

**M.L. 2019 Environment and Natural Resources Trust Fund (ENRTF)
LCCMR Recommendations for FY 2020**

As of July 18, 2018 the Legislative-Citizen Commission on Minnesota Resources (LCCMR) has selected 68 projects totaling \$53,696,000 to recommend to the 2019 Minnesota Legislature for funding from the Environment and Natural Resources Trust Fund (ENRTF). The recommendations are the result of the LCCMR's 2019 Request for Proposal (RFP) process, in which 273 proposals requesting a total of approximately \$191 million were received and considered through a competitive, multi-stage evaluation. The recommendations range from funding the full proposal and dollar amount requested to partial funding for specific proposal elements.

Topic Area	\$ Recommended	Percentage of Total Recommendation
Subd. 03 Foundational Natural Resource Data and Information 16 Recommendations	\$9,918,000	18.47%
Subd. 04 Water Resources 19 Recommendations	\$5,215,000	9.71%
Subd. 05 Technical Assistance, Outreach, and Environmental Education 3 Recommendations	\$886,000	1.65%
Subd. 06 Aquatic and Terrestrial Invasive Species 2 Recommendations	\$3,100,000	5.77%
Subd. 07 Air Quality and Renewable Energy 4 Recommendations	\$1,485,000	2.77%
Subd. 08 Methods to Protect or Restore Land, Water, and Habitat 4 Recommendations	\$4,453,000	8.29%
Subd. 09 Land Acquisition, Habitat, and Recreation 15 Recommendations	\$25,101,000	46.75%
Subd. 10 Administration and Contract Agreement Reimbursement 3 Recommendations	\$1,538,000	2.86%
Subd. 11 Wastewater Treatment Recommendations 2 Recommendations	\$2,000,000	3.72%
	\$53,696,000	100.00%
Debt Service per M.L. 2018, Chp. 214, Art. 6, Sec. 4, Subd. 4	\$7,840,000	
GRAND TOTAL	\$61,536,000	

Fund Source	\$ Amount
FY 2020 - Environment and Natural Resources Trust Fund (ENRTF)	\$61,387,000
ENRTF Dollars Reallocated from 2016 Appropriations	\$149,000
Total \$	\$61,536,000

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Subd. 03 Foundational Natural Resource Data and Information (16 Recommendations - Subtotal = \$9,918,000)								
03a	001-A	Minnesota Biological Survey	\$ 1,500,000	\$ 1,500,000	\$ -	MN DNR	Bruce Carlson	Statewide
03b	003-A	Restoring Native Mussels in Streams and Lakes	\$ 500,000	\$ 500,000	\$ -	MN DNR	Mike Davis	Statewide
03c	005-A	Quantifying Exposure of Minnesota's Raptors to Mercury and PFAS	\$ 250,000	\$ 250,000	\$ -	Hawk Ridge Bird Observatory	Matthew Etterson	Statewide, NE
03d	014-A	Minnesota Trumpeter Swan Migration Ecology and Conservation	\$ 300,000	\$ 300,000	\$ -	U of MN	David Andersen	Statewide
03e	016-A	Spruce Grouse as Indicators for Boreal Forest Connectivity	\$ 350,000	\$ 350,000	\$ -	U of MN - Raptor Center	Julia Ponder	NW, NE
03f	018-A	Understanding Brainworm Transmission to Find Solutions for Minnesota Moose Decline	\$ 400,000	\$ 400,000	\$ -	U of MN	Tiffany Wolf	NE
03g	025-A	Mapping Habitat Use and Disease of Urban Carnivores	\$ 500,000	\$ 500,000	\$ -	U of MN	Nicholas McCann	Metro
03h	027-A	Accelerated Aggregate Resource Mapping	\$ 700,000	\$ 700,000	\$ -	MN DNR	Heather Arends	SW
03i	032-AH	Den Boxes for Fishers and Other Nesting Wildlife	\$ 190,000	\$ 190,000	\$ -	U of MN - Duluth NRRI	Ron Moen	Central, Metro, NW, NE
03j	034-AH	Red-headed Woodpeckers as Indicators of Oak Savanna Health	\$ 171,000	\$ 171,000	\$ -	U of MN	David Andersen	Central
03k	035-AH	Implementing Conservation Plans for Avian Species of Concern	\$ 124,000	\$ 124,000	\$ -	Audubon Minnesota	Nathaniel Miller	Statewide
03l	038-AH	Mapping Aquatic Habitats for Moose	\$ 199,000	\$ 199,000	\$ -	U of MN	Joseph Bump	NE
03m	046-AH	Improving Statewide GIS Data by Restoring the Public Land Survey	\$ 135,000	\$ 135,000	\$ -	Minnesota Association of County Surveyors	Patrick Veraguth	Central
03n	002-A	County Geologic Atlases - Part A, Mapping Geology	\$ 2,000,000	\$ 2,000,000	\$ -	U of MN - MN Geological Survey	Barbara Lusardi	Statewide
03o	275-J	County Geologic Atlases - Part B, Mapping Aquifer Hydrology	\$ 2,400,000	\$ 2,400,000	\$ -	MN DNR	Paul Putzier	Statewide
03p	274-J	Unlocking the Science of Minnesota's Moose Decline	\$ 199,000	\$ 199,000	\$ -	Minnesota Zoological Garden	Nicole Mattson	Statewide
Foundational Natural Resource Data and Information Subtotal =			\$9,918,000	\$9,918,000	\$0			
Subd. 04 Water Resources (19 Recommendations - Subtotal = \$5,215,000)								
04a	048-B	Determining the Influence of Insecticides on Algal Blooms	\$ 350,000	\$ 350,000	\$ -	U of MN	William Arnold	Statewide

