

*Wisconsin Tribal
Conservation Advisory
Council*



*A report on
protecting and
restoring natural
resources on
Tribal lands in
Wisconsin*

Stewardship for the Future

Wisconsin Tribal Conservation Advisory Council receives USDA 2010 Honor Award



Left to Right: Secretary Tom Vilsack, Pat Pelky - Oneida Nation, Jonathan Pyatskowit - President WTCAC, Tom Krampf - NRCS Wisconsin, Deputy Secretary Kathleen Merrigan

The Wisconsin Tribal Conservation Advisory Council (WTCAC), received the USDA Secretary's Honor Award in 2010. The 11-member tribal organization was recognized for exemplary service and achievement during the 62nd annual Honor Awards ceremony in Washington, DC, in August, 2010.

Council President Jonathan Pyatskowit, of the Menominee Nation, accepted the award from Agriculture Secretary Tom Vilsack, on the council's behalf.

The Secretary's Annual Honor Awards are USDA's most prestigious awards. The Honor Awards recognize USDA employees at all grade levels and private citizens who have made outstanding contributions supporting USDA's mission.



Wisconsin Tribal Conservation Advisory Council

A Voice for Conservation on Tribal Lands

The Wisconsin Tribal Conservation Advisory Council (WTCAC), formed in 2001, provides a forum for the 11 Native American Tribes in Wisconsin to identify and solve natural resource issues on tribal lands. The Council gives a strong voice to tribes on conservation issues at the state and national level.

Funding for Conservation Work

Through a strong partnership with the USDA Natural Resources Conservation Service (NRCS), the Council reviews and recommends proposals for conservation projects from tribes. Tribal Conservation Advisory Councils were authorized in the 1995 Farm Bill as advisory bodies to NRCS and all of USDA on tribal issues. For tribal resource issues, WTCAC serves as the equivalent to the Wisconsin State Technical Committee. Wisconsin's was the first such council formed in the country.

Some of the roles of the WTCAC are:

- to advise USDA and NRCS on better ways to meet tribal needs
- to identify natural resource issues affecting tribal lands or ways of life
- to communicate tribal conservation needs to legislators
- to provide input on pending conservation legislation and policy

Members of the Wisconsin Tribal Conservation Advisory Council

Bad River Band of the Lake Superior Chippewa

Forest County Potawatomi Community

Ho-Chunk Nation

Lac Courte Oreilles Band of the Lake Superior Chippewa

Lac du Flambeau Band of the Lake Superior Chippewa

Menominee Indian Tribe of Wisconsin

Oneida Tribe of Indians of Wisconsin

Red Cliff Band of the Lake Superior Chippewa

Sokaogon Mole Lake Band of the Lake Superior Chippewa

St. Croix Chippewa Indians of Wisconsin

Stockbridge-Munsee Community



A Voice for the Future of Wisconsin Tribes

Since the Wisconsin Tribal Conservation Advisory Council (WTCAC) was formed, tribal participation in USDA programs and funding for conservation projects have multiplied. Projects range from simple well closures to protect groundwater, to broad campaigns to combat invasive plant and aquatic species, to constructed practices to sustain native food sources.

The Wisconsin Tribes are stewards of over 650,000 acres of vast natural resources, including forestland, wetlands, streams and lakes. The focus of their stewardship is to protect pristine areas in the state, restore degraded natural resources, and help build strong communities.

NRCS recognizes the importance of providing sound conservation technical assistance to the Wisconsin Tribal communities. Two of NRCS's programs, the Environmental Quality Incentives Program (EQIP) and the Wildlife Habitat Incentives Program (WHIP) are highlighted in this report.

