



FAX 810-231-4295
PHONE 810-231-1000
www.hamburg.mi.us

P.O. Box 157
10405 Merrill Road
Hamburg, Michigan 48139

A GREAT PLACE TO GROW

**FLOOD HAZARD PREVENTION COMMITTEE
MEETING NOTES
(FORMERLY THE HAZARD MITIGATION COMMITTEE)**

**Monday, April 18, 2005
7:00 p.m.
Huron Meeting Room
Hamburg Township Hall**

The following are notes taken by Brenda Richardson, Hamburg Township Information Specialist.

Attendees: Mike Bitondo, Chairman (Hamburg Township Trustee and member of HERB - 2020 Darwin), Ken Recker (Livingston County Deputy Drain Commissioner), Danny Costello (Meteorologist/Weather Forecaster, National Weather Service), Brenda Richardson (Hamburg Township Information Specialist), Floyd Phillips (Hamburg Director of Water Quality Testing Program/HERB - 9535 Crestline Dr.), Art Stauch (Washtenaw County Drain Commission - Portage Dam Operator), Carol Lybarger (8364 Riverside Dr.), Diane Henry (8024 Beach Rd.), Richard Hicke (8746 Riverside Dr.), Dave Mioduszewski (8938 Branch Drive), Bill Anderson (8802 Riverside Dr.), Richard Hicke (8746 Riverside Dr.), Bill Anderson (8802 Riverside Dr.), Wayne Clinger, Bob Demyanovich, David Spielman, Bill Hahn and Bill Tupper (Portage-Base-Whitewood Association); Scott Cesarz and Walter Bolt (Mannik & Smith Civil Engineers).

Proposed Agenda

1. Stop logs on the Portage Dam - Art Stauch
2. Cindy Pine and Bill Hahn to report on funding for modeling and meeting with Joe Hune
3. Follow up: Log and debris removal needs to be handled in such a way that we can do things legally and not get into trouble with DNR.
4. Identifying the various specific weed areas that would have to be harvested.
5. Identifying funding for the weed harvesting
6. Lining up a company to do the weed harvesting on some kind of lead time notice, and for how much money.
7. The launch area: whether the water is high or low.
8. Measuring devices: Danny Costello will talk to Steve Blumer.
9. Meeting with Dr. Wally Fusilier - David Mioduszewski
10. Determine how to measure Brighton WWTP water contributions to the Huron River
11. Make chart for agenda items. Identify time frame and limit.
12. Date and time of next meeting.

Committee Chairman Mike Bitondo opened the meeting for business at 7:09 p.m., introducing newcomers to tonight's meeting.

1. Stop logs on the Portage Dam - Art Stauch

Art Stauch is the Portage Dam operator under the direction of the office of the Washtenaw County Drain Commissioner. He provided the following information regarding the dam and its operations.

