

Amanda Brazee

From: Amanda Brazee
Sent: Friday, October 30, 2015 9:44 AM
Subject: LCCMR 2016 Recommendation Package
Attachments: LCCMR_2016_recommended.pdf

Council Members,

Attached please find LCCMR's latest recommendation package.

Below is a list of projects that may be of interest to you.

ENRTF ID

159-F	Controlling Reed Canary Grass to Regenerate Floodplain Forest	\$218,000	Tim Schlagenhaft	Audubon Minnesota	SE
166-F	Restoring our Metro Lands and Waters: MeCC IX	\$509,000	Wiley Buck	Great River Greening	Metro
173-F	Restoring the City of Champlin's Northern Gateway	\$2,000,000	Todd Tuominen	City of Champlin	Metro
174-G	State Parks and State Trails Land Acquisitions	\$2,000,000	Jennifer Christie	MN DNR	Statewide
175-G	SNA Acquisition, Restoration, Enhancement & Public Engagement	\$4,000,000	Peggy Booth	MN DNR	Statewide
177-G	Preserving the Avon Hills with Reverse-Bidding Easements	\$1,300,000	Thomas Kroll	Saint Johns University	Central
186-H	Roseau Lake Watershed: Targeted Water Quality Improvement	\$65,000	Henry Van Offelen	MN DNR	NW

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M.L. 2016 Environment and Natural Resources Trust Fund Recommendations (FY 2017)

The Legislative-Citizen Commission on Minnesota's Resources (LCCMR) has selected 88 projects totaling \$45.4 million to recommend to the 2016 Minnesota Legislature for funding from the Environment and Natural Resources Trust Fund (ENRTF). The recommendations are the result of the LCCMR's 2016 Request for Proposal (RFP) process, in which 186 proposals requesting a total of approximately \$131 million were received and considered through a competitive, multi-stage evaluation. The recommendations range from full funding for the full proposal and dollar amount requested to partial funding for specific proposal elements and partial dollar amounts requested.

Topic Area	\$ Recommended (\$45,402,000)	Percentage of Total Recommendation
A. Foundational Natural Resource Data and Information 20 Appropriations	\$8,545,000	18.82%
B. Water Resources 22 Appropriations	\$7,829,000	17.24%
C. Environmental Education 11 Appropriations	\$2,562,000	5.64%
D. Aquatic and Terrestrial Invasive Species 7 Appropriations	\$5,860,000	12.91%
E. Air Quality, Climate Change, and Renewable Energy 8 Appropriations	\$3,889,000	8.57%
F. Methods to Protect, Restore, & Enhance Land, Water, & Habitat 9 Appropriations	\$4,338,000	9.55%
G. Land Acquisition for Habitat and Recreation 9 Appropriations	\$12,179,000	26.82%
H. Other 2 Appropriation	\$200,000	0.44%
TOTAL \$ RECOMMENDATION	\$45,402,000	100.00%

Fund Source	\$ Recommended	\$ Remaining for Recommendation
FY 2016 - Environment and Natural Resources Trust Fund (ENRTF)	\$45,402,000	\$935,000
Total \$ Available = \$46,337,000		

M.L. 2016 Environment and Natural Resources Trust Fund (ENRTF) Recommendations (FY2017)

ENRTF ID	Title	Total LCCMR \$ Recommended	Program Manager	Affiliation	Region of Impact*
		ENRTF: FY2017			
A. Foundational Natural Resource Data and Information (20 Recommendations - Subtotal = \$8,545,000)					
001-A	Completing the National Wetland Inventory Update for Minnesota	\$1,200,000	Steve Kloiber	MN DNR	NW
002-A	Minnesota Vegetative Buffer Assessment and Prioritization	\$170,000	David Mulla	U of MN	Statewide
003-A	Data Driven Pollinator Conservation	\$520,000	Daniel Cariveau	U of MN	Central, NW, SW
004-A	A Statewide Monitoring Network for Minnesota's Changing Habitats	\$500,000	Bruce Carlson	MN DNR	Statewide
005-A	Wild Bee Surveys in Minnesotas Prairie-Forest Habitats	\$600,000	Crystal Boyd	MN DNR	Central, Metro, NW, SW, SE
006-A	Sentinel Lakes Monitoring and Data Synthesis	\$401,000	Melissa Trembl	MN DNR	NW, NE, SW, SE
007-A	Feasibility of Restoring Elk to Northeastern Minnesota	\$300,000	James Forester	U of MN	Northeast
008-A	Do Neonicotinoids Pose a Risk to Minnesotas Birds?	\$349,000	Julia Ponder	U of MN	Statewide
009-A	Prairie Butterfly Conservation, Research and Breeding - Phase 2	\$750,000	Erik Runquist Robert Dana	Minnesota Zoo MN DNR	NW, SW
011-A	Assessing Vegetations Control on Minnesota's Groundwater	\$212,000	Gene-Hua (Crystal) Ng	U of MN	Statewide
012-A	State Spring Inventory for Resource Management - Phase 2	\$370,000	Jan Falteisek	MN DNR	Statewide
013-A	Insecticide Exposure Risk of Wildlife on Public Grasslands	\$250,000	Nicole Davros	MN DNR	Central, SW, SE
014-A	Enhancing Forest Inventory Using Multiple Remote Sensing Technologies	\$1,000,000	Dennis Kepler	MN DNR	Statewide
015-A	Emerald Ash Borer and Black Ash: Wildlife Impacts	\$334,000	Gerald Niemi	U of MN - Duluth NRRI	Statewide

