WETLAND PROGRAM PLAN FOR THE SAINT REGIS MOHAWK INDIAN RESERVATION



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Contact Information

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Introduction

The Saint Regis Mohawk Indian Reservation is situated along the St. Lawrence River between St. Lawrence and Franklin Counties in upstate New York. The Saint Regis Mohawk Indian Reservation is divided into three major watersheds: 1) St. Lawrence; 2) Raquette; and 3) St. Regis, including a small number of streams and ponds accounting for the entire water system. Four different types of wetlands exist on the Saint Regis Mohawk Indian Reservation, and are dependent upon the soil, water depth, flood periods, landscape, and vegetation found within that area: 1) emergent; 2) scrub/shrub swamps; 3) forested swamps; and 4) open water areas.

Wetlands are culturally-significant for the Mohawks who live on the Saint Regis Mohawk Indian Reservation. Wetlands have provided medicinal plants, plants used in crafts, and edible food sources for the people of this community. Medicinal plants found in the wetlands play an important role in the culture of the Mohawks on the Saint Regis Mohawk Indian Reservation. Examples of wetland plants used in medicine include sweet flag, turtle socks, goldthread, spotted touch-me-not, cattails, and boneset. Plants used in crafts such as black ash and sweet grass are also found in wetlands. Black ash is used for making baskets, walking sticks, bowls, utensils, and wooden artifacts, while sweet grass is used in weaving of various products such as baskets. Sweet grass is also a culturally-significant ceremonial plant used in the Mohawk culture. Wetland plants such as wild rice, berries, cattails, and wild mushrooms are some examples of edible plants found in wetlands. These plants are considered culturally-significant because they have been used as food during times when meat was not plentiful, are they are also used in religious ceremonies.

Previous Wetland Activities

Wetland Protection Plan (1994)

The Wetland Protection Plan was developed to help the Saint Regis Mohawk Tribe (SRMT) Environment Division create an effective tool for dealing with the eventual development that was occurring with the influx of outside business interests. Due to the cultural significance of the wetlands on the Saint Regis Mohawk Indian Reservation, it was deemed necessary to establish a protection mechanism to insure the safety of the wetlands for future generations. The five long-term issues that the SRMT Environment Division wanted to address with this protection plan include: 1) the protection of culturally-significant plants important to the Mohawk people who practice medicine; 2) the preservation of wetland plants for

Mohawk crafts; 3) the protection of the water supply throughout the community; 4) the preservation of opportunities for hunting, fishing, and trapping; and 5) the preservation of wetland plants used as food sources.

A series of recommendations were presented within the Wetland Protection Plan to provide suggestions as to the best approach to begin immediate implementation of this protection plan: 1) solicit volunteers to serve on a Citizens' Advisory Committee and work closely with this group to provide information and guidance in the development of review procedures; 2) draft a Tribal Environmental Protection Ordinance to clearly state specific parameters under which development could occur to insure future compliance with a specific set of regulations; 3) designate certain tracts of land as "Forever Wild" spaces in order to protect wetlands containing either endangered vegetation species or plants that were critical to the preservation of the Mohawk culture from future development; and 4) establish an educational outreach component to teach the people of this community about land use planning and development. The SRMT Environment Division used these recommendations as a starting point to consider a long-term approach to the protection and preservation of wetlands throughout the Saint Regis Mohawk Indian Reservation.

Akwesasne Wetlands Conservation Act (1998)

The wetlands of the Saint Regis Mohawk Indian Reservation have always played a critical role in sustaining the cultural traditions, health, and welfare of this community. Therefore, it is the public policy of the SRMT Environment Division to: 1) preserve, protect, and conserve natural wetland areas; 2) to prevent the pollution and destruction of wetlands; and 3) to regulate the use and development of wetlands. However, a sizeable amount of wetlands on the Saint Regis Mohawk Indian Reservation has been either lost, polluted, or impaired by unregulated draining, dredging, filling, excavating, building, pollution, and/or other acts inconsistent with the natural uses of such areas. As a result, the SRMT Environment Division called for a uniform Tribal regulation for the entire Akwesasne Mohawk Nation Territory (Akwesasne) since a wetland from one region can be affected by the activities on rivers, streams, and wetlands of other regions.

