

04/30/2014 Agenda – Minong Flowage Stakeholders Meeting

Purpose: update on 2014 Minong Flowage activities and develop stakeholder group logistics

- 1:00 p.m. Agenda review and introductions
- Review stakeholder group concept and purpose (Pamela Toshner)*
- 1:15 p.m. Minong Flowage status update (Steve Johnson and county)
- 1:30 p.m. Review 2014 Minong Flowage work plans
- St. Croix Tribe and GLIFWC (reps)
- Washburn County (rep)
- Minong Flowage Association AIS grant (Steve Johnson)
- DNR Lakes local needs project (Pamela Toshner)
- DNR Fisheries plans (rep)
- Any other updates?*
- Are we cooperatively meeting monitoring needs to make future management decisions in regards to wild rice, aquatic invasive species, and fisheries?*
- 2:30 p.m. Future meeting(s) and communication
- Who are we missing?*
- Consider summer stakeholder field tour*
- Schedule quarterly meetings*
- 3:00 p.m. Wrap-up

04/30/2014 Meeting Notes – Minong Flowage Stakeholders' Meeting

Purpose: update on 2014 Minong Flowage activities and develop stakeholder group logistics

Agenda review and introductions

- Attendees: Steve and Jean Johnson and Dan Maxwell (Minong Flowage Association - MFA); Peter David (Great Lakes Indian Fish & Wildlife Commission - GLIFWC); Dave Blumer (Lake Education & Planning Services – LEAPS); Jon Johnson (Washburn County Highway Department); John Skogerboe (Department of Natural Resources - DNR contractor); Frank Dallam, Mark Sundeen, and Pamela Toshner (DNR). Tony Havranek (St. Croix Tribe) updated Peter and Pamela the previous day.
- Review stakeholder group concept and purpose (Toshner): The concept of a stakeholder meeting was suggested going into the 5 Dec 2013 meeting, and there was consensus to move it forward. Along with that the group decided:
 - 2014 would be a study year on the Minong Flowage
 - The stakeholder group would cooperatively work to monitor and then plan for the Flowage
 - The outcome of the management plan is uncertain at this time

There was consensus that the stakeholder group should continue and that improved communication should be a goal.

Review 2014 Minong Flowage work plans

- Minong Flowage Association AIS grant (S. Johnson and Blumer). The Minong Flowage and/or partners received several grants:
 - \$2850 Clean Boats Clean Waters grant coordinated/led by J. Johnson for watercraft inspection at the DNR boat landing
 - \$36,000 Clean Boats Clean Waters grant coordinated by the Town of Minong Lakes Committee for watercraft inspection at 9 town lakes, including the Flowage county park landing
 - \$23,022 Aquatic Invasive Species Education, Prevention & Planning Grant to the MFA for the following activities:
 - Aquatic plant monitoring, including May and August point-intercept surveys, curlyleaf pondweed and Eurasian watermilfoil bed mapping, and volunteer support of wild rice monitoring
 - Lake volume and water movement studies, including:
 - Bathymetric survey.
 - MFA purchasing and using sonar units as match is approved. MFA or Blumer should contact CIBiobase to be sure the base data will be provided so others can edit and use it.*
 - Dye study.

