

**Minutes\***  
**Boardman River Dams Committee Meeting**  
**Tuesday, June 24, 2008**  
**Grand Traverse County Civic Center**

**Statement of purpose:** “To engage all interests in assessing and recommending the fate of the dams on the main stem of the Boardman River based upon a thorough analysis of options, including long and short-term economic, social, environmental, aesthetic, transportation and ecological impacts upon the community, individuals and riparian owners.”

**Attendance\*\*:** Pete Albers, Bob Allen, Dennis Aloia, Ron Alpers, Landa Alpers, Rob Beardsley, Susanne Biteman, Marty Boote, Bruce Carpenter, Jim Carruthers, Steve Cavendar, Beverly Cuthbert, Jim Dexter, Mike Donahue, Dave Downer, John Dyksterhouse, Brett Fessell, Burr Fisher, Jim Grant, Marge Forgione, Josh Green, Robert Hess, Bruce Hope, Meral Jackson, Jennifer Jay, Todd Kalish, Joe Kaltenbach, Bob Kaufman, Andrea Kline, Tom Knas, Kyle Kruger, Steve Largent, Herb Lemcool, Jim MacInnes, Ed Martel, Jan Martin, Chris Maxbauer, Andy McIntyre, Jim McIntyre, William McIntyre, Troy Naperala, Glenn, Neihardt, Jim Pawloski, Charles Peterson, Tom Rozich, Bill Scharf, Gabe Schneider, Jim Schramm, Ken Smith, Wayne Swallow, Mark Tonello, Norbert Tutlis, Tom Wertz, Rick Westerhof and John Wyrwas.

- \* The meeting minutes are only a general overview and are not verbatim. An audio of the meeting has been recorded by the BRDC for archival purposes.
- \* \*The list of attendees was developed from a sign-in sheet passed around the room for signature.

- I. Introductions** (formal introductions were not made due to the Potluck)
- II. Review of Agenda**
- III. Approve or Amend May Minutes**  
May minutes approved as written. Rick Westerhof noted after the BRDC meeting that he did not attend the May BRDC meeting; therefore, his name was removed from the list of attendance.

Comment: There is a comment meant to be on the Bottomlands/Property Owners Issues Team (POIT) meeting agenda – copy of Part 91. This should be included in the final minutes.

A: It is in the packets passed out today. We will go over it later on.

- IV. Announcements – Sandra Sroonian**  
Todd Kalish has been promoted to a new position in Newberry, MI; he starts July 14. Todd will be at all BRDC meetings - but is late today! He will still be part of the process and remain involved, he’s just going to be in the U.P. for a while.
- V. Presentation on maintaining and/or upgrading the Sabin, Boardman and Brown Bridge Dams for hydroelectric power generation.**  
Mike Donahue introduced this month’s Special Topics presentation with the comment that now we are 3 or 4 months into the Special Topics format. These are topics you need to know more about: dam modifications/fish passage was the

*DRAFT*  
*July 16, 2008*

last one, and socioeconomics and sedimentation issues are to come. This month's presentation is on maintaining/upgrading Sabin and Boardman, and Brown Bridge dams for hydroelectric power generation. This is a 30 minute (min) talk, then 30 min he will be facilitating with Marty Boote on what we need – sharing information, question and answer (Q&A), in order to help ECT with the analysis for hydroelectric issues of concern. We want the BRDC to share their thoughts and ideas, and identify any additional items for ECT.

*Jim Macinnes, CEO Crystal Mountain Resort*

Jim gave a brief introduction of his background and why he is interested in the hydroelectric generation issue: prior to working for Crystal Mountain, he developed power plants in California. Jim wanted to talk about energy “from 30,000 feet” down to renewable energy, and how important it is.

World consumes over one cubic mile of oil per year. The U.S. accounts for a quarter of that amount, of which 70% is used for transportation/fuel. Oil has a high energy density (energy per unit volume). That's why we use it to power automobiles, versus using it for something like batteries, which provide small energy per volume but over a longer time period. World oil production may be reaching its peak soon, much the same way U.S. oil production peaked in the 1970s. Some think the peak has already arrived, some think its 5 to 10 years in the future. We won't know if we've peaked until it happens. Doubled oil prices within the past 12 months are a good indicator that the peak is closer than we think.

