

DATE: January 18, 2008 FILE REF: Upper St. Croix Watershed Alliance Project
TO: Participants of the Upper St. Croix Watershed Project Discussion Meeting
FROM: Dave Blumer, WDNR Lakes Assistant, Spooner
SUBJECT: 01/17/2008 Meeting Notes

ATTENDEES:

Pamela Toshner, WDNR; Scott Toshner, WDNR; Jane Malischke, WDNR; Kathy Bartilson, WDNR; Carroll Schaal, WDNR; Tim Asplund, WDNR; Buzz Sorge, WDNR; Alex Smith, WDNR; Scott & Susan Peterson, Friends of the St. Croix Headwaters; John Kudlas, Town of Barnes Volunteer Water Quality Monitoring Program, Elliott Stefanik, US Army Corp of Engineers; Nancy Turyk, UWSP; Jane Anklam, West Wisconsin Land Trust

By Phone: Kris Stepanuk, WDNR

Start Time: 10:15am in Large Spooner Conference Room

PURPOSE: To revisit the protection grant proposal to ensure a clear project vision and to identify gaps and then discuss how to fill those gaps.

NOTES:

I. Introductions & reason for attendance:

Carroll Schaal: WI Grants Program Director: asked to facilitate the meeting

Jane Malischke: Grants Financial Administrator: making sure discussion follows appropriate funding aspects

Scott & Susan Peterson: overall organization and clarification of the project; making sure all partners are on the same page, & that objectives and activities meet all the necessary expectations and requirements

Elliott Stefanik: has an active project description in addition to the DNR Protection grant, looking for an overall vision for the watershed to better incorporate in his project, and want to get a handle on C of E expectations

Jane Anklam: Interested in the protection part of the study. Looking to pick up what ever she can in order to pursue protection via land trusts and easements (already has several projects in the work in the watershed)

Alex Smith: DNR Special Project Assistant: has been responsible for many of the GIS applications that have and will likely be used in this project, also has been doing the critical habitat evaluations for the project

Kathy Bartilson: St. Croix Basin Supervisor: interested in meeting the partners and helping to develop the project work plan out of the Spooner Office

Tim Asplund: DNR Lakes Research and Management: provide technical assistance and feedback for activities presented in this project.

Kris Stepanuk: WAV Coordinator: has been providing training and assistance for the stream monitoring volunteers for 3 years, interested in how this data will be incorporated into this project.

John Kudlas: Lakes monitoring volunteer coordinator: wants to know how volunteers fit into this project and what they need to do in order to make it happen

Scott Toshner: Fisheries Management: interested in study design and components, particularly as it pertains to the cold water fishery in the area

Pamela Toshner: Overall project coordinator: knows there has been some confusion with the goals, objectives, and partner expectations. Wants to get everyone on the same page so the end results are a usable tool to protect and improve the Watershed. Concerned that the project may be becoming more of an academic study and less of a means to produce a usable management tool.

Nancy Turyk: represents the original protection grant project description including deliverables from UWSP. Wants to clarify the University's role including what can be expected of the institution and the graduate level project

Buzz Sorge: Lakes Coordinator West Central Basin. Here to listen to the discussion and provide direction and feedback based on experience with similar large-scale watershed projects. This process has already been completed for the Lower St. Croix and likes that this study compliments that work.

II. Overview of Upper St. Croix Watershed Alliance and Goals (The Petersons)

The Petersons, as representatives of the Friends of the St. Croix and sponsors of the protection grant, introduced a document outlining the goals of this project and this meeting from their perspective.

County Officials in areas in Douglas and Bayfield Counties covered by the watershed generally more interested in economical development in this area rich in history and natural resources, but not rich in financial resources including people, industry, etc.

Many smaller groups formed that are concerned more about preserving and protecting the natural resources in the area but no central "watershed district" like those that exist in many MN Communities

The alliance hopes to pull all these existing groups together to pool their resources to better understand the environment they are working in and improve public stewardship. Then using what is learned to influence local units of government to buy into the protection and preservation of the area.