- *DNR funding will be used for dye study so there may be a surplus of grant funds that can be returned to the state or used for another activity, if approved. Flow monitoring/modeling was suggested to calculate retention time.*
 - Aquatic invasive species monitoring and education, including volunteer monitoring, public education, and stakeholder group participation.
 - *The stakeholder group will rotate note-takers and possibly meeting planners. Toshner volunteered to do so for this meeting.*
 - Water quality and quantity monitoring, including expanded water chemistry, lake level, and precipitation.
 - *The grant proposal included expanded water chemistry on 1 rather than 2 sites. DNR approved adding expanded chem using the sonar unit funds, which won't be needed if they are used as match.*
 - Aquatic plant management (APM) plan and general project support. The actual plan is not included in this grant project because it will complete as part of another open grant (ACEI-072-10).
- DNR Lakes local needs project (Toshner). Spooner Lakes staff received \$17,135 internal funding for a Minong Flowage APM Evaluation/Implementation Monitoring Project. The main component of the project is a dye study. Dye would be applied by a certified herbicide applicator to mimic herbicide. Dye is applied at 10 ppb with a detection limit of 0.01 ppb. An equation is used to convert the dye concentration to (theoretical) herbicide concentration. The dye is red and would be visible in the target area. The dye would then be measured to understand concentration exposure times and movement. Toshner estimated costs based on the St. Croix Flowage, Douglas County, dye application proposal; the costs will need to be refined. Skogerboe, formerly with the Army Corps of Engineers, is working with DNR on a contract, and the contract includes his technical assistance with this project.
 - *DNR, MFA, Blumer, and David will conference call to finalize study design, including sample site identification, volume of treatment area and dye, costs, and timing. MFA and Toshner will adjust their budgets accordingly afterwards.*
- DNR Fisheries plans (Terry Margenau via email). Margenau provided the following summary, which Toshner shared:
 - We monitored DO throughout the winter at 2 week intervals. Oxygen levels remained good, never dropping below 5 mg/l.
 - *There was a localized panfish kill in Serenity Bay. These types of fish kills have been common this year because of the long, cold, and snowy winter. While the drawdown may have had an impact, the kill itself was minor relative to fish populations throughout the Flowage.*
 - Our next scheduled fishery survey for the Minong Flowage is 2017.
 - *There is substantial public concern about the state of the fishery post-drawdown, and MFA is requesting the DNR move the survey up to 2015, preferable, or 2016.*

- This is the first year of a new walleye regulation for the Minong Flowage. Walleye of any length may be kept, but only one fish can be over 14 inches. Bag limit will vary depending on spear harvest.
 - *Meeting attendees were surprised about this new reg and will work to get the word out locally because they suspects anglers, too, will be surprised.*
- We are expecting to hire a new fisheries biologist for Washburn/Burnett Counties within the next several weeks.
- St. Croix Tribe and GLIFWC (Havranek via phonecalls and David). This summer GLIFWC, in partnership with Washburn County, will complete initial wild rice ground-truthing to determine if the wild rice population declined. If the initial ground-truthing indicates a healthy population, an aerial survey will be completed in lieu of more detailed mapping. If the ground-truthing survey indicates substantial declines, more detailed mapping will be completed. It is up to the County and GLIFWC to determine wild rice monitoring methods, including survey detail.
- Washburn County (Jon Johnson). The dam is operating and the Flowage is refilled. Johnson will coordinate the dam plan approval-required wild rice monitoring in a portion of the Flowage with GLIFWC (see above).
 - *Toshner to send David and Johnson the 2010 Minong Flowage Wild Rice Mapping Report for consideration of the same methodology should more detailed mapping be required in 2014.*

Are we cooperatively meeting monitoring needs to make future management decisions in regards to wild rice, aquatic invasive species, and fisheries?

- Sundeen asked if anyone had monitored Minong Flowage frost depth, and no one had. Frost depth around the Chippewa Flowage, Sawyer County, where fisheries (?) staff measured it was not deep because of the early, insulating snow.
- S. Johnson expressed concern that understanding wild rice baseline and annual change conditions is fundamental to management planning and implementation, but no one really seems to have a handle on it. David acknowledged it's challenging, in part because there is no standard annual monitoring protocol. Options include aerial surveys, which could potentially be digitized, and field mapping.
 - *The stakeholder group will integrate a wild rice monitoring component, including methodology and potential triggers for changing management, into the APM Plan.*
- Maxwell questioned wild rice requirements for the Smith Bridge reconstruction project, which is outside the monitoring area related to dam plan approval. No one had a handle on this since it's not within attendees' management area or respective agencies.
 - *Wild rice monitoring and management considerations should be comprehensive across the entire Minong Flowage and possibly Cranberry Lake system.*

Future meeting(s) and communication

- Who are we missing? The group discussed stakeholders who should be asked to participate in the future.
 - *Invite reps from the Towns of Wascott and Minong and Cranberry Lake Association*
 - *Follow up with Washburn County Forester Mike Peterson for participation*
 - *Consider inviting Washburn County Land/Water Conservation Coordinator Lisa Burns*
- Stakeholder field tour. We penciled in Wednesday 08/06/2014 for an afternoon field tour of the Flowage and would like to invite additional partners, including tribal, DNR, and/or county leadership.
 - *The group and their partners/leaders should confirm this date works*
- Quarterly meetings. Wednesday afternoons on 10/29/2014 and 01/28/2015 are tentative future meeting dates.
 - *Stakeholders should confirm these dates work*

08/21/2014 Agenda – Minong Flowage Float

Purpose: tour the Minong Flowage and key points of interest while sharing management updates.

