

**M.L. 2016 Environment and Natural Resources Trust Fund (ENRTF)
M.L. 2016 Appropriations: Chapter 186, Sec. 2 (FY2017)**

For the FY 2016 and FY 2017 biennium (July 1, 2015 - June 30, 2017), approximately \$46.3 million is available each year (total = \$92,674,000) for funding from the Environment and Natural Resources Trust Fund. In response to the 2016 Request for Proposal (RFP) 186 proposals requesting a total of approximately \$131 million were received. Through a competitive, multi-step process, 97 of these proposals, requesting a total of \$70.4 million, were chosen to present to the LCCMR and 89 of those proposals were selected to receive a recommendation for funding to the 2016 MN Legislature. The Legislature adopted 79 of the recommendations, including 73 without any changes and 6 at a decreased or increased dollar amount; dropped 10 of the recommendations; and added 7 new appropriations for a total of 86 appropriations. On 05/31/16, 79 of the appropriations, totaling \$37,909,000, were signed into law by the Governor as M.L. 2016, Chapter 186 and 7 appropriations, totaling \$8,428,000, were line-item vetoed.

Topic Area	\$ Appropriated (\$37,909,000)	Percentage of Total Recommendation
Subd. 03 Foundational Natural Resource Data and Information 17 Appropriations [18 Projects]	\$7,958,000	20.99%
Subd. 04 Water Resources 23 Appropriations	\$7,799,000	20.57%
Subd. 05 Environmental Education 9 Appropriations	\$2,312,000	6.10%
Subd. 06 Aquatic and Terrestrial Invasive Species 7 Appropriations [8 Projects]	\$5,860,000	15.46%
Subd. 07 Air Quality, Climate Change, and Renewable Energy 5 Appropriations	\$2,090,000	5.51%
Subd. 08 Methods to Protect, Restore, & Enhance Land, Water, & Habitat 9 Appropriations	\$4,515,000	11.91%
Subd. 09 Land Acquisition, Habitat, and Recreation 7 Appropriations	\$7,165,000	18.90%
Subd. 10 Administration 2 Appropriations	\$210,000	0.55%
TOTAL \$ APPROPRIATED	\$37,909,000	100.00%

Fund Source	FY2017 \$ Available
FY 2017 - Environment and Natural Resources Trust Fund (ENRTF)	\$46,337,000

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			ENRTF: FY2017			
Subd. 03 Foundational Natural Resource Data and Information (17 Appropriations [18 Projects] - Subtotal = \$7,958,000)						
03a	003-A	Data-Driven Pollinator Conservation Strategies	\$520,000	U of MN	Daniel Cariveau	Central, NW, SW
03b	005-A	Native Bee Surveys in Minnesota Prairie and Forest Habitats	\$600,000	MN DNR	Crystal Boyd	Central, Metro, NW, SE, SW
03c	009-A	Prairie Butterfly Conservation, Research, and Breeding - Phase II	\$421,000	Minnesota Zoological Garden	Erik Runquist	NW, SW
			\$329,000	MN DNR	Robert Dana	
03d	004-A	Statewide Monitoring Network for Changing Habitats in Minnesota	\$500,000	MN DNR	Bruce Carlson	Statewide
03e	001-A	Completing National Wetland Inventory Update for Minnesota	\$1,500,000	MN DNR	Steve Kloiber	NW
03f	011-A	Assessment Tool for Understanding Vegetation Growth Impacts on Groundwater Recharge	\$212,000	U of MN	Gene-Hua (Crystal) Ng	Statewide
03g	006-A	Sentinel Lakes Monitoring and Data Synthesis – Phase III	\$401,000	MN DNR	Melissa Trembl	NE, NW, SE, SW
03h	012-A	State Spring Inventory for Resource Management and Protection - Phase II	\$370,000	MN DNR	Jim Berg	Statewide
03i	020-A	Enhancing Understanding of Minnesota River Aquatic Ecosystem	\$500,000	MN DNR	Tony Sindt	Central, Metro, SE, SW
03j	016-A	Improving Brook Trout Stream Habitat Through Beaver Management	\$225,000	Minnesota State University - Bemidji	Andrew Hafs	NE
03k	023-A	Evaluate Temperature, Streamflow, and Hydrogeology Impact on Brook Trout Habitat	\$115,000	Minnesota Geological Survey	Bob Tipping	SE
03l	007-A	Restoration of Elk to Northeastern Minnesota	\$300,000	U of MN	James Forester	NE
03m	008-A	Game and Nongame Bird Pesticide Exposure	\$349,000	U of MN	Julia Ponder	Statewide

