WATER QUALITY STANDARDS: PROTECTING TRIBAL WATERS

2011 National Tribal Water Quality Conference

November 15, 2011

What Are Water Quality Standards (WQS)?

- Provisions of Tribal-State (or Federal Law)
- Consists of
  - Designated Uses
  - Water Quality Criteria to Protect the Uses
  - Antidegradation Policy and Implementation Procedures

How Can a Tribe Participate in the Federal WQS Program?

- Tribe must meet specific criteria
  - Referred to as Treatment in a Manner Similar to a State (TAS)
- Tribe's TAS application must be approved by EPA
- Tribe must have adopted WQS consistent with EPA's WQS regulation, policies and guidance
- Tribe's WQS must be approved by EPA
- Currently
  - 47 Tribes with TAS for the WQS Program
  - 39 Tribes with EPA Approved WQS

Water Quality Standards for Surface Waters of the Ute Mountain Ute Reservation

Colin Larrick

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Background

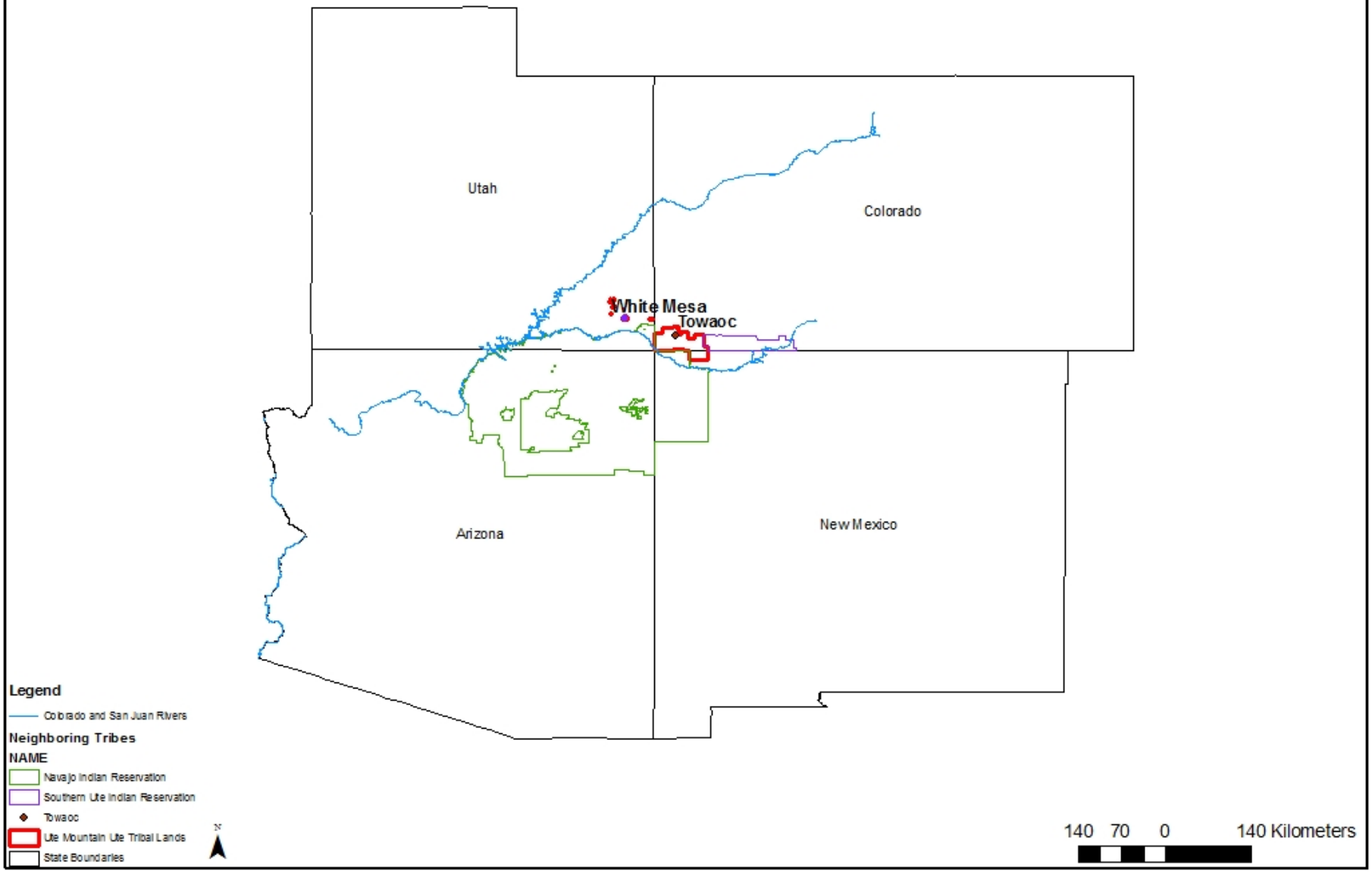
Ute Mountain Ute Tribe

- Located on the Colorado Plateau
  - Sedimentary strata with coal, oil, and gas and mountain ranges with mineral resources
- 933 square miles in the southwestern corner of Colorado, with portions in New Mexico and Utah
- Elevation range 4,600 to 10,000 feet
- Precipitation ~10 inches per year
- No non-member fee lands within the Reservation

Ute Mountain Ute Tribe (cont.)

