**Fond du Lac Band of Chippewa**
**1720 Big Lake Road**
**Cloquet, MN 55720**

**February 20, 2014**

[ HYPERLINK "https://www.google.com/search?safe=active&rls=com.microsoft:en-us:IE-SearchBox&q=www.fdlrez.com&spell=1&sa=X&ei=GBaVUfrzGrLH4APW3oHoBw&ved=0CC8QvwUoAA" ]

---

**Water Resource Staff: 218 878-7101**

Wayne DuPuis Environmental Program Manager
Nancy Schuldt Water Projects Coordinator
Richard Gitar Wetland Specialist
Kari Hedin Watersheds Specialist
Cristina Bunch Groundwater Specialist

---

**Chairwoman Karen Diver**
Fond du Lac RBC
218-879-4593

The Fond du Lac Band of Lake Superior Chippewa Reservation lies in Northeastern Minnesota adjacent to the city of Cloquet, MN, approximately 20 miles west of Duluth, MN. The Fond du Lac Reservation, established by the LaPointe Treaty of 1854, is one of six Reservations inhabited by members of the Minnesota Chippewa Tribe. The Chippewa Nation is the second largest ethnic group of Indians in the United States. Archaeologists maintain that ancestors of the present day Chippewa have resided in the Great Lakes area since at least 800 A.D.

**Fond du Lac briefing points for visit with Karen Diver**

**Background**

- Clean Water Act program authority approval dates: CWA **106** - July7/1992
  CWA **319** - December/2004
  **303/401** WQS – May/1996
- Secured and administered over $ 3,100,000 in project funding over the past 15 years from Federal and State sources to address wetlands, groundwater, sediments, abandoned well closure, stream renovation, non point source, and waste water management.
  (See attachments 1. Workplan components and 2. Other funding sources)

Reservation statistics

- Total acres - 101,392
- Population - 3,900 enrolled members, 1,900 live on reservation
- 43,000 wetland acres
- 96 miles of streams
- 20 mile reach of St. Louis River
- 3,000 acres of lakes
- Seven productive wild rice lakes with 1,500 acres of designated wild rice waters

**Funding – Performance Partnership Grant (PPG) 4/1/13- 3/31/15 - $1,204,047**

CWA 106 grant - $194,400 (FY 12 amount) FY 14 will be close to same amount dependant on final budget.
CWA 319 grant - $30,000 annual base amount

| | Total EPA Amount Awarded to Date | Total Approved Assistance Amount |
|---|---|---|
| GAP: | $345,000 | $345,000 |
| CAA 105: | $294,294 | $302,000 |
| CWA 106: | $174,960 | $388,800 |
| CWA 319: | $67,900 | $90,000 |
| Wetlands | $78,247 | $78,247 |
| **Total:** | **$960,401** | **$1,204,047** |

Issue: **St. Louis River Mercury TMDL project- Concerns Expressed by the Fond du Lac Band of Lake Superior Chippewa**

Using GLRI funds, EPA began working in 2010 with the Minnesota Pollution Control Agency (MPCA), Wisconsin Department of Natural Resources (WDNR) and the Fond du Lac Band of Lake Superior Chippewa (FdL) to develop total maximum daily loads (TMDLs) to establish pollutant reduction needs for mercury for the St. Louis River watershed. In February 2013, MPCA informed the other parties of its decision not to continue TMDL efforts at this time, citing fundamental questions about the behavior of mercury in the system that need to be answered in order to complete the TMDL. MPCA has stated its support for completing a mercury TMDL after these questions are answered, and has an active research effort to study these questions. Nevertheless, FdL continues to raise concerns about MPCA's decision not to complete a TMDL at this time. In our separate discussions with the tribe and with MPCA it is apparent that there continues to be a significant degree of mutual distrust between them.

**Status:**

- EPA is facilitating quarterly management calls with FdL, MPCA and WDNR regarding mercury-related activities.

- MPCA and the Minnesota Department of Natural Resources conducted sampling last summer to evaluate mercury bioavailability in five Minnesota watersheds with high fish-tissue mercury concentrations, including St. Louis River. MPCA is seeking longer term state funding for research related to mercury in these watersheds. The goal is to better understand factors driving mercury methylation, demethylation, accumulation in fish, and the factors in these processes that can be controlled. This information would provide support for TMDL development and remediation efforts.

