

Little Manistee River Watershed Steering Committee
January 23, 2018
Elk Township Hall, Irons, Mi 49644

Meeting opened at 3:00 p.m. by Armas Soorus.

Present: Armas Soorus-LMWRSC, Ed Hoogterp-NNW, Chris Riley-NFS, Jim Squier-LMWCC, Lou Fitz-Elk Twp., Wayne Anderson-Sauble River WS, Jeremy Geist-TU, Shawn Barnett-LRBOI, Curt Schindler-MSUE, Christine Karnitz-AES, Joyce Durdell-LMWRSC

Ed Hoogterp, Plan Consultant, gave his updated presentation of the watershed plan using a power point presentation of the below described documents. Scott Gest, his associate, was not able to attend today but is working on plan design.

The following is a synopsis of Ed's presentation and is a good representation of the work he and Scott have accomplished based on our previous meetings and other sources of gathered data. The data set is already useful to determine some areas of greater concern. Part of the watershed plan process is to use the data at two public meetings, dates to be determined, to educate the public on the status of the Little Manistee River watershed and generate interest in what activities are needed to preserve and protect water quality.

Ed reviewed the proposed implementation tasks, explaining that items on the list will be subject to updates right up to the time we submit the plan and it is currently in draft form. It is for the group who knows the watershed to suggest improvements, deletions, etc.

Several handouts were passed to those in attendance, including an updated copy of the goals. Positive changes to the goals were included along with a draft of the first chapter of the plan.

A watershed survey is now online, and the link was passed around to participants. Armas will email the link to everyone. Survey participation is encouraged.

Chris Riley made a comment to add ranges to the water quality data handout. Ed will go over the fine points with Joyce before it is finished.

On data collection, Ed mentioned that he had expected to see data that showed a negative impact on the river from the Luther Dam, but so far has not been able to determine anything specific after a review of our current data. This will be discussed again further along in the implementation plan. He stated, "If we were doing daily water temperature monitoring, we would expect to see more impact on the river water temperatures considering the eight acres of silt accumulating there. Clearly there is a fish passage issue."

Ed stated, "This series of maps and spreadsheets now exist and will continue to be updated and refined as the plan develops. The first map is a base map of the watershed from Manistee, to Mason and Lake Counties. Of note, only about one half of the property owners live on the river and that can be a problem for local governments (communication, responsibilities, etc.)."

Another map depicts six sub-watersheds.

Ed and Scott have run a modeling program to show rainfall and run-off to determine suspended solids, phosphorus and

nitrogen run off by sub-watershed based on land cover, land use and soil types. Ed stated, "We find there is not a whole lot of pollution run off. The watershed is about 75% forest, about 5% agriculture and a few percent developed. The highest concentrations of run off is in Newkirk and Ellsworth Townships which is where we have the most agriculture, and is based on average rainfalls of 2.09 inches, the amount of evapo-transpiration of vegetation/trees, how much run-off and how much infiltration there is. Because we have sandy soils we get mostly infiltration. It also shows the rates of nitrogen, phosphorus and suspended solids in kilograms per hectare (or about 0.9 lbs./acre), the volumes, rate, and concentration, according to the models, are low compared to the other locations, but significantly higher in this area compared to the rest of the watershed. Over all we are doing pretty good, but the take away here is a difference in the agricultural part. The ideal thing is to have forest in sandy soils to maintain water quality. The people who approve watershed plans use models to provide information to describe this watershed. "

Ed continued, "the next step is to map some of this, for instance, (as shown on the overhead) "elevation here is shown in yellow at about 1000 ft. above sea level, the reds are about 1400-1500 ft. Udel Hills, on the boundary between the Big Manistee and Little Manistee watersheds, shows two spots where there is a lot of ground water filtering into the river and that is why this river is cold and stable, more than other rivers."