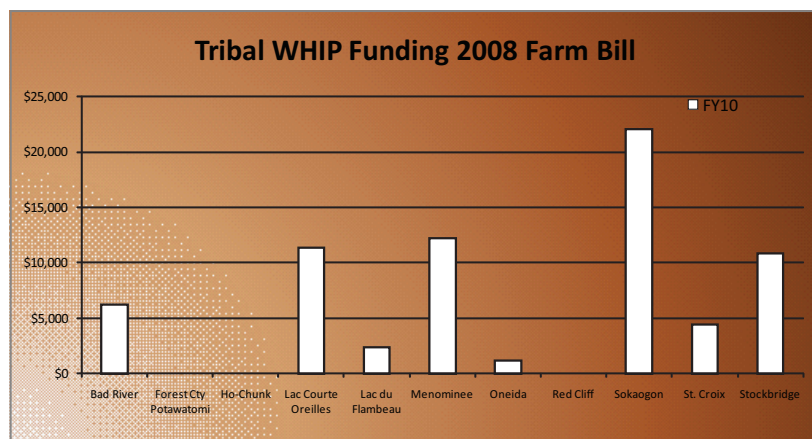
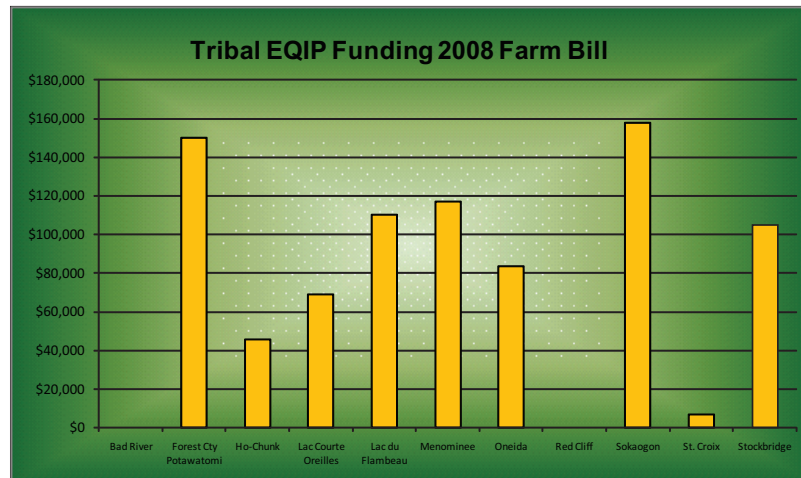
The unique needs of tribal agriculture and tribal lands occasionally were not met by the common conservation practices used in more conventional farming. In order to meet these needs, WTCAC has worked with NRCS to modify existing conservation standards, such as Wild Rice Seeding, Pest Management for Aquatic Invasive Species, Tree Drops for Fish Habitat, Hoop Houses for Community Gardens, and Paved Surface Water Access Point to abate streambank erosion.

Other Major WTCAC Initiatives:

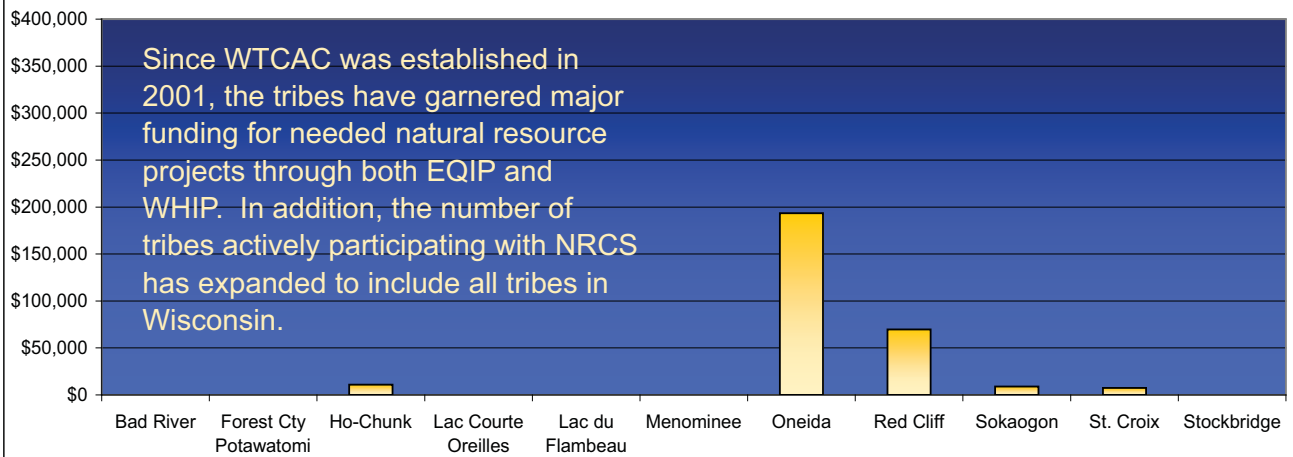
WTCAC has strengthened partnerships with many of the other USDA Agencies, including Farm Service Agency, Rural Development and the Forest Service. In partnership with the USDA Animal & Plant Health Inspection Service, WTCAC conducted surveillance for Viral Hemorrhagic Septicemia infestations in important fish species with the St. Croix Chippewa, Forest County Potawatomi and Stockbridge-Munsee Tribes. In addition to USDA partners, WTCAC has also established a strong working relationship with the Environmental Protection Agency.

WTCAC has also developed an Outreach Program to teach other Federally recognized Tribes how to organize a Tribal Conservation Advisory Council (TCAC) in order to better access USDA Programs. Tribes from Alaska to Florida, and all points in-between, are requesting this Technical Assistance.