- Neighboring jurisdictions:
  - 2 tribes: Southern Ute, Navajo
  - 4 states: Colorado, Utah, New Mexico, Arizona
  - EPA Regions 6, 8, and 9
- 2,000 Tribal members
- 2 communities on the reservation: tribal headquarters in Towaoc, CO and the White Mesa Community in UT

Ute Mountain Ute Tribal Lands



Environmental Programs Department

- Established in 1992, with 1 staff; Director added in 1996
- Currently 7 full time staff and 5 part time
- Mission: Work with Communities to conserve resources and protect the environment in order to increase the quality of life for all members and future generations of the Ute Mountain Ute Tribe (UMUT)

Environmental Programs Department (cont.)

- General Assistance Program (GAP)
- Environmental Education
- Solid Waste/Recycling
- Water/Waste Water
- Brownfields
- Clean Water Act (CWA) Section 106
- Groundwater/Pesticide
- Nonpoint Source

http://www.utemountainuteenvironmental.org/

Water Quality Issues on Reservation Lands

Top issues include:

- Colorado: Legacy mining, bacteria, invasive species, salinity, nutrients, selenium
- New Mexico: Livestock grazing, oil and gas, soil erosion, sediments, salinity, bacteria
- Utah: Legacy mining (vanadium and uranium)

Treatment in a Manner Similar to a State (TAS)

- TAS for the WQS Program received from EPA in 2005
- Goals and objectives:
  - Enhancement of Tribal sovereignty
  - Benchmarks for data assessment
  - Develop CWA WQS
- TAS enables Tribe to conduct CWA section 401 certifications Challenges:
  - Jurisdictional issues
  - Difficult to sell to the Tribal Council

Lessons Learned from the TAS Process

- Boundaries and Jurisdiction
  - Lesson learned in approval process
    - Patience is a necessity
    - Attorneys help navigate through the process
    - This is an opportunity to review Tribal history and document Tribal boundaries


Water Quality Standards

Water Quality Standards (WQS)

- January 20, 2011: Tribe adopted *Water Quality Standards for Surface Waters of the Ute Mountain Ute Reservation of Colorado, New Mexico and Utah*
- March 11, 2011: Submitted to EPA for review on
- April 8, 2011: Supplemental information submitted
- October 19, 2011: EPA completed review and notified Tribe of their official action: Federal approval!

WQS (Cont.)

- Submittal package included:
  - Statement from Tribal Attorney certifying WQS were adopted pursuant to Tribal Law along with a copy of the Council's Resolution
  - A transcript and minutes and attendance record of the most recent public hearing
  - Public Comments Summary and Response from the WQS hearing

WQS: Lessons Learned

- Working with other Tribes provided valuable information concerning development of complex technical documents with limited resources and protecting water resources for cultural uses
  - worked with Flathead and Fort Peck Tribes to develop initial standards in 2002

General Purpose and Intent of WQS

- Protect uses and prevent impairment of water quality
- WQS include designated uses, criteria, antidegradation provisions and general policies and definitions explaining how the WQS are to be interpreted, implemented and maintained
- Enables Tribe to protect waters consistent with its own priorities and goals
- A basis for assessing water quality data and protection of Outstanding Tribal Resource Waters
- Regulatory protection
  - A "trigger" for initiating action
  - Antidegradation (enforcement)

Beneficial Use Designations

- Beneficial uses designations include:
  - Agriculture: irrigation and/or livestock watering
  - Cold Water Aquatic Life, Drinking Water Source
  - Fish Consumption, Industrial Use
  - Recreation, Primary contact. Recreation, secondary contact
  - Tribal Cultural Use, Warm Water Aquatic Life
- Tribal cultural uses: waters that are used for Tribal ceremonial use and traditional activities. The preservation of the quality of these waters is important in the preservation of the Tribe's culture.

WQS Development – Arid Issues and Unique Habitats

Colorado Pikeminnow

Humpback Chub

Bonytail

Razorback Sucker

Illustrations© by Joseph R. Tomelleri

WQS Development – Arid Issues and Unique Habitats (cont.)

- Conducted Use Attainability Analyses to remove REC1 use from many ephemeral streams
- UAA Worksheets:
  - Recreational Use Classification for CWA Section 101(a)(2): "Swimmable;" is it really attainable for the following:
    - Ephemeral Streams?
    - Livestock Reservoirs?
- Is it Appropriate?

