December Boardman River Dams Implementation Team Meeting
APPROVED Meeting Notes

Date: Thursday, December 14, 2017 at 1:30 pm
Facilitator: Frank Dituri, Grand Traverse Band of Ottawa and Chippewa Indians
Notes: Nate Winkler, Conservation Resource Alliance
Location: Traverse City Governmental Center, Commission Chambers

Implementation Team
Grand Traverse County                            City of Traverse City
Traverse City Light and Power Department           Grand Traverse Band of Ottawa and Chippewa Indians
Michigan Hydro Relicensing Coalition               US Fish and Wildlife Service
Michigan Department of Natural Resources           Michigan Department of Environmental Quality
Grand Traverse Conservation District (Ex officio)   Conservation Resource Alliance (Ex officio)
Watershed Center Grand Traverse Bay (Ex officio)   Charter Township of Garfield (Ex officio)
Grand Traverse County Road Commission (Ex officio)

IT Members Present:
Frank Dituri, DJ Shook (Grand Traverse Band of Ottawa and Chippewa Indians)
Nate Winkler, Amy Beyer, Kim Balke, Casey Ressl (Conservation Resource Alliance)
Scott Heintzelman* (Michigan Department of Natural Resources)
Bob Stuber (Michigan Hydro Relicensing Coalition)
Jim Cook, Jim Johnson (Grand Traverse County Road Commission)
Christine Crissman
(Watershed Center Grand Traverse Bay)
Marty Colburn (City of Traverse City)
Rick Westerhof (US Fish and Wildlife Service)
Steve Largent, Reb Ratliff
(Grand Traverse Conservation District)
Vicki Uppal, Jean Derenzy (Grand Traverse County)

IT Members Absent:
Michigan Department of Environmental Quality
Traverse City Light and Power Department
Charter Township of Garfield

* attendance via conference line

Non-IT Members Present:
Dan DeVaun, Troy Naperal (AECOM)
Carl Platz*, Paul Powell*
(US Army Corps of Engineers)
Mike Sipkoski (Adams Chapter of Trout Unlimited)
1. **Welcome and introductions** – Introductions were made by those in attendance.

2. **Public comment** – None.

3. **Miscellaneous**

   **Agenda deletions/additions** – None.

   **Review and potential approval of the November IT meeting notes** – Approved with one correction (“Mike” not “Mark” Wills in the Action Items section).

   **Action item review from the November IT meeting** – Reviewed by Winkler; those not complete were noted as owing and placed on the “Pending Action Items” list (at the end of these notes) unless determined to no longer be relevant.

   **2018 IT meeting calendar** – Winkler inquired of the IT members present as to their preference of a meeting schedule for 2018. After a short discussion, it was agreed to maintain the current and past schedule of the third Thursday of the month with the exception of November and December when it would be the second Thursday of the month.

4. **AECOM update: report and discussion (Dan DeVaun)** – DeVaun presented the following updates on the local effort:

   **Boardman Dam**
   - Michels has demobilized from the construction site, although equipment is still onsite
   - The floodplain and channel are roughed in over the entire length of the project although the upper half (top of project to approximately station 220) is closer to final grade/shape than the lower
   - Remaining work to be performed in 2018 includes final grading/shaping of floodplain and channel, dig and pitch, seeding, and sediment basin abandonment
   - AECOM is working with the District and TART to finalize site grading plans that will accommodate new recreation trails on the bottomlands. Michels will incorporate the grading plans into their 2018 work
   - AECOM is working with CRA and the District on two eroding bluff sites upstream of the project, proximal to the Oleson Bridge crossing

   **Sabin Dam**
   - A conditional permit is pending from MDEQ, awaiting submittal of sealed design plans from AECOM (AECOM is working through design changes requested by the MDEQ)
   - Plans are expected to be complete the following day and will be submitted to the County for signature
4. AECOM update (Sabin Dam cont.)