Larger foreign nations such as China and India want to live The American Dream; they use more energy now than before. Even when oil prices keep going up for us, the rest of the world is going to keep increasing its usage. Demand will increase, but demand will have to follow the downward supply curve – this will cause a serious energy problem in U.S. Once oil reaches its peak, there will be a long decline at an unknown rate. Just a 4% a year decline is a drop of 50% in a decade. Fifty percent less production within 10 years is a scary thought. Oil from the North Sea, Kuwait, Mexico, and the U.S. is already declining. Russia is keeping more oil internally, same with other countries. So there's less for export even with increased production. Importers are creating higher demand due to increasing transportation. Every 2 to 3 years we need to find another Kuwait to keep up with our growth... continued strong demand after the peak is a threat to our infrastructure/economy. Pricing competition will help with supply, but not solve the problem since so many countries are using this oil. We can slow the rate of decline with new technologies, but not equal the demand for energy. It's the same curve for natural gas. Natural gas is a decade or so peak beyond oil's peak. Peak coal is 1 to 2 decades beyond that. All our energy is from nonrenewable sources, and those will be exhausted. Half of the recoverable oil, gas, and coal will remain in the ground; that will take many decades to exhaust, but it's less available. We need a cultural shift to change our usage; energy conservation is what's needed - doing less, or doing without. The goal needs to be to decrease our own energy use 25% (or you can pick any rate, 1-100%) within

5 to 10 years. Public transportation, carpooling, etc. to conserve, buying locally or growing our own food, becoming more localized. We have to take steps in our own home usage, like using compact fluorescents, using vapor barriers in our homes, and other ways to conserve energy.

The challenge is a shift in public policy; we need to encourage conservation and development of renewable energy: wind, solar, photovoltaic, hydroelectric. Things like the Ludington pump storage plant must be developed. Biofuels may also be a solution as long as they don't impact food production. Any technology used must have a positive return on investment (ROI). To further motivate us, they need to offer incentives to companies, homeowners, and energy developers: utility-sponsored conservation, subsidies for homeowners. Renewable Portfolio Standards (RPS) allow for a fixed price for renewable energy. Integrated resource planning, integrated planning/zoning codes. Renewable energy is critical, it's the only proven sustainable energy supply. We have to transition our whole society to sustainable sources, which is very difficult to do. May take a whole generation, because it will take most of a century for renewable sources to reach the base load generation. We will need to build large base load plants. 5500 wind turbines the size of the Traverse City Light & Power's (TCL&P) are needed to equal one nuclear power plant. Electric cars, grid connected vehicles, natural gas vehicles – these have a limited transitional role: an electric car is 66% more efficient than a combustion engine. We'd need fifty 1,100 Megawatt (MW) nuclear power plants to replace just 25% of transportation oil... that's a lot. But it would reduce sending 150 billion dollars a year to Middle East Oil. Failure to transition away from oil will create big problems, and also create carbon dioxide (CO<sub>2</sub>)/greenhouse problems. Carbon footprints similar to wind power can bridge the gap during the transition to renewable power. 600 billion dollars a year, which is what the U.S. now spends on transportation oil, can be reduced. Inaction is our most costly option, so we should consider all renewable energy. 10 million (M) kilowatt hour (KWH) per year equals 13 wind turbines, which will power 1627 homes. From an environmental standpoint, CO<sub>2</sub> savings with hydroelectric power is 150 million (M) pounds of CO<sub>2</sub> into the atmosphere over a 2 to 10 year period. We must take into consideration renewable energy.

Q: A long time ago I read a book, the "Bible" of renewable energy. The first page said if you have water with a drop, you don't need this book. From your perspective, is it really responsible for government to discard hydropower on the Boardman River?

A: There are a lot of things to consider in this case, but I can say it's a wonderful resource, but we'd need a ton more sources – we need to scrounge for every renewable source we can get, don't discard just one source.

*Wayne Swallow, ECT*

Wayne's talk covered two sections in Federal Energy Regulatory Commission's (FERC's) regulations; the code to federal regulations Parts 4 and 5 – parallel but distinct parts. TCLP was forced with a decision, to upgrade or relinquish the

license. Economics at the time said they couldn't afford it, so they relinquished the license to FERC. Also, Michigan Department of Environmental Quality (MDEQ) regulations required the drawdown. If the Engineering and Feasibility Study (EFS) says hydropower is an "economic reality," we will learn all this in detail - Part 4 deals with preliminary permits, which is different than a license. With a preliminary permit, and individual, county, or municipality can apply for it. Anyone who has interests and a study plan can apply to FERC. If approved, it puts them at the head of the line. Anyone else filing means you are first. If a second vendor wants one, they must apply and FERC rules determines how they weigh the alternatives and who gets the nod for a full fledged license. The second part of this talk is on the license and license operations. What is submitted in process - it's all that we [the BRDC] are doing now, with ECT's study categorizing all the options. If it is decided at that point in time that it is feasible to use the dams again as a renewable energy source, then we will go through this licensing process and FERC will rule on it.

