UMRR

A-Team Minutes
9 January 2017
Conference Call

Attendees: J. Sauer, J. Dieck, S. Giblin, K. Hagerty, N. De Jager, J. Houser, S. Gritters, D. Bierman, J. Hendrickson, M. Hubbell, M. McClelland, M. Vitello, K. McCain, C. Theiling, K. Barr, M. Moore, D. Herzog, N. Schlesser, D. Potter, J. Fischer, K. Michelson

Next Meeting: 26 April 2017 at UMESC; Segment D conference Room

➢ Chair change in July, Matt Vitello, Missouri

Approval of October 2016 Minutes:
  ➢ Correct name spelling, Nick Schlesser
  ➢ Add Karen Hagerty to attendance list
  ➢ Motion Nick, second Shawn, passed

UMRR Update, Marv Hubbell
  ➢ $20M budget planning number. Budget release Feb
  ➢ Interest in infrastructure improvement
  ➢ Show capability of UMRR up to $33M. Submitted to work plan
  ➢ Marv holds conference call with Corps staff to pass on UMRR information. The opportunity is there to have a call with states and USGS

LTRM Science Update, Jeff Houser
  ➢ Working on finalizing the Science in support of restoration and management SOW which includes the HNA. Should see in the next week or so.
  ➢ Potential fund by end of month or early February
  ➢ Resilience and HNA high priorities
  ➢ Reconciliation document on the Resilience manuscript was completed. Jeff will send to A-Team
  ➢ At next A-Team meeting will present LTRM highlights and material on next steps of tracking new ideas/proposals
  ➢ Some recent LTRM manuscripts distributed include authors Brian Ickes and Levi Solomon's LTRM survey report
  ➢ LTRM Component Meeting this spring

HNA II Update
  ➢ Tim Eagan—Project manager
  ➢ Sara Schmucker—represent managers to help set objectives
  ➢ Nate De Jager—coordinating scientists on data analysis and development
  ➢ Each agency and River Team has a representative on the HNA Steering Committee so all know what work is being done under HNA
  ➢ Outputs 1-5 funded

➢ There will be a spring meeting with the HNA II steering committee, Resilience working group, and subject manner experts to show how Resilience and HNA II connect and also show some analysis.

S. Giblin--working of same conceptual models as resilience work and conceptual models of reach plans. Managers should revisit reach plans

Marv H.—All work stems from the UMRR Strategic Plan and fit into a 7-step plan that includes resilience, HNA II, and selection of the next generation of HREPS.

Agency Updates:
➢ MN-Weaver small scale dredging done. Lots of folks fishing the area. Spring UMRCC meeting 21-23 March in Red Wing
➢ WI-realignment of core work and priorities. Mississippi River Team and Great Lakes linked to "Office of Great Waters". Jordon Weeks Mississippi River fisheries leader
➢ IA-New Veg. Component staff, Kyle Bayles. Beaver Island, McGregor, and Conway Lake HREPs under way. Have travel restrictions
➢ IL-Wayne Herdon retired. Still no budget
➢ MO-Sara Parker Pullee, new director. Have telemetry antennae on towboats
➢ Corps-Ken Barr retiring end of Month
➢ USGS-Topobathy coverage completed, WQ and Fishery browsers updated and on-line