Any loss of wetlands deprives the people of Akwesasne of the many benefits derived from these areas, including flood and storm control, protection of subsurface water resources, pollution treatments, erosion control, education, open space and aesthetic appreciation, provision of critical wildlife habitat, and support of valuable medicinal plants and trees. The regulation of wetlands, in accordance with the exceptions established within this act, are consistent with the legitimate interests of farmers and other landowners to graze and water livestock, make reasonable use of water resources, harvest natural products and medicinal plants, selectively cut timber, and otherwise engage in the use of land for agricultural purposes.

Akwesasne Marsh Monitoring Program (2004)

The major objective of the Akwesasne Marsh Monitoring Program was to provide a quantitative assessment of the ecological health of the Akwesasne Marsh system in relation to the hydrologic regime, for a period of three years. The investigation examined the longitudinal axis and lateral spread of the wetland system for changes in wetland characteristics as an indicator of temporal changes due to the construction of the Moses-Saunders dam. The performance indicators helped to determine the influence of a variety of conditions on biotic communities in the Akwesasne Marsh system, with standard indices of wetland health being used to evaluate measures of biodiversity associated with this wetland system.

This information provided the International Joint Commission (IJC) with data on the response of aquatic and wetland organisms to changes in the hydrologic regime throughout the Akwesasne Marsh. The analysis focused on evaluation of the condition of the observed fish assemblages and their correlations

with hydrologic and other abiotic variables. This provided insight into the influence of changes with the hydrologic regime on fish assemblages, and contributed to modeling efforts by the IJC Environmental Technical Working Group (ETWG) Integration Sub-group that indicate the hydrologic regime would maintain optimal biotic conditions in the Akwesasne Marsh and the St. Lawrence River in general. The two hypotheses examined for this program were: (1) there are no significant differences among fish species assemblages occupying habitats within the Akwesasne Marsh or adjacent areas of the St. Lawrence River and its major tributaries; and (2) there is no significant correspondence between fish species assemblages or selected indicator species abundances and water level fluctuation in the sample area.

Purple Loosestrife Bio-Control in Akwesasne (2005)

Purple loosestrife (*Lythrum salicaria*) is a tall, perennial plant from Europe that has degraded temperate wetlands throughout North American. The plant was introduced both as a contaminant of European ship ballast and as a medicinal herb for treatment of diarrhea, wounds, ulcers and sores. The plant adapts readily to natural and disturbed wetlands, and can establish and expand rapidly to replace native grasses, sedges, and other flowering plants. Several methods have been used to combat the spread of purple loosestrife, such as being pulled by hand, mowing, herbicide treatments, and burning. Although these methods have shown some success against very small, recently established populations, they are ineffective against large well-established populations. Therefore, scientists have turned to using biocontrol methods (using one biological organism to control the spread or infestation of another) to limit the spread of purple loosestrife in these larger wetland areas.

The SRMT Environment Division worked in collaboration with Dr. Bernd Blossey, Associate Professor of Natural Resources at Cornell University, to raise and release host-specific (*Galerucella spp.*) beetles throughout Akwesasne. Some concerns were raised by the people of Akwesasne as to whether releasing host-specific beetles (also originating from Europe) was such a good idea. In particular, alternative healers throughout the community were apprehensive about using this control method without fully knowing the effects these beetles would have on medicinal plants in the region. As a result, members of the SRMT Environment Division staff responded to these concerns by assuring the people of Akwesasne that these beetles feed specifically on purple loosestrife, and that the beetles would die of starvation before attempting to eat anything else.

