

MEMORANDUM FOR RECORD

SUBJECT: Minutes of River Resources Forum Meeting #107, December 7th and 8th, 2016;
Bloomington, Mn

Steve Tapp (COE) moderating Day 1

Introductions (All)

- Minutes from RRF #106: endorsed by consensus as written
- Upcoming RRF Meetings:
 - April 25th : Brice Prairie, Wisconsin
 - August 22nd, 23rd RRF meeting is in Wabasha. Discuss possibility of a field trip to the Goose Lake Project. Lost Island Unload, or Crats Island Unload
 - December 5th and 6th meeting will be in Bloomington, Mn (Site to be Determined)
- Review Due-Outs from the last meeting
 - Updated Due-Outs list provided at the end of this document

Agency Activities- WDNR (Jim Fischer)

- Fisheries Supervisor filled by Jordan Weeks, replace Ron Benjamin
- Dan Helsel – Moved on to Field Integration Leader, reports to Dan Bauman, Reporting is now straight line
- Organizational alignment was unveiled, significant change from 7 to 5 divisions
 - Realignment expected to be complete in 2018
 - Office of Great Waters - Miss River team combined with Great Lakes, provides continuity, invasive species interconnectivity, and sheds light on difficulties managing the Miss River
- WDNR not taking stand regarding the crossing of the Rail Road tracks by the public
 - WDOT is identifying highly used crossing sites by fisherman and working towards establishing legal crossing points.

Agency Activities- MDNR (Megan Moore)

- Bill Huber gone until Sept, Brenda acting
- Modification to Peterson Lake in Pool 4
 - Water quality monitoring
- Weaver Bottoms/Goose Lake Habitat contract complete
 - \$923K of Lessard Sams funds were executed for the contract
 - RRF expressed interest in touring the project

- MDNR officially requested FWS to carry forward the O&M for the North/Sturgeon Lakes UMRR Project
 - The FWS reviewed proposal and are unable to take care of O&M

Agency Activities- Audubon (Tim Schlagenhaft)

- New executive director Molly Peterson
- CO-Op agreement extending a year with the FWS regarding the Forestry position
- Involved with the Lake Pepin section 204 project seeking the beneficial use of dredged material

Agency Activities- FWS (Tim Yager)

- Brandon Jones hired as District Manager, McGregor District. Report date of January 8, 2016, but physically at office on January 23, 2016. Wendy Woyczik has done an outstanding job as acting District manager.
- Nick Stavroplus (Federal Wildlife Officer at McGregor) is retiring in March. The Federal Wildlife Officer position at McGregor will be refilled by John Below who is currently an FWO at Horicon NWR. John will be officially reporting on January 8, 2016, but will physically report sometime in February and hopefully overlap with Nick by a couple weeks.
- Theresa Wilson (Administrative professional at McGregor) will be retiring in January. Unclear if we will be allowed to refill this important position.
- Cindy Samples is retiring on December 31, 2016 after 36 years of public service with both the Corps of Engineers (20 years) and Fish and Wildlife Service (16 years). The visitor services manager position will not be refilled. Duties will be assumed by Hallie Rasmussen at La Crosse District.
- Work continues on several Right-of-Way projects:
 - Dairyland Power through Reno Bottoms
 - Cardinal Bluffs/Hickory Creek through Turkey River Bottoms
 - Nelson-Wabasha line which crosses Big Lake and Nelson-Trevino
- Comments on Compatibility Determinations are being evaluated and responses developed. Significant comments were received from the WDNR specific to the State retaining authority over all aspects of the fishery as well as navigation. We are also awaiting/anticipating comments from MDNR. We are meeting/working with Wisconsin to understand the full extent of their concerns and will likely need to engage our solicitor for further clarification. The Refuge remains committed to meeting its legal requirements to complete compatibility as well as its responsibility to conserve fish and wildlife and the habitats which species depend upon.