- The Portage Dam levels are lowered some 12-15 inches in winter.
- The legal lake level for Portage Lake is 851.54 feet above sea level for the summer level. It is set pursuant to a court order regulating the level.
- Art has seen many changes in the water flow over the past 7 years that he has been operating the dam. He is the 4th operator of the dam since 1964. Art has noticed increased streamflow in the winter time. There are times after the stop logs are put in that the water flows over the stop logs in the winter.
- There are 5 gates in the Portage Dam. Art used to put winter stop logs on 4 of the gates during the winter, keeping only 1 gate open. Lately, he has been using stop logs on 3 gates instead of 4 gates, leaving 2 gates open. He has been needed 2 gates open to control the water, where he used to need only 1 gate open to control the water flow. In March, 2005 there was a period when he had 2 gates completely wide open. He has seen a huge increase in waterflow coming down the river in recent years.
- Art is an avid fisherman. He has noticed a lot of weed growth around the dam recently. The past summers, weeds have choked the dam area.
- When the Portage Dam was constructed, the channel area between Portage Lake and Base Line Lake was dredged. The dam was to control the lake levels.
- He has seen offsets in water levels between Portage Lake, Base Line Lake and Whitewood Lake. He has seen that Base Line Lake and its levels are 1-1/2 inch to 2 inches different between his house at the dam and the lake. He attributes the changes to weed growth and sedimentation.
- Last May (2004) when it was flooding, Art took the dam down so far that the Portage Lake waterfront property owners couldn't get their boats off their lifts. Art had lowered the gate levels in the Portage Dam 5 to 7 inches below the legal limits.
- There are 2 canals that drain into Portage Lake. Sometimes the canals flow into the lake; other times they flow out of the lake.
- It is difficult to gauge just how much to raise or lower the gates to get control of waters upstream due to the delayed effects because of distance from the Portage Dam and upstream areas around Ore Lake. It takes approximately 3 to 4 days for actions taken at Portage Dam to have much of an effect upstream.
- There is coordination with Kent Lake dam operators during the raising and lowering of Portage Dam levels in the spring. The coordination occurs during a 2 - 3 week period. It is quite a "balancing act" to balance out concerns of both upstream and downstream interests. Levels have to be raised/lowered slowly, and the concerns of property owners both below and above the dam have to be considered. Ecological concerns as well as the court-ordered lake levels have to be taken into account.
- During the May-June, 2004 flooding, there was significant coordination between a group of people watching and managing the dams. The group included Hamburg Township staff from several departments, Livingston County Drain Commission staff, 9-1-1 Central Dispatch emergency staff, National Weather Service staff, and USGS Staff.
- Some photos taken by Ken Recker of the dam were passed around for the committee members to view. Bill Hahn said he had watched the stop logs on the gates getting

taken out. He felt it would be good to have more gages to have a better feel of what was happening in terms of collecting accurate data. Art Stauch said more flow gages were needed. Danny Costello noted the old gage was taken down when the old bridge was taken down.

- Mike Bitondo asked Art Stauch about whether the gate operations were mechanical and automatic, or manual. Art stated that automatic gate operations were tried for a while, but it was found that operating the gates manually was better. There is a learning process that has been involved in effective manipulation of the gates for different situations. There are no flow gates either directly above or below the Portage Dam. Art does not totally rely on the Hamburg USGS stream gage data. He also uses other variables to the water flow. Danny Costello said that on the USGS web page, the data just shows the last gage readings and the shift applied to the rating. Danny wondered whether the design documents for the dam showed any data describing what the expected streamflows would be.

2. Cindy Pine and Bill Hahn to report on funding for modeling and meeting with Joe Hune.

No information was reported on this item.

4. Identifying the various specific weed areas that would have to be harvested.

Bob Demyanovich said there are records of the gages in Lansing and the Dam Safety website of the State of Michigan has some data. He felt we most likely will need all the dam data for the watershed to start trying to determine what is going on. Eutricification can have effects on streamflow, but there are ways to deal with eutricification. He felt Danny Costello's chart which had been passed out plotting the shift departure from stage-discharge rating from 1990 to 2005 is very good on the loading. When the water is a lot cleaner, it is lower. He felt what needs to be done is analysis in preparation prior to the flow and to obtain measurements now. The existing calculations are based on storage. A problem with allowing holding ponds in developments is that the pond's contents will be released at the worst possible times into the watershed.

Danny Costello reviewed the chart handout in more depth. Already this year (2005) conditions are showing a .2 of a foot negative shift. There has been no rain in the past month. Last year (2004) conditions were a bit warmer. This year, the shift is starting already. If things continue, the shift will continue. Things depend on how much rain we get in April, May and June. Back in the 1990s, May-June was a period of weed growth. Last year and this year, the shift is not normal. We might get a little rain tomorrow. The bad news is that the conditions we presently have contribute to increased weed growth. Art Stauch confirmed that he is seeing changes in weed growth in the Portage Dam area also, but he could not tell just how much weed growth has increased since the original dredging of the canal when the dam was constructed.

