

V. Recommendations

“to the extent known by the commission, descriptions of the projects anticipated to be supported by the trust fund during the next biennium;”

There is \$50,828,000 available for expenditure in each year of the FY18-19 biennium from the Environment and Natural Resources Trust Fund (ENRTF) –biennial total available \$101,656,000. The amount available for expenditure is determined by the MN Constitution which states: “The amount appropriated each year of a biennium....may be up to 5.5% of the market value of the fund on June 30 one year before the start of the biennium”. The value of the ENRTF on June 30, 2016 was \$924,152,297.79.

The LCCMR is making a funding recommendation to the 2017 Legislature totaling \$59,156,000. Of this amount, \$50,728,000 is from the Environment and Natural Resources Trust Fund for FY18 and \$8,428,000 is from the Environment and Natural Resources Trust Fund for FY17. The LCCMR will be making a future additional funding recommendation for FY19 totaling up to \$50,828,000 from the Environment and Natural Resources Trust Fund to the 2018 Legislature. As stated in M.S. 116P, the LCCMR may make an annual or a biennial funding recommendation.

The list of recommended appropriations totaling \$59,156,000 from the Environment and Natural Resources Trust Fund is provided in “Section V. Recommendations.” The funding levels and the proposed legislative bill were adopted by the LCCMR on November 15, 2016.

LCCMR M.L. 2017 ENVIRONMENT AND NATURAL RESOURCES TRUST FUND RECOMMENDATIONS BY SUBDIVISION

LCCMR Process for M.L. 2017 Recommendations

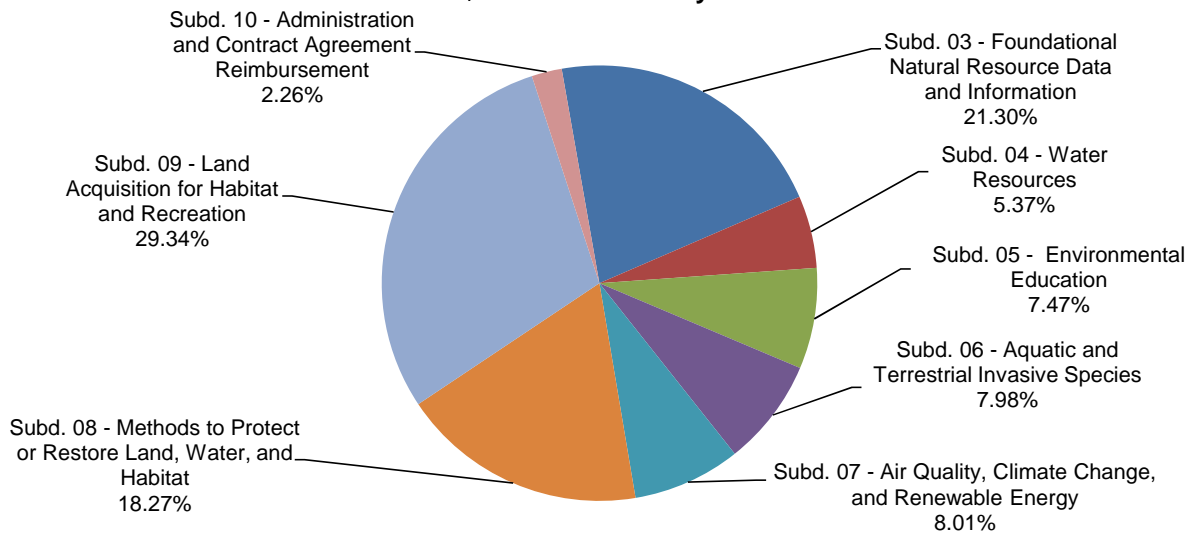
For the FY 2018 and FY 2019 biennium (July 1, 2017 - June 30, 2019), approximately \$50.8 million is available each year (total = \$101,656,000) for funding from the Environment and Natural Resources Trust Fund. Additionally, approximately \$8.4 million in ENRTF funds remain available from FY 2017 for appropriation during the 2017 legislative session if done so before the end of FY 2017. As of July 12-13 and November 15, 2016, the Legislative-Citizen Commission on Minnesota Resources (LCCMR) has selected 69 appropriations totaling \$59.1 million to recommend to the 2017 Minnesota Legislature for funding from the Environment and Natural Resources Trust Fund (ENRTF). The recommendations are the result of the LCCMR's 2017 Request for Proposal (RFP) process, in which 195 proposals requesting a total of approximately \$159.6 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.

