.

TLIP 2003

Federal grant: \$200,000

Contribution: \$66,875

Title: *Catawba Natural Resources Management Plan*

Goals/Objectives: In conjunction with the Catawba Indian Nation 2003 TWG grant (see above) acquire 233.5 acres of wildlife habitat in York County, South Carolina. Additionally, conduct wildlife surveys to establish wildlife management plan for all Catawba properties in York County to conserve high quality habitats, create food plots, wildlife openings, and improve habitat for local wildlife species.

TLIP 2004

Federal grant: \$150,000

Contribution: \$89,000

Title: *Plant Restoration and Wildlife Enhancement*

Goals/Objectives: Acquire 75 acres adjacent to tribal lands and restore five Federally protected plant species throughout these and other reservation lands. Project work presents an opportunity to educate traditional and cultural knowledge about these plants to tribal members. Newly acquired lands expand tribal hunting opportunities and management capacity.

CONNECTICUT

Mashantucket Pequot Tribal Nation

TWG 2003

Federal grant: \$82,040

Contribution: \$107,500

Title: *Examination of Population Status, Habitat Needs, and Home Range Size of Significant Predator and Prey Species in a Suburban Environment in Connecticut*

Goals/Objectives: Examine the status and habitat selection of the New England cottontail (*Sylvilagus transitionalis*) on tribal lands. Expand an ongoing research project on fox (the spiritual animal of the Mashantucket Pequots) in southeastern Connecticut. Through these research projects, previously nonexistent information will be available to the tribe and public in order to best preserve and manage for these species.

TLIP 2006

Federal grant: \$80,870

Contribution: \$68,532

Title: *Examination of Snapping Turtle Ecology and Use of Road Culverts by Herpetiles and Small Mammals in Connecticut*

Goals/Objectives: Examine the movements, behavior, and habitat selection of the common snapping turtle (*Chelydra serpentina serpentina*) on tribal lands and the use of road culverts by herpetiles and mammals.

MASSACHUSETTS

Wampanoag Tribe of Gay Head (Aquinnah)

TWG 2004

Federal grant: \$247,500

Contribution: \$171,480

Title: *Development of a Comprehensive Bay Scallop Population Enhancement Program for Menemsha Pond, Martha's Vineyard, Massachusetts*

Goals/Objectives: Restore the bay scallop (*Aequipecten irradians*) to Menemsha Pond, on Martha's Vineyard in Massachusetts. The scallop restoration project dovetails with the construction of the Wampanoag Aquinnah Shellfish Hatchery, where oyster, hard clam and bay scallop shellfish will be produced for two sites in Menemsha Pond.

TWG 2006

Federal grant: \$145,040

Contribution: \$104,490

Title: *Development of a Comprehensive Bay Scallop Population Enhancement Program for Menemsha Pond, 1Martha's Vineyard, Massachusetts-Phase2*

Goals/Objectives: This second phase of the program expands existing activities to include bay scallop (*Aequipecten irradians*) larvae monitoring using a Larval Identification and Hydrographic Data Telemetry instrument (LIHDAT). The LIHDAT quickly and accurately identifies larvae and zooplankton of over 2000 species while a boat is operating on the target waters. LIHDAT will allow us to determine bay scallop spawning events and spawning events of bay scallop predators. This improves understanding of population dynamics, contributes to population ecosystem model, and maximizes seed release efforts through prediction of predator populations.

MAINE

Aroostook Band of Micmacs

TWG 2003

Federal grant: \$80,647

Contribution: \$32,919

Title: *Aroostook Band of Micmacs Brown Ash Management and Re-introduction*

Project Goals/Objectives: Improve the health and sustainability of brown ash (*Fraxinus nigra*) on tribal lands and protect future viability of the ancient tribal tradition of basket-making through: 1. Develop a management plan to manage and protect existing brown ash populations on tribal lands; 2. Implement of a management plan; 3. Establish a brown ash population in a degraded wetland; and 4. Establish of brown ash reference plots.

TWG 2004

Federal grant: \$250,000

Contribution: \$327,000

Title: *Aroostook Band of Micmacs Aroostook River Land Conservation Project*

Goals/Objectives: Acquire and permanently protect approximately 4,128 acres of high value habitat from development for the benefit of rare and endangered species (e.g., Canada lynx (*Lynx canadensis*), Atlantic salmon (*Salmo salar*), bald eagle (*Haliaeetus leucocephalus*), pygmy snaketail dragonfly (*Ophiogomphus howei*) and the extra-striped snaketail dragonfly (*Ophiogomphus anomalus*.)

Region 5 (Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia, and West Virginia)

Houlton Band of Maliseet Indians

TWG 2003

Federal grant: \$68,867

Contribution: \$32,919

Title: *Wildlife Habitat Enhancement Program*

Goals/Objectives: Enhance wildlife habitat on the Houlton Band of Maliseet Indian reservation for species biodiversity and to help sustain tribal cultural uses of natural resources. Specifically, the project addresses four priority wildlife habitat needs through a variety of wildlife habitat enhancement activities, including: 1. Invasive plant species (purple loosestrife (*Lythrum salicaria*), Japanese knotweed (*Fallopia japonica*) and Canada thistle (*Cirsium arvense*) survey; 2. Snag tree management and nest box installation; 3. Release wild apple trees (*Malus spp.*); and 4. Plant American chestnut (*Castanea dentata*) trees.

TWG 2006

Federal grant: \$70,285

Contribution: \$22,358

Title: *Wildlife Habitat Enhancement Program (Phase II)*

Goals/Objectives: Conduct wildlife habitat enhancement activities and resource surveys over a three year period including: 1. Nesting cavities; 2. Wetland protection and enhancement; 3. Additional biodiversity data; 4. Buffer zones along streams, brooks and rivers; and 5. Invasive plant species control. Activities enhance a nine acre wetland, 120 acres of upland habitat and three miles of riparian habitat.