Dave Mioduszewski reported that yesterday, on Sunday, April 3, 2005, he had conducted an inspection of the Huron River from his boat. He determined that for a distance of about 2,000 feet downstream of the Hamburg Road Bridge, there is a weed mat approximately 6 to 8 inches in height. The mat reaches from shore to shore with between 80%-90% coverage. The water is flowing through one section. He brought in samples of the weeds (by looking in a plant identification guide, it was determined that the weeds were clasping leaf pondweeds). He also noted many cases of logs along the river in that area (approximately 25 cases of logs 5 to 8 feet

long, 10 cases of logs 10-12 feet long and 25 or so more logs that are partially blocking the river). He offered to obtain GPS coordinate data to pinpoint the location of the weed mat. He stated that past the 2,000 foot area, there were no weeds. He wondered about the effects that the heavy humus swamp section might be having with its mucky bottom, and felt that it was a possible sedimentation deposit. Past that area, the water clears out.

Bob Demyanovich said that all needs to be cleaned out -- all those lowland trees that are dying and falling into the river. North of Ore Lake, the stream is very fast with excessive erosion and trees are falling in on the inlet. Some historical data from the dams needs to be constructed.

Danny Costello noted that last year, his inspections of the Buck Lake area bend in the Huron River revealed no weeds at that location.

3. Follow up: Log and debris removal needs to be handled in such a way that we can do things legally and not get into trouble with DNR.

A discussion followed as to how to go about clearing the Huron River of the log debris.

Bill Hahn was for getting some volunteers to clear out the blocked areas and getting someone to lead the charge to get rid of the debris and felt starting now would give us a head start on the spring flooding season.

Bob Demyanovich was for just dragging the debris out to the side to get it out of the middle of the river to relieve the congestion. Once an Ore Lake association is established, some fund raising can be done, selling t-shirts or whatever, to help raise money. There are already sewers around the lakes, so that's a good thing. He wanted to attend the next Portage Base association meeting and learn about their charter, etc. to help the Ore Lake association get organized.

Diane Henry mentioned that the area of flooding was not just Ore Lake but sections of the Huron River, and the association would probably need to include homeowners in that area as well.

Mike Bitondo stated that we needed to follow the appropriate permit process and obtain homeowner permissions, etc. It would be good to have some sort of association to obtain the permit, because MDEQ is going to want to have someone to work with on the permit. The process can't be speeded up. We can get the permit, but not this year, not by May, 2005. We can start the process and probably have the permit for next year (2006). As an MDEQ employee, he could not "speed up" or somehow skip steps to circumvent or "push through" the permit process -- only help with the process. However, Mike will need some help in preparing the permit application, because his time is limited and there is a lot of work needed to help identify what needs to be removed from the river.

David Spielman said that Tony Randazzo of Hamburg Township has some of the GIS resources to assemble permit information for parcels with tax ID codes and homeowner address information.

Brenda Richardson said that the assembling of GIS parcel information and addresses was the easiest part of the permit process. The real work is in the analysis of the work to be done. She talked about the Hazard Mitigation Workshop held by Livingston County Planning Department earlier that day, and how Bill Wagoner had said during the workshop how flooding mitigation is one part of the overall hazard mitigation planning for the township. Planning for flooding mitigation has a lot of overlap with planning for mitigation of other kinds of hazards.

Incorporating flood hazard mitigation into our comprehensive township planning documents will help us to be eligible for federal monies for mitigation. We are not going to be able to do very much in the short term but we should try to do what we can. There is a need to work on planning as well, as the County Planning Department had suggested, to help obtain the funds for the analysis work that needs to be done. If we want to get any money at all, we have to do that planning work.

David Spielman noted MDEQ had restrictions on what kind of debris and how much of it was allowed to be removed from the river -- MDEQ would not allow roots to be pulled out; in some cases, a tree could be cut off above the roots. With weed mats, they would need to be "anchored" out of the way somehow, and metal cables to secure the mats are not permitted.

Bill Hahn asked whether somebody from Ore Lake would volunteer to work with Mike Bitondo so we could begin to eliminate the debris.

