

LOOKING GLASS RIVER INTERCOUNTY DRAIN

DRAINAGE BOARD MEETING

Tuesday October 6, 2015

Clinton County Courthouse
St. Johns, Michigan 48879

PRESENT: Michael Gregg, Michigan Department of Agriculture & Rural Development
Phil Hanses, Clinton County Drain Commissioner
Paul C. Pratt, Ingham County Deputy Drain Commissioner
Tony Newman, Shiawassee County Drain Commissioner
Ken Recker, Livingston County Deputy Drain Commissioner

ALSO PRESENT: Jon Morrison, Clinton County Deputy Drain Commissioner
Jenna Jullie, Shiawassee County Deputy Drain Commissioner
Alan Boyer, LSG Engineers & Surveyors
Michael Woodworth, Woodworth & Associates
Dan Wietecha, Bath Township Superintendent
Rod Taylor, DeWitt Township Manager
Dan Coss, City of DeWitt
Mike Svendsen, DeWitt Township Resident
Gloria Miller, Friends of the Looking Glass

Chairman Gregg called the meeting to order at 9:36 a.m.

MOTION by Pratt to have Clinton County serve as secretary. **SECOND** by Recker. **MOTION CARRIED** unanimously.

Chair Gregg asked for a review of the agenda. Jenna Jullie noted the meeting location as the Clinton County Courthouse rather than Clinton County Drain Office.

MOTION by Hanses to approve the agenda with the noted clarification. **SECOND** by Newman. **MOTION CARRIED** unanimously.

The minutes from the August 27, 2015 meeting were reviewed. Jullie noted the Shiawassee County residents names were misspelled and should be correctly spelled "Vanagen".

MOTION by Hanses to approve the minutes with the noted correction. **SECOND** by Pratt. **MOTION CARRIED** unanimously.

Boyer discussed his maintenance outline that he distributed. Without more direction as to scope of a project he was not able to develop a proposal for services but chose to develop an outline for

maintenance work after speaking with Gloria Miller of Friends of the Looking Glass and John Switzer of the Clinton Conservation District about updates to the 2008 Looking Glass River Watershed Management Plan.

Newman noted that the Watershed Management Plan (WMP) did not address many of the issues the river is facing today. The 2015 WMP update will include acknowledgement of drainage as a use of the river. It will look more at the tributaries to the Looking Glass rather than the river itself. It was noted that implementation funds for the 2008 plan were not approved because the impairments to the river itself were not seen as severe.

Gregg asked Boyer if any field or survey data would be acquired to determine if log jams are truly impeding flows from the tributaries or the river itself. Boyer answered that any surveying would be localized as necessary for a MDEQ permit application. He referenced a similar project on the Maple River for which he prepared a georeferenced photo record of impairments to use for contractor bidding and that no survey work was done. Pratt noted that log jams were removed without surveying on the Red Cedar River however, an engineer did provide scientific justification for their removal.

Mike Svendsen, a district resident asked about tiling of agricultural ground and if that is creating its own problems. Are there any studies? Boyer responded that there are many studies and talked about how soils respond to tiling. Hanses noted that tiling is now mainly used to improve crop yields on existing farm ground and not necessarily to convert unfarmed areas into active farmland. Gregg noted the philosophical change to tiling and nutrient issues from years ago.

Gregg asked Boyer to comment on the issue of dead ash trees. Boyer responded that this would be a contributing factor in the number and size of log jams. The Friends of the Looking Glass has organized volunteers to remove log jams to allow for passage of canoes and kayaks. Miller observed that one downed tree across the river can grow in to a huge log jam if not addressed quickly. This makes it very difficult for volunteers to make progress. Gregg noted that mechanical removal of jams results in additional work for equipment access and dealing with environmental concerns.

Boyer talked about two issues for the board to consider. One is landowner flooding issues that are more immediate in nature and the second being long term use issues for recreation and drainage.

Taylor questioned the interplay between drainage board responsibility and WMP efforts. Does the drainage board have the ability to address other issues in the WMP in addition to providing for the free flow of water? Gregg indicated the need to take action to improve the flow of the river rather than to just talk about it. Boyer added that any plan should be simple so as to avoid stakeholders losing interest. He's observed that many WMP issues simply have no way to finance them which leads to lost interest in recommended actions. Taylor cautioned about "scope creep" where the board is unnecessarily lead to address more than it should. Newman added that concerns from his constituents are more than just farmers with flooded ground and that other uses of property are being affected. Coss is concerned with how work upstream will affect downstream. Pratt noted that with EPA Phase II permitting requirements the board has an obligation to be in line with the WMP and that does not necessarily represent "scope creep".