1:00 p.m. Meet at Totagatic County Park shelter near boat landing

<https://www.google.com/maps/place/Totagatic+County+Park/@46.13861,-91.9333619,15z/data=!4m2!3m1!1s0x0:0x312eab328c930c8>

Introductions and tour overview

- Boats, life jackets, and refreshments provided, compliments of MFA and DNR

1:15 p.m. Board boats and begin tour

Points of interest/topic with speaker(s)

- Wild rice beds with St. John and/or David(s)
 - Cultural significance
 - 2014 distribution and abundance
- Serenity Bay with MFA reps and Blumer
 - Post-drawdown observations
 - Aquatic plant survey results
- Bay across from campground with Skogerboe and/or Van Egeren and Roberts
 - Herbicide best practices
 - Fisheries update
- Deep hole or dam water quality with Toshner, time permitting

3:30 p.m. Wrap-up and disembark

Attendees:

Great Lakes Indian Fish & Wildlife Commission: Lisa and Peter David

Minong Flowage Association (MFA): Dan Maxwell, Bob Budden, Steve Johnson, and Wayne Johnson with Dave Blumer, Lake Education and Planning Services

St. Croix Tribe: Conrad St. John (Voigt Task Force rep), Chad Songetay, Jeremy Bloomquist, and Cody Mattison

Washburn County: Lisa Burns

Wisconsin DNR: Cherie Hagen, John Skogerboe, Mark Sundeen, Craig Roberts, Pamela Toshner and Scott Van Egeren

Next Meeting: 1-3:00 p.m. Wed 10/29/2014, location to be determined

10/29/2014 Agenda – Minong Flowage Stakeholders' Meeting

Purpose: review 2014 monitoring data and observations

1:00 p.m. Agenda review and introductions

Review stakeholder group concept and purpose (Toshner)

1:15 p.m. Monitoring update round table (laptop and projector will be available)

- Wild rice (David(s) and/or Bloomquist)
 - 2014 distribution and abundance
 - Harvest
- Aquatic plants (MFA and/or Blumer)
 - Aquatic plant survey results
 - Post-drawdown observations
- Dye study results (Skogerboe)
- Fisheries (Roberts)
- Water quality (Toshner)

2:30 p.m. Monitoring results summary (all)

Do we need additional information before delving into management planning?

2:50 p.m. Future meeting(s)

01/28/2015?

3:00 p.m. Wrap-up

10/29/2014 Notes – Minong Flowage Stakeholders' Meeting

Purpose: review 2014 monitoring data and observations

Agenda review and introductions

- Attendees: Frank Dallam, Cherie Hagen, Craig Roberts, John Skogerboe & Pamela Toshner (DNR); Lisa David (GLIFWC); Dave Blumer (LEEPS); Steve Johnson, Wayne Johnson & Dan Maxwell (MFA); Jeremy Bloomquist (St. Croix Tribe); and Lisa Burns (Washburn County). Jon Johnson (Washburn County) replied that he couldn't attend.
- Review stakeholder group concept and purpose (Toshner): The concept of a stakeholder meeting was suggested going into the 5 Dec 2013 meeting, and there was consensus to move it forward. Along with that the group decided:
 - 2014 would be a study year on the Minong Flowage
 - The stakeholder group would cooperatively work to monitor and then plan for the Flowage
 - The outcome of the management plan is uncertain at this time