December 2 & 10, 2015	2017 Funding Priorities Determined and RFP Adopted
December 16, 2015	2017 RFP Issued
March 21, 2016	2017 RFP Proposal Deadline (Received 195 Proposals totaling approx. \$159.6 million)
June 7-8, 2016	2017 Selection of Proposals for Presentations
June 21, 22, 23, 27, 28, & 29, 2016	2017 Proposal Presentations
July 12-13, 2016	2017 Allocations Recommendations
July 2016 - November 2016	Research Projects Recommended Undergo Peer Review
November 15, 2016 & December 6 and 13, 2016	2017 Appropriation Language Review & Adoption

Summary of Recommendations by Subdivision

Subdivision	\$ Recommended	# Appropriations
Subd. 03 - Foundational Natural Resource Data and Information	\$12,601,000	14
Subd. 04 - Water Resources	\$3,175,000	9
Subd. 05 - Environmental Education	\$4,421,000	9
Subd. 06 - Aquatic and Terrestrial Invasive Species	\$4,721,000	6
Subd. 07 - Air Quality, Climate Change, and Renewable Energy	\$4,738,000	8
Subd. 08 - Methods to Protect or Restore Land, Water, and Habitat	\$10,808,000	12
Subd. 09 - Land Acquisition, Habitat, and Recreation	\$17,357,000	9
Subd. 10 - Administration and Contract Agreement Reimbursement	\$1,335,000	2
TOTAL	\$59,156,000	69

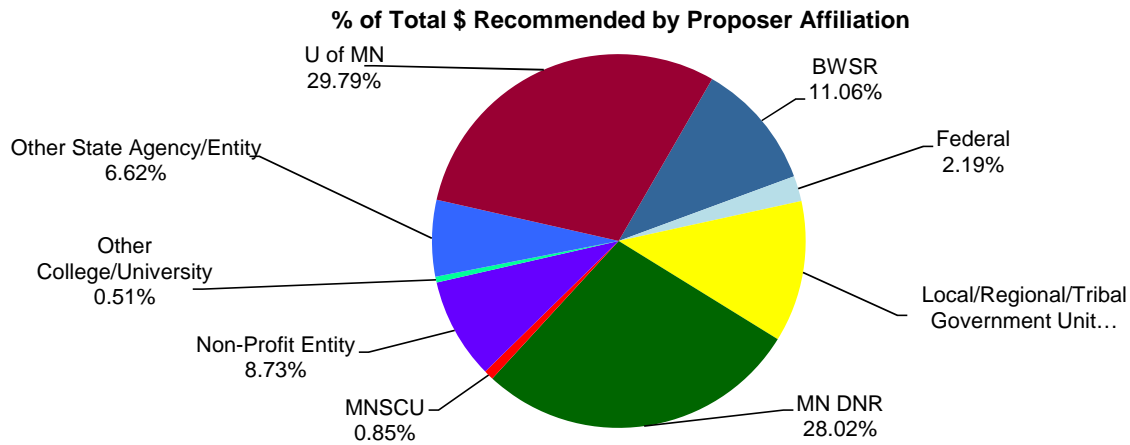
% of Total \$ Recommended by Subdivision