Q: Are you from FERC?

A: No I'm not.

Q: I'm looking at a letter from FERC: in 2002, FERC sent a letter to TCLP saying "I stated that you may proceed with the investigation as long as you maintain the spillway upgrade system." What is that spillway upgrade system??

A: (Joe Kaltenbach, formerly of TCLP) That letter was from me to FERC. Preliminary work was for the Brown Bridge spillway, the original spillway as it was intended. A quick hydro overview on 3 items: Brown Bridge Dam showed a profit over the last few years of operation because it was inherited by TCLP. There was no debt service on it, and nothing had been done to the site for 40-50 years. Boardman and Sabin Dams - both were redone after the 1970s energy crisis, and there was considerable debt service on the equipment. That has a big bearing on profitability. Price of power is a big factor in this. Power is at a set price on the market. TCLP is contracted to buy at a given rate. We renovated the sites, got them up and running, and it didn't work out well. The equipment was not specified correctly (that guy went out of business, so there was no warranty with the equipment)... all in all the two sites were not good for the power industry, they would have been better if they were done correctly. It was subsidized for a while with coal, and in 2001 FERC came to us for the spillway upgrade at Brown Bridge Dam. It had a schedule. Gannett-Fleming did the preliminary work, which ECT has. We were ready to pull the trigger on it, it was in the final stages, when Silver Lake washed away in Marquette. We pulled back, and came back and said the overflow spillway in that configuration was not OK. We had \$1M into it at that time, and had to do more. It produced 670KW if it had the water - and we didn't have enough water the last 10 to 15 years, we were at 50% capacity the last several years. We looked at it, went ahead, and now were \$2M into it, and Michigan Department of Natural Resources (MDNR) Natural Rivers said we could permit half- but not the other half. Then we had MDNR problems along with FERC problems, so we decided we needed to look at the whole river system. We had been told by FERC if Brown Bridge Dam was

upgraded, we would then have to do Boardman Dam upgrades. Sabin Dam met spill capacity, but with the additional flow from Brown Bridge and Boardman Dams, then that would then have to increase. The MDNR, MDEQ, and Michigan Hydro Relicensing met and decided to surrender the license and get out of the hydropower business. Five years' consultant money on top of \$2M for the preliminary study, a bank stabilization report, and Boardman spillway work came to \$5.5M with a 2.2 MW capacity, but not really 2.2MW, it was just about 1MW capacity because of water levels. The project just wasn't going to go. Three little facilities do not equate to the Hoover or Grand Cooley Dams. Three facilities, three sets of gates, four generators/wheels, six embankments: the math just didn't work for us.

Q: The dams produced 10M (KWH), correct?

A: I don't know.

Q: The windmill – what does that provide?

A: 14% of time it produces the 650 kilowatt (KW) capacity, other times less. The energy amounts being produced are available, you can contact TCLP.

Comment: Interesting thing with the pump station at Ludington, run by consumers energy because of the Campbell plant... they don't want to turn down at night, so use extra energy at night to pump water back up. Can't we repump at these dams?

A: No.

Q: By how much did FERC say the spillway at Boardman Dam was deficient, and how much was the cost to upgrade?

A: We never got anything solid, we weren't at that point yet. Jim Palowski and I looked at the minimum point, but I don't have those numbers with me. To do it correctly we'd need to do something with Cass Road, which was not figured in. Interlocking stone over embankment was one possible fix.

Q: Part of Brown Bridge is a FERC category 1 alteration, repair the spillway. The Gannett-Fleming report on the Boardman spillway never brought category 1 items up. Probable maximum flood (PMF) would not affect the dam based on the history of floods in this area. It's identified as a problem, but not an emergency problem – please clarify. Some believe there is a life threatening problem with Boardman dam – do you believe it is a life threatening dam?

A: What I believe, versus the law... Brown Bridge was no different. TCLP spent tons of money to prove we did not have to do anything with the spillways at Brown Bridge or Boardman Dams, but FERC was adamant that if it rains, water will come.

Q: FERC did say Brown Bridge Dam, but the Boardman Dam?

A: That's coming out of different reports. The PMF we did. That study we did internally – the Gannet-Fleming internal report. It was submitted to FERC but way after the fact. We were made to do it even though we were surrendering the license. That's different than spillway capacity – the spillway at Boardman is deficient.