- Root River project is nearly complete. Most of the infrastructure (dikes, levees, water control structures) have been removed and ditches plugged. Still need to install low water crossings and completed forest enhancement work (plantings, ridge/swale creation). During project construction, the main levee on the Root River breached and significant flooding occur in the project area. This flooding was very timely and beneficial to the project as it provided direct observations of how water would flow across the floodplain under flood conditions. These observations result in some slight modifications of the how the project was constructed to better restore floodplain hydrology. The project has been very successful in spite of the challenges the wet summer/fall presented. The project is funded through a grant from Minnesota's Outdoor Heritage Council.
- An evaluation of waterfowl survey needs will be conducted by Chris Nicolai, Service's Migratory Bird program in January. The Refuge attempted to complete an evaluation/meeting with State partners last spring, but due to staff changes and other priorities was not able to accomplish the evaluation. Mr. Nicolai will be on a detail to Region 3 from Region 8 and will be meeting with Federal and State partners who have previously had involvement with waterfowl surveys or have an interest in waterfowl surveys.
- Waterfowl mortality associated with trematodiasis continues to be observed in pools 5 through 11. When waterfowl consume the invasive faucet snail (*Bythnia tentaculata*), they can contract trematodes (small worm, similar to a leach ... several different species) which infest the intestinal tract of the infected bird. Birds basically bleed out. Waterfowl mortalities associated with trematodiasis have been confirmed in most of the pools listed above.
- Eastern massasauga rattlesnake was listed as a threatened species on October 31, 2016. Eastern massasaugas are currently found in scattered locations in Illinois, Indiana, Iowa, Michigan, New York, Ohio, Pennsylvania, and Wisconsin and live in wet prairies, marshes and low-lying areas along rivers and lakes. Massasaugas also use adjacent uplands during part of the year. They often hibernate in crayfish burrows, but they may also be found under logs and tree roots or in small mammal burrows. There are a few locations along the Mississippi which have historically held massasauga (Nelson-Trevino Bottoms, Black River bottoms).
- Rusty patched bumble bee was proposed as endangered on September 22, 2016. Twenty years ago, the rusty patched bumble bee was an abundant native pollinator found across a broad geographic range that included 28 states and the District of Columbia, from Connecticut to South Dakota and north into two provinces in Canada. The rusty patched bumble bee is now found only in Illinois, Indiana, Maine, Maryland, Massachusetts, Minnesota, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, Wisconsin – and Ontario, Canada. Abundance and distribution of rusty patched bumble bee populations have declined by an estimated 91 percent since the mid to late 1990s. Comments on the proposed listed were accepted through November 21, 2016. The Service will evaluate any new information and make a determination on whether to list the species.

Agency Activities- American Rivers (Olivia Dorothy)

- Olivia working part time after maternity leave
- Funds available for the Restore the Gorge Study
 - Contact Olivia if interested

Agency Activities- LPLA (Rylee Main)

- New board president Scott Jones
- LPLA working to continually engage stakeholders
- Ann is working on communications for the LPLA
- Strategic planning and events slated to discuss Minnesota River sedimentation transport and address the sediment load entering Lake Pepin
 - Restoration Project is the number one priority for LPLA

Agency Activities- COE (Steve Tapp)

- COE is hiring Biologist Positions
 - Several emails circulating in multiple districts
- Fargo Moorhead Flood Risk Management Project
 - PPA signed this summer which initiated construction
 - Includes a 30 mile diversion channel to direct flood water around the Fargo Moorhead metro area
- Significant tonnage increase during this past navigation season
 - Increase of 27% through Lock and Dam 2
 - Increase of 24% through Lock and Dam 10
- Jake Zanon and Ray Marian will be filling in for Zach Kimmel until mid May
- Planning and Environmental Division Chief Tom Crump is leaving the St. Paul District to fulfill new duties with the COE at Fort Shafter, HI
 - Terry Birkenstock is the acting Chief of the Planning and Environmental Division for the St. Paul District

Pool 2 CMS – Boulanger Bend to LD 2 (Tom Novak)

- COE seeking endorsement at the April 2017 RRF
- Increase the channel width with channel control structures
- Construction set to begin in FY 2018

Pool 2 Dredged Material Management Plan (Tom Novak)