Historic communication between the partners has been ineffective at best. Would like the outcome of their involvement to be an appropriate deliverable that addresses the state of the watershed, is scientifically sound, written in a language easily understood, and can will really be used to enact changes.

III. What we have or know and what we still need: how does this project address these needs?

(Carroll, Pamela, Scott T., Nancy Turyk)

Pamela started by introducing a document outlining all data activities that have been completed or are currently underway. Volunteers, UWSP, USGS, and WDNR have collected lake, stream and river data at many points throughout the watershed. Her overall impression is that the watershed is still in pretty good condition with a few hot spots. She believes that this project should build on existing data to move forward.

Carroll asked several questions: Had smaller grant activities since 1990 had been looked at? Had a complete compilation and evaluation/analysis of existing data collected by a multitude of sources been done? A large portion of the watershed around Upper St. Croix Lake is currently being studied as a part of a 5 phase planning grant that in the end will summarize and integrate much of these data. Existing data from other parts of the watershed have not been completely compiled and evaluated.

Nancy Turyk pointed out that this historical data analysis was a part of the Protection Grant Project originally, but currently is not. Her people will still pull all existing data together but do not have the capacity to do the evaluation/analysis because of financial and time limitations in the project (originally 2 grad students were included but one was eliminated in the final project proposal). The position eliminated had been designated as the one to analyze historical data.

Some discussion ensued as to what had been done already, including stream and tributary data, extensive WAV stream monitoring, critical habitat, historical fisheries information (particularly the presence of past populations of native brook trout in many of the streams in the watershed that currently do not exist), water quality information, and extensive work in and around Upper St. Croix Lake.

Kris Stepanuk referred to WAV and Level 2 summary reports and presentations, as an example of data that has already been collected and that tells a pretty good story. Pamela passed these around. There seems to be a lot of data compiled for the west side of the watershed but not in the east side. Scott T. emphasized the importance of uniform coverage across the watershed for all data collection.

Carroll pointed out that this discussion did not answer his question about compiling and analyzing what we already know. Susan Peterson agreed stating that efforts should be placed where needed, not on re-doing what has already been done.

Buzz added that knowing what is good in the watershed is just as important as knowing what is bad. In order to affect change in local governance, it is often imperative to tell them what they are doing right, not just what they are doing wrong.

Jane A added that she was looking for those areas to focus her immediate protection activities on. She would like to try to concentrate her efforts not only on those areas deemed pristine, but also on those areas at highest risk for further degradation.

After this, the discussion moved toward identifying specific gaps in existing data and what should be included or not.

Fisheries Management

Scott T. presented a lot of information about the fishery in the watershed. He provided a handout detailing what has been done by the fisheries department. He stated that there really is quite a bit of historic fish data for the watershed.

Jane A. asked what the standard monitoring protocols were, and Scott T. outlined them. Buzz wanted to know if small fish had been surveyed along with large fish. In some cases yes.

Carroll asked Scott T. if anything jumped out in his analysis. The biggest thing was the absence of trout in many of the waters historically identified as cold-water.

Buzz asked if Scott data was transferable to IBI's. I think Scott said yes, this was a part of the evaluation.

Buzz asked if the fisheries or stream data included bugs and habitat. The answer was not really. Kathy stated that water chemistry, habitat, and bugs are a part of the baseline stream monitoring protocol on waters at the lowest end of the watershed but nowhere else. Scott said it had been at one time but focus was shifted to just fish in recent years (2006). Tim stated that bugs and habitat had not necessarily been removed from program protocol just shifted to other personnel, not necessarily fisheries people.

The Petersons wanted to know if volunteers could collect bugs and habitat data as a supplement to the project if it was deemed important.

Scott T. stated that major disruption in the natural hydrology in the area had been caused by the north south transportation corridors built over a primarily east west stream flow area causing lots of fragmentation in area streams.