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04b	049-B	Benign Design: Environmental Studies Leading to Sustainable Pharmaceuticals	\$ 415,000	\$ 415,000	\$ -	U of MN	William Arnold	Statewide
04c	050-B	Wastewater Nutrient Reduction through Industrial Source Reduction Assistance	\$ 200,000	\$ 200,000	\$ -	U of MN	Laura Babcock	Statewide
04d	051-B	Quantifying Microplastics in Minnesota's Inland Lakes	\$ 200,000	\$ 200,000	\$ -	U of MN - Duluth	Kathryn Schreiner	Statewide
04e	052-B	Improving Nitrogen Removal in Greater Minnesota Wastewater Treatment Ponds	\$ 325,000	\$ 325,000	\$ -	U of MN	Paige Novak	Statewide
04f	054-B	Improving Drinking Water for Minnesotans through Pollution Prevention	\$ 345,000	\$ 345,000	\$ -	U of MN	Raymond Hozalski	Metro
04g	055-B	Protecting Minnesota Waters by Removing Contaminants from Wastewater	\$ 250,000	\$ 250,000	\$ -	U of MN	Matt Simcik	Statewide
04h	058-B	Reducing Municipal Wastewater Mercury Pollution to Lake Superior	\$ 250,000	\$ 250,000	\$ -	Minnesota Pollution Control Agency	Scott Kyser	NE
04i	062-B	Extracting Deicing Salt from Roadside Soils with Plants	\$ 360,000	\$ 360,000	\$ -	U of MN	Bo Hu	Statewide
04j	064-B	Transformation of Plastic Waste into a Valued Resource	\$ 225,000	\$ 225,000	\$ -	U of MN	Brett Barney	Statewide
04k	072-B	Accelerating Perennial Crop Production to Prevent Nitrate Leaching	\$ 440,000	\$ 440,000	\$ -	Stearns County Soil and Water Conservation District	Dennis Fuchs	Central
04l	076-B	Farm-Ready Cover Crops for Protecting Water Quality	\$ 741,000	\$ 741,000	\$ -	Central Lakes College - Ag and Energy Ctr	Keith Olander	Central, Metro, NW, SW, SE
04m	077-B	Setting Realistic Nitrate Reduction Goals in Southeast Minnesota	\$ 350,000	\$ 350,000	\$ -	U of MN	John Nieber	SE
04n	100-BH	Mapping Unprofitable Cropland for Water and Wildlife	\$ 100,000	\$ 100,000	\$ -	Science Museum of Minnesota - St. Croix Research Station	Jason Ulrich	Statewide
04o	101-BH	Evaluating Locally-Sourced Materials for Road Salt Reduction	\$ 162,000	\$ 162,000	\$ -	U of MN - Duluth NRRRI	Chanlan Chun	Statewide
04p	102-BH	Minnesota Spring Inventory Final Phase	\$ 71,000	\$ 71,000	\$ -	MN DNR	Paul Putzier	Statewide
04q	106-BH	Restoring Impaired Lakes through Citizen-Aided Carp Management	\$ 106,000	\$ 106,000	\$ -	Carver County Water Management Organization	Andrew Dickhart	Metro