Monitoring update round table

- Wild rice (David)
 - 2014 distribution and abundance. 2014 was a banner year for Minong Flowage rice. 2008 and 2009 were banner years at a regional scale, and 2014 seems similar.
 - Harvest. Typically 5-6% of the state's harvest is from the Flowage with over 19,000 pounds being harvested from 1992-2012. Processed rice yield is about 50% of the harvest weight. Roberts riced the Flowage and observed many worms. Anecdotally the Minong 2014 harvest was excellent, and the survey results will be in soon.
 - Discussion
 - Matt Berg's detailed report wasn't complete so we weren't sure about the prevalence of brown spot disease. He did observe geese impacts to wild rice in the West Bay beds.
 - The group discussed Cranberry Lake, where no rice has been recently monitored, including Berg's 2014 survey. Maxwell mentioned that a 2011 ricer survey respondent requested Cranberry Lake be seeded. Minong Flowage is making contact with Cranberry Lake folks and considering partnering on managing the whole Minong/Cranberry system. MFA has historically managed up to the Hwy T bridge with Cranberry Flowage (between Cranberry Lake and Minong Flowage) being a "no man's land."
 - Is seeding in north Serenity Bay feasible? Possibly – about 20% of harvest comes from re-seeded waters. Rice abundance is cyclical with 1 great year, 1 failure year, and 2 so-so years. The Seed remains viable in the substrate for

years. The wild rice bed size threshold needed to reduce or overcome geese predation should be determined; this was done in the St. Louis River.

- Does Eurasian watermilfoil (EWM) encroach on wild rice or vice versa? Anecdotally, EWM prevails when competing with wild rice.
- Aquatic plants (Blumer)
 - Aquatic plant survey results. Berg completed a full summer point-intercept survey and fall EWM bed mapping on the Flowage in 2014 – post-drawdown. In general, native plants and EWM both substantially declined. Only visual observations of EWM occurred in August, but by October it had spread in low densities to previously present areas throughout the Flowage. There were 300+ acres of EWM in 2008. Curlyleaf pondweed is sparse.
 - Property owner observations. The general theory is “out of sight, out of mind.” Since most of the EWM is in Serenity Bay and other more isolated locations, it is not a particular concern to Flowage residents at large. The most prevalent feedback was that fishing was good, especially early in the season.
 - Discussion.
 - Was freeze depth or extent of dryness collected during the drawdown? No.
 - What is the phenology of rice vs. EWM? Wild rice is an early successional species that probably came in first, before EWM could establish and expand into the rice immediately post-drawdown.
 - Will winter reduce the EWM population since it established so late in the growing season? No.
- Dye study results (Skogerboe). This is the first time a dye study was conducted before an herbicide treatment in the state, and it is innovative at a national scale. Skogerboe partnered on a similar project took place in a Montana reservoir in 2014.
 - Study design. Bed size replicated the 5 acre minimum bed size for spot treatments. Dye application rate was 10 ppb, and the dye was a non-toxic formulation often used to check for leaks in drinking water lines. The weather was similar, although not totally ideal, with 10 mph NW winds on both days of dye application. Previous studies and the application method show the dye is evenly distributed throughout the water column.
 - Results. The dye did not move into the wild rice beds. Overall, the dye exposure times were too small for effective 2,4-d spot treatments. The range was from 1-2 hours for Area 1 (narrows west of Serenity Bay), although it was treated 4 times because of water moving through it from other treatment areas, to 7-12 hours for Area 6 (south shore of Serenity Bay). The results indicate Diquat, which requires 2-3 hours exposure time, or a bay-wide treatment may be more effective.
- Water quality (Blumer and Toshner). Blumer handed out 2014 water quality data summaries. There were no declines or improvements in post-drawdown water quality. The volunteers need

to enter their secchi data, but Berg measured 3-4 feet secchi depth. This is similar to the recent record.

