Tracking	Milestone	Target	Date	1st	2nd	3rd	40 4	Y 1
number		Date	Completed	quarter	quarter	quarter	4th quarter	Lead
MINIMU	JM SUSTAINABLE PROGRAM							
Aquatic V	egetation Component							
	Complete data entry and QA/QC of 2007 data; 1250 observations							
	a. Data entry completed and submission of data to USGS	30-Nov-07	✓ 7-Nov-07	Completed				Popp, Dukerschein, Bierman
	b. Data loaded on level 2 browsers	15-Dec-07	√ 12-Nov-07	Completed				Schlifer
	c. QA/QC scripts run and data corrections sent to Field Stations	28-Dec-07	✓ 21-Nov-07	Completed				Sauer
	d. Field Station QA/QC with corrections to USGS	15-Jan-08	√ 27-Nov-07		Completed			Popp, Dukerschein, Bierman
	e. Corrections made and data moved to public Web Browser	30-Jan-08	✓ 18-Jan-08		Completed			Sauer, Schlifer, Caucutt
2008A2	WEB-based annual Aquatic Vegetation Component Update with 2007 data on Public Web Server							
	a. Develop first draft	28-Feb-08	✓ 9-Jan-08		Completed			Sauer
	b. Reviews completed	28-Mar-08	21-Jan-08		Completed			Popp, Dukerschein, Bierman, Sauer, Yin
	c. Submit final update	18-Apr-08	✓ 5-Feb-08			Completed		Sauer
	d. Placement on Web with PDF	31-Jul-08	√ 31-Jul-08				Completed	Sauer, Caucutt
2008A3	Complete aquatic vegetation sampling for Pools 4, 8, and 13 (Table 1)	31-Aug-08	√ 31-Aug-08				Completed	Popp, Dukerschein, Bierman
2008A4	Final draft completion report: Developing submersed aquatic plant bioindicators and biocriteria for the Upper Mississippi River (2007A4)	30-May-08	10-Jun-08		08; review s to author	Completed	; sent to COE	Dukerschein, Langrehr, Popp, Moore
2008A7	Web-based: Creating surface distribution maps for aquatic plant species in Pools 4, 8, and 13; 2007 data	31-Jul-08	24-Jan-07				Completed	Yin
2008A8	Final draft OFR: LTRMP Aquatic Vegetation Program Review (2007A9)	30-Sep-08					In review process	Heglund
2008A9	Draft manuscript: Aquatic vegetation in the UMRS	31-May-08	√ 18-Jun-08			Completed		Popp, Moore
2007A9	Draft OFR: LTRMP Aquatic Vegetation Program Review	29-Feb-08	√ 28-Mar-08		Completed			Heglund
2007APE1	Draft manuscript: Importance of the Upper Mississippi River Forest Corridor to Neotropical Migratory Birds	30-Mar-08	16-Apr-08		Completed			Kirsch
2007APE5	Draft manuscript: Status and trends of floodplain forests on the UMR	30-Mar-08	✓ 18-Apr-08		Completed			Yin
2007APE12	Draft LTRMP Report: Ecological Assessment of High Quality UMRS Floodplain Forests	29-Aug-08					0 April 2009 ing funds late looding issues	Chick
	Component							
2008B1	Complete data entry, QA/QC of 2007 fish data; ~1,590 observations	1						
	a. Data entry completed and submission of data to USGS	31-Jan-08	1-Feb-08		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-08	✓ 4-Feb-08		Completed			Schlifer
	c. Field Station QA/QC with corrections to USGS	15-Mar-08	5-Feb-08		Completed			Popp, Dukerschein, Bierman, Chick, Sass, Hrabik
	d. Corrections made and data moved to public Web Browser	30-Mar-08	✓ 14-Feb-08		Completed			Sauer and Schlifer

Tracking number	Milestone	Target Date	Date Completed	1st quarter	2nd quarter	3rd quarter	4th quarter	Lead
2008B2	WEB-based annual Fisheries Component Update with 2007 data on Public Web Server	Date	Completed	quarter	quarter	quarter		
	a. Develop first draft	30-Apr-08	√ 14-Feb-08			Completed		Sauer, Popp, Dukerschein, Bierman, Chick, O'Hara,
	b. Reviews completed	15-May-08	√ 21-Mar-08			Completed		Sauer, Popp, Dukerschein, Bierman, Chick, O'Hara, Hrabik, Ickes
	c. Submit final update	31-May-08	√ 6-Jun-08			Completed		Sauer, Popp, Dukerschein, Bierman, Chick, O'Hara,
	d. Placement on Web with PDF	31-Aug-08	✓ 24-Oct-08				Completed	Sauer, Caucutt