"There is a map of sub-surface geology formed millions of years ago under the Michigan basin. Shales, limestones and salt in some areas underlie the 1000's of feet of sand and soil. A soils map shows types of soils, wetlands, Grayling sand (the primary soil type), Kalkaska, Rubicon, Montcalm sands, all deep sandy soils with a little different subsurface profile which helps determine what kind of forest we get on top. Wetland soils have a few thousand years of organic material on top."

The LMWCC provided a lot of survey data for the last several years that is going into spreadsheets and gives good baseline information about where the watershed is now. Ed commended the organization for the time, efforts and expense of gathering the data with the help of volunteers and making it available to be included as a river monitoring tool.

Ed, "The State of Michigan outlines acceptable safe uses of water. We looked around at this watershed and we are not impaired in state standards in anything except fish consumption, as is everywhere in Michigan. Some issues, preserving wildlife and fisheries, Cool Lake and Cool Creek, has some agriculture issues where livestock has direct access to the waterway. Sediment and thermal are probably the biggest issues we see. The state requires we meet all those designated uses, it also says that in a watershed plan there may be other things you want to consider. If that is the case, you can do it. Basically, we are saying we need enough ground water to protect those streams, maintaining our huge forest area as a multi-resource for timber, wildlife, recreation, ecological services, and improve fish habitat, something the council has worked on a lot over the years.

Preservation of the rustic, natural scenic character including scenic beauty - we know from surveys that that is very important to people and sometimes it gets missed. We now have a lot of ORV trails, but we want to keep those out of the stream.

Economic opportunities, it goes without saying that we would like to have master plans to encourage appropriate citing(?) of businesses even though my impression is that most of the economic business takes place outside the watershed. That is open for discussion. Suggestions and improvements are certainly in order.

Another handout is the 'Implementation Tasks for the Watersheds', which we can change the design of a little, but all these spots(?) stay in. As we write up the watershed plan, we will do a lot of the things we are talking about, and characterize what we see in the watershed now. What are the problems that we see and the specific issues? These are twelve pages of things we want to do to address the problems. This begins to be the 'guts' of the plan and it's one of those things that we want laying out there in front of you all literally for months, so you can look at it and say 'oh we should add this, we should add that.'

The way this works is this column lists the 'tasks', the next column says, 'high priority, medium priority, low priority'. Then we estimate the costs for this. Because it's a ten-year plan, there are milestones, we need to know if we are making progress. For example, if we plan to do 10 road crossings, in the first three years we should have three of those done. The next column is 'Project Partners' - who will work on this, and 'Funding' - who will pay for this? Some discussion ensued as to how we will depict our partners. CRA is listed as an example. A few of us commented that several other partners such as the NFS, Trout Unlimited, Little River Band, should be included here. 'Potential Partners' was suggested as the column heading. Ed said there needs to be a lead group listed. Using bold type to depict the leader may be a way to do this.

Another column is 'Objectives Addressed' - is meant to list goals and objectives addressed, example, Goal #2, 3c and 3e, Cold Water Resource and Fish Habitat.

Another handout is broken down by categories of work addressed.

Category A:

'Streambank Restoration' - is an example in this category. I am meeting with Nate Winkler in February to go over what CRA has done, any updates, and for example, if \$120 per foot is estimated and if we want to do 4000 feet of streambank, we show dollars expended as a milestone of progress, are we ahead or behind?

A point of discussion by Jim Squier was made here about including the LMWCC (not shown) as a source of funding. Ed stated that "we will go over that significantly in the text and what the MDEQ and the EPA want here is to know where you are going to get the money to do this task?" Nate said the CRA has most of the money in hand for the Syers Dam Project. Again, it was noted that the LMWCC is committed to \$10,000 on this project and should be included under funding. Another question arose about the placement of this project into this category. The goal was restoring the creek, so it can fit here but if you see a better category as we go along, we can place it there. This project needs to be included because it is expected to have a real positive impact on that little creek and on the Little Manistee River itself.

Also included in this category, is to update the streambank inventory every 10 years or so, and the third item is to work with Conservation Districts and MSU Extension to demonstrate natural shoreline protection on Cool, Syers, and other developed areas.