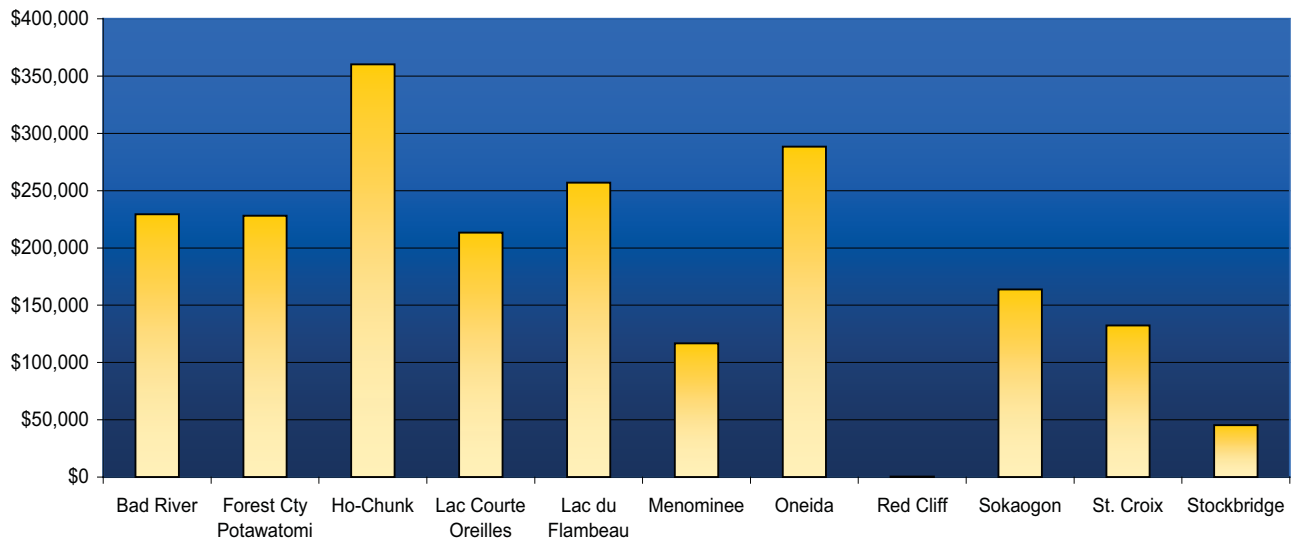
WTCAC recently established a website, www.WTCAC.org where information about our Strategic Plan, By-laws, Training Opportunities and Student Internship Program can be found.



Tribal EQIP Dollars through 1995 Farm Bill 1996-2000 (Pre-WTCAC)

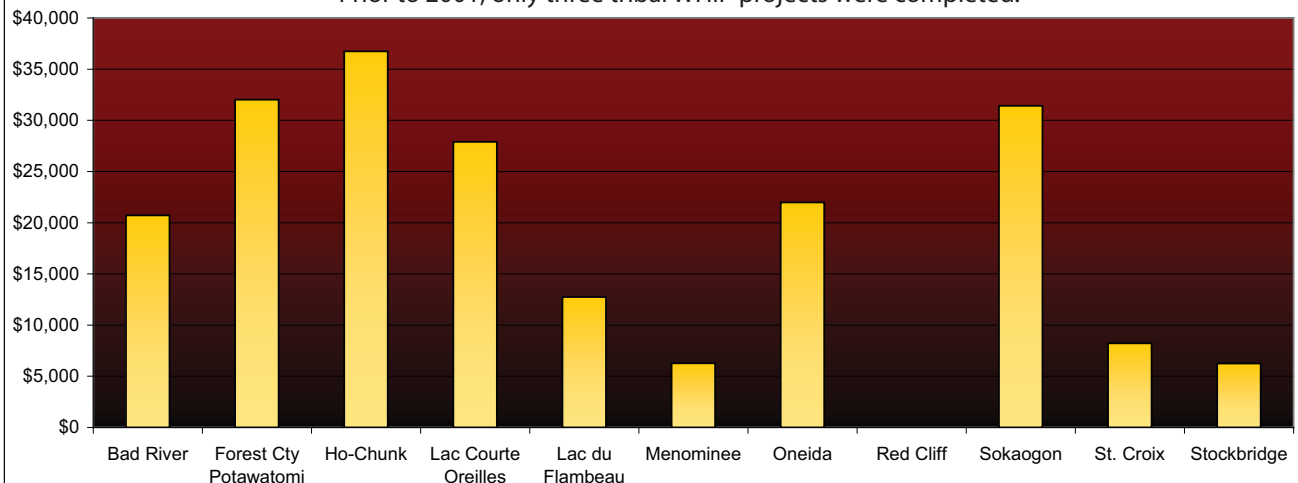


Tribal EQIP Dollars 2002 Farm Bill 2001-8 (with WTCAC)



Tribal WHIP Contracts 2002 Farm Bill 2001-2008*

* Prior to 2001, only three tribal WHIP projects were completed.



