

UMRR-EMP's
Long Term Resource Monitoring Program element
FY2013
Scope of Work

Final FY13

Tracking number	Milestone	Original Target Date	Modified Target Date	Date Completed	Comments	Lead
Aquatic Vegetation Component						
2013A1	Complete data entry and QA/QC of 2012 data; 1250 observations.					
	a. Data entry completed and submission of data to USGS	30-Nov-12		25-Sep-12		Popp, Fischer, Bierman
	b. Data loaded on level 2 browsers	15-Dec-12		15-Oct-12		Schlifer
	c. QA/QC scripts run and data corrections sent to Field Stations	28-Dec-12		16-Oct-12		Sauer
	d. Field Station QA/QC with corrections to USGS	15-Jan-13		15-Nov-12		Popp, Fischer, Bierman
	e. Corrections made and data moved to public Web Browser	30-Jan-13		7-Jan-13		Sauer, Schlifer, Caucutt
2013A2	WEB-based annual Aquatic Vegetation Component Update with 2012 data on Public Web Server.					
	a. Develop first draft	30-Mar-13		22-Feb-12		Sauer
	b. Reviews completed	15-Apr-13		5-Mar-13		Popp, Fischer, Bierman, Sauer, Yin
	c. Submit final update	30-Jun-13		6-Mar-13		Sauer
	d. Placement on Web with PDF	31-Jul-13		7-Mar-13		Sauer, Caucutt
2013A3		31-Aug-13		31-Aug-13		Yin, Popp, Fischer, Bierman
2013A4	Web-based: Creating surface distribution maps for aquatic plant species in Pools 4, 8, and 13; 2012 data	31-Jul-13		30-Apr-13		Yin, Rogala, Schlifer
2013A5	Wisconsin DNR annual summary report 2012 that combines current year observations from LTRMP with previous years' data, for the fish, aquatic vegetation, and water quality components.	30-Apr-13		30-Sep-13		Fischer, Langrehr, Bartels, Giblin, Hoff
2013A6	Summary graphs 2012: Sampling the impaired reach of the UMR (Pools 2 and 3) for submersed aquatic vegetation using LTRMP methods.	30-Dec-12		30-Dec-12		Moore
2013A7	Draft manuscript: A statistical model of species occupancy using the LTRMP aquatic vegetation data.	15-Jul-13		29-Oct-13		Yin
2013A8	Extension of modeling capabilities for aquatic vegetation	TBD; see text on page 4 of FY13 SOW			Contract awarded on 15 July 2013. Work to be completed in FY14	Yin
On-Going						
2012A6	Draft LTRMP completion report: Thirteen years (1998–2012) of aquatic vegetation in Pool 4 of the Upper Mississippi River.	30-Jun-12	30-Apr-14			Moore
Intended for distribution						
Completion report: LTRMP Aquatic Vegetation Program Review (Heglund; 2007A9) In USGS review						
Manuscript: Importance of the Upper Mississippi River Forest Corridor to Neotropical Migratory Birds (Kirsch, 2007APE1) Condor 115(1):115-130						
LTRMP Report: Ecological Assessment of High Quality UMRS Floodplain Forests (Chick, Guyon, Battaglia; 2007APE12) In USGS review						
LTRMP Technical Report; Experimental and Comparative Approaches to Determine Factors Supporting or Limiting Submersed Aquatic Vegetation in the Illinois River and its Backwaters (2008APE5, Sass) In USGS review						
LTRMP completion report: FY05-07 data--Analysis and support of aquatic vegetation sampling data in Pools 6, 9, 18, and 19 (2008APE4a; Yin) In USGS Review						
Manuscript: Have the recent increases in aquatic vegetation in Pools 5 and 8 been the result of water level management drawdowns, HREPs, or natural fluctuations? (2009APE1a; Yin) In USGS Review						