Antidegradation

- Permitting process for any business or entity that may discharge pollutants into Tribal Waters
- A water pollution prevention permit will be necessary for all new activities that may degrade water quality
- Responsibility of potentially regulated entity to apply for the permit, as well as to gather and provide information as required

Antidegradation Review

- Antidegradation procedures apply to **any proposed activity that may affect surface water quality**:
  - Point sources regulated under NPDES permit program
  - Discharges resulting in the placement of dredge or fill materials into waters regulated under CWA section 404
  - Federal permits and licenses subject to CWA section 401 certifications
  - Other discharges or land-disturbing activities that may degrade surface water quality (e.g., forestry, construction >1 acre, oil and gas development)

Outstanding Tribal Resource Waters (OTRWs)

- Three Tribal water have been designated as OTRWs:
  - Allen Canyon Creek (Utah), per nomination by Water Quality Specialist
  - Ute Spring and Creek (north side of mountain)), per nomination by Water Quality Specialist
  - Lopez Spring, (near Sun Dance Grounds) per nomination by Tribal Chairman

Using Tribally-adopted WQS to Protect Tribal Waters

- 401 Certifications: Approve, Deny, or Conditionally Grant projects that require a Federal permit or license
- Commonly added conditions include:
  - Coordination with Tribe's Historic Preservation Office for any ground disturbing work
  - Additional Best Management Practices to prevent erosion impacts

Contract Agreements with Oil and Gas Companies

- Contract agreement between Tribe, BIA, BLM and individual Oil and Gas companies to allow them to produce
- Companies agree to abide by Tribal and Federal laws
- Tribe uses contract stipulations to direct clean up of an average of 10 oil and gas and produced water releases a year
- Federally approved Tribally adopted Water Quality Standards as a clean up/enforcement mechanism


Working with Others

Cooperative Activities

Pollution Source Identification
&
Best Management Practice Recommendations

San Juan and Animas Rivers, New Mexico

Prepared For:

San Juan Watershed Group

Prepared By:

SJWWII

San Juan Watershed
Woody-Invasives Initiative

Lessons Learned

- WQS Development and Tribal and Federal Approval actions, along with the Treatment in a Manner Similar to a State steps, are complex and long processes.
  - Make sure adequate support is available before embarking on the journey
    - Good relationship with EPA Water Quality Coordinator, your Tribal attorneys and Council is essential
    - Include serious time for the effort in your workplan


QUESTIONS?

Nibi gimiinigonaan bimaadiziwin (Water gives us life)

Nah gah chi wa nong (Fond du Lac Band of Lake Superior Chippewa)