Inventory and Evaluation of Turtles (2006-09)

Under the guidance of the Wetlands Protection Plan (WPP) of 1994 and the Akwesasne Wetlands Conservation Act (AWCA) of 1998, the SRMT Environment Division initiated the process of protecting the population structures of the Blanding's (*Emydoidea blandingii*) and common snapping turtles (*Chelydra serpentina*), together with developing a strategy for preserving the preferred wetland habitat of both species, throughout the Saint Regis Mohawk Indian Reservation. As a result, a three-year study to inventory and evaluate the populations of the Blanding's and common snapping turtles was conducted. The goals of this study were to: 1) assess the population status of both the Blanding's and common snapping turtle; and 2) identify the required conservation methods for developing a management plan to sustain and/or improve the current turtle population structure.

Trapping occurred from 2006-2007 and again in 2009, with a total of 107 common snapping turtles captured and recorded. The study revealed a disproportionate number of male common snapping turtles captured, as well as more residential expansion along the Raquette River, both of which could be detrimental to the turtle population structure in the near future. Although no Blanding's turtles were captured or recorded, one was sighted within our community in 2009, motivating the SRMT Environment Division to proceed with the development of a turtle species management plan to enhance the population

structure of the Blanding's turtle and to improve the common snapping turtle population structure throughout the Saint Regis Mohawk Indian Reservation. This process has allowed the SRMT Environment Division to sustain and/or improve the current turtle population structure by evaluating the threats to turtle species protection, as well as provide the techniques and recommendations necessary for preserving these turtle species into the future.

Depressional Wetlands Bioassessment (2010-11)

Bioassessments measure the diversity and composition of wetland flora and fauna, which are a reflection of the overall health of wetland ecosystems. The bioassessment methods developed for this project focused on measuring the diversity and composition of wetland vegetation and macroinvertebrates over a wide-range of disturbances. The project was conducted throughout the Saint Regis Mohawk Indian Reservation using a "three-tier" approach: 1) complete a preliminary assessment of the general landscape; 2) perform a rapid assessment of a select number of depressional wetlands; and 3) conduct an intensive assessment using the data collected. The information obtained from these assessments were used to establish an Index of Biological Integrity (IBI); combining multiple indicators of biological conditions (metrics) into an index of values.

It was important to incorporate more than one biological assemblage considering that each would exhibit a different response to a particular disturbance: vegetation tends to be more responsive to changes in hydrology and agricultural input, while macroinvertebrates tend to be more responsive to short-term changes in water quality. The methods developed from this project produced an IBI data set that can be utilized as a starting point for future bioassessments. Since the IBI measures the overall health of a depressional wetland, and the methods developed are consistent and can be repeated in the field, over time they can provide an applicable measure of the overall wetland condition.

Overall Goals and Time Frame

The goals of SRMT Environment Division will be to continue to enhance its management system for making rational, sound assessments and evaluations that consider the long-term impacts upon the wetlands of the Saint Regis Mohawk Indian Reservation. In addition, the SRMT Environment Division will continue to improve on the protection mechanism that insures the continuity of these wetland areas for future generations. The time frame for this Wetland Program Plan will be for five years, beginning on January 2014 and ending on December 2018. This Wetlands Program Plan will follow the guidelines provided by the U.S. Environmental Protection Agency (EPA) Core Elements Framework (http://water.epa.gov/grants_funding/wetlands/cefintro.cfm), using all four core elements: 1) Monitoring and Assessment; 2) Regulation; 3) Voluntary Restoration and Protection; and 4) Water Quality Standards for Wetlands.

Core Element #1: Monitoring and Assessment

Goal: Focus on the biological aspects (inventory) of wetlands, including undeveloped areas, based on the premise that the community of plants and animals living in a wetland will reflect the health of that wetland.

