

2017 Environment and Natural Resources Trust Fund Proposals
CUMULATIVE AVERAGE OF MEMBER RANKINGS - LISTED BY CATEGORY RANK - HIGH TO LOW

Line #	LCCMR ID #	Project Title	Organization [Project Manager]	\$ Request	Region of Impact	Member Notes [Compiled from all members. Notes from individual members are designated with bullets]	Staff Notes	Average Score - Members that Scored	All Member Scores - High to Low	# Members that Scored	# Members with Conflict	SELECTED	LCCMR Recommendation
1	A. Foundational Natural Resource Data and Information (17 Proposals / Subtotal \$16,620,760)												
2	001-A	Minnesota Geological Survey Geologic Atlases for Water Management	U of MN - Minnesota Geological Survey [Setterholm, Dale]	\$3,784,700	Statewide	- MGS could accelerate by adding 25% for total of \$4.729MM (116P.08 2, 3,4) - Don't know if they need full amount. - \$3,784,700	-Continuation -Budget includes transport vehicle for bore hole drilling \$34,000 -M.L. 2015 "County Geologic Atlases - Part A" \$2,040,000 thru 6/30/2018 -M.L. 2013 "County Geologic Atlases - Part A" \$1,200,000 thru 6/30/2016	7.82	9,9,9,9,9,9,9,9,8,8,8,8,7,4,1	17	0		
3	006-A	Minnesota Biological Survey	MN DNR [Carlson, Bruce]	\$2,955,861	Statewide	- (116P.08 2, 3,4, 6) - Do they need full amount? - \$2,955,861	-Continuation - Budget includes \$179,861 for "DNR Direct and Necessary Expenses" -M.L. 2015 ENRTF \$2,450,000 thru 6/30/2017 with \$1,620,399 remaining -M.L. 2013 ENRTF \$2,650,000 completed 6/30/2015 -M.L. 2011 ENRTF \$2,250,000 completed 6/30/2013	7.35	9,9,9,9,9,9,9,9,8,8,7,7,6,5,3,0	17	0		
4	009-A	Promoting Wild Rice Restoration Success by Examining Microbes	U of MN - Duluth NRRRI [Chun, Chanlan]	\$334,035	NE	- (116P.08 2, 3, 4) - \$334,035	-Budget includes conference costs \$2,289	6.82	9,9,9,9,8,8,8,7,7,7,5,5,4,4,3	17	0		
5	015-A	Non-Invasive Moose Calf Surveys and Ecosystem Monitoring	U of MN [Ditmer, Mark]	\$348,151	Statewide	- (116P.08 2, 3). Penning high leverage with \$810K from NSF - \$348,151	-Wildlife Research-Moose -Equipment includes a drone for \$18,000	6.29	9,9,9,9,9,8,6,6,6,6,5,2,2,1	17	0		
6	002-A	What are the Public Benefits of Protecting Sourcewater?	U of MN [Keeler, Bonnie]	\$320,000	Statewide	- (116P.08 2, 3,4) 75% of Minnesotans drink groundwater where source water protection is an emerging field, the rest drink river water where there is no real source water protection.	-Ecosystem Services-Drinking Water -M.L. 2015 "Understanding Water Scarcity, Threats, and Values to Improve Management" \$234,936 thru 6/30/2018	6.12	9,9,9,9,9,9,8,8,8,6,5,3,3,0,0,0	17	0		
7	007-A	Continue Expansion of the Minnesota Wildflowers Online Botanical Reference	Minnesota Wildflowers Information [Chayka, Catherine]	\$270,470	Statewide	- (116P.08 2, 4) - \$270,470	-Continuation -M.L. 2014 "Expansion of Minnesota Wildflowers Online Botanical Reference" \$150,000 thru 6/30/2017	6.06	9,9,9,9,9,8,7,7,7,6,5,5,4,0,0,0	17	0		
8	017-A	Effects of Wolves on Beavers, Moose, and Deer	Voyageurs National Park [Windels, Steve]	\$293,000	NE	- (116P.08 2, 3,4)	-Wildlife Research- Wolf -Includes approximately \$176,000 non-state other funds secured	5.65	9,9,9,9,9,6,6,6,5,4,4,3,2,2,2,2	17	0		

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9	003-A	Minnesota Trumpeter Swan Migration Ecology and Conservation	U of MN [Andersen, David]	\$462,433	Statewide	- (116P.08 2,4)	-Wildlife Research- Swans -Equipment includes costs of \$156,00 for 60 GPS transmitters	5.59	9,9,9,9,9,8,6,6,6,5,4,4,2,0,0,0	17	0		
10	016-A	Cascading Effects of Wolf Recolonization	U of MN [Isbell, Forest]	\$398,000	Metro	- (116P.08 2, 3) - \$398,000	-Wildlife Research- Wolf	5.56	9,8,8,8,7,7,7,6,4,4,3,3,3,2,2	16	1		
11	012-A	Mapping Groundwater Contamination: Accessible Data to Protect Resources	MPCA [Neve, Hans]	\$480,000	Statewide	- (116P.08 2, 3). This would set the standard for better data managemtn and better public access to data	-Superfund funding?	5.53	9,9,9,9,8,8,8,6,6,5,3,3,3,0,0,0	17	0		
12	031-A	Minnesota's Freshwater Sponges: Mapping Taxonomy and Environmental Toxicology	U of MN [Mukku, Venugopal]	\$258,000	Statewide	- (116P.08 4) - Interested in possible effects on zebra mussels.		5.44	9,9,9,9,9,8,8,6,5,3,3,0,0,0,0	16	0		
13	004-A	Healthy Prairies II: Preserving MN Prairie Plant Diversity	U of MN [Shaw, Ruth]	\$938,000	SE	- (116P.084, 6)	-Continuation -M.L. 2014 "Prairie Sustainability through Seed Storage, Beneficial Microbes, and Adaptation" \$600,000 thru 6/30/2017	5.13	9,9,9,9,9,8,7,7,3,2,1,0,0,0,0	16	1		
14	013-A	Landslide Hazards and Impacts on Minnesota's Natural Environment	U of MN [Gran, Karen]	\$672,408	Statewide	- (116P.08 2, 3)	-Budget includes funding for University of North Dakota staff \$67,875 and University of Wisconsin staff \$6,674	4.69	9,9,9,9,8,7,5,5,2,1,1,1,0,0,0	16	0		
15	011-A	Drainage Records Modernization – Phase II, Cost-Share	Board of Water and Soil Resources [Gillette, Timothy]	\$540,000	Statewide	- (116P.08 3) - \$540,000	-Continuation -The number of grants is unknown and dollar amount for grants is unknown -M.L. 2014 "Drainage Records Modernization and Statewide Geographic Information System Database" \$230,000 -2014 appropriation was to establish tools for development of a regular budget item for the grants	3.53	9,8,8,8,7,4,4,3,2,2,2,2,1,0,0,0,0	17	0		
16	020-A	Lowland Conifer Ecosystems: Holistic Assessment for Adaptive Management	U of MN [Windmuller-Campione, Marcella]	\$763,702	Central, NW, NE	- (116P.08 2, 3)		3.44	9,8,8,8,7,3,3,2,2,2,2,1,0,0,0,0	16	0		

