

Tracking number	Milestone	Target Date	Date Completed	1st quarter	2nd quarter	3rd quarter	4th quarter	Lead
MINIMUM SUSTAINABLE PROGRAM								
Aquatic Vegetation Component								
2005A1	WEB-based annual Aquatic Vegetation Component Update with 2003 data on Public Web	30-Nov-04	✓ 22-Nov-04	Completed				Yin, Dukerschein, Sauer, Heglund
2005A2	Complete data entry and QA/QC of 2004 data; 1250 observations.							Popp, Dukerschein, Kirby, Chick, Pegg, Sauer, Hansen
	a. Data entry completed and submission of data to USGS	1-Oct-04	✓ 31-Aug-04	Completed				Popp, Dukerschein, Kirby
	b. Data loaded on level 2 browsers	1-Oct-04	✓ 5-Sep-04	Completed				Hansen
	c. QA/QC scripts run and data corrections sent to Field Stations	18-Oct-04	✓ 18-Oct-04	Completed				Sauer
	d. Field Station QA/QC with corrections to USGS	15-Nov-04	✓ 12-Nov-04	Completed				Popp, Dukerschein, Kirby
	e. Corrections made and data moved to public Web Browser	30-Nov-04	✓ 18-Nov-04	Completed				Sauer, Hansen, Caucutt
2005A3	WEB-based annual Aquatic Vegetation Component Update with 2004 data on Public Web							Popp, Dukerschein, Kirby, Chick, Pegg, Sauer,
	a. Develop first draft	15-Feb-05	✓ 11-Jan-05		Completed			Sauer, Dukerschein
	b. Reviews completed	28-Feb-05	✓ 28-Feb-05	Submitted to Branch Chief and Field Station Staff 11 January 2005	Completed			Popp, Dukerschein, Kirby, Chick, Hrabik, Pegg, Sauer, Heglund, Yin, Ardinger
	c. Submit final update	31-Mar-05	✓ 6-Mar-05		Completed			Popp, Dukerschein, Kirby, Chick, Pegg, Sauer
	d. Placement on Web with PDF	30-Jul-05	✓ 8-Jun-05		Submitted to editorial staff for		Completed	Sauer, Caucutt, Ardinger
2005A4	Complete aquatic vegetation sampling for Pools 4, 8, and 13 (Table 1)	31-Aug-05	✓ 7 Sept. 2005				Completed	Popp, Dukerschein, Kirby
2005A5	Manuscript: Navigation Pool 8: Vegetation response near HREP projects in format of target journal for publication	30-Sep-05	✓ 30-Sep-05				Completed and submitted for editorial review	Dukerschein, Yin, Boma, Gray, Heglund
2005A6	Floodplain forest manuscript (FY02 SOW)	Awaiting journal review	✓	Awaiting journal review				Chick, Yin
2005A7	LTRMP report titled: "A multi-year synthesis of aquatic vegetation data from 1991 to 2002 for the Long Term Resource Monitoring Program on the Upper Mississippi River" to COE and USGS (FY04 SOW)	27-Jan-05	✓ 27-Jan-05		Completed			Yin, Dukerschein, Heglund
2005A8	Web display of aquatic vegetation model - outstanding product	30-May-05	✓			Completed		Yin, Chick, Heglund, Caucutt

