

Fish and Wildlife Working Group
February 17th, 2021, 8:30-2:00

Participants

IA DNR: Kirk Hansen, Scott Gritters, Ryan Hupfeld, Karen Osterkamp

Lake Pepin Legacy Alliance: Kenz Becco, Rylee Hince

MN DNR: Neil Rude, Brandon Schad, Lucas Youngsma

National Park Service: Alan Robbins-Fenger

UMRBA: Andrew Stephenson

USACE: Steven Clark, Angela Deen, Karen Hagerty, Kevin Hanson, Paul Machajewski, Aaron McFarlane, Andrew McQueen, Andrew Meier, David Potter, Dan Reburn, Jon Schultz, Elliott Stefanik, Burton Suedel, Chuck Theiling

USFWS: Sharonne Baylor, Stephanie Edeler, Jennifer Froehly, Cheryl Groom, Katie Julian, Heidi Keuler, Matt Mangan, Louise Mauldin, Tim Miller, Rebecca Neeley, Hallie Rasmussen, Brandon Raymond, Sara Schmuecker, Mary Stefanski, Wendy Woyczik, Tim Yager

USGS: Kristen Bouska, Nathan De Jager, Jennifer Dieck, Jeff Houser, Jason Rohweder, Jayme Strange

WI DNR: Deanne Drake, Shawn Giblin, Jeff Janvrin, Brenda Kelly, Sara Strassman, Jordan Weeks

2021 HREP Monitoring and Evaluation Activities – Dave Potter (USACE)

Andrew Stephenson - There have recently been more projects constructed in phases, how, if at all, does the monitoring change for those types of projects that may overlap in time and space?

Dave Potter – Each phase should have its own feasibility report and each feasibility report should have its own monitoring and adaptive management plan.

Sara Strassman - Is there a desire to develop a database for monitoring data that is just for UMRR or would it cover all restoration authorities? Would it be a national resource or just for our region--like something similar to the Navigation Portal?

Dave Potter and Angela Deen – Discussions are ongoing; current thought is that a regional database might be best and that it wouldn't need to be limited to HREP monitoring but could include other non-HREP monitoring as well.

Jeff Janvrin - Since COE now has approval for story maps, perhaps MVP could do a story map of monitoring spatial and indicate what was collected, when and who would be contact to obtain data/reports.

Dave Potter - I forgot to mention that Dan Kelner is analyzing the mussel data for Capoli Slough and will be presenting at the upcoming UMRCC mussel technical session.

UMRR update – Angela Deen (USACE)

NESP update – Elliott Stefanik (USACE)

**How Climate Change is Impacting Mississippi River Health: Can We Adapt Quickly Enough to Produce Meaningful Change? – Sawn Giblin (WI DNR)
Engineering With Nature – Burton Suedel (USACE)**

The note-taker, Steve Winter, wasn't able to keep up with the majority of the notetaking during the discussion following this presentation. Fortunately, Andrew Stephenson and others provided their notes and recollections. Thanks everyone!

Deanne Drake – the N removal numbers you presented, can you tell us what the mechanism(s) for that are (uptake by plants, denitrification?)

Andrew McQueen - <https://www.sciencedirect.com/science/article/pii/S092585741630550X>

Sara Strassman – How would you describe the EWN process used for setting objectives?

Burton Suedel – I think there are a lot of parallels between EWN and UMRR in how objectives are set, especially how sustainability and climate change considerations are accounted for.

Sara Strassman – What are the O&M requirements/responsibilities?

Burton Suedel – work within frameworks and policies that dictate how you're doing your work. Looking at how to work within those frameworks to develop solutions – frameworks for projects vary from project to project.

Steve Winter – Once a project is completed – who is responsible for operations and maintenance for those projects? Who's responsible for upkeep and repair?

Burton Suedel – That wouldn't change – whoever would be responsible without those types of designs would be the same, unless we come to a different agreement. Army Corps perspective – if we modify existing or utilize innovative designs, we could be responsible.

Sara Strassman – If built under typical Ops or navigation management authority – not usually a long-term maintenance requirement there – unless set up specifically – wouldn't have an O&M obligation associated with the project. Is that fair?

Steve Clark – What Burton is explaining and describing should be considered in a context of Planning and Construction philosophy and method – wouldn't do much to change the authorities under which we would construct these projects in the district – would still be UMRR, NESP, or O&M, and projects would still need to fit within the constraints of those authorities.

Karen Hagerty - are you familiar with the UMRR habitat design handbook?
https://www.mvr.usace.army.mil/Portals/48/docs/Environmental/UMRR/HREP/EMP_Documents/2012%20UMRR%20EMP%20Environmental%20Design%20Handbook%20-%20FINAL.pdf

Burton Suedel – yes I am familiar with it and I have cited it a time or two.

Kirk Hansen – How are ecosystem services benefits calculated?