Passamaquoddy Tribe - Pleasant Point

TWG 2004

Federal grant: \$105,896

Contribution: \$15,300

Title: *Restoring Native Diadromous Fish in the Little River and Boyden Lake Watershed, Maine*

Goals/Objectives: Restore native sea-run fish (e.g., alewife (*Alosa pseudoharengus*), American eel (*Anguilla rostrata*) and their spawning and rearing habitats in the Little River and Boyden Lake by repairing a fish ladder and installing an eel passageway at the Passamaquoddy Water District dam in the Little River in Northeast Maine.

TWG 2005

Federal grant: \$106,218

Contribution: \$21,575

Title: *Monitoring the Water Quality at Boyden's Lake Tributaries after the Re-Introduction of Alewives*

Goals/Objectives: Monitor water quality at Boyden Lake tributaries as a follow up to the 2004 TWG project (see above) to repair fish passage on the Little River. Gather information on the alewife populations in the Boyden Lake watershed to develop a sustainable harvest plan. Assess biochemical changes in Boyden Lake that may impact water treatment at Passamaquoddy Water District. Investigate the impact of nutrient additions associated with the new run of alewife populations and impacts on the food web structure, providing a model for shallow eutrophic lakes in the Northeast.

Passamaquoddy Tribe-Indian Township

TWG 2005

Federal grant: \$250,000

Title: *A Comprehensive Plan to Protect Enhance and Manage Fresh Water Fish*

Goals/Objectives: Develop a comprehensive freshwater fish management plan including a complete inventory of all tribal fisheries on 143,573 acres of Passamaquoddy Tribal Land; individual inventories for each lake, pond, and stream for water quality, fish species present (and population), available spawning habitat, and its current fishery; and develop an individual fisheries goal and management plan for each lake, pond and stream based on the collected data.

TLIP 2003

Federal grant: \$180,700

Contribution: \$60,233

Title: *Population Assessment and Forest Management Planning for the Canada Lynx and Other Rare and Endangered Forest Carnivores on Passamaquoddy Tribal Lands in Maine*

Goals/Objectives: Conduct surveys for Federally endangered gray wolf (*Canis lupus*) and Eastern cougar (*Felis concolor*); Federally threatened Canada lynx (*Lynx canadensis*) and other furbearing species including bobcat (*Lynx rufus*), fisher (*Martes pennanti*), pine marten (*Martes americana*), snowshoe hare (*Lepus americanus*), coyote (*Canis latrans*), red fox (*Vulpes fulva*), weasel (*Mustela spp.*), red squirrel (*Tamiasciurus hudsonicus*), mink (*Mustela vison*) and otter (*Lutra canadensis*) on tribal lands. Develop habitat models to assess suitability of tribal lands for snowshoe hare, Canada lynx and pine marten and assess the effects of past, present and future forest management practices on these species. Utilize habitat models for snowshoe hare and Canada lynx and pine marten to revise tribal forest management plans and promote the recovery and management of these species on tribal lands.

Region 5 (Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, Virginia, and West Virginia)

Penobscot Indian Nation

TWG 2003

Federal grant: \$250,000

Contribution: \$28,789

Title: *Development of a Management Strategy for Moose and White-tailed Deer on Penobscot Nation Trust Lands*

Goals/Objectives: Through the employment of a professional wildlife manager and a wildlife technician over a two-year period develop an applied management strategy, based on existing habitat conditions and population status of whitetail deer (*Odocoileus virginianus*) and moose (*Alces alces*). This strategy will give the Penobscot Indian Nation the capacity to make informed decisions in its forest management planning process and in its fish and game regulations development process. This will help to insure the continuation of healthy populations of deer and moose on Penobscot Indian Nation reservation lands.

TLIP 2003

Federal grant: \$198,625

Contribution: \$769,980

Title: *Katahdin to the Sea: Restoring the Penobscot River Ecosystem (Phase I)*

Goals/Objectives: Overall, the Penobscot River Restoration Project is a multi-year effort to restore the Penobscot River. *Phase I - Katahdin to the Sea* enables the tribe to conduct critical scientific, political and community assessments, including sediment, archaeological and engineering analyses of proposed dam removals. Continue to build a diverse and broad base of public support for the Penobscot River Restoration Project.

TLIP 2005

Federal grant: \$149,490

Contribution: \$50,372

Title: *Katahdin to the Sea: Restoring the Penobscot River Ecosystem (Phase II)*

Goals/Objectives: *Phase II - Katahdin to the Sea* restores and reopens 500 miles of river habitat for shortnose sturgeon (*Acipenser brevirostrum*), Atlantic salmon (*Salmosalar*), American eel (*Anguilla rostrata*), American shad (*Alosa sapidissima*) and alewives (*Alosa pseudoharengus*). The Penobscot Indian Nation is working with numerous partners to remove two large dams, decommission a third and boost power production at six more dams in the Penobscot River watershed. For the first time in more than 200 years, 100 percent of migratory fish historical habitat will be reopened.

NEW YORK

St. Regis Mohawk Tribe

TWG 2005

Federal grant: \$187,941

Title: *Inventory and Evaluation of Suitable Wetland Habitat for Blanding's and Snapping Turtles on the St. Regis Mohawk Reservation*

Goals/Objectives: Inventory and evaluate populations of Blanding's (*Emydoidea blandingii*) and snapping turtles (*Chelydra serpentina*) in their preferred habitats within reservation boundaries and implementation of a species management plan. The Blanding's turtle is listed as threatened in New York, and both species play an important role in the Mohawk culture and tradition.