Q: Is there any [hydroelectric generating] equipment out there state-of-the-art, better than what's in there now?

A: Sure there is.

Q: Anyone investigating into it?

A: Yes.

Q: Why is the capacity 2.2MW but it only provided 1.1MW?

A: Water is the fuel, and we never had enough rain.

Q: Was it the drought situation?

A: That contributed a lot to it. It has the capacity to produce, but you have to have enough propellant to get that full capacity. We don't have enough capacity.

Comment: When FERC decided to license less than 5MW hydropower plants, they charged them during the day, loaded them up, and at peak times let all the water out – a very good business decision but bad environmentally.

Mike Donahue commented that Don Tilton was not present, but we will write him a letter with these recommendations/questions for the EFS.

Q: How much revenue was generated from hydroelectric at the dams?

A: This stuff was been given to the BRDC early on. It's archived. The numbers per year, that spreadsheet was done by an accountant at TCLP. They came up with over the 17 years, Boardman and Sabin generated about \$5M in power, and cost \$9M to operate: a \$4.5M loss over 17 years. But the books were not kept the way they should, since the '96-'97 expense accounts was \$15...I don't believe those are good numbers. One gallon of oil is \$15.... the methodology is questionable, but the way the accountants did it – with the debt service, what it would cost us...?

Q: Did FERC register its dissatisfaction with the spillway in writing for the Boardman?

A: There are letters stating it was inadequate. They changed their methodology, how they measure river flow, from an arithmetic to geometric mean, which made the spillway inadequate. It was a Gentleman's Agreement – given that if we upgrade the spillway at Brown Bridge Dam, we would then have to do Boardman Dam – but they said we could do later. But over \$3M into Brown Bridge Dam with everything... relicensing was coming up, too for that site. There are letters that state the spillway was inadequate from FERC to TCLP.

Comment: TCLP approached Grand Traverse Conservation District two years prior to the spillway issue, trying to get out of that – the geology doesn't support the flows they need. It came down to FERC forcing them to move forward with spillway.

Comment: Regarding hydrology/floods – we have talked about half probable maximum flood for the Boardman design. People everywhere think it won't happen here. Last week Mason City got over 11 inches of rain. It just so happens that 11 inches is half probable precipitation for Northern Michigan. The dam in the state park almost failed. The campground was evacuated because the dam was within 3 inches of failing.

Q: What is the cost analysis difference for a windmill versus spillway capacity upgrades? Include projected maintenance.

Comment: In 1967, September 11-14, we got 14-inches of rain in our watershed. Boardman Dam only came within a few feet of the maximum spillway.

Comment: MDNR in 1987 said it was the highest the river had ever been in 100 years, and the dam is still there.

Q: If the dams are removed, and an event took place, what would happen? Would there be a wall of water if there were no dams?

A: Probably not; the river would swell and rise, no wall of water. After the rainfall receded, water levels would recede. The river bank could be flooded like other natural rivers.

Q: I would like to make a request that ECT address the cost of windmills versus hydroelectric, that they consider future fuel costs in their calculations. Scenarios developed in the past use current conditions. Energy costs are going to skyrocket. The value of renewable energy will rise as well. Future projections should be put into the calculations.

Comment: Mr. Peterson is looking into new technology for producing hydroelectricity – I want the consultants to look into new technology for hydroelectric generation, too.

Q: What caused the Keystone Dam failure in 1961? Was it catastrophic?

A: Seven inches of rain on Sept. 11-12-13 caused the Mayfield Dam to wash out, which then took out Keystone Dam, and Boardman Dam held. Several dams throughout the state failed, too.

Q: Almost failed – what does “almost failure” mean?

A: it almost flowed over the top of the embankments. Earthen embankments are not designed to overtop.

Q: Is it always a condition to blowout?

A: Not always if it's designed for it – earthen is not designed to overtop.

Probably will fail. If all three dams overtop, they would wash out instantly. The back cut wall on Brown Bridge Dam- it would collapse quickly, it's earthen fill only.

Q: Of the various conceivable means of emergency spillways on the Boardman Dam, who came up with interlocking stones?

A: Gannett-Fleming came up with the numbers; to drain the pond, it could be a permanent fix, but wanted a quick fix. Never made it that far.

Q: If you had to redo Boardman Dam spillway, something would have to be done with the bridge. Any way to look into bridge costs separately? Bridge and dam.

Q: I always assumed the EFS study will answer this – if those dams are removed, how is that going to affect South Airport Road, especially Logan's Landing?