Lake Superior Chippewa

Bad River Band



Controlling Non-native Plant Species in the Kakagon Sloughs

The Bad River Tribe is utilizing the Wildlife Habitat Incentives Program (WHIP) to control Pickeral weed on the Kakagon Sloughs. When the project was developed it was thought that Pickeral weed was crowding out the wild rice beds in the slough. Most of the Pickeral weed was flooded out of the rice beds when water levels increased in 2008. It is now believed that the remaining weed provides an aquatic buffer that dampens the effects of boat wakes on the wild rice beds. Subsequent site evaluation identified Narrow Leaf Cattail as a more serious threat to the Kakagon Sloughs. Control efforts have now been redirected to suppress this non-native invasive plant. Treated sites will be seeded with wild rice to enhance the existing beds.

Lake Superior Chippewa

Community Gardens

The Gitiganing Community Garden Project, located on the Bad River Reservation, created in cooperation with NRCS, established healthy, local food production to help battle diabetes, obesity and nutrition-related illnesses that afflict many tribal members. From 2000 to 2006, with the assistance of NRCS, tribal members produced 14,000 bedding plants and distributed over 400 fruit trees to Tribal families. Gitiganing worked to establish over 100 home gardens on the reservation and 1.5 acre community garden site was developed in Old Odanah.



The Community Garden Project offers access to healthy, locally-grown foods.

Sealing Wells on Tribal Lands



Protection of ground water resources is a high priority on the Bad River Reservation. The Tribe is utilizing EQIP to decommission abandoned wells by filling them with bentonite. To date, 14 wells have been successfully closed.

Bad River Band



Forest County Potawatomi Community



Unimproved dirt landing



Eroding banks on Bug Lake



Improved boat landing after construction

Forest County Potawatomi

Bug Lake is an 11-acre lake on the Forest County Potawatomi Community (FCPC) Reservation in Forest County, Wisconsin. The lake is stocked with brook trout on an annual basis to provide fishing opportunities to the Tribal community as well as a high quality source of food. The boat landing on the lake was an unimproved dirt landing on a very steep slope that had been rutted up by vehicle traffic and was also causing erosion of sediment into the lake.

FCPC was awarded funds through the Wisconsin Tribal Conservation Advisory Council (WTCAC) Small Grants Program to install a new boat landing to reduce the erosion of sediment into the lake. The Natural Resources Conservation Service (NRCS) provided technical assistance by designing the project and providing technical oversight of construction.

The improvements consisted of excavation to reduce the grade down to the lake, pouring of a 12-foot x 87-foot concrete slab, and installing four concrete boat planks that extend out into the lake off the end of the concrete pad.

Using the information gained from this project and at the request of WTCAC, WI NRCS developed an EQIP scenario under the Access Road practice titled "Paved Surface – Water Access Point" which allows Tribes to construct boat landings for subsistence food collection as long as a resource concern is present at an existing water access point.



Swan Creek Habitat Improvement and Restoration Project

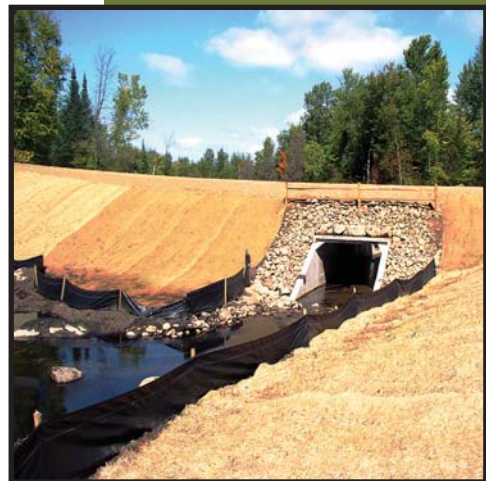
There were two dams in place in Swan Creek located at the Forest County Potawatomi Community Red Deer Ranch. These dams were installed decades ago by a previous owner to allow access to hay fields on the west side of the property. The placement of the two dams had created two impoundments in the stream.