Bob Demyanovich felt it was Livingston County's responsibility to take the lead the way counties in other places do, and that county equipment should be used for the clearing. A lot of the hazard mitigation planning work was the government's responsibility. That's all township planning. The problem is that there are number of communities allowing permitting of development without any idea of what is going on in the watershed. But it's a federal watershed. If you have enough representation with enough coverage on television so that it is good for politics to come in and change things, then something will get done. You can study yourself to death and not get anything done. So you have to stay focused to get anything done. State and federal officials that have assets they can bring into play to get things done. He had hoped that some of the representatives would have attended the meeting tonight, because they are already in Lansing almost everyday and they could obtain the information needed, instead of someone from the committee having to take off of work and go to review or obtain the needed information. He felt things would work a lot more quickly that way.

Mike Bitondo tried to summarize the discussion by stating it appeared that we need to be working in 2 directions at one time: in the short term, try to identify specific things and try to take care of it. Right now, the committee is working on short term items. The process we started today with the Hazard Mitigation workshop was what we originally started with and the committee had decided to shift our focus to what we can do in the short term. His hope is that once we deal with the short term things over the next few months we could deal with more a permanent committee that could deal with all types of hazards and the long term solutions. For now, maybe we're going to be spinning our wheels looking at some of these short term things.

Bill Hahn felt we had discussed the two issues of debris removal and removing weeds over the past couple meetings and were re-hashing it. Now tonight he was hearing it could take a year to get a permit to remove the debris. If that's the facts, and we can't do anything, or if nobody wants to do anything, maybe we should stop talking about it and stop worrying about it, if that's the consensus. Maybe if a permit could take a year to get, we should move the permit from the short term to the long term list.

Mike Bitondo said we still need to initiate the permit process.

There was a lengthy discussion on the issue of what kinds of log jams/debris can be removed without a permit. If something was floating, could it be removed. Or if part of log was embedded in the stream bed and part was obstructing above the stream bed, could the whole log be removed, or only a part, or what? What requires a permit? What does not require a

permit?

Wayne Clinger said Mike Bitondo was the one in the whole group that wants the long term things, but that about 80% of the group wants something done short term, and every time we come you, you say it's going to take a year. We're looking to you to get us some action quick instead of long term.

Mike Bitondo said he can't do that - he can't override state law.

The question was asked whether there were any emergency provisions for log and debris removal. There is one log near a bridge that is in the way and appears to be acting like a "dam." Bill Hahn said he had been through this type of situation a number of times near his cottage on the river up on Strawberry Lake where logs obstructed the boat area, and he simply got the chain saw out, cut up the log and moved it up on the shore out of the way. He felt the solution was simple and that we should "just get on with it." Bob Demyanovich said near the Lakeland Trail bridge on the Huron River there were at least 3 or 4 logs creating a dam, and whoever was responsible for allowing them to fall in the river should have the responsibility for getting them out.

Mike Bitondo said if a log is impeding boat traffic (navigation), then it can be removed. But as far as the wholesale going up and down the shoreline and cleaning out things --that action needs a permit. Removing debris from the river was not as simple as it might seem. The debris channels the water and carries sediment downstream. If the weed mat was removed, the sediment would precipitate out of the water more quickly, causing the river to spread out and worsen flooding problems.

Bill Tupper said Portage Base Association had to get permits cleaning out their part of the river near Whitewood where they were clearing out some embedded items. They got into trouble with MDEQ/MDNR over removing the embedded items, but the top floating debris can be moved over to the side out of the way without a permit. The State wanted them to create more fish habitats. The association had to go back and create more fish habitats and that made the State happy.

Bill Hahn said maybe the long term things could be defined as things needing a permit and short term things could be the floating items that could be removed. Maybe some volunteers could be assembled to remove the floating debris in the short term so next meeting we could report on who is heading this up. Mike Bitondo said that Bill Anderson (who was absent at this meeting) had been working on volunteers. A sign-up sheet for volunteers was passed around the group for those willing to work on clean ups.

5. Identifying funding for the weed harvesting.

Bill Tupper said Portage Base Association had hired a contractor to get the permits and do their work.