- Hec RAS model to be completed in June

- Preliminary indications are a 24% increase in sand entering Pool 2 with a corresponding 39% increase in dredging
 - Model will help determine time and magnitude of sand movement, uncertain after the Lock 1 closure
- Dredging in Pool 2 historically 110K+ could go to 150K
- DMMP's in Pool 2 Seeking 40 year plan to handle a projected 6 million cubic yards of sand over that time period
- Greg G- Value of dredged material far greater when dredged within Pool 1
 - Beneficial use will be higher if sand is dredged in Pool 1
 - Dredged material from below the Minnesota River FAR LESS DESIRABLE
- Screening during Nov and Dec on what to use for upland sites - Slide 5 and 8

Upper Mississippi River Restoration (Tom Novak)

- WDNR - Is there a sunset on the North Sturgeon UMRR?
 - Response was no shelf life
- FY 2017 UMRR – MVP budget is 6.2 M vs 3.6 M in FY 2016
- Planning – L&D 10, Weaver, Lake Winneshiek, Finger Lakes, And Bass Lake Ponds
- MDNR met with the COE (Channels and Harbors) to discuss potential island construction

Fish and Wildlife Work Group Activities (Aaron McFarlane)

- FWWG – Last meeting October 18th
 - Charter has been signed, finalized, and sent out
 - Templates for other groups
- Aquatic Invasive Species, Listed Species Update
 - FWS monitoring aquatic invasive in Pool 7- Water Hyacinth and Water Lettuce
 - Faucet Snail – attributed to waterfowl die offs
 - WDNR
 - Fisheries working with Asian Carp concerns
 - Madison WI- Tracking the New Zealand Mud Snail
 - Asked if other agencies had seen this snail – Consensus No
 - New Zealand snail not know to be in the Mississippi- Causes most issues in trout streams
 - Invasive Phragmites (tall cane like plant) possible in Pool 4 and 5 (not confirmed)
 - MDNR
 - Starry Stonewort- Sampling to see if in the Mississippi River
 - Chronic Wasting Disease (CWD) – Near the Lansboro area – Two confirmed case

- IDNR performing additional testing for CWD as well

Beneficial Use Restoration Projects (Aaron McFarlane)

- McMillan Island
 - Flood impact model produced no concerns
 - Send proposals to Regional Sediment Management (RSM) and Engineering with Nature (EWN)
 - Rough design of project plan complete by summer of 2017 (June or July cost estimates)
 - Includes forest restoration, tree plantings and top soil cost estimates
 - Cost estimate will be pitted against the Federal Standard to determine feasibility
 - GEOTech took borings around December 5th
 - Cultural will be completed – Not scheduled yet
 - Waiting on further field work until project is deemed viable
- Jim Fischer – Upland placement of dredged material to a beneficial use site preferred by WDNR rather than temporary holding areas.
 - COE responded that the goal is always to place on an upland site whenever possible
 - More cost effective, operationally preferred
- Mosquito Island Endorsement
 - EA was provided 30 days before the meeting
 - Moving forward how to implement construction
 - OSIT team will create the Mosquito Island implementation plan to endorse at April RRF meeting

Section 204 Projects – Pigs Eye Lake- Head of Lake Pepin (Aaron McFarlane)

- Pigs Eye Lake
 - Create 23.6 acres of Island area in Pigs Eye Lake
 - Much of the material to support the project will be procured from the Upper and Lower Boulager and Pine Bend Island placement sites
 - Project will require approximately 400K cubic yards of material
 - Habitat Evaluation Procedure (HEP) analysis done from the dabbling duck model
 - Feasibility to be completed in early 2017 – promising outlook
 - Suggestion to look at creating a sediment trap near Pigs Eye Lake to gain material for the project, possible around the St. Paul Barge Terminal area
- Head of Lake Pepin
- Federal interest determination completed
 - \$200K received to start feasibility study

