

**UMRR Science in Support of Restoration and Management**  
**FY2014 Scope of Work**  
**April 2015 Status**

Tracking number	Milestone	Original Target Date	Modified Target Date	Date Completed	Comments	Lead
<b>Seamless Elevation Data</b>						
2014LB1	LiDAR Tier 1, processing and meta data, data on line: Pools 15-19, Pool 25 – Open River, Kaskaskia, IL River all pools	30-Mar-15		18-Dec-14		Dieck, Rohweder, Nelson, Fox
2014LB2	LiDAR Tier 3, processing and meta data, data on line: Pools 4, 5, 7, 8, 9, 10, 13, and 21	30-Mar-15		7-Apr-15		Dieck, Rohweder, Nelson, Fox
<b>Land Cover / Land Use data and Accuracy Assessment/Validation for UMRS</b>						
2014V2	Complete remaining 70% of the 2010/11 LCU database for UMR Open River North	30-Sep-14	30-Jan-15	21-Jan-15	In USGS FSP review	Robinson, Hoy, Hanson, Langrehr, Ruhser, Nelson
2014V4	Final LTRMP Completion Report on Accuracy Assessment	30-Sep-14		17-Nov-14	In USGS FSP review	Ruhser, Jakusz
<b>Standardized HREP Non-forested Wetland Plant Sampling Protocol</b>						
2014NFW1	draft NFW monitoring protocol	28-Feb-14		28-Feb-14		McCain
2014NFW2	Final draft NFW monitoring protocol	30-Mar-14		31-Mar-14		McCain
2014NFW3	A-Team review	1-Apr-14		7-Apr-14		McCain
2014NFW4	completed NFW monitoring protocol available	30-Sep-14		completed		McCain
<b>Standardized HREP Forested Wetland Plant Sampling Protocol</b>						
2014FW1	draft FW monitoring protocol	30-Nov-13		30-Nov-13		McCain
2014FW2	Final draft FW monitoring protocol	30-Mar-14		31-Mar-14		McCain
2014FW3	A-Team review	1-Apr-14		7-Apr-14		McCain
2014FW4	completed FW monitoring protocol available	30-Sep-14		completed		McCain
<b>Predictive Model for Aquatic Cover Types</b>						
2014AQ1	Complete hydraulic model of existing conditions	30-Apr-14	11-Jul-14	11-Jul-14		Hendrickson
2014AQ2	Compile vegetation data and develop empirical equations, Stoddard as pilot	31-Aug-14		31-Aug-14		Yin, Rogala, Ingvalson, Potter
2014AQ3	Apply equations to Pool 3 for pre-existing conditions, North & Sturgeon	30-Sep-14	28-Nov-14	completed		Yin, Rogala, Ingvalson, Potter
2014AQ4	Final model and outputs	31-Dec-14		completed		Yin, Rogala, Ingvalson, Potter
<b>UMRS Vegetation Handbook</b>						
2014VH1	Acquire new field images for handbook	30-Sep-14		30-Sep-14		Dieck, Langrehr, Hoy, Robinson, Ruhser
2014VH2	Draft updates to technical sections and vegetation descriptions	31-Dec-14		31-Dec-14		Dieck, Langrehr, Hoy, Robinson, Ruhser
2014VH3	Finalize handbook and submit for USGS review	31-Mar-15		31-Mar-15	In USGS FSP Review	Dieck, Langrehr, Hoy, Robinson, Ruhser
<b>Phase 2 Geospatial Data Upgrades</b>						
2014GDU1	Complete geodatabases by pool for the entire UMRS	30-Sep-14	30-Apr-15		A snag was hit with the 1989 Satellite data. Apparently no metadata was ever created despite having the data online. UMESC is working through old technical reports to compile FGDC metadata for this dataset	Nelson, Robinson
2014GDU2	Complete KMZ files for river miles, levees, boat access points, wing dams, aquatic areas, and remaining land cover data	30-Sep-14	30-Apr-15		Completed; still needs to be uploaded on-line	Nelson, Robinson