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17	005-A	Enhancing Targeted and Measureable Watershed Restoration and Protection	Board of Water and Soil Resources [Thomas, Doug]	\$2,802,000	Statewide	- Clean water legacy is more appropriate	-Budget includes contract with Iowa State University for \$400,000 -Proposal consist of 3 contracts, MN DNR \$50,000, Iowa State University \$400,000, and UMN \$2,200,000, that BSWR proposes \$150,000 to manage. -Clean Water Fund funding?	3.24	9,9,8,8,7,5,3,2,2,1,1,0,0,0,0,0	17	0		
18	010-A	Contaminants in Urban Soils: Understanding the Urban Environment	U. S. Geological Survey [Elliott, Sarah]	\$1,000,000	Statewide	- (116P.08 2,3)		1.94	8,6,5,4,3,2,2,1,1,1,0,0,0,0,0,0	17	0		
19	B. Water Resources (18 Proposals / Subtotal \$18,627,126)												
20	035-B	Rearing Native Mussels and Building Water Quality Awareness	Minnesota Zoo [Maguire, Allan]	\$591,925	Statewide	- (116P.08 4, 6) - \$591,925	-Wildlife Research-Mussels -Expands capacity beyond existing collaboration with DNR on mussel rearing from 2016 DNR ENRTF recommendation M.L. 2016 "Restoring Native Mussels in Streams and Lakes" \$600,000 pending thru 6/30/2019 -Equipment includes a mussel research and rearing pod \$130,000	7.29	9,9,9,9,9,9,8,8,8,7,6,6,6,5,4,3	17	0		
21	033-B	Household Chemicals as Water Pollutants and Toxic Precursors	U of MN [Arnold, William]	\$236,000	Statewide	- (116P.08 2, 3)Need better understanding of the complex chemical reactions in waste water treatment	-Budget includes publication costs \$3,000 -Project is included in 2017 proposal 052-B "The Minnesota Center for Water Treatment Technology Innovation" \$10,306,899 -See Water Center (052-B) response to staff questions	6.24	9,9,9,9,9,9,8,8,6,6,5,5,4,1,0,0	17	0		
22	034-B	Innovative Nitrogen Removal Technology to Protect Water Quality	U of MN [Novak, Paige]	\$476,100	Statewide	- (116P.08 2, 3). This could be a double bonus, more effective treatemtn at a lower cost - Seems viable and could produce a product for commercial use.	-Project is included in 2017 proposal 052-B "The Minnesota Center for Water Treatment Technology Innovation" \$10,306,899 -See Water Center (052-B) response to staff questions	6.06	9,9,9,9,9,9,8,8,7,5,5,4,3,0,0,0	17	0		
23	048-B	Reassessing Toxicity of Petroleum Spills with New Technologies	University of St. Thomas [Martinovic-Weigelt, Dalma]	\$423,189	NW	- (116P.08 2, 4)	-Qualifications had 2 pages, 2nd page removed	6.00	9,9,9,9,9,9,6,5,4,4,4,4,4,3,3,2	17	0		
24	059-B	Chemicals of Emerging Concern in Minnesota Fish	Grand Portage Band of Lake Superior Chippewa [Moore, Seth]	\$436,922	NE	- (116P.08 2, 3,4) High leverage with \$242K secured and \$20K pending	-Qualifications had two pages, 2nd page removed -See response to staff questions	5.76	9,9,9,9,9,9,8,7,6,5,4,3,2,0,0,0	17	0		

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25	044-B	Responsive Water Quality Monitoring: SEern Minnesota Trout Streams	Winona State University [Mundahl, Neal]	\$583,980	SE	- After conclusion, what is action plan?	-Equipment includes 9 gauging stations \$180,000 -Equipment includes Smith-Root LR-24 electrofisher \$9,780 -Includes sensors	5.44	9,9,9,9,8,7,7,6,6,4,4,4,4,1,0,0	16	1		
26	038-B	Removing Plastic Particle Pollution from Minnesota Water Bodies	U of MN [Coletti, Filippo]	\$359,540	Statewide	- (116P.08 2, 3,4)	-St. Anthony Falls Laboratory (SAFL) -See response to staff questions about SAFL priorities	4.94	9,9,8,8,8,7,7,7,7,5,4,0,0,0,0,0	17	0		
27	051-B	New Self-Sustaining Nitrate and Pesticides Removal Biotechnology	U of MN [Behrens, Sebastian]	\$318,162	SW, SE	- Add neonics please. - (116P.08 2, 4) Patentable possible ROI - Good to use natural materials to filter; scalable, which is a plus.	-Project is included in 2017 proposal 052-B"The Minnesota Center for Water Treatment Technology Innovation" \$10,306,899 -Budget includes conference costs \$3,045 -See Water Center (052-B) response to staff questions	4.94	9,8,8,8,7,7,6,6,5,4,4,4,4,4,0,0,0	17	0		
28	055-B	Maximizing the Benefits of Water Reuse	U of MN [Ishii, Satoshi]	\$148,000	Statewide	- Where is the collaboration with other efforts we have funded regarding surface water and barriers? - (116P.08 2, 3,4)		4.88	9,9,9,8,7,7,7,7,6,5,5,4,0,0,0,0,0	17	0		
29	046-B	How Rapidly can Groundwater Quality be Improved?	U of MN [Nieber, John]	\$672,000	SE	- (116P.08 2, 3,4) - Should prevent not clean up - How will the water be cleaned up in an expedient manner?		3.94	9,8,8,7,5,4,4,4,4,4,4,3,2,1,0,0,0	17	0		
30	042-B	Restoring Agricultural Lakes and Watersheds by Managing Carp	U of MN [Bajer, Przemyslaw]	\$967,100	Central, Metro, SW, SE	- (116P.08 2, 6) - Possible to scale down? Possible to remove more carp from lakes as part of this? - \$967,100	-Budget includes publication costs \$5,000	3.65	9,8,7,7,6,6,6,5,4,1,1,1,1,1,0,0,0,0	17	0		
31	054-B	Preventing Fish Kills by Increasing Understanding	MN DNR [Rantala, Heidi]	\$699,905	Statewide	- (116P.08 2, 3,4) - \$699,905	-Wildlife Research- Fish -Budget includes \$4,490 for "DNR Direct and Necessary Expenses" -Equipment includes Data loggers and automated samplers \$147,000 -Budget personnel includes Minnesota Department of Agriculture \$333,000 for water sampling	3.65	8,7,7,6,6,5,5,4,3,3,3,2,2,1,0,0,0,0	17	0		
32	036-B	Rural Industrial Water Efficiency Impact on Drinking Water	U of MN [Brauman, Kate]	\$282,000	Central, NW, NE, SW, SE	- (116P.08 4)	-Budget includes publication costs \$2,000	3.12	9,6,6,6,6,4,4,4,3,2,1,1,1,1,0,0,0,0	17	0		
33	074-B	Measuring Reductions in Nitrate Pollution from Precision Agriculture	University of St. Thomas [Small, Gaston]	\$159,833	Central	- (116P.08 2 ,4)	-Budget includes \$32,908 in equipment for sensors, \$4,974 for a camera, and \$1,980 for loggers -Includes sensors	3.00	7,7,6,5,5,5,4,4,4,4,0,0,0,0,0,0,0	17	0		