- FdL is performing fish and water column monitoring.

- Because there is not consensus among the parties to develop a TMDL at this time, EPA does not support the use of GLRI contract funds for this purpose. However, EPA is exploring the possibility of using GLRI funds for efforts within the St. Louis River basin which would support future TMDL development.

**Recommendation:**

We recommend emphasizing the following points in discussion with Chairwoman Diver:

1. EPA shares the interest of the Tribe in the development of a TMDL for the St. Louis River that provides a basis for actions to reduce mercury levels in fish.
2. MPCA has indicated strong support for developing a TMDL in the future, and is engaged in research to answer questions about the behavior of mercury in the watershed.
3. We believe the process should be driven by the states, tribes, and other stakeholders. EPA is happy to continue facilitating coordination and information sharing between the parties.
4. EPA is exploring the possibility of using GLRI funds for efforts within the St. Louis River basin which would support future TMDL development.

**Issue: <u>Water Quality Standards Variance and NPDES for Mesabi Nugget, Hoyt Lakes, MN [Litigation sensitive]</u>**

**Background/Status:** On December 27, 2012, EPA approved Minnesota's request for a variance for up to eight years from Minnesota's water quality standards (WQS) for industrial or irrigation uses for hardness, bicarbonates, specific conductance, and total dissolved salts for Mesabi Nugget, a large scale iron nugget production plant in Hoyt Lakes, Minnesota. In approving the variance, EPA agreed with the conclusion of the Minnesota Pollution Control Agency (MPCA) that the standards were not attainable for the period of time covered by the variance. EPA's approval of the variance was based on EPA's conclusion that the information provided by Mesabi and MPCA demonstrated that water quality standards cannot be attained during the period of the variance because the pollution control actions that may be necessary to achieve compliance with the air permit will affect the selection, design, testing, and construction of the water pollution controls needed to attain water quality standards. Other options considered were a compliance schedule and enforcement action. Neither alternative to a variance was considered viable. All parties acknowledged that Mesabi did not currently comply with water quality standards and that Mesabi would need to construct additional treatment to achieve compliance with water quality standards. The parties could not agree on whether Mesabi needed to complete its air controls before beginning work on addressing its water compliance problems, what data Mesabi needed to collect before working on wastewater treatment solutions, and how long the process of achieving compliance should take. The MPCA issued a National Pollutant Discharge Elimination System permit based on the approved variance on December 28, 2012.

Two environmental groups and the Grand Portage and Fond Du Lac Tribes filed petitions for review with the Environmental Appeals Board (EAB) challenging EPA's action approving the variance. In March 2013, these petitions were dismissed for lack of jurisdiction. The petitioners subsequently filed complaints in the 8th Circuit Court of Appeals, where the cases were consolidated and are now pending.

Petitioners' claims include (1) EPA erred in concluding that technology did not currently exist to address treatment of wastewater from the tailings basin to the level necessary to meet applicable water quality standards, and (2) EPA erred in concluding that it would take more than five years for the facility to install treatment technology. Underlying concerns raised by petitioners include the potential for impacts to aquatic life and wild rice posed by discharges from the facility and the potential precedent set by the state's use of a variance in this case as it might be a model for addressing the discharge of pollutants from other existing and proposed mine sites in Minnesota.

**Issue: Wild Rice Protection in Minnesota**

**Background/Status:** Because wild rice is central to the cultural identity of Great Lakes Ojibwe Tribes, the Fond du Lac Tribe is very concerned about past, current and future mining impacts to wild rice, both in ceded territory and in locations downstream from mining country. Proposals for metals mine expansions and new mines have sharply increased in Minnesota in recent years. Sulfate concentrations in mining wastewater often exceed Minnesota's 10 mg/L sulfate criterion to protect wild rice, and often flow into wild rice waters. The Minnesota wild rice standard is viewed by mining supporters as a barrier to mining projects. The Minnesota Legislature provided funding in 2011 to the MPCA to bolster the existing science regarding the effects of sulfate and other substances on the growth of wild rice, and to overcome objections to legacy scientific data.