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016-A	Improving Brook Trout Stream Habitat through Beaver Management	\$225,000	Andrew Hafs	Bemidji State University	NE
018-A	Minnesota: How Much Water? How is it Changing? (merged with ENRTF ID: 047-B and dollars (\$) of each proposal to be determined)	\$250,000	John Nieber	U of MN	Statewide
019-A	Prescribed Burning to Improve Management for Brushland Species	\$267,000	Rebecca Montgomery	U of MN	NE
020-A	Enhancing Understanding of the Minnesota River Ecosystem	\$500,000	Tony Sindt	MN DNR	Central, Metro, SW, SE
023-A	Protecting Native Brook Trout: Temperature, Streamflow and Hydrogeology	\$115,000	Bob Tipping	Minnesota Geological Survey	SE
026-A	Tree Retention Following Harvest: Maximizing Benefits for Wildlife	\$232,000	Gerald Niemi	U of MN - Duluth NRRI	Statewide
	Foundational Natural Resource Data and Information Subtotal =	\$8,545,000			
B. Water Resources (22 Recommendations - Subtotal = \$7,829,000)					
035-B	Neonicotinoid Insecticide Effects on Aquatic and Soil Communities	\$400,000	William Arnold	U of MN	Statewide
036-B	Restoring Native Mussels for Cleaner Streams and Lakes	\$600,000	Mike Davis	MN DNR	Statewide
037-B	Tracking and Preventing Harmful Algal Blooms	\$500,000	Daniel Engstrom	Science Museum of Minnesota - St. Croix Research Station	Statewide
038-B	Increasing Harmful Algal Blooms in Minnesota Lakes	\$270,000	Miki Hondzo	U of MN - St. Anthony Falls Laboratory	Statewide
039-B	Is Minnesotas Groundwater Safe to Drink?	\$299,000	Raymond Hozalski	U of MN	Statewide
040-B	Quantifying Bacteria for Better Wastewater Treatment Process Control	\$398,000	Timothy LaPara	U of MN	Statewide

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042-B	Morrison County Performance Drainage and Hydrology Management	\$209,000	Helen McLennan	Morrison SWCD	Central
043-B	Membrane-Based Process for Decentralized Drinking Water Production	\$191,000	Santiago Vargas	U of MN	Statewide
044-B	Salt Impacts to Minnesota Lakes, Rivers and Groundwater	\$497,000	John Gulliver	U of MN	Statewide
045-B	Assessing Wetland Restorations for Improved Water Quality	\$420,000	Jacques Finlay	U of MN	Central, NW, SW
046-B	Reducing Salt and Metal Removal Costs with Microbes	\$596,000	Daniel Bond	U of MN	Statewide
047-B	Innovative Assessment of Minnesotas Surface Waters from Space (merged with ENRTF ID: 018-A and dollars (\$) of each proposal to be determined)	\$250,000	Jacques Finlay	U of MN	Statewide
049-B	Understanding Bedrock Fracture Flow to Improve Groundwater Quality	\$183,000	Anthony Runkel	Minnesota Geological Survey	Metro, SE
050-B	Protecting Drinking Water Aquifers-Phase 2	\$433,000	Johnathan Bumgarner	U. S. Geological Survey	Statewide
051-B	Tiny Cheap Sensors for Pollutants Monitoring in Waters	\$509,000	Tianhong Cui	U of MN	Statewide
053-B	Eliminating Contaminants to Protect Endangered Native Fish/Mussels	\$287,000	Kristine Wammer	University of St. Thomas	Statewide
054-B	Engineered Biofilter for Sulfate Removal from Mine Waters	\$440,000	Sebastian Behrens	U of MN	NE
060-B	Sulfate/Wild-Rice Muncipal Wastewater Treatment Plant Alternative Analysis	\$180,000	Scott Kyser	MPCA	Metro
070-B	Predicting Climate Change Effects on Mercury in Peatlands	\$300,000	Ed Nater	U of MN	Statewide
073-B	Removal of Nitrates from Minnesota Waters	\$198,000	Lawrence Wackett	U of MN	Statewide