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34	058-B	Sulfate and Metal Removal from NE Minnesota Waters	U of MN [Dutcher, Cari]	\$298,325	NE	- Industry should pay. - (116P.08 2, 3)	-Relationship to similar 2016 project unknown? -Equipment budget not very well broken down	2.65	8,6,5,4,4,4,3,3,3,2,2,1,0,0,0,0,0	17	0		
35	045-B	Buffer Gap Analysis	Board of Water and Soil Resources [Mohring, Eric]	\$1,390,656	Statewide	- 182 a better project for buffer gap. - (116P.08 2, 3) - 182 a better project for buffer gap. - \$1,390,656	-Budget includes conferences and printing \$21,000 -Equipment includes hydrologic instrumentation and gaging stations \$300,000 -5 year project -Includes drones	2.53	8,8,6,6,5,3,2,2,2,1,0,0,0,0,0,0,0	17	0		
36	066-B	Continuous Nitrate Pollution Monitoring at the Kitchen Sink	U of MN [Wickert, Andrew]	\$276,590	Statewide	- Agriculture should pay. - (116P.08 2,4) Highly leveraged with \$202K secured and \$3K pending	-Is this product testing for a private company? -Includes sensors -St. Anthony Falls Laboratory (SAFL) -See response to staff questions about SAFL priorities)	1.59	6,5,4,3,3,2,1,1,1,1,0,0,0,0,0,0,0	17	0		
37	052-B	The Minnesota Center for Water Treatment Technology Innovation	U of MN [Hozalski, Raymond]	\$10,306,899	Statewide	- (116P.08 2, 3,4) - Don't know if need a lot of directors but would prefer people or identify emerging issues & coordinate projects and proposals. Question if need full amount.	-Need competitive process for center directors -Includes funding for director and associate director -\$700,000 in equipment and \$729,626 for lab supplies before RFP for projects -6 year project -Outcomes not clear with narrative -See response to staff questions -Staff were anticipating fewer director and overhead staff and more of a coordinator for projects and center to get it going -Proposal includes 2017 proposals William Arnold 033-B "Household Chemicals as Water Pollutants and Toxic Precursors" \$236,000, Paige Novak 034-B "Innovation Nitrogen Removal Technology to Protect Water Quality" \$476,100, and Sebastian Behrens "New Self-Sustaining Nitrate and Pesticide Removal Biotechnology" \$318,162	0.82	7,6,1,0,0,0,0,0,0,0,0,0,0,0,0,0,0	17	0		

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38	C. Environmental Education (11 Proposals / Subtotal \$5,098,858)												
39	079-C	Floating Classroom: Connecting 20,000 Youth to Minnesota Waterways	Wilderness Inquiry [Lais, Greg]	\$1,240,730	Statewide	- Campsite adoption is innovative and on-going. - Great history really appreciate the inclusion. ALL means ALL. - (116P.08 4, 6) My #1 pick this year - Cut in half; seems expensive at \$443 per student for only 3-5 days. - \$1,240,730	-Continuation -M.L. 2014 "Urban Environmental Education Engaging Students in Local Resources" \$1,093,000 thru 6/30/2017 -M.L. 2013 "Youth Outdoors: Mississippi River Education and Employment Opportunities" \$450,000 completed 6/30/2015	7.29	9,9,9,9,9,9,9,8,8,7,7,6,6,5,3,2	17	0		
40	100-C	Developing Watershed Stewardship in NW Minnesota Youth	Headwaters Science Center [Joy, Susan]	\$71,861	NW	- Authentic Up North Educational Experiences. - (116P.08 4) low cost, high impact for NW Mn	-Budget and outcomes are not clear -Project needs fiscal agent	6.41	9,9,9,9,8,8,8,8,7,7,7,4,0,0,0	17	0		
41	082-C	Increasing Diversity in Environmental Careers: Fellowships, Internships, Mentorships	MN DNR [Getchell, Vikki]	\$1,487,519	Statewide	- Well thought out for long term support and benefits. - (116P.08 4) - Don't think they need that much money. - If agencies are will to fund years 2-5, why can't they fund year one?	-\$650,000 or more for DNR and Conservation Corps Minnesota and Iowa administration -Budget includes \$90,480 for "DNR Direct and Necessary Expenses" -See response to staff questions	6.29	9,9,9,8,8,8,8,8,7,7,6,5,4,3,0,0	17	0		
42	092-C	Bird City - Education for Lasting Conservation	Audubon Minnesota [Eckles, Joanna]	\$280,000	Statewide	- Has so much potential for public awareness! - Double the Money - (116P.08 4, 6) - \$280,000		6.18	9,9,9,9,8,8,7,7,6,6,5,5,4,4,0,0	17	0		
43	101-C	Providing Residential Environmental Learning Experiences to Under-Served Students	Audubon Center of the North Woods [Wood, Bryan]	\$130,000	NE	- Innovative opportunity! - Only for schools not served by other centers and, once started, no free ride. - (116P.08 4) Nedds restraint in not using grant to take schools away from other ELC's - Helps get students involved in the environment but concerned it could become an annual request.	-How much does it cost per student?	5.63	9,9,9,8,8,8,7,7,7,6,6,4,2,0,0,0	16	1		
44	084-C	Bridging Classroom and Outdoor Learning by Studying Birds	U of MN [Ponder, Julia]	\$270,740	Statewide	- Builds on "Drive to Discover" from Cornell. - (116P.08 4)	-Curriculum development or adaptation of existing material? -Outcomes are unclear? -It is unclear what the demonstrations are? -M.L. 2014 "Raptor Lab Integrating Online and Outdoor Learning Environments" \$186,000 thru 6/30/2016	5.53	9,9,9,9,8,8,8,7,6,6,5,5,3,2,0,0,0	17	0		