Nancy Schuldt

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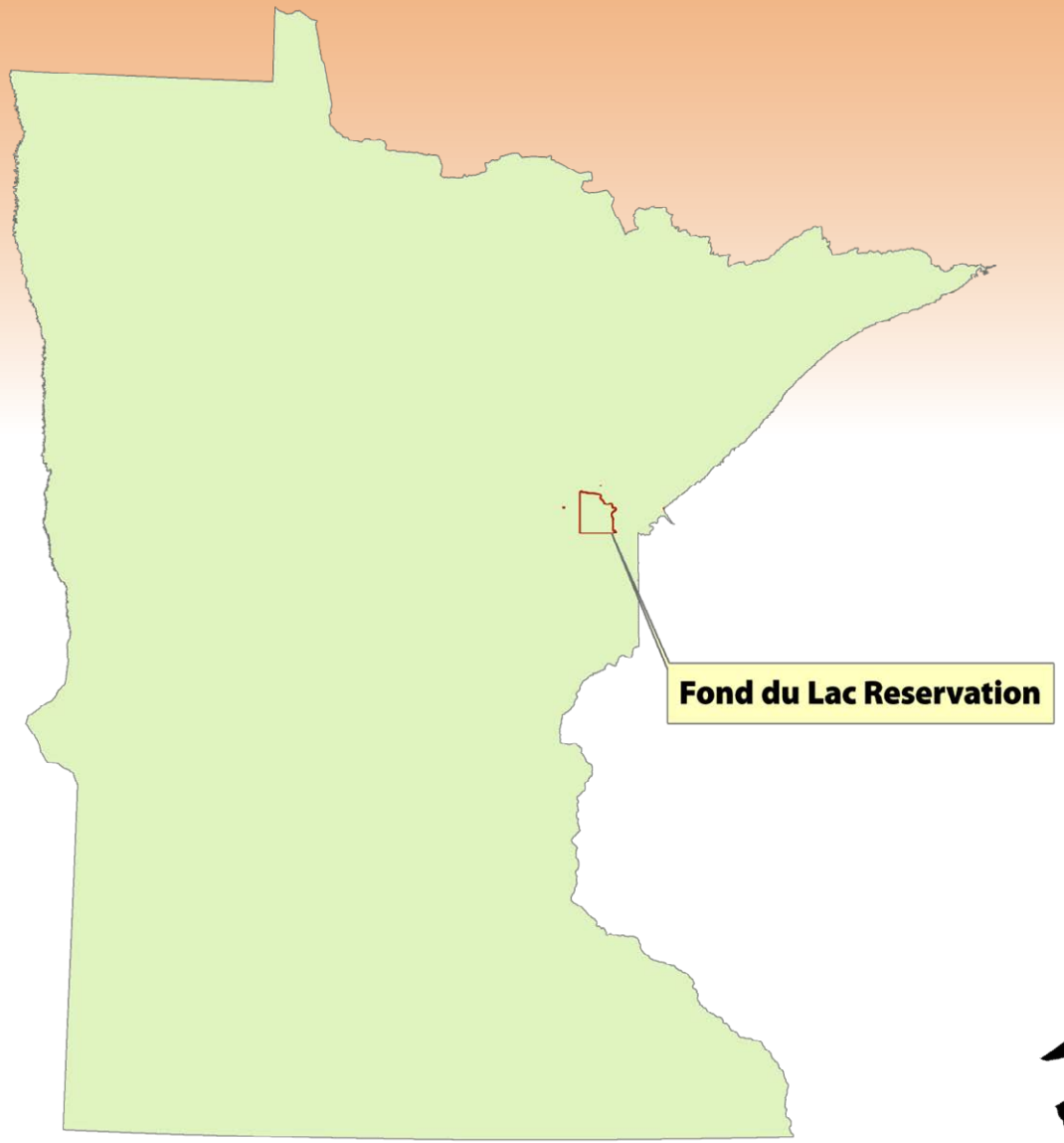
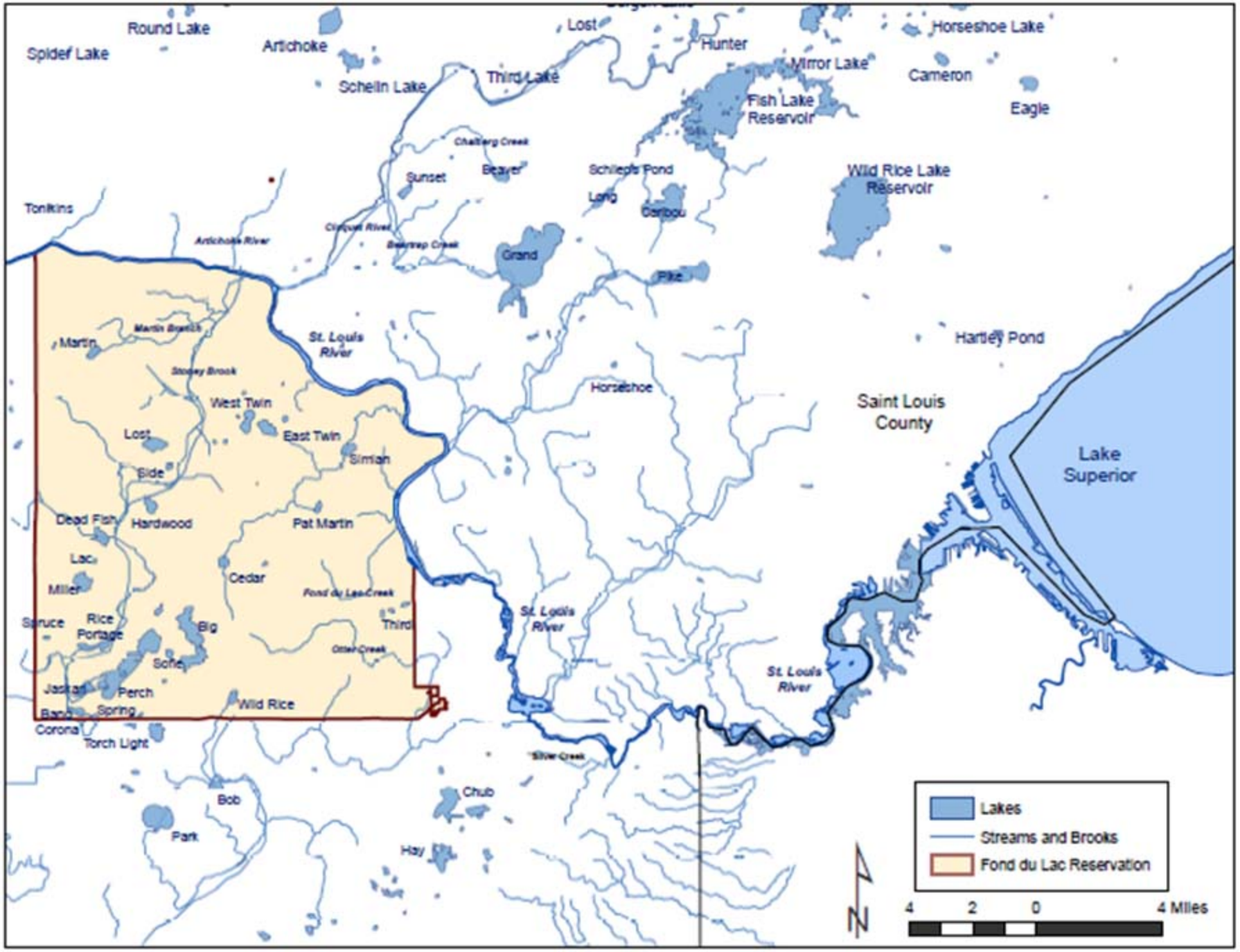
Entering
Fond du Lac
Reservation
NO SPRAY ZONE
ECOLOGICAL PROTECTION AREA
Fond du Lac Reservation
5 YEARS
FIRE WISE COMMUNITIES/USA
2008
firewise.org/usa