LCCMR M.L. 2017 ENVIRONMENT AND NATURAL RESOURCES TRUST FUND RECOMMENDATIONS BY AFFILIATION AND AREA OF IMPACT

Summary of Recommendations by Proposer Affiliation*		
Affiliation Type by Proposer Affiliation	\$ Recommended	# Appropriations
Minnesota Board of Water and Soil Resources (BWSR)	\$6,540,000	2
Federal	\$1,293,000	2
Local/Regional/Tribal Government Unit	\$7,244,000	7
Minnesota Department of Natural Resources (MN DNR)	\$16,577,000	10
Minnesota State Colleges and Universities (MNSCU)	\$500,000	1
Non-Profit Entity	\$5,165,000	12
Other College/University	\$300,000	1
Other State Agency/Entity	\$3,916,000	6
University of Minnesota (U of MN)	\$17,621,000	28
TOTAL	\$59,156,000	69

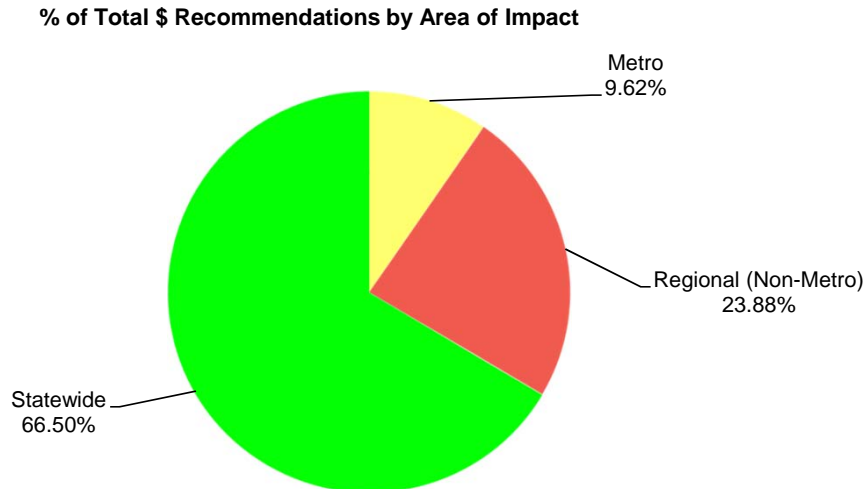
*Dollar amounts based on project manager affiliation listed in the proposal; some proposals have multiple partners with multiple affiliations and dollars requested distributed between them.



Summary of Recommendations by Area of Impact		
Area of Impact	\$ Recommended	# Appropriations
Metro*	\$5,692,000	10
Regional	\$14,128,000	18
Statewide	\$39,336,000	41
TOTAL	\$59,156,000	69

* "Metro" region includes the 11 counties of Anoka, Carver, Chisago, Dakota, Hennepin, Isanti, Ramsey, Scott, Sherburne, Washington, and Wright.

** "Regional" means area of impact is less than "Statewide" but includes one or more regions of the state ("Northwest", "Northeast", "Central", "Southwest", or "Southeast") other than the 11-county "Metro" region.



Pending

M.L. 2017 Environment and Natural Resources Trust Fund (ENRTF) Recommendations (FY 2017 and FY 2018)

For the FY 2018 and FY 2019 biennium (July 1, 2017 - June 30, 2019), approximately \$50.8 million is available each year (total = \$101,656,000) for funding from the Environment and Natural Resources Trust Fund. Additionally, approximately \$8.4 million in ENRTF funds remain available from FY 2017 for appropriation during the 2017 legislative session if done so before the end of FY 2017. As of July 12-13 and November 15, 2016, the Legislative-Citizen Commission on Minnesota Resources (LCCMR) has selected 69 appropriations totaling \$59.1 million to recommend to the 2017 Minnesota Legislature for funding from the Environment and Natural Resources Trust Fund (ENRTF). The recommendations are the result of the LCCMR's 2017 Request for Proposal (RFP) process, in which 195 proposals requesting a total of approximately \$159.6 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 (\$59,156,000)	Percentage of Total Recommendation
Subd. 03 Foundational Natural Resource Data and Information 14 Appropriations	\$12,601,000	21.30%
Subd. 04 Water Resources 9 Appropriations	\$3,175,000	5.37%
Subd. 05 Environmental Education 9 Appropriations	\$4,421,000	7.47%
Subd. 06 Aquatic and Terrestrial Invasive Species 6 Appropriations	\$4,721,000	7.98%
Subd. 07 Air Quality, Climate Change, and Renewable Energy 8 Appropriations	\$4,738,000	8.01%
Subd. 08 Methods to Protect or Restore Land, Water, and Habitat 12 Appropriations	\$10,808,000	18.27%
Subd. 09 Land Acquisition, Habitat, and Recreation 9 Appropriations	\$17,357,000	29.34%
Subd. 10 Administration and Contract Agreement Reimbursement 2 Appropriations	\$1,335,000	2.26%
TOTAL \$ RECOMMENDATION	\$59,156,000	100.00%