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45	083-C	Minnesota Water Stories Told in Digital Planetariums	U of MN - Bell Museum of Natural History [Weiblen, George]	\$622,000	Statewide	- Educates about Minnesota's critical water issue. - (116P.08 4)Just received NASA grant - highly leveraged. Planetarium shows extremely popular	-Budget includes \$114,000 for video equipment -Includes drones	4.65	9,9,9,9,8,7,6,5,5,5,4,2,1,0,0,0,0	17	0		
46	081-C	Youth Convening Minnesota	Climate Generation: A Will Steger Legacy [Poppleton, Kristen]	\$310,008	Statewide	- (116P.08 3, 4) an effective an popular program in outstate MN where it is rare to have these conversations with experts.	-M.L. 2014 "Educating Minnesotans about Potential Impacts of Changing Climate" \$325,000 thru 6/30/2016	4.53	9,9,9,9,8,8,6,6,5,4,4,0,0,0,0,0	17	0		
47	087-C	Market Science: Connecting Minnesotans to Environmental Research	U of MN [Tiffin, Peter]	\$132,000	Statewide	- Should expand to all Farmers' Markets. - (116P.08 4)		4.47	9,9,9,9,8,8,6,6,5,4,1,1,1,0,0,0,0	17	0		
48	085-C	Students Use Local Phenology to Understand Climate Variability	U of MN [Carlson, Stephan]	\$240,000	Statewide	- Overdue Citizen Science to aid future decisions. - where is the ROI from these investments - (116P.08 4)	-Why is there nature center room rental charges? -How will they choose the 10 nature centers?	4.18	9,8,8,8,8,7,7,5,5,3,2,1,0,0,0,0,0	17	0		
49	105-C	NE Minneapolis Sustainability Incubator	Holland Neighborhood Improvement Association [Koski, Adelheid]	\$235,000	Metro	- Model for others. - (116P.08 4) Highly leveraged with outside funds \$220 secured and \$350K pending -Non-profit? - Doesn't indicate any actual outcomes.		3.65	8,7,7,7,5,5,4,4,4,4,4,3,0,0,0,0,0	17	0		
50	D. Aquatic and Terrestrial Invasive Species (12 Proposals / Subtotal \$11,823,168)												
51	108-D	EAB Biocontrol Phase III: Assessment and Citizen Engagement	Minnesota Department of Agriculture [Osthus, Jonathan]	\$729,540	Statewide	- Implementation critical to ash tree future. - (116P.08 2, 4) - \$729,540	-TIS-Emerald Ash Borer -Continuation -M.L. 2014 "Biosurveillance and Biocontrol of Emerald Ash Borer - Phase 2" = \$447,000 thru 6/30/2017 -M.L. 2011 "Emerald Ash Borer Biocontrol Research and Implementation" \$500,000 completed 6/30/2014 -See TIS Center response to staff questions	6.18	9,9,9,8,7,7,7,7,7,7,5,5,3,2,1	17	0		
52	119-D	Adapting Stream Barriers to Remove Invasive Fish	U of MN [Bajer, Przemyslaw]	\$381,150	Statewide	- Clever technology transfer. - (116P.08 2, 3,4) - AIS Funding should cover. - Natural barriers are a plus. - \$381,150	-AIS- Common Carp -Equipment rental for \$105,000 for what appears to be the "Whooshh" system created by Whoosh Innovations -Budget includes publication costs \$4,000 -See AIS Center response to staff questions	5.94	9,9,9,9,8,8,8,7,7,6,6,5,3,3,2,2,0	17	0		

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53	107-D	Implementing Biological Control of Garlic Mustard	U of MN [Becker, Roger]	\$421,987	Statewide	- A solution to one of top three Forest Service invasives!!! - This is operational implementation. Should be funded immediately out of Terrestrial Invasive Species Center appropriations. - (116P.08 2,,4) - Leery of using non-native species to fight non-native species.	-TIS-Garlic Mustard -Continuation -M.L. 2007 "Biological Control of European Buckthorn and Garlic Mustard" \$300,000 6/30/2010 -M.L. 2013 "Biological Control of Garlic Mustard" \$140,000 thru 6/30/2016 -See TIS Center response to staff questions	5.82	9,9,9,9,9,7,5,5,5,4,4,4,3,3,0	17	0		
54	106-D	Using Science to Solve Minnesota's AIS problems - Phase II	U of MN [Galatowitsch, Susan]	\$6,100,000	Statewide	- Need project list before funding decision. - (116P.08 2, 3,4, 6) - Fund Center to do its job and screen the other AIS projects. - \$4,000,000	-AIS -Continuation -This is the Minnesota Aquatic Invasive Species Resource Center funding for reseach projects based on center priorities -See AIS Center response to staff questions	5.76	9,9,9,9,8,8,7,7,7,6,5,4,4,4,2,0,0	17	0		
55	122-D	Tactical Invasive Plant Management Plan Development	Minnesota Department of Agriculture [Chandler, Monika]	\$296,832	Statewide	- Proactive and leading other States. - (116P.08 2, 3, 4, 6)	-TIS- Plants -Why is this not already done and what plan have they been using? -See TIS Center response to staff questions	5.65	9,9,9,9,8,8,8,8,7,6,5,4,4,2,0,0,0	17	0		
56	114-D	Continuation of Invasive Carp and Native Fish Evaluation	MN DNR [Aukema, Brian]	\$739,064	Central, Metro, SW, SE	- (116P.08 2, 3,4)	-AIS- Invasive Bigheaded Carp -Continuation -Budget includes \$34,157 for "DNR Direct and Necessary Expenses" -M.L. 2013 "Detection and Monitoring of Asian Carp Populations" \$540,000 -DNR Game and Fish Fund? -See AIS Center response to staff questions	5.29	9,9,8,8,7,7,7,5,5,5,4,4,4,4,2,2,0	17	0		
57	123-D	Maximize Value of Water Impoundments to Wildlife	Audubon Minnesota [Hall, Kristin]	\$195,000	NW	- Many applications in Prairie Waterfowl region. - (116P.08 2, 5)	-AIS-Cattails -Proposal appears to include potentially ineligible standard maintenance and management per RFP -Land located in Agassiz Valley Impoundment owned by the Middle-Snake-Tamarac Rivers Watershed District -See AIS Center response to staff questions	5.18	9,9,9,9,8,8,7,6,5,4,4,4,3,2,1,0,0	17	0		
58	111-D	New Technology to Control Invasive Carp	U of MN [Smanski, Michael]	\$389,000	Statewide	- Marketable elsewhere. - (116P.08 2, 3,4) - AIS Funding should cover.	-AIS-Common Carp -See AIS Center response to staff questions	4.94	8,8,8,8,7,5,5,5,5,4,4,3,3,2,1,0	17	0		