TLIP 2004

Federal grant: \$25,500

Contribution: \$8,500

Title: *Habitat Protection Project within the Benedict Property on the St. Regis Mohawk Reservation*

Goals/Objectives: Acquire 51-acres on the St. Regis Mohawk Tribe's reservation that is habitat for at-risk and tribally- significant species including wood turtle (*Clemmys insculpta*), Blanding's turtle (*Emydoidea blandingii*), pied-billed grebe (*Podilymbus podiceps*) and black ash (*Fraxinus nigra*) and establish environmental protection and habitat conservation management for the site.

COLORADO

Southern Ute Indian Tribe

TLIP 2004

Federal grant: \$126,006

Contribution: \$42,002

Title: *Stollsteimer Creek Restoration Project*

Goals/Objectives: Eliminate approximately 3,400 feet of severe stream bank erosion and associated water quality impacts in the Stollsteimer Creek. Reclaimed stream bank re-planted with native riparian vegetation. Restore habitat for wintering bald eagles (*Haliaeetus leucocephalus*), neo-tropical migratory birds, osprey (*Pandion haliaetus*), waterfowl, leopard frogs (*Rana spp.*) and many other wildlife species that use and depend on riparian areas in the southwestern United States, and serve as a model project for adjacent landowners.

MONTANA

Blackfeet Nation

TWG 2003

Federal grant: \$152,615

Contribution: \$75,000

Title: *The Blackfeet Tribe's Four Wildlife Projects*

Goals/Objectives: 1. Provide bear-resistant garbage dumpsters to avoid bear/human encounters and making unnatural human foods inaccessible to bears. 2. Revise the Blackfeet Fish and Wildlife Code that the public and law enforcement officers can better interpret, understand, and enforce. 3. Continue to monitor the population status and health of the previously-reintroduced swift fox (*Vulpes velox*). 4. Wildlife and habitat survey of tribal lands to establish base line data for future management and conservation efforts.

TLIP 2004

Federal grant: \$120,000

Contribution: \$40,000

Title: *Landowner Stream Restoration Program*

Goals/Objectives: Enables the tribe to pay for labor and machinery to construct fish and wildlife habitat in the Two Medicine River drainage at three locations. Project work consists of stream bank restoration and habitat construction in severely eroded reaches. Improvements will enhance or create new habitat for fish, macroinvertebrates, birds, and mammals. About 2,800 feet of riverine habitat will be restored.

Chippewa Cree of the Rocky Boys Indian Reservation TWG 2003

Federal grant: \$250,000

Contribution: \$143,927

Title: *Enhance Tribal Fish and Wildlife*

Goals/Objectives: Acquire a full-time tribal fish and wildlife game biologist and provide training for all current fish and wildlife staff. Enhanced capacity will enable the tribe to conduct habitat mapping, field surveys, and implement effective management activities to protect, preserve, and enhance wildlife populations.

Confederated Salish and Kootenai Tribes (CSKT) TWG 2003

Federal grant: \$212,050

Contribution: \$24,967

Title: *Columbian Sharp-Tailed Grouse*

Goals/Objectives: Enhance the understanding of the quantity and quality of Columbian sharp-tailed grouse (*Tympanuchus phasianellus columbianus*) habitat on tribal lands in order to increase the probability of successful reintroduction of this species. Sophisticated airborne hyper spectral remote sensing technologies were utilized to discriminate habitats.

TLIP 2003

Federal grant: \$200,000

Contribution: \$200,000

Title: *Grizzly Bear Habitat Enhancement*

Goals/Objectives: The CSKT are leveraging TLIP funds to purchase aspen seep and riparian habitat along the base of the Mission Mountains in seasonally important grizzly bear (*Ursus arctos horribilis*) habitats. Typically, the highest value lands for bears are riparian and aspen seep habitats at the base of the Mission Mountains.

TWG 2004

Federal grant: \$41,516

Contribution: \$22,298

Title: *Trumpeter Swan Powerline Collision Project*

Goals/Objectives: Enable the tribes' Wildlife Management Program to enhance Trumpeter swan (*Cygnus buccinator*) habitat on the Flathead Indian Reservation by installing protective devices on electrical transmission lines that help to prevent collisions. The project goal is to reduce trumpeter swan mortalities due to collisions with overhead power lines.

TLIP 2004

Federal grant: \$129,951

Contribution: \$43,915

Title: *Acquisition of the Walhoo Property*

Goals/Objectives: CSKT purchase and restoration of a critical piece of property within the DuCharme Creek drainage to facilitate habitat restoration for Westslope cutthroat trout (*Oncorhynchus clarki*).

Region 6 (*Colorado, Kansas, Montana, Nebraska, North Dakota, South Dakota, Utah, and Wyoming*)

TLIP 2004

Federal grant: \$20,000

Contribution: \$22,697

Title: *Instillation of Pipeline on the Morin Ditch*

Goals/Objectives: Restore native bull trout (*Salvelinus confluentus*) in the Jocko River watershed. The project eliminates leakage, prevents ditch failure, and minimizes ongoing disturbance by the previously failing diversion and ditch system. Lining the ditch with pipe provides benefits to fish and wildlife habitat by reducing the amount of irrigation water withdrawn from Valley Creek thereby improving stream flows.

Crow Tribe

TLIP 2006

Federal grant: \$150,000

Contribution: \$50,000

Title: *Habitat Conservation Incentive Program*

Goals/Objectives: Development and implementation of a comprehensive Tribal conservation program to restore and conserve 10,000 acres of native prairie and prairie dog habitat. Restoration of this ecosystem will benefit many other endemic species such as black-tailed prairie dogs (*Cynomys ludovicianus*), burrowing owls (*Athene cunicularia*), and sage grouse (*Centrocercus urophasianus*) that are at critical points in their recovery.