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083-B	Integrating Targeted Watershed Planning Tools with Citizen Involvement	\$169,000	Kimberly Musser	Minnesota State University, Mankato Water Resources Center	Statewide
088-B	Surface Water Bacterial Treatment System Pilot Project	\$500,000	Brian Corcoran	Vadnais Lake Area Water Management Organization	Metro
Water Resources Subtotal =		\$7,829,000			
C. Environmental Education (11 Recommendations - Subtotal = \$2,562,000)					
090-C	Minnesota Conservation Apprentice Academy	\$433,000	Jenny Gieseke	Board of Water and Soil Resources	Statewide
091-C	Improving Outdoor Classrooms for Education and	\$440,000	Amy Kay Kerber	MN DNR	Statewide
092-C	Youth-Led Energy Action Projects in 50 Minnesota Communities	\$400,000	Shelli-Kae Foster	Prairie Woods Environmental Learning Center	Statewide
093-C	Hunters Choice: Alternative Ammunition	\$133,000	Julia Ponder	U of MN	Statewide
094-C	Standards-Based Dakota Indian Land Curriculum for 1,250 Students	\$197,000	Teresa Peterson	Dakota Wicohan	Statewide
096-C	Creating Southwest Minnesota High School Student Wildlife Champions	\$147,000	Carol Strecker	Minnesota Zoo	SW
099-C	Expanded Wolves at our Door program	\$240,000	David Kline	International Wolf Center	Statewide
101-C	The New Prairie Sportsman Statewide Broadcast Video Project	\$300,000	Timothy Bakken	Pioneer Public Television	Statewide
105-C	Promoting Stewardship through Student Mentoring and River Monitoring	\$39,000	Emily Deaver	Southwest Minnesota State University	SW
111-C	"Toasted" Birdhouse Market Readiness Test	\$117,000	Ryan Hueffmeier	U of MN - Duluth NRRI	Statewide
112-C	Master Water Steward Program Expansion	\$116,000	Peggy Knapp	Freshwater Society	Statewide
Environmental Education Subtotal =		\$2,562,000			

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D. Aquatic and Terrestrial Invasive Species (7 Recommendations - Subtotal = \$5,860,000)					
121-D	Minnesota Invasive Terrestrial Plants and Pests Center - Phase 3	\$3,750,000	Dr. Robert Venette	U of MN	Statewide
122-D	Using Membranes to Treat Lake Superior Ballast Water	\$151,000	Santiago Vargas	U of MN	NE
123-D	Advancing Microbial Invasive Species Monitoring from Ballast Discharge	\$368,000	Randall Hicks	U of MN	NE
124-D	White Nose Bat Syndrome Biological Control - Phase 2	\$452,000	Christine Salomon	U of MN	Statewide
128-D	Elimination of Target Invasive Plant Species - Phase 2	\$750,000	Monika Chandler	Minnesota Department of Agriculture	Statewide
131-D	Winning the Dutch Elm Disease Battle - Phase 2	\$200,000	Robert Blanchette	U of MN	Statewide
134-D	Invasive Carp Applied Research in Lake Nokomis Subwatershed	\$189,000	Adam Arvidson	Minneapolis Park and Recreation Board	Metro
	Aquatic and Terrestrial Invasive Species Subtotal =	\$5,860,000			
E. Air Quality, Climate Change, and Renewable Energy (8 Recommendations - Subtotal = \$3,889,000)					
135-E	High Resolution Climate Projections to Aid Planning Efforts	\$411,000	Peter Snyder	U of MN	Statewide
140-E	Cheap Solar Cells from Simple Roll-to-Roll Advanced Manufacturing	\$388,000	Tianhong Cui	U of MN	Statewide
141-E	Clean Vehicles Fueled by Hydrogen from Renewable Ammonia	\$400,000	Will Northrop	U of MN	Metro, NW
144-E	Geotargeted Distributed Clean Energy Initiative	\$800,000	Carl Nelson	Center for Energy and Environment	Statewide
148-E	Utilization of Dairy Farm Wastewater for Sustainable Production	\$500,000	Bradley Heins	U of MN	Statewide