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04r	116-BH	Spring Biological Nitrate Removal to Protect Drinking Water	\$ 175,000	\$ 175,000	\$ -	City of Fairmont	Troy Nemmers	SW
04s	053-B	Degrading Chlorinated Industrial Contaminants with Bacteria	\$ 150,000	\$ 1,000	\$ 149,000	U of MN	Paige Novak	Statewide
Water Resources Subtotal =			\$5,215,000	\$5,066,000	\$149,000			
Subd. 05 Technical Assistance, Outreach, and Environmental Education (3 Recommendations - Subtotal = \$886,000)								
05a	122-C	Expanding Camp Sunrise Environmental Program	\$ 237,000	\$ 237,000	\$ -	YouthCARE MN	Shania Abraham	Metro
05b	124-C	Connecting Students to the Boundary Waters	\$ 450,000	\$ 450,000	\$ -	Friends of the Boundary Waters Wilderness	Chris Knopf	Statewide
05c	143-CH	Mississippi National River and Recreation Area Forest Restoration	\$ 199,000	\$ 199,000	\$ -	Mississippi Park Connection	Mary Hammes	Metro
Technical Assistance, Outreach, and Environmental Education Subtotal =			\$ 886,000	\$ 886,000	\$ -			
Subd. 06 Aquatic and Terrestrial Invasive Species (2 Recommendations - Subtotal = \$3,100,000)								
06a	160-D	Building Knowledge and Capacity to Solve AIS Problems	\$ 3,000,000	\$ 3,000,000	\$ -	U of MN - MAISRC	Nicholas Phelps	Statewide
06b	173-DH	Oak Wilt Suppression at its Northern Edge	\$ 100,000	\$ 100,000	\$ -	Morrison Soil and Water Conservation District	Shannon Wettstein	Central
Aquatic and Terrestrial Invasive Species Subtotal =			\$3,100,000	\$3,100,000	\$0			
Subd. 07 Air Quality and Renewable Energy (4 Recommendations - Subtotal = \$1,485,000)								
07a	176-E	Development of Clean Energy Storage Systems for Farms	\$ 650,000	\$ 650,000	\$ -	U of MN - WCROC	William Northrop	Statewide
07b	186-E	White Earth Nation Community Solar for Economic Resilience	\$ 500,000	\$ 500,000	\$ -	Rural Renewable Energy Alliance	Vicki O'Day	NW, NE
07c	190-EH	Sustainable Solar Energy from Agricultural Plant Byproducts	\$ 185,000	\$ 185,000	\$ -	U of MN - Morris	Ted Pappenfus	Statewide
07d	196-EH	Morris Energy and Environment Community Resilience Plan	\$ 150,000	\$ 150,000	\$ -	City of Morris	Blaine Hill	Statewide
Air Quality and Renewable Energy Subtotal =			\$1,485,000	\$1,485,000	\$0			
Subd. 08 Methods to Protect or Restore Land, Water, and Habitat (4 Recommendations - Subtotal = \$4,453,000)								
08a	202-F	Saving Endangered Pollinators through Data-Driven Prairie Restoration	\$ 800,000	\$ 800,000	\$ -	Minnesota Zoological Garden	Erik Runquist	Central, Metro, NW, SW
08b	213-F	Promoting and Restoring Oak Savanna Using Silvopasture	\$ 750,000	\$ 750,000	\$ -	U of MN	Diomy Zamora	Statewide