Elliot remarked that the AC of E may be able to help with habitat assessment.

Buzz questioned if damage to the stream hydrology had already been done by the Hwy 53 and the RR right of way was it likely it could even be changed.

Scott Peterson asked if there were any other major threats to the trout streams. Scott T. added that there were many, and that temperature was extremely important and went on to describe his temperature findings. For the Eau Claire River, several impoundments in the river make it a warm water stream and as a result brown trout stocking was stopped. However there are still a lot of cold water resources to protect. He also indicated that sturgeon management on the St. Croix above the Flowage had started again.

Scott P. stated that streams are a vital part of getting citizens involved. He finds that the perception is that lakes are somewhat closed entities with lake shore property holders having the most say in their management, but streams are largely considered wide open. People get excited talking about them and this serves as a useful vehicle in getting the conversation started about the entire watershed.

Carroll suggested that assessment of the existing data was not complete or still on-going and coming up with a story to tell based on this analysis would be important.

Watershed monitoring and monitoring

From here the discussion shifted from fisheries to watershed monitoring and assessment. Nancy Turyk discussed what UWSP had done to date via a River Planning Grant, and what she has proposed in the Lake Protection Grant Project. She provided participants with several handouts and maps.

She provided nutrient and chemistry records for the monitoring completed in 2007. The original design plan included runoff sampling events, but drought conditions in the northwest prevented this from happening.

Groundwater in certain areas of the watershed carries a great deal of phosphorous. In particular, groundwater around Upper St. Croix Lake has extremely high P concentrations and is being studied in a separate project. In general P levels are not bad but there are some hotspots. At the current time with the data collected it is difficult to tell which areas are impacted the most by phosphorus levels and whether the impacts are natural or man-made. Nancy discussed some of the other findings related to the water chemistry in the area. Others added that there is some water chemistry information available from volunteer stream monitoring and lake monitoring. Buzz asked what else included water quality information.

Tim again reiterated that we really do not have a complete assessment of what already exists and that this is needed to direct present future data collection. He also asked what the purpose of these activities was. Is it to simply inventory existing conditions or is it to help make management recommendations? He asked again who should collect the missing data.

Susan Peterson wanted to know if enough data had already been collected and wondered if the focus of this project shouldn't shift to the next level.

To answer this, Carroll outlined 3 (possibly 4) levels of data collection; assessment, long-term trends, future recommendations, and then possibly implementation of recommendations. Data collection in the watershed is probably at the assessment/long-term trends level. Elliot from AC of E added that the next step is making meaningful changes as a result of data collection.

Buzz stated that there is still too much existing data that needs to be analyzed and assessed. Some summary of the data and what it means has to be done.

Jane M stated that county officials want to protect what the watershed currently has, but basically said they needed more information to make good decisions. She wanted to know how the focus of this protection grant had changed from its original intent, if indeed it had.

Pamela asked Jane M to discuss the Priority Watershed Project that had been completed some time ago and if there were any parts of it she would have changed or other things that she wished had been included in it. If there was, then perhaps the current project could do so. Jane M stated the PWP was sponsored by forestry and focused primarily on the land owner rather than a broader perspective. It stressed shoreline restoration and recognized future impacts to be caused by the Hwy 53 expansion and storm water runoff in the Village of Solon Springs.

Tim added that a typical watershed project is concerned about all the water that flows overland to one body of water at the bottom of the shed. This current project is different. Understanding the impacts and role of groundwater in this project is important.

Nancy added that a groundwater model for this watershed was a large component of the work to be done by the university in this protection grant. Pamela added that it is also a component of the Upper St. Croix Lake Project, one of the hotspots for P concentrations.

The discussion moved into the clarification of the deliverables as written in the current protection project.

IV. Protection Grant Proposal and Deliverables

Nancy provided a handout listing what deliverables are currently in the protection project.