A: From what I know, the impoundments are not flood storage impoundments. So we will see much of the change in flows because they are not flood control dams, they operate on run of the river. Dams are not flood control – whatever goes in is whatever comes out. FERC's headwater levels allowed deviation of 12 inches, and it always ran within 6 inches from the remote station. Pretty much consistent. If the water came up, the gates were opened remotely or by hand. The dams do offer a little bit of a cushion but not very much. Flood stage now would not be a lot different without the dams, only little bit higher.

Comment: MDEQ website on dam removal – look at using dams as flood control. If a 14 inch rainstorm is coming, could they drain down the dams to prepare, create storage capacity so no flooding in Traverse City? MDEQ flood control could be an old dam usage. Gannett-Fleming says we can drop water to maximum drop within 15 hours, safely. Look at the potential for dams as flood control.

Q: What reasons did FERC offer to TCLP by way of explanation for substitution of geometric for arithmetic means?

A: FERC is my favorite subject. Every five years or so they invite firms to their seminars and they come up with all new rules. Firms who attend bid out and get the work the new rules create... self perpetuating themselves. “World according to Joe Kaltbach.” Once they change the rules, it’s good for consultants but not for operators. Change and FERC is forever... what happened originally is hydroelectric less than 5MW were not licensed, because not affordable financially – they’re too small – but FERC needed more control. As soon as they made that law, Consumers Energy dropped all their hydropower. They then gave the dam ponds to nature preserves for \$1.

Q: We asked ECT to look at seven alternatives. Is there a way to narrow that down so they don’t have to study so much? Can we identify what it is we really need to answer?

A: Tom Wertz will cover this during his presentation (Scoping Team).

Q: The project on Kalamazoo River, the ongoing project – Clean Water from a paper mill contamination? From their worst case scenario, the dams were breached but not removed, and are not able to satisfy the Superfund people. What’s being done?

A: Several dams on the Kalamazoo River, 3 to 4 hydropower dams. Each impoundment had sediment contaminated with polychlorinated biphenyls (PCBs). In the ‘80’s, the owners unloaded them trying to get rid of them. The dams were partially removed, generating equipment and the superstructure were torn out, and the water sort of returned to run of the river, but the sediments were left in place, not treated, and then studied. Problem was how to take the dams out without those PCB sediments moving downstream to contaminate a bigger area. Superfund has been looking at various options/scenarios to remove the sediments, and I believe there is a project now on a few dams but I can’t tell you their status. There is a website, can look up progress. The key element is the vast amount of sediments that were highly contaminated.

Comment: I can tell you about them (Jim Dexter) one of those dams is by my office. What I can tell you about it is there are no parallelisms with this situation.

Q: What is this “issue” that Consumers Energy saw coming down the road?

A: The Economic Labyrinth: economics for small projects – they saw it coming – not feasible in their view I believe.

Comment: They were going to have to license them for the first time less than 5MW – that was the criteria – not relicense. Assume that was the cause.

A: We bought them in 1984 for a \$1, and all that new FERC licensing came out in 1987 (full bore in 1988). The structures came down in 1986, sills only thing that’s left.

Q: Sabin/Boardman came online in 1987? Why did they decide to go online with this in 1986 and borrowing money to do it when in conventional wisdom it was not economically viable?

A: Simplify it – yes, we had an energy crisis on at the time, Grand Traverse (GT) board, TCLP board worked together on it. Boardman and Sabin Dams were in terrible condition at that time, passed all the water through the spillways, which eroded, but we needed energy, period. So decision was made to repower facilities. GT county helped us. We got exemptions on those sites. Bypass type mode, cost over \$1M to build fish ladder and the transfer station; we did those two things for the exemptions. TCLP made their case to FERC with the community behind it.

A: There was federal incentive along with the law for small hydro developers, tax exemptions to get up and going before a given time, to energize these small plants. TCLP may have gotten that. Under that new licensing, they developed some dams with those funds.

Q: Are there tax incentives for someone to produce power from hydro – grants or whatever?

Comment: The same study funding removal actually has money set aside to repair/maintain those dams. Federal government funds, ACE, FWS; same grants available if the community wants to maintain the dams, money available for that. Energy, even with homeland defense for local power. We didn't have any effects with the East Coast Grid Burnout because of the dams.