Gros Ventre and Assiniboine Tribes of the Ft. Belknap Indian Reservation

TWG 2003

Federal grant: \$250,000

Contribution: \$155,689

Title: *Comprehensive Wildlife Management*

Goals/Objectives: Develop and implement a comprehensive tribal wildlife management program to conserve and enhance native ecosystems consistent with Native American cultural traditions and values. The tribe hired a biologist to develop and implement ecosystem and species management plans, conduct annual monitoring of key wildlife species, implement research efforts as well as habitat protection and enhancement efforts on native prairie, sagebrush, and big game habitats.

Assiniboine and Sioux Tribes of the Fort Peck Indian Reservation

TWG 2003

Federal grant: \$225,000

Contribution: \$76,000

Title: *Swift Fox Restoration*

Goals/Objectives: Assess the potential for natural recolonization by swift fox (*Vulpes velox*) and determine factors affecting reintroduction. Surveys are conducted for foxes and monitored to determine likelihood of population expansion and re-colonization.

TLIP 2005

Federal grant: \$150,000

Contribution: \$50,000

Title: *Manning Lake Wetlands Tribal Wildlife Refuge Project*

Goals/Objectives: Secure permanent protection and establish a Tribal Wildlife Management Area on the Manning Lake Wetlands Complex. This extensive wetland-wet meadow in the western portion of the reservation is adjacent to the Medicine Lake National Wildlife Refuge. The unique landscape provides vital breeding and rearing habitat for a diversity of waterfowl, migratory birds, songbirds and other species of conservation concern.

Northern Cheyenne Tribe

TLIP 2005

Federal grant: \$150,000

Contribution: \$50,000

Title: *Native Prairie Conservation Incentive Program*

Goals/Objectives: Develop and implement a comprehensive Tribal Conservation Program to restore prairie dog habitat on tribal native sagebrush and prairie acreages through traditional Native American land use values.

TWG 2006

Federal grant: \$250,000

Title: *Black Footed Ferret Reintroduction/Wildlife Management Plan of the Northern Cheyenne Tribe*

Goals/Objectives: Reintroduce the black-footed ferret (*Mustela nigripes*) to the reservation and begin preliminary actions to reintroduce the swift fox (*Vulpes velox*). Preliminary steps evaluate and prioritize reintroduction sites for swift fox. Returning the ferret and swift fox will reestablish ecological balance, fill a missing ecological niche, increase biodiversity, and restore a natural prairie ecosystem as well as further public awareness.

NORTH DAKOTA

Spirit Lake Nation

TWG 2005

Federal grant: \$250,000

Contribution: \$51,964

Title: *Implementation of Biological Wildlife Surveys for a Wildlife Management Program*

Goals/Objectives: Collect baseline data on the focal wildlife species identified by the Spirit Lake Nation including, Federally-protected species, species of management concern and wildlife species that are of cultural importance to the Nation. Primary species are the bald eagle (*Haliaeetus leucocephalus*), ferruginous hawk (*Buteo regalis*), Dakota skipper (*Hesperia dacotae*), and white-tailed deer (*Odocoileus virginianus*). A second objective of this project is to ensure proper harvest management of game species by implementing a licensing and tagging system that incorporates both modern harvest principles and tribal traditions.

TLIP 2005

Federal grant: \$150,000

Contribution: \$53,964

Title: *Assessment of Flooded Habitats, Important Wildlife Habitats and the Development of a Land Use Plan*

Goals/Objectives: This project is determining the amount of terrestrial wildlife habitat that has been lost on tribal and allotted lands due to the rising of Devil's Lake and the resultant flooding. This information is being used to develop a Habitat Mitigation Plan which will identify areas in need of protection and/or restoration. A Land Use Plan will also be developed to identify areas that are at risk of development.

Three Affiliated Tribes of the Fort Berthold Indian Reservation

TWG 2003

Federal grant: \$248,522

Contribution: \$104,300

Title: *Big Game Habitat Usage/Migration*

Goals/Objectives: Surveys to establish and monitor big game habitat usage and migration enables the tribes to make biologically sound management decisions. Surveys target elk (*Cervus elaphus*), pronghorn antelope (*Antilocapra americana*) and white-tailed deer (*Odocoileus virginianus*).

SOUTH DAKOTA

Cheyenne River Sioux Tribe

TWG 2004

Federal grant: \$240,498

Contribution: \$223,752

Title: *Protecting Wildlife Habitat through Riparian Restoration and Noxious Weed Control*

Goals/Objectives: Benefit wildlife and their habitat by protecting and enhancing the riparian areas within the Cheyenne River Sioux Reservation through noxious weed identification, control, monitoring, restoration and public outreach activities. Project activities include: the survey of 485 miles of shoreline within and adjacent to the reservation for wildlife habitat improvements; monitoring of habitat treated areas through Global Positioning Systems and Geographic Information Systems; restoration of riparian areas through native and cultural plantings; and aggressive efforts to inform the public of the negative ecological impacts of noxious weeds.

TLIP 2006

Federal grant: \$144,783

Contribution: \$80,837

Title: *Opening another Black-footed Ferret Recovery Site*

Goals/Objectives: The Cheyenne River Sioux Tribe is studying the biological, financial, social and political possibilities of managing another Black-footed ferret (*Mustela nigripes*) recovery site on the reservation. Current reintroduction efforts may now be self sustaining, and can contribute wild born kits to other recovery sites.