Mike Bitondo said that a stumbling block in itself is that there is no association for the Ore Lake/Little Ore Lake/Huron River area that was the flooded area that could provide the funding to hire a contractor to do the work the way the Portage Base Association had hired a contractor.

Ken Recker, Deputy Drain Commissioner for Livingston County Drain Commission, said using

county equipment to do river dredging work is outside the scope of authority that the Commission is charged with. The Huron River is not a drainage system. The county has no maintenance easements over the Huron River. The county can offer expertise from its staff, but cannot offer the use of equipment. Natural stream regulations govern how equipment can be used in the river, and the Drain Commission has to abide by the regulations.

Bob Demyanovich contended that since the Huron River already had a number of dams on it, the situation was probably beyond the "natural river" situation.

Ken Recker agreed, and said that probably today, such dams would not be permitted to be constructed, and that the dams have fundamentally changed the behavior of the river. Dams help in a moderate way in a small sense, but the real purpose of the dams is more recreational in nature rather than to serve a flood control purpose.

Art Stauch agreed that the dams have changed the flow of the run of the river, and that everything has changed since the construction of the Kent Lake Dam and the Portage Dam. However, the things he is seeing are because of the distance between the dams are more of changes in the river structure and weeds. At the Portage Dam, he is trying to let more water go through to affect levels, but the effort is not resulting in much of an effect in the change of levels.

Bill Tupper said that the Portage Base Lake Association has been studying this problem. What they have found is that the Portage Lake area receives about 1 gallon of waterfall where we get 4 gallons. The problem of draining the Portage Lake/Little Portage Lake area is that the dam is really ineffective. The Association has been looking at installing gates at the McGregor Bridge area where more control could be achieved.

Scott Cesarz offered to help Mike Bitondo with the permit process.

6. Lining up a company to do the weed harvesting on some kind of lead time notice, and for how much money.

This item was not discussed during the meeting.

7. The launch area: whether the water is high or low.

Floyd Phillips said that Chuck Menzies had offered to take people on a trip on the Huron River as soon as the water levels allowed his pontoon boat to navigate the river. Menzies had taken HERB and Planning Commission members a couple times in years past to observe what construction and development was taking place along the river shoreline and observe what kind of hindrances are upstream from the M-36 bridge over the Huron River upstream as far as beyond Ore Lake.

Mike Bitondo noted that Dave Mioduszewski had already done some inspection work. Mioduszewski said he would be able to go back and obtain GPS coordinates for the weed mat if necessary.

Diane Henry wondered about the effects of fertilizers on weed growth and what was being done to keep fertilizers out of the water. Brenda Richardson briefly outlined the Township's existing fertilizer ordinance provisions and how companies had to get a permit to spread fertilizer according to Township ordinance requirements every year.

Henry wondered how individual homeowners could be informed of which fertilizers to use. The problem is hardware stores selling fertilizers in Hamburg Township carried the appropriate kinds of fertilizers, but there was no way to prohibit someone from shopping at a hardware store outside of the Township, bringing back a fertilizer brand not recommended under the fertilizer ordinance, and applying the fertilizer in non-compliance with the ordinance.

Floyd Phillips said the HERB was attempting to educate the people through the fertilizer ordinance. It was suggested that the media be used to stress to homeowners that one cause of flooding is weed growth, and that improper application of fertilizers contributes to excessive weed growth.

Diane Henry expressed concerns about the upstream communities where fertilizers come down the river to our area, and the needs of educating consumers in those communities about fertilizer use.

Brenda Richardson said that to date, no one has been able to identify the individual who was supposed to be working on chemicals and weed growth as a research project through Eastern Michigan University. Some e-mails had been sent out, but no response received yet. Mike Bitondo said Wally Fusilier did not know of anyone doing that type of research.

