

A scenic view of a river flowing through a canyon with red rock walls under a clear blue sky. The river is in the foreground, with white water rapids. The canyon walls are made of layered red rock. The sky is a clear, bright blue.

Water Quality Newsletters

Part of *Approaches to Clean Water Communication*

Newsletters

Water quality programs have used newsletters to deliver alerts and periodic updates to interested stakeholders. This document contains examples of water quality newsletters, including notes about topics covered and means of distribution.

This document include examples from the following programs, in order:

- Fond du Lac Band of Lake Superior Chippewa
- Indiana
- Louisiana
- Minnesota
- Penobscot Nation
- Red Lake Nation

These examples originate from responses to an Environmental Law Institute questionnaire on communication distributed in the fall of 2019. The examples are not intended to be comprehensive; rather, their collection is meant to facilitate the sharing of ideas among water quality programs, especially CWA 303(d) programs, and to help generate new ideas about how to communicate water quality and program information.

Ashi-niswi giizisoog (Thirteen Moons)

Manidoo-giizis

Gichi-Manidoo-giizis is the Great Spirit Moon. The new moon begins January 9. Other names for this moon are Maajii-bibooni-giizis, the Start of the Winter Moon; Oshki-bibooni-giizis, New Winter Moon.

Fond du Lac Band of Lake Superior Chippewa: 13 Moons Program

The 13 Moons Program provides cultural, ecological, and natural resource management information appropriate to the current moon. Thirteen Moons pages are produced by Fond du Lac Resource Management and the University of Minnesota Extension and published in the Fond du Lac newspaper. More information about the program and the full archive of pages can be found [here](#).

2018 Gichi Manidoo Giizis Powwow

The Thirteen Moons Fond du Lac Tribal College Extension Program is proud to host the 2018 Gichi Manidoo Giizis Conference and Traditional Powwow on Jan. 13, 2018 at the Black Bear Casino and Resort-Otter Creek Event Center. This is a one day powwow that celebrates taking care of the land and community. The mission of the 2017 Gichi Manidoo

Giizis Traditional Powwow is to bring together community members and federal, Tribal, and state organizations to learn from one another about how we take care of the land and community. Representatives from organizations will be available to answer questions and provide information on sustainable agriculture, natural resources programs for land owners, and education and career opportunities through college and university

programs. In addition, those representatives will learn from community members the traditions of the Anishinaabe culture, language and best practices of taking care of the land and community. Please see the accompanying flyer for more information. To sign up for an Outreach and Education Information Tables or Vendor Tables contact Nikki Crowe at nikkicrowe@fdlrez.com or call (218) 878-7148.

Gichi Manidoo Giizis Sustainable Agriculture and Natural Resources Conference

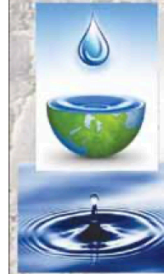
The Thirteen Moons Fond du Lac Tribal and Community College Extension program is hosting a conference Jan. 11, 12, and 13, 2018. The mission of the conference is to share

and learn information relevant to Tribal Resource Management staff, Tribal Producers, Federal and State Agencies, and Educators. This year's topics will include Water Quality Standards, Maple

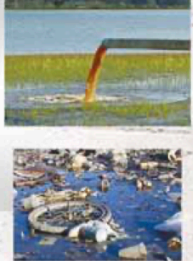
Syrup Production, Tribal Food Codes, Food Safety, USDA Grants and Loans, Orchard Management, and Introduction to Tribal Agriculture Resource Management Planning (ARMP).

Sign up to the 13 Moons listserv for the latest information on workshops and events by emailing thirteenmoons@fdlrez.com Don't forget to check us out on Facebook! 13 Moons Ashi niswi giizisoog

Fond du Lac Resource Management Water Quality Standards Public Meeting



When: Friday January 12th
6pm-8pm
Where: Black Bear Casino
Hotel-Sophie Lake Room
Contact: Nancy Schuldt
218-878-7110
nancyschuldt@fdlrez.com



The Fond du Lac Environmental Program welcomes you to a public meeting regarding proposed changes and updates to our tribal water quality standards. These are all elements of the federal Clean Water Act that the Fond du Lac Band is authorized by the USEPA to manage for waters of the reservation.

- We are interested in hearing from the Fond du Lac community and the public about:
- Adding Ojibwe names for our lakes and streams into our ordinance;
 - Assuring we have assigned all of the right "uses" for our waters & include the most up-to-date water quality criteria to protect those uses;
 - Examining our sulfate standard for protecting wild rice waters, in light of the latest research;
 - Considering specific water quality standards for protecting our wetlands;
 - Reviewing our anti-degradation policies in place to protect the quality of our waters.