TWG 2006

Federal grant: \$180,085

Contribution: \$173,966

Title: *Small Mammals and Furbearers Phase I*

Goals/Objectives: Protect and preserve small mammals and furbearers and their respective habitats located within the boundaries of the Cheyenne River Sioux Reservation. Project activities consist of 1. Trapping and tracking small mammals and furbearers on the reservation; 2. Identification and documentation of all small mammals and furbearers occurrences and their habitats; 3. Development of a habitat and species database for the reservation; 4. Participation with local area high schools in field activities and documentation of cultural significant species; and 5. Development of a field guide specific to the reservation.

Region 6 (*Colorado, Kansas, Montana, Nebraska, North Dakota, South Dakota, Utah, and Wyoming*)

Lower Brule Sioux Tribe

TWG 2003

Federal grant: \$160,957

Contribution: \$47,300

Title: *Swift Fox and Black-Footed Ferret*

Goals/Objectives: A self-sustaining population of swift fox (*Vulpes velox*) and black-footed ferrets (*Mustela nigripes*) on the Lower Brule Sioux Reservation. This study evaluates the legal and social aspects, conducts a habitat suitability analysis, estimates relative abundance of prey, estimates relative abundance of predators, and examines disease presence and estimates risk.

TWG 2003

Federal grant: \$88,000

Contribution: \$25,850

Title: *Wetland Restoration*

Goals/Objectives: Restored, create, enhance, and protect wetlands for long-term production and migration benefits for waterfowl and other migratory birds. Wetland restoration totaled 10 projects on 40 acres and consisted of plugging wetland drains, repairing and rebuilding dikes, replacing water control structures and spillway tubes, and repairing spillways.

TLIP 2003

Federal grant: \$192,154

Contribution: \$99,611

Title: *Prairie Restoration*

Goals/Objectives: 1. Prairie Restoration—to reestablish the native grass and forb community, and 2. Prairie Dog Conservation Incentives—to provide an incentive to tribal landowners and lessees of tribal lands to conserve black-tailed prairie dogs (*Cynomys ludovicianus*) and their habitat.

TWG 2004

Federal grant: \$56,000

Contribution: \$4,425

Title: *Wetland Restoration and Conservation Project*

Goals/Objectives: Restore, enhance and protect wetlands for long-term production and migration benefits for waterfowl and other migratory birds. The project provides a stable water source for a 50-acre drought-prone wetland basin through the installation of a well and water-control valve in the deep, free-flowing Sunburst aquifer.

TWG 2005

Federal grant: \$250,000

Contribution: \$224,180

Title: *Swift Fox and Black-footed Ferret Reintroduction (Phase II)*

Goals/Objectives: Reintroduce swift fox and black-footed ferrets (*Mustela nigripes*) to the Lower Brule Reservation. The short-term goal is breeding of the first wild-born generation of these species on the reservation. For swift fox (*Vulpes velox*), the long-term goal is a self-sustaining population on and around the reservation that has survival and recruitment rates similar to other wild self-sustaining populations. For black-footed ferrets, the long-term success measure is a black-footed ferret population that produces young annually and requires minimal supplementation.

TLIP 2005

Federal grant: \$149,904

Contribution: \$115,806

Title: *County Line Prairie Restoration and Conservation Project*

Goals/Objectives: Re-establish the native grass and forb community that benefits important native plant and animal species. Some of the significant prairie species affected are prairie dogs, grassland-nesting birds as well as the swift fox (*Vulpes velox*) and black-footed ferrets (*Mustela nigripes*) which the Tribe will reintroduce in subsequent phases of this effort. The restoration area is 520 acres of tribal land currently under management for agricultural production.

Oglala Sioux

TWG 2003

Federal grant: \$246,638

Title: *Igmú Tanka “Big Cat”*

Goals/Objectives: Phase I. Conduct a systematic survey to determine whether mountain loins (*Puma concolor*) are present; and Phase II. Formulate a new tribal land management policy to include mountain loin presence; develop plans for further studies to include reproductive rates and survival rates, especially of young loins; develop a plan to work with landowners, especially livestock producers; and develop an outreach and public education plan.

TLIP 2003

Federal grant: \$199,835

Contribution: \$66,959

Title: *Sungila Tokalo “Fox Society”*

Goals/Objectives: Determine whether or not a small swift fox (*Vulpes velox*) population currently resides in the southwest corner of the reservation and conduct a comprehensive feasibility study to examine reintroducing swift fox populations to other areas of the reservation.

Region 6 (*Colorado, Kansas, Montana, Nebraska, North Dakota, South Dakota, Utah, and Wyoming*)

TWG 2006

Federal grant: \$249,240

Title: *Sylvatic Plague Monitoring and Prairie Dog Management Plan*

Goals/Objectives: Determine the extent of Sylvatic plague occurrence in existing prairie dog colonies and ascertain the impacted geographic radius on Pine Ridge Indian Reservation. Develop a comprehensive prairie dog management plan for the Pine Ridge Indian Reservation to minimize the impact of plague on the local and surrounding ecosystem and foster a healthy, robust population managed.

TLIP 2006

Federal grant: \$149,595

Contribution: \$71,840

Title: *Comprehensive Mammal Inventory in the Badlands, on the Pine Ridge Indian Reservation*

Goals/Objectives: Conduct a comprehensive mammal inventory in the Badlands area and on the former Air Force Bombing Range of the Pine Ridge Indian Reservation. This is the first step in developing a mammal community management plan which will form part of a comprehensive land management plan.