The north and south impoundment water levels were drawn down and both dams were removed. A box culvert was installed at the former location of the south dam and a road was built at the stream crossing so farm equipment could still reach the field on the west side of Swan Creek. All areas disturbed by heavy equipment were seeded with a temporary crop, as well as native seeds, and erosion control matting was put down.

In order to catch the sediment that will continue to move downstream as Swan Creek cuts and finds its original streambed, sediment traps were installed at the former locations of both dams and an existing sediment trap was already in place approximately 300 yards downstream of the former north dam. These sediment traps will be closely monitored and cleaned out as needed.

Fish assessments will be conducted in the coming years to see if brook trout are now moving into the areas of Swan Creek which were formerly unreachable because of the dams. Furthermore, once the streambed has stabilized, there are plans to incorporate instream fish habitat to improve the conditions for brook trout.

Funding for this project by NRCS WHIP and EQIP programs, U.S. Fish and Wildlife Service and the Bureau of Indian Affairs



Forest County Potawatomi
Community

Ho-Chunk Nation



A spectacular prairie restoration is now part of the Ho-Chunk lands.

To Šanąk Ska (pronounced Doe Shahnunk Skah) White Otter Property

In 1998 the Ho-Chunk Nation purchased the 272-acre To Šanąk Ska property (named for Chief White Otter) as part of a continuing effort to reacquire lands in their aboriginal territory.

Since 1998, the Ho-Chunk Nation has incorporated various EQIP and WHIP practices for restoration of approximately 130 acres of mesic prairie. This phase was a cooperative effort among NRCS, USFWS, Juneau County Land Conservation Department, Wisconsin Waterfowl Association, and the BIA-Circle of Flight Program.



Lyndon Creek prior to restoration

Additional restoration work at To Šanək Ska was conducted along a one-mile segment of Lyndon Creek. A multiphase stream bank stabilization and habitat improvement project was undertaken by various partners, including USDA-NRCS.

Project activities have included re-grading and stabilizing approximately 1,500 feet of eroding stream banks, installing trout habitat such as lunger structures, vortex weirs, boulder retards, and half logs.

WTCAC Small Project grant funds were used to develop a new technical standard for access barriers to restrict vehicle access on the restored prairie. This new access barrier standard has since been incorporated as an NRCS EQIP practice.



Lyndon Creek after streambank restoration completed.



Lake Superior Chippewa

Lac Courte Oreilles Band



Restoring Fish Habitat to Lakes in the Lac Courte Oreilles Reservation

Over the past 20 years, most of the littoral zone fish habitat on all of the larger, oligotrophic water bodies on the Lac Courte Oreilles Reservation has deteriorated due to the influx of lake-shore construction. Tree stumps and logs have been removed by property owners to reduce “clutter” along their lakefronts, aquatic herbicides may have reduced or eliminated aquatic plant beds and many natural shorelines have been destroyed and converted to hard edges that provide little or no fish cover or spawning habitat.

Lake Superior Chippewa

Structural features are important in helping to maintain diverse, healthy lake ecosystems and in sustaining gamefish and non-gamefish populations. Lack of habitat can lead to an imbalanced fish population and reduction in gamefish yields.

The purpose of this project was to increase or enhance the amount of available structure in a lake to increase the overall fish population. The LCO Conservation Department, through the WTCAC Special Projects Program, conducted a deep-water enhancement project. Different types of fish “cribs” were constructed and dropped in water depths of 13-20 feet in the same general location, in the same substrate, on Big Round Lake on the Lac Courte Oreilles Reservation. Ultimately, the goal of the project was to determine which “crib” type would be most suitable and cost effective. Fish cribs may be included as a new practice under WHIP in future years.



Lac Courte Oreilles Band

Lake Superior Chippewa

Lac du Flambeau Band



Environmental Quality Incentives Program Helps Control Water Levels at the Sugarbush Impoundment

The Sugarbush Impoundment is located in Vilas County, part of the Lac du Flambeau Reservation. This 400-acre impoundment was built in 2000 with the placement of a levee, a spillway and a stoplog water control structure. The original water control structure was damaged and needed to be replaced.

Through EQIP, NRCS installed a new screw-gate water control structure on the Sugarbush Impoundment. NRCS staff surveyed and engineered the new structure and spillway. This structure will allow for the water levels to be controlled more accurately and the maintenance of the structure will be much easier. Construction was completed in 2008.

The Sugarbush Impoundment is part of the Powell Marsh. This 14,000-acre area is an important emergent marsh wetland system that annually supports hundreds of thousands of migratory waterfowl and songbirds. The results of the project will have long term benefits for migratory and local wildlife in northern Wisconsin.