- Comments from MDEQ on prior iterations of the design plans include 1) refinement of backfill description related to in-stream large wood structures (log jams) and 2) MDEQ preferences for sediment management methodology
- Additional changes to design plans were a result from the 30 November (2017) “lessons learned” meeting convened by AECOM with project partners. These changes are intended to result in efficiencies and a lower end-cost for the project
- Specifications will be complete subsequent to the design plans, sometime the following week
- The project monitoring plan is complete and is very close in construct to that of the Boardman Dam project monitoring plan. While not the sole reason for developing the project monitoring plan, it is a requirement of the MDEQ and Army Corps to have a plan to monitor the project for 3-5 years in the short term (subsequent to project completion) but is possible to require monitoring for 10 years subsequent to project completion

A discrete component of the monitoring plan is to assess the degree of sedimentation between the Sabin Dam project site and South Airport Road. The following are key items of note:

- the sedimentation effects of the Boardman Dam removal on the Sabin Dam to South Airport Road stretch are in the initial stages of assessment
- sediment transport models developed and interpreted by AECOM currently only forecast to 50 years, post-project completion
- while the transport of sediment and wood material is a natural aspect of river function (the dam removal project restores this function), the culverts at South Airport Road are vulnerable to the effects of increased sediment and wood material loading
- AECOM expects a 3-5 year span post Sabin Dam removal in which there will be a mobilization of fine sediment, part of which will stall out in sections of the river and accumulate—will want to ascertain where this happens to ensure there’s no negative effect on infrastructure (i.e. South Airport Road culverts)
- AECOM doesn’t feel sediment will be the primary issue effecting the culverts at South Airport Road and that instead feels it will be wood material transported from upstream

Cook observed that according to an MOU between the District, the County and the Road Commission, the County is responsible for the maintenance of Sabin Dam, the Road Commission is responsible for culverts and bridges, and the District is responsible for maintenance of public lands. As a follow up, Cook noted that the responsibility of managing sediment that has the potential or actually is affecting culverts or bridges and is the result of the dam removal project, lies ultimately with the County. Related to the discussion, DeVau inquired of the County and the Road Commission what constitutes “long term” as it pertains to sediment management and its effect on infrastructure, following up by saying that it would/should be hashed out between the two entities.
4. **AECOM update (Sabin Dam cont.)**

Dituri added to the dialogue by noting the removal of the dams on the Boardman River constitutes a reduction in operation and maintenance liabilities on the part of the County.

DeVaun advanced the discussion by offering several discussion topics/questions for further consideration:

- How much data is required for effective monitoring
- What is the IT’s tolerance for risk
- What metrics will provide required information regarding sedimentation
  1) monitor at South Airport Road with a staff gage and routine measurements for changes in bottom elevation or
  2) monitor entire reach between Sabin Dam and the South Airport Road with longitudinal profile and cross-sectional surveys to predict arrival of sediment at the crossing

In response to a question by Dituri, DeVaun said the above discussion could extend another month and a half at the most before a decision would need to be made. With regard to maintenance, it could be included in the bid package for Sabin Dam removal or as an “after the fact” addendum. One option as an example would be to park an excavator at the South Airport Road crossing and bail sediment after it accumulates to a pre-determined critical level at the culverts (Cook noted that this would require a permit from the Road Commission for work in the road right-of-way). DeVaun concluded this part of the discussion by stating the type of monitoring proposed is considered prudent by the Army Corps and stems from discussions regarding agreements with the local team for project maintenance (which the Army Corps will not be picking up the tab on).

A question came up as to who would be collecting the data for sediment monitoring with the answer being AECOM or the Army Corps. Largent followed up by noting that there’s no way of knowing what the level of sedimentation is until data is collected. To this DeVaun reiterated the primary concern on the part of AECOM is the impingement and jamming of large wood material in the culverts at South Airport Road. Dituri suggested monitoring during construction at Sabin Dam so that adaptive management could occur and contractor could respond by changing methodology.

Johnson enquired as to when the last survey of the stretch had occurred, with Dituri responding that it had been 2010-2011. Johnson said he’d asked because there had been observations made of sediment deposition in the vicinity of South Airport Road and that he was concerned with setting benchmarks for surveying sedimentation levels in the event substantial deposition had already occurred. DeVaun noted that any fine sediment would likely be transported downstream unless accumulations vegetated, which would result in the fine sediment being locked in place.
4. **AECOM update (Sabin Dam cont.)**

Balke asked the group at large if it wouldn’t be a good idea to reactivate the M&E Team and followed up with a question as to how to fund the sediment transport monitoring. DeVaun responded by agreeing that the M&E Team should be reactivated to take up the sediment transport issue and that a funding mechanism would have to be developed for the monitoring effort. DeVaun followed up by noting the requirement to monitor sediment aggradation at South Airport Road was explicitly called out in the PPA to which Balke asked if the Army Corps could then cost-share the monitoring with DeVaun replying in the affirmative and that a unit-based cost estimate could be developed for each cleanout event. Beyer asked DeVaun when the Army Corps’ transferred responsibility to the local team for such work with DeVaun responding that it very likely would be once the Sabin Dam project is complete. Dituri related that StreamMechanics is looking for verification when they can acquire baseline data for the Boardman Dam monitoring effort. DeVaun suggested waiting until the completion of the punchlist walkthrough meeting (i.e. when the project is complete). DeVaun noted the need for a plan of action to set up cross sections and a line item in the project budget for sediment cleanouts at South Airport Road.