Rosebud Sioux Tribe

TWG 2004

Federal grant: \$248,600

Title: *Restoration of Black-footed Ferrets to Rosebud Sioux Tribe Indian Reservation*

Goals/Objectives: Restoration of the black-footed ferret (*Mustela nigripes*) to Rosebud Sioux tribal lands will involve habitat evaluation and mapping, releases and monitoring, travel and educational materials. Tribal biologists will receive ferret handling and anesthesia training at the National Black-Footed Ferret Conservation Center (NBFFCC). Crews will then map prairie dog colonies within the release area and assess prairie dog densities. Reintroduction ferret candidates with pre-release training will be acquired from Conata Basin or the NBFFCC.

Sisseton-Wahpeton Sioux Tribe

TWG 2003

Federal grant: \$183,702

Contribution: \$18,996

Title: *Comprehensive Management Plans*

Goals/Objectives: Prepare a comprehensive fish and wildlife management plan that reviews historical and current management of fish and wildlife including native wildlife, migratory species, endangered species, species of tribal concern, and other wildlife consideration. Develop a comprehensive bison management plan.

TLIP 2003

Federal grant: \$199,161

Contribution: \$70,349

Title: *Perennial Stream Study (Topeka Shiner)*

Goals/Objectives: Conduct a variety of river and stream assessments; implement habitat protection and restoration efforts, and conduct fish population studies within the exterior boundaries of the reservation with a focus on the Topeka shiner (*Notropis topeka*).

TLIP 2004

Federal grant: \$149,519

Contribution: \$56,437

Title: *Endangered Species Management Plan and Dakota Skipper Study*

Goals/Objectives: Conduct reservation-wide surveys for Federally-listed threatened and endangered species. Long term goals are to develop an Endangered Species Management Plan and to train a tribal member to assume the managerial responsibilities once the biological surveys are complete. A special emphasis is being placed on the local status of the endangered Dakota skipper (*Herperia dakotae*).

TWG 2006

Federal grant: \$249,830

Contribution: \$30,845

Title: *Lake, Fishery & Habitat Investigations, Enhancement & Management Plan Development*

Goals/Objectives: Scientific studies conducted on tribal lakes will provide opportunities for improving and managing existing native fish populations, enhancing habitat, and providing optimal fishing opportunity for tribal members and non-members. The project includes: 1. Assessment of physical lake conditions, 2. Evaluation of existing habitat and establish enhancement recommendations, 3. Evaluation of existing seasonal water quality conditions, 4. Assessment of existing fish populations, limiting factors and management requirements, 5. Completion of long term and lake specific management plans, and 6. Enhancing waterfowl and other wildlife populations by implementation of habitat enhancement activities.

TLIP 2006

Federal grant: \$141,171

Contribution: \$49,163

Title: *Wetland Studies and Habitat Restoration Project*

Goals/Objectives: Conduct feasibility assessment studies to prepare for the completion of a variety of wetland restoration projects and establishment waterfowl survey procedures.

Region 6 (*Colorado, Kansas, Montana, Nebraska, North Dakota, South Dakota, Utah, and Wyoming*)

Standing Rock Sioux Tribe

TWG 2003

Federal grant: \$192,976

Contribution: \$9,400

Title: *Survey of Tribal Lakes*

Goals/Objectives: Conducted a variety of tribal lake and fish population studies. The studies identified lakes that could provide opportunities for improving existing native fish populations, increasing and protecting riparian habitat, establishing waterfowl nest opportunities, and enhancing fishing opportunities for tribal members and the public.

TLIP 2003

Federal grant: \$89,700

Contribution: \$39,754

Title: *Endangered Species Management Plan*

Goals/Objectives: Conduct an Endangered Species inventory (including: Endangered, Threatened, Candidate, Species of Special Concern and Species of Tribal Concern) on the Standing Rock Reservation, develop a Comprehensive Endangered Species Management Plan with an accompanying Endangered Species–Emergency Action Plan and hire and train a tribal member to conduct annual baseline inventories.

TWG 2006

Federal grant: \$243,986

Contribution: \$29,114

Title: *Development and Implementation of Wildlife Management Program*

Goals/Objectives: Develop and implement a Wildlife Management Program and Comprehensive Wildlife Conservation Plan. The wildlife management program will include development of survey protocols for several important annual wildlife surveys, standardizing survey procedures and staff training to conduct these important seasonal biological data collection activities leading to recommendations for management and establishment of hunting seasons. The creation of the Comprehensive Wildlife Conservation Plan will include a review of historical and current management strategies for walleye (*Sander vitreus vitreus*), perch (*Perca spp.*), northern pike (*Esox lucius*), other resident fish species and the status of lakes, rivers, streams and their related habitats.

Yankton Sioux Tribe

TWG 2005

Federal grant: \$250,000

Contribution: \$24,087

Title: *Riverine Endangered Species Habitat Development*

Goals/Objectives: Increase and improve the Yankton Sioux Wildlife Service's capacity to manage tribal fish and wildlife resources. Staff members receive technical training in habitat restoration and improvement for listed species, habitat cover type mapping, and implementation of effective management activities that support wildlife diversity and specific training for establishing habitat for the Interior least tern (*Sternula antillarum*) and piping plover (*Charadrius melodus*). This project provides for one Biologist/Coordinator and two seasonal technicians that will implement habitat restoration recommendations to benefit the Interior least tern and piping plover.

Shivwits Band of the Paiute Indian Tribe

TLIP 2004

Federal grant: \$80,000

Contribution: \$26,670

Title: *Santa Clara River Restoration*

Goals/Objectives: Provide the Shivwits Band the ability to take an active leadership role in managing important natural resources, such as fish, wildlife, habitat, and water flows, on their reservation. The project focuses on monitoring fish populations, riparian and riverine habitat conditions, and management of water flows along the Santa Clara River within the Shivwits Band Reservation. It will provide the Virgin River Recovery Program with recommendations on how to restore and protect virgin spinedace (*Lepidomeda mollispinis mollispinis*) and their habitat.