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59	117-D	Acquiring Key Information for a Carp Deterrent System at Lock and Dam #5	U of MN [Sorensen, Peter]	\$284,000	NW	<ul style="list-style-type: none"> - Use reserve funds. LCCMR for \$84k only. - Just give \$84,000 since he still has \$200,000 - \$84,000 - (116P.08 2, 4) - Just give \$84,000 since he still has \$200,000. - Has 200k remaining, support with 84k. 	<ul style="list-style-type: none"> -Continuation-AIS- Carp -Score reflects past ENRTF funding still available -It is not clear if there is not already sufficient funding under current funding to do this project? -What is relationship to Messinger projects? -Equipment includes \$20,000 for fish tracking system with computer -M.L. 2014 "Blocking Bighead, Silver, and Other Invasive Carp by Optimizing Lock and Dams" \$853,000 thru 2017 -M.L. 2013 ENRTF "AIS Research Center Sub-Project 03: Reducing and Controlling AIS: Developing Effective Tools to Attract and Locate Aggregations of Invasive Carp" \$753,000 thru 2019 -M.L. 2012 "Aquatic Invasive Species Cooperative Research Center" \$981,000 thru 2018 -M.L. 2008 "Accelerating Plans for Integrated Control of the Common Carp" \$550,000 completed 2011 -M.L. 2005 "Integrated and Pheromonal Control of Common Carp" \$550,000 completed 2008 -M.L. 2003 "Developing Pheromones for Use in Carp Control" \$100,000 thru -See AIS Center response to staff questions 	4.18	9,8,8,8,8,6,5,3,3,3,3,2,2,2,1,0,0	17	0		
60	109-D	Quantifying Spiny Waterflea Threats to Minnesota Walleye Lakes	U. S. Geological Survey [Kiesling, Richard]	\$1,690,320	Central, NW, NE	<ul style="list-style-type: none"> - No clear solutions. - (116P.08 2, 3,4) - Coordinate with AIS Center research - AIS Funding should cover. 	<ul style="list-style-type: none"> -AIS-Spiny Waterflea -The AIS Center is going to fund a risk assessment on fish from spiny water flea but is not funding this research -Budget includes \$120,000 Portland State software development contract -Budget includes potentially ineligible general office supplies \$2,500 per RFP -Budget includes \$910,900 for 8 USGS staff salary -See AIS Center response to staff questions 	2.65	5,5,5,5,4,4,4,3,3,2,2,2,1,0,0,0,0	17	0		
61	115-D	Impact of Zebra Mussels on Mercury in Fish	U of MN - Duluth [Ozersky, Tedy]	\$211,437	Statewide	<ul style="list-style-type: none"> - (116P.08 2, 4) 	<ul style="list-style-type: none"> -AIS-Zebra Mussels -Budget includes \$15,000 in capital equipment -Budget includes international conference \$4,000 -See AIS Center response to staff questions 	2.59	6,6,6,5,3,3,3,3,3,2,2,2,0,0,0,0,0	17	0		
62	112-D	Mountain Pine Beetle Phase II: Protecting Minnesota	U of MN [Aukema, Brian]	\$384,838	Central, Metro, NW, NE, SE	<ul style="list-style-type: none"> - Let nature solve this one! Forest will adjust. - Use existing funding from TIS Center - Fund out of current Terrestrial Invasive Species Center appropriations. - (116P.08 2, 3,4) Pay for this with existing funds to get to work ASAP - Use existing funding from TIS Center. 	<ul style="list-style-type: none"> -TIS- Mountain Pine Beetle -Continuation -M.L. 2014 "Mountain Pine Beetle Invasive Threat to Minnesota's Pines" \$250,000 -See TIS Center response to staff questions 	2.29	7,6,5,3,3,3,3,2,2,1,1,1,1,1,0,0,0	17	0		

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63	E. Air Quality, Climate Change, and Renewable Energy (10 Proposals / Subtotal \$8,205,768)												
64	128-E	Cheap Solar Energy from Simple Roll-to-Roll Manufacturing	U of MN [Cui, Tianhong]	\$388,852	NW	- California has 5. - (116P.08 2)	-Energy-Solar -Renewable Development Fund? -Resubmission of M.L. 2016 "Solar Cells Manufacturing Research" \$388,000 proposal	6.53	9,9,9,9,9,9,9,9,7,7,6,1,0,0,0	17	0		
65	131-E	Enabling Extraction of Solar Thermal Energy in Minnesota	U of MN [Coletti, Filippo]	\$351,040	Statewide	- (116P.08 2)	-Energy-Solar -Renewable Development Fund? -St. Anthony Falls Laboratory -See response to staff questions	5.71	9,9,9,8,8,8,8,7,6,5,5,3,2,1,0,0	17	0		
66	129-E	Community-Scale Energy Storage Guide for Clean Energy	U of MN [Anderson, Ellen]	\$625,478	Statewide	- (116P.08 2, 3,4)	-Energy-Storage -Budget includes \$300,000 for 3 energy storage systems -Budget includes office supplies \$3,040 -Renewable Development Fund?	5.47	9,9,9,9,9,8,7,6,6,5,3,3,1,0,0,0	17	0		
67	132-E	Deploying New Technology to Understand Urban Air Pollution	MPCA [Vadali, Monika]	\$981,564	Metro	- Using good science to include public awareness. - Could be a great tool in addressing economics and Asthma as was recently passed in legislation. - (116P.08 2, 3,4)	-Air Quality -Sensor development -Renewable Development Fund?	5.29	9,9,9,9,9,8,8,8,6,5,1,0,0,0,0,0	17	0		
68	150-E	District Heating with Renewable Biomass at Camp Ripley Training Center	Department of Military Affairs [Pennington, Josh]	\$1,969,988	Central	- No capital investment. - Ineligible capital cost - (116P.08 5) Highly leveraged with outside funds \$50K secured, \$500K pending - Do not cover capital costs? -Ineligible capital cost. - \$1,969,988	-Energy-Biomass -Proposal is for capital per RFP ineligible and not scored -Budget includes \$922,600 in ineligible capital for biomass combustion unit, hot water boiler, and thermal storage tank -Installation of heating plant for a military facility -Renewable Development Fund? -Capital Bonding?	4.53	8,8,8,8,7,7,6,5,5,5,4,1,0,0,0,0	17	0		
69	147-E	Generation, Storage, and Utilization of Solar Energy	U of MN [Heins, Bradley]	\$795,500	Statewide	- (116P.08 2) - Do not cover capital costs?	-Energy -Proposal includes potentially ineligible capital DC fast charging station \$560,000, Smart level II charging station with 3 Tesla batteries \$15,000 and 2 Recoil iS 100% Electric ATV's \$30,000 -Budget includes \$15,000 to lease a Nissan Leaf (automobile) -Appears to be the very similar to Mike Reese's M.L. 2014 "Transitioning Minnesota Farms to Local Energy" \$500,000 thru 6/30/2017 and Joel Tallaksen's M.L. 2014 "Life Cycle Energy of Renewably Produced Nitrogen Fertilizers" \$250,000 thru 6/30/2017 -Renewable Development Fund?	4.06	9,9,9,7,7,5,5,4,3,3,1,1,1,0,0,0	17	0		

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70	137-E	Forest Regeneration: Maximizing the Value of Our Investment	U of MN - Duluth [Etterson, Julie]	\$732,046	Statewide	- DNR needs seed source update. Consider different indicator species than white pine. - (116P.08 2, 6)	-Budget includes \$101,000 to DNR for Deer fencing	3.29	9,7,7,5,5,5,4,4,3,3,2,1,1,0,0,0,0	17	0		
71	151-E	Renewable Energy Production from Municipal Organic Waste	Minnesota Energy Center (MNEC) [Waite-Altringer, Melanie]	\$1,687,500	Statewide	- Ineligible capital cost, no new initiative. - (116P.08 5) - Ineligible capital cost, no new initiative.	-Energy-Biomass -Proposal is for capital per RFP ineligible and not scored -Waste Management Inc. -Budget includes \$935,000 in ineligible capital for a BIOFerm Energy System's EUColino Anaerobic Digester for local municipality -Renewable Development Fund? -Capital Bonding?	2.47	8,7,7,7,6,4,2,1,0,0,0,0,0,0,0,0	17	0		
72	127-E	Managing for "Climate Smart" Trees and Forests	U of MN [Reich, Peter]	\$385,000	Statewide	- Need to match ecoregions. - (116P.08 2, 4)	-Climate-Forestry -Budget includes room rentals and refreshments \$7,000 -Budget includes website development \$22,000 -M.L. 2014 "Assessing Species Vulnerability to Climate Change Using Phenology" \$175,000 thru 6/30/2017 -M.L. 2010 "Healthy Forests to Resist Invasion" \$359,000 completed 6/30/2013 -M.L. 2008 "Impacts of Climate Change and CO2 on Prairie and Forest Production" \$330,000 completed 6/30/2011	2.41	7,7,5,4,3,3,3,2,2,2,2,1,0,0,0,0	17	0		
73	149-E	Climate-Smart Cities: Helping Cities Make Smarter Land-Use Decisions	The Trust for Public Land [Forbes, DJ]	\$288,800	Metro	- (116P.08 2, 3,4)	-Budget includes potentially ineligible unidentified office related expenses \$30,000 -Qualifications and organization description had three pages, two pages removed	2.24	7,6,5,5,4,4,3,3,1,0,0,0,0,0,0,0	17	0		