Lake Superior Chippewa

Prescribed Burns Preserve Rare Peatland

The Lac du Flambeau Chippewa own 8000 acres of wetland habitat adjacent to the 4000 acre DNR-managed Powell Marsh. Sedge meadows like those found in these wetlands offer favorable conditions for many bird, mammal, and amphibian species. Migration can bring numbers of waterfowl, shorebirds and other passer-bys into sedge meadows for short periods of feeding and resting. About 50 species of birds regularly nest in northern sedge meadows, including the Yellow Rail, LeConte's Sparrow and Nelson's sharp-tailed sparrow; three species of special concern found in consistent numbers at the Powell Marsh area.

Large open peatland is rare in northern Wisconsin. This wildlife area is regionally important because of its large size and open character. Without management, this open peatland will succeed to tamarack forest and black spruce muskeg. A combination of prescribed fire, hand cutting, mowing and shearing can be used to limit the growth of shrubs and tamarack.

The Lac du Flambeau Forestry Department, in cooperation with the NRCS, attempts to burn about 250 acres annually. Along with the prescribed burning, NRCS has worked cooperatively with the Tribe on wild rice seeding and brush management. These cooperative agreements go a long way to help manage this unique environment.

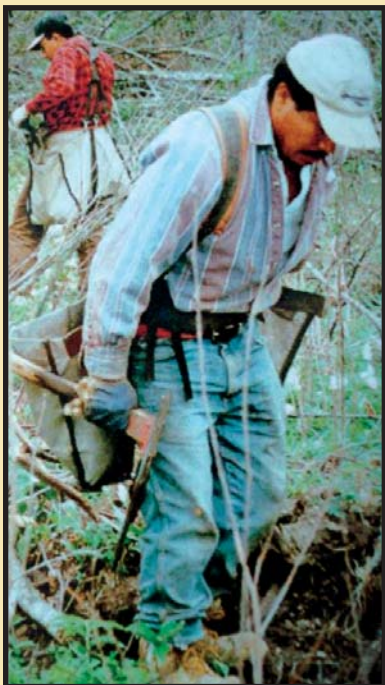


Lac du Flambeau Band

Menominee Indian Tribe of Wisconsin



Preparing the site



Planting the nursery stock



Menominee Forest Stand Conversion

The Menominee Tribe's Forestry Division is using the NRCS soil survey to maximize productivity of the forest. In areas where this is feasible, the tribe has been working on converting from one forest type to another. For example, in one area, the forest is being converted from a northern hardwoods stand to a white pine stand. By identifying the soil types, and matching that with the best forest cover for those soils, forest productivity can be increased.

Photo credits: Menominee Tribal Enterprises

Beaver Dam Removal

The Menominee Indian Tribe of Wisconsin has many miles of productive trout streams that are often impacted by beaver activity. Beaver dams can impede fish movement, increase sediment and raise water temperatures within the ponded area. The tribe actively controls beaver densities and uses the beaver dam removal practice to remove abandoned dams to restore stream hydrology.



Upstream photo of the beaver dam



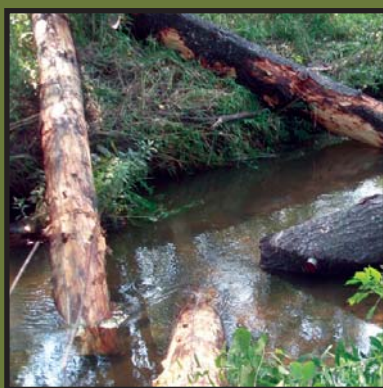
Downstream picture of the beaver dam



Stream reach after dam removed.

Menominee Indian Tribe of Wisconsin

Oneida Tribe of Indians of Wisconsin



Wildlife Habitat Incentives Program (WHIP) project helps restore stream habitat in Lancaster Brook

Lancaster Brook, one of two Oneida Nation Reservation trout streams, is a Class II Trout Stream with relatively good water quality. Due to development and poor agricultural practices, it has some degraded instream habitat, high peak flows (“flashiness”), and low base flow as well a lack of suitable substrate for fish. Despite this, recent fish surveys indicate that brook trout still actively use the stream.

In late July 2009, red pine logs were strategically placed along a 250 foot reach to enhance in-stream habitat. The reach is along the back of a tribally owned parcel on the east side of County FF. Rain and snowmelt will eventually create scouring and pools where the downstream ends of the logs rest on the bottom (see photos). This action suspends undesirable sediment and reveals gravel and other more desirable substrates. The logs will provide food for invertebrates as they decay, cover for aquatic organisms such as fish, amphibians and turtles, as well as habitat for mammals such as mink. The log placement will improve habitat for brook trout and provide food and cover for a variety of aquatic animals. Trees will be planted to provide shade, cooler temperatures, and future large woody habitat for the stream.