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03n	013-A	Evaluating Insecticide Exposure Risk for Grassland Wildlife on Public Lands	\$250,000	MN DNR	Nicole Davros	Central, SE, SW
03o	014-A	Development of Innovative Cost-Saving Methodology for Forest Inventory	\$800,000	MN DNR	Dennis Kepler	Statewide
03p	026-A	Evaluation of Tree Retention Guidelines Pertaining to Wildlife	\$232,000	U of MN - NRRI	Gerald Niemi	Statewide
03q	015-A	Determine Impacts on Wildlife From Emerald Ash Borer Infection of Black Ash Forests	\$334,000	U of MN - NRRI	Gerald Niemi	Statewide
03r	--	GOVERNOR VETO - Aggregate Mapping (\$1,500,000)	\$0	MN DNR	OPEN	
03s	--	GOVERNOR VETO - Pineland Sands Lands and Water Study (\$1,500,000)	\$0	MN DNR	OPEN	
03t	--	GOVERNOR VETO - Natural Resources Research Institute (\$1,100,000)	\$0	U of MN - NRRI	OPEN	
Foundational Natural Resource Data and Information Subtotal =			\$7,958,000			
Subd. 04 Water Resources (23 Appropriations - Subtotal = \$7,799,000)						
04a	037-B	Tracking and Preventing Harmful Algal Blooms	\$500,000	Science Museum of Minnesota	Daniel Engstrom	Statewide
04b	038-B	Assessing the Increasing Harmful Algal Blooms in Minnesota Lakes	\$270,000	U of MN - St. Anthony Falls Laboratory	Miki Hondzo	Statewide
04c	036-B	Restoring Native Mussels in Streams and Lakes	\$600,000	MN DNR	Mike Davis	Statewide
04d	053-B	Assessing Techniques for Eliminating Contaminants to Protect Native Fish and Mussels	\$287,000	University of St Thomas	Kristine Wammer	Statewide
04e	035-B	Assessing Neonicotinoid Insecticide Effects on Aquatic and Soil Communities	\$400,000	U of MN	William Arnold	Statewide
04f	039-B	Bacterial Assessment of Groundwater Supplies Used for Drinking Water	\$299,000	U of MN	Raymond Hozalski	Statewide
04g	049-B	Understanding Bedrock Fracture Flow to Improve Groundwater Quality	\$183,000	U of MN - MN Geological Survey	Anthony Runkel	Metro, SE

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04h	050-B	Protection of State's Confined Drinking Water Aquifers - Phase II	\$433,000	US Geological Survey	Jared Trost	Statewide
04i	047-B	Assessment of Surface Water Quality With Satellite Sensors	\$345,000	U of MN	Jacques Finlay	Statewide
04j	051-B	Development of Innovative Sensor Technologies for Water Monitoring	\$509,000	U of MN	Tianhong Cui	Statewide
04k	040-B	Wastewater Treatment Process Improvements	\$398,000	U of MN	Timothy LaPara	Statewide
04l	043-B	Membrane-Based Process for Decentralized Drinking Water Production	\$191,000	U of MN	Santiago Romero-Vargas Castrillón	Statewide
04m	060-B	Analyzing Alternative for Muncipal Wastewater Treatment	\$180,000	Minnesota Pollution Control	Scott Kyser	Metro
04n	044-B	Understanding Impacts of Salt Usage on Minnesota Lakes, Rivers, and Groundwater	\$497,000	U of MN	John Gulliver	Statewide
04o	046-B	Microbes for Salt and Metal Removal	\$596,000	U of MN	Daniel Bond	Statewide
04p	054-B	Engineered Biofilter for Sulfate and Metal Removal from Mine Waters	\$440,000	U of MN	Sebastian Behrens	NE
04q	073-B	Developing Biosponge Technology for Removal of Nitrates from Minnesota Waters	\$198,000	U of MN	Lawrence Wackett	Statewide
04r	042-B	Morrison County Performance Drainage and Hydrology Management	\$209,000	Morrison SWCD	Helen McLennan	Central
04s	168-F	Agricultural and Urban Runoff Water Quality Treatment Analysis - Phase II	\$110,000	Blue Earth County Drainage Authority	Craig Austinson	SW
04t	088-B	Surface Water Bacterial Treatment System Pilot Project	\$500,000	Vadnais Lake Area Water Management Organization	Brian Corcoran	Metro
04u	045-B	Assessing Effectiveness of Wetland Restorations for Improved Water Quality	\$420,000	U of MN	Jacques Finlay	Central, NW, SW