Boyer also noted that farming “marginal” land can create its own issues. Woodworth pointed out the board’s responsibility to public health, convenience, and welfare and how that concept has changed and grown throughout the years and may be legally consistent with WMP measures.

Miller asked for a simple answer as to why flooding was occurring. Gregg and Boyer responded that there is no simple answer and that there are many factors that likely contribute to the flooding.

Gregg noted that the last meeting the Board approved submittal of pre-application for an Aquatic Habitat Restoration Grant. He has since received word that we were not accepted to move forward with an application. He went on to note the likely value of further efforts by the drainage board to receive future grant funding.

Newman stated that by removing log jams the same amount of water will still flow downstream but it will get there faster. Hanses noted a recent call from a downstream landowner concerned with higher flood levels experienced this year. Hanses stated that the extent of the problem is not known yet and some effort should be made to determine that.

Gregg spoke of the existing easements through Shiawassee County and just in to Clinton County. Newman noted the concept of prescriptive easement. Miller stated the Friends of the Looking Glass have not had problems with landowners when seeking access for volunteers to remove log jams. Coss added that may change when they get assessed for the work by the district.

Gregg asked Boyer if a 10-mile stretch could be prioritized for work based on his maintenance outline and where that area would be. Boyer indicated the need to define a maintenance reach which may not be contiguous, inventory that reach or reaches, and defining a scope of work in order to prepare an estimate. Work areas could then be prioritized considering the \$5,000 per mile maintenance spending limit. A meeting with MDEQ staff to layout environmental considerations is advised. Boyer offered that engineering costs could be \$2,500 per mile more or less for an approximate project length of 10 miles. He also indicated the need to consider the Looking Glass as a resource particularly as it relates to recreational use.

Taylor asked about the apportionment because at the last meeting that was left unsettled. Board discussion ensued. The board is not in a position to make that determination today but the sense was that an apportionment would likely be based on land area in the district with other factors considered. There is MDOT and railroad property in the district which would be figured separately from county apportionments.

MOTION by Newman to accept the maintenance proposal as submitted by LSG Engineers & Surveyors with project areas to be determined after consultation with the Clinton and Shiawassee County Drain Commissioners. The amount for engineering not to exceed \$25,000 without prior authorization. **SECOND** by Hanses. **MOTION CARRIED** unanimously.

A district boundary will still need to be finalized by using the 1944 district boundary as a basis for revision. Pratt recommended identifying the district and then holding a hearing in accordance with Section 197 of the Drain Code. Boyer was directed to prepare a proposal to identify the district boundary for further consideration by the Board.

MOTION by Hanses to approve the district treasurer's invoices to each county in the amount of \$5,969.21. SECOND by Newman. MOTION CARRIED unanimously.

Financing of future expenses will be discussed at the next meeting which will be in December following receipt of Boyer correspondence.

There was no old/new business or additional public comment.

MOTION to adjourn by Recker. SECOND by Newman. MOTION CARRIED unanimously.

Meeting adjourned at 12:06 p.m.

Respectfully submitted,

A handwritten signature in blue ink that reads "Phil Hanses". The signature is written in a cursive style with a large initial "P".

Phil Hanses, Secretary

AGENDA

Looking Glass River Intercounty Drain Drainage Board Clinton, Ingham, Livingston, and Shiawassee Counties

9:30 a.m., Tuesday, October 6, 2015

**Clinton County Drain Office
100 East State Street Suite 2300
St. Johns, Michigan**

1. Call the meeting to order and introduce Board Members

Board Members

**Michael Gregg, Chair, Michigan Department of Agriculture & Rural Development
Phil Hanses, Clinton County Drain Commissioner
Patrick Lindemann, Ingham County Drain Commissioner
Brian Jonckheere, Livingston County Drain Commissioner
Anthony Newman, Shiawassee County Drain Commissioner**

2. Motion to elect a secretary
3. Review and approve the agenda
4. Review and approve the August 27, 2015 meeting minutes
5. Discuss log jam removal and take appropriate action
6. Receive a proposal from LSG to develop a maintenance work plan and take appropriate action
7. Authorize the payment of all properly presented invoices, drain orders, and vouchers
8. Discuss old/new business
9. Receive public comment
10. Set the date, time, and location of the next meeting
11. Adjourn

PLEASE SIGN IN

LOOKING GLASS RIVER INTERCOUNTY MEETING
OCTOBER 6, 2015 @ 9:30 A.M.