Please join us at the Black Bear Casino Hotel to learn more and share your ideas! Refreshments and clean water will be served.



This page addresses culture, ecology, and natural resource management. Thirteen Moons is the Fond du Lac Tribal College Extension Program and is a collaboration of Fond du Lac Tribal and Community College, Fond du Lac Resource Management, funded by the USDA-National Institute of Food and Agriculture.

Indiana: Hoosier Riverwatch *Riffles and Pools* Newsletter

Hoosier Riverwatch, IDEM's volunteer monitoring program, publishes the quarterly [Riffles and Pools newsletter](#). The newsletter is distributed through email and provides updates on upcoming workshops as well as watershed monitoring and protection activities.

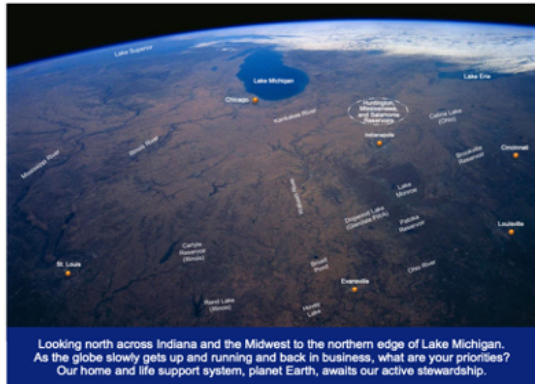


Photo by NASA, 1993

Greetings Riverwatchers!

We hope everyone is healthy and in good spirits! The past few months have been challenging for all Hoosiers. With challenges come opportunities for growth. Perhaps you learned new tools for communicating and staying in touch or found time for hobbies or work-related projects that would otherwise remain untouched. We certainly hope spare time enabled you to slow down and enjoy the moments. Our neighborhood walks and sojourns to favorite parks provided welcome, temporary relief from life under quarantine.

As we slowly return to work and society, we need to be resilient to the changes around us and find greater strength, deeper meaning, and growth from this experience. Time marches on, and we want to share one change to HRW. Riverwatch coordinator Carol Newhouse is on a leave of absence to address health issues. We wish Carol a speedy recovery! Our staff look forward to working with Riverwatch instructors and volunteers to keep HRW wheels moving forward. Citizen involvement in water quality concerns is vital to the future success and welfare of our water resources. We appreciate your involvement and support!

— Kristen Arnold, Technical and Logistical Services Section Chief
Watershed Assessment and Planning Branch

Summer 2020

In this Issue:

- [Boyds Ditch Success Story](#)
- [IDEM COVID-19 Actions](#)
- [Ensuring Safe Drinking Water as Buildings Reopen](#)
- [How the Pandemic Affected Watershed Assessment and Planning at IDEM](#)
- [White River Mainstem Project](#)

MARK YOUR CALENDARS!

Cancelled or Postponed Workshops

- June 13—North-Webster
- July 9—Battle-Ground

Upcoming Workshops

- June 13—Fort Wayne
- Sept. 4—Bristol
- Sept. 12—Indianapolis

Hoosier Riverwatch is administered by

White River Mainstem Project

IDEM will begin a fifth cycle of probabilistic monitoring in June 2020 by sampling the mainstem White River and tributaries from the headwaters to the mouth encompassing three 8-Digit Hydrologic Units (05120201, 05120202, 05120203). IDEM will sample the East Fork White River and tributaries in 2022.

The probabilistic monitoring program is named for its design for statistical probability. IDEM collects and analyzes water samples from randomly selected streams of different sizes within a given basin. Results from a small number of sampling sites provide a snapshot of the overall physical, chemical, and biological quality of the waters within the basin at a given point in time.



White River in the Indianapolis metropolitan area

IDEM was approached by the Muncie Sanitary District's Bureau of Water Quality to collaborate on a project with the Indiana Department of Natural Resources' (IDNR) Division of Fish and Wildlife to sample fish communities on the mainstem White River. To evaluate the White River mainstem as supporting or non-supporting for aquatic life use, approximately 65 targeted sites will be sampled for water chemistry, fish community, and habitat.

