**Michigan Stream Team**

Notes from April 9, 2020 Conference Call

Notes taken by: Megan Royal

1. **Attendees**:
   1. Ralph Reznick – MI EGLE Nonpoint Source
   2. Bethany Matousek – EGLE Inland Lakes and Streams
   3. John Skubinna – EGLE Transportation
   4. Dan DeVaun – EGLE Dam Safety
   5. Mathew Herman – EGLE Nonpoint Source
   6. Alyssa Riley – EGLE Nonpoint Source
   7. Kesiree Thiamkeelakul – DNR Habitat Management Unit
   8. Mike Rubley – DNR Resource Analyst Division
   9. Patrick Ertel – DNR Fisheries Division
   10. Neil Godby – DNR Fisheries Division
   11. Cyndi Rachel – USGS Upper Midwest Water Science Center
   12. Jim Selegean – USACE Hydraulics & Hydrology
   13. Megan Royal – USACE Hydraulics & Hydrology
   14. Mark Fedora – Ottawa National Forest Service
   15. Andria Ania – Huron-Manistee National Forest Service
2. **Future of Stream Team**
   1. Past
      1. Original driving force for Stream Team was to develop regional reference curves.
      2. Group also served as an advisory committee, for example dam removal and conversion to white water parks paper.
         1. Patrick recommends revising the group’s white paper to include more structures, not just grouted as it currently reads.
         2. Topic still relevant with new permit applications coming in.
      3. Shared resource between agencies
   2. How might the Stream Team be involved in communication to legislators?
      1. For issues such as fish passage with white water parks or record high water levels on Great Lakes.
      2. Broader education if the group was invited to speak on issues, difficult to insert ourselves.
      3. DNR Fish Division can create policies that are used as supporting documents by EGLE during permit review (ex. Baffles at stream crossings).
         1. Stream team could play a role in the development or review of these scientific policy documents.
         2. Provides a paper trail for (EGLE) decision making to make recommendations to avoid or minimize impacts through permit evaluation.
   3. Theme of education, whether through white papers, journal articles, or presentations.
      1. Public outreach – USACE entering into coastal contract with EGLE for “beach walk with a scientist” to educate on sediment transport, waves, shoreline protection structures and with virus this year, scope is being transformed to a short 3-5 minute videos. A similar program could be developed for streams.
      2. Depending on the content of videos, could be something sent out to all EGLE field staff for education.
      3. EGLE water resources division made a series of videos explaining the ordinary high water mark (6 videos ranging from general to specific), posted on EGLE’s YouTube. Would like to have a series of videos explaining how to identify bankfull. Also how to use the regional reference curve.
      4. **Request – what topics would your agency be interested in having the Stream Team develop videos on?**
         1. Bankfull and regional reference curve.
         2. EGLE developing guidance documents for dam removals, would be helpful to have accompanying videos.
         3. Could have a video explaining fish behavior that could be pointed to as a scientific reason why a white water park or baffles at a stream crossing are not recommended.
         4. Dam removal sediment transport – better guidance on how to estimate sediment load. Limitations of existing USACE Calvin Creech curve based on modeled data.
         5. Highlight guidance on installing recommended in channel features for slope stability, installing toe-wood, riffles, etc.
         6. How to measure a culvert – tie into the culvert inventory effort.
         7. Audience might be variable from agencies, consultants, educators, anglers, watershed conservation groups.
      5. Benefit of having Stream Team complete these videos vs an agency is the ability to get more done using shared resources.
         1. USACE has video editor that can be leveraged for this project.
         2. Depending on the topic, another form of content might be useful (ex. white paper).
         3. Would want to have a script for each video.
   4. Sediment Transport
      1. How to provide guidance on incorporating sediment transport into project design.
      2. Hesitant on detailing one method to use as streams are complex and there’s not one solution for all sites.
      3. What kind of analyses are acceptable? Would be best to hire an expert but that cannot be required by permitting agencies; there are too many projects and not enough experts.
      4. Could list the analyses that are recommended – the regulatory community is recognizing that this is a huge need to set a minimum bar.
      5. Developing sediment rating curves would be helpful.
         1. Currently lacking the Bedload and suspended load data which will be time consuming to collect.
         2. USGS has a sediment data portal that Cyndi presented to the group in January 2017.
            1. Only suspended sediment, no Bedload.
            2. River mouth samplings through GLRI, plus Cyndi’s edge of field sites.
         3. EGLE working with USGS at ~25 sites collecting suspended sediment samples. Had funding for a phase 2 to collect bedload samples at select sites, but no longer confident funding will be available.
         4. Patrick volunteers to complete grant writing.
         5. USACE can leverage PAS program for 50% cost share as work in kind; if another group can support data collection, USACE could match funding in services.
   5. Updates to regional reference curves
      1. EGLE has funding under contract to update and validate curves.
         1. Additional funding to fill data gaps for smaller watersheds (<10 sq mi) and lake plain area.
   6. Agency collaboration
      1. Opportunity assist with grant funding, and have scientific discussions and get input that may inform policy.
3. **Housekeeping**
   1. Email list – if you know of someone who should be added to the stream team list, send their contact info to Ralph.
      1. Check if Kurt Densmore – MDOT was added.
   2. **Next meeting – conference call on Wednesday June 17th**
      1. Plan in-person meeting for September:
         1. Potentially in Traverse City to observe dam removal.
         2. Patrick could lead second field day for Lake Kathleen / Maple River dam removal to monitor plume of sediment transport (3-miles of stream to collect depth of sand using probes and channel cross sections).