NAME	REPRESENTING / Address
Phil Hanson	Clinton County Drain Commissioner
Alan Boyer	LSG Engrs & Surv.
MICHAEL SUIENOSIEN	2125 W. CLARK RD DEWITT
KEN RECKAL	LIVINGSTON CO. DRIN / 2300 E. GRAND RD STE 105, HOWELL
Mike Woodworth	Woodworth & Assoc. E LANSING MI
Tony Newman	S&D C
Paul C. Pratt	Ingham County
Michael R Gregg	MOARD
Jenna Jalli	Shia
Jon Morrison	Clinton Co. Den Com's OFFICE
Gloria Miller	Friends of the Looking Glass Rcr
Dan Wietecha	Bath Township
Rod Taylor	Dewitt Twp
Daniel Cass	City of Dewitt - dcass@dewittmi.org
MILIE SUIENOSIEN	M.SUIENOSIEN @ FRONTIER.COM

October 5, 2015

Looking Glass River Intercounty Drain Drainage Board

Mr. Michael Gregg, Chair
MDARD – Environmental Stewardship Division
525 West Allegan Street
PO Box 30017
Lansing, MI 48909

Mr. Phil Hanses, Member
Clinton County Drain Commissioner
100 E. State Street, Suite 2300
St. Johns, MI 48879

Ms. Carla Clos, Member
Deputy Ingham County Drain Commissioner
707 Buhl Street, PO Box 220
Mason, MI 48854

Mr. Tony Newman, Member
Shiawassee County Drain Commissioner
149 Corunna Ave. L-1
Corunna, MI 48817

Mr. Ken Recker, Member
Deputy Livingston County Drain Commissioner
2300 E. Grand River, Suite 105
Howell, MI 48843

Re: Looking Glass River Intercounty Drain
Clinton, Ingham, Livingston and Shiawassee Counties, MI

Dear Mr. Gregg & Board Members:

At the Board's request, LSG has prepared a maintenance outline for the Looking Glass River Intercounty Drain. This outline is based on similar maintenance projects on the Corcoran and Maple River Intercounty Drains.

1. Identify the maintenance reach of the Looking Glass River IC Drain
 - a. Clinton County
 - b. Shiawassee County
2. Inventory the maintenance reach
 - a. walking/kayaking the channel
 - b. compile a photo record
 - i. log jams
 - ii. obstructions
 - iii. erosion sites
3. Identify the maintenance scope of work, such as
 - a. repair erosion areas, or
 - b. no excavation or dredging
 - c. construction mats use necessary for heavy equipment on unstable soils

- d. selective clearing/tree removal
4. Prepare an estimate based on the maintenance reach and inventory
 - a. Basis of estimate - previously bid similar work on the Corcoran and Maple River Intercounty Drains.
5. Prepare a detailed plan for the maintenance work
 - a. plan may include a multi-year schedule to spread the cost based on the statutory limit of \$5,000 per maintenance mile per year
 - b. prioritize the work based on immediate need
6. Confirm the existing drain right-of-way
 - a. width
 - b. location
7. Conduct a pre-application meeting with MDEQ staff to review the scope of work, environmental concerns and possible permit requirements.
8. If necessary, prepare and submit an MDEQ Joint Permit Application
9. Prepare a notification list of landowners along the maintenance reach
10. If warranted, meet with landowners and other stakeholders regarding the maintenance scope of work
11. Prepare bid documents and bid the project.
12. Adjust the annual scope(s) of work and maintenance reaches based on the bid totals.
13. If necessary, construction and/or SESC inspections during the course of the maintenance work will be performed by an inspector certified by the MDEQ to perform such inspections.

To give some idea of the cost to identify and prepare the maintenance plans, we have prepared the following estimated breakdown of a hypothetical ten mile maintenance reach.