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149-E	Innovative Solar Energy Utilization for Minnesota Swine Farms	\$500,000	Lee Johnston	U of MN - West Central Research and Outreach Center	Central, NW, SW, SE
151-E	Waste Heat Recovery with Efficient Thermoelectric Energy Generators	\$400,000	Uwe Kortshagen	U of MN	Metro
153-E	Solar Solutions to Minnesota Energy Poverty	\$490,000	Jason Edens	Rural Renewable Energy Alliance	Central
Air Quality, Climate Change, and Renewable Energy		\$3,889,000			
F. Methods to Protect, Restore, and Enhance Land, Water, and Habitat (9 Recommendations - Subtotal = \$4,338,000)					
154-F	Seeding Between the Lines: Permanent Habitat Within Rowcrops	\$159,000	Shawn Schottler	Science Museum of Minnesota - St. Croix Research Station	Statewide
155-F	Bee Pollinator Habitat Enhancement - Phase 2	\$387,000	Marla Spivak	U of MN	Statewide
159-F	Controlling Reed Canary Grass to Regenerate Floodplain Forest	\$218,000	Tim Schlagenhaft	Audubon Minnesota	SE
162-F	Measuring Prairie Fragment Connectivity: Pollen and Seed Dispersal	\$556,000	Lauren Sullivan	U of MN	NW
165-F	Forest Management for Mississippi River Drinking Water Protection	\$300,000	Melissa Barrick	Crow Wing Soil and Water Conservation District	Central
166-F	Restoring our Metro Lands and Waters: MeCC IX	\$509,000	Wiley Buck	Great River Greening	Metro
168-F	Agricultural Runoff Water Quality Treatment Analysis - Phase II	\$110,000	Craig Austinson	Blue Earth County Drainage Authority	SW
169-F	Restoration/Monitoring of Winona's 40-acre Blufflands Natural Area	\$99,000	Neal Mundahl	Winona State University	SE
173-F	Restoring the City of Champlins Northern Gateway	\$2,000,000	Todd Tuominen	City of Champlin	Metro
Methods to Protect, Restore, and Enhance Land, Water, and Habitat Subtotal =		\$4,338,000			
G. Land Acquisition for Habitat and Recreation (9 Recommendations - Subtotal = \$12,179,000)					
174-G	State Parks and State Trails Land Acquisitions	\$2,000,000	Jennifer Christie	MN DNR	Statewide

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175-G	SNA Acquisition, Restoration, Enhancement & Public Engagement	\$4,000,000	Peggy Booth	MN DNR	Statewide
177-G	Preserving the Avon Hills with Reverse-Bidding Easements	\$1,300,000	Thomas Kroll	Saint Johns University	Central
178-G	Mesabi Trail Segment Highway 135 to Embarrass	\$1,200,000	Robert Manzoline	St. Louis and Lake Counties Regional Railroad Authority	NE
179-G	Minnesota Point Pine Forest SNA Addition Project (to be appropriated to DNR SNA Program)	\$500,000	Tom Werner Peggy Booth	Duluth Airport Authority DNR	NE
180-G	Wilder Forest Acquisition for Conservation, Preservation and Education	\$500,000	Hilary Otey Wold	Minnesota Food Association	Metro
181-G	Long-Term Drinking Water Supply Protection, Recreation, Habitat Plan	\$1,500,000	Mark Johnson	Lincoln Pipestone Rural Water System	SW
182-G	Otter Tail River Protection and Recreation Trail Acquisition	\$500,000	Gordon Hydukovich	City of Fergus Falls	Central
183-G	Tower Historic Harbor Nature Trail/Kayak Route	\$679,000	Linda Keith	City of Tower	NE
	Land Acquisition for Habitat and Recreation Subtotal	\$12,179,000			
H. Other (2 Recommendations - Subtotal = \$200,000)					
185-H	Contract Agreement Reimbursement	\$135,000	Amanda Graeber	MN DNR	Statewide
186-H	Roseau Lake Watershed: Targeted Water Quality Improvement	\$65,000	Henry Van Offelen	MN DNR	NW
	Other Subtotal =	\$200,000			
	Total \$ Recommended =	\$45,402,000			

* Region of Impact designated in the State include Statewide, Central, Metro, NE, NW, SE, SW. Metro region includes the 11 counties of Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott, Sherburne, Washington, and Wright.