UMRR-EMP's
Long Term Resource Monitoring Program element
FY2013
Scope of Work

Final FY13

Tracking number	Milestone	Original Target Date	Modified Target Date	Date Completed	Comments	Lead
Fisheries Component						
2013B1	Complete data entry, QA/QC of 2012 fish data; ~1,590 observations					
	a. Data entry completed and submission of data to USGS	31-Jan-13		31-Jan-13		DeLain, Bartels, Bowler, Ratcliff, Gittinger, West, Solomon, Michaels
	b. Data loaded on level 2 browsers; QA/QC scripts run and data corrections sent to Field Stations	15-Feb-13		15-Feb-13		Schlifer
	c. Field Station QA/QC with corrections to USGS	15-Mar-13		15-Mar-13		DeLain, Bartels, Bowler, Ratcliff, Gittinger, West, Solomon, Michaels
	d. Corrections made and data moved to public Web Browser	30-Mar-13		30-Mar-13		Sauer and Schlifer
2013B2	Update Graphical Browser with 2012 data on Public Web Server.	31-May-13		31-May-13		Schlifer, DeLain, Bartels, Bowler, Ratcliff, Gittinger, West, Solomon, Michaels
2013B3	Complete fisheries sampling for Pools 4, 8, 13, 26, the Open River, and La Grange Pool (Table 1)	31-Oct-13		31-Oct-13		Ickes, DeLain, Bartels, Bowler, Ratcliff, Gittinger, West, Solomon, Michaels
2013B4	Draft LTRMP completion report: Summary of data extraction and metadata for archiving of UMRS floodplain disturbance histories. (2008APE1a; Task 1)	30-Sep-08	6-Jun-13	24-May-13		Ickes
2013B5	Final Draft LTRMP fisheries component procedures manual	15-Feb-13		10-May-13		Ratcliff, Gittinger, Ickes
2013B6	Asian carp age and growth: collection of cleithral bones	30-Sep-13		30-Sep-13		Solomon, Michaels
2013B7	Asian carp reduction: delivery of LTRMP WQ and Fisheries Data	30-Sep-13		30-Sep-13		Solomon, Michaels
2013B8	Database increment: Rehabilitation of backwater habitat in select Pool 12 backwaters	30-Sep-13	1-Nov-13			Bowler
2013B9	IDNR Fisheries Management State Report: Fisheries Monitoring in Pool 13, Upper Mississippi River, 2012	30-Jun-13		1-Feb-13		Bowler
2013B10	Database increment: Stratified random day electrofishing samples collected in Pools 16–19	30-Sep-13		30-Sep-13		Bowler
2013B11	Database increment: Stratified random day electrofishing samples collected in Pools 9 and 10	30-Sep-13		28-Aug-13		Bowler
2013B12	Final draft LTRMP report: Testing the Fundamental Assumption underlying the use of LTRMP fish data: Does variation in LTRMP catch-per-unit-effort data reflect variation in the abundance of fishes? (2007APE3)	30-Sep-13	8-Nov-13		issue with my figures, and will have to redo them. I am out of town all but two days for the upcoming week. Given that, I will get the revised report to you by COB Nov 22 so that I am sure I can make the needed changes.	Chick
2013B13	Quality assurance results for the UMRR-EMP LTRMP Fish Component: Mapping of the electrical fields on the new fleet of electrofishing boats.	30-Mar-13		6-Mar-13		Ickes, DeLain, Bartels, Bowler, Ratcliff and Gittinger, Solomon and Michaels, West
2013B14	LTRMP fish component hoop net study: results from comparative in situ bait trials seeking comparable substitute bait for LTRMP hoop net sampling. (see 2012B16)	30-Mar-13		27-Mar-13		Ickes, DeLain, Bartels, Bowler, Ratcliff and Gittinger, Solomon and Michaels, West