- Section 204 kick off meeting early 2017
- WDNR will be involved in that meeting and identified challenges related to the Lake Pepin 204 project
 - Concerned parts of the project will be on the refuge
 - Expecting legal to be largely involved
 - Would and can WDNR sign a PPA
 - Project sponsor split cost share on any other project?
 - If WDNR is not a sponsor how does the LPLA get access to the land
 - Fact sheet is just conceptual – other areas upstream would be more beneficial ecologically
 - Are there Contaminated Sediment issues?
 - No Show stoppers but acknowledges some hurdles
 - Can someone else take over on WDNR property, if so how?
 - “We have moderate fears the public is getting expectations we will never be able to meet”
 - Master plan for the Pierce County Islands, project located at the head of Lake Pepin
 - Workshop in January to start discussion about the concerns and issues

Watershed Scale Planning (Megan McGuire)

- Mn River drains 20% of Minnesota
- Project specifically authorized by congress
- Seven year study thus far with 1.5 years left
 - Goal to contribute to watershed planning and bring all stakeholders together
 - Create a framework for the State of Minnesota
 - Monitoring recommendations to be developed from study
 - Running land use and BMP scenarios
- MN Environmental Quality Board (EQB) cost share with COE
- Data collected by USGS sediment monitoring will help calibrate further monitoring
- Study will produce and integrated plan for the watershed and a digital framework
- Digital framework will be a Decision Support System (DSS) with data and a family of process based simulation models

END OF DAY 1 December 7, 2016

Beginning of Day 2 December 8, 2016

Jim Fischer (WDNR) moderating Day 2

- Review of Day 1 and continue meeting with the last agenda item from Day 1, Navigation Work Group Activities

Navigation Work Group Activities (Dan Cottrell)

- NWG did not meet in 2016 but plans to in 2017

Channel Maintenance Program Activities (Channels and Harbors)

- Channel Maintenance
 - Coulters Island Dredge Cut
 - Being dredged more frequently
 - Problem stems from the Brewer Lake Inlet flows increasing
 - MDNR asked if the COE could cost share with MDNR to curtail the problem
 - COE indicates the area is not within the top 5 perennial problem areas so funds at this time are not likely
 - UMRBA – Is highlighting channel maintenance to Congress for funding justification.
- Placement Site Actions
 - Work on Renewing Easement for South Port Placement Site
 - Mississippi Gardens EA – Start early 2017
- Planning Channel Maintenance Management Plan Update
 - Upper Pool 4 and Pool 5 public meetings mid December at Cochran and Wabasha
 - Purchased the Homer site in Pool 6 for material placement
 - Pool 6 DMMP was re-distributed in August of 2016
 - Accounts for the annual dredging of approximately 168K Cubic yards within Pool 6
 - A final draft will be sent out to stakeholders in March of 2017
 - Lost and Crats Island Unloads, \$11 Million and \$9.6 Million respectively
 - Typical cost for channel maintenance \$12 to \$13 million per year
 - Years with an active site unload project can nearly double the yearly cost of channel maintenance

Hydraulics – Hydrology – Sediment Movement (John Hendrickson)

- Fifty percent of the Mississippi River flow in Pool 3 passes through Sturgeon Lake, North Lake, and Brewer Lake
 - Breakout flows such as the above scenario cause a majority of the channel maintenance challenges
- Peak discharge values show no significant trends of increasing since the 1940's
 - Average annual flows have trended upward since the 1980's

- Flow through lake Onalaska has decreased contributing to an outdraft increase at the Upper Approach to L&D 7
- Mn River was determined to be 52% wider than in 1938
 - Mn River has also become shorter do to channelization and cut offs

Water Level Management Task Force (Mary Stefanski)

RRF 107 Report
December 8, 2016

Facebook update 320 total page Likes (i.e., total number of fans who are able to see updates from the WLMTF page).

Conceptual Model – Tim Schlagenhaft provided the final document (attached: *Ecological relationships of drawdown revised 8-29-16*). Aaron McFarlane and Nick Utrup need to meet to finalize the design of the artistic model. Tim will share with Audubon’s communications director for input.

Pool 3 – Bill Huber suggested that MNDNR may use the LSOHC funding which expires in June 2018 to facilitate a drawdown as opposed to constructing the Brewers Lake inlet. There was a group discussion about what policies are in place for the COE that limit the use of O&M funding to facilitate drawdowns. It expected that Aaron McFarlane will report on this at the next meeting. There was also group discussion about funding options and different ways to look at drawdowns. One possibility is to look at drawdowns over a 50 year life like other projects. Randy Ulrich was tasked with locating examples of the COE’s contribution program being used to see how it worked which may help with ideas for using LSOHC funding.