Mike Bitondo noted that Bill Terlecki (who was absent from tonight's meeting) had been going to find out about a launch area and contact a weed control/harvesting company. Bill Hahn said he thought we were looking for a company to be on call who could come out and relieve the immediate restriction. Mike Bitondo had found a company (Aquacide Company, 1627 9th Street, P.O. Box 10748, White Bear Lake, MN 55110-0748 (800-328-9350 - Order Line)), and passed the information on to Bill Terlecki. We have to apply for a permit from DEQ and find out levels of chemicals needed, and how to apply the chemicals in the river as opposed to a lake. The chemicals might have to be applied upstream to float downstream to our area and have any effect.

Danny Costello said we would need to find out if the weeds were cut once, how fast would they grow back? Would they have to be cut multiple times during the summer?

Dave Mioduszewski said weed harvesting with a cutter would be nice, but the weed mat he observed in the river had boulders and rocks in it. He questioned whether cutting equipment would be able to handle an area with boulders and rocks in it. The area was different than a lake shore area might be. Mike Bitondo said the weed harvesting company needed at least two feet clear depth to operate their cutting equipment, and they have to operate above any debris.

Bill Tupper said one way to handle weed removal in debris/rock areas was to have a line of several people working to pull the weeds by hand. This method, while labor intensive, circumvents the need for chemicals or cutting equipment that require certain unobstructed water depths to operate.

Mike Bitondo can follow up with the Aquacide and herbicides in the river. Scott Cesarz said that getting permits for herbiciding for weeds in lakes is one thing, but his contacts at MDEQ could not recall issuing permits for herbiciding for weeds in a river. Cesarz felt the best way was probably mechanical cutting as opposed to chemical control.

8. Measuring Devices: Danny Costello will talk to Steve Blumer.

Danny Costello asked Steve Blumer if they could check downstream to see if there was any backwater. Blumer said they would do two, maybe 3 measurements per month to keep a record. If any weeds are harvested, their staff would like to take measurements before anything was done to the channel, and then afterwards, to see how much the channel was really opened up.

9. Meeting with Dr. Wally Fusilier - David Mioduszewski

Dave Mioduszewski said he had spoken with Dr. Wally Fusilier and he hadn't done any weed surveys on trends.

Dave Spielman said Portage Base Lake Association had someone who had done surveys two years in a row in the Portage Lake/Base Lake area. The Lake Association had received copies of the reports. Dave will get copies for the committee. Bill Tupper said that the reports had recommended a chemical kill of the weeds.

10. Determine how to measure Brighton WWTP water contributions to the Huron River

Mike Bitondo passed out a sheet of paper showing 2 tables of information on WWTP discharges upstream of Strawberry Lake.

The first table was titled "Current Permit Limits and Waste Load Allocations for Facilities Discharging Upstream of Strawberry Lake," and the second table was entitled "Recent Actual Phosphorus Data for Facilities Discharging upstream of Strawberry Lake." He helped the group to analyze the table information.

Bitondo says that the average flow on the Huron River is 150 cubic feet/second. During flooding the flow was up around 700 cubic feet/second. The total flow from all the plants is very, very small -- approximately 11 cubic feet/second. He did not do any studies on nutrient contributions.

The Hamburg WWTP is a groundwater discharge plant. Mike did not look at any groundwater discharges.

There was a discussion regarding the effects of holding water at Portage Dam back and its effects upstream.

11. Make Chart for agenda items. Identify time frame and limit.

Bill Anderson is going to work on short term log removal.

Bill Terlecki on the weeds.

Dave Spielman would supply weed survey from the Portage Base Lakes Association.

Mike Bitondo will work with Scott Cesarz on longer term debris removal.

Cindy Pine and Bill Hahn will report on funding and meeting with Joe Hune. They hope to meet with Joe Hune this week.

Bob Demyanovich will work on the Ore Lake Area Association. Bill Hahn invited him to attend the Portage Base Lakes Association meeting at Bill Tupper's home on Durston Road.

Mike Bitondo adjourned the meeting at 8:47 p.m.

12. Next Meeting Date and Time

The next meeting will be held on Monday, May 2, 2005 at 7:00 p.m. in the Hamburg Township Hall Board Room.