**UMRR-EMP's
Long Term Resource Monitoring Program element
FY2013
Scope of Work**

Final FY13

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2013B15	Assorted solicited blogs (N=4) for The Nature Conservancy's Great River Partnership (GRP)	30-Sep-13			No longer applicable as no longer working on TNC GRP	Ickes
2013B16	Draft fact sheet: Tree map tool for visualizing fish data, with example of native versus non-native fish biomass.	30-Sep-13		30-Sep-13		Schlifer, Sauer
2013B17	Shovelnose sturgeon habitat use in the UMR (Data sets, analysis, presentations and manuscript)	30-Sep-13	31-Dec-13			Phelps
2013B18	Evaluation of American eel abundance (Data sets, analysis, presentations and manuscript)	30-Sep-13		20-Aug-13	See eel manuscript below. Email from Q on 8/20/2013	Phelps
2013B19	Channel catfish habitat evaluation (Data sets, analysis, presentations and manuscript)	30-Sep-13	31-Dec-13			Phelps
2013B20	Sauger life history in the lower portion of the Upper Mississippi River (Data sets, analysis, presentations and manuscript)	30-Sep-13		30-Aug-13	Submitted to Prairie Naturalist	Phelps
2013B21	A comparison of methods to estimate shovelnose sturgeon mortality in the Mississippi River adjacent to Missouri (Data sets, analysis, presentations and manuscript)	30-Sep-13		12-Aug-13	North American Journal of Fisheries Management, 33:4, 754-761	Phelps
2013B22	Determining environmental history of three sturgeon species in the Upper, Middle and Lower Mississippi Rivers (Data sets, analysis, presentations and manuscript)	30-Sep-13		20-Aug-13	Draft manuscript completed and submitted to UMESC	Phelps
2013B23	Early Life History and Habitat use of Age-0 Blue Catfish in the Unimpounded Middle Mississippi River (Data sets, analysis, presentations and manuscript)	30-Sep-13		29-Aug-13	Draft manuscript completed and submitted to UMESC	Phelps
2013B24	A pilot evaluation of the commercial and recreational harvest of paddlefish (<i>Polyodon spathula</i>) in Missouri (Data sets, analysis, presentations and manuscript)	30-Sep-13		1-Aug-13	Submitted to the Journal of Applied Ichthyology	Phelps
2013B25	Evaluation of silver carp ages derived from seven bony structures in Midwestern U.S. Rivers: Implications for management of invasive populations (Data sets, analysis, presentations and manuscript)	30-Sep-13		12-Aug-13	North American Journal of Fisheries Management, 33:4, 839-844	Phelps
2013B26	White paper: UMRR-EMP LTRMP Capability Related to Asian Carp	1-Jun-13	31-Dec-13			Hubbell, Chick, Casper, Phelps, Solomon, Lubinski
2013B27	Draft report for review: Empirical response curves for Upper Mississippi River fishes	28-Oct-13		5-Aug-13		Ickes, Richards
2013B29	Refinement of Fish Component Hoop net study: Field sampling Open River (see 2012B16; 2012B14)	31-Oct-13		31-Oct-13		Ickes, Phelps, and West

**UMRR-EMP's
Long Term Resource Monitoring Program element
FY2013
Scope of Work**

Final FY13

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On-Going						
2006B6	Draft manuscript: Spatial structure and temporal variation of fish communities in the Upper Mississippi River. (Dependent on 2008B9 acceptance into journal)	30-Sep-11	30-Sep-14			Chick
2008B9	Draft manuscript: Standardized CPUE data from multiple gears for community level analysis (a previous manuscript was submitted and not accepted by the journal, 2006B5; 2008B9 is a revised manuscript)	30-Dec-09	15-Dec-13			Chick
2012B8	Draft Manuscript: Influence of Asian carp on planktivorous fish	30-Sep-12	31-Dec-13			Phelps
Intended for distribution						
Completion report: LTRMP Fisheries Component collection of six darter species from 1989–2004. (2006B13; Ridings) In USGS review						
LTRMP Report: An Evaluation of Macroinvertebrate Sampling Methods For Use In The Open River Reach of The Upper Mississippi River; Kathryn N. S. McCain, Robert A. Hrabik, Valerie A. Barko, Brian R. Gray, and Joseph R. Bidwell (2005C2) In USGS review						
LTRMP report: Relationship of juvenile abundance of select fish species to aquatic vegetation in Navigation Pools 4, 8, and 13 of the Upper Mississippi River, 1998-2012 (2007B5; 2009B5; Popp and DeLain) In USGS review (Back from SPN edit)						
LTRMP technical report; Setting quantitative fish management targets for LTRMP monitoring (2008APE2; Sass) In USGS review						
LTRMP Completion report, compilation of 3 years of sampling: Fisheries (2009R1Fish; Chick et al.) In USGS Review						
Manuscript: A Comparison of Methods to Estimate Shovelnose Sturgeon Mortality in the Mississippi River Adjacent to Missouri and Illinois (2013B21; Phelps) North American Journal of Fisheries Management, 33:4, 754-761, DOI: 10.1080/02755947.2013.808291						
Manuscript: American eel population characteristics in the Upper Mississippi River (2012B7; Phelps) Accepted for publication						
Manuscript: Justin R. Seibert & Quinton E. Phelps. 2013. Evaluation of Aging Structures for Silver Carp from Midwestern U.S. Rivers, North American Journal of Fisheries Management, 33:4, 839-844, DOI: 10.1080/02755947.2013.815670						
Manuscript: Age-0 sturgeon habitat associations in the free flowing portion of the Upper Mississippi River (Sara Tripp, Quinton Phelps, and David Herzog; 2012B5) (Submitted to UMESC)						
Manuscript: Phelps, Q. E. and D. W. Willis. 2013. Development of an Asian Carp Size Structure Index and Application through Demonstration, North American Journal of Fisheries Management, 33:(2)338-343						
Water Quality Component						
2013D1	Complete calendar year 2012 fixed-site and SRS water quality sampling	31-Dec-12		31-Dec-12		Houser, Popp, Fischer, Bierman, Chick, Sass, Hrabik
2013D2	Complete laboratory sample analysis of 2012 fixed site and SRS data; Laboratory data loaded to Oracle data base.	15-Mar-13		15-Mar-13		Yuan, Schlifer
2013D3	1st Quarter of laboratory sample analysis (~12,600)	30-Dec-12		31-Dec-12		Yuan, Kreiling, Manier, Burdis, Giblin, Kueter, L. Gittinger, Cook, Crites
2013D4	2nd Quarter of laboratory sample analysis (~12,600)	30-Mar-13		30-Mar-13		Yuan, Kreiling, Manier, Burdis, Giblin, Kueter, L. Gittinger, Cook, Crites
2013D5	3rd Quarter of laboratory sample analysis (~12,600)	29-Jun-13		29-Jun-13		Yuan, Kreiling, Manier, Burdis, Giblin, Kueter, L. Gittinger, Cook, Crites
2013D6	4th Quarter of laboratory sample analysis (~12,600)	28-Sep-13		28-Sep-13		Yuan, Kreiling, Manier, Burdis, Giblin, Kueter, L. Gittinger, Cook, Crites