White paper update – There was group discussion regarding the time it has taken to move the white paper ahead. The white paper was first discussed in January 2015 when Pool 8 was chosen. In April 2015 the RRF endorsed the paper with a completion date of July 31, 2015.

The COE team working on the white paper has been meeting regularly to prepare the second draft. The intent is to provide the Office of Council a copy for review in the next two weeks. Following this review, the paper will be sent to the WLM Task Force members by December 30 to facilitate a 30 day review prior to the next meeting.

Following discussion at the last WLM meeting regarding the operation of pools in the lower river versus the upper river, Jon Hendrickson provided a handout (attached: *20160831 Comparison of Pool 8 and 26 to WLMTF*) to highlight the differences in pool management between the upper pools and lower pools (24, 25, 26). He did add that the Pool 8 dredging is about 60,000 yds/year and Pool 26 is around 600,000 yds/year.

Zach Kimmel discussed a project in LaCrosse that may have potential to use about 100,000 yds of material on a 35 acre site. Preliminary information appears that dredged sand would be significantly cheaper than the current fill option. Construction is planned for 2018 so dredging

would occur in 2017. To facilitate a drawdown, 209,000 cu yds would need to be dredged from Pool 8. More to come on this opportunity.

The next WLM meeting will be Tuesday, Jan 31, 2017.

- UMRBA will take the lead on holding a workshop to discuss WLM within the upper three districts

Recreation Work Group (Tim Yager)

- Still looking at passing off the chairmanship
- Jim Fischer...How much overlap on OREIT UMRCC
 - Tim was unsure
- Benda Kelly and Ruth are chairing OREIT for UMRCC
- Recreational Beach Plans are the RWG's major efforts
 - Beach Plan EA's are at a 50% completion rate
 - Five to 6 options per beach then look at impacts

Other Topics (All)

- MnDOT markings on bridge piers
 - Who does the standards?
- Due-outs: Carried forward from previous RRF meetings
 - COE to forward 2014 Dredging Season AAR to the RRF upon completion (Tapp)
 - OSIT to investigate erosion at Lost Island and Fisher Island (Kimmel)
 - COE to distribute Environmental Assessments for Lansing Island and McMillan Island to the RRF upon completion (Clark)
 - FWS to distribute a preliminary draft EA of the beach plans for Pools 2-10 to the RRF upon completion (Yager)
 - RRF to draft a letter to distribute to the USCG pertaining to buoy maintenance concerns throughout the St. Paul District (Tapp/Helsel/Fisher)
 - COE to establish a team to identify potential uses of the Corps' Regional Sediment Management and Engineering with Nature programs pertaining to the McMillan Island Project (Kimmel)
 - MnDOT to reengage in discussions pertaining to modifying fill specifications for construction projects (Phenow)
 - MDNR to schedule a meeting in order to reinitiate the Weaver Bottoms Task Force (Dieterman)
 - COE to reach out to Jon Klingman (MVR) in regards to the O&M islands constructed in Pool 13 (Kimmel)
 - COE to reach out to Wendy Woyczik (FWS) in regards to the status of the Lansing Island floodplain forest restoration project (Kimmel)

- MDNR to reach out to Dan Cottrell pertaining to railroad bank erosion near Swift Creek (Dieterman)
- Due-outs: Generated from RRF meeting 107
 - COE to define emergency dredging in the CMMP (C&H)
 - Add language to remove natural occurring shoals causing emergency conditions
 - Recreation Work Group to look into portaging status at USAF Lock
 - Continue looking for a chair person
 - COE to provide one page write-up for December RRF endorsement of Mosquito Island and Prairie Sand & Gravel (Machajewski/Kimmel)
 - Steve Tapp to follow up with Kirsten on the Root River Study
 - FWS Root River Project briefing will be put on the next agenda for RRF meeting
 - Work on implementation plan for the Mosquito Island and present project to RRF for endorsement at April meeting

Steve Tapp

Co-Chairman, RRF