The State has collaborated with academic, tribal, government, and industry scientists on research projects which began in 2012 and were completed in December 2013. As mandated, MPCA began a stakeholder group known as the Wild Rice Advisory Committee, and solicits input from all parties through regular meetings. Fond du Lac personnel are on the Advisory Committee.

Based on the study results, MPCA is preparing recommendations regarding the wild rice sulfate criterion which MPCA anticipates going out for a formal, public rulemaking process beginning in March 2014. MPCA also is preparing a proposed method for identifying waters used for the production of wild rice for public review and comment by the end of March 2014. This method, once finalized, will be used in MPCA's 2014 assessment of surface waters and for subsequent permitting decisions.

In a February 7, 2014 letter to MPCA, the Minnesota Chippewa Tribe (of which Fond du Lac is a member) offered recommendations on how MPCA should proceed with respect to the existing sulfate criterion to protect wild rice and the designation of waters used for the production of wild rice. (See attached letter.) The recommendations include:

- Retain the existing 10 mg/L sulfate criterion to protect wild rice and protect wild rice under Minnesota's Class 2 aquatic life uses rather than under the Class 4 agriculture and irrigation uses;
- Maintain and continuously update the list of waters used for the production of wild rice;
- Refrain from consideration of stand density and harvest potential in determining whether or not an individual water is a water used for the production of wild rice; and,
- Begin assessing attainment of wild rice use as part of MPCA's routine monitoring and listing wild rice use impairment on Minnesota's 303(d) list.

We recommend emphasizing the following points in discussion with Chairwoman Diver:

1. Any updates or changes to the current MN standards will be based on the results of the multi-phase wild rice-sulfate study currently managed by the MPCA. Any changes will go through a formal, public rulemaking process.
2. The WR Study Advisory Committee plays a major role in providing input to the MPCA on the wild rice-sulfate study and use of its results.

3. Concurrent with the wild rice-sulfate study, MPCA is developing methods for determining which state waters are wild rice production waters, and will assess these waters for attainment of the State's sulfate criteria for the 2014 303(d) listing cycle.
4. The Tribe should provide MPCA with information it has regarding waters that are or historically did support growth of wild rice through MPCA's ongoing data solicitation process.

**Issue: <u>Region 5 Mining Issues update – NPDES Permitting in Minnesota</u>**

There have been several proposals for new mines and expansions of existing mines in northeastern Minnesota. These operations include iron ore operations in the Mesabi Range, and copper/nickel and PPG (palladium/platinum/gold) group operations in the Duluth complex at the eastern end of the Mesabi Range.

Most of the NPDES permits for existing mine operations are expired; some have been expired and administratively continued for over a decade. MPCA is tasked and funded to act upon new permit proposals expeditiously due to the economic implications.

NPDES has expressed concerns related to environmental conditions at existing mines and MPCA's failure to timely reissue permits. Many mines and tailings basins are discharging to surface waters via groundwater and these discharges are not addressed in existing NPDES permits. NPDES has entered into a joint priority agreement to work with the MPCA to modernize the existing permits and closely coordinate on the new mine operation permits. NPDES has committed to work with MPCA to develop these permits and conduct comprehensive reviews of all permit issuances and reissuances. As outlined in the joint priority, NPDES and MPCA are working to finalize a "Standard Operating Procedure" which describes in detail our vision for the permit review process. NPDES has completed a workload analysis and shifted resources to assure that we provide timely and comprehensive input to MPCA.

Existing mining operations in MN are significantly impacting water quality and wetlands in an otherwise near pristine area in the St. Louis River basin. Tailings basins for these operations can cover many square miles of land. Discharges of salts, mercury, sulfate and other pollutants are cause for concern generally and are of specific concern to numerous tribes in the area. Sulfate loadings may adversely impact wild rice production and may increase the methylation of mercury which accumulates in fish tissue, both of which are relied upon by the tribes as food sources. The study "Mercury Levels in Blood from Newborns in the Lake Superior Basin" released by the Minnesota Department of Health in 2011 showed that ten percent of tested newborns in Minnesota had concentrations above EPA's reference dose for methylmercury. The study suggested that consumption of locally caught fish during the summer months is an important source of mercury exposure for pregnant women in the Lake Superior region.

