

LTRMP FY09 Milestone Chart

Tracking number	Milestone	Target Date	Date Completed	1st quarter	2nd quarter	3rd quarter	4th quarter	Lead
MINIMUM SUSTAINABLE PROGRAM								
Aquatic Vegetation Component								
2009A1	Complete data entry and QA/QC of 2008 data; 1250 observations.							
	a. Data entry completed and submission of data to USGS	30-Nov-08	✓	Completed				Popp, Dukerschein, Bierman
	b. Data loaded on level 2 browsers	15-Dec-08	✓	Completed				Schlifer
	c. QA/QC scripts run and data corrections sent to Field Stations	28-Dec-08	✓	23-Sep-08 Completed				Sauer
	d. Field Station QA/QC with corrections to USGS	15-Jan-09	✓	30-Sep-08	Completed			Popp, Dukerschein, Bierman
	e. Corrections made and data moved to public Web Browser	30-Jan-09	✓	6-Oct-08	Completed			Sauer, Schlifer, Caucutt
2009A2	WEB-based annual Aquatic Vegetation Component Update with 2008 data on Public Web Server.							
	a. Develop first draft	28-Feb-09	✓	12-Jan-09	Completed			Sauer
	b. Reviews completed	28-Mar-09	✓	3-Feb-09	Completed			Popp, Dukerschein, Bierman, Sauer, Yin
	c. Submit final update	18-Apr-09	✓	19-Feb-09		Completed		Sauer
	d. Placement on Web with PDF	31-Jul-09	✓	23-Feb-09			Completed	Sauer, Caucutt
2009A3	Complete 2009 aquatic vegetation sampling for Pools 4, 8, and 13 (Table 1)	31-Aug-09	✓	31-Aug-09			Completed	Popp, Dukerschein, Bierman
2009A4	Web-based: Creating surface distribution maps for aquatic plant species in Pools 4, 8, and 13; 2008 data	31-Jul-09	✓	30-Apr-09			Completed	Yin
2008A8	Final draft OFR: LTRMP Aquatic Vegetation Program Review (2007A9)	30-Sep-09	✓	9-Apr-09			Completed	Heglund
2007APE12	Draft LTRMP Report: Ecological Assessment of High Quality UMRS Floodplain Forests	30-Apr-09					Delayed to Dec. 2009; waiting for lab results (Battaglia)	Chick; Guyon, Battaglia
Intended for distribution								
Manuscript: Importance of the Upper Mississippi River Forest Corridor to Neotropical Migratory Birds (Kirsch, 2007APE1)								
Manuscript: Status and trends of floodplain forests on the Upper Mississippi River (Yao, 2007APE5); 5 October 2009; doi:10.1016/j.ecocom.2009.08.004; doi:10.1016/j.ecocom.2009.09.003								
LTRMP Report: Status and Trends Report; 15 April 2009; http://pubs.usgs.gov/mis/LTRMP2008-T002/								
Fisheries Component								
2009B1	Complete data entry, QA/QC of 2008 fish data; ~1,590 observations							
	a. Data entry completed and submission of data to USGS	31-Jan-09	✓	15-Jan-09	Completed			Popp, Dukerschein, Bierman, Chick, Sass, Hrabik
	b. Data loaded on level 2 browsers; QA/QC scripts run and data corrections sent to Field Stations	15-Feb-09	✓	22-Jan-09	Completed			Schlifer
	c. Field Station QA/QC with corrections to USGS	15-Mar-09	✓	5-Feb-09	Completed			Popp, Dukerschein, Bierman, Chick, Sass, Hrabik
	d. Corrections made and data moved to public Web Browser	30-Mar-09	✓	10-Feb-09	Completed			Sauer and Schlifer
2009B2	Update Graphical Browser with 2008 data on Public Web Server.	31-May-09	✓	21-Aug-09	Completed;	http://www.umesc.usgs.gov/data_library/fisheries/graphical/fish_front.html		Sauer, Schlifer, Popp, Dukerschein, Bierman, Chick, O'Hara, Hrabik
2009B3	Complete fisheries sampling for Pools 4, 8, 13, 26, the Open River, and La Grange Pool (Table 1)	31-Oct-09						Popp, Dukerschein, Bierman, Chick, O'Hara, Hrabik
2009B5	Final Draft 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, 1998-2007 (2007B5)	30-Jun-09				In USGS review process; 30 March 2010		Popp, Delain
2009B6	Model development (2008APE1b)	30-Sep-09					30-Dec-09	Ickes
2008B9	Draft manuscript: Standardized CPUE data from multiple gears for community level analysis (re-worked 2006B5)	30-Mar-09				30-Dec-09		Chick