In October 2019, IDEM received \$25,000 in funding from U.S. EPA to analyze water chemistry samples for nutrients. U.S. EPA's Chicago lab will be analyzing water chemistry samples for general chemistry and dissolved metals, saving IDEM \$55,000 in laboratory costs. Site reconnaissance (working with land-owners and others to determine the best route to access the site) started in November 2019. Sampling for this project will end by October 2020. Results should be available by early 2021.



White River in the Indianapolis Metropolitan Area

The objectives of this project are to:

- Collect samples to give a "snapshot" of the water quality of the West Fork White River and White River.
- Assess stretches of the West Fork White River and White River that have not been sampled for many years.
- Collect additional data at historical IDNR sites to continue monitoring and managing the fish community.
- Sample stream reaches on the [303\(d\) List of Impaired Waters](#) for possible removal of impairment(s).
- Identify shifts in fish community structure along the river.
- Identify how far up the West Fork White River invasive Silver Carp (*Hypophthalmichthys molitrix*) and Bighead Carp (*Hypophthalmichthys nobilis*) have reached.

The stretch of the West Fork White River and White River included in the project is 405 river miles long. West Fork White River has a drainage area of 5,367.5 square miles (mi²), with 24.2% forest, 17.6% developed land, and 1.6% wetland. The entire White River has a drainage area of 11,340.9 mi², with 30% forest, 12.9% developed land, and 1.8% wetland.

IDEM's [interactive story map](#) provides more information about the project. If you have questions, please contact Stacey Sobat, Watershed Assessment and Planning Branch, at (800) 451-6027 (press 5) or (317) 308-3191, or ssobat@idem.IN.gov.



Scan with a QR code reader for more information

Louisiana: Discover DEQ

Louisiana DEQ disseminates updates through Discover DEQ, a monthly newsletter distributed on the [DEQ website](#) and via email.



DISCOVER DEQ

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY NEWSLETTER



February 2019 Issue Number: 85

What's Inside?

- Sibley Lake fish consumption advisory lifted
- Message From The Secretary
- Where we are going and where we have been
- Sustaining local water infrastructure with the LDEQ "New Vision" CWA 303(d) Program
- LDEQ scudmaster and six scouts master Minnesota waters
- Operation Fresh Start refreshes East Baton Rouge
- Louisiana Department of Environmental Quality utilizes social media for training opportunities
- Environmental Scientist Russel S. Clark retires from the Louisiana Army National Guard
- LDEQ On The Move
- Who's Who At LDEQ?

Sibley Lake fish consumption advisory lifted

Louisiana is fortunate to have many beautiful lakes, rivers and waterbodies. The state's aquatic resources are part of the reason it has been dubbed a sportsman's paradise. Sibley Lake near Natchitoches is one of Louisiana's water assets, but it has had a longtime advisory concerning fish consumption.



Sibley Lake is a 2,250-acre impoundment constructed in the late 1950s to produce a reliable drinking water supply for Natchitoches. It provides approximately five million gallons of drinking water daily for area residents. It has an average depth of nine feet and maximum depth of 40 feet. It has been a popular sportsmen's destination for boating and fishing for many years.

After more than 30 years of sampling lake sediments and fish, the Louisiana Department of Environmental Quality (LDEQ), the Louisiana Department of Health (LDH) and the Louisiana Department of Wildlife and Fisheries (LDWF) have lifted the fish consumption advisory for Sibley Lake. The last signature necessary to remove the advisory on the water body near Natchitoches was inked Dec. 21, 2018. The fish consumption ban had been in place since 1989. No one currently involved with water quality at a state regulatory agency can recall another instance where a fish consumption advisory issued due to chemical contamination has been rescinded in Louisiana.

"I am proud to see one of our state's impaired water bodies returned to its designated uses. This was no small feat. The long process to restore Sibley Lake demonstrates the care and commitment of the LDEQ, LDH and LDWF staffs to protecting the public from possible health risks of contamination, and making it safe for everyone to now enjoy," Gov. John Bel Edwards said.

"This is a singular achievement. It is a victory for environmental remediation, a major battle we have won in the effort to clean all of Louisiana's waterbodies," LDEQ Secretary Dr. Chuck Carr Brown said.

"Thanks to a coordinated effort between multiple state agencies, our state, the Sportsman's Paradise, now has one more body of water in which residents who

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DISCOVER DEQ

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY NEWSLETTER



February 2019 Issue Number: 85

Sustaining local water infrastructure with the LDEQ "New Vision" CWA 303(d) Program

Each and every day, everyone benefits from the environmental, health, social and economic impacts that clean and safe water provides. There is no debating the impact water infrastructure has on daily life. One of the most critical challenges facing the nation is how to sustain water and wastewater infrastructure to ensure that the public can continue to enjoy these benefits in the future. Louisiana Department of Environmental Quality (LDEQ) is collaborating with drinking water and wastewater utility managers, trade associations, local watershed protection organizations, and state and local officials to help ensure that Louisiana's precious water infrastructure is sustainable with the implementation of programs such as the Clean Water Act (CWA) Section 303(d) Program.