## **VI. Update of FERC Preliminary Permit - Charles Peterson**

Mr. Peterson provided the details for the preliminary permit process. In line with their objective/desire, they were investigating all possibilities. FERC came up from the very beginning. In February 2008, it came to their attention that not only did they have a preliminary permit in process, another applicant had already applied. Was anyone aware another party had come into the picture? Peterson Machinery was not even aware of it. They acted in good faith, purchased assets, were directed to participate in the process. They were told to act through the BRDC, for the possibility to produce hydroelectricity – and they uncovered another party had already stepped forward to apply for a preliminary permit. The preliminary permit is nothing more than a reservation for the applicant to study all the facts regarding the possibility to produce hydro-power in the future – no rights, no ownership included. Permit process is open to any individual/company/agency that meets qualifications. When they realized another party had stepped forward and already applied, they were compelled to apply just to keep all three permits together - that permit had only been for Sabin Dam. So their “all three” applications were submitted. City of Traverse City (City) was aware of it. Peterson Machinery was applying and had just finished it. They saw this as only another step necessary to study equipment expense, etc. It was in line to at least apply for the preliminary license. FERC responded they had received everything; then FERC requested a tour of the dams by Peterson Machinery and asked them if they would conduct an informal visit at three sites. Peterson Machinery then made it known to City and Grand Traverse County (County) in

writing that FERC was coming and they had applied for a Preliminary Permit under FERC, what was the best method to pursue that process? They made it known to commissioners they were willing to participate in any way so that there would be a reservation in place, should the decision be to retain/produce hydroelectricity – for them to remain a competitor for this. Carrying the ball so that public can evaluate the possibility to produce hydropower, and that they would be a competitive bidder. Agreement was that dam should be kept together. If you can't operate three dams and make money, you can't split into individuals between entities and afford to operate. Agreement was that should a decision be made to reactivate dams, keeping them together as a unit would be the desire of City/County. All is available on the electronic library, look at the history. Researching in detail what the real history was, and where they can intervene to produce viable production, make competitive and generate revenue for the county/city through greater efficiency, using existing serviceable equipment with new technologies... they believe they can pick up the pieces TCLP did to make it competitive and meet requirements for renewable energy, worth far more than base load power today. Don't want to see taken out just on financial basis alone. Preliminary Permit was not to give them an edge, they just followed through. They can back away from the prelim permit, or can follow through, can substantiate, so public can have clear view of all options. Peterson Machinery believes relicensing/reactivation has several benefits, plus the bridge crossing lanes – if they move the equipment below the dams the bridge could be two lanes. They believe it is economically viable and feasible through privatization. They can do these things for lower cost that public utilities/entities can. ECT is doing their due diligence, Peterson Machinery is holding their feet to the fire. So public will not receive an improper view, but an entire view.

Q: Do you feel your efforts have met any resistance from federal entities?

A: No. We have met with FERC for more than a day, the affirmation we received is that DOE is changing – save what's out there at all costs because it's going to be critical. TCLP had it's barriers, we will have some of those too, but in dealing with people, even at the federal government level, they have an agenda to help this process to enhance/facilitate/promote small hydroelectric power. Instrumental in maybe a short time.

Q: Are there other dams as role models to look at? Sold by power companies that have been activated and returned to profitability?

A: Antrim – Elk Rapids dam turned over to private operator – out for bids, bid from an individual in Lansing – he is successful and pleased with it. We went up there, and Antrim County has changed perspective from fear/agonny, now encouraged to move ahead for relicensing in six years. Bill Stackhousen handling it. TCLP operated that. They are encouraged by response to FERC, and looking forward to relicensing. Significant savings to input of renewable energy.

Q: The Governor recently signed the Bill on renewable energy. In Northwest Michigan, there are 200 hydroelectric dams which are “earmarked for removal” and “free flow of water” concept. Do you feel that the renewable legislation is actually going to relook at dams earmarked for renewal in Michigan (MI)?

A: We could, but too tied up in current project to know much about that. FERC website has almost 300 pending permits for all types of renewable energy resources across the US. MI currently has none in there. This could be a showcase project, to say we could save these and make them productive instead of ripping them out. In dealing with every state in the country, individual plants all over the country – it's clear across the board that the two worst states to deal with the MDEQ is MI and Vermont. Because of their [FERC] expertise for hydroelectric power, it's better working with them.

Q: Do you have any of the profitability reports for Elk Rapids and how they compare to TCLP's costs? Have you asked him about that? Stackhausen.

A: He is pleased with it, looking forward to it.

Q: I think if you could get your hands on that would be good.

## **VII. ECT Update – Marty Boot**

Marty developed many of the deliverables. ECT is continuing to work on fact sheets, two are complete and submitted to the Scoping Team in draft form; they continue to work on the other five. The socioeconomic study is underway, expected to be completed July. Cost analysis nearing completions and submitted soon as well. Currently in process developing scope of work for detailed study. At this time, not all details of the seven alternatives have been identified yet, still under discussion. Forthcoming in near future. It is a tight schedule... accomplishing a lot.