Fond du Lac (FDL) Reservation

- Established by 1854 Treaty of LaPointe
- 25 miles inland from Lake Superior in Minnesota
- 101,000 acres; approximately 30% tribally owned or in trust
- Over 4,000 enrolled Band members; early half live on the reservation

Geographic Location

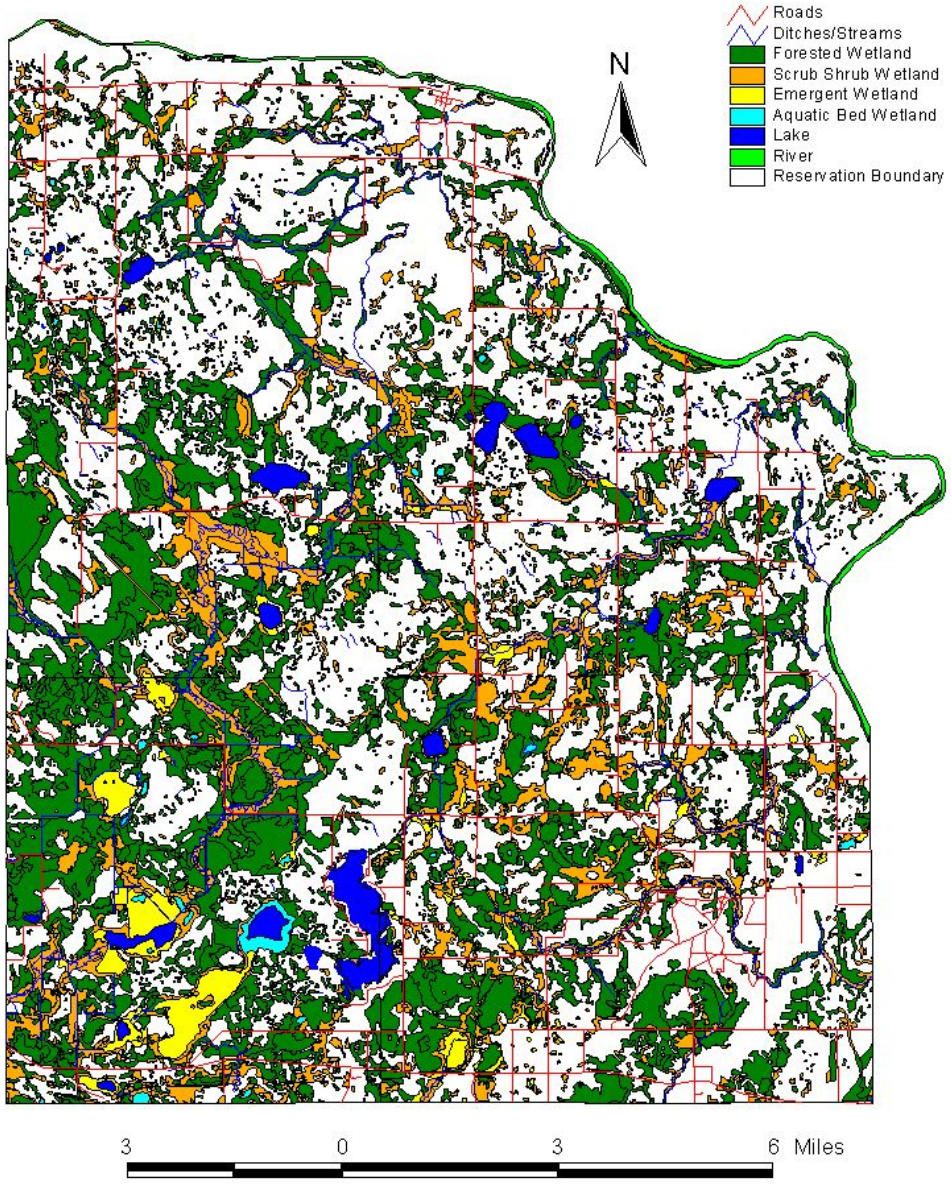



Round Lake
Spider Lake
Artichoke
Lost
Hunter
Horseshoe Lake
Mirror Lake
Cameron
Eagle
Schelin Lake
Third Lake
Fish Lake Reservoir
Sunset
Beaver
Schleps Pond
Long
Caribou
Wild Rice Lake Reservoir
Tonkins
Grand
Pike
Martin
St. Louis River
Hartley Pond
Stoney Brook
West Twin
Horseshoe
Saint Louis County
Lost
East Twin
Simian
Side
Lake Superior
Dead Fish
Hardwood
Pat Martin
Lac
Miller
Cedar
Spruce
Rice Portage
Big
Third
Schley
Jackpot
Perch
Wild Rice
Spring
Corona
Torch Light
Bob
Park
Chub
Hay
Lakes
Streams and Brooks
Fond du Lac Reservation
N
4 2 0 4 Miles