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Fisheries Component								
2005B1	Complete data entry, QA/QC of 2004 fish data; ~1,590 observations							Sauer, Popp, Dukerschein, Kirby, Chick, Pegg, Hrabik, Hansen
	a. Data entry completed and submission of data to USGS	31-Jan-05	✓ 25-Jan-05		Completed			Popp, Dukerschein, Kirby, Chick, Pegg, Hrabik
	b. Data loaded on level 2 browsers; QA/QC scripts run and data corrections sent to Field Stations	10-Feb-05	✓ 25-Jan-05		Completed			Hansen
	c. Field Station QA/QC with corrections to USGS	18-Feb-05	✓ 31-Jan-05		Completed			Popp, Dukerschein, Kirby, Chick, Pegg, Hrabik
	d. Corrections made and data moved to public Web Browser	28-Feb-05	✓ 8-Feb-05		Completed			Sauer, Hansen, Caucutt
2005B2	WEB-based annual Fisheries Component Update with 2004 data on Public Web Server.							Sauer, Popp, Dukerschein, Kirby, Chick, Pegg, Hrabik, Johnson
	a. Develop first draft	30-Apr-05	✓ 29-Apr-05			Completed		Sauer, Popp, Dukerschein, Kirby, Chick, Pegg, Hrabik
	b. Reviews completed	15-May-05	✓ 9-Jun-05			Completed		Sauer, Popp, Dukerschein, Kirby, Chick, Pegg, Hrabik, Johnson, Knights, Ardinger
	c. Submit final update	31-May-05	✓ 20-Jun-05			Completed		Sauer, Popp, Dukerschein, Kirby, Chick, Pegg, Hrabik
	d. Placement on Web with PDF	31-Aug-05	✓ 7-Oct-05				Completed	Sauer, Caucutt, Ardinger
2005B3	Written summary of progress regarding how key habitat-matrix variables affect fish diversity and production in off channel aquatic areas.	30-Sep-05	✓ 17-Oct-05				Completed	Knights, Johnson
2005B4	Complete fisheries sampling for Pools 4, 8, 13, 26, the Open River Reach, and La Grange Pool (Table 1)	31-Oct-05	✓ 31-Oct-05				Completed: FY06 1st quarter	Popp, Dukerschein, Kirby, Chick, Pegg, Hrabik
2005B5	Draft LTRMP report titled: Fish life history database report	22-Apr-05			Draft submitted to B. Johnson 1 April 2005	Waiting for reviewers' comments	Returned to author for revisions: Delayed to FY06	Pegg, Dukerschein
2005B6	LTRMP report titled: "A ten-year synthesis of fisheries data from 1993 to 2002 for the Long Term Resource Monitoring Program on the Upper Mississippi River" to COE and USGS. (FY04 SOW)	23-Jun-05	✓ 12-Jul-05		Completed - in editorial production	Completed		Ickes, Popp, Dukerschein, Kirby, Chick, Pegg, Hrabik, Johnson, Ardinger
2005B7	Final draft LTRMP report titled "Spatial structure and temporal variation of fish communities in the Upper Mississippi River" to COE and USGS. (FY04 SOW) Chick et al.	31-Jan-05	✓ 22-Mar-05		Completed			Chick, Ickes, Pegg, Hrabik, Johnson, Ardinger

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2005B8	Contract report titled: "Non-native fishes in the Upper Mississippi River System: A Synthesis of Information from the Long Term Resource Monitoring Program" to COE and USGS. (FY04 SOW) Irons et al.	1-Jun-05			Submitted to Branch Chief for Review 7 April 2005	Incorporating reviewer suggested edits	Reviewer edits addressed. Waiting for revisions from co-authors: Delayed to FY06	Pegg, Popp, Chick, Ickes, Kolar, Hrabik, Johnson
2005B9	Final draft LTRMP report titled: Spatial, temporal, and environmental trends of fish assemblages within six reaches of the Upper Mississippi River System (FY04 SOW) Barko et al.	31-Jan-05	✓ 31-Jan-05		Completed; Final report printed 11 March 2005			Hrabik, Ickes, Chick, Pegg, Ardinger
2005B10	Draft LTRMP report titled: Temporal and spatial trends in the frequency of occurrence, length-frequency distributions, rate of gain, and relative abundance of Upper Mississippi River Fish (FY04 SOW) Kirby and Ickes	1-May-05	✓ 1-May-05			Completed		Kirby, Ickes, Johnson
2005B11	Manuscript titled: Abundance Patterns of Centrarchids in Backwaters of the Upper Mississippi River: Implications for Habitat Rehabilitation, submitted to journal.	31-Jul-05	✓ 26-Jul-05				Submitted to NAJFM	Kirby
2005B12	Complete and distribute project status reports on fish analysis. (FY02 SOW)	1-Sep-05			Submitted to Branch Chief in 2003. Resubmitted 4 April 2005	Revised target date 30 Sept. 2005	Changed format to USGS Open-file report. Currently in review: Delayed to FY06	Ickes
Water Quality Component								
2005D1	Complete calendar year 2004 fixed-site water quality sampling	31-Dec-04	✓ 31-Dec-04	Completed				Houser, Popp, Dukerschein, Kirby, Chick, Pegg, Hrabik
2005D2	Complete laboratory analysis of 2004 fixed site and SRS data; Data loaded to Oracle data base.	30-Mar-05	✓ 30-Mar-05		Completed			Yuan
2005D3	Complete data entry, QA/QC of calendar year 2004 fixed-site and SRS data.	30-May-05	✓ 30-May-05			Completed		Popp, Dukerschein, Kirby, Chick, Pegg, Hrabik
2005D4	Summary (plots and brief commentary of 2004 data) completed by field stations and notes/plots send to WQ component specialist @UMESC.	30-Jun-05	✓ 30-Jun-05			Completed		Popp, Dukerschein, Kirby, Chick, Pegg, Hrabik
2005D5	Complete FY 2005 fixed site and SRS sampling for Pools 4, 8, 13, 26, Open River, and La Grange Pool (Table 1)	30-Sep-05	✓ 30-Sep-05				Completed	Popp, Dukerschein, Kirby, Chick, Pegg, Hrabik
2005D6	Preliminary analysis of light penetration data collected in 2003	1-May-05	✓ 1-May-05			Completed		Dukerschein, Houser