Burton Suedel – can't tell you how it differs, but Corps-wide we're not quantifying benefits for a lot of our projects – makes it hard to justify – people ask why we are using these innovative techniques without support for long-term benefits? Results and metrics have to be easily understood in comparison to other projects – we've approached ecosystem services benefits on Horseshoe Bend in that way. We have a journal article on that subject – can share.

Andrew McQueen - <https://setac.onlinelibrary.wiley.com/doi/pdfdirect/10.1002/ieam.4084>

Kirk Hansen – one impediment to using Beneficial Use material – federal standard – haven't been able to account ecosystem or recreation benefits. Could change in the future.

Burton Suedel – WRDA 2020 has some interesting language in it – Waiting to see what leadership directs in relationship to new language. Federal standard is an interesting topic – Horseshoe Bend was lowest cost alternative so no problems there – can work well there. Also, some differences in how they handle dredge material in that area of the country than in the UMR. To the extent we can apply those techniques in the UMR, we'd be excited to do so. As USACE ERDC – we support the districts. Engineering with nature has funding on annual basis – have a riverine sediment management project ongoing that is open to the prospect of working with this group to bring some R&D and engineering with nature type of expertise to one or more projects that the team might be interested in pursuing with us. Chuck Theiling and Andrew McQueen are also available to support the district on projects in the current fiscal year. Not available on an annual basis, but is available this year. We're biologists and modelers – can model sediment particles. Can offer expertise almost immediately if there's interest.

David Potter - There seems to be growing interest in the role of large wood in the UMR. Not much known about this.

Burton Suedel – I will share a link to a manual about the use of large wood in riverine systems.

Here's a link to the Bureau of Reclamation's webpage about the National Large Wood Manual:
<https://www.usbr.gov/research/projects/detail.cfm?id=2754>

Here's a link to download the National Large Wood Manual:
https://www.usbr.gov/research/projects/download_product.cfm?id=1481

Chuck Theiling - MVS has used large wood in HREPs.

Kirk Hansen – We are incorporating thin-layer placement in several upcoming HREPs – could utilize some of your expertise in studying that. Have shown many projects where that was done in coastal wetlands to combat sea level rise – thinking about how to apply that to existing HREPs to address increased flows and surface levels.

Burton Suedel – Appreciate that. As you might have gathered – people may think I spent too much time in coastal marine environments- but with additional communication, we could use lessons learned from elsewhere and apply to inland waterways. We have a thin-layer placement website on the Corps – if you'd like to have some projects featured there, we'd be happy to do it. As manager of DOTS program – I'm interested in providing technical support for any thin-layer placement projects. We also have funding that could be deeper for one or more other projects.

Sara Strassman - One of the issues we have is planning work to prepare projects in a timely manner with O&M needs. Is there a systematic way to help support planning work? I should clarify O&M as channel maintenance.

Chuck Theiling - Sara, EWN can share design ideas for more rapid implementation on O&M schedule.

Chuck Theiling (post-meeting email) - Regarding this sediment work in the papers, the PI Dr. Jacob Berkowitz mentored Aaron McFarlane on his recent ERDC-U UMR restoration soil physical and microbial characterization. Jacob is very interested to collaborate with UMR scientists and was happy to get some pilot work under way. Burton funded some of Aaron's lab work through Dredge Operations Technical Support (DOTS). That is one example of how we can use ERDC programs to study beneficial use for Operations and Ecosystem restoration. I think Burton wants to hear other ideas from the UMR as they grow their inland program. Your UMRR and Operations work is as good or better than many examples, EWN may provide more opportunity to document it.

FWWG and Recreation Work Group discussion – Sara Strassman (WI DNR)

The note-taker, Steve Winter, wasn't able to keep up with the majority of the notetaking during this discussion.

Burton Suedel – can start at Pilot-sized scale – a few hundred feet long – or jump right in. Needs of the group dictate where to start.

Sara Strassman – 20,000 CY dredging and a couple hundred yards of beach that could receive material (1-2000 CY of material at sites). How does involvement of your group change the metrics or calculus around what might be done.

Burton Suedel – Hope to bring expertise to the issue – could model, deploy appropriate models to understand how that sand might be placed in the appropriate spot or way to be more sustainable. R&D modeling capability to understand fate of that project. Because of funds right now – can mobilize immediately.

Chuck Theiling – Engineering with Nature – not program that will come in to support additional cost over current needs – need a barge to come out and move some sand around – that's Ops. Engineering with Nature could come in to evaluate how well sand will stay in some place.

Burton Suedel – not able to pay for construction, but can bring expertise regarding technical support.

Jeff Janvrin - How about using the material for bank stabilization? We have several HREPs that have used a narrow sand/fine cross-section with vane or groin protection to stabilize islands.

Chuck Theiling - Dredge material placement on ag fields is a potential in some parts of Rock Island District.