Objective #1: Develop a monitoring and assessment strategy consistent with *Elements of a State Water Monitoring and Assessment Program for Wetlands* (EPA 2006) that states and tribes can use to manage wetlands according to their objectives;

Action (a): Identify program decisions and long-term environmental outcome(s) that will bene program.	fit from a	wetlands r	nonitoring	and asses	sment
Activity:	2014	2015	2016	2017	2018
Document program's long-term environmental goals.	X	X			
Identify programs that will ultimately use monitoring data (e.g., track trends, 401 certification, restoration, permitting).	X	X			
Define reference standard condition (e.g., best attainable condition, least disturbed condition, minimally disturbed condition, historical condition, best professional judgment).	X	X			
Identify how wetland data can be used to implement watershed planning.	X	X			
Action (b): Define wetlands monitoring objectives and strategies.					
Activity:	2014	2015	2016	2017	2018
Coordinate with most relevant partners, for example: federal, state, tribal, and/or local agencies, universities, regional and national work groups.	X	X			
Examine other sources for monitoring information within the tribe or state.	X	X			
Identify monitoring objectives.	X	X			
D.C., 1.4., 1 1	X	X			
Define data needs and uses.					
Coordinate with your tribe's water quality monitoring program to identify shared goals and activities.	X	X			

Document wetlands monitoring strategy.	X	X			
Action (c): Develop monitoring design, or an approach and rationale for site selection that best probabilistic survey, rotating basin).	t serves mo	onitoring o	bjectives ((e.g., censi	us,
Activity:	2014	2015	2016	2017	2018
Determine classification scheme in order to group the type, class, and size of wetlands.	X	X			
Describe site selection process.	X	X			
List universe of wetland resources from which sites could be selected if available.	X	X			
Determine which data are already available.	X	X			
Action (d): Select a core set of indicators to represent wetland condition or a suite of functions	s.				
Activity:	2014	2015	2016	2017	2018
Identify indicators that are relevant for established monitoring objectives.	X	X	X		
Confirm indicators are scientifically defensible.	X	X	X		
Develop/select field method(s) for culturally significant plants and animals.	X	X	X		
Add supplemental indicators if needs dictate and as resources allow.	X	X	X		

Objective #2: Implement a sustainable monitoring program consistent with the wetlands monitoring strategy;

Action (a): Ensure the scientific validity of monitoring and laboratory activities.					
Activity:	2014	2015	2016	2017	2018
Draft and peer review quality management plan.		X	X		

Draft and peer review quality assurance project plan.		X	X		
Draft and peer review field operations manual.		X	X		
Select, prioritize, and peer review candidate assessment indicators.		X	X		
Action (b): Monitor wetland resources as specified in strategy.					
Activity:	2014	2015	2016	2017	2018
Identify and train staff to monitor for each indicator.		X	X		
Verify monitoring strategy by conducting sufficient number of pilot monitoring projects (e.g., small-scale projects to test methods, calibrate, enhance reference network).		X	X		
Develop a schedule for monitoring wetland resources.		X	X		
Track sites that are monitored.		X	X		
Action (c): Establish reference condition.					
Activity:	2014	2015	2016	2017	2018
Define reference condition (the gradient from unimpaired to impaired).			X	X	
Define reference standard condition (e.g., best attainable condition, least disturbed condition, minimally disturbed condition, historical condition, best professional judgment).			X	X	
Determine process for measuring reference standard condition (e.g., reference sites, historical data).			X	X	
Select reference sites using a systematic approach.			X	X	
Action (d): Track monitoring data in a system that is accessible, updated on a timely basis, and data.	l integrated	d with other	er tribal or	state wate	r quality
Activity:	2014	2015	2016	2017	2018
Design a data management system that supports program objectives.			X	X	

Administer and update data system so that the tribe or state can use it for analysis.			X	X					
Make data system compatible with and regularly update water quality standards.			X	X					
Integrate with other water quality data systems (e.g., state watershed planning databases).			X	X					
Georeference data as it is gathered for reporting.			X	X					
Identify sites to sample repeatedly for a trend network.			X	X					
Action (e): Analyze monitoring data to evaluate wetlands extent and condition/function or to inform decision-making.									
Activity:	2014	2015	2016	2017	2018				
Document data analysis and assessment procedures.			X	X					
Develop assessment method to determine condition thresholds relative to reference standard condition (i.e., departure from reference standard condition).			X	X					
Establish baseline wetland condition.			X	X					
Analyze changes in wetland extent or condition relative to reference conditions.			X	X					
Analyze changes in wetland extent or condition in response to climate change.			X	X					
Regularly report wetlands status and trends (e.g., annual reporting of no net loss, net gain, or 305(b) reports for wetlands).			X	X					