Q: Cost analysis submitted soon – can we get it for the next BRDC meeting?

A: It will be ready mid July 2008.

Comment: I am expecting the results of the sediment study, submitted and posted on the website, can be reviewed.

Comment: Draft form submitted for the January baseline study – Charles Peterson Machinery challenged the engineering basis for some of it – no response yet.

A: I'm not sure the timing of the response, but it's still draft form, so will be addressed. Specific numbers relative to spillway capacity are available on website.

Q: Has there been any recommendation concerning feasible alternatives to spillway alternatives? List of those yet?

A: Not yet, will be detailed in Scope of Work.

Comment: As of today, we are still looking at the seven alternatives.

## **VIII. Scoping Team Update – Tom Wertz**

The first significant item they reviewed was ECT progress, Marty went over that. Spent bit of time critiquing BRDC special topic program, especially the fish passage report. Upshot was they want to refine some of the rules on how we're going to do the special topics format. Presentation today followed the model we would like to follow from now on in – a presentation given in 20 min, and then a Q&A session, focusing on the BRDC system rather than broad topics, plus want facilitator on these topics. Don Tilton will facilitate in future, Mike Donahue did today. Future topics were discussed, such as the hydro topic today, next topic is

sediments study, then socioeconomic factors, beyond that still developing. Don Tilton broached the possibility of changing the seven focus items to a lesser number for financial/timing reasons. Not something that has been settled yet – looking into may streamline it. Full permutations of dams/alternatives are 81, not feasible, narrowed down to seven to cover all options. May be able to narrow down more.

Q: Will the decision of the commission and Peterson Machinery keeping the three dams together impact the study?

A: Will have to get clarification to that, this is new.

Comment: Mike Donahue was asked to create a presentation/activity timeline.

Can do preliminary, Mike wants to present to the BRDC to get input, which will be the template for Scoping Team to progress from now till end of study to keep on task.

Comment: Steve Largent was volunteered to coordinate the sediment focus for the final session. Volunteers - let Mike Donahue or Steve Largent know if you want to help organize a session.

Q: If we're discussing reducing from the seven alternatives, do we need to ask the group today if we should reduce the number? Is that something we should do today?

A: I didn't want to do it as action item, too preliminary. I just wanted to let BRDC know that the Scoping Team was open to discussing that. Asked ECT if we would lose any integrity of data with that and he said no.

Q: Going on the plan that there will be fact sheets for options, is there an option for the BRDC that we should delve deeper into any of those topics?

A: Don Tilton will present next meeting on that.

Comment: When we get the first fact sheet – consolidated data, we'll have a good sense of the data, will give us an idea of how to use these and make any changes we may want.

Q: Sedimentation – lot of discussions lately about movement of dirt. Potential of movement of soil within 500 feet of water body – need Part 91 permit. Shouldn't ECT, as condition of MDEQ permit, do a Part 91 analysis? Was it determined by the county soil erosion officer that a Part 91 permit was required? I don't believe that's the law. Shouldn't ECT be analyzing the cost if MDEQ enforces their permit which requires a Part 91 permit – cost analysis of sedimentation that passes through here every storm? Maybe we should reduce our considerations, but what are the possible considerations of damage with sedimentation control?

A: Part 91 is not required for drawdown, but full evaluation would require Part 91.

Comment: Jim signed the paper, it was required.

A: It's in the minutes, and Ron will be following up with MDEQ for a more definitive answer, at July 16 meeting will be reported.

Q: Isn't Part 91 an office, not the drain commissioner. Who handles this?

## **IX. Communications Team Update – Susanne Biteman**

Susanne asked if everyone enjoy potluck today? Claps all around. She thanked everyone for bringing food and participating. Communications Team (CT) is

working on and finalized another newsletter, posters have been distributed along trailheads. Steve offered three more laminated copies to post. Looking at other ways to get communication out to larger public, different publications. Want a presentation streamlined to get out most information, very important to get this information out to the community

Comment: I found when putting up newsletters they are oversized for weatherproof holders, they fit but can't fit very many. Can we trim smaller size to fit well?

Q: Who is handling special presentations for the Rotary Clubs, etc? Coming up in July and August to civic groups?

A: CT emails and asks for volunteers: Troy, Herb, Sandra, Steve does a lot, Todd. CT talked about our schedules for Nov./Dec. - we probably won't have 4th Tuesday meetings because of Thanksgiving and Christmas. We are putting 6-month schedules together, probably will have date change for meetings.