Fund Source	\$ Recommended
FY 2017 - Environment and Natural Resources Trust Fund (ENRTF)	\$8,428,000
FY 2018 - Environment and Natural Resources Trust Fund (ENRTF)	\$50,728,000
Total \$	\$59,156,000

M.L. 2017 Environment and Natural Resources Trust Fund (ENRTF) Recommendations (FY2017 and FY2018)

Subd.	ENRTF Proposal ID	Title	Total LCCMR \$ Recommended	Total LCCMR \$ Recommended	Organization	Program Manager	Region of Impact*
			FY2017	FY2018			
Subd. 03 Foundational Natural Resource Data and Information (14 Recommendations - Subtotal = \$12,601,000)							
03a	001-A	County Geologic Atlases - Continuation	\$4,729,000	\$0	U of MN - Minnesota Geological Survey	Dale Setterholm	Statewide
03b	002-A	Assessment of Public Benefits of Protecting Source Water	\$0	\$320,000	U of MN	Bonnie Keeler	Statewide
03c	004-A	Preserving Minnesota Prairie Plant Diversity – Phase II	\$0	\$900,000	U of MN	Ruth Shaw	Central, SE, SW, NW
03d	006-A	Minnesota Biological Survey - Continuation	\$0	\$2,900,000	MN DNR	Bruce Carlson	Statewide
03e	007-A	Minnesota Wildflowers Online Botanical Reference – Phase II	\$0	\$270,000	Minnesota Wildflowers Information	Katy Chayka	Statewide
03f	009-A	Assessment of Microbes for Improving Wild Rice Restoration	\$0	\$334,000	U of MN - Duluth NRRI	Chanlan Chun	NE
03g	011-A	Drainage Records Modernization Cost Share - Phase II	\$0	\$540,000	Board of Water and Soil Resources	Timothy Gillette	Statewide
03h	012-A	Groundwater Contamination Mapping	\$0	\$400,000	MPCA	Hans Neve	Statewide
03i	013-A	Landslide Susceptibility, Mapping, and Management Tools	\$0	\$500,000	U of MN	Karen Gran	Statewide
03j	015-A	Moose Calf Surveys and Monitoring	\$0	\$348,000	U of MN	Mark Ditmer	NE
03k	016-A	Cedar Creek Natural Area Wolf Recolonization Assessment	\$0	\$398,000	U of MN	Forest Isbell	Metro
03l	017-A	Effects of Wolf Predation on Beaver, Moose, and Deer	\$0	\$293,000	Voyageurs National Park	Steve Windels	NE
03m	031-A	Mapping Taxonomy and Environmental Toxicology of Minnesota Freshwater Sponges	\$0	\$258,000	U of MN	Venugopal Mukku	Statewide
03n	188-l	Analyzing Climate Data to Aid Local Planning Implementation Efforts	\$0	\$411,000	U of MN	Peter Snyder	Statewide
Foundational Natural Resource Data and Information Subtotal =			\$4,729,000	\$7,872,000			

M.L. 2017 Environment and Natural Resources Trust Fund (ENRTF) Recommendations (FY2017 and FY2018)