Review of proposals

Proposal	PI	UMESC Comments	Corps Comments	
Estimating backwater sedimentation resulting from alluvial fan formation	Rogala	The topics and main objectives of this proposal are worthwhile pursuits that would add valuable knowledge to the state of the UMR. Some methods unclear. Questions on proposal answered by PI on 10 January 2017 and sent to A-Team. Potential to provide useful information to HNA (predictions of future conditions) and resilience (rates of loss of off channel areas).	Would like to see a clear statement of detailed objectives instead of one general objective.	Decisions during the selection of the TSP for the last two projects in St. Paul that have gone through feasibility have both been affected by a lack of information on backwater sedimentation and the fate of alluvial fan (or delta) formation. At North & Sturgeon Lakes, a TSP had almost been reached in 2015. This TSP would have altered, but maintained delta formation along the eastern (shallow) shoreline of North Lake using the rivers flow characteristics. However one of the project partners decided that existing delta habitat could not be altered, resulting in the selection of a plan that would actually force the deltas away from the eastern shoreline, and direct it to deeper water. The UMRR program hasn't done a good job quantifying or addressing the geomorphic trajectory on the river. This is one small step towards doing that and should be supported.
Mapping Benthic Habitat of Native Mussels in West Newton Chute using Hydroacoustics	Stone, Hanson	See http://link.springer.com/article/10.1007/s10750-014-2017-z; Will not detect or be able to identify habitat of mussels that are buried. Methods are not clear on how suitable habitat for native mussels will be determined. Is low discharge not a concern within this study area? Will only be able to get gross sediment type (i.e., rock, cobble)	How does this tie in with Swannack / Kelner modeling effort. Would like t see a clear statement of detailed objectives. Please provide a date for a final report.	Increasing or improving secondary channel habitat is a stated objective of many HREPs. Yet there is limited information on the physical criteria associated with good secondary channel habitat. Many HREPs include features (islands, closure structures) that increase flow in secondary channels, but the criteria used during the planning and design of these projects is usually based on backwater objectives related to centrarchids and SAV. Developing criteria for secondary channel mussel habitat would allow the PDTs working on these projects to make better decisions regarding the location of these features.
Advancing our understanding of habitat requirements of fish assemblages using multi-species models	Bouska, Gray	Ties in well to previous work on this topic. Looks at broader fish community vs select species. Obvious potential connections to both HNA and Resilience work.	How is this related to AHAG? What is the linkage to invasive species (i.e., linkage of habitat conditions that favor native species archetypes over invasive species archetypes)? Why no fish biologists included?	Multi-species models with emphasis on both backwater and riverine fish sounds valuable. The USFWS has stated a couple of times recently they would like to see more emphasis on riverine fish, not just the centrarchids that have dominated projects to date. This requires knowledge regarding the seasonal habitat needs for multiple fish species especially riverine fish. Mississippi River backwater habitat is highly connected and is trending towards higher connectivity with time. This may lead to a diverse fish community, but the question is, can connectivity be too high, and should connectivity have a seasonality (ie. connected only during high flows) to it based on the needs of fish communities.
Investigation of metabolism, nutrient processing, and fish community in floodplain water bodies of the Middle Mississippi River	Sobotka	Compelling proposal that fits well into the priorities of the UMRR partnership. Difficult to assess methods such as # of sites, # of samples… In addition, the author states that this proposal will allow an estimation of nutrient processing and capture rates, which I don't necessarily see as achievable with concentration data alone as they propose to do here. Despite these reservations, this could be a good project to advance our understanding of floodplain function in an area where we have limited data and opportunity for sampling.	No draft report or presentation of results? Would like to see a clear statement of detailed objectives. Seems like a starting point for a multiple-year study.	This proposal recognizes that seasonal dis-connectivity provides physical, chemical, and biologic diversity. Although the research will be done on the Middle Mississippi, it has application system wide. Once the river management community has science-based information on the value of isolated wetlands, and seasonally (not permanently) connected backwater lakes and that creating or maintaining these aquatic habitat will also help to maintain secondary channel habitat (mussels and riverine fish), better decisions will be made on HREPs.
Mapping the thermal landscape of the Upper Mississippi River: A Pilot Study	Jankowski & Robinson	Nice linkage using LTRM SRS WQ data to verify new technique. Current proposal looking at Pool 8; but can be expanded systemically. May provide insights into hydrologic connectivity among aquatic areas under certain conditions.	Would like to see a clear statement of detailed objectives. No draft report or presentation of results?	Temperature is a very important water quality parameter, but there are too many things that can affect temperature for this to work that well. These include temporal variation (seasonal and diurnal), stratification in some areas (mentioned by the authors), water levels and hydraulic connectivity (the authors mention water level, but the real driver is hydraulic connectivity). If improved spatial temperature data is obtained for two aerial surveys, how does this affect HREP planning and design, or performance evaluation reports?
Estimating SAV biomass levels at HREP sites using a modification of the LTRM sampling protocol	Gray	Rake scores are not a good indication of biomass (they were never meant to be). If biomass is needed at an HREP site then biomass could be measured directly. Already been two papers trying to tie rake scores with biomass		It's not clear to me how this will affect HREP design or performance evaluation reports. If there is a bias in the rake scores, and that is corrected that sounds like purely a research issue. Is project selection or project planning (HEP analysis) and design going to be improved?