There is a "pollution budget" set for every body of water - from rivers and lakes to the bayou that runs behind your home. A pollution budget is the amount of pollutants that a waterbody can assimilate (or blend in) while still maintaining the water quality criteria for the parameters of concern specific to that water body. Each waterbody will have a point source loading component (i.e., discharge from a permitted sewerage treatment facility), a nonpoint source loading component (i.e., individual home septic tanks) and a margin of safety (applied percentage factor for error). All of these factors combined will equal a specific waterbody's Total Maximum Daily Load (TMDL).



The Yellow River in Tangipahoa Parish is in the early stages of an alternative plan under the New Vision Program. It is currently being monitored.

A TMDL can be developed for any parameter (i.e., dissolved oxygen, fecal bacteria, etc.) and can be expressed in a variety of ways. Additionally, TMDLs establish water quality-based permit limits for point source loads and the reduction percentages, if any, that are required for both point and nonpoint source loads. The CWA 303(d) program requires TMDLs for each waterbody, and the Code of Federal Regulations governs them.

The CWA 303(d) program allows for implementation efforts that restore and protect the nation's aquatic resources. Through this program the nation's waters are assessed, restoration and protection objectives are prioritized, and Total Maximum Daily Loads (TMDLs) and alternative approaches are implemented to achieve water quality goals. The achievement of these goals is only made possible through the collaboration between LDEQ, federal agencies, the regulated community stakeholders and the public.

The original LDEQ program, referred to as the TMDL program, was established by the Clean Water Act Section 303(d) in the 1970s. At that time, it documented that states must assess all waterbodies and prioritize impaired waterbodies for TMDL development. The Long-Term Vision for Assessment, Restoration, and Protection Program, also referred to as the New Vision program, has since been implemented under the CWA 303(d) program. The primary goals of the New Vision Program include prioritization, assessment, protection, alternatives, engagement and integration to achieve water quality goals. LDEQ hopes the new program will guide the realization of our clean water goals in a manner that recognizes lessons learned from the past two decades of CWA 303(d) program implementation while addressing new challenges with innovative solutions.

All waterbodies have designated uses. Some of these uses equate to swimming, fishing, boating, a drinking water source, wildlife propagation or agricultural purposes to name a few. Some more directly impact the community than others, but ultimately, all play a role in the overall water infrastructure of a community. These designated uses are what determine the water quality criteria

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Minnesota: Waterfront Bulletin

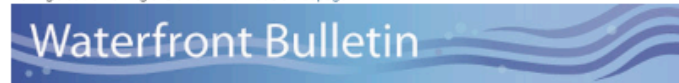
Minnesota PCA publishes the [Waterfront Bulletin](#), a monthly email newsletter providing updates on impaired waters, watershed project funding, and other restoration and protection actions. The publication also accepts submissions from the public.



MPCA Waterfront Bulletin

Minnesota Pollution Control Agency sent this bulletin at 06/10/2020 11:34 AM CDT

Having trouble viewing this email? [View it as a webpage.](#)



June 2020 Edition

- Clean Water Partnership marks biggest year ever
- Controlled drainage project part of plans to restore water quality in Winnebago River Watershed
- Water quality and monitoring: What a difference a day makes
- MPCA study: Lake Pepin close to meeting water-quality standard, more work needed upstream
- La Crescent area: Most streams meet standards for fish and other aquatic species
- MPCA reports good water quality and recommends protection strategies for Cloquet River Watershed
- Hawk Creek soars above state's 80 watersheds for water quality work
- Salt Symposium streaming live Aug. 4-5. Certification training sessions (free) offered Aug. 6
- In brief

Clean Water Partnership marks biggest year ever

The Clean Water Partnership (CWP) loan program helps restore lakes and streams in Minnesota, one project at a time. The program, administered by the Minnesota Pollution Control Agency (MPCA), marked its biggest year ever in fiscal year 2020, awarding \$8.75 million in no-interest loans. It's been about 25 years since the program came close to that level, previously \$7 million in the mid-1990s.