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74	F. Methods to Protect, Restore, and Enhance Land, Water, and Habitat (12 Proposals / Subtotal \$6,758,954)												
75	155-F	State Parks for Monarchs and Other Native Pollinators	MN DNR [Quinn, Edward]	\$672,159	Central, Metro, NW, SW, SE	- (116P.08 2, 3,4) - \$672,159	-Budget includes "DNR Direct and Necessary" \$22,159	6.94	9,9,8,8,8,8,7,7,7,7,7,7,5,5,5,4	17	0		
76	157-F	Roadside Prairie Prescribed Fire	Minnesota Department of Transportation [Graeve, Ken]	\$345,000	Central, Metro, NW, SE	- Pragmatic and cost-effective management method. - (116P.08 2, 6) - \$345,000		6.94	9,9,9,9,8,8,8,7,7,7,6,6,5,5,3,3	17	0		
77	153-F	Promoting Conservation Biocontrol of Beneficial Insects	U of MN [Krischik, Vera]	\$399,000	Statewide	- (116P.08 2, 6)	-Services using USDA AMS Lab in North Carolina chemical analysis \$60,000 -M.L. 2014 "Understanding Systemic Insecticides as Protection Strategy for Bees" \$326,000 6/30/2017 -M.L. 2010 "Mitigating Pollinator Decline in Minnesota" \$297,000 completed 6/30/2016	5.82	9,9,9,9,8,7,7,7,6,5,4,3,3,3,1,0	17	0		
78	158-F	MN Honey Bee & Monarch Butterfly Partnership	Pheasants Forever [Holland, Matt]	\$732,162	Statewide	- (116P.08 2, 4, 6)	-\$915 per acre to enhance 800-acres of prairie on approximately 75-100 sites -Includes RIM conservation plans and updates 100 plans for \$30,000 -Buses and workshops \$4,500 -Where are projects taking place? private or public land? -How are they deciding who will get work done?	5.76	9,9,8,8,7,7,7,6,6,5,4,4,3,3,3,2	17	0		
79	160-F	Restoring 83-acres of Prairie, Savanna & Forest Habitat	Friends of the Mississippi River [Lewanski, Tom]	\$213,450	Metro	- (116P.08 6)	-Continuation -M.L. 2015 "Metro Conservation Corridors Phase VIII - Prairie, Forest, and Savanna Restoration in Greater Metropolitan Area" \$276,000 thru 6/30/2018 -M.L. 2014 "Prairie, Forest, and Savanna Restoration in Greater Metropolitan Area" \$200,000 thru 6/30/2017	5.69	9,9,9,9,8,8,8,7,7,5,5,4,3,0,0,0	16	1		
80	154-F	Restoring and Preserving Savanna Using Bison	Cedar Creek Ecosystem Science Reserve, U of MN [Tilman, David]	\$388,000	Central	- Consider addition of cattle also. - Add cows for comparison grazing. - (116P.08 2, 6) - Remove 60k fencing, include cattle for comparison to bison grazing. - Fencing costs? - Omit fencing costs and have bison farmer take a write off.		5.59	9,9,9,9,8,8,8,7,7,5,5,5,3,2,1,0,0	17	0		
81	152-F	Optimizing the Nutrition of Roadside Plants for Pollinators	U of MN [Snell-Rood, Emilie]	\$815,000	Central, Metro, NW, SW, SE	- Place plots on County roads to increase their understanding of pollinator habitat. - (116P.08 2, 6) - Coordinate with MnDot & DNR.	-Budget includes publication costs \$8,000	5.12	8,8,8,8,7,6,5,5,5,5,5,5,3,3,1,0	17	0		

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82	161-F	Restoring Our Metro Lands and Waters: MeCC 10	Great River Greening [Buck, Wiley]	\$524,400	Metro	- (116P.08 6)	-Continuation -M.L. 2016 "Restoring Our Metro Lands and Waters: MeCC 10" \$524,400 Pending -M.L. 2015 "Metro Conservation Corridors Phase VIII - Enhancing Restoration Techniques for Improved Climate Resilience and Pollinator Conservation" \$400,000 thru 6/30/2018 -M.L. 2014 "Upland and Shoreline Restoration in Greater Metropolitan Area" \$300,000 thru 6/30/2017 -M.L. 2013" Metropolitan Conservation Corridors (MeCC) - Phase VII: 2.3: Restoring Our Lands and Waters " \$208,000 thru 6/30/2016	5.00	9,9,9,8,8,7,7,6,6,5,5,4,1,1,0,0,0	17	0		
83	156-F	Prioritizing Shoreline Habitat Restoration in Minnesota Lakes	U of MN - St. Anthony Falls Laboratory [Herb, William]	\$294,913	Statewide	- (116P.08 2, 6)	-St. Anthony Falls Laboratory (SAFL) -See response to staff questions about SAFL priorities)	4.47	9,9,9,7,7,6,5,5,5,5,2,2,0,0,0,0	17	0		
84	162-F	Precision Conservation and Agriculture: Growing Green2 Together	Pheasants Forever [Bruse, Tanner]	\$508,370	Central, NW, SW, SE	- (116P.08 2, 4, 6)	-Land owners are each being charged \$1,000 for the analysis and that money goes to a private company	3.38	9,9,7,7,6,5,4,3,3,1,0,0,0,0,0,0	16	0		
85	164-F	Identifying Optimal Soil Conditions for Sustainable Forest Management	U of MN [Slesak, Robert]	\$415,000	Statewide	- (116P.08 2,,4, 6)	-Equipment includes \$15,000 for 100 sensors, \$10,000 for 25 data loggers, and \$25,000 for a mobile soil pressure apparatus -Includes sensors	3.18	9,6,6,6,5,5,5,3,3,3,1,1,1,0,0,0,0	17	0		
86	167-F	Mississippi River Habitat Restoration at Halls Island	Minneapolis Park and Recreation Board [Arvidson, Adam]	\$1,451,500	Metro	- (116P.08 2 ,6) - Partial amount - Permits	-Funding match comes from Met Council and State Bonding -Project is part of Metro Regional Park system -It is not clear if funding is for restoration or construction of the island -M.L. 2010 \$6,467,000 as amended by M.L. 2013 as amended by M.L. 2015 with further amendment pending M.L. 2016	2.76	9,7,6,5,4,4,4,3,3,2,0,0,0,0,0,0	17	0		

