#### **LCCMR Peer review 2016**

### Summary of Peer Review for 35 proposal recommended for funding in 2016

18 proposals: LCCMR Peer review. Two or three peer reviewers for each proposal - 4 complete/14 underway

4 proposals: U of M Internal peer review process. Proposals Include sensitive intellectual property information that needs to be protected regarding patents - 2 complete/2 underway

3 Proposals: Peer Review by others. The USGS internal peer review fulfills the LCCMR requirements (2 proposals). A technical panel set up for one proposal peer reviewed it - 3 reviews com

10 Proposals: Continuations. Peer Review was completed in previous phases (Six by LCCMR and two by others) - all complete

#### 18 proposals: LCCMR Peer review. Two or three peer reviewers for each proposal - 4 complete/14 underway

Subd.	ID#	Proposal Title	Project Manager	Organization	Amount	Peer Review Description
3a	003-A	Data Driven Pollinator Conservation Strategies	Daniel Cariveau	U of MN	\$520,000	2016 LCCMR peer review process
3n	008-A	Game and Non-Game Bird Pesticide Exposure	Julia Ponder	U of MN	\$349,000	2016 LCCMR peer review process
30	013-A	Evaluating Insecticide Exposure Risk for Grassland Wildlife on Public Lands	Nicole Davros	MN DNR	\$250,000	2016 LCCMR peer review process
4a	037-В	Tracking and Preventing Harmful Algal Blooms	Daniel Engstrom	Science Museum of Minnesota- St. Croix Research Station	\$500,000	2016 LCCMR peer review process
4b	038-B	Assessing the Increasing Harmful Algal Blooms in Minnesota Lakes	Miki Hondzo	U of MN - St. Anthony Falls Laboratory	\$270,000	2016 LCCMR peer review process
4d	053-B	Assessing Technique for Eliminating Contaminants to Protect Native Fish and Mussels	Kristine Wammer	University of St. Thomas	\$287,000	2016 LCCMR peer review process
4e	035-В	Assessing Neonicotinoid Insecticide Effects on Aquatic and Soil Communities	William Arnold	U of MN	\$400,000	2016 LCCMR peer review process
4f	039-В	Bacterial Assessment of Groundwater Supplies Used for Drinking Water	Raymond Hozalski	U of MN	\$299,000	2016 LCCMR peer review process
4j	045-B	Assessment of Surface Water Quality with Satellite Sensors	Jacques Finlay	U of MN	\$420,000	2016 LCCMR peer review process
41	040-В	Wastewater Treatment Process Control Improvements	Timothy LaPara	U of MN	\$398,000	2016 LCCMR peer review process
4m	043-B	Membrane-Based Process for Decentralized Drinking Water Production	Santiago Vargas	U of MN	\$191,000	2016 LCCMR peer review process
4р	046-B	Reducing Salt and Metal Removal Costs with Microbes	Daniel Bond	U of MN	\$596,000	2016 LCCMR peer review process

4q	054-B	Engineered Biofilter for Sulfate Removal from Mine Waters	Sebastian Behrens	U of MN	\$440,000	2016 LCCMR peer review process
4w	070-B	Assessing Climate Change Effects on the Release of Mercury and Sulfur into Aquatic Ecosystems	Ed Nater	U of MN	\$300,000	2016 LCCMR peer review process
6b	122-D	Developing a Membrane Filtration System to Treat Lake Superior Ballast Water	Santiago Vargas	U of MN	\$151,000	2016 LCCMR peer review process
8b	162-F	Measuring Pollen and Seed Dispersal for Prairie Fragment Connectivity	Lauren Sullivan	U of MN	\$556,000	2016 LCCMR peer review process
8d	019-A	Evaluate Prescribed Burning Techniques to Improve Habitat Management for Brushland Species	ebecca Montgomer	U of MN	\$267,000	2016 LCCMR peer review process
8e	159-F	Controlling Reed Canary Grass to Regenerate Floodplain Forest	Tim Schlagenhaft	Audubon Minnesota	\$218,000	2016 LCCMR peer review process