Small Project Grant - Invasive Plants

The WTCAC small project grant evaluated the costs associated with controlling *Phragmites australis* (common reed) and *Alliaria petiolata* (garlic mustard). The goal of the project is to provide information to WTCAC and the NRCS to amend the Pest Management Standard by creating additional scenarios which allow multi-year funding for invasive species control on tribal lands. The project spanned two growing\field seasons to gather and interpret data.

A combination of mechanical and chemical control of garlic mustard was documented during the study. Garlic mustard is a biennial plant that flowers and produces seed during its second growing season. These flowering plants were removed prior to going to seed using a weed trimmer. First year seedlings were then selectively sprayed in the fall with a 2% glyphosate solution (Round-up™).

In 2008 over five acres of mature second year and first year seedling garlic mustard plants were treated. The effectiveness of the methods was observed in 2009 when only 0.7 acres of garlic mustard remained. Continued management will be required to exhaust the seed bank.

Phragmites control was documented at four locations. A 2% solution of Isopropylamine salt of Imazapyr (Habitat™) was applied in the fall of 2008 and 2009. In 2008 large stands were targeted by an aerial application using a helicopter. A total of 32.9 acres received the aerial application. Smaller areas were sprayed using a backpack style spray applicator. A total of 1.35 acres were manually sprayed.

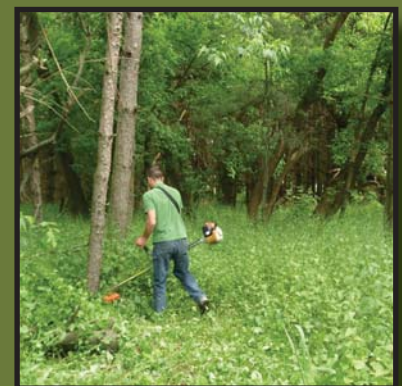
Both methods appear to have resulted in a 100% kill of plants that were sprayed with the herbicide. However, this is a tenacious species that will require continuous monitoring and control.



Aerial spraying is part of the treatment for controlling Phragmites.



Documenting the effects of the research on stands of Phragmites.



Removal of the flowering Garlic Mustard plants.

Oneida Tribe of Indians of Wisconsin

Lake Superior Chippewa

Red Cliff Band



Traditional subsistence food for the Lake Superior Tribes are being restored by revitalizing this hatchery.

Coaster Brook Trout Restoration

Coaster brook trout are a unique sub-species of trout and are a traditional subsistence food for the Lake Superior Tribes. The fish disappeared from many Wisconsin waters in the early 1900's due to habitat destruction and overfishing. NRCS assisted the Red Cliff Band in their work to restore coaster brook trout and its habitat.

This wetland was constructed to treat wastewater effluent from tribal hatcheries, which rear young coaster brook trout. Eroding streambanks were reshaped and stabilized with natural plant materials. For success in the long term, the trout need an underwater habitat with large woody debris submerged in water. Conifers were planted along the stream corridor to provide the underwater habitat essential to the coaster brook trout. This project was completed through a combination of funding assistance from both EQIP and WHIP.

Lake Superior Chippewa



This fish transfer structure known as a “fish kettle” was part of a Resource Conservation and Development (RC&D) Project. RC&D is administered through NRCS and focuses on improving the quality of life through natural resource conservation and community development for sustainable communities.

Red Cliff Community Garden Hoop Houses

In an attempt to extend the northern climate growing season Red Cliff worked with the USDA Rose Lake Plant Material Center to develop, design and construct “hoop houses”. NRCS has adopted the “hoop house” in a national 3-year pilot project.

Red Cliff Band

Lake Superior Chippewa

Sokaogon Mole Lake Band



Wild Rice represents the spiritual, cultural and economic centerpiece of the tribe for the last 300 years.

Restoring Wetlands and Wild Rice

With funding from WHIP, NRCS partnered with the Sokaogon Mole Lake Band to complete a wetland restoration and improve 75 acres of wild rice beds in Rice Lake in Forest County in northeastern Wisconsin. The reservation is adjacent to Rice Lake, or Zaaga-i'-gan Manoomin. The Ojibwa refer to the rice as "manoomin" meaning the food that grows on the water. Wild rice has always been a staple of the Chippewa diet and is still harvested and processed today, in the traditional way. It thrives exclusively in the stillness of this approximately 210-acre mineral-rich lake. This natural ecosystem maintains the necessary and orderly combination of consistent water level and temperature to sustain the annual crop.