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08c	225-F	Sauk River Dam Removal and Rock Rapids Replacement	\$ 2,768,000	\$ 2,768,000	\$ -	City of Melrose	Michael Brethorst	Central
08d	232-FH	Conservation and Monitoring of Minnesota's Rare Arctic Plants	\$ 135,000	\$ 135,000	\$ -	U of MN - Duluth	Briana Gross	NE
Methods to Protect or Restore Land, Water, and Habitat Subtotal =			\$4,453,000	\$4,453,000	\$0			
Subd. 09 Land Acquisition, Habitat, and Recreation (15 Recommendations - Subtotal = \$25,101,000)								
09a	247-G	Minnesota Scientific and Natural Areas	\$ 3,500,000	\$ 3,500,000	\$ -	MN DNR	Judy Schulte	Statewide
09b	248-G	Grants for Local Parks, Trails and Natural Areas	\$ 3,000,000	\$ 3,000,000	\$ -	MN DNR	Audrey Mularie	Statewide
09c	249-G	Minnesota State Parks and State Trails In-Holdings	\$ 2,000,000	\$ 2,000,000	\$ -	MN DNR	Jennifer Christie	Statewide
09d	251-G	Minnesota State Trails Development	\$ 5,000,000	\$ 5,000,000	\$ -	MN DNR	Kent Skaar	Statewide
09e	252-G	National Loon Center	\$ 4,000,000	\$ 4,000,000	\$ -	National Loon Center Foundation	Leah Heggerston	Central
09f	253-G	Accessible Fishing Piers	\$ 320,000	\$ 320,000	\$ -	MN DNR	Nancy Stewart	Statewide
09g	254-G	Mesabi Trail Extensions	\$ 3,000,000	\$ 3,000,000	\$ -	St. Louis & Lake Counties Regional Railroad Authority	Bob Manzoline	NE
09h	256-G	Britton Peak to Lutsen Mountain Bike Trail	\$ 300,000	\$ 300,000	\$ -	Superior Cycling Association	Tim Kennedy	NE
09i	257-G	Preserving the Avon Hills with Reverse-Bidding Easements	\$ 1,600,000	\$ 1,600,000	\$ -	Saint Johns Arboretum and University	John Geissler	Central
09j	264-G	Birch Lake Recreation Area Campground	\$ 350,000	\$ 350,000	\$ -	City of Babbitt	Cathy Bissonette	NE
09k	265-G	Bailey Lake Trail and Fishing Pier	\$ 550,000	\$ 550,000	\$ -	City of Virginia	Britt See-Benes	NE
09l	266-G	Vergas Long Lake Trail	\$ 290,000	\$ 290,000	\$ -	City of Vergas	Julie Lammers	NW
09m	269-G	Glacial Edge Trail and Downtown Pedestrian Bridge	\$ 600,000	\$ 600,000	\$ -	City of Fergus Falls	Ryan Miller	NW
09n	271-G	Crane Lake to Vermilion Falls Trail	\$ 400,000	\$ 400,000	\$ -	Voyageur Country ATV	Bruce Beste	NE
09o	272-GH	Restoring Five Sections of the Superior Hiking Trail	\$ 191,000	\$ 191,000	\$ -	Superior Hiking Trail Association	Denny Caneff	NE
Land Acquisition, Habitat, and Recreation Subtotal =			\$ 25,101,000	\$ 25,101,000	\$ -			

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Subd. 10 Administration and Contract Agreement Reimbursement (3 Recommendations - Subtotal = \$1,538,000)								
10a	273-l	Contract Agreement Reimbursement	\$ 135,000	\$ 135,000	\$ -	MN DNR	Katherine Sherman-Hoehn	Statewide
10b	---	LCCMR Administration	\$ 1,400,000	\$ 1,400,000	\$ -	Legislative-Citizen Commission on Minnesota Resources	Becca Nash	Statewide
10c	---	LCC Administration	\$ 3,000	\$ 3,000	\$ -	Legislative Coordinating Commission	Sally Olson	Statewide
Administration and Contract Agreement Reimbursement Subtotal =			\$ 1,538,000	\$ 1,538,000	\$ -			
Subd. 11 Wastewater Treatment Recommendations (2 Recommendations - Subtotal = \$2,000,000)								
11	---	Water Infrastructure Funding Program	\$ 1,000,000	\$ 1,000,000	\