Largent asked DeVaun how the tributary ford designs were coming along. DeVaun said that the general detail was complete and will forward to Largent and Ratliff for review. Cook reminded everyone that any work performed in the road right-of-way would require a Road Commission permit to do so.

5. **Army Corps update: report (Carl Platz, Paul Powell)**

Platz and Powell provided the following project updates on behalf of the Corps:

**Boardman Dam**
- Work on the Boardman Dam project is substantially complete per DeVaun’s earlier update

**Sabin Dam**
- The RFP for the Sabin Dam project is essentially ready for distribution, awaiting the issuance of the project permit by MDEQ so that it may be included with the RFP package. The goal for distribution of the RFP is sometime prior to Christmas (2017) with a contract signed by late February (2018). Items hinging on the issuance of the permit include finalization of the engineer design consultant contract with AECOM (the firm will be assisting in reviewing dirt contractor proposals and qualifications). Per a question by Dituri, Platz indicated that AECOM and the Army Corps will be under separate contract which will facilitate engineering services during construction, similar to the process followed during the Boardman Dam project.

Dituri lofted the issue of fund flow between the GTB and the Army Corps—the PPA states the GTB will pay the Army Corps $2.1 million toward full cost of the Sabin Dam removal. The GTB
5. **Army Corps update (cont.):**

would prefer to have any funds currently available from grant sources to be brought forward right now for payments toward the $2.1 million. Dituri went on to note the GLFT is willing and preparing to front awarded grant funds predicated on assurances that the project will go to completion.

Jean Derenzy added that the County Brownfields Authority has approved funding for the Sabin Dam removal project and will check on the status of the release of those funds.

Beyer reminded the group assembled of the three funding sources for the Sabin Dam removal project which include:

- Grants awarded to and/or routed through GTB
- Grants awarded to CRA
- Brownfield funding through the City and the County

With this in mind, it is crucial to arrange the funding mechanism by which these funds are flowed to the GTB so that payments (as obligated by the PPA) can be made in a timely fashion to the Army Corps.

6. **MHRC “Knowledge Capture” process update: report (Bob Stuber) –**

Stuber provided background on himself as a retired career fish biologist with the US Forest Service, during which time he’d worked on relicensing numerous Consumers Power hydroelectric projects. That experience provided a background by which he was able to undertake the Boardman River Dams project “knowledge capture” exercise for the MHRC which will inform future dam removals. Stuber provided a summary of the exercise for distribution with the meeting packet for IT review as well as sending Winkler a link to the final document also for IT review. Stuber would like comments from the IT by the next IT meeting in January (2018).

7. **IT Chair and vice-Chair term for 2018-2019 term: discussion, decision (CRA, IT) –**

Winkler provided background on the process by which feedback was gathered on Dituri’s performance as IT Chair and in general, what that feedback amounted to. In summary, those that responded to Winkler’s request for feedback were all favorable of Dituri’s performance and would like to see him continue in the role. With regards to a vice-Chair, opinion ranged from no vice-Chair needed to a recommendation for Marty Colburn to serve in that position (for reference, Beyer passed around copies of the IT Chair/vice-Chair job description).

Colburn continued the discussion by saying Dituri would, in his new role as Facilities Manager for the City, still be involved with the project as an IT member. Dituri noted that before the next IT meeting, the GTB will have selected a replacement representative for the IT. Westerhof added that in his mind, only signatories to the settlement agreement could field candidates for Chair/vice-Chair. This would allow Bob Stuber to serve in his role as member of the MHRC as
7. **IT Chair and vice-Chair term for 2018-2019 term (cont.)**

    suggested by members of the IT. The proposal to nominate an MHRC representative to the proposed IT vice-chair position needs to be discussed and approved by the respective organizations that are part of the MHRC (Anglers of the Au Sable, Michigan TU, Great Lakes FFF, and MUCC). This discussion will take place prior to the January IT meeting, with an MHRC recommendation being given to the IT at that time.