Subd.	ENRTF Proposal ID	Title	Total LCCMR \$ Recommended	Total LCCMR \$ Recommended	Organization	Program Manager	Region of Impact*
			FY2017	FY2018			
Subd. 04 Water Resources (9 Recommendations - Subtotal = \$3,175,000)							
04a	033-B	Assessment of Household Chemicals and Herbicides in Rivers and Lakes	\$0	\$236,000	U of MN	William Arnold	Statewide
04b	034-B	Wastewater Nitrogen Removal Technology to Protect Water Quality	\$0	\$450,000	U of MN	Paige Novak	Statewide
04c	035-B	Rearing Native Mussels for Reintroduction and Expanding Water Quality Awareness	\$0	\$591,000	Minnesota Zoo	Allan Maguire	Statewide
04d	044-B	Water Quality Monitoring in Southeastern Minnesota Trout Streams	\$0	\$500,000	Winona State University	Neal Mundahl	SE
04e	048-B	Reassessing Toxicity of Petrochemical Spills on Groundwater and Surface Waters	\$0	\$300,000	University of St. Thomas	Dalma Martinovic-Weigelt	NW
04f	055-B	Assessment of Water Quality for Reuse	\$0	\$148,000	U of MN	Satoshi Ishii	Statewide
04g	059-B	Identification of Chemicals of Emerging Concern in Minnesota Fish	\$0	\$400,000	Grand Portage Band of Lake Superior Chippewa	Seth Moore	NE
04h	183-I	Techniques for Water Storage Estimates in Central Minnesota	\$0	\$250,000	U of MN	John Neiber	Statewide
04i	184-I	Assessing Release of Mercury and Sulfur on Aquatic Communities	\$0	\$300,000	U of MN	Ed Nater	Statewide
Water Resources Subtotal =			\$0	\$3,175,000			
Subd. 05 Environmental Education (9 Recommendations - Subtotal = \$4,421,000)							
05a	079-C	Connecting Youth to Minnesota Waterways through Outdoor Classrooms	\$0	\$1,200,000	Wilderness Inquiry	Meg Krueger	Statewide
05b	081-C	Youth Convening Minnesota –Phase II	\$0	\$300,000	Climate Generation: A Will Steger Legacy	Kristen Poppleton	Statewide
05c	082-C	Increasing Diversity in Environmental Careers	\$0	\$1,487,000	MN DNR	Denise Legato	Statewide
05d	083-C	Interactive Water Resource Programs for Planetariums in Minnesota	\$0	\$500,000	U of MN - Bell Museum of Natural History	George Weiblen	Statewide
05e	084-C	Expanding Raptor Center Online Education	\$0	\$270,000	U of MN	Julia Ponder	Statewide

M.L. 2017 Environment and Natural Resources Trust Fund (ENRTF) Recommendations (FY2017 and FY2018)