Reservation Statistics

- 54,000 acres forested
- 44,000 acres wetlands
- 108 bodies of water, including 3,000 acres of lakes
- 850 acres manoomin (wild rice)
- 96 miles of lakes and streams, including 22 miles of the St. Louis River (largest U.S. tributary to Lake Superior)

Fond du Lac Wetland Types



FDL's Environmental Program

- Began with General Assistance Program (GAP) funding in 1995
- Currently 12 full time employees covering:
  - Water quality
  - Wetlands
  - Air quality
  - Solid waste
  - Energy
  - Brownfields
  - Environmental education
  - Environmental health

FDL's Environmental Program (cont.)

- Within the Resource Management Division, which includes:
  - Natural Resources
  - Forestry
  - Conservation Enforcement

FDL's CWA Programs

- Section 106 Surface Water Monitoring and Assessment
- Section 319 Nonpoint Source Management
- Section 303 Water Quality Standards (WQS)
- Section 401 Water Quality Certification

FDL's CWA Programs (cont.)

- Direct Implementation Tribal Cooperative Agreements (DITCAs) for wetland inspections and stormwater inspections
- Cooperate on Total Maximum Daily Load (TMDL) studies and implementation: MN, WI, EPA R 5
- Steps towards section 404 wetland permitting, section 402 National
- Pollutant Discharge Elimination
- System (NPDES) permitting

Fond du Lac (FDL) Water Quality Standards

Why Water Quality Standards?

- To protect culturally important natural resources and subsistence
- "Aggressively assert tribal sovereignty"
- Recognized that federally delegated authority would enable Band to "sit at the table" with state and federal decision-makers

WQS Development

- TAS approved by EPA in 1996
- WQS drafted in 1998; approved by EPA in 2001
- First tribal WQS reviewed under the Great Lakes Initiative (GLI)
- Completed first triennial review in 2008
- Approved section 401 certification protocol in 2006

Components of FDL WQS

- Designated uses include cultural, wild rice, aesthetic
- Criteria include narrative and numerical, with some toxics calculated to reflect greater fish consumption
- Antidegradation to protect high quality waters, including Outstanding Reservation Resource Waters

Section 401 Certifications

- Have certified several nationwide general permits
- **Always** include conditions
- Denied nationwide general aquatic pesticides permit in December 2010

Conditions for Section 401 Certifications

- Multi-sector General Permit for Industrial Stormwater Discharges
- The draft nationwide permit included TSS and nitrate + nitrite criteria that were higher than ambient conditions in Fond du Lac waters
- Set conditions on the MSGP to reflect our tribal criteria

Antidegradation Review

- Currently, no NPDES-permitted facilities within the reservation boundaries
- First opportunity: Wastewater Treatment Plant (WWTP) discharge from Big Lake Area Sanitary District
- Major challenge: extremely stringent mercury criterion; no known technology to meet it

EPA Review of WQS

- Three years for initial EPA approval; worked with EPA to resolve questions; additional GLI criteria
- At first triennial review (2008), considered some revisions, but EPA review concluded that the FDL WQS were protective
- Working towards numeric nutrient criteria and biocriteria


Working with
Partners

Collaboration and Cooperation

- Memorandum of Understanding (MOU) with Minnesota Department of Transportation: Roadside vegetation
- Big Lake cooperative wastewater project; established sanitary district with both tribal and non-tribal representation
- Cooperative TMDL for St. Louis River