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2005D7	Draft report: Main channel/side channel report for the Open River Reach.	1-Apr-05				Product delayed to 4th quarter 30 Sept.	Delayed to FY06	Hrabik
2005D8	LTRMP report titled: "A multi-year synthesis of limnological data from 1993 to 2001 for the Long Term Resource Monitoring Program on the Upper Mississippi River" to COE and USGS. (FY04 SOW)	11-Apr-05	✓ 11-Apr-05			Completed		Houser, Popp, Dukerschein, Kirby, Chick, Pegg, Hrabik, Ardinger, Johnson
2005D9	Draft WEB-based annual Water Quality Component Update for one study area for 1997–2003 data. (FY04 SOW)							Rogala, Houser,
	a. Develop first draft	1-Jun-05	✓ 1-Jun-05			Completed		Rogala
	b. Reviews completed	1-Jul-05					In review: Delayed to FY06	Popp, Dukerschein, Kirby, Chick, Pegg, Hrabik, Johnson, Houser, Ardinger
	c. Submit final update	1-Aug-05					Delayed to FY06	Popp, Dukerschein, Kirby, Chick, Pegg, Hrabik, Houser
2005D10	Final Draft LTRMP report titled: "Long Term Resource Monitoring Program Water Quality Component Review". (FY02 SOW)	30-Sep-05					Final draft out to the workshop panel for review: Delayed to	Houser, Johnson
Statistical Evaluation of Monitoring Data								
2005E1	Provide statistical consultation to individual components and LTRMP management.	Ongoing					Completed	Gray
2005E2	Draft LTRMP report on sampling design and statistical analyses—recommended procedures	15-Jul-05	✓ 11-Jul-05			Completed		Gray, Rogala, Heglund
2005E3	Submit document describing methods for evaluating power-to-detect trends in counts.	15-Sep-05	✓ 26-Sep-05				Completed	Gray, Heglund
N/A	FY03 - Complete Pool 8 mayfly abundance report (Objective 2).	31-Mar-03	✓ 30-Sep-05				Completed	Gray
Data Management								
2005M1	Update component field data entry applications.	30-May-05	✓ 19-Jul-05			Completed		Hansen
2005M2	Load collected data into Oracle tables and make data available on Level 2 browsers for field stations to QA/QC.	Ongoing						Hansen
2005M3	Create Component Data Correction Applications and distribute on UMESC Intranet.	Ongoing						Hansen
2005M4	Move approved data to publicly accessible Level 1 tables on UMESC web site.	Ongoing						Hansen
2005M5	Provide computer and database technical assistance and expertise to the Environmental Management Program partnership	Ongoing						Hansen
2005M6	Provide quarterly updates to LTRMP management	Quarterly						Hansen, Bower, Caucutt