**UMRR-EMP's
Long Term Resource Monitoring Program element
FY2013
Scope of Work**

Final FY13

Tracking number	Milestone	Original Target Date	Modified Target Date	Date Completed	Comments	Lead
2013D7	Complete QA/QC of calendar year 2012 fixed-site and SRS data.					
	a. Data loaded on level 2 browsers; QA/QC scripts run; SAS QA/QC programs updated and sent to Field Stations with data.	30-Mar-13		30-Mar-13		Schlifer, Rogala
	b. Field Station QA/QC; USGS QA/QC.	15-Apr-13		15-Apr-13		Rogala, Popp, Fischer, Bierman, Chick, Sass, Hrabik
	c. Corrections made and data moved to public Web Browser	30-Apr-13		30-Apr-13		Rogala and Schlifer
2013D8	Complete FY13 fixed site and SRS sampling for Pools 4, 8, 13, 26, Open River, and La Grange Pool (Table 1)	30-Dec-13				Houser, Popp, Fischer, Bierman, Chick, Sass, Hrabik
2013D9	WEB-based annual Water Quality Component Update with 2012 data on Public Web Server.	30-May-13		7-May-13		Rogala
2013D10	Final draft LTRMP Completion Report: Changes in substrate, water quality, aquatic vegetation, zooplankton, and fish community from Geomorphic Reach 1 (above Lake Pepin) to Geomorphic Reach 3 (below Lake Pepin). 2010D6	30-Dec-13				Popp, De Lain, Burdis, Moore
2013D11	Database low water velocity measurements collected by the ADV.	28-Sep-13			Removed from SOW	Rogala, Houser, Gray, Giblin
2013D12	Contract report summarizing the distribution of water speed for typically BDL values.	28-Sep-13			Removed from SOW	Rogala, Houser, Gray, Giblin
2013D13	Complete trend analysis of tributary nutrient and sediment data	1-Jun-13		1-Jun-13		Houser, Kreiling
2013D14	Draft report or draft manuscript describing trend analysis results	1-Sep-13		23-Sep-13		Houser, Kreiling
2013D15	Manuscript revised and submitted for publication (2012D10)	1-Aug-13		31-Oct-13		Houser
2013D16	Presentation at national science meeting (pending funds and USGS approval)	1-Sep-13		Travel not approved		Houser
2013D17	Draft manuscript: Relationship between the temporal and spatial distribution, abundance, and composition of zooplankton taxa and hydrological and limnological variables in Lake Pepin	30-Dec-13				Burdis
2013D19	Letter Summary: Assessment of the efficacy of monitoring water quality in the UMRS using a YSI real-time Environmental Monitoring System (Pices Platform) (continued work on 2012D15)	31-Oct-13	30-Jan-14			Chick, L. Gittinger, Lubinski
On-Going						
2010D6	Draft LTRMP Completion Report: Changes in substrate, water quality, aquatic vegetation, zooplankton, and fish community from Geomorphic Reach 1 (above Lake Pepin) to Geomorphic Reach 3 (below Lake Pepin).	30-Sep-10	30-Sep-13	15-Apr-13		Popp, De Lain, Burdis, Moore
Intended for distribution						
Completion report: Examining nitrogen and phosphorus ratios N:P in the unimpounded portion of the Upper Mississippi River (2006D9; Hrabik & Crites) (In USGS Review)						
LTRMP report: Main channel/side channel report for the Open River Reach. (2005D7; Hrabik) (In USGS Review)						
Manuscript: Ecosystem metabolism in the main channel and backwaters of the Upper Mississippi River: the role of submersed vegetation and hydraulic connectivity. (2008D8; Houser et al.) (In USGS Review)						
Bulletin Illinois Natural History Survey (changed from LTRMP report): A Decade of Monitoring on Pool 26 of the Upper Mississippi River: Water Quality and Fish Data with Cross Component Analyses Chick et al.; 2005APE26) (Illinois Natural History Bulletin 39(6):323-420)						