Deliverable #1: Delineation of direct drainage areas for major rivers, streams, and lakes. It will include maps and management recommendations within specific zones

Scott T asked for an example of how this information could be used. Nancy suggested an example related to knowing what areas along a stream bank contribute direct or indirect runoff to that stream. Development in areas with the potential to negatively affect that stream could be limited in some way.

Deliverable #2: Groundwater watershed and water table map. Identification of major areas of groundwater inflow to rivers, lakes and streams will be mapped and evaluated.

Work in the immediate area around Upper St. Croix Lake already shows some significant impacts of groundwater. High phosphorus content has been identified in several areas. This could be contributing to tipping of a lake to an algae dominated lake, regardless of the man-made inputs. Flow direction, mineralogy, water quality, will be evaluated across the watershed. Tim questioned the scale of this model. Is it necessary to do this for the whole watershed? Nancy stated clearly that it was.

Buzz was worried the planned model may be too detailed. He also wanted more clarification between human induced and natural phosphorus, adding that managers want to know what they can do on a larger scale. They manage what they see. They may not be willing to micro-manage based on specific groundwater impacts in specific areas. Identifying a smoking gun is important because it can be seen and addressed. Make sure management recommendations are realistic. Carroll agreed.

Jane A added that Douglas Co is currently in the process of developing a new land and water plan. She is on the committee. Town of Wascott is the shining star in this process currently. Buzz stated that the county really needs to incorporate the information in this protection grant as soon as it becomes available.

Pamela named Sue O'Halloran as the lead for Douglas County project and stressed the importance of keeping communication and coordination going between the two projects.

Sue's project assesses land uses, impervious surface area, and resource impacts at a sub-watershed level. It is heavy on GIS and is being linked to county planning efforts.

Nancy stated that Paul McGinley felt the Douglas County project was too coarse in scope for inclusion in the UWSP project.

Overall, the consensus was that this is a very valuable part of the protection plan.

Deliverables #3 & 4: Ground and surface water quality

Pamela thought all individual lake phosphorus data would be included in this project. Nancy said it wasn't because it is too big a project. This is also the reason why there is no long-term trend analysis for water quality in this project. Both Tim and Carroll felt that this was a large gap in the deliverables for this project.

Susan Peterson asked if fewer resources could be spent on collecting current water quality data for analysis and instead using those same resources to analyze historic and/or existing data to evaluate conditions.

Nancy stated that the UWSP project currently is designed to provide a snapshot of the current water quality and that is all.

Someone suggested monitoring only seepage lakes to gather the mineralogy, chemical, and other data related to water quality for the first year and then expanding if necessary in the second year.

Nancy and others agreed this could be done.

Since trend analysis is not currently in the protection project description and it is deemed a very important part by the DNR, how to make this happen needs to be discussed further.

Deliverable #5 River and Stream Monitoring

There was some difference of opinion on this deliverable between Pamela and Nancy. Currently the plan included bi-weekly sampling of four primary and four secondary sites. Determining the sites was difficult due the characteristics of this watershed. Nancy provided a map showing these sites. UWSP will be using the FLUX model to determine the impact of loading at these sites.

Pamela wanted to know if the amount of sampling at these sites could be reduced. USGS provided her with an estimate of the total amount of sampling that was necessary to complete the modeling for loading and it was significantly different than that proposed by Nancy. She believed that the savings from less sampling could be used elsewhere.

Nancy said the level of monitoring could not be reduced unless producing defensible loading recommendations was not the goal. Susan wanted to know what defensible loading meant and how it benefitted the public. Nancy stated that more sampling allowed a broader look at the watershed that could then be used to pinpoint sources of loading that could be fixed.

Pamela was not convinced until it came out that a different model would likely have been used for the USGS sampling. FLUX modeling required certain data and having the graduate student working on this project change or piece-meal what was done was not really an alternative. In order for the grad project to meet its required goals this part had to be done.