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Land Cover/Land Use								
2005V1	Provide GIS technical assistance, expertise, and data production to the Environmental Management Program partnership	On-going						Lohman, Robinson
2005V2	Provide quarterly updates to LTRMP management	Quarterly						Lohman, Robinson
2005V3	LTRMP report titled: Upper Mississippi River Vegetation Change (1989-2000) (FY03)	31-Aug-05					Delayed to FY06	Lohman
Bathymetry								
2005T1	Provide technical assistance related to the bathymetric data base to the EMP partnership	On-going						Rogala, Heglund
2005T2	Provide quarterly updates to LTRMP management	Quarterly						Rogala
Macroinvertebrate Component								
2005C1	WEB-based annual Macroinvertebrate Component Update with 2004 data on Public Web Server.							Sauer
	a. Develop first draft	31-Jan-05	✓ 28-Sep-04		Completed			Sauer
	b. Reviews completed	15-Apr-05	✓ 15-Apr-05			Completed		Sauer, Popp, Dukerschein, Kirby, Chick, Pegg, Johnson, Ardinger
	c. Submit final update	30-Apr-05	✓ 30-Apr-05			Completed		Sauer
	d. Placement on Web with PDF	16-May-05	✓ 15-May-05			Completed		Sauer, Caucutt, Ardinger
2005C2	Open River Macroinvertebrate Report (Outstanding product)	1-May-04				Delayed to FY06	Delayed to FY06	Hrabik, Johnson, Sauer
2005C3	LTRMP report titled: "Multi-year Synthesis of the Macroinvertebrate Component from 1992-2002 for the Long Term Resource Monitoring Program" to COE and USGS (FY04 SOW)	12-Jan-05	✓ 31-Dec-04		Completed			Sauer
2005C4	Final draft LTRMP report titled: "Evaluation of the Long Term Resource Monitoring Program's Macroinvertebrate Component" to COE and USGS. (FY04 SOW)	30-Sep-05	✓ 24-Aug-05	Revised report submitted to Branch Chief 25 August 2004			Completed	Sauer, Johnson, Ardinger
Annual LTRMP Monitoring Summary Report								
2005S1	Draft 2004 LTRMP Summary Report	30-Sep-05	✓ 30-Sep-05				Completed	Heglund, Sauer et al.
2005S2	FY02 - Draft report submitted for USGS review (2000 & 2001).	15-Jul-05					Delayed to FY06	Johnson, Heglund, Rogala, Sauer
2005S3	FY02 - Final draft report completed and submitted to COE (2000 & 2001).	30-Sep-05					Delayed to FY06	Johnson, Heglund, Rogala, Sauer

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GLIDE PATH								
2005GLIDE1	Site Selection Complete	30-Mar-05	✓ 30-Mar-05		Completed			Pegg, Cook
2005GLIDE2	Field work complete	15-Jul-05	✓ 1-Jul-05				Completed	Pegg, Cook
2005GLIDE3	Draft LTRMP Technical Report	30-Aug-05					Delayed to FY06	Pegg, Cook
2005GLIDE4	Post final report on Web	30-Oct-05					Delayed to FY06	Pegg, Cook