Principal In Charge	25 hrs @ \$150 per hour	\$ 3,750
Senior Engineer	40 hrs @ \$120 per hour	\$ 7,200
<u>Designer/Surveyor/Field Staff</u>	<u>160 hrs @ \$85 per hour</u>	<u>\$13,600</u>
Estimated Subtotal		\$24,550

Estimate is approximately \$2,500 per mile for a ten mile maintenance reach.

This is by no means comprehensive and these fees do not include environmental consulting services that may be requested/required by MDEQ, or others, based on the findings of the drain inventory. However; these engineering costs are somewhat consistent with what we have seen on other similar projects.

This outline is presented as one approach to address the immediate issue of log jams, etc. restricting the drainage capacity of the river. However; it should be acknowledged that the Looking Glass River Intercounty Drain is more than a drain. It is a resource in the form of a biological and aquatic habitat, a warm water fishery, and a seasonal migratory pathway. It is also a recreational feature providing canoeing, kayaking, fishing and swimming opportunities (partial and full body water contact activities).

This more overall view of the Looking Glass River as a system could be viewed as a three legged stool. With any one leg missing the stool is unstable. With all three present AND accounted for the stool is stable.

A maintenance outline incorporating the three legged approach may look similar to the draft maintenance outline listed above but would include participation, input and cooperation of a variety of stakeholders. For example:

- the Friends of the Looking Glass River LogJamboree can be an opportunity to inventory and/or remove some or all of the log jams, not only to provide for open navigation but improved drain maintenance;
- the efforts of the Intercounty Drainage Board and each Drain Commissioner can be an opportunity to fulfill a number of the Project Goals cited in the February 2008 Watershed Management Plan (attached) and currently under revision; and,
- the revised Watershed Management Plan can be used by the Drainage Board as a tool to guide future maintenance.

A maintenance plan incorporating the three legged stool idea would undoubtedly take a long term approach and require a long term effort, more than can be addressed here.

We look forward to the opportunity of continuing our work with the Board. If you have any questions regarding this correspondence, please feel free to contact me.

Sincerely,

A handwritten signature in dark ink, appearing to read "Alan D. Boyer". The signature is stylized with a large loop at the beginning and a long horizontal stroke extending to the right.

Alan D. Boyer, PE
Vice President

attachments

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Project Goals

It may truthfully be said, "As go the headwaters, so goes the watershed." If pollutants or physical changes are introduced at the source waters of a watershed, the entire watershed will be affected. Changes to water may be of two basic types—qualitative changes that affect the chemical or biological quality, and quantitative changes that affect flow patterns and/or volume. While natural occurrences such as wind and flood may be responsible for changes in water quality and quantity, by far the most common cause is interference by humans. It is therefore very important to identify and understand the types of human activities—and their possible consequences—that may affect the upper Looking Glass River, if we desire to protect the river for the future. The primary goals of this project were as follows:

- **Delineate upper watershed boundaries and surface waters** (drainage district, route & course)
- **Identify existing and desired uses of the watershed and what must be done for its protection** (identified as a part of the apportionment process, development & design standards)
- **Provide new tools to local governments and residents to encourage better land use decisions** (development & design standards)
- Encourage and facilitate interagency and intergovernmental cooperation in addressing land use issues and **public investments** of more than local concern
- Establish clear links and specific targets for enhancing/protecting the watershed
- Enhance land and habitat protection
- **Identify and document current sources of water quality impairments and all sites that contribute to the source**
- **Identify future water quality impacts based on a build-out analysis of local townships** (development & design standards)
- **Prioritize pollution sources and identification of remedies, including model ordinances** (development & design standards)
- Inventory wetlands
- **Inventory the stream corridor to prioritize restoration of areas of eroding stream banks and excessive sedimentation**
- **Use findings of the inventory to adopt county and/or local ordinances to support protection and development standards**
- **Identify structural and managerial best practices targeting control of pollution sources**
- **Develop guidelines and recommendations for implementation of remedies**
- Develop a process for evaluation efforts

Direct connection with the responsibilities of the Looking Glass River Intercounty Drain Drainage Board as they relate to maintenance and petition projects.

Indirect connection with the responsibilities of the Looking Glass River Intercounty Drain Drainage Board and/or each of the County Drain Commissioners.