***Cliffs Erie - Hoyt Lakes– mining and tailings basin area NPDES permits*** – EPA is working with MPCA on the NPDES permit reissuance for this site. There are separate NPDES permits for the tailings basin and mining areas, both of which expired in 2005. The existing permits are rated as "minor" NPDES permits, and the reissued permits will be rated as a "major" NPDES permits. Major status will provide for greater EPA oversight, a prescribed minimum inspection frequency, and inclusion of discharge monitoring report data in EPA's online database. The new permit will contain compliance points at which water quality standards will be evaluated for the seepage from the tailings basin that is discharging to the Embarrass River watershed.

***US Steel – Minntac – mining and tailings basin NPDES permits:*** MPCA has issued three NPDES permits for this facility; one for the mining area, one for the tailings basin area and one for a sanitary discharge to the tailings basin. All three permits are expired. The oldest and most controversial is the tailings basin permit which expired in 1992. MPCA has modified this permit post-expiration, and issued several Schedules of Compliance, but none that require Minntac to come into compliance with water quality standards.

The Minntac Tailings basin discharges to the Sand and Dark Rivers directly and indirectly via groundwater to surface water pathways. Water quality standards are not being met in the Sand River, and exceedences are related to the tailings basin discharges.

The Minntac permits are high on the list of priority permit reissuances developed within the Joint Priority that NPDES and MPCA agreed to. We are actively engaged with MPCA and Minntac on requirements that will be incorporated into the reissued permits and expect that these permits will be reissued within the next year.

MPCA has issued a draft memo that identifies the Sand River as a water where the wild rice water quality standard applies. After receiving information indicating that the Dark River may also be a wild rice water, MPCA is requiring US Steel conduct a survey in the Dark River to identify wild rice.

Fond du Lac and Grand Portage Bands wrote to the NPDES Branch in June 2011 requesting EPA intervention in the matter of the NPDES permits issued by the MPCA to Minntac. (See other briefs in the package.)

***Mesabi Nugget Delaware, LLC - Mesabi Nugget Phase I***: See separate write up for Mesabi Nugget on page 4.

***Proposed Polymet-Northmet Mine:*** This project is currently going through the National Environmental Policy Act process. No NPDES permit applications have been received by the MPCA for this project at this time. The SDEIS contemplates discharges to surface waters from the mine site, but indicates that these discharges won't have an impact on water quality. This conclusion is primarily based on modeling results. Upon review of the information presented through the NEPA process, the MPCA has determined that an NPDES permit will not be required at the mine site. NPDES has submitted comments on this issue, advising that discharges to surface waters without NPDES permit coverage, should they occur, would be a violation of the Clean Water Act.

<u>Messages:</u>

- Many existing mine NPDES permits have been expired and administratively continued for over a decade, do not address water quality standards, and do not address all discharges to surface waters. NPDES and MPCA have agreed to a Joint Priority to address this issue.
- EPA's agreement with Minnesota will result in elimination of backlogged permits in five years and substantially improve effluent quality.

- Discharges of sulfates from mining operations in MN may contribute to exceedances of criteria to protect wild rice and may enhance methylation of mercury and mercury contamination in fish which concerns the Tribes.

**Enforcement Confidential**

**Issue: U.S Steel - Minntac**

**Background/Status:** The U.S. Steel Minntac mine in Mountain Iron, Minnesota is a taconite mine operating in northern Minnesota with several tribal reservations nearby. Minntac discharges wastewater from its tailing basin pursuant to a NPDES permit issued by Minnesota Pollution Control Agency (MPCA). Minntac's NPDES permit for the tailings basin expired in 1992 but has been administratively continued pursuant to Minnesota statute and is the currently effective permit. OGC has determined that, despite the length of time that has passed since the permit expired, since Minntac filed a timely renewal application, they are operating with an NPDES permit. EPA is evaluating Minntac compliance with the currently effective permit. Tailing basin "seeps" may be discharging into nearby streams and may be causing exceedances of water quality standards for hardness and sulfates, among other things. MPCA has taken some enforcement action for wastewater discharges from the facility and is in on-going negotiations. EPA inspected the Minntac mine in 2012. EPA has procured a consultant on mining issues to evaluate the information gathered concerning the seep discharges and sulfate levels in the tailing basin, and to provide recommendations on appropriate compliance measures.