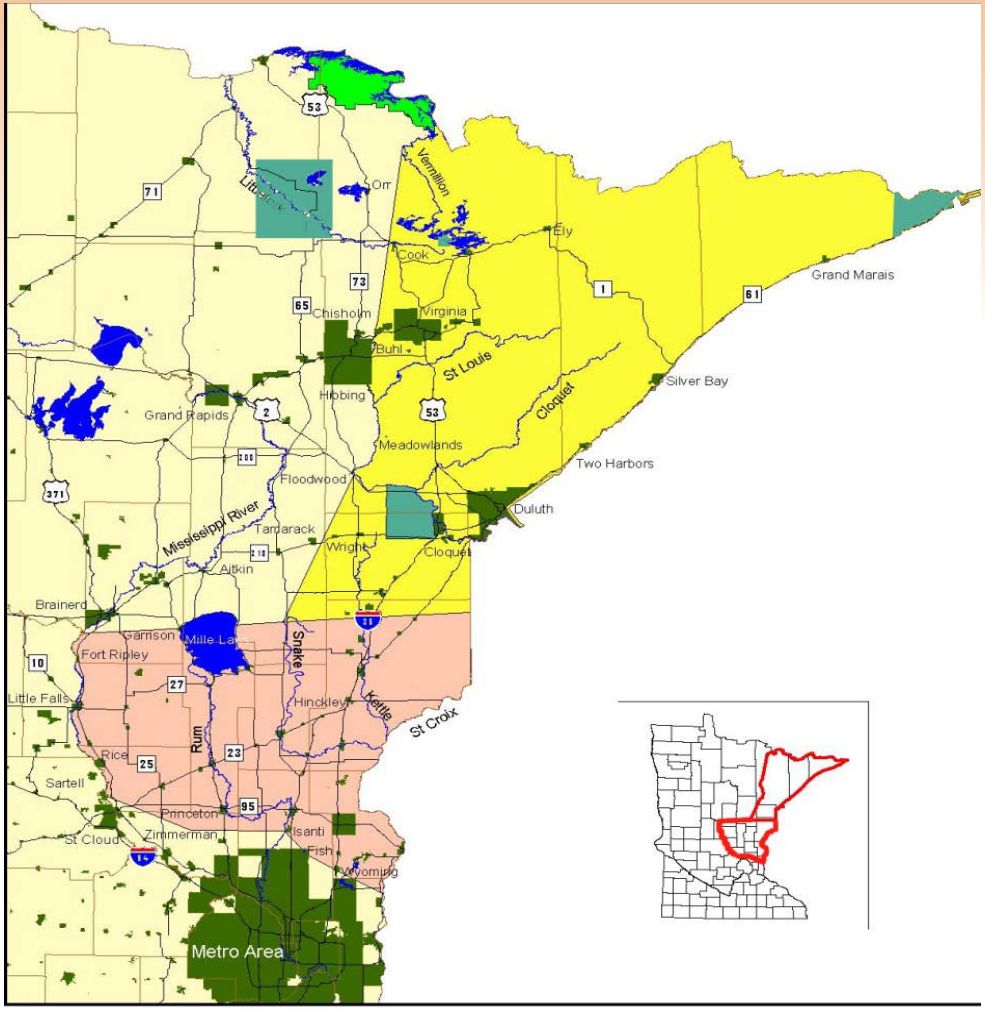
Collaboration and Cooperation (cont.)

- Share monitoring data with Minnesota Pollution Control Agency (MPCA), Minnesota Department of Natural Resources (MNDNR)
- Concur with state's 303(d) list
- Provide technical expertise to statewide wild rice water quality research