    Beyer noted also that the IT would need a spokesperson, whether or not it’s the Chair would be up for discussion and inquired of Colburn whether or not Dituri could remain the project spokesperson with Colburn responding that it was indeed possible. The final decision on leadership was postponed until the January IT meeting at which time a GTB representative (not necessarily Dituri’s replacement) will be present for discussion.

8. **Monitoring and evaluation update: report, discussion (Winkler)** – Winkler reported that the GLEC macroinvertebrate survey final report for 2016 and 2017 has not been received and was informed by GLEC that it was under “final review”.

    Also, per the earlier discussion related to sediment transport monitoring between Sabin Dam and South Airport Road, Winkler was tasked to set up an M & E Team meeting for the first two weeks of January (2018) to begin to plan for sediment monitoring.

9. **Bi-directional fish passage update: report (GTB)** – Dituri covered the following items as Zielinski was not present to do so this month:

    - MDNR and GTB were unable to get in the lower Boardman River for the fall fish shocking survey event planned for November
    - The intent of part of the survey is to capture and implant PIT tags in a number of steelhead to ascertain functionality of the antenna array proximal to Union Street Dam and at the mouth of the river. This will be rescheduled for the next week/two weeks
    - The GLFC met recently with Rotary, (former mayor) Michael Estes, the Watershed Center, DDA, and the City parks department
    - The GTB and MDNR will be meeting the following day to discuss fish species passage above Union Street Dam
    - Per a question by Winkler, Dituri noted that the fish ladder at Union Street Dam would be blocked during the Sabin Dam removal and FishPass project construction

    DeVaun added the following:

    - AECOM is working through the conceptual design and hydraulic modeling for the FishPass structure. The 30% level of (conceptual) design is anticipated for completion by the 15 February (2018) FishPass workshop
    - AECOM will be attending a meeting with the City planning commission on 3 January (2018) to discuss FishPass
10. **Bottomlands update: report, discussion (Largent)** – Largent provided the following with regard to bottomlands maintenance and restoration:
   - The District is working with NRCS on securing funding through EQIP for tree planting at the Boardman Pond bottomlands and that an MOU between the District, the GTB, and NRCS was expected to be signed off on in January (2018). Shook indicated his agency’s desire for there not to be any languishing erosion issues post-project completion that would intercept the EQIP funding and prevent its being spent on plantings. Dituri thought it might be prudent to discuss how the timing of surplus wood material scattering on the bottomlands might interfere (or not) with the plantings. DeVau replied that it would not be an issue as the wood material would be scattered prior to project completion and the installation of plant material would not occur until after the project was completed. DeVau added that an issue exists concerning deviations between the total disturbed bottomland area and that estimated in the bid documents and how that discrepancy needed to be avoided during the Sabin Dam/Pond project.
   - The District has been awarded an “Urban Forestry” grant from the MDNR for additional plantings at Boardman Pond bottomlands.
   - The District also was awarded $4,000 by the Invasive Species Network, which will be used to order native seed for the bottomlands at the (former) Boardman Pond.
   - A resident with frontage on the former Boardman Pond has contacted the District about how the bottomlands will appear over time.

11. **Communications update: report, discussion (CRA/IT)** – Ressl covered the following related to communications:
   - Prior edits by the IT to the draft 2018 communication plan are reflected in the copy distributed in the IT packet.
   - Time lapse cameras from the Boardman Dam site have been collected and the images are currently being processed, likely complete by the end of the first quarter in 2018. The most probable sequence for processing are the images from the Cass Road Bridge camera and then those images from the camera focused on the powerhouse.

Dituri reported that the GTB documentary half-hour educational exercises have been distributed to seven states.

12. **Funding update: report, discussion (CRA/IT)** – Beyer reviewed the material included in the meeting packet as well as noting a recent award of $70,000 from Rotary to the project.

13. **Open Forum: (IT)** – Largent provided Winkler with kudos for tending to the meeting notes and other administrative details.