2006B6	Draft manuscript: Spatial structure and temporal variation of fish communities in the Upper Mississippi River. (Dependent on 2008B9 acceptance into journal)	30-Mar-09				30-Mar-10		Chick

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2007B4	Draft manuscript: Proportional biomass contributions of Non-native fish to UMRS fish communities	30-Jul-09					30-Jul-10	Ickes
2007B8	Draft manuscript: Proportional Size Density and Frequency of Occurrence of Flathead Catfish (<i>Pylodictis olivaris</i>), Channel Catfish (<i>Ictalurus punctatus</i>), and Blue Catfish (<i>I. furcatus</i>) in an impounded and unimpounded reach of the Upper Mississippi River. (Expanded work on 2006B12: returned to author for revision)	30-Sep-09	23-Sep-09				Completed	Hrabik, McCain, Herzog
2007APE3	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?	30-Apr-09				30-Apr-10		Chick
2007APE8	Final draft: A Proposal to restore Specific Monitoring Elements to the LTRMP (2007 year)	30-Mar-09				2007-2009 data will be combined into one report; see 2009R1		Team Leaders
Intended for distribution								
Completion report: Exploratory Analysis of Index of Biotic Integrity Scores Calculated from Datasets Obtained from Three Different Day Electrofishing Protocols (2006B9; Bartels)								
Manuscript: Evaluation of a Catch and Release Regulation for Largemouth Bass in Brown's Lake, Pool 13, Upper Mississippi River (2007B7; Bowler)								
Completion report: LTRMP Fisheries Component collection of six darter species from 1989–2004. (2006B13; Ridings)								
USGS Series: Non-native fishes in the Upper Mississippi River System: A Synthesis of Information from the Long Term Resource Monitoring Program (2008B4; Irons); 9 Sept.2009; http://pubs.usgs.gov/sir/2009/5176								
Manuscript: O'Connell, M.T. with A.M. Uzee-O'Connell and Valerie A. Barko. (in press) Occurrence and predicted dispersal of bighead carp (<i>Hypophthalmichthys nobilis</i>) in the Mississippi River System: Development of a Heuristic Tool in D. Chapman and M. Hoff (editors). Asian Carp Symposium Proceedings, American Fisheries Society Symposium. (2005APE13; Barko)								
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)								
Manuscript: Fishes of the Mississippi River System: a 40 year synthesis of research on one of the world's great rivers. (2008B8, Ickes)								
Manuscript: Flood trends and river engineering on the Mississippi River system (2008B6; Ickes); 12 Dec. 2008; doi:10.1029/2008GL035987								
Manuscript: Cumulative impacts of river engineering, Mississippi and Lower Missouri rivers (2008B7; Ickes); 9 April 2009; DOI: 10.1002/rra.1269								
Water Quality Component								
2009D1	Complete calendar year 2008 fixed-site water quality sampling	31-Dec-08	31-Dec-08	Completed				Houser, Popp, Dukerschein, Bierman, Chick, Sass, Hrabik
2009D2	Complete laboratory analysis of 2008 fixed site and SRS data; Data loaded to Oracle data base.	30-Mar-09	30-Mar-09		Completed			Yuan
2009D3	Complete data entry, QA/QC of calendar year 2008 fixed-site and SRS data.	30-May-09	30-May-09			Completed		Rogala, Popp, Dukerschein, Bierman, Chick, Sass, Hrabik
2009D4	Complete FY09 fixed site and SRS sampling for Pools 4, 8, 13, 26, Open River, and La Grange Pool (Table 1)	30-Sep-09	30-Sep-09				Completed	Popp, Dukerschein, Bierman, Chick, Sass, Hrabik
2009D5	WEB-based annual Water Quality Component Update with 2008 data on Public Web Server.	30-Jun-09	30-Jun-09			Completed		Rogala
2009D6	Draft completion report: comparison of zooplankton in the UMR between channel and backwater strata, and between Geomorphic Reach	1-Aug-09	1-Aug-09				Completed	Popp, Burdis