- Fisheries (Roberts). GLIFWC did a fall walleye survey, and the results will be available in December when the DNR/GLIFWC data exchange occurs. Roberts reviewed previous monitoring data, and the lowest young-of-year (yoy) walleye abundance was 15/mile. This is exceptional. Typically, yoy walleye range from 4-10 inches in size. Roberts intended to revisit the current Flowage regulations after the next DNR survey is completed in 2016.
- Additional discussion items.
 - Property owners observed native mussels died or decreased from the drawdown. Berg did a mussel survey, but the results were not yet available. Turtles also appeared to anecdotally decrease.
 - Washburn County's Jon Johnson indicated he supports initially considering/investigating water level management options for EWM control. Renewable World Energies generates power from the dam so the revenue loss resulting from a drawdown would need to be considered.
 - The 2013 dam reconstruction permit requires 3 years of post-drawdown wild rice monitoring.

Monitoring results summary (all). We didn't have time to discuss and outline a results summary.

Do we need additional information before delving into management planning?

Future meeting(s).

- Wednesday 12/03/2014 1:00-3:00 p.m. at Spooner DNR
- 01/28/2015

12/03/2014 Agenda – Minong Flowage Stakeholders' Meeting

Purpose: develop initial/draft 2015 Minong Flowage aquatic plant management action plan.

1:00 p.m. Agenda review and introductions

Review stakeholder group concept and purpose (Toshner)

Grant update – funds remaining in MFA's open grant (MFA)

1:15 p.m. Review key conclusions from monitoring results meeting

- Wild rice
 - Abundance/distribution and harvest high
- Aquatic plants
 - EWM and native plant community presence and abundance declined initially
 - EWM widely present but sparse by October
- Dye study results
 - Exposure times are too small for effective 2,4-d control of EWM
- Fisheries
 - Fishery is exceptional, and fishing was good post-drawdown
- Water quality
 - No water quality effects from drawdown

Do we need additional information before delving into management planning?

1:45 p.m. Management options – with pros, cons, and uncertainties

- Do nothing
- Manual removal
- Herbicides
- Drawdown

What are thresholds for engaging management or changing methods?

2:50 p.m. Future meeting(s)

01/28/2015

3:00 p.m. Wrap-up

12/03/2014 Notes – Minong Flowage Stakeholders' Meeting

Purpose: develop initial/draft 2015 Minong Flowage aquatic plant management action plan.

Agenda review and introductions

- Attendees: Steve Johnson, Wayne Johnson & Dan Maxwell (Minong Flowage Association - MFA); Lisa David (Great Lakes Indian Fish & Wildlife Commission - GLIFWC); Jeremy Bloomquist (St. Croix Tribe); Dave Blumer (Lake Education & Planning Services – LEAPS); John Skogerboe (Department of Natural Resources - DNR contractor); Frank Dallam, Dan Harrington, Craig Roberts, Pamela Toshner & Scott Van Egeren (by phone) (DNR).
- Review stakeholder group concept and purpose (Toshner): The concept of a stakeholder meeting was suggested going into the 5 Dec 2013 meeting, and there was consensus to move it forward. Along with that the group decided:
 - 2014 would be a study year on the Minong Flowage
 - The stakeholder group would cooperatively work to monitor and then plan for the Flowage
 - The outcome of the management plan is uncertain at this time, *but the purpose of this meeting was to review alternatives and build consensus for 2015 management activities*
- Grant update – funds remaining in MFA's open grant (MFA). Per Jane Malishke:
 - AEPP-431-14 grant award is \$23,022.80; SLOH is \$1,013.78; no payments have been made from this grant yet; expiration date of 12/31/2015.
 - ACEI-072-10 grant award is \$191,720.17; SLOH is \$4,713.10; total payment made as of 04/18/14 \$186,136.12; taking into account that SLOH expenses need to be taken from remaining balance...this grant is all used up (w/ exception of about \$870); expiration date of 12/31/2014.
 - MFA would need to pay out of local funds for 2015 management or apply for a February 1, 2015 ACEI control grant.
 - Since DNR approved the previous APM Plan and this is an update process with DNR at the table to help guide management, the formal Plan approval process would not apply provided the update reflects the group consensus. Public participation would be necessary, though, and it should be documented.

Review key conclusions from monitoring results meeting

- Wild rice (David)
 - Abundance/distribution and harvest high
- Aquatic plants (Blumer)
 - EWM and native plant community presence and abundance declined initially
 - EWM widely present but sparse by October – 10 beds totaling 14 acres
- Dye study results (Skogerboe)