Scott T asked what the purpose of the FLUX model was and how it was intended to be used to meet the sponsors' goal. A clear answer was not given.

Buzz wanted to make sure from a management perspective that this project could justify the recommendations to come out of it by clearly stating what had changed in the watershed warranting the recommendations.

Kris Stepanuk asked about the Public Outreach part of this plan and the importance of it being able to tell the story of what has been found.

The Petersons stated that this was the role of such things like the St. Croix Festival. A brochure was passed around. It looked good.

Deliverable # 6 Purchasing and using Thermistors

Some discussion was had about the value of the information collected by thermistors. Scott T said he would use the information if he could help determine where they would be placed. Buzz stated that a consistent temperature record was necessary to do an adequate/accurate ground water assessment.

The current protection has included the purchase of 20 thermistors, however there are already 20 available and in use by the stream monitors. Some discussion had about the need to purchase the extra 20. Scott T felt that the 20 existing thermistors would be adequate for collecting the desired data. Not purchasing 20 more would reduce costs and minimize duplication of volunteer efforts.

UWSP was interested in the data the thermistors would provide but only as a component of the groundwater assessment. If they were to be used for habitat and fisheries evaluation, Scott T or some other person would have to evaluate the data as UWSP would not. Scott was OK with this.

LUNCH AT 12:50

Meeting continued at 1:30

Agenda Item IV a. (St. Croix Riverfest with the Petersons) was put off until later in the meeting

Agenda Item IV b. (critical habitat, resource conservation, and permanent land protection) was discussed

Some discussion was had related to the outreach that was currently underway as a part of Jane A work on easements to protect habitat. Susan P. asked how long it takes to identify areas for targeting by Jane A for protection. Jane A responded that designating areas for protection was already pretty far along. She apparently has a NPS grant to work with (?).

Buzz asked if the terrestrial component of the watershed had been considered in the protection process. Was Land Legacy program involved, had endangered resources been considered. Short answer is yes. Alex Smith had done the NHI Screening and had gotten lots of hits across the watershed.

Kathy B added that there were likely some wild lakes candidates in the watershed as well.

Pamela and Alex updated the critical habitat work that had already been completed as a part of this project. 15 total lakes to be done and 9 were complete. The rest would be completed in 2008. The lakes were selected from the top tier of a list provided by Paul Cunningham. The critical habitat surveys will also include the St. Croix and Eau Claire Rivers.

Jane M wanted to know how usable the data will be to the public to promote protection. It should be very useful and does carry some regulatory authority.

At this point the discussion moved again toward the overall protection project and the gaps that had been identified but not resolved in the morning discussion.

Carroll mentioned that the assessment of trends was still missing. The current water quality work in the project does not do any sort of long-term trend analysis only the current state of the lakes in the watershed. UWSP was still adamant about not doing this analysis. Tim and Carroll were pretty adamant that they would like to see this be a part of the overall project.

Buzz added that maybe some top/bottom cores could be added to come up with some sort of history for the lakes and where they might be going in the future.

Tim added that if this protection grant can't be used to collect data for an in depth analysis, then perhaps it could at least identify certain lakes to target for planning grants to be used for this purpose.

Buzz added that it was important to offer some land-based recommendations to protect the watershed, but that these had to really be able to enact some sort of change.

Tim added that we need to know what we can manage effectively (water quality) and what we can't (groundwater?).

Elliot added that we need to know where we are currently in the watershed and then where we want to be, and make recommendations to get there.

Tim stated that water quality is a big component of this. Some confusion may be occurring due to not really addressing the specific reasons to collect water quality data. Is it to establish only the current status of the lakes in the watershed or to help predict what the future holds?

Pamela acknowledged that there were some short comings in the project and that this discussion was to identify these and then help determine the best way to tweak it to address the sponsor's needs and the DNR's feedback.

Scott T asked what level of detail was necessary in this protection project to meet its goals.

Nancy stated that developing a watershed management plan was originally a part of this project but it had been removed due to financial limitations.