Subd.	ENRTF Proposal ID	Title	Total LCCMR \$ Recommended	Total LCCMR \$ Recommended	Organization	Program Manager	Region of Impact*
			FY2017	FY2018			
05f	092-C	Local Planning and Implementation Efforts for Bird Habitat	\$0	\$280,000	Audubon Minnesota	Joanna Eckles	Statewide
05g	100-C	Developing Youth Watershed Stewardship in Northwest Minnesota	\$0	\$121,000	Headwaters Science Center	Susan Joy	NW
05h	101-C	Increasing Residential Environmental Learning Center Opportunities	\$0	\$130,000	Audubon Center of the North Woods	Bryan Wood	NE
05i	185-I	Workshops and Outreach to Protect Raptors from Lead Poisoning	\$0	\$133,000	U of MN	Julia Ponder	Statewide
Environmental Education Subtotal =			\$0	\$4,421,000			
Subd. 06 Aquatic and Terrestrial Invasive Species (6 Recommendations - Subtotal = \$4,721,000)							
06a	106-D	Aquatic Invasive Species Research Center - Phase II	\$2,700,000	\$0	U of MN	Nicholas Phelps	Statewide
06b	108-D	Emerald Ash Borer Biocontrol - Phase III	\$0	\$729,000	Minnesota Department of Agriculture	Jonathan Osthus	Statewide
06c	114-D	Invasive Bighead and Silver Carp and Native Fish Evaluation – Phase II	\$0	\$500,000	MN DNR	Bradford Parsons	Central, Metro, SW, SE
06d	119-D	Adapting Stream Barriers to Remove Common Carp	\$0	\$301,000	U of MN	Przemyslaw Bajer	Statewide
06e	122-D	Tactical Invasive Plant Management Plan Development	\$0	\$296,000	Minnesota Department of Agriculture	Monika Chandler	Statewide
06f	123-D	Maximize Value of Water Impoundments to Wildlife	\$0	\$195,000	Audubon Minnesota	Kristin Hall	NW
Aquatic and Terrestrial Invasive Species Subtotal =			\$2,700,000	\$2,021,000			
Subd. 07 Air Quality, Climate Change, and Renewable Energy (8 Recommendations - Subtotal = \$4,738,000)							
07a	128-E	Solar Cells Manufacturing Research	\$0	\$388,000	U of MN	Tianhong Cui	Statewide
07b	129-E	Community-Scale Energy Storage Guide for Renewable Energy	\$0	\$500,000	U of MN	Ellen Anderson	Statewide
07c	131-E	Extraction of Solar Thermal Energy in Minnesota	\$0	\$250,000	U of MN	Filippo Coletti	Statewide

M.L. 2017 Environment and Natural Resources Trust Fund (ENRTF) Recommendations (FY2017 and FY2018)

Subd.	ENRTF Proposal ID	Title	Total LCCMR \$ Recommended	Total LCCMR \$ Recommended	Organization	Program Manager	Region of Impact*
			FY2017	FY2018			
07d	132-E	Assessment of Urban Air Quality	\$0	\$700,000	MPCA	Monika Vadali	Metro
07e	147-E	Generation, Storage, and Utilization of Solar Energy	\$0	\$500,000	U of MN - West Central Research and Outreach Center in Morris	Bradley Heins	Statewide
07f	150-E	District Heating with Renewable Biomass at Camp Ripley Training Center	\$0	\$1,000,000	Department of Military Affairs	Josh Pennington	Central
07g	189-I	Geotargeted Distributed Clean Energy Initiative	\$0	\$800,000	Center for Energy and Environment	Carl Nelson	Statewide
07h	193-K	Develop Solar-Powered Robots for Weed Control in Agricultural Fields	\$0	\$600,000	U of MN	Michael Reese	Statewide
Air Quality, Climate Change, and Renewable Energy Subtotal =			\$0	\$4,738,000			
Subd. 08 Methods to Protect or Restore Land, Water, and Habitat (12 Recommendations - Subtotal = \$10,808,000)							
08a	152-F	Optimizing the Nutrition of Roadside Plants for Pollinators	\$0	\$815,000	U of MN	Emilie Snell-Rood	Central, Metro, NW, SW, SE
08b	153-F	Promoting Conservation Biocontrol of Beneficial Insects	\$0	\$400,000	U of MN	Vera Krischik	Statewide
08c	154-F	Evaluating the Use of Bison to Restore and Preserve Savanna Habitat	\$0	\$388,000	U of MN - Cedar Creek Ecosystem Science Reserve	David Tilman	Central
08d	155-F	State Park Pollinator Habitat Restoration	\$0	\$672,000	MN DNR	Edward Quinn	Central, Metro, NW, SW, SE
08e	156-F	Enhancing Spawning Habitat Restoration in Minnesota Lakes	\$0	\$294,000	U of MN - St. Anthony Falls Laboratory	William Herb	Statewide
08f	157-F	Prescribed-Fire Management for Roadside Prairies	\$0	\$345,000	Minnesota Department of Transportation	Ken Graeve	Central, Metro, NW, SE
08g	158-F	Minnesota Bee and Beneficial Species Habitat Restoration	\$0	\$732,000	Pheasants Forever Inc.	Steven Burdick	Statewide
08h	160-F	Mississippi and Vermillion Rivers Restoration of Prairie, Savanna, and Forest Habitat - Phase X	\$0	\$213,000	Friends of the Mississippi River	Tom Lewanski	Metro
08i	161-F	Community Stewardship to Restore Urban Natural Resources - Phase X	\$0	\$524,000	Great River Greening	Wiley Buck	Metro