2008B3	Complete fisheries sampling for Pools 4, 8, 13, 26, the Open River, and La Grange Pool (Table 1)	31-Oct-08	31-Oct-08				Completed	Popp, Dukerschein, Bierman, Chick, O'Hara, Hrabik
2008B4	USGS Series: Non-native fishes in the Upper Mississippi River System: A Synthesis of Information from the Long Term Resource Monitoring Program (extension of 2005B8)	30-Sep-08					At USGS EPN	Sass, Irons
2008B5	Manuscript: Assessing habitat use by breeding Great Blue Herons (Ardea herodias) on the Upper Mississippi River National Wildlife and Fish Refuge, USA (intended outlet Waterbirds)	30-Apr-08	30-Apr-08	Completed: Assessing Habitat Use by Breeding Great Blue Herons (Ardea herodias) on the Upper Mississippi River, USA Eileen M. Kirsch, Brian Ickes, and Douglas A. Olsen. Waterbirds June 2008. Vol.31,Iss.2;p.252-267				Ickes
2008B6	Draft Manuscript: River engineering and flooding: Systemwide empirical modeling of the Mississippi and Lower Missouri Rivers (intended outlet Nature)	30-Apr-08		Completed: Pinter, N., A. A. Jemberie, J. W. F. Remo, R. A. Heine, and B. S. Ickes (2008), Flood trends and river engineering on the Mississippi River system, Geophys. Res. Lett., 35, L23404, doi:10.1029/2008GL035987				Ickes
2008B7	Draft Manuscript: Effects of river engineering on flow conveyance and flood stages: Reach-scale empirical modeling of the Mississippi and Lower Missouri Rivers (intended outlet Water	1-Jul-08	11-Sep-08			FSP 11/1	8/08 - River h and App	Ickes
2008B8	Draft manuscript: Fishes of the Mississippi River System: a 40 year synthesis of research on one of the world's great rivers (intended outlet Hydrobiologia)	30-Jun-08	12-Jan-09				S review; g peer review	Ickes
2008B9	Draft manuscript: Standardized CPUE data from multiple gears for community level analysis (reworked 2006B5).	27-Jun-08				PI redirected to new tasks with INHS move to University; 30-Mar-2009		Chick
2006B6	Draft manuscript: Spatial structure and temporal variation of fish communities in the Upper Mississippi River. (Dependent on 2008B9 acceptance into journal)	30-Sep-08		New deadline 28 February 2009			Chick	
2007B5	Draft LTRMP report: Trends in abundance of fish species linked to vegetation	30-Mar-08	✓ 3-Jun-08		Completed			Popp, Delain
2007B4	Draft manuscript: Proportional biomass contributions of Non-native fish to UMRS fish communities	31-May-08				program leve	and program	Ickes

Tracking	Milestone	Target	Date	1st	2nd	3rd	1	
number	1.2000000	Date	Completed	quarter	quarter	quarter	4th quarter	Lead
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)	30-Sep-08				sent back to revision; dea September 20	author for dline 30	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-Mar-08			Lab procession longer than e June	-	New deadline: 30 March 2009	Chick
2007APE7	Draft completion report: Association between fish assemblage and off-channel area type in the impounded reach of the Upper Mississippi and Illinois rivers: implications for habitat restoration at management-relevant scales	31-Jan-08	27-Mar-08	Completed			Completion report delivered to COE on	Knights
2007APE8	A Proposal to restore Specific Monitoring Elements to the LTRMP	30-Apr-08	✓ 21-Jul-08			Draft submitted		Chick
	Estimated d	istribution d	ate					
Completion i	report: Habitat-related factors that are potentially limiting backwater fish communities (2006B8;	30-May-08	✓ 20-Oct-08				Completed	
Completion i	report: Exploratory Analysis of Index of Biotic Integrity Scores Calculated from Datasets Obtained Different Day Electrofishing Protocols (2006B9; Bartels)	30-Jul-08					view; through review	