This program once awarded low-interest loans to local partners, such as cities, watershed districts and non-profit groups, to reduce non-point pollution, which is pollution from diffuse sources such as cropland runoff, urban stormwater and failing septic systems.

But as bank interest rates dropped to low levels over the years, the program had difficulty generating applications. Then program staff – Cindy Penny and Kurt Soular - proposed a change. Because previous recipients had paid back their loans with interest, the program had its own source of funding from the interest payments. In other words, MPCA staff had increased the funding available through good management and interest payments.



Jeff Synder, wastewater supervisor for the City of Edgerton, shown with the sweeper purchased with a CWP loan that allows the city to clean streets more quickly and efficiently than it could using its previous machine.

Water quality and monitoring: What a difference a day makes

The relatively dry spring helped produced excellent water quality in many streams and rivers throughout Minnesota. These conditions were good for fish, as well as fishing and other forms of river recreation. At right is an example: An angler caught a small-mouth bass in the Maple River in southern Minnesota when the water was clear.



One storm can change that. Heavy rains lead to runoff from farm fields, many of which are bare at this time of the year, as well as from paved areas in cities. The rain flushes pollutants from the landscape and raises stream levels. The results are erosive flows, higher levels of pollutants, and muddy waters.

For example, rains on May 16-17 led to higher levels of sediment in the Le Sueur River near Mankato, as shown in the sample bottles at right. The results before and after:

May 16

- Total suspended solids: 32mg/l
- Nitrate = 3.4 mg/l
- Phosphorus = 0.059 mg/l

May 17

- Total suspended solids: 1,100 mg/l (34 times higher)
- Nitrate: 11 mg/l (3 times higher)
- Phosphorus = 0.904 mg/l (15 times higher)



The Le Sueur is a tributary to the Minnesota River, which carries high sediment loads to the Mississippi and downstream. The Maple River referenced above is a tributary to the Le Sueur.

Catching that flush of pollutants is the job of the Watershed Pollutant Load Monitoring Network. This network of state and local partners monitor the quality of major rivers throughout Minnesota. Their work is important for detecting if water quality is getting better or worse; tracking the impact of restoration work; and identifying source of pollution, as well ways to reduce them.

Climatologists predict that heavy rains are becoming more common, making water retention even more important for keeping pollutants out lakes and streams. Practices that retain water include:

- Building soil health on cropland
- Planting cover crops
- Restoring wetlands
- Building water and sediment retention basins
- Planting rain gardens
- Planting buffers of native vegetation along lakes, streams and ditches

Learn more:

- [What the MPCA is going to improve water quality](#)
- [Watershed pollutant load monitoring, including real-time data.](#)

Penobscot Nation: Pəskehtək^wok—Joining of the Branches Newsletter

Penobscot Nation DNR's Pəskehtək^wok—Joining of the Branches [newsletter](#) is printed and inserted into the community flyer, included in the electronic version of the same, and distributed by email.

June 2018 newsletter - Read about:
Wild Foods Info Series
River Herring
New Contamination Study
Watching Bumblebees

[View this email in your browser](#)




Pəskehtək^wok

Joining of the Branches
Penobscot Indian Nation Department of Natural Resources Newsletter


Fishing season is here - and so is our new brochure and poster about enjoying meals of freshwater fish safely!



Because fish and a wide variety of other wild foods are a traditional part of a Penobscot sustenance diet, DNR scientists analyzed contamination levels in some of them. And we are thrilled to be finished with the first of three brochures and posters about the best ways to keep yourself safe when eating them! Here is how you can get the information in the first brochure about fish:



ALEWIFE



BLUEBACK HERRING

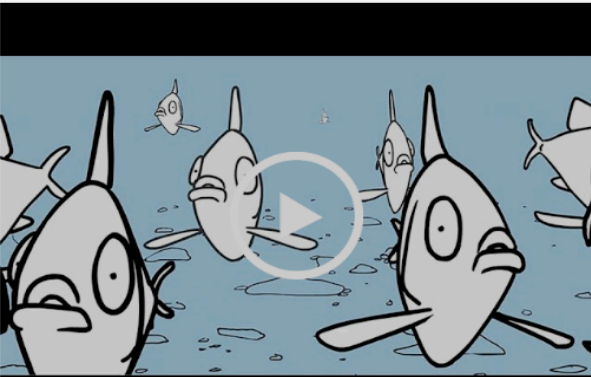
Lots of River Herring Are Coming Up the Penobscot

Removing dams and improving fish passage (www.penobscotriver.org) means more fish coming up the river again!