Objective #3: Incorporate monitoring data into agency decision-making;

Action (a): Evaluate monitoring program to determine how well it is meeting a tribe's monitoring program objectives.						
Activity:	2014	2015	2016	2017	2018	
Develop schedule to evaluate monitoring program.				X	X	

Track program reviews.				X	X				
Ensure the assessment method is providing the necessary information.				X	X				
Make changes as necessary to the program.				X	X				
Review other wetlands program elements (e.g., restoration, regulation, water quality standards).				X	X				
Modify other aspects of wetlands program as needed based on review of monitoring data.				X	X				
Action (b): Evaluate the environmental consequences of a federal or state/tribal action or group of actions; modify programs as needed based on M&A data (e.g. habitat restoration projects).									
Activity:	2014	2015	2016	2017	2018				
Inform tribal wetland permit decisions.				X	X				
Inform 401 certification decisions on federal actions.				X	X				
Modify permitting or 401 certification practices as needed based on assessment information.				X	X				
Action (c): Improve the site-specific management of wetland resources.	•								
Activity:	2014	2015	2016	2017	2018				
Incorporate monitoring and analysis into restoration techniques.				X	X				
Establish ecologically-meaningful benchmarks for gauging restoration success.				X	X				
Evaluate the performance of compensatory mitigation sites.				X	X				
Evaluate the ecosystem services provided by individual wetlands.				X	X				

Action (d): Develop geographically-defined wetland protection, restoration, and management plan.							
Activity:	2014	2015	2016	2017	2018		
Identify and prioritize management areas (e.g., identify vulnerable wetlands, prioritize restoration potential).				X	X		
Incorporate wetlands into a comprehensive watershed plan that serves tribal water quality management needs and addresses all waters.				X	X		
Evaluate progress toward meeting wetland objectives identified in other projects/programs (e.g., state wildlife action plans).				X	X		
Inform broader watershed activities (e.g., reducing erosion, providing floodplain storage, reducing nutrient loading).				X	X		

Core Element #2: Regulation

Goal: Reduce the amount of wetland drainage and destruction for the purpose of creating suitable areas for agricultural, residential, and commercial development.

Objective #1: Clearly define the jurisdictional scope of the program;

Action (a): Provide clear and comprehensive jurisdictional coverage of aquatic resources.									
Activity:	2014	2015	2016	2017	2018				
Delineate wetlands in a manner that is at least equivalent with the federal program.	X	X	X	X	X				
Action (c): Provide clear guidance to public on how to identify jurisdictional waters and activities.									
Activity:	2014	2015	2016	2017	2018				
Develop clear, publicly accessible guidance and/or training on how to identify waters of the tribe for wetlands, streams, and other waters.	X	X							
Develop clear, publicly accessible guidance on what activities in waters of the tribe require what authorizations.	X	X							
Action (d): Evaluation.									
Activity:	2014	2015	2016	2017	2018				
Periodic reviews of tribal program to ensure all potentially regulated activities are addressed, and take appropriate programmatic action.		X	X	X	X				

Objective #2: Administer regulatory activities effectively and consistently;

Action (a): Adopt regulations or rules to implement state/tribal and/or federal water quality statutes.						
Activity:	2014	2015	2016	2017	2018	
Adopt regulations that identify agency goals and responsibilities for all water quality statutes.		X	X			

Action (b): Develop and operate according to a clear and effective set of criteria for reviewing	g and respo	nding to a	pplications	S.	
Activity:	2014	2015	2016	2017	2018
Develop publicly accessible criteria for applying for and agency review of applications.		X	X		
Establish reasonable timelines for initially responding to applications in regulatory guidelines.		X	X		
Establish reasonable timelines for providing final responses to applications in regulatory guidelines.		X	X		
Develop and implement internal procedures for responding to federal actions on permits.		X	X		
Action (c): Actively review proposed impacts to waters of the tribe.	•				
Activity:	2014	2015	2016	2017	2018
Actively review proposed impacts to waters of the tribe.		X	X		
Develop standard practices or general authorizations for like projects impacting similar aquatic resources.		X	X		
Action (d): Adopt and apply comprehensive project review criteria (e.g. cultural impacts).					
Activity:	2014	2015	2016	2017	2018
Adopt 404(b) (1) guidelines or comparable review criteria for assessing and minimizing impacts.			X	X	
Adopt more stringent review criteria than the 404(b) (1) guidelines.			X	X	
Action (e): Coordinate among agencies, programs, and industry groups to reduce duplicative e	efforts by the	ne progran	ns and the	regulated	public.
Activity:	2014	2015	2016	2017	2018
Use joint review processes and practices.			X	X	
Develop clear guideline for roles, responsibilities, and procedures for review of permits for activities that require approval from more than one tribal agency.			X	X	

Issue permit/certification decisions conditioned that they must meet the requirements of other agency permit decisions.			X	X	
Action (f): Require effective mitigation for authorized impacts.					
Activity:	2014	2015	2016	2017	2018
Require long-term protection at mitigation sites (e.g., restrictive covenant, easement, deed restriction).				X	X
Establish minimum requirements and review criteria for mitigation proposals.				X	X
Require financial assurances for mitigation projects.				X	X
Action (g): Track permit/certification program activity.					
Activity:	2014	2015	2016	2017	2018
Track permit/certification program activity.				X	X
Map impact and mitigation sites.				X	X
Administer and regularly update publicly accessible tracking system for impacts and mitigation.				X	X

Core Element #3: Voluntary Restoration and Protection

Goal: Recreate basins previously drained for agriculture and other land uses in order to restore the historical configuration of the wetlands that formerly existed on any particular site.

Objective #1: Clearly and consistently define restoration and protection goals throughout tribal territory.

Action (a): Establish goals that are consistent or compatible across relevant agencies (e.g. NRI	DA/ACR).				
Activity:	2014	2015	2016	2017	2018
Coordinate with relevant agencies that outline restoration/protection goals and strategies and timeframes.		X	X		
Develop multi-agency body to coordinate restoration/protection efforts.		X	X		
Gather information on wetland location, class, and condition/functions.		X	X		
Set restoration goals based on agency objectives and available information.		X	X		
Action (b): Consider watershed planning, wildlife habitat, and other objectives when selecting	restoration	n/protectio	on sites.		
Activity:	2014	2015	2016	2017	2018
Identify rare, vulnerable, or important wetlands and prioritize for restoration/protection.		X	X	X	
Apply tools (GIS, color-infrared photography, mapping, modeling, field inspection of soil, vegetation, and hydrologic conditions) to identify and prioritize restorable wetlands.		X	X	X	
Integrate restoration/protection efforts on a watershed or landscape scale (e.g., prioritize restoration sites within a watershed).		X	X	X	
Share priorities with other organizations involved in wetland protection and restoration (e.g., wildlife bureaus, agriculture/conservation agencies, land trusts, and mitigation banks).		X	X	X	
Share priorities with other water quality protection programs (e.g., identify riparian restoration projects that would reduce sediment and nutrient loadings to streams and implement TMDLs).		X	X	X	

Action (c): Provide clear guidance on appropriate restoration and management techniques and success measures.						
Activity:	2014	2015	2016	2017	2018	
Develop restoration and management guidance specific to wetland types and location (e.g., urban vs. rural).			X	X	X	
Establish measures of restoration success (e.g., adopt functional and/or condition indicators and field methods).			X	X	X	
Establish performance standards based on reference wetland sites in a relatively undisturbed condition.			X	X	X	
Through guidance, encourage restoration outcomes that recreate natural self-sustaining systems and reduce the need for ongoing management.			X	X	X	
Verify restoration techniques with site visits and adapt as necessary.			X	X	X	
Train restoration partners to use guidance techniques.			X	X	X	

Core Element #4: Water Quality Standards for Wetlands

Goal: Implement U.S. EPA approved water quality standards in order to manage ambient water quality, non-point source pollutants, construction activities, and direct discharges to waters throughout wetlands.

Objective #2: Develop wetland-specific water quality standards.

Action (a): Gather and analyze monitoring data and other information that will become basis of	f water qu	ality stand	lards.		
Activity:	2014	2015	2016	2017	2018
Define wetland types/classes.	X	X			
Establish reference conditions for defined wetland types in terms of functional/condition performance and other physical measurements.	X	X			
Action (b): Establish and adopt appropriate wetland-specific designated uses to be achieved an	d protecte	d.			
Activity:	2014	2015	2016	2017	2018
Establish designated uses for different wetland types (e.g., recreation, wildlife habitat, cultural uses and values).	X	X			
Map where designated uses apply.	X	X			
Action (c): Establish and adopt narrative criteria that qualitatively describe the condition or sui designated use.	te of funct	ions that 1	nust be ac	hieved to s	support a
Activity:	2014	2015	2016	2017	2018
Establish narrative physical criteria (e.g., fill material not present; no hydrologic conditions).		X	X		
Establish narrative biologic criteria (e.g., species composition, population dynamics, structure).		X	X		
Develop technical documents to support the narrative criteria with numerical data. This document describes the types of narrative and numerical data that will be used in determining attainment of the standard.		X	X		

Action (d): Establish and adopt numeric criteria representing wetland specific values for chemical, physical, and biological parameters that may not be exceeded, must be exceeded, or some combination to protect or restore designated uses.

Activity:	2014	2015	2016	2017	2018
Establish numeric criteria for biological attributes based on wetland type and location (e.g., plant or macroinvertebrate indices, algae).		X	X		
Establish numeric criteria for chemical constituents based on wetland type and location (e.g., nutrients).		X	X		
Establish numeric criteria for physical parameters based on wetland type and location (e.g., buffer characterizations, micro habitats).		X	X		

Action (e): Better define tribal antidegregation policies for wetlands, requiring full protection of existing uses (functions and/or condition), maintenance of functions/condition in high quality wetlands, and a prohibition against lowering functions/conditions in outstanding national resource waters.

Activity:	2014	2015	2016	2017	2018
Include restoration potential or wetlands in antidegredation policies.		X	X		
Administer and enforce antidegradation policies for wetlands.		X	X		
Develop measures to ensure antidegradation is being applied successfully in a manner specific to wetlands.		X	X		

Objective #3: Incorporate wetland-specific water quality standards into agency decision-making.

Action (a): Use water quality standards as basis for regulatory decisions.					
Activity:	2014	2015	2016	2017	2018
Base 401 certifications on wetland water quality standards.				X	X
Base tribal permit decisions, including mitigation requirements, on water quality standards.				X	X
Track wetland impacts avoided or mitigated based on water quality standards, via permitting actions.				X	X

Action (b): Use water quality standards as basis for evaluating restoration/protection projects and mitigation/compensation projects.						
Activity:	2014	2015	2016	2017	2018	
Use water quality standards in restoration guidelines.				X	X	
Track restoration/protection projects that are monitored for compliance with water quality standards.				X	X	
Track restoration/protection sites that meet water quality standards.				X	X	
Identify remedial measures for sites that do not meet wetland water quality standards.				X	X	
Action (c): Incorporate water quality standards into monitoring and assessment program.						
Activity:	2014	2015	2016	2017	2018	
Update monitoring strategy and methods based on water quality standards.				X	X	
Track acres monitored for compliance with water quality standards.				X	X	
Regularly report on wetlands status and trends relative to water quality standards.				X	X	