	ort: Investigate effects of newly completed HREPs (Lake Chautauqua NWR, Banner Marsh State dlife Area) in La Grange Pool (2006APE17b; O'Hara)	30-Sep-08	30-Mar-08		Approval from Reston 5 Feb. 2008		Completed	
_	Evaluation of a Catch and Release Regulation for Largemouth Bass in Brown's Lake, Pool 13, ssippi River (2007B7; Bowler)	30-Sep-08					At journal	
Completion i	report: LTRMP Fisheries Component collection of six darter species from 1989–2004. (2006B13;	30-Sep-08					In USGS review	
Water Qu	ality Component							
2008D1	Complete calendar year 2007 fixed-site water quality sampling	31-Dec-07	31-Dec-07	Completed				Houser, Popp, Dukerschein, Bierman, Chick, Sass, Hrabik
2008D2	Complete laboratory analysis of 2007 fixed site and SRS data; Data loaded to Oracle data base.	30-Mar-08	✓ 4-Mar-08		Completed			Yuan
2008D3	Complete data entry, QA/QC of calendar year 2007 fixed-site and SRS data.	30-May-08	1-May-08			Completed		Rogala. Popp, Dukerschein, Bierman, Chick, Sass, Hrabik
2008D4	Complete FY 08 fixed site and SRS sampling for Pools 4, 8, 13, 26, Open River, and La Grange Pool	30-Sep-08	30-Sep-08				Completed	Popp, Dukerschein, Bierman, Chick, Sass, Hrabik
2008D5	WEB-based annual Water Quality Component Update with 2007 data on Public Web Server.	30-Jun-08	✓29-Apr-08			Completed		Rogala
2008D6	Final draft LTRMP report: Sampling of light regime in support of aquatic vegetation modeling	30-Aug-08	√ 15-Aug-08				Completed	Dukerschein, Giblin, Hoff
2008D7	Final draft LTRMP report: Pool 5 water quality, pre- and post-drawdown (2007D7)	30-Sep-08					view; through review	Popp, Burdis
2008D8	Final draft manuscript: Primary production, and dissolved oxygen dynamics in UMRS backwater lakes and main channel. (2007D8)	30-Jul-08					Delayed to 30 July 2009	Houser
2008D9	Final draft manuscript describing results of analyses of spatial and temporal patterns in UMRS WQ. (2006D5)	30-Aug-08	18-Jun-08			Draft submitted 18 June	Completed	Houser

T1	M21 - d - · · ·	Toward	Doto	1.4	23	23	 	
Tracking number	Milestone	Target Date	Date Completed	1st quarter	2nd quarter	3rd quarter	4th quarter	Lead
2006D7	Final draft completion report: Lake Pepin zooplankton and water quality data	31-Jul-08	Completed	quarter	quarter	In USGS review; through peer review		Popp, Burdis
2005D7	Final draft LTRMP report: Main channel/side channel report for the Open River Reach.	30-Sep-08			awaiting inte	Report is in draft at the field station waiting internal review. Should be completed and submitted to UMESC 1		Hrabik
2007D7	Draft LTRMP report: Pool 5 water quality, pre- and post-drawdown	31-Aug-07	✓11-Apr-08			Completed		Popp, Burdis
2005APE26	Final draft LTRMP report: retrospective, cross-component analysis for Pool 26	29-Feb-08			submitted to	comments o author; new March 2009		Chick, Johnson
	Estimated d	istribution d	ate					
Completion r	report: Evaluation of new Hydrolab Turbidity Probe (2006D6; Hoff)	31-Dec-07	✓21-Dec-07	Completed				
	ort: A decade of monitoring on Pool 26 of the Upper Mississippi River: Water quality and fish data imponent analyses (2005APE27; Chick)	30-Sep-08					Review comments submitted to author	
Completion report: Effectiveness of wetland creation (2006D8; Kirby & Bierman)		30-Sep-08					Redirected	
	report: Examining nitrogen and phosphorus ratios N:P in the unimpounded portion of the Upper River (2006D9; Crites)	30-Sep-08					Review comments submitted to author	
Statistical	Evaluation of Monitoring Data				<u> </u>			
2008E1	Draft completion report that describes methods of estimating variance components from LTRMP water quality data	15-Sep-08	26-Sep-08				Completed	Gray
	Estimated d	istribution d	ate					