**Message:**

- EPA inspected Minntac for alleged Clean Water Act (CWA) violations and is in the process of evaluating and developing the information.
- EPA is committed to enforcing the CWA and protecting ecosystems from the effects of water pollution.

**Contact:** Noel Vargas, Water Division, 312-353-3575, [ HYPERLINK "mailto:vargas.noel@epa.gov" ]; Deborah Carlson, ORC, 312-353-6121, [ HYPERLINK "mailto:carlson.deboraha@epa.gov" ].

Issue: **401 Certification for US Steel MinnTac CWA Section 404 permit for Mine Pit Extension**

USS has requested a CWA Section 404 permit to expand its existing Minntac Mine east and west pits and construct a new mine access road, impacting 66.2 acres of wetlands 4,002 linear headwater stream. [In 2012, EPA provided comments to the Corps on the need for more information to allow a determination of compliance with the CWA Section 404(b)(1). In 2013, EPA staff representing Water division and OECA also provided comments on the Environmental Impact Assessment for the Minntac East Pit Extension and requested specific information that needed to be addressed as part of the Corps' more detailed Environmental Assessment.]

Because the 404 permit is a federal permit, it is subject to state water quality certification requirements under CWA Section 401. Under Section 401 a state may certify, certify with conditions,[1] deny or waive certification.

On December 27, 2013, MPCA public noticed[2] its draft decision to certify that there is reasonable assurance that the project will be conducted in a manner that will not violate water quality standards, provided that USS complies with certain conditions listed in the certification.

On December 24, 2013, Grand Portage Band of Chippewa and Fond du Lac submitted a joint letter to MPCA disagreeing with the conclusions in the draft 401 certification. Most of the concerns raised by the tribes are a reflection of impacts ascribed to the facility's NPDES discharges:

- Additional dewatering discharge
- Impact of additional tailings on the discharge
- Historical violations of NPDES permit limits, and unmet schedules of compliance for meeting those limits.

One area of tribal concern was related to the 404 permit:

- Concern that the proposed mitigation for wetland impacts would be provided in an area (Mission Creek watershed) which is outside the watershed where impacts occur.

On January 22, MPCA finalized its 401 certification in a form consistent with its draft version.

While EPA has no role to play in the State's 401 certification process, the tribe may point out that EPA does have a responsibility to notify other states or tribes ('downstream states') that may be affected by the issuance of a federal permit. CWA Section 401(a)(2) requires EPA notify affected states/tribes, after which, those states/tribes may request a hearing of the federal permitting agency (e.g. Corps). In the current situation, issues raised by the tribe are mainly related to the NPDES permit (which is not subject to 401 certification), and to wetland mitigation which addresses replacement of wetland function. EPA has not provided 401(a)(2) notification to downstream entities[3] regarding this project.

**Recommendation**:

---

[1] Such 401 conditions become requirements of the final permit

[2] MPCA has clarified to EPA that this public notice was for informational purposes, and was not intended to seek public comment.

[3] Fond du Lac is approximately 80 river miles downstream and approximately 50 miles away as the crow flies.

We recommend emphasizing the following points in discussion with Chairwoman Diver:

1. EPA does not oversee the State's 401 certification process.
2. Impacts related to wastewater discharges, including potential downstream impacts, are addressed via the NPDES permitting and enforcement processes.
3. EPA is interested in better understanding the Tribe's concerns regarding this project, including impacts related to the 404 permit or the NPDES permit.