Scott P. wanted to know if maybe we had enough information or detail already to make some management recommendations.

John K added that perhaps we just need to merge existing data into a form that is more usable to the sponsor to make recommendations.

Kathy added that we need to compare past, near past, present and future conditions as they exist to determine if existing management in the watershed has and is protecting the resource.

At this point Carroll outlined a 3 yr process on the flipchart on how this might be accomplished and by whom.

Year One:

Establishing what we know, compiling existing data, to be completed by UWSP.

Year Two:

Collect new data to fill in gaps (UWSP)

Combine existing and new data to complete trend analysis (maybe USACOE)

Year 3:

Modeling and Recommendations (UWSP)

Stream monitoring was then discussed. Nancy presented a map showing primary and secondary points for sampling every two weeks in 2008. She stated that it was really difficult to determine where the stream sampling would occur because of the characteristics.

It was agreed that the sampling regimen put forth by UWSP would be used as it better supports the FLUX model that they use. However, only the primary sites would be done in the first year and then secondary sites would be added in year two.

Elliot added that if there were any sites that could not be monitored by UWSP that the corp. may be able to take them on.

The group asked if mineralogy data for only the seepage lakes could be collected in the first year with other lakes being added in year two to fill in gaps. Another option would be to postpone any lake monitoring until after compiling and evaluating existing data. Nancy wanted to sample lakes for mineralogy in the first year, but was willing to include only seepage lakes.

Kathy asked if the mineralogy data from the past was “good data”. Nancy said it likely was.

A timeline for completing parts of the data analysis was discussed. Some of the analysis could be finished by the end of the summer season in year one. Pamela confirmed the responsibility of UWSP to compile this existing data, stating it was in the existing protection project description.

DESCRIPTION OF THE USACOE PROJECT

Elliot took over the discussion to add detail to what it was the Corp was expecting to be involved in. He provided a plan with 12 activities outlined based on what the Watershed Alliance, the Corps, and the WDNR wanted. In fall of 2007 the secretary signed an agreement to partner with the Corp on this project.

The first four points included helping to set study goals and objectives, provide input into what UWSP is doing and what others are doing, compile a nutrient budget for a sub-watershed and look at lakeshore/riparian habitat restoration.

The corp. could perform data analysis after others compiled it. They could come up with the watershed management plan. They would identify those areas of the watershed that are degraded and come up with recommendations as to how to improve these areas.

Carroll wanted to make sure that whatever recommendations that would come out of the corp. study would be reviewed by the DNR before being sold to the public.

Jane A wanted to know who would get or take these recommendations and make them happen. That thought was that all the stakeholders would get them. The counties involved would include them in their

current and future plans as long as they are not the ones required to research the how and where to implement them.

Point 5: (AIS)

This would include baseline monitoring, establishment of a continual AIS monitoring plan, and development of a rapid response plan to handle any new infestations.

Point 6: long-term St. Croix Flowage management

This would likely include establishing a steering committee from and for the watershed alliance

Point 7: Fish passage

This would evaluate how development in the area, dams on rivers, and culverts under roads affect fish passage. Road culverts would likely be the most important part as these are what can realistically be changed if necessary. Recommendations would be made as to how to improve existing conditions

Point 8: Wetland conservation and land use management recommendations

This would include ranking and grading existing wetland habitat and suggestions for wetland restoration. Carroll suggested an FQI for the wetlands in the watershed.

Points 9-12 recreational and social resource planning, independent technical review, watershed report preparations, and public involvement were not discussed in great deal except for the expectation that it would all be done.

What else should the Corp do?

Elliot then asked what things the sponsors or DNR would like added to their project and what expectations there were for an end product. There is around \$130,000 allocated to this project at the current time. There was some discussion as to which parts of both projects (USACOE and the DNR Protection grant) could be used as match for the other.