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04v	083-B	Integrating Targeted Watershed Planning Tools with Citizen Involvement	\$169,000	Minnesota State University, Mankato - Water Resources Center	Kimberly Musser	Statewide
04w	186-H	Roseau Lake Watershed Targeted Water Quality Improvement	\$65,000	MN DNR	Henry Van Offelen	NW
Water Resources Subtotal =			\$7,799,000			
Subd. 05 Environmental Education (9 Appropriations - Subtotal = \$2,312,000)						
05a	090-C	Minnesota Conservation Apprentice Academy	\$433,000	Board of Water and Soil Resources	Jenny Gieseke	Statewide
05b	091-C	School Forests Outdoor Classrooms	\$440,000	MN DNR	Amy Kay Kerber	Statewide
05c	092-C	Youth-Led Sustainability Projects in 50 Minnesota Communities – Phase III	\$400,000	Prairie Woods Environmental Learning Center	Shelli-Kae Foster	Statewide
05d	101-C	New Prairie Sportsman Statewide Broadcast Video Project	\$300,000	Pioneer Public Television	Patrick Moore	Statewide
05e	096-C	Wildlife and Habitat Conservation Education for Southwest Minnesota High Schools	\$147,000	Minnesota Zoo	Carol Strecker	SW
05f	094-C	Standards-Based Dakota Indian Land Stewardship Education	\$197,000	Dakota Wicohan	Darlene St. Clair	Statewide
05g	099-C	Wolf Management Education in the Classroom – Phase II	\$240,000	International Wolf Center	David Kline	Statewide
05h	112-C	Master Water Steward Program Expansion	\$116,000	Freshwater Society	Peggy Knapp	Statewide
05i	105-C	Promoting Water Quality Stewardship through Student Mentoring and River Monitoring	\$39,000	Minnesota State University - Southwest	Emily Deaver	SW
05j	--	GOVERNOR VETO - Wildlife Science Center (\$500,000)	\$0	Wildlife Science Center	OPEN	
Environmental Education Subtotal =			\$2,312,000			

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Subd. 06 Aquatic and Terrestrial Invasive Species (7 Appropriations [8 Projects] - Subtotal = \$5,860,000)						
06a	121-D	Minnesota Invasive Terrestrial Plants and Pests Center - Phase III	\$3,750,000	U of MN	Robert Venette	Statewide
06b	122-D	Developing Membrane Filtration System to Treat Lake Superior Ballast Water	\$151,000	U of MN	Santiago Romero-Vargas Castrillón	NE
06c	123-D	Advancing Microbial Invasive Species Monitoring from Ballast Discharge	\$368,000	U of MN - Duluth	Randall Hicks	NE
06d	124-D	Biological Control of White Nose Syndrome in Bats - Phase II	\$452,000	U of MN	Christine Salomon	Statewide
06e	128-D	Elimination of Target Invasive Plant Species - Phase II	\$511,000	Minnesota Department of Agriculture	Monika Chandler	Statewide
			\$239,000	U of MN	Angela Gupta	
06f	131-D	Dutch Elm Disease Resistance - Phase II	\$200,000	U of MN	Robert Blanchette	Statewide
06g	134-D	Invasive Carp Management Research in Lake Nokomis Subwatershed	\$189,000	Minneapolis Park and Recreation Board	Adam Arvidson	Metro
Aquatic and Terrestrial Invasive Species Subtotal =			\$5,860,000			
Subd. 07 Air Quality, Climate Change, and Renewable Energy (5 Appropriations - Subtotal = \$2,090,000)						
07a	153-E	Community Solar Garden Installation	\$490,000	Rural Renewable Energy Alliance	BJ Allen	Central
07b	151-E	Waste Heat Recovery with Efficient Thermoelectric Energy Generators	\$400,000	U of MN	Uwe Kortshagen	Metro
07c	141-E	Hydrogen Fuel from Wind-Produced Renewable Ammonia	\$250,000	U of MN	William Northrop	Metro, NW
07d	148-E	Utilization of Dairy Farm Wastewater for Sustainable Production	\$475,000	U of MN	Bradley Heins	Statewide
07e	149-E	Solar Energy Utilization for Minnesota Swine Farms – Phase II	\$475,000	U of MN - West Central Research and Outreach Center	Lee Johnston	Central, NW, SE, SW
Air Quality, Climate Change, and Renewable Energy			\$2,090,000			