# 4 proposals: U of M Internal peer review process. Proposals Include sensitive intellectual property information that needs to be protected regarding patents - 2 complete/2 underway

Subd.	ID#	Proposal Title	Project Manager	Organization	Amount	Peer Review Description
4k	051-B	Development of Innovative Sensor Technologies for Water Monitoring	Tianhong Cui	U of MN	\$509,000	2016 U of M Internal confidential peer review
4r	U/3-B	Developing Biosponge Technology for Removal of Nitrates from Minnesota Waters	Lawrence Wackett	U of MN	\$198,000	2016 U of M Internal confidential peer review
7a	140-E	Solar Cells Manufacturing Research	Tianhong Cui	U of MN	\$388,000	2016 U of M Internal confidential peer review
7f	141-E	Hydrogen Fuel from Wind Produced Renewable Ammonia	Will Northrop	U of MN	\$400,000	2016 U of M Internal confidential peer review

# 3 Proposals: Peer Review by others. The USGS internal peer review fulfills the LCCMR requirements (2 proposals). A technical panel set up for one proposal peer reviewed it - 3 complete

Subd.	ID#	Proposal Title	Project Manager	Organization	Amount	Peer Review Description
4h	050-B	Protection of State's Confined Drinking Water Aquifers	Jared Trost	U. S. Geological Survey	\$433,000	Previous USGS review for earlier phase - will have additional USGS review for this phase
4i	018-A	Techniques for Water Storage Estimates in Central Minnesota	John Nieber	U of MN	\$500,000	2016 USGS Peer Review
40	044-B	Understanding Impacts of Salt Usage on Minnesota Lakes, Rivers, and Groundwater	John Gulliver	U of MN	\$497,000	2016 Peer review by 2 Technical Panel members

### 10 Proposals: Continuations. Peer Review was completed in previous phases (Six by LCCMR and two by others) - all complete

Subd.	ID#	Proposal Title	Project Manager	Organization	Amount	Peer Review Description
3c	009-A	Prairie Butterfly Conservation, Research and Breeding - Phase 2	Erik Runquist Robert Dana	Minnesota Zoo and MN DNR	\$750,000	LCCMR peer review in previous phase
3h	006-A	Sentinel Lakes Monitoring and Data Synthesis – Phase 3	Melissa Treml	MN DNR	\$401,000	LCCMR peer review in previous phase
3q	026-A	Evaluation of Forest Tree Retention Guidelines Pertaining to Wildlife	Gerald Niemi	U of MN - Duluth NRRI	\$232,000	LCCMR peer reviewed in 2011 - proposal was not ultimately included in final appropriation
3r	015-A	Determine Impacts on Wildlife from Emerald Ash Borer Infection of Black Ash Forests	Gerald Niemi	U of MN - Duluth NRRI	\$334,000	Previous LCCMR and federal agency review
4j	47- B	Assessment of Surface Water Quality with Satellite Sensors	Finlay, Jacques	U of M	\$345,000	Previous USGS Peer Review for similar proposal
6c	123-D	Advancing Microbial Invasive Species Monitoring from Ballast Discharge	Randall Hicks	U of MN	\$368,000	LCCMR peer review in previous phase
6d	124-D	Biological Control of White Nose Syndrome in Bats - Phase 2	Christine Salomon	U of MN	\$452,000	LCCMR peer review in previous phase
6f	131-D	Dutch Elm Disease Resistance - Phase 2	Robert Blanchette	U of MN	\$200,000	LCCMR peer review in previous phase
7e	151-E	Waste Heat Recovery with Efficient Thermoelectric Energy Generators	Uwe Kortshagen	U of MN	\$400,000	Previous National Science Foundation (NSF) Peer Review for earlier similar work