M.L. 2017 Environment and Natural Resources Trust Fund (ENRTF) Recommendations (FY2017 and FY2018)

Subd.	ENRTF Proposal ID	Title	Total LCCMR \$ Recommended	Total LCCMR \$ Recommended	Organization	Program Manager	Region of Impact*
			FY2017	FY2018			
08j	162-F	Economic Assessment of Precision Conservation and Agriculture	\$0	\$400,000	Pheasants Forever Inc.	Tanner Bruse	Central, NW, SW, SE
08k	167-F	Mississippi River Habitat Restoration Planning at Halls Island	\$0	\$25,000	Minneapolis Park and Recreation Board	Adam Arvidson	Metro
08l	196-K	Conservation Reserve Enhancement Program (CREP) Outreach and Implementation	\$0	\$6,000,000	BWSR	Tabor Hoek	Statewide
Methods to Protect or Restore Land, Water, and Habitat Subtotal =			\$0	\$10,808,000			
Subd. 09 Land Acquisition, Habitat, and Recreation (9 Recommendations - Subtotal = \$17,357,000)							
09a	169-G	Metropolitan Regional Parks System Land Acquisition	\$0	\$1,500,000	Metropolitan Council	Deborah Streets Jensen	Metro
09b	170-G	Scientific and Natural Areas Acquisition and Restoration, Citizen Science, and Engagement	\$0	\$4,500,000	MN DNR	Peggy Booth	Statewide
09c	171-G	Minnesota State Parks and State Trails Land Acquisition	\$0	\$1,500,000	MN DNR	Jennifer Christie	Statewide
09d	171-G	Minnesota State Trails Acquisition, Development, and Enhancement	\$999,000	\$39,000	MN DNR	Kent Skaar	TBD
09e	172-G	Native Prairie Stewardship and Prairie Bank Easement Acquisition	\$0	\$3,500,000	MN DNR	Judy Schulte	Central, NW, SW, SE
09f	174-G	Leech Lake Acquisition	\$0	\$1,500,000	Leech Lake Division of Resource Management	Levi Brown	Central
09g	176-G	Mesabi Trail Development	\$0	\$2,269,000	St Louis and Lake Counties Regional Railroad Authority	Robert Manzoline	NE
09h	180-G	Tower Trailhead Boat Landing and Habitat Improvement – Phase II	\$0	\$600,000	City of Tower	Linda Keith	NE
09i	192-K	Land Acquisition for Voyageurs National Park Crane Lake Visitors Center	\$0	\$950,000	Town of Crane Lake	Jim Janssen	NE
Land Acquisition, Habitat and Recreation Subtotal =			\$999,000	\$16,358,000			

M.L. 2017 Environment and Natural Resources Trust Fund (ENRTF) Recommendations (FY2017 and FY2018)

Subd.	ENRTF Proposal ID	Title	Total LCCMR \$ Recommended	Total LCCMR \$ Recommended	Organization	Program Manager	Region of Impact*
			FY2017	FY2018			
Subd. 10 Administration and Contract Agreement Reimbursement (2 Recommendations - Subtotal = \$1,335,000)							
10a	181-H	Contract Agreement Reimbursement	\$0	\$135,000	MN DNR	Katherine Sherman-Hoehn	Statewide
10b	n/a	Legislative-Citizen Commission on Minnesota Resources (LCCMR) Administration	\$0	\$1,200,000	LCCMR	Susan Thornton	Statewide
Administration and Contract Agreement Reimbursement Subtotal =			\$0	\$1,335,000			
Total \$ Recommending =			\$8,428,000	\$50,728,000			

* 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.