Attachment 1

**CWA 106 Workplan Components**

Environmental Data Collection

1. Core Monitoring Program
   - Surface Water Quality Monitoring program
   - Expanding core monitoring program to include
   - Bathymetric/Substrate/SAV mapping
   - Ground Water Monitoring

Other specific Water Program Activities

2. Water Quality Standards: Criteria Development
3. Ground Water Protection
4. Mentorship
5. Community Outreach and Education Activities

Enforcement/Compliance aspects of Water Quality Program

6. Wetlands Protection and Management
7. §401 Water Quality Certification
8. Environmental Site Assessments
9. Grant, Program Administration Activities

Attachment 2

**Other Funding Sources**

- Completed two sediment assessment projects with funding from GLNPO, and provided GLNPO with our sediment quality database (also now included in the St. Louis River AOC sediment database, developed by Dr. Judy Crane of the MPCA). **$76,740**
- Permanently closed over 100 abandoned wells on the Reservation, with funding from the USDA Environmental Quality Incentives Program (EQIP) and Indian Health Services, and direct tribal funding. **$90,000**
- Implemented a stream restoration project on Martin Branch with EQIP funds. **$48,000**
- Proposing a stream restoration project on Jolicouer Creek, through the Save our Great Lakes funding program. **$31,000**
- Completing a comprehensive hydrologic study of the Stoney Brook watershed, partnering with NRCS and USGS to collect surface water, ground water, precipitation, LIDAR, and physical survey data to develop a continuous hydrologic model of the watershed. Eventually this model will be used as a basis for a Stoney Brook Watershed Management Plan, and will seek future funding for historic stream channel and wetland restoration. **$264,000**
- Utilized BIA Water Resources funding to supplement the Stoney Brook Watershed hydrologic study. **$33,000**
- Utilized federal §319 money, passed through the Minnesota Pollution Control Agency (MPCA) in a Clean Water Partnership grant, to complete a nonpoint source assessment report and management plan, leading to our current tribal §319 program. **$20,000**
- Used a combination of state (MPCA Clean Water Partnership **$16,330**) and federal (§104(b)(3) grants (**$39,500**) to complete a feasibility study and develop a facility plan for a community wastewater treatment system for Big Lake, in cooperation with non-tribal LGU's.
- Cooperators with the University of Minnesota Duluth on a second National Science Foundation grant to study nutrient cycling in wild rice waters. **$622,936**
- Cooperators with the University of Minnesota on a National Science Foundation "Opportunities for Enhancing Diversity in the Geosciences" grant to study historic conditions on our wild rice lakes, based upon sediment coring data. **$1,500,000** (over 5 years)
- Cooperators with a researcher from the University of Minnesota Water Resources Center on a grant from Minnesota Sea Grant to do a risk-benefits comparison of 'wild' foods (fish, wild rice, ducks, moose) vs. market foods, based upon nutrition, chronic health effects, and contaminant exposure. **$48,000**
- Received a grant from the Administration for Native Americans to develop our ground water protection program, and to bring two critical staff members to the Environmental Program (GIS Specialist and Ground Water Specialist); further funding from EPA enabled us to complete a Source Water Assessment and a Ground Water Protection Plan. **$161,000**
- Successful in securing a Wetland Program Development Grant two years ago, and as a result, were able to collect wetland water quality data to include in our assessments of tribal water resources. **$146,964**

- Successful in securing a competitive §319 grant to implement a lake restoration project, with impairments identified and characterized in our water quality monitoring program. **$47,751**
- Receiving funding from EPA's Great Lake Restoration Initiative Tribal Capacity Grants, for work on LaMP-related activities, and for work within the St. Louis River Area of Concern. **$300,000/5 years**
- Signed a cooperative agreement with the US Forest Service (Superior National Forest) to provide zooplankton analysis for samples they have collected in lakes within ceded territories for monitoring and research purposes **$20,000**
- Completed two reconnaissance surveys with the US Army Corps of Engineers Detroit District Office, to evaluate a perched culvert on Fond du Lac Creek, and to evaluate diminished wild rice on Cedar Lake (**$80,000**); moving into implementation phase (**up to $150,000/year for five years**)

**9/16/13 – Development of Biological and Nutrient Criteria for Fond du Lac Tribal Water Quality Standards Program ($125,000 Contractual);** The Fond du Lac Band of Lake Superior Chippewa has EPA-approved water quality standards (WQS) and seeks to add biological and nutrient criteria for a more comprehensive program.