2009D7	Draft completion report: Evaluation of Factors Influencing Metaphyton Abundance and Distribution on Navigation Pools 4, 8, and 13 of Upper Mississippi River (Preliminary analysis for 2009APE3a; NEW Addition)	30-Jun-09	30-Jun-09			Completed		Dukerschein, Giblin, Langrehr, and Hoff
2008D8	Final draft manuscript: Primary production, and dissolved oxygen dynamics in UMRS backwater lakes and main channel. (2007D8)	30-Jul-09					30-Jul-10	Houser
2005D7	Final draft LTRMP report: Main channel/side channel report for the Open River Reach.	1-Jun-09				30 Dec. 2010/abstract submitted 10/2/2009		Hrabik
2005APE26	Final draft LTRMP report: retrospective, cross-component analysis for Pool 26	15-Mar-09			3-Mar-10			Chick
Intended for distribution								
LTRMP completion report: Pool 5 water quality, pre- and post-drawdown (2008D7; Popp & Burdis); 29 July 2009								
LTRMP report: Sampling of light regime in support of aquatic vegetation modeling (2008D6; Dukerschein, Giblin, Hoff)								
Completion report: Examining nitrogen and phosphorus ratios N:P in the unimpounded portion of the Upper Mississippi River (2006D9; Hrabik & Crites)								
Manuscript describing results of analyses of spatial and temporal patterns in UMRS WQ. (2006D5; Houser)								
Completion report: Lake Pepin zooplankton and water quality data (2006D7; Popp & Burdis); 29 July 2009								

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Statistical Evaluation of Monitoring Data								
2009E1	Update LTRMP Statistical Web Pages (Draft)	30-Sep-09	✓ 15-Oct-09				Completed	Gray
Intended for distribution								
Completion report: "An introduction to the analysis of LTRMP's vegetation rake data" (2007E1; Gray); 20 November 2008								
Completion report: "Estimating temporal trends in data derived using LTRMP's submersed aquatic vegetation rake sampling design" (2007E2; Gray); 4 November 2008								
Completion report describing methods of estimating variance components from LTRMP water quality data (2008E1);								
Completion report: "Cumulative HREP effects on ecological characteristics of impounded regions of the UMR" (2007APE10); 29 July 2009								
Data Management								
2009M1	Update vegetation, fisheries, and water quality component field data entry and correction applications.	30-May-09	✓ 30-May-09			Completed		Schlifer
2009M2	Load 2008 component sampling data into Oracle tables and make data available on Level 2 browsers for field stations to QA/QC.	30-Jun-09	✓ 30-Jun-09			Completed		Schlifer
Intended for distribution								
Online viewer (ArcServer) of historical data (2007VTj, Fox); http://umesc-gisdb03.er.usgs.gov/umr_historic_data/viewer.aspx								
Land Cover/Land Use with GIS Support								
Intended for distribution								
Assessment of high-resolution digital imagery for UMRS vegetation mapping and software-based vegetation classification (Robinson, 2007APE13)								
Bathymetry								
Intended for distribution								
UMRS Bathymetric Data Acquisition Plan: Completion report (Hagerty and Rogala); May 2009								
ADDITIONAL PROGRAM ELEMENTS--2008								
2008APE1a	Draft completion report: Developing an empirical framework for reconstructing and modeling UMRS floodplain disturbance histories	30-Mar-09					30 Dec. 2009	Ickes
2008APE2	Draft LTRMP technical report; Setting quantitative fish management targets for LTRMP monitoring	30-Mar-09			30-Mar-10			Sass
2008APE3	Draft completion report: Evaluation of two double sampling designs for sampling mussel beds in the UMRS	30-Mar-09	✓ 26-Jun-09		Completed	Distributed 7/29/2009		Rogala
