

**UMRR Science in Support of Restoration and Management**  
**FY2015 Scope of Work**  
**April 2015 Status**

Tracking number	Milestone	Original Target Date	Modified Target Date	Date Completed	Comments	Lead
<b>Seamless Elevation Data</b>						
2015LB1	Tier 2 LiDAR for Pools 14-19	31-Mar-15		15-Apr-15		Dieck, Hanson
2015LB2	Tier 2 LiDAR for Pool 25-OR & Kaskaskia	30-Jun-15				Dieck, Hanson
2015LB3	Tier 2 LiDAR for the Illinois River	30-Sep-15				Dieck, Hanson
2015LB4	All remaining Bathymetry	30-Sep-15				Dieck, Hanson
2015LB5	Seamless Elevation for Pools 2, 5a, 6, 10-12, St Croix, and Pool 14	31-Dec-15				Dieck, Hanson
2015LB6	Seamless Elevation for Pools 15-19, 20, and 22-24	31-Mar-16				Dieck, Hanson
2015LB7	Seamless Elevation for Pools 25-OR & Kaskaskia	30-Jun-16				Dieck, Hanson
2015LB8	Seamless Elevation for the Illinois River	30-Sep-16				Dieck, Hanson
<b>Producing NED ready LiDAR products</b>						
2015NED1	Perry County, MO	31-Jul-15				Nelson, Dieck
2015NED2	Remaining portions of the middle Mississippi (OR1 & 2)	31-Jul-15				Nelson, Dieck
2015NED3	Area of the Upper Mississippi (Pool 25-26)	30-Sep-15				Nelson, Dieck
2015NED4	Illinois River area	30-Sep-15				Nelson, Dieck
<b>Pool 12 AM monitoring (crappie telemetry)</b>						
2015AM1	Capture fish and affix radio tags to white crappies in study lakes	1-Nov-14		2-Apr-15		Bierman, Hansen, Bowler, Theiling
2015AM2	Location of tagged fish and update in-house project database	Ongoing through FY				Bierman, Hansen, Bowler, Theiling
2015AM3	Complete tracking portion of study	30-Sep-15				Bierman, Hansen, Bowler, Theiling
<b>Fish Indicators of Ecosystem Health</b>						
2015FI1	Preliminary set of species identified for the different assemblages by study reach submitted to A-Team as status update and for review	30-Aug-15				McCain
2015FI2	Draft recommendation for the best attainable or target for each assemblage by study reach submitted to A-Team for Review	1-Oct-15				McCain
2015FI3	Initial draft Project Report submitted to A-Team for review	1-Dec-15				McCain
2015FI4	Final draft Project Report submitted to A-Team for review and endorsement at April meeting	1-Mar-16				McCain
2015FI5	Final draft Project Report submitted to UMRR CC for endorsement at August meeting	15-Jul-16				McCain
2015FI6	Final Report	1-Jun-16				McCain
<b>Plankton community dynamics in Lake Pepin</b>						
2015LPP1	Phytoplankton processing; species composition, biovolume	30-Dec-15				Burdis
2015LPP2	draft manuscript: Plankton community dynamics in Lake Pepin	30-Sep-16				Burdis
<b>Estimating trends in UMRR fish and vegetation levels using state-space models</b>						
2015SST1	Draft completion report: Evaluation of trend estimation methods for LTRM fish and vegetation indices	30-Sep-15				Gray
2015SST2	Final completion report: Evaluation of trend estimation methods for LTRM fish and vegetation indices	31-Dec-15				Gray
2015SST3	Provide trend estimates for fish and vegetation web browser pages	30-Sep-16				Gray, Schlifer
<b>Generating and serving presumptive habitat maps for 28 UMRS fish species</b>						
2015FI1	Assemble requisite data resources	28-Feb-15		15-Jan-15		Ickes
2015FI2	Generate "point" maps of predictions	30-Mar-15	15-May-15		funding delayed	Hlavacek
2015FI3	Generate "splines with barriers" interpolated maps	15-May-15	30-Jul-15		funding delayed	Hlavacek
2015FI4	Post maps to the UMRR LTRM fish component homepage	15-Jun-15	15-Sep-15		funding delayed	Ickes
2015FI5	Issue/publish a brief communication on their availability and prospective usage	15-Sep-15				Ickes

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<b>Predictive Aquatic Cover Type Model - Phase 2</b>						
2015AQ1	Develop 2-D hydraulic model of upper Pool 4	30-Sep-15				Goodfellow (MVP H&H)
2015AQ2	Apply model to Pool 4 and resolve discrepancies	31-Dec-15				Yin, Rogala
2015AQ3	Detailed summary of work for Phases I & II	31-Dec-15				Yin, Rogala, Ingvalson
<b>Landscape Pattern Research on the UMRS: synthesis and significance, FY16-18</b>						
	Milestones will be coordinated through the UMRR annual scope of work process					De Jager
<b>Developing and Applying Indicators of Ecosystem Resilience to the UMRS</b>						
	Milestones will be coordinated through the UMRR annual scope of work process					work group, post doc