Lake Superior Chippewa



Manoomin is a sensitive plant and does not tolerate chemical pollutants or drastic changes in water level during the growth cycle. Scientists have determined that wild rice is the only naturally occurring grain in North America. This is a very special place, yet hardly visible for the most part even though it lies just a few hundred feet from a main highway. This is one of the last remaining ancient wild rice beds in Northern Wisconsin.

The tribe settled in this area because the wild rice fulfilled the prophecy of Tribal ancestors, in which they “were told to find the food that grows on water” during the migration from the east. Rice Lake was the primary reason for determining the location of the present Reservation.

The restoration, protection and management of Rice Lake restores the centerpiece and the spirit of the Sokaogon Band of Mole Lake.

Sokaogon Mole Lake Band

St. Croix Chippewa Indians of Wisconsin



Restoring Pine Barrens and Karner Blue Butterfly Habitat

Through a WHIP project, NRCS partnered with the St. Croix Chippewa Indians of Wisconsin to restore grassland and pine barrens habitat which will benefit wild lupine, a favorite food source of the endangered Karner Blue Butterfly. This project also aims to reduce the density and distribution of spotted knapweed, an invasive, on tribal lands.

Approximately 12 acres of former grassland/pine barrens is being restored after years of fire absence led to a dense oak-aspen-pine

habitat, crowding out valuable herbaceous species. This project is located in central Burnett County on tribal lands.

Management practices on the project site include: fall and spring prescribed burns, wetland scrapes, ditch plugs, brush management, and frost seeding native grass and forb species. Project partners in addition to the NRCS include the Bureau of Indian Affairs, the U.S. Fish and Wildlife Service, and the Wisconsin Department of Natural Resources. Along with the management practices described above, biological control in the form of root weevils and flower weevils have been introduced.

After five years of restoration efforts a majority of the property has returned to native grasses (little and big bluestem) and forbs (butterfly milkweed, bergamot, and cream indigo). Wild lupine has returned to the site and was first noted in 2009 and expanded in 2010. Blueberries are also being managed on the site. A combination of opening the canopy and prescribed burning has led to an expansion of the blueberry plants and resulted in a yield this summer. It is hoped to continue management for blueberries on the property to increase gathering opportunities for tribal members.

St. Croix has also worked on or is currently working on projects involving shoreline protection, wild rice reseeded, access road construction, wood duck boxes, and well abandonment with the cooperation of the USDA-NRCS.



St. Croix Chippewa Indians
of Wisconsin

Stockbridge-Munsee Community



Prairie Improvement

In 2004, Stockbridge-Munsee Community used Natural Resource Conservation Service (NRCS) EQIP funds to establish several warm season prairie fields. One-hundred acres of fallow farm field were seeded with a mixture of big and little blue stem, switch grass, Indian grass, white wild indigo, purple coneflower, yellow coneflower, black-eyed susan, and wild lupine. These prairie fields were mowed annually as part of routine maintenance. Success of these plantings appeared to be limited through 2009. As a result, Stockbridge-Munsee Environmental Department staff determined that a prescribed burning was needed to stimulate the prairie seeding.

Prescribed burns were conducted during the spring of 2010. Five fields making up 59 acres were burned in total using NRCS WHIP funds. Stockbridge-Munsee Community voluntary fire department staff carried out each of the burns. The controlled burns were used as a training exercise for fire department staff. Staff learned valuable fire fighting and controlled burn experience that they can use if an uncontrolled fire should ever break out on tribal lands.





EQIP helps maintain tribal logging roads

The Tribe also used EQIP funds to maintain and upgrade forestry logging roads in 2007-2010. Two factors influenced the Tribe's decision to replace forestry road culverts:

- Drought conditions creating fish passage issues
- Soil erosion problems

Stockbridge-Munsee Community was able to upgrade and replace numerous degraded culverts, improving fish passage and reducing erosion.

Wetland Restoration

A cooperative partnership between Stockbridge-Munsee Community, NRCS and the Shawano County Highway Department is currently underway to restore ten acres of wetland on a 40 acre parcel that was tiled and farmed by the previous landowner. Drainage tiles will be removed and a large berm will be constructed. In addition, three large wetland scrapes will be constructed.



Stockbridge-Munsee Community



Published in cooperation with the Wisconsin Tribal Conservation Advisory Council and dedicated to Jean Buffalo of the Red Cliff Band of Lake Superior Chippewa for her energy, spirit and wisdom provided to the Council.



The USDA is an equal opportunity provider and employer.

Wisconsin 2011

