

**UMRR-EMP**  
**Long Term Resource Monitoring Program FY14 Activities (Living Document)**  
**(Oct.–Dec.)**

**Publications, Presentations, and Conference Attendance**

Bierman participated in several conference calls with LTRMP Team Leaders during the federal shutdown – October, 2013.

Bierman attended a Pool 11 HREP (Mud and Sunfish Lakes) Performance Evaluation Report Planning meeting with Iowa and Wisconsin DNR fisheries management staff and USACE staff – December, 2013.

Popp, W.\*, R. Burdis, S. DeLain, and M. Moore. Temporal trends in water quality and biota in segments of Pool 4 above and below Lake Pepin: indications of a recent ecological shift. Presentation at the St. Croix Research Rendezvous, October 15, 2013, Marine on St. Croix, MN.

Popp, W.\*, R. Burdis, S. DeLain, and M. Moore. 20+ years of monitoring the Mississippi River: indications of a recent ecological shift. Presentation at the Minnesota DNR's Ecological and Water Resources Division meeting, October 23, 2013, St. Cloud, MN.

Walt Popp attended the UMRR-EMPCC meeting in St. Paul on Nov. 20<sup>th</sup>.

Rob Burdis, Steve DeLain, Megan Moore, and Walt Popp attended the Minnesota DNR's Ecological and Water Resources Division meeting in St. Cloud, MN on Oct. 22-23.

Walt Popp participated in two field station team leader conference calls during the government shutdown.

John Chick gave a presentation about the Great Rivers Ecological Observation Network (GREON) and LTRMP at the Joint Illinois Rivers Coordinating Council meeting. 10/2013.

John Chick gave a presentation on the Great Rivers Ecological Observatory network to the US Water Alliance at NGRREC. LTRMP data was presented during this talk. 11/2013.

John Chick gave a presentation on the Great Rivers Ecological Observatory network to USACE reps from ERDC at NGRREC. LTRMP data was presented during this talk. 12/2013.

Lori Gittinger attended training provided by Yellow Springs Instruments regarding the new YSI EXO Sondes and associated GREON platform. 11/2013.

Solomon, L. E. The Expanding Influence of the Long Term Resource Monitoring Program (LTRMP). 14th Bi-Annual Governor's Conference on the Management of the Illinois River System. Platform Presentation

Houser, J.N. Increasing our understanding of the UMR: Analysis of UMRR-EMP LTRMP monitoring data as a foundation for learning about a large, complicated ecosystem. EMPCC meeting. 20 November 2013. Minneapolis, MN.

## Technical activities and assistance:

Jennifer Sauer provided Liat Lichtman-Bonneville (Urban & Regional Planner, WisDOT) with updated information on the number of tons of cargo shipped annually between Minneapolis and the mouth of the Missouri River.

Yao Yin provided Derek Ingvalson (Corps) with Pool 8 vegetation data collected by the LTRMP.

Larry Robinson updated the LTRMP LiDAR Web pages including updating the graphic showing the LiDAR data that is available for download ([http://umesc.usgs.gov/data\\_library/gis\\_data/lidar.html](http://umesc.usgs.gov/data_library/gis_data/lidar.html))

Jennifer Sauer provided Chris Rogers of the Winona Post references to help answer his question on question about a report on projecting river levels.

B. Ickes served (1-day; Nov 8, 2013) as an invited expert to the USFWS Eastern Tallgrass/Big River LCC. Contributions included advising on fish species that should be considered as surrogate species for conservation planning activities and actions.

B. Ickes reviewed a manuscript authored by S. Crimmins, W. Thogmartin, and P. Boma (USGS/UMESC); topic – species extinction probability modeling.

B. Ickes, B. Schlifer (USGS), J. Rogala (USGS), and J. Fischer (WDNR) submitted a pre-proposal in response to an RFP from USGS Center for Data Integration (CDI). The proposal title was “Novel web-enabled data visualization applications for serially-structured time-ordered data Case study 1: Mississippi River and select tributary hydrology”.

B. Ickes accepted an invitation by the University of Minnesota to deliver an evening keynote lecture as part of the grand reopening of Northrup Auditorium. The lecture will be April 21, 2014. B. Schlifer will accompany Ickes. All resources for participation (Ickes and Schlifer) have been accorded via honorarium (U of MN).

B. Ickes reviewed a manuscript authored by Yao Yin (USGS).

B. Ickes accepted an invitation to be a member of a Board of Directors for a new Environmental Science Program at the University of Wisconsin – Stout. Duties will principally involve advising and guiding the development of the curriculum within the Aquatic Biology concentration of the new program. Four single day meetings at UW-Stout, structured quarterly, beginning April 2014.

B. Ickes shared data summaries from UMRR-EMP LTRMP Fish component data sources, initially compiled by B. Ickes and D. Kirby (IDNR), detailing information on American eel (*Anguilla rostrata*), with the USFWS under a recent data and information call established to consider listing American eel under the 1973 Endangered Species Act.

LTRMP staff assisted Bellevue Research with fall tailwater sauger and walleye population assessments in Pool 13 – October, 2013.

Bowler completed data entry and QA/QC for Pool 12 overwintering HREP project – November, 2013.

Bowler discussed research project with Loras College student Amanda Fitzpatrick on fisheries, invertebrate, and water quality sampling in the Catfish Creek Watershed of Dubuque County, Iowa – November, 2013.

LTRMP staff extracted and catalogued 606 bluegill otoliths in conjunction with the Pool 12 overwintering HREP project – November, 2013.