UTAH

Ute Indian Tribe

TLIP 2003

Federal grant: \$120,000

Contribution: \$40,000

Title: *Native Fish Planning and Implementation*

Goals/Objectives: This project has four components:

1. Native Fish Management Plan—compile and summarize studies and literature regarding habitat, needs, distribution, abundance, and status of native fish on tribal lands;
2. Support of the Colorado River Cutthroat Conservation Agreement—including project support, habitat protection and restoration, stream assessment, strain identification, and other activities specified in the Agreement;
3. Project support for Recovery of Colorado River Endangered Fish—included floodplain habitat restoration, removal of non-native fish in the Green, Duchesne and White Rivers, maintenance of fish barriers, and other activities proposed by the Recovery Implementation Program; and
4. Community Information Dissemination and Training—develop information kiosk and pamphlets.

WYOMING

Shoshone and Arapaho Tribes of the Wind River Reservation

TWG 2003

Federal grant: \$190,900

Contribution: \$24,800

Title: *Management Plan for Grizzly, Wolf and Sage Grouse*

Goals/Objectives: The program will first develop management plans for grizzly bears (*Ursus arctos horribilis*), Wolves (*Canis lupus*), and sage grouse (*Centrocercus urophasianus*). Associated with the bear and wolf management plans are 1. Aerial and ground surveys to estimate numbers of grizzly bears and wolves; 2. Radio-collaring; 3. Trapping, relocating, and possible removal of nuisance and depredating individuals; 4. Purchase of traps, immobilizing drugs and dart guns, bear sprays, radio-collars and other tagging equipment; 5. Training personnel; and 6. Participate in interagency groups. Along with the sage grouse management plan are radio-collaring grouse hens to assess populations, inventorying conditions of the sagebrush ecosystems, and treating habitats to enhance the sagebrush ecosystems.

ALASKA

Aleut Community of St. Paul Island

TWG 2003

Federal grant: \$201,662

Contribution: \$29,302

Title: *Evaluation of the Health and Restoration of the St. Paul Island Salt Lagoon*

Goals/Objectives: Collect baseline data and develop a conservation plan for Salt Lagoon on St Paul Island. Salt Lagoon is the only place in the Pribilof Islands where substantial tidal flats are exposed during low water providing important feeding habitat for migratory waterfowl, shorebirds, and gulls.

Beaver Village

TWG 2006

Federal grant: \$211,762

Contribution: \$117,949

Title: *Yukon Flats Cooperative Moose Management Plan Implementation Project*

Goals/Objectives: Implement management practices recommended in the Yukon Flats Cooperative Moose Management Plan designed to increase moose (*Alces alces*) populations in key hunting areas. Measures are being taken to reduce bear and wolf predations, improve harvest monitoring and reporting systems, and to educate the local public through scientific and traditional ecological information. Moose are not only culturally, traditionally, and spiritually important to the Native people of Yukon Flats and are the primary source of meat for subsistence in the Region. Current moose populations here are one of the lowest in Alaska.

Chevak Native Village

TWG 2006

Federal grant: \$239,883

Title: *Developing a Y-K Delta Coastal Villages Conservation Plan*

Goals/Objectives: Develop a Coastal Land Conservation Plan for the Yukon-Kuskokwim Delta coastal lands bordering the Bering Sea and five tribal villages. The plan supports long-term conservation efforts and develops compatible land protection and conservation policies across Native Corporation and National Wildlife Refuge lands which are host to some of the most productive waterfowl, bird and fish habitat in Alaska.

Chickaloon Village Traditional Council

TWG 2004

Federal grant: \$249,887

Title: *Moose Creek Fish Passage Restoration Project (Phase I)*

Goals/Objectives: Restore fish passage around a large, artificially constructed waterfall by reconstructing the original channel in reach 3 of Moose Creek. Assess watershed-wide aquatic physical and biological conditions in Moose Creek to add to traditional knowledge of the area. Salmon were seen traveling upstream to their historic spawning areas immediately after the original channel was re-opened.

TWG 2005

Federal grant: \$167,768

Contribution: \$1,000

Title: *Moose Creek Fish Passage Restoration Project (Phase II)*

Goals/Objectives: Continue fish passage rehabilitation efforts begun in Phase I (above). Remove small waterfalls and other fish passage obstacles in reach 5 of Moose Creek and begin evaluation of habitat restoration needs in reaches 1 and 2.

Craig Community Association

TWG 2003

Federal grant: \$103,255

Contribution: \$13,745

Title: *Hatchery Creek Fish Habitat Improvement Project*

Goals/Objectives: Conduct on-the-ground salmon habitat restoration and fish passage work within the Hatchery Creek sub-basin of the Klawock Watershed.

Curyung Tribal Council

TWG 2004

Federal grant: \$245,847

Contribution: \$29,813

Title: *Traditional Use Area Conservation Plan in the Nushagak River Watershed*

Goals/Objectives: Develop a Traditional Use Area Conservation Plan for the 7,000 square mile Nushagak River watershed. The plan will include a comprehensive assessment of fish and wildlife and their habitats and devise conservation strategies based on an ecosystem approach.

Region 7 (Alaska)

Eyak Native Village

TLIP 2003

Federal grant: \$129,198

Contribution: \$43,504

Title: *Razor Clam Rehabilitation Project (Phase I)*

Goals/Objectives: Conduct a study to provide a clearer understanding of how razor clams (*Siliqua patula*) use their habitat and initiate a pilot Rehabilitation Project utilizing hatchery produced seed. This effort will determine the approach to a full-scale rehabilitation project. Nursery culture techniques are also being developed and assessed to enable the production of between five and ten million seed annually.