14. **Meeting Closing:** Meeting action items were reviewed by Winkler and subsequently the meeting was adjourned.
Action Items

New:

- **Winkler** to distribute draft December IT meeting notes for review
- **Winkler** to have approved November IT meeting notes posted to the project website
- **Winkler** to have brook trout-related literature posted to the project website
- **DeVaun** to ascertain from **Army Corps** whom will be acquiring sediment transport data
- **County** and **Road Commission** to meet and discuss transition timeline for sediment management responsibility between Sabin Dam and South Airport Road
- **Winkler** to schedule and convene a Monitoring and Evaluation Team meeting first two weeks in January (2018) and loop **Shook** into any future meetings
- **DeVaun** to submit write-up to the Army Corps regarding monitoring schedule transition
- **Derenzy** to check with **Scott Howard** regarding Brownfield funds
- **IT** to provide **Winkler** with feedback on Knowledge Capture document prior to next IT meeting
- **Stuber** to check with **Schramm** regarding potential role as IT Chair
- **IT** to ask **Schramm** if 1) IT can be led by co-chairs and 2) can ex-officio members serve as co-chairs
- **Winkler** to distribute to **IT** the **GTB** fish species passage resolution
- **IT** to provide comments to **Ressl** on draft 2018 communications plan by 24 December (2018)
- **Largent** and **Ratliffe** to populate funding chart and forward to **Beyer**
- **GTB** and **County** to provide recommendations for IT representation

Pending:

- **Dituri** to provide SEP final report to **CRA** for IT distribution
- **Shook** to distribute to **IT** (via **Winkler**) Brown Bridge large wood installation report once complete
- **DeVaun** to make a request to Luke Trumble to summarize MARC dam removal panel discussion
- **Winkler** to make updates to dam removal project emergency contact plan and make plan available to the **IT**
- **Winkler** to update the IT contact information list
- **Army Corps** and **Michels** to identify emergency contact for Boardman Dam site
### Acronyms and Abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>AECOM</td>
<td>Project engineer</td>
</tr>
<tr>
<td>Brown Bridge</td>
<td>Brown Bridge Quiet Area and dam removal location</td>
</tr>
<tr>
<td>City</td>
<td>City of Traverse City</td>
</tr>
<tr>
<td>Corps or Army Corps</td>
<td>United States Army Corps of Engineers</td>
</tr>
<tr>
<td>County</td>
<td>Grand Traverse County</td>
</tr>
<tr>
<td>CRA</td>
<td>Conservation Resource Alliance</td>
</tr>
<tr>
<td>District</td>
<td>Grand Traverse Conservation District</td>
</tr>
<tr>
<td>EQIP</td>
<td>Environmental Quality Incentives Program</td>
</tr>
<tr>
<td>FFF</td>
<td>Federation of Fly Fishers</td>
</tr>
<tr>
<td>FishPass</td>
<td>Fish passage exploration project at Union Street Dam</td>
</tr>
<tr>
<td>GLEC</td>
<td>Great Lakes Environmental Center</td>
</tr>
<tr>
<td>GLFC</td>
<td>Great Lakes Fishery Commission</td>
</tr>
<tr>
<td>GLFT</td>
<td>Great Lakes Fishery Trust</td>
</tr>
<tr>
<td>GTB</td>
<td>Grand Traverse Band of Ottawa and Chippewa Indians</td>
</tr>
<tr>
<td>IT</td>
<td>Boardman River Dams Settlement Agreement Implementation Team</td>
</tr>
<tr>
<td>MARC</td>
<td>Michigan Aquatic Restoration Conference</td>
</tr>
<tr>
<td>MDEQ</td>
<td>Michigan Department of Environmental Quality</td>
</tr>
<tr>
<td>MDNR</td>
<td>Michigan Department of Natural Resources</td>
</tr>
<tr>
<td>MHRC</td>
<td>Michigan Hydro Relicensing Coalition</td>
</tr>
<tr>
<td>Michels</td>
<td>Boardman Dam project dirt contractor</td>
</tr>
<tr>
<td>MOU</td>
<td>Memorandum of Understanding</td>
</tr>
<tr>
<td>MUCC</td>
<td>Michigan United Conservation Clubs</td>
</tr>
<tr>
<td>NRCS</td>
<td>Natural Resources Conservation Service</td>
</tr>
</tbody>
</table>
### Acronyms and Abbreviations (cont.)

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIT</td>
<td>Passive Integrated Transponder</td>
</tr>
<tr>
<td>PPA</td>
<td>Project Partnership Agreement</td>
</tr>
<tr>
<td>RFP</td>
<td>Request for Proposals</td>
</tr>
<tr>
<td>Rotary</td>
<td>Rotary Camps and Services</td>
</tr>
<tr>
<td>SEP</td>
<td>Supplemental Environmental Project</td>
</tr>
<tr>
<td>TART</td>
<td>Traverse Area Recreation and Transportation (Trails, Inc.)</td>
</tr>
<tr>
<td>TU</td>
<td>Trout Unlimited</td>
</tr>
<tr>
<td>US</td>
<td>United States</td>
</tr>
</tbody>
</table>