Category B:

'Storm Water and Run-off - Update Infrastructure and Impervious Surface Mass' - This is one that less of a big deal here because we don't have urban areas but is something that needs to be kept track of.

Inventory monitoring for nutrients, E. coli, and other pollutants is something that has been done and here in my notes is a continuation and expansion of the LMWCC's work.

Promote shoreline stewardship education through Michigan's Natural Shorelines partnerships, promote reforestation and remove barriers to reduce stream run-off and thermal pollution and encourage voluntary private land ownership of stewardship practices.

Category C:

'Planning, Zoning and Land Use' - This is probably the toughest and biggest deal in this watershed. We are lightly populated and developed, 75% forest, but I did some looking to find that the Grand Rapids population has 1.4 million people, the fastest growing metro area in MI, and the closest distance from our watershed is 47 miles. There is nothing going on in the watershed yet that shows development is a problem, but looking down the road, maybe we need to think ahead on how do we protect what we want to protect in this watershed?

Considerable discussion followed. Chris Riley pointed out that there is 30 million people within a 200-mile distance of this area. Joyce stated that excessive, unrestricted tree removal is happening now in the Elk Township area as some new residents clear land to create river views and access. Seven large pole barns were built in 2016-17 that required substantial tree removal in areas close to the river. Ed acknowledged these comments and noted that "we can't say no one can move into our township but, if the residents of the township decide so, you can find a way to reduce timber cutting in the corridor (and along shorelines). We can create set-backs through planning, so no one is building too close. No one has been eager to do that around here so when you worked on the goals, one of the things you came up with was education to teach people about land use and how it impacts the reasons people come here and find potential ways we can encourage shoreline protection here."

We must go back to the question of what is the resource and what do we do to protect it? As an example, the modeling of the sub-watersheds has a tool that can show that if development doubles, how does that change the run-off? This becomes part of the plan.

A discussion ensued about including population projections as part of the watershed plan and education process. Chris Riley added that it could be a high-expense item but may be desirable. Ed suggested there may be potential for grants. Curt put a possible \$10,000 price tag on it.

Armas offered a comment that a lot of people seem to think that protections are already in place. He stated that urban areas have lost recreational use of water and land through over-development and over-use. In some areas people cannot even go into the water. Now they come northward to recreate.

Ed stated that people worry about over-regulation, but there is a need to work with government agencies to help protect resources. This watershed is in 3 counties, crossing into different land service agencies and conservation districts. Uniform regulation should be a goal of the local people working together to protect the watershed. What kind of land use rules will people accept to protect the rustic and natural character of the watershed? How do we preserve that? If you have land use plans in Elk Township, what good is it if they don't have one in Eden Township? All of this requires working together. In this category, we have allocated \$3,000 per township, that is not enough. What we are envisioning here is going to need some group like Alliance for Economic Success to look at potential land use rules across the watershed that people will accept.

We will identify locally important land-use plans that are in place to protect water resources and the natural and rustic character of the watershed. Will townships develop plans to deter terrestrial and aquatic invasive species and permit treatment of existing infestations. We can investigate the possibility of a multi-jurisdictional zoning overlay district to establish uniform locally based rules for development within the Little Manistee River watershed, promote green-infrastructure principles, educate people on the pros and cons of Michigan Natural Rivers designation and promote it if support exists.

Discussion ensued that our approach needs to be education first followed by potential for local planning. Ed noted that Ch. 1 - 4 identify the stressors on the watershed. If we want to protect the river, you don't cut down the trees. After educating people, what do you do to protect the watershed. The lack of planning and zoning around the area is perhaps the biggest threat to the watershed.

Chris Riley stated that typically a watershed plan does not address zoning other than to identify what is in place. The goal is to get an approved watershed plan in place in an expedient way.