Bowler entered data of catalogued bluegill otoliths – November, 2013.

Bowler entered data from the Beaver Island into the special projects database – November, 2013.

Petersen assisted Green Island Wildlife with collection of CWD samples from Jackson County – December, 2013.

Bierman compiled and submitted 2011 and 2012 data from Upper and Lower Rock Creek fixed site monitoring to Bob Drustrup, IDNR Contaminated Sites section – December, 2013.

Bowler compiled and tabulated data from the six field LTRMP stations and special projects database (1992-2012) to determine catches of age-0 and adult grass carp annual catches for Martin Konrad (Des Moines Fisheries) on potential addition of this species (diploids) to the exotic species list in Iowa – December, 2013.

LTRMP staff completed 21 pool-wide random electrofishing sites and completed 30 fyke netting samples at six different backwater complexes in conjunction with the Pool 12 overwintering HREP projects – October-November, 2013.

Bowler entered incidental turtle catches from Pool 13, 2013 into master dataset – November, 2013.

Bowler provided age assignment and age analysis of Pool 16 white bass 2013 collections to Fairport Management – December, 2013.

Bowler provided mean length at age summaries of bluegill in Pool 12, 2012 to Manchester Management for comparisons to northeast Iowa inland populations – December, 2013.

Megan Moore provided a U.S. Army Corps of Engineers St. Louis District biologist with information on how to record vegetation data collected from HREP monitoring so that it is comparable to LTRM data.

Megan Moore, as UMRCC Wildlife Technical Section chair, coordinated the funding of a graduate student to analyze eight years of UMRCC-collected vegetation data with a professor at Western Illinois University and the UMRCC Executive Board.

Steve DeLain provided technical expertise concerning LTRM electrofishing technique to five U.S. Army Corps of Engineers St. Paul District staff and they in return provided the field assistance that the Lake City Field Station needed to complete period 3 fish sampling.

Steve DeLain provided specific fish species he collected during LTRM sampling to the Minnesota DNR's mussel propagation program.

Walt Popp provided the UMRBA with a cost estimate for vegetation sampling.

Becky Kreiling reviewed a wetland restoration paper for Ecological Restoration.

Giblin provided water quality data to WDNR Fisheries Biologist, Dave Heath in response to questions regarding poor fish community statistics in the Reno Bottoms Area in Pool 9.

Giblin and Kalas conducted gear comparison study between Marsh-McBirney Flo-Mate and Hach FH950. Data were entered and analyzed. Report was submitted to Houser for review.

LTRMP data and technical reports were used extensively by MPCA to develop proposed TSS and TP criteria for MN Rivers and Lake Pepin. <http://www.pca.state.mn.us/index.php/water/water-permits-and-rules/water-rulemaking/new-water-quality-standards-for-river-eutrophication-and-total-suspended-solids.html#technical-support-documents>

Giblin provided manuscript reprint and technical advice to Dr. Griselda Chapparo, University of Buenos Aires, Argentina.

Langrehr met with Megan Moore and Welby Smith (MN state botanist) to discuss wild rice identification.

Langrehr provided maps with the locations of faucet snails and bullfrogs ancillary data recorded during veg SRS sampling to Jim Nissen (USFWS).

Langrehr provided *Sagittaria* species depth maximums to Ruth Nissen (WDNR) for a technical report.

Langrehr provided Pool 11 EMAP vegetation data to Brenda Kelly and Sara Strassman (WI DNR)

Langrehr provided Pool 8 vegetation SRS bootstrapping analysis results to John Sullivan (WI DNR)

Levi Solomon was added to the INHS ad hoc web design committee as Field Station Representative

Blake Bushman, Andy Casper, Rich Pendleton, and Levi Solomon assisted with collection of fish and water quality parameters for Dr. Wen-Tso Lui, Professor of Civil and Environmental Engineering, University of Illinois. Dr. Lui is investigating gut microbiota in relation to the detection of Asian carp.

## Outreach

UMESC staff visited with Anne Kinsinger (USGS Associate Director for the Ecosystem Mission Area), Bill Lellis (USGS Deputy Associate Director for the Ecosystem Mission Area) and Mark Hudy (Senior Science Adviser for Fisheries) and Bill Guertal, Midwest Region Deputy Director for Science on December 4-5. They were visiting the Center primarily to gain a better understanding of our program, particularly our fisheries and aquatic resources activities including LTRMP.

Senator Tammy Baldwin and staffers visited UMESC on December 6 to learn about the Center programs including the UMRR LTRMP. This was the first visit to the Center by Senator Baldwin.

Megan Moore organized the agenda and chaired the UMRCC Wildlife Technical Section meeting at the Kibbe Research Station, Warsaw, IL, on Oct. 1-3.

Giblin provided interview for WI Public Radio regarding water quality trends and challenges on the UMR.

Eric Ratcliff and Ben Lubinski presented information about the LTRMP and INHS to approximately 160 high school seniors attending a “Who Works on the River” career fair event at the National Great Rivers Research and Education Center. 11/2013.

Andy Casper and Levi Solomon were interviewed concerning biology of Asian carp and their effects on native ecosystems by Summer Nettles, graduate student in Journalism at Northwestern University.

Andy Casper and Levi Solomon hosted a delegation of Chinese engineers from the Three Gorges Corporation. Included tour of the field station, discussion of mission and sampling techniques of LTRMP and other IRBS programs along with dissemination of past publications, telemetry equipment, and general information. Tour facilitated by Doug Blodgett of The Nature Conservancy.