Comment: We have a list of guidelines for facilitating process – when commenting please be respectful, etc. This is an open process.

**X. Finance and Fund Development Team Update – Herb Lemcool**

Great Lakes Fisheries Trust funds were reallocated for public process to EFS – notice we are going to be allowed to do that, \$35k. Applied for grant to Rotary Charities, received \$20K grant, 2% Grant/Tribal – that grant application is finished and county commission will approve grant allocation requests and will be sent in immediately upon approval. In the report is the financial report from Vicky Cook at NMC – complete allocation of funds spent for the month. Check register so know what is being spent each month. BRDC is not looking to apply for additional grants –not feasible because timeline won't allow it. Finishing up by December, any new grants would likely not come through till December.

Q: Do we have enough money to finish what we sent out to do?

A: Yes. But if you happen to find a grant, remember we only have 6 months,- 30-45 days to write the grant, same time to approve it, same till allocated – you're at the end of the year.

Q: What oversight existed in this? It has come to my attention the real possibility that we have paid NMC/WSI over \$200K to \$500K, and what kind of bang for our buck have we gotten? Can someone from county put an accounting together?

A: It has been summarized – college is fiscal agent – pass through for fiscal funds – have had in past spreadsheets for detail next meeting.

Comment: I doubt they [Northern Michigan College (NMC)] have gotten that much money.

Comment: NMC doesn't receive any money for it, any money passed through NMC is for contractors – Jennifer Jay, Becky Ewing, Tim Ervin, other folks who got it going. Direct copy charges are the only amount charged through the college. In kind, they have given us space – a big contribution.

Q: So putting those costs together should be very easy.

A: We're looking at the spreadsheet – contract services are in there. Some is facilitation. NMC got paid postage [a savings for us], that is the only money paid to NMC, plus use of the rooms – Hagerty charged so we changed. That's when we got the civic center for free. \$800 to Hagerty when we used it.

Q: I would like to see the statement on those amounts.

**XI. Bottomlands Management/Property Owners Issues Team (POIT) Update – Steve Largent**

Keeping it short, we met last Wed. evening; two meetings ago we were asked for clarification on three issues – Natural Rivers Zoning as it pertains to dams/impoundments. Brian sent a letter, will bring to next meeting. Second we were asked for an explanation of Part 91 Permit; Ron followed up with Matt Johnstone. Follow up results presented next meeting. Thirdly, the dam impoundments, should they become public trust? No change to follow up on that till next meeting. List of new issues from POIT prior to 7/16/2008 meeting – took us entire 35 min to cover these three, so need listing ahead of time for preliminary answers, get them to Steve by Monday. ECT/Don Tilton said lack of water level control has led to setback of revegetation – high water rounded out that – some of the stonier/sandier embankments will be slower to revegetate than low areas. He will monitor so it doesn't cut into private property. Until the ultimate decision made on fate of dams, no money will be provided to maintain bank stabilization. Stabilize water level: written level of request for higher water level – Dennis Aloia.

A: I said no decision has been made on it yet, would not have decision made by today. Evaluating the amount of water – there is a difference between 2nd penstock versus spillway control, if water is raised, to see which is better option. STS Consultants (retained by the City) is performed a detailed stability inspection of impoundment, done last week, they had to shut off river flow for about 1 hour; therefore, you may have noticed a difference in water level, we tried to announce ahead of time to public. They walked from Brown Bridge Dam to East Creek by Garfield Road, found one brook trout over 10-inches, no other stranded fish. Ron asked us answer to two questions – GT Band fish passage/dam removal stance: we will ask those questions next week at the meeting.

Comment: Was the email from Kevin why Part 91 was not required?

A: That is in the minutes.

**XII. General Question and Answer**

Todd finally showed up: he commented that we probably thought that finally we were going to get away from Todd talking about The Process. No, he wouldn't talk about that, but he has accepted a fisheries supervisor position in Newberry, starting July 14. The BRDC will have appropriate support by MDNR Fisheries Division, plus Todd has a personal commitment to the BRDC. He will remain as chair of the Implementation Team throughout fruition of project, will still attend meetings, and still be active in the BRDC.

**XIII. Call for agenda items for July meeting and meeting evaluation**

***DRAFT***  
***July 16, 2008***

Special discussion on Sedimentation Transport  
Reports from Task Teams  
Update from US Corp of Engineers and ECT

**XIV. Adjourn 8:11PM**

Submitted by Meral Jackson  
July 6, 2008  
Reviewed by Sandra Sroonian  
July 15, 2008