Completion 1	report: "An introduction to the analysis of LTRMP's vegetation rake data" (2007E1; Gray)	15-May-08	√ 4-Nov-08			Completed		
rake samplin	report: "Estimating temporal trends in data derived using LTRMP's submersed aquatic vegetation g design" (2007E2; Gray)	15-Jun-08	31-Oct-08			Completed		
	Completion report: "Cumulative HREP effects on ecological characteristics of impounded regions of the UMR" (2007APE10; Gray)					In USGS rev peer review	riew; through	
Data Man								
	Update vegetation, fisheries, and water quality component field data entry and correction	30-May-08	✓30-May-08			Completed		Schlifer
2008M2	Load 2007 component sampling data into Oracle tables and make data available on Level 2 browsers for field stations to QA/QC.	30-Jun-08	30-May-08			Completed		Schlifer
	er/Land Use with GIS Support							
	Provide biannual updates to LTRMP management	Biannual	,		Completed		Completed	Robinson
2007APE13	Assessment of high-resolution digital imagery for UMRS vegetation mapping and software-based vegetation classification	30-Mar-08	4-Apr-08		In USGS review			Robinson

DRAFT LTRMP FY08 Milestone Chart 4th Quarter

Tracking	Milestone	Target	Date	1st	2nd	3rd	4th quarter	Lead		
number		Date	Completed	quarter	quarter	quarter	4tii quai tei	Dead		
Bathymet	<u> </u>									
	Provide biannual updates to LTRMP management	Biannual			Completed		Completed	Rogala		
	Draft UMRS Bathymetric Data Acquisition Plan: Completion report	1-Aug-08	✓ 30-Sep-08				Completed	Hagerty, Rogala		
Macroinv	Macroinvertebrate Component									
2005C2	Draft LTRMP Report: Open River macroinvertebrates	30-Sep-08	✓ 25-Jul-08				Completed	Hrabik		
LTRMP S	Summary Report									
2007S1	2005 LTRMP Web-based summary report on-line	30-Jun-08	√ 10-Nov-08			Completed		Johnson, Houser, Ickes, Yin		
ADDITIO	ONAL PROGRAM ELEMENTS									
	Draft completion report: Developing an empirical framework for reconstructing and modeling UMRS floodplain disturbance histories	30-Sep-08			digitized from report will changes in	present these key attribute	psets - progress e and discuss	Ickes		
2008APE2	Draft LTRMP technical report; Setting quantitative fish management targets for LTRMP	30-Mar-09						Sass		
2008APE3	Draft completion report: Evaluation of two double sampling designs for sampling mussel beds in the UMRS	30-Mar-09						Rogala		
	Draft completion report: FY05-07 dataAnalysis and support of aquatic vegetation sampling data in Pools 6, 9, 18, and 19	30-Dec-08						Yin		
2008APE4b	Data entry and data quality checking of the 2008 dataAnalysis and support of aquatic vegetation sampling data in Pools 6, 9, 18, and 19	30-Mar-09						Yin		
	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						Sass		
	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						Richardson		
2008APE7	Draft Completion Report: A Proposal to Restore Specific Monitoring Elements to the LTRMP	30-Mar-09						Team Leaders		
Data Visu	alization Tools									
2008VT1	Maintenance of LTRMP Graphical Browsers	30-Sep-08	✓ 30-Sep-08				Completed	Schlifer, Caucutt		
2008VT2	Beta-version SQL code: rewrite of current fish SAS code used to generate synthesized fisheries information	30-Sep-08	30-Sep-08				Completed	Schlifer, Bartels		
2008VT3	Develop a plan to rewrite the Water Quality Application	30-Sep-08	✓ 31-Oct-08				Completed	Schlifer		
2008VT4	Servable LIDAR data of Pools 8–24	30-Sep-08		software issu problems wo vendors. Poo	d due to network licensing and program re issues. We were able to resolve these ms working with UMESC IT and program s. Pools 8-14, 20-24 collected. Pools 15-19 are led for collection by the vendor fall 2008			Robinson, Dieck, Nelson, Olsen		