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<b>Spatial Data Query Tool</b>						
2014SDQ1	Compile all LTRMP sampling data collected through 2013 and convert to a useable format	1-Aug-14		1-Aug-14		Rohweder, Fox
2014SDQ2	Create a web-based platform that contains all spatial data; convert all queries to ArcGIS	31-Dec-14	30-Apr-15		New ArcGIS server was needed, original server was taken offline because of compliance issue	Rohweder, Fox
2014SDQ3	SDQT beta tested and ready for USGS review	31-Mar-15	31-May-15		New ArcGIS server was needed, original server was taken offline because of compliance issue	Rohweder, Fox
<b>UMRS Data Map</b>						
2014DM1	Include all UMRR-EMP data created at UMESC in the data map	30-Sep-14	30-Nov-14	31-Dec-14	UMESC will update as new datasets come online in the future	Nelson, Ruhser
2014DM2	Include all UMRR-EMP publications from <a href="http://umesc.usgs.gov/reports_publications/ltrmp_rep_list.html">http://umesc.usgs.gov/reports_publications/ltrmp_rep_list.html</a> in the data map	31-Dec-14	31-May-15		Presented WebEx to the Corps. Waiting for comments by 4/30/15	Nelson, Ruhser
2014DM3	Include additional state and federal data references in the data map	31-Mar-15	30-Jun-15		Not all state and federal data sources have the same metadata available making it more difficult than initially expected. New OMB guidelines will correct this. UMESC will continually updated site as new metadata are made available	Nelson, Ruhser
<b>Assessing System-wide Hydrodynamic Model Availability</b>						
2014SHM1	Kick off Email to workshop participants	30-Apr-14		21-Apr-14		Theiling
2014SHM2	Compile list of UMR-IWW hydrologic models	31-May-14		31-May-14		Theiling
2014SHM3	Complete read-aheads	15-Jun-14	14-Jul-14	14-Jul-14		Theiling
2014SHM4	Conduct workshop/webinar	1-Jul-14	12-Aug-14	21-Aug-14	July dates did not work for attendees	Theiling
2014SHM5	Summarize webinar	31-Jul-14	31-Aug-14	30-Sep-14		Theiling
<b>2014SHM6</b>	<b>Draft white paper</b>	<b>31-Aug-14</b>	<b>15-Aug-14</b>	<b>30-Sep-14</b>		<b>Theiling</b>
2014SHM7	<i>draft</i> Final white paper	30-Sep-14	31-Dec-14	31-Dec-14	draft final submitted 31 Dec 14. Additi	Theiling
2014SHM8	final white paper	1-Apr-15		4-Apr-15		Theiling
Development of						
2014MVR1	Brief summary report	30-Sep-15				Newton, Zigler, Davis
2014MVR2	Brief summary report	30-Sep-16				Newton, Zigler, Davis
2014MVR3	Completion report on a vital rates of native mussels at West Newton Chute, UMRS	30-Sep-17				Newton, Zigler, Davis
<b>Validation of Mussel Community Assessment Tool</b>						
2014MCA1	Workshop of mussel experts in UMRS	1-May-15		19-Feb-15		Newton, Zigler, Dunn, Duyvejonck
2014MCA2	Draft completion report on a validated mussel community assessment tool for use by river managers	1-Dec-15				Newton, Zigler, Dunn, Duyvejonck
2014MCA3	Final completion report on a validated mussel community assessment tool for use by river managers	1-Mar-16				Newton, Zigler, Dunn, Duyvejonck

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<b>Effects of Nutrient Concentrations on Zoo- and Phytoplankton</b>						
2014NC1	Counting of phytoplankton samples	13-Mar-15		2-Mar-15		Giblin, Campbell, Houser, Manier
2014NC2	Database completed and analysis completed	13-Mar-16				Giblin, Campbell, Houser, Manier
2014NC3	Full manuscript completed	13-Mar-17				Giblin, Campbell, Houser, Manier
<b>Ecological Shifts Turbid to Clear States</b>						
2014ES1	Literature review and initial analyses competed	13-Mar-15		15-Nov-14		Giblin, Ickes, Langrehr, Bartels
2014ES2	Refined analyses and draft manuscript prepared	13-Mar-16			All analyses complete, manuscript in draft and co-author review 2 April 2015	Giblin, Ickes, Langrehr, Bartels
2014ES3	Manuscript submitted for publication	13-Mar-17				Giblin, Ickes, Langrehr, Bartels
<b>Invasive Carp Population Demographics (#1)</b>						
2014CPD1	Summary letter	31-Jan-15		16-Jan-15		Phelps, Mccain
2014CPD2	Manuscript	31-Mar-16				Phelps, Mccain
<b>Asian Carps Recruitment Sources (#2)</b>						
2014CRS1	Summary letter	31-Jan-15		16-Jan-15		Phelps, Mccain
2014CRS2	Manuscript	31-Mar-16				Phelps, Mccain
<b>Effects of Asian Carps on Native Piscivore Diets (#3)</b>						
2014NPD1	Summary letter	31-Jan-15		16-Jan-15		Phelps, Mccain
2014NPD2	Manuscript	31-Mar-16				Phelps, Mccain
<b>Early Life History of Invasive Carps (#4)</b>						
2014CLH1	Summary letter	31-Jan-15		16-Jan-15		Phelps, Mccain
2014CLH2	Manuscript	31-Mar-16				Phelps, Mccain