Previous discussion suggests that a **trends analysis of the existing data** including the historic data, be completed by the Corp after UWSP has finished compiling it.

Jane A wants **wetland delineation** in the corp. project. She is also interested in getting some **risk assessment for current practices** perhaps on a much smaller basis (i.e. sub-watersheds and buffers and non-point sources of pollution).

Kathy B suggested the **Wild Lakes List be reviewed** as part of this but probably not specifically published in it.

Buzz suggested a **sociological assessment** be added (no details given) and that all **existing zoning ordinances** within the watershed be evaluated.

Kathy B suggested a **runoff potential map (similar to an Environmental Corridors document)** be generated for the watershed. This however may already be a part of the UWSP deliverables, just under a different name.

A **culvert inventory** is a part of an existing component, but make sure that it is there in the final design.

Carroll suggested an **economical assessment** to determine the economic value of the resources in the watershed.

Jane M added that all of this stuff needs to be blurred into one message to present to the public so that they believe that all the partners are on board with this project and its outcomes.

St. Croix Riverfest

The Peterson's showed a brochure announcing the Riverfest and stated that its goal was to provide a community-based public event to promote watershed stewardship. It was specifically designed to cover some of the public involvement/education needs of the project. It will be held the weekend of June 14th, 2008. It will likely coincide with some Take Me to The River activities being held to celebrate the 40th anniversary of the Wild Rivers designation for the St. Croix and Namekagon.

Final Thoughts

Carroll wanted to know what the best way to govern this project now and in the future. How will we incorporate all the partners (including projects and people like Susan O'Halloran and the Douglas County work related to zoning in the watershed)?

Once the new or changed roles discussed today have been implemented then all partners and potential partners will be notified. This is probably Pamela's responsibility.

Overall Accomplishments from the meeting:

Identifying Gaps (two big ones):

Analysis of existing data to come up with what we know now and what we are missing.

-Existing data will be compiled by UWSP by the end of the 2008 season at the latest. Further trend analysis of this to determine what's missing and where we need to go will be completed by the USACOE (?)

Long-term trend analysis related to existing and new water quality data. Where have we been, where are we now, and where would we like to go?

-Should be a part of the data collection by UWSP, analysis to be completed by the USACOE

Clarification of Tasks

The Petersons, as representatives of the grant sponsors really want to avoid duplicating data collection that has already been done.

Stream monitoring will be completed according to UWSP recommendations, but only on the primary sites in the first year. Year two may incorporate secondary sites.

A mineralogy study could be completed by UWSP in 2008, but only on the main seepage lakes. This may be dependent on the results of the existing data evaluation.

UWSP will only compile existing data from around the watershed and will complete this early in the 2008 season. The USACOE will take on the task of analyzing and assessing this data in year two.

More thermistors are probably not needed as there are 20 now available for designation to a task. Scott T (DNR) will assess the habitat (fisheries implications) of the data.

Things to potentially add the USACOE project

- analysis of the existing data
- wetland delineation
- risk assessment for current practices
- Wild Lakes List be reviewed
- sociological assessment
- existing zoning ordinances
- runoff potential map
- A culvert inventory
- economical assessment

Things Requiring Follow-up

Revise USACOE project to include recommended pieces.

Revisit the potential to go forward with mineralogy data collection on only seepage lakes in the first year of this project (2008?).

Clarify what is to be included in the social and economic assessments within the watershed (?)

Clarify how “match” from the protection grant can be used for the USACOE project.

Clarify the roles of volunteers in the project beyond the WAV and CLMN programs. What should they do and when, and how can they avoid collecting duplicate information that is not needed?

Clarify final technical details of the protection project.

Make changes to the existing project description and budget to accommodate those things discussed in this meeting (e.g. dropping the purchase of additional thermistors, deployment of said thermistors and analysis of the data.)

Don't lose site of the desired outcome at the end of the project, a reasonable and credible management tool for the entire watershed that is actually used by all stakeholders to affect improvement in the watershed.