UMRR-EMP's
Long Term Resource Monitoring Program element
FY2013
Scope of Work

Final FY13

Tracking number	Milestone	Original Target Date	Modified Target Date	Date Completed	Comments	Lead
Manuscript: Nutrient cycling, connectivity, and free-floating plant abundance in backwater lakes of the Upper Mississippi River. (2009APE3, Houser) (Submitted to River Systems) Accepted 6-20-2013 with minor revisions						
Manuscript: Lateral contrasts in nutrients, chlorophyll, and suspended solids within the Upper Mississippi River System (2012D10; Houser) (In USGS Review)						
Completion report, compilation of 3 years of sampling: Water Quality (2009R1WQ; Giblin, Burdis) (In USGS Review)						
Manuscript: Temporal evaluation of factors influencing metaphyton biomass, distribution and composition within UMR backwaters (2012D12; Giblin et al.) (In USGS Review)						
Land Cover/Land Use with GIS Support						
2013LC1	Updates on progress for land cover products listed above.	New progress reported in the quarterly activities. Percent complete updated annually.				Robinson
Development of 2010–2011 Land Cover/Land Use GIS Database and Aerial Photo Mosaics						
2013V1	Complete 2010/11 LCU databases for UMR Pools 12 and 25	31-Dec-12		31-Dec-12		Robinson, Hoy, Hanson, Langrehr, Ruhser, Nelson
2013V2	Complete 2010/11 LCU databases for UMR Pools 5, 7*, 24	15-Mar-13		15-Mar-13		Robinson, Hoy, Hanson, Langrehr, Ruhser, Nelson
2013V3	Complete 2010/11 LCU databases for UMR Pools 3, 5a,, 21, and 22	15-Jun-13		15-Jun-13		Robinson, Hoy, Hanson, Langrehr, Ruhser, Nelson
2013V4	Complete 2010/11 LCU databases for UMR Pools 10 and 20	31-Aug-13		31-Aug-13		Robinson, Hoy, Hanson, Langrehr, Ruhser, Nelson
On-Going						
2012AA3	La Grange Pool accuracy assessment analysis	30-Jun-12	30-Oct-12	30-Jan-13		Lubinski, Langrehr, Ruscher, Jakusz
2012LB1	LiDAR Tier 2: Pools 2-7 , 8 (p), 9, 11-12, 13 (p), 20, 22-24, St. Croix. Further process LiDAR data: QA/QC, reclassify data errors, mask water, and smooth contours	30-Dec-12		30-Dec-12		Dieck, Rohweder, Nelson, Fox
Statistical Evaluation						
2013E1	Draft completion report: Long-term trend reporting, water quality component	30-Sep-13		30-Sep-13		Gray, Houser, Rogala
2013E2	Final draft completion report: An assessment of trends in water temperature in La Grange Pool (2012E3)	30-Sep-13	30-Dec-13			Gray, Robertson, Rogala, Houser
Intended for distribution						
Completion report that describes methods of estimating variance components from LTRMP water quality data (2008E1; Gray) (In USGS Review)						
Completion Report: Duckweed and filamentous algal associations with submersed aquatic vegetation in contiguous floodplain lakes of the Upper Mississippi River. Gray and Holland. (2009APE3a) (In USGS Review)						
Manuscript: Inferring decreases in among- backwater heterogeneity in large rivers using among-backwater variation in limnological variables (2010E1, Rogala, Gray, Houser) (in USGS review)						
Completion Report (Switched to manuscript): Gray, B.R., A.M. Ray, J.R. Rogala, M.D. Holland and J.N. Houser. Accepted. Spatial and temporal variation in duckweed and filamentous algal levels in contiguous floodplain lakes of the Upper Mississippi River. Journal of Aquatic Plant Management. (2009APE3a) J. Aquat. Plant Manage. 50: 91-100						
Completion report: Summer water temperature in the Upper Mississippi River (2012E2) ; Gray, Robertson, Rogala, Houser) (In USGS Review)						