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ADDITIONAL PROGRAM ELEMENTS								
Status and Trends Report								
2005APE1	First draft report: Status and Trends	30-Sep-05	✓ 30-Sep-05				Completed	Gaugush and DeHaan
2005APE2	Control charts with accompanying descriptions	30-Jul-05	✓ 30-Sep-05				Completed	Gray
Bathymetry								
2005APE3	Bathymetry data collection	30-Sep-05	✓ 30-Sep-05				Completed	USACOE
Development of Two-dimensional Numerical Hydraulic Models for Mississippi River Pools 17 and 18 in Support of the LTRMP								
2005APE4	Development of Two-dimensional Numerical Hydraulic Model	30-Sep-05	✓ 30-Sep-05				Completed	USACOE
LTRMP Equipment Refreshment								
2005APE5	Create Equipment Needs Document	1-Mar-05	✓ 19-Jan-05		Completed			Gaugush
Water Quality Monitoring to Evaluate Effects of Pool 5 Drawdown								
2005APE6	Complete water quality data sampling	30-Sep-05	✓ 30-Sep-05				Completed	Burdis
Pool-based Georeferenced Mosaics of the 1890s Mississippi River Commission								
2005APE7	Upper Mississippi River main stem mosaicked and served over the internet in UTM Zone 15 and/or 16 NAD27/83	16-Sep-05	✓ 30-Oct-05				Completed	Robinson
Analysis of fish age structure and growth in the Illinois River								
2005APE8	Age and growth determinations complete	30-Apr-05	✓ 30-Apr-05			Complete		Pegg
2005APE9	Analysis Complete	30-May-05	✓ 30-May-05			Complete		Pegg
2005APE10	Draft LTRMP Technical Report	30-Jun-05				Initial draft		Pegg
2005APE11	Post final report on Web	30-Sep-05					Delayed to FY06	Pegg
Asian Carp in the Mississippi River: Their impact on native fish species and predicted dispersal within the system								
2005APE12	Enter data into GIS, create heuristic models, and conduct statistical analysis	1-Sep-05	✓ 1-Sep-05			In progress. Data entered.	Completed	Barko
2005APE13	Write draft LTRMP project status report and submit to UMESC for review, printing, and	15-Sep-05					Delayed to FY06	Barko
2005APE14	Write and submit manuscript to peer-reviewed	30-Oct-05					Delayed to FY06	Barko
Enter pre-2002 Quality Factor fields (for Laboratory Measurements) into the Water Quality Database								
2005APE15	Quality Factors in the LTRMP Water Quality SRS and Fixed site databases for the 1997-2001	30-Sep-05	✓ 30-Sep-05				Completed	Dukerschein, Yuan

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Model chlorophyll a and suspended solids levels in backwater lakes of the UMRS								
2005APE16	Database for water quality SRS data with assigned backwater lake ID, and associated attributes such as depth, macrophyte levels, and retention time for individual backwaters	31-Mar-05	✓ 31-Mar-05		Completed			Gray
2005APE17	Project status report	30-Aug-05	✓ 30-Aug-05				First draft submitted for review	Gray
HNA Query Tool Update and Maintenance								
2005APE18	HNA GIS Query Tool compatible with ArcMap 9.0	1-Sep-05					In review: Delayed to FY06	Fox
2005APE19	HNA GIS Query Tool Manual (50 copies including installation/program disks)	1-Sep-05	✓ 2-Nov-05			In Progress	Completed	Fox
2005APE20	Installation of Query Tool at the field stations where hardware is available (with their upgrade to ArcMap 9.0)	1-Sep-05	✓ 2-Nov-05				Completed	Fox
2005APE21	Updated on-line Query Tool help	1-Sep-05	✓ 2-Nov-05			In Progress	Completed	Fox
2005APE22	Query Tool technical support (for installation or program errors only)	On-going						Fox
2005APE23	Contract report assessing cost and feasibility of web-based HNA GIS Query tool.	1-Sep-05	✓ 2-Nov-05			In Progress	Completed	Fox
Analysis of Factors Limiting the Abundance of Centrarchids in the UMRS								
N/A	Consultation	On-going						Knights, Wilcox, Gutreuter, Johnson
Develop retrospective, cross-component analysis report of all LTRMP data for Pool 26 for managers.								
2005APE24	Complete Analysis	28-Feb-05	✓ 28-Feb-05		Completed			Chick
2005APE25	First draft of report (for internal review)	30-Apr-05				Delayed to FY06		Chick
2005APE26	Second draft – out for comment by UMESC	15-Jun-05				Delayed to FY06		Chick
2005APE27	Final Report	15-Sep-05					Delayed to FY06	Chick
Feasibility study: Investigate the possibility of automating annual compilation of USACE hydrology data and create a database of existing UMESC hydrology data								
N/A	Consultation	On-going						Caucutt

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Data Access and Delivery online tools								
2005APE28	Complete Water Quality Graphical Browser	1-Sep-05					In Review: Delayed to FY06	Caucutt
2005APE29	Complete LTRMP Vegetation Graphical Browser	1-Jun-05	✓ 7-Oct-05			Peer review completed submitted to Branch Chief	Completed: http://www.umesc.usgs.gov/data_library/vegetation/graphical/veg_front.html	Caucutt
2005APE30	Complete LTRMP UMRS Land Cover viewer	1-Apr-05	✓ 31-Mar-05			Completed; http://umesc-ims01.er.usgs.gov/website/ltrmp_landcover/viewer.htm		Caucutt