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87	G. Land Acquisition for Habitat and Recreation (7 Proposals / \$18,822,625)												
88	171-G	Minnesota State Parks and State Trails Land Acquisition	MN DNR [Christie, Jennifer]	\$1,500,000	Statewide	- Can you afford to manage more land? - (116P.08 4, 5, 6) - Would support restoration only. - \$1,500,000	-Fee Title Acquisition -Continuation -2016 Bonding Request \$2,000,000 -M.L. 2016 ENRTF \$2,455,000 pending _M.L. 2015 ENRTF \$1,500,000 thru 6/30/2018 -M.L. 2013 ENRTF \$1,000,000 thru 6/30/2016 -M.L. 2011 ENRTF \$3,000,000 completed 6/30/2015 -M.L. 2009 ENRTF \$2,200,00 completed 6/30/2012 M.L. 2008 ENRTF \$1,590,00 completed 6/30/2010 -M.L. 2007 ENRTF \$750,000 completed 6/30/2010	6.76	9,9,9,9,9,8,8,8,7,7,6,5,5,0,0	17	0		
89	174-G	Leech Lake Natural Resource Multi-Benefit Conservation Acquisition	Leech Lake Division of Resource Management [Brown, Levi]	\$1,500,000	Central	- Cultural and ecological importance. - (116P.08 4, 5, 6)	-Fee Title Acquisition -Approximately \$33,000 per acre for 42.5 acres	6.75	9,9,9,9,9,9,8,6,5,5,5,4,4,3	16	1		
90	170-G	SNA Acquisition, Restoration, Citizen Science and Engagement	MN DNR [Booth, Margaret (Peggy)]	\$6,022,220	Statewide	- Restores and monitors 1000 acres! - (116P.08 4, 5, 6) - \$2,000,000	-Fee Title Acquisition and Restoration -Continuation -No other state dollars listed -2016 Bonding Request \$1,000,000 -LCCMR staff recommend 3-4 years to spend based on previous spending not 2 as requested -Budget includes "DNR Direct and Necessary" \$213,270 -M.L. 2016 ENRTF \$4,000,000 pending -M.L. 2015 ENRTF \$4,000,000 thru 6/30/2018 -M.L. 2014 ENRTF \$2,540,000 thru 6/30/2017 -M.L. 2013 ENRTF \$1,500,000 thru 6/30/2016	6.65	9,9,9,9,9,9,8,8,8,7,6,6,4,3,0,0	17	0		

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91	172-G	Native Prairie Stewardship and Prairie Bank Easement Acquisition	MN DNR [Schulte, Judy]	\$5,185,457	Central, NW, SW, SE	- 5200 acres of willing landowners on waiting list. Once plowed, can never be restored. - (116P.08 4, 5, 6) - Would support restoration only. - \$1,700,000	-Conservation Easements and Restoration -Continuation -Budget includes for \$200,000 Easement Stewardship Account -Proposal states it needs \$10,000,000 per biennium for next ten years? -2016 Bonding request \$2,000,000 -MNIT Services for Prairie Tax Exemption Database for county assessor access \$30,000? -Budget includes \$124,457 for "DNR Direct and Necessary Expenses" -\$5,553 per acre for 600 acres of easements -\$1,284 per acre to restore and enhance 900 acres of native prairie -\$2,700,000 for easements and transaction costs -Payment is determined by criteria set in Minnesota Statute -M.L. 2015 "Native Prairie Stewardship and Prairie Bank Easement Acquisition" \$3,325,000 thru 6/30/2018 -M.L. 2013 "Native Prairie Stewardship and Prairie Bank Easement Acquisition" \$750,000 thru 6/30/2016	6.59	9,9,9,9,9,9,9,8,8,7,7,6,6,4,3,0,0	17	0		
92	176-G	Mesabi Trail, Wetland Crossing and Bridge Rehab	St Louis and Lake Counties Regional Railroad Authority [Manzoline, Robert]	\$1,231,500	NE	- We may want to combine more than one year and add extra funding so they don't keep coming back in every year. My back of the envelop calculation is 3.7 million. - (116P.08 5, 6) Highly leveraged withoutside funds. We should fund 1/2 of the remaing total and ask them to come back in 2 years. - \$1,231,500	-Continuation -To complete the trail segment from TH 135 to Embarrass -DNR owned bridge in a WMA -See DNR response to staff questions -M.L. 2016 "Mesabi Trail, Wetland Crossing and Bridge Rehab" \$1,231,500 pending TH 135 to Embarrass segment -M.L. 2015 "Mesabi Trail Development Soudan to Ely-Phase II" \$1,000,000 (completed 6/30/2018) 7 miles between Soudan and Ely -M.L. 2014 "Mesabi Trail Development Soudan to Ely-Phase" \$1,000,000 (completed 6/30/2017) 11 miles of trail segments near Vermillion State Park -Capital Bonding?	6.35	9,9,9,8,8,8,8,7,7,6,6,5,5,5,3,0	17	0		
93	169-G	Metropolitan Regional Parks System Land Acquisition	Metropolitan Council [Streets Jensen, Deborah]	\$2,400,000	Metro	- Find additional partnerships. - (116P.08 5, 6) Highly leveraged with outside funds 2:3 match equals \$2.9M	-Fee Title Acquisition -Continuation -M.L. 2015 "Metropolitan Regional Park System Land Acquisition Phase 4" \$1,000,000 thru 6/30/2018 -M.L. 2014 "Metropolitan Regional Park System Acquisition" \$1,500,000 thru 6/30/2017	5.00	9,9,9,8,8,8,6,6,6,6,5,5,0,0,0,0	17	0		

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94	180-G	Tower Trailhead Boat Landing and Habitat Improvement	City of Tower [Keith, Linda]	\$983,448	NE	- Reassess existing opportunities. - Continuation of what was started last year. - (116P.08 5) - Don't want to fund - don't think we can fund parking lot paving. - Why not use existing parking lot across street? - For road and parking lot, available lot across street next to water	-DNR Water Recreation Account? -DNR recently built public access less than a mile away -M.L. 2016 Tower Historic Harbor Tower Trail ENRTF \$679,000 pending -Capital Bonding? -See DNR response to staff questions	4.06	9,9,9,6,6,6,6,5,4,4,1,0,0,0,0,0	16	1		
95	H. Other (1 Proposals / \$135,000)												
96	181-H	Contract Agreement Reimbursement	MN DNR [Sherman-Hoehn, Katherine]	\$135,000	Statewide	- (116P.08 8) - \$135,000	Not ranked: DNR fiscal agent funding for reimbursement contracts	8.65	9,9,9,9,9,9,9,9,9,9,9,9,9,7,5	17	0		
97	I. 2016 LCCMR Recommendations Removed from ML 2016 Bill (9 Proposals / \$5,014,000)												
98	182-I	Minnesota Vegetative Buffer Assessment and Prioritization to Protect Water Quality	U of MN [Mulla, David]	\$170,000	Statewide	- (116P.08 2, 3, 4) - \$170,000		6.50	9,9,9,9,9,8,8,8,8,5,0,0,0	14	0		
99	187-I	Solar Cells Manufacturing Research	U of MN [Cui, Tianhong]	\$388,000	Statewide	- (116P.08 2) RESUBMITTED		6.43	9,9,9,9,9,9,9,8,7,3,0,0,0	14	0		
100	189-I	Geotargeted Distributed Clean Energy Initiative	Center for Energy and Environment [Nelson, Carl]	\$800,000	Statewide	- (116P.08 4, 6)		6.43	9,9,9,9,9,8,8,8,6,6,0,0,0	14	0		
101	183-I	Techniques for Water Storage Estimates in Central Minnesota	U of MN [Nieber, John]	\$250,000	Statewide	- (116P.08 2, 3, 4)		6.40	9,9,9,9,9,8,8,8,7,6,5,0,0,0	15	0		
102	188-I	High-Resolution Climate Projections to Aid Local Planning and Implementation Efforts	U of MN [Snyder, Peter]	\$411,000	Statewide	- (116P.08 2, 3, 4)		6.33	9,9,9,9,9,9,9,8,6,5,4,0,0,0	15	0		
103	190-I	State Parks and Trails Land Acquisition	MN DNR [Christie, Jennifer]	\$2,445,000	Statewide	- (116P.08 4, 5, 6)		6.27	9,9,9,9,8,8,8,7,7,6,5,0,0,0	15	0		