UMRR-EMP's
Long Term Resource Monitoring Program element
FY2013
Scope of Work

Final FY13

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Data Management						
2013M1	Update vegetation, fisheries, and water quality component field data entry and correction applications.	30-May-13		30-May-13		Schlifer
2013M2	Load 2011 component sampling data into Oracle tables and make data available on Level 2 browsers for field stations to QA/QC.	30-Jun-13		30-Jun-13		Schlifer
2013M3	1-2 day workshop on data access, use, and exploration applications.	by May 2013	Travel not funded			Sauer, Johnson, Houser, Ickes, Yin, Schlifer
2013M5	Updating Graphical Fish Browser	30-Sep-13		18-Sep-13		Schlifer and Bartels
Landscape Pattern Research and Application (Not base monitoring)						
2013L1	Draft Manuscript: Curve Fit: A pixel level raster regression tool for landscape modeling and assessment.	30-Sep-13		25-Jun-13	Manuscript published http://onlinelibrary.wiley.com/doi/10.1111/2041-210X.12068/abstract	De Jager & Fox
2013L2	Analysis: Effects of flood inundation duration on litter decomposition and nitrogen cycling during different states of forest succession.	30-Sep-13		30-Sep-13		Strauss, Swanson, (UWL) & De Jager
2013L3	Final draft fact sheet: Landscape Ecology on the Upper Mississippi River: lessons learned, challenges, opportunities (2012L2)	30-Jun-13		13-Jun-13		De Jager
2013L4	Graphical Browser with landscape pattern indicators (2012L3)	30-Jun-13		13-Jul-13	http://www.umesc.usgs.gov/data_library/landscape_indicators/background.html	De Jager, Rohweder, Schlifer
Intended for distribution						
Manuscript: De Jager, N.R. and Houser, J.N. 2012. Water mediated connectivity influences patch distributions of total nitrogen (TN), total phosphorous (TP) and TN:TP in the Upper Mississippi River. <i>Freshwater Science</i> (2010OUT2b2) Freshwater Science, 31(4):1254-1272. November 2012						
Manuscript: De Jager, N.R. and Thomsen, M. (UWL). 2013. White-tailed deer herbivory increases flood-induced tree mortality in an UMR floodplain forest (2012L5). Forest Ecology and Management 303 (2013) 11–19						
Manuscript: De Jager, N.R., Cogger, B.J. (UWL) and Thomsen, M. (UWL). In Press. Winter browse selection by white-tailed deer and implications for bottomland forest restoration in the Upper Mississippi River valley, USA. (2012L4) Natural Areas Journal						
Beta-version Graphical Browser. Rohweder, J.J. and De Jager, N.R. 2013. Landscape patterns graphical web browser (2012L3). Final version released 20 June 2013. http://umesc-gisdb03.er.usgs.gov/landscape_viewer/indicators.aspx						
Fact Sheet: De Jager, N.R. In Prep. Landscape Ecology on the Upper Mississippi River: lessons learned, challenges, opportunities (2012L2; 2013L3).						
Manuscript: De Jager, N.R. and T. J. Fox. 2013. Curve Fit: a pixel-level raster regression tool for mapping spatial patterns (2013L1). Methods in Ecology and Evolution; British Ecological Society 2013. 4 pp.						
Manuscript: De Jager, N.R. Accepted. The allometry of community level stem size-density distributions in a floodplain forest. Accepted American Journal of Botany.						