As of June 2 there had already been 1.8 million river herring counted at the Milford Fish lift. Each of the past two years they have counted around 1.2 million by the end of the season, so we are breaking records. The two species of river herring that make up these numbers are the Alewife and Blueback Herring. For more information about the biology of these species go to this page: [http://www.penobscotriver.org/river-herring-biology](#)

If you want to keep track of the numbers coming up the Penobscot and other rivers in Maine go to <http://www.maine.gov/dmr/science-research/searun/programs/trapcounts.html>

Alewives have been making a comeback throughout the state - check out The Nature Conservancy's new video about their journey and importance!



https://www.nature.org/ourinitiatives/regions/northamerica/unitedstates/maine/the-comeback-alewives-return-to-maine-rivers.xml?src=r.v_thecomeback.local.na.me

Red Lake Nation: DNR Newsletter

The Red Lake Nation [DNR Newsletter](#) is released three to four times per year and includes updates on water quality in addition to other topics such as forestry and wildlife. The newsletter is released digitally and mailed to tribal members.



The newsletter cover features a golden wheat field background. At the top left is the Red Lake Department of Natural Resources logo, which includes a circular emblem with a tree, water, and mountains, surrounded by the text 'RED LAKE' and 'DEPARTMENT OF NATURAL RESOURCES'. The main title is 'Miskwaagamiwi-zaaga'iganiig Aki-genawendamowaad' in bold black text. Below it, in smaller text, is 'Red Lake Department of Natural Resources'. The issue title is 'Dagwaagin Fall 2019' and the featured article is 'Mazina'Igan onji Odaakewigima Letter from Director'. A 'Table of Contents' section lists: 'Ezhi-ayaag-gidakiiminaan Environmental | 2', 'Giigoonyikewin Fisheries | 4', 'Miskwaagamiwi-zaaga'Iganing Miti-gokewin Forestry | 6', 'Ezhi-ganawenjigaadeg-Nibi Water Resources | 8', and 'Awesinhya Wildlife | 10'. The 'RED LAKE DNR' contact information is provided: 15761 High School Drive, Red Lake, MN 56671; Phone: 218-679-3959; Fax: 218-679-2830; ridnn@redlakenation.org; Website: www.redlakednr.org. A Facebook icon and 'Like our Facebook Page Red Lake DNR' are also present. The footer reads 'Dagwaagin / Fall 2019' and 'www.redlakednr.org'.



Ezhi-Ganawenjigaadeg-Nibi Water Resources

Mark Edlund (Scientist with the Science Museum of Minnesota) accompanying Red Lake DNR Water Resources on a Lake of the Woods sampling trip

Red Lake DNR Work on Lake of the Woods

The Red Lake DNR Water Resources Program has been collecting water quality data on Lake of the Woods (specifically at the NW Angle) since 2004. Early work on the lake was simply to establish some baseline water quality data. We wanted to find out what the water quality is like since the Red Lake Band owns more than 80% of the NW Angle. Lake of the Woods is listed as an impaired lake for nutrients and while the streams of the NW Angle were unlikely candidates as contributing sources, it is important that we understand their conditions and know what "normal" is. When the Minnesota Pollution Control Agency (MPCA) listed the lake as impaired, a greater level of cooperation among governments and natural resource agencies was required. This need resulted in an International Multi-agency Arrangement (IMA). Governments and agencies signed on to the IMA in order to improve our ability to work together toward common water quality goals. Signatories include the Red Lake Band, MPCA, Minnesota Department of Natural Resources, US Environmental Protection Agency, and their Canadian counterparts among others. These agencies have actively partnered over the last decade to

determine the causes of water quality impairments on the Lake of the Woods and determine appropriate steps to improve water quality.

More recently, in 2013, the International Joint Commission formed the International Rainy River Lake of the Woods Watershed Board. Al Pemberton, DNR Director, holds a seat on this board. The Board's mandate includes determining what water quality studies are necessary to improve and protect water quality in the watershed.

While Lake of the Woods seems to be a far off place at times, we know that Red Lake members used it historically and are likely to make greater use of the resources there in the future. Current protection efforts include monitoring at 7 streams on the NW Angle and multiple sites in the lake. We are also partnering with the Science Museum of Minnesota and the MPCA to collect some water quality data on waters that the state is interested in. We take part in watershed board activities and are active members of the IMA working group and technical advisory committee. Through these avenues we have an opportunity to bring tribal perspectives to organizations and governments making decisions for the watershed as a whole. Remem-