TLIP 2005

Federal grant: \$149,559

Contribution: \$51,935

Title: *Razor Clam Rehabilitation Project (Phase II)*

This TLIP project follows up on the tribe's previous TLIP grant (above) to determine how to restore historic razor clam (*Siliqua patula*) populations on beaches near Cordova, Alaska. The tribe will conduct studies to determine clam habitat needs, test rehabilitation potential in southeastern Prince William Sound, and develop techniques for producing razor clam seeds with which to develop a razor clam fishery.

Huslia Tribal Council

TWG 2005

Federal grant: \$248,100

Title: *A Holistic Approach to Managing Moose along the Koyukuk River*

Goals/Objectives: Reverse moose (*Alces alces*) population declines along the Koyukuk River drainage system. Strategies include consistent participation in management meetings of the Koyukuk River Advisory Committee and the Koyukuk River Moose Hunter's Working Group; enhancement of traditional and customary predator management practices; and monitoring the effectiveness of traditional predator management for regulatory purposes.

Kiana Native Village

TLIP 2006

Federal grant: \$149,800

Contribution: \$80,501

Title: *Kiana Elders Camp*

Goals/Objectives: Inupiat elders teach traditional Inupiaq cultural values in natural resource conservation and subsistence to tribal youth with a special emphasis on caribou (*Rangifer tarandus*.) These values will be taught through a variety of activities: development of science projects, hunting, fishing, food gathering, preparation and processing.

Kasaan Organized Village

TWG 2004

Federal grant: \$248,155

Contribution: \$68,500

Title: *Karta River Sockeye Assessment*

Goals/Objectives: Build a fish weir on the Karta River (southeast Alaska) to estimate escapement of sockeye salmon (*Oncorhynchus nerka*), which are an important subsistence resource and conduct subsistence harvest surveys. Escapement and subsistence harvest information are critical for properly determining harvest goals and regulations.

Kotzebue Native Village IRA

TWG 2003

Federal grant: \$249,454

Contribution: \$59,400

Title: *Habitat Use, Seasonal Movements and Stock Structure of Bearded Seals in Kotzebue Sound, Alaska*

Goals/Objectives: Capture and fit bearded seals (*Erignathus barbatus*) with satellite transmitters to record information on their movement and behavior. Bearded seals are an important marine mammal subsistence species throughout western and northern Alaska. This effort responds to the concerns of coastal hunters that there is no ongoing directed research or management program for bearded seals.

Larsen Bay Native Village

TWG 2005

Federal grant: \$75,000

Title: *Acquire and Apply Digital Orthophoto and GIS Technologies in the Karluk River Watershed*

Goals/Objectives: Obtain digital orthophotos for use in conservation, management and sustainable use of fish, wildlife and habitat in the vicinity of Larsen Bay and the Karluk River watershed. Enable Larsen Bay and its partners to more effectively manage fish and wildlife resources and their habitat.

Noatak Native Village

TWG 2004

Federal grant: \$244,711

Contribution: \$118,000

Title: *Western Arctic Caribou Herd Working Group*

Goals/Objectives: Transfer responsibility for the management of the Western Arctic Caribou Herd Working Group from the Alaska Department of Fish and Game to the Native Village of Noatak and the Maniilaq Association. Noatak will organize and manage the meetings that provide a forum for collaborative management of the Western Arctic caribou herd, as well as provide educational and informational materials to the public

Region 7 (Alaska)

Port Lions Native Village

TWG 2005

Federal grant: \$250,000

Title: *Port Lions Brown Bear Rehabilitation Project*

Goals/Objectives: Implement a four-part plan to re-educate the local brown bear (*Ursus arctos*) population to seek their natural food sources rather than human garbage and other food sources. Human/bear encounters have increased significantly recently because of poor salmon returns and an increase of readily available human garbage. Project work includes a cadastral survey of the Port Lions landfill, the removal of woody cover in and around the site, installation of adequate fencing around the fill and an extensive public education effort.

St. George Aleut Community of Pribilof Island

TLIP 2003

Federal grant: \$127,592

Contribution: \$42,531

Title: *Tribal Management Plan for Protecting Against Invasive Species and Other Negative Impacts on St. George Island*

Goals/Objectives: Develop and implement management strategies that: 1. Prevent the introduction of invasive species, especially rats; 2. Monitor and manage the St. George Island reindeer herd; and 3. Prevent negative impacts to fish and wildlife of St. George Island. The tribal management plan will help protect St. George Island's important species of nesting seabirds, northern fur seals, and unique island subspecies of birds and mammals against invasive species and mitigate the effects of other deleterious impacts including those resulting from all-terrain vehicle use.

Seldovia Village

TWG 2006

Federal grant: \$249,437

Contribution: \$35,742

Title: *Seldovia River Silver Salmon Restoration and Habitat Access Project*

Goals/Objectives: Develop a fish passage plan that enables the Seldovia River silver salmon (*Oncorhynchus kisutch*) to access the upper river system stretches. A ten foot waterfall barrier created by an earthquake in 1964 cut off the salmon's main river access, thus reducing spawning, rearing, and over-wintering habitat to only ten percent of the river. The Seldovia River silver salmon is an important subsistence resource, and the backbone of commercial fisheries for elders and relatives but predation and over-harvesting has reduced sustainability.

Sitka Tribe of Alaska

TWG 2003

Federal grant: \$249,958

Contribution: \$112,855

Title: *Sockeye Salmon and Pacific Herring Research*

Goals/Objectives: Develop biological and ecological information for Pacific Herring (*Clupea pallasii*) and sockeye salmon (*Oncorhynchus nerka*) near Sitka, Alaska to enhance management of Pacific herring and sockeye salmon, which are very important to subsistence users in southeast Alaska.

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