2008APE4a	Draft completion report: FY05-07 data--Analysis and support of aquatic vegetation sampling data in Pools 6, 9, 18, and 19	30-Mar-09					15-Jan-10	Yin
2008APE4b	Data entry and data quality checking of the 2008 data--Analysis and support of aquatic vegetation sampling data in Pools 6, 9, 18, and 19	30-Dec-08	✓ 30-Dec-08	Completed				Yin
2008APE5	Draft LTRMP Technical Report; Experimental and Comparative Approaches to Determine Factors Supporting or Limiting Submersed Aquatic Vegetation in the Illinois River and its Backwaters	30-Mar-09			30-Mar-10			Sass
2008APE6	Data set for 2008 field season: Hydrologic connectivity between off channel areas and the main channel: an empirical test of an important driver of potential HREP effects on biological production and organism health	30-Mar-09		95% complete; awaiting lab results for fatty acids				Richardson
2008APE7	Draft Completion Report: A Proposal to Restore Specific Monitoring Elements to the LTRMP (2008 year)			2007-2009 data will be combined into one report; see 2009R1				Team Leaders

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ADDITIONAL PROGRAM ELEMENTS--2009								
2009APE1a	Draft manuscript for USGS internal review	1-Sep-09					15 Dec. 2009	Yin
2009APE1b	Submittal of manuscript to journal	1-Mar-10						Yin
2009APE2a	Draft completion report including sample design, methods, and results	30-Jan-10						Newton
2009APE3a	Draft completion report based on analysis of LTRMP water quality and vegetation data entitled "Associations between selected WQ variables, metaphyton, SAV and connectivity in backwaters as inferred from LTRMP data."	30-Jan-10						Houser
2009APE4a	Draft manuscript: The calculation of landscape metrics to derive measures of land change and the description of temporal changes in these measures	30-Sep-09	✓ 30-Sep-09				Completed	DeJager
2009APE4b	Draft manuscript: Markovian analysis of land change	30-Sep-09	✓ 30-Sep-09				Completed	DeJager
2009R1	Draft completion report, compilation of 3 years of sampling	15-Jun-10						Team Leaders
Visualization Tools								
N/A	Acquisition of 3-D Software						Completed	Dieck and Robinson
2009APE6a	Creating Squarified Tree Mapping Tool to Determine if Quantitative Goals Are Being Met							
	Active Web tool running with a couple of initial data queries	30-Dec-09						Schlifer
2009APE7a	Redesign of Long Term Resource Monitoring Program Web pages to enhance communication of information on the Upper Mississippi River System							
	Beta-version of redesigned LTRMP Web pages	30-Dec-09						Sauer and Rogala
LIDAR Acquisition and Processing								
2009LID1	LIDAR Data Acquisition Contract	30-Sep-09						Hagerty
2009LID2	Servable LIDAR data of Pools 8-24*	30-Sep-09					LIDAR processing and serving for Pools 8-14; 20-24 slated for completion 6 Nov. 2009 (the vendor has yet to deliver Pools 15-19)	Robinson
Operational Planning Ramp-Up								
2009OP1	White paper on methods assessment (Bathymetry and LIDAR)	30-Sep-09	✓ 29-Sep-09				Completed	Rogala
2009OP2	Detailed outline for Science Management Plan	30-Sep-09						Johnson
2009OP3	Detailed outline for Mussel Research Plan	30-Sep-09	✓ 30-Sep-09				Completed	Newton
Assessment and Training for the 2010 Systemic Land Cover/Land Use Acquisition and Processing								
2009LCU1	Draft contract report: All photography and LIDAR testing will be documented and referenced for the 2010 systemic flight.	27-Feb-10						Dieck and Robinson
2009LCU2	Presentation to the EMP Partnership on LC/LU procedures. To include time table on process, classification system, and field verification.	21-May-09					Attempted at 21 May meeting; meeting ran long therefore rescheduled to Feb. 2010	Robinson