Curt Schindler asked about how many townships have zoning or buy into the idea of setbacks. Lou stated there are five townships that now have some zoning and rescue, but the county does not even have zoning and relies on Michigan building codes and MDEQ for set-back regulations. It was noted that Peacock, Sauble, Norman, Stronach have land-use set-backs for water protection.

Curt cited a study completed by MI State Police on how people comply with regulatory law that showed a certain percent of people will willingly comply, up to 75%, even without a means of enforcement in place. Higher compliance can be achieved with enforcement. He said we may not need to worry about going regulatory if enough people comply (with water protection guidelines) to achieve a protective status, maybe 50% - 75% compliance is adequate.

Armas suggested that a goal outlining a long-term vision related to development may be needed, "here is what is going to happen as far as people moving in, how do we want this to look with all these people here?" Joyce added that we need to give people an idea about what can happen if we sit back and do nothing as more and more people use the rivers and lakes, we just watch and do nothing as serious degradation occurs.

Ed said we need to include as much of this information in the watershed plan as we can. We need a specific educational program as one of our tasks to address these issues going forward. Hopefully the plan will have enough detail to help people see why we need the education.

Jim followed up by saying that the way he views it, is that people who live here say that those who don't live here don't really have a say about what goes on, they just basically don't care about what the part-timers want even though they pay property taxes. Ed followed with "that is a cultural thing that we need to consider as we go out to educate people about the watershed."

Chris gave an example of a watershed group having an annual meeting with a cook-out where all the new land owners were invited to come talk about issues of concern between the newcomers and longtime residents. They worked with area realtors to help organize and communicate the event. The outcome was greater understanding about area concerns for both groups and resolution of issues. Ed commented that often just establishing a base of trust between groups with different ideas can happen if they agree on one basic goal like protecting water quality.

Someone asked, "What if Nestle Co. wants to come here and start pumping water out of the watershed?" That usually get peoples' attention."

Armas added that during our many visits and phone calls to nearly all townships while we asked for support of a watershed management plan, we heard clearly one common thread, everybody loves this river. A lot of people are here for the lifestyle. That is the common ground.

Ed moved on to Road/Stream issues next. He will meet with Nate soon on this item. This is usually the most expensive, 75% in general. There is an inventory online, but it needs updating. Trained volunteers may be able to do that. There over 100 sites. Chris Riley states that we should not spend a lot of time and money here. Pick your top 10 and go with it. Ed emphasized the need for updates every 10 years. Our last inventory and work took place 2004-2007.

Land Protection and Management - Category E

This goes in all plans and suggest that Land Conservancies study and come up with priorities for protection which they do based on a formula of property size, are there invasive species on it, is it adjacent to a wetland, is it in holding in public property, etc., just to identify if you are going to do a conservation easement or purchase, what are your priorities for that? Then I put in E2 here, no reason, a half a million dollars assistance/support, state and local government acquisition of property for water quality, etc. E3 is support land protection and land purchase activities on these high priority sites and conservation easements. It turns out that if the land conservancy is looking for natural resources trust fund money, or whatever, it helps them if their priority is listed in the watershed plan. That has no specific implications other than that it helps them do their work.

Category F - Habitat - This has a couple points of interest on that the first one is just to maintain multiple use management policies on public lands, preserve upland habitat and wildlife corridors, discourage new roads in state forest and wetland areas, no new costs. Fishery surveys at a couple points on the Little Manistee River on a 10-year cycle (a goal), maintain current stocking and management unless changes are warranted by studies. F4 - Install and maintain fish habitat improvement structures as appropriate. Consider instream fish habitat and fish passage implications at road crossing and bank stabilization projects, the best way to do the fish habitat is when you are stabilizing the bank or fixing the crossing anyway. Evaluate and document stream side habitat including shade and forest cover. Re-study fish habitat in small lakes. A lot have not been looked at since the 1960's.