UMRR-EMP's
Long Term Resource Monitoring Program element
FY2013
Scope of Work

Final FY13

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Science Planning						
2013XX	Draft questions and background material to A-Team	1-2 weeks before Spring A-Team meeting.		16-Apr-13		Johnson
2013XY	Draft report: Critical questions for advancing ecosystem understanding and management capability on the UMRS	30-Sep-13	31-Oct-13			Johnson
2013XZ	Final Draft report to EMP-CC	Nov. 2013	31-Dec-13		Progress delayed by federal shutdown. A progress report will be presented at Nov. EMPCC	Johnson
Development of vital rates to assess the relative health of UMRS mussel resources (FY11 Deferred)						
2012U1	Summary letter describing results to date from Phase 1, Objective 3	30-Nov-12		21-Dec-12		Ries, Newton, Zigler
Continuing existing work on survival of mussels using PIT tagging						
2012U2	Summary letter with field-based survival estimates	31-Dec-13			Preliminary letter sent to Corps on 21 Dec. 2012	Newton
Geospatial Data Upgrades						
2012G1	Projection files (.prj) and metadata files (.xml) will be created for all publically served data (vector and raster).	30-Mar-13		2-Aug-13		Nelson
Quarterly Activities						
2013QR1	Submittal of quarterly activities	30-Jan-13		30-Jan-13		All LTRMP staff
2013QR2	Submittal of quarterly activities	13-Apr-13		30-Apr-13		All LTRMP staff
2013QR3	Submittal of quarterly activities	13-Jul-13		13-Jul-13		All LTRMP staff
2013QR4	Submittal of quarterly activities	12-Oct-13		4-Nov-13		All LTRMP staff
USACOE Technical Support						
2013QR1	Track progress on UMESC's SOW for the updated Wind Fetch/Wave tool. Coordinate comments from the Corps on the beta version. Promote use of this tool across all districts.	30-Sep-13		30-Sep-13		Potter
2013QR2	Track progress on "Annotated empirical response curves for Upper Mississippi River System fishes" (AHAG 2.0), LTRMP Project 2013B28, under Fisheries Component	30-Sep-13		30-Sep-13		Theiling
2013QR3	Incorporate LTRMP fish data with the St. Louis District's Aquatic Habitat Classification Study.	TBD				McCain
Analysis Team ad hoc Indicator Report						
2013QR1	Revise draft report based on partner comments	Feb 2013		3-Apr-13		Hagerty
2013QR2	Draft final report to A-Team for review & endorsement	1-Feb-13		4-Apr-13		Hagerty
2013QR3	Provide read ahead to EMPCC 30 days prior to meeting	29-Apr-13		2-May-13		Hagerty
2013QR4	Present report to UMRR-EMP CC review & endorsement	29-May-13		29-May-13		Hagerty

UMRR-EMP's
Long Term Resource Monitoring Program element
FY2013
Scope of Work

Final FY13

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Science Management						
2013FS1	Final Draft Fact Sheet: Taking the Pulse of the River System #3	30-Sep-13		2-May-13	Fact sheet will not be published due to conflicting reviews.	LTRMP staff as needed
2013FS2	Final Draft Fact Sheet on LTRMP history, accomplishments, and future direction	30-Sep-13		2-May-13	Fact sheet will not be published due to conflicting reviews.	LTRMP staff as needed
2013ER1	Property inventory and tracking	15-Nov-13				LTRMP staff as needed
Documenting the use of the LTRMP Fish Monitoring methodologies outside the UMRR-EMP throughout the Midwest Area						
2013S1	Complete online survey collection	30-May-13		30-May-13		Solomon, Casper
2013S2	Assess results	30-Sep-13		30-Sep-13		Solomon, Casper
2013S3	Prepare read ahead document for EMP-CC	31-Dec-13				Solomon, Casper
2013S4	Present findings to EMP-CC February quarterly meeting and AFS conference (if funding for travel available)	Spring 2014				Solomon, Casper