Line #	LCCMR ID #	Project Title	Organization [Project Manager]	\$ Request	Region of Impact	Member Notes [Compiled from all members. Notes from individual members are designated with bullets]	Staff Notes	Average Score - Members that Scored	All Member Scores - High to Low	# Members that Scored	# Members with Conflict	SELECTED	LCCMR Recommendation	
104	184-I	Assessing Climate Change Effects on Release of Mercury and Sulfur into Aquatic Ecosystems	U of MN [Nater, Ed]	\$300,000	Statewide	- (116P.08 2, 3, 4)		5.73	9,9,9,9,8,8,7,7,5,4,2,0,0,0	15	0			
105	185-I	Workshops and Outreach for Nontoxic Ammunition Alternatives	U of MN [Ponder, Julia]	\$133,000	Statewide	- (116P.08 4)		5.67	9,9,9,9,8,7,7,6,5,4,3,0,0,0	15	0			
106	186-I	Analysis of Thermally Modified Wood Nesting Boxes for Birds	U of MN - NRRI [Hueffmeier, Ryan]	\$117,000	Statewide	- (116P.08 6)		4.73	9,9,9,8,7,7,5,3,3,2,0,0,0,0	15	0			
107	J. Governor Vetoed Appropriations (1 proposal / \$488,128)													
108	191-J	Real Wildlife, Real Conservation, Real Impact	Wildlife Science Center [Callahan, Peggy]	\$488,128	Statewide	- (116P.08 4) - Poorly constructed budget, ineligible expenses.	- Activity budgets add up to \$232,500, but budget & dollars requested are for \$488,128. - Proposal has outcome completion dates listed that are prior to project start date. - Difference between Activity 1 & 2 is unclear; cost per student is 50% greater in Activity 2. - Budget includes \$65,000 for travel, but activity descriptions state project will occur "at the Wildlife Science Center" - not clear what the travel is for or where it is to. It appears part of this sum may be for a vehicle purchase. - No mention of curriculum development in activity descriptions; however, budget includes \$48,254 for "curriculum expansion and development". RFP category description indicates "Proposals to develop new curriculum will not be considered." - Budget includes capital expenditures over \$5,000: \$12,000 for "equipment to live stream video"; not clear to which activity this and other electronics equipment listed correspond. - Budget includes potentially ineligible expenses: \$70,000 for "Project Director" if this person is the Executive Director (who is listed as project manager); \$5,000 for "marketing support"; \$18,750 for liability insurance; and undesignated portions of \$65,000 for "vehicle", "maintenance", and "insurance to transport animals".		3.35	9,9,8,7,6,5,4,3,3,2,1,0,0,0,0,0	17	0		

Line #	LCCMR ID #	Project Title	Organization [Project Manager]	\$ Request	Region of Impact	Member Notes [Compiled from all members. Notes from individual members are designated with bullets]	Staff Notes	Average Score - Members that Scored	All Member Scores - High to Low	# Members that Scored	# Members with Conflict	SELECTED	LCCMR Recommendation
109	K. Proposals Received in Response to Extended Deadline of 06/26/16 (3 Proposals / \$11,361,320)												
110	192-K	Voyageurs National Park Crane Lake Visitor Center Partnership	Town of Crane Lake [Janssen, Jim]	\$950,000	NE	- Need NPS written agreement. - (116P.08 5, 6) - Bonding. - Need some Fed interest. - Maybe stage funding? Should try to purchase house. - Need some Fed interest. - \$950,000	- It appears there are existing buildings on the site. - DNR has indicated that they are not a partner on the proposal.	4.76	9,9,9,8,8,7,7,6,5,5,4,3,1,0,0,0,0	17	0		
111	196-K	CREP Implementation Phase 1	Board of Water and Soil Resources [Hoek, Tabor]	\$8,761,320	Statewide	- \$5.6 million already from LCCMR for four phases, said it was final. - Need federal guarantee first. - (116P.08 6) Seems like intended to usurp normal LCCMR process. - \$5.6 million already from LCCMR for four phases, said it was final. - \$8,761,320	- Related open appropriations: ML 2013 - Conservation Program Technical Assistance = \$3,000,000 (expires 06/30/16); ML 2015 - Acceleration of Minnesota Conservation Assistance - Final Phase = \$1,000,000 (expires 06/30/18). - Submitted in response to 2016 RFP, but not selected for a presentation to LCCMR.	3.88	9,9,9,9,8,7,5,3,3,2,1,1,0,0,0,0,0	17	0		
112	193-K	Organic Weed Control Using Solar-Powered Robots	U of MN - Morris [Reese, Michael]	\$1,650,000	Statewide	- Toro investment needed. - (116P.08 2) Invite back for next year, refine relationship and patent with Toro. - Extremely innovative and real world application. - \$1,650,000	- Proposal is to develop technology for agriculture weed control. - Budget includes capital expenditures over \$5,000: \$95,000 for "Toro Groundsmaster Mower"; \$42,000 for "Customized Electric UTV"; \$95,000 for "Robot Platform"; \$8,507 for "Trailer for Portable Solar Charging Station"; \$19,000 for "Smart Charge Controller and Battery Packs"; \$12,000 for "Solar PV Panels" [TOTAL = \$271,507]. - Budget includes \$7,200 for exhibit fees at FarmFest and MN State Fair, plus \$2,200 for exhibit display. - Budget has inadequate detail for \$10,000 in "lab supplies" and \$12,000 for "materials to fabricate custom weeding implements" - Related open appropriations to West Central Research and Outreach Center: ML 2014 - Transitioning Minnesota Farms to Local Energy = \$500,000 (expires 06/30/17); ML 2014 - Life Cycle Energy of Renewably Produced Nitrogen Fertilizers = \$250,000 (expires 06/30/17); ML 2015 - Renewable and Sustainable Fertilizers Produced Locally = \$1,000,000 (expires 06/30/18); ML 2016 - Utilization of Dairy Farm Wastewater for Sustainable Production = \$475,000; ML 2016 - Solar Energy Utilization for Minnesota Swine Farms - Phase II (expires 06/30/19); ML 2016 - Solar Energy Utilization for Minnesota Swine Farms - Phase II (expires 06/30/19)	2.94	9,9,7,5,4,3,3,3,3,2,2,2,1,0,0,0,0,0	17	0		
113	TOTAL \$ REQUEST REMAINING =			\$102,876,707									