Then we have the controversial ones, F7, 8 and 9. Evaluate the fishery potential in the Luther Millpond Dam. Closely monitor operation of the dam and spillway. Identify which agency is responsible for operation of the dam, Luther or the MDNR. Then we have long term options for removal of the dam and restoration of the millpond area recognizing the dam belongs to the village and restoration only if the residents and officials determine it is in their best interests. - it costs a lot to keep the dam----no swimming, dangerous, weedy. Identify the benefits and costs of stream restoration. Ed expects that removing the dam would cost over a million dollars. A study to determine the long-term benefits of keeping or removing the dam is proposed.

Next- recreation safety and navigation - work with state agencies, national forest service and ORV organizations to make sure to keep the ORVs away from the stream banks. Monitor paddle craft volume to be sure they do not exceed the river's carrying capacity. May not be a current issue but could in the future.

Next - hydrology, ground water and wet lands, Ed proposed installing and monitoring permanent gauges throughout the watershed to evaluate and that report stream flow, water temperature, high and low water conditions, investigate emerging technology and automatic sensors if the USGS gauging is not available, which it probably isn't. Then actively support the portion of the MI Water Strategy that calls for a system of active ground water and surface water monitoring. Ed proposes coordinating a letter of support campaign with other watershed groups.

Initiate a program to educate the public about the role of the wetlands. Adopt state and local rules about the water to monitor and regulate horizontal drilling and hydraulic fracking for oil and gas extraction. Pretty standard stuff. On water quality monitoring, most of this is to say to keep on doing what we are doing.

The State proposes to monitor ground and surface water and come up with statewide septic code. Those are two things that are worth supporting. We need to quickly develop some wader cleaning stations (J5) at some of our sites and monitor the Dittimo rock snot situation in the watershed.

Chris asked about the lake perspective of monitoring for Eurasian milfoil. Ed replied, "In J4 we cover boat launching and as it turns out Manistee Co. has a boat wash and Benzie Co. Conservation District has two and they are available for just that sort of thing to do that. It is something I am interested in and got involved in peripherally as I developed one for Crystal Lake and we get calls all the time from people from other lakes, like Higgins." Chris said, "you are looking for opportunities to educate people in becoming familiar with boat washing at the boat sites and we want to continue that. We are seeing a good opportunity for this watershed in the lake water quality monitoring and the plant mapping inventory and I have Kayla Knoll's water quality report for the eight lakes she did, and in particular Sand Lake, we have not found any non-natives in the eight lakes studied, it turns out the you can't easily tell the natives and the non-natives apart. They all have good water quality. Each one has its own geology/parent material, some are oligotrophic, some are mesotrophic, a couple are eutrophic but there are all in pretty good shape, it is a piece of information you can include in your program. The data is online, it's the state CLMP. Armas stated that we have a lot of people who live on lakes around here and they have been supportive of us and we are supportive of them.

Category K (skipped) Septic Systems

Basically, develop education materials that work with local governments to establish mandatory inspections of septic systems and water prior to sale of property, and support statewide standards that we are told exist in 49 states but not Michigan.

Category L - Education

- Preserving distinctive rustic character
- Signage at appropriate sites to educate on watershed concerns
- Dissemination of education materials to riparian land owners
- Assign an individual to promote education using multiple pathways school, local media,
- Establish a program of outreach to real estate professionals
- Maintain updated versions of the wmp to post on the websites

Ed suggests that we have some overlapping groups and need to clarify who is who.

Scott will be meeting with Joyce to go over the what local units of government have zoning or not.

Ed believes we can have a draft of the watershed document in the next few months. He needs to get in touch with Greg Goudy to see what they want to add.

We need to have a public meeting on the east and west side of the watershed for educational purposes, hopefully working through the conservation districts. Maybe June or July. Those are really the last step fine tuning of the plan and then we submit it for approval.

Armas suggested coordinating with Ed so there is no duplication of effort when communicating with Greg.

We would like to have the online link to the survey distributed to everyone on your mailing lists.

Meeting adjourned at 5:15 p.m.

Meeting minutes submitted by Joyce Durdell.