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Subd. 08 Methods to Protect, Restore, and Enhance Land, Water, and Habitat (9 Appropriations - Subtotal = \$4,515,000)						
08a	155-F	Bee Pollinator Habitat Enhancement - Phase II	\$387,000	U of MN	Marla Spivak	Statewide
08b	162-F	Measuring Pollen and Seed Dispersal for Prairie Fragment Connectivity	\$556,000	U of MN	Lauren Sullivan	NW
08c	154-F	Establishment of Permanent Habitat Strips Within Row Crops	\$179,000	Science Museum of Minnesota	Shawn Schottler	Statewide
08d	019-A	Evaluate Prescribed Burning Techniques to Improve Habitat Management for Brushland Species	\$267,000	U of MN	Rebecca Montgomery	NE
08e	159-F	Controlling Reed Canary Grass to Regenerate Floodplain Forest	\$218,000	Minnesota State Office of National Audubon Society	Tim Schlagenhaft	SE
08f	165-F	Forest Management for Mississippi River Drinking Water Protection	\$300,000	Crow Wing SWCD	Melissa Barrick	Central
08g	166-F	Upland, Wetland, and Shoreline Restoration in Greater Metropolitan Area	\$509,000	Great River Greening	Wiley Buck	Metro
08h	169-F	Bluffland Restoration and Monitoring in Winona	\$99,000	Winona State University	Neal Mundahl	SE
08i	173-f	Champlin Mill Pond Shoreland Restoration	\$2,000,000	City of Champlin	Todd Tuominen	Metro
08j	--	GOVERNOR VETO - Pollinator Highway Demonstration Projects (\$2,200,000)	\$0	MN DOT	OPEN	
Methods to Protect, Restore, and Enhance Land, Water, and Habitat Subtotal =			\$4,515,000			
Subd. 09 Land Acquisition, Habitat, and Recreation (7 Appropriations - Subtotal = \$7,165,000)						
09a	175-G	Scientific and Natural Area Acquisition and Restoration	\$1,386,000	MN DNR	Peggy Booth	Statewide
09b	179-G	Minnesota Point Pine Forest Scientific and Natural Area Acquisition	\$500,000	MN DNR	Peggy Booth	NE

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09c	177-G	Conservation Easements in Avon Hills - Phase III	\$1,300,000	Saint Johns Arboretum and University	Thomas Kroll	Central
09d	181-G	Lincoln Pipestone Rural Water System Acquisition for Wellhead Protection	\$1,500,000	Lincoln Pipestone Rural Water System	Jason Overby	SW
09e	178-G	Mesabi Trail Segment from Highway 135 to Town of Embarrass	\$1,200,000	St. Louis & Lake Counties Regional Railroad Authority	Bob Manzoline	NE
09f	183-G	Tower Historic Harbor Trail Connections	\$679,000	City of Tower	Linda Keith	NE
09g	182-G	Otter Tail River Recreational Trail Acquisition	\$600,000	City of Fergus Falls	Gordon Hydukovich	Central
09h	--	GOVERNOR VETO - State Park and Trail Enhancement (\$1,228,000)	\$0	MN DNR	OPEN	
09i	--	GOVERNOR VETO - Douglas County Regional Park and Trail Planning, Development or Acquisitions (\$400,000)	\$0	Douglas County	OPEN	
Land Acquisition for Habitat and Recreation Subtotal =			\$7,165,000			
Subd. 10 Administration (2 Appropriations - Subtotal = \$210,000)						
10a	185-H	Contract Agreement Reimbursement	\$135,000	MN DNR	Jason Tidemann	Statewide
10b	n/a	Grants Management System	\$75,000	LCCMR	Susan Thornton	Statewide
Administration Subtotal =			\$210,000			
Total \$ Appropriated =			\$37,909,000			

* 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.