Aaron McFarlane – Looking forward to more detailed conversation on beneficial use. Many projects tend to have additional costs associated with them for desired stabilization or topsoil that are tangential to navigation. Probably will fall to case-by-case discussions of what is appropriate to support through NAV funding and when partner cost-sharing would be required. Hope to use the Beneficial Use Work Group to brainstorm wide variety of project ideas and see if there are opportunities that all partners can agree on to maximize benefits to nav and the environment.

Burton Suedel – envisioned that working groups would have to huddle together and then have follow-on conversations – not limited much to potential projects.

Sara Strassman – overall timeline for engaging those folks or deliverables?

Burton Suedel – We have a smart group – four of us could be involved in follow-on discussions. Easy for us to participate. Also, have a proposal that may be funded in 22 on riverine islands. Chuck is on that project – would be three years in length – don't anticipate it would be a one and done, but could explore those conversations later.

Chuck Theiling – I invited Burton to join the beneficial work group conversations when that kicks off as well.

Paul Machajewski – Zach is currently the chair for Beneficial Use, but he's deployed for hurricane duty – he plans to return in March and start the process, but then transfer chair to someone else in MVP. Would start conversations again in April – May timeframe.

Chuck Theiling – Right timeframe for picking those conversations up.

Burton Suedel – our desire is to work with you all in the upper miss this year. To the extent we can support the work groups or districts, we will do that and would like to do that.

Agency Updates - Iowa, Minnesota, Wisconsin, USACE, USFWS

IA DNR (Kirk Hansen)

There are currently two vacancies at the LTRM station in Bellevue due to employees retiring or taking other positions:

- Mel Bowler (Fisheries Component Specialist) retired.
- Kyle Bales (Vegetation Component Specialist) took a Biologist position with the Corps of Engineers.
- We are working to advertise and refill those positions this spring.

MN DNR (Neil Rude)

- Still primarily working from home for the foreseeable future (at least until summer), but we can do field work with proper approval and safety protocols.
- Changing of the guard for the MS River area hydrologist. Lucas Youngsma (Lucas.Youngsma@state.mn.us) has taken over for Taylor Huinker. Please include include him on FWFG emails (and others) going forward.
- We are reviewing the Upper St Anthony Falls L&D Disposition study which is due mid-March.
- There appears to be an impasse between the Corps and MN DNR on the Pool 2 embankment project related to the potential for Blanchard's Cricket frog to be in the area. This concern was brought to the DNR's attention during public comment period.
- Active involvement with the Corps for planning of the new Rolling Prairie Dredge placement site in pool 5/Zumbro River bottoms area.
- Planning of MN DNR Lessard Sams Reno Bottoms/Millstone Bay project is ongoing, and ideas and plans should be more solidified soon after on-site meetings with USACE and USFWS.
- Planning and organizing the Pool 8 modified unified method effort with WI, USGS, USFWS for removal of invasive carps—late March/early April.

UMRBA (Andrew Stephenson)

- UMRBA is doing a targeted review of “Keys to The River” report.
- The UMRBA Board Quarterly Meeting is February 23, 2021 and will include a panel discussion on Beneficial Use.
- The UMRCC Coordinating Committee’s Quarterly Meeting is February 24, 2021.

USACE (Andy Meier)

- The MVP Master Plan should be done in the next couple of weeks.

WI DNR (Jordan Weeks)

- All staff have been working remotely at home offices (a limited number of staff have been in the office).
- Some field work (only 2 person crews) has occurred.
- Fall fish sampling occurred at near normal levels (both FM and HREP).
- Age structures from yellow perch, largemouth bass and bluegill were collected.
- Staff are in the process of age estimation of these structures.
- Shawn Giblin and some fish staff have been collecting WQ data at a variety of sites.
- Staff have been busy keeping up to date on HREP, and other UMRCC projects.
- We are planning a Modified Unified Method Asian Carp sampling event for the end of March in Pool 8.
- Staff continue to work on Statewide teams (Panfish, Sturgeon, and Fish Age Task Forces) to develop stocking guidance, ageing protocols, regulations, and management plans.
- Wisconsin AFS meeting was held in early February. This all virtual even was well received and attended.

Open discussion, additional items

Billy Rieter-Marolf, Wildlife Biologist at the McGregor District of the Upper Mississippi River National Wildlife and Fish Refuge, recently gave a presentation at the Midwest Fish and Wildlife Conference. Billy was unavailable to give this presentation for the February 17th FWWG meeting, but he's made a video recording of it available by clicking on the linked text below. If you have questions about Billy's research, please contact him at <william_reiter-marolf@fws.gov>.

[**Reiter-Marolf. 2021. Forest habitat changes and bird habitat associations in Pool 10 of the Upper Mississippi River National Wildlife and Fish Refuge. Oral Presentation at the 2021 Midwest Fish and Wildlife Conference, Upper Mississippi River Bottomland Forests: Birds and Habitats Symposium. February 23rd, 2021.**](#)