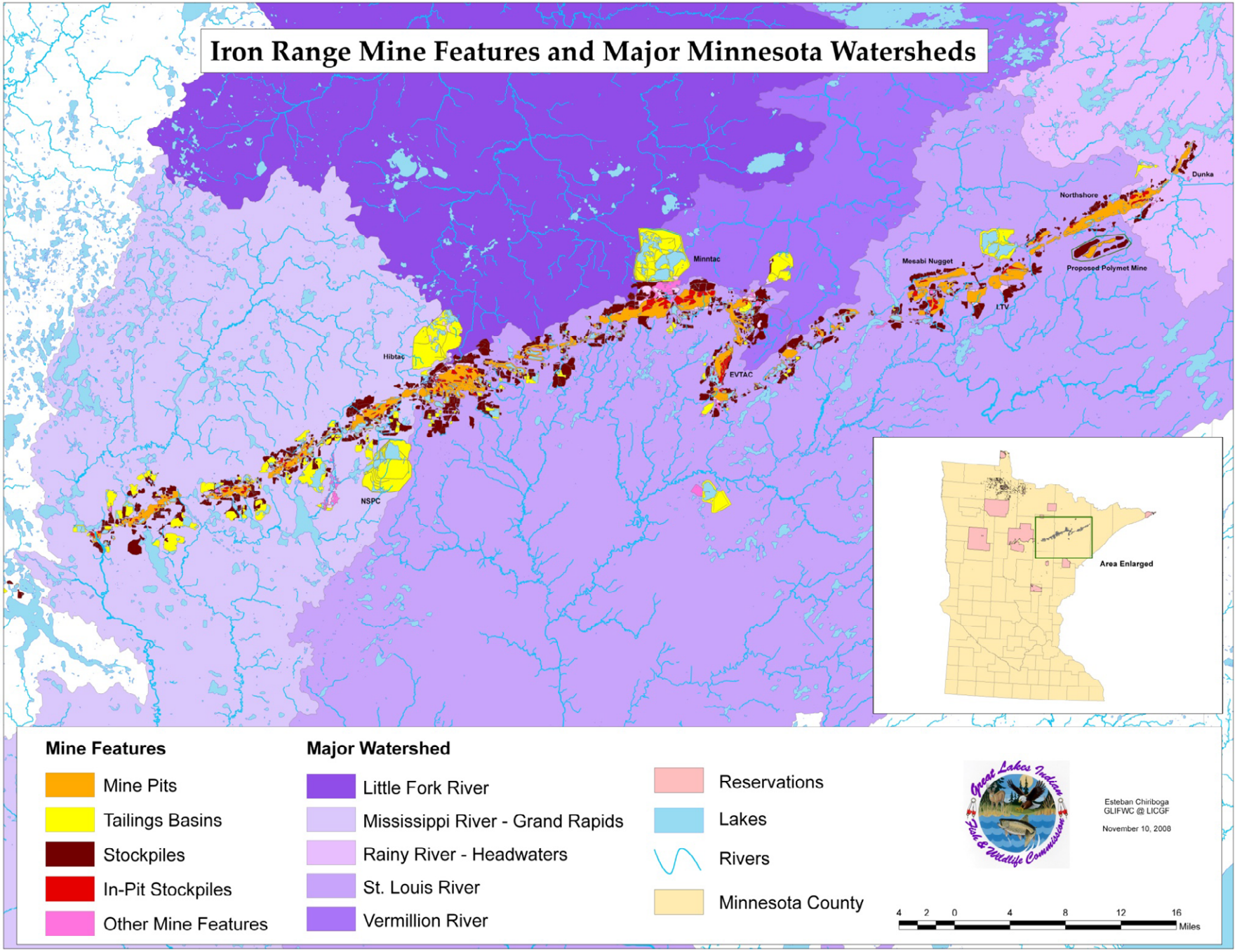
Protecting Shared Resources

- 1854 Ceded Territory (Fond du Lac, Bois Forte, Grand Portage Bands)
- Natural Resource Damage Assessment: Lower St. Louis River Area of Concern
- Cooperative natural resource monitoring
- Cooperating agency status for several major taconite and sulfide mining environmental impact statements (EISs)

FDL Reservation and Ceded Territories



Iron Range Mine Features and Major Minnesota Watersheds




Reflections…

Meeting Our Goals….?

- Yes: in conjunction with monitoring and assessment, can demonstrate where we are protecting subsistence lifeways (and where not)
- Generally, protecting high quality waters
- Identified restoration opportunities

Current Water Quality Issues

- Multimedia studies have documented our mercury problem
- Specific criterion to protect wild rice has been politically crucial
- Downstream water quality authority requires upstream (state) dischargers to consider how they will meet our standards
- Section 319 program addresses many issues (forestry practices, roads, AIS, hydromodification)

Pros and Cons of an EPA-approved WQS Program

Pros:

- Jurisdictional authority
- Ability to establish culturally-relevant uses and standards
- Protect high quality waters (ORRW)
- Taken seriously by other regulatory agencies

Cons:

- Stretched **thin**, both in staff and resources
- Takes significant investment in training (legal and scientific)

Lessons Learned

- Patience! It takes time and commitment to establish and maintain a tribal WQS program
- Learn from your peers
- Take advantage of available training on all aspects of the Clean Water Act; you must know it well to apply its protections effectively

Where Can I Obtain More Information?

- Information Kit Contains
  - List of Resources (links to web sites)
  - Contact Information for EPA's Regional WQS Coordinators
  - TAS/WQS Helpful Tips
- EPA's Clean Water Act Tribal Training website: http://water.epa.gov/learn/training/tribaltraining/index.cfm

Training and Educational Needs

- Input needed to help EPA develop water quality training programs to meet your needs
- Please complete the feedback form in your Information Kit
- Leave the completed form in the “Training Feedback Box” on the Conference Registration Table by Thursday, November 17
- THANK YOU!

Beaches Environmental Assessment and Coastal Health (BEACH) Act of 2000

- To improve public health protection at our nation's beaches through enhanced WQS and beach monitoring and notification programs

BEACH Act (cont.)

Eligibility:

- To become eligible for grants under the BEACH Act:
  - A Tribe must have coastal waters (defined as Great Lakes and marine coastal waters) within their jurisdiction, with beaches or similar points of access that are used by the public.
  - A Tribe must be federally recognized and must be approved by EPA to conduct a WQS program.
  - A tribe must have adopted WQS for its beaches that are as protective of human health as EPA's current recreational water quality criteria.
    - The Tribe's WQS must be approved by EPA.

BEACH Act (cont.)

Draft Brochure

- EPA is developing a brochure to:
  - Inform the Tribal Community About the BEACH Act
  - Availability of Grant Funds for Eligible Tribes

Review of Draft Brochure

- Draft Contained in Your Information Kit
- EPA Would Appreciate Your Feedback
- E-mail Comments to:
  - Richard Healy, U.S. Environmental Protection Agency, healy.richard@epa.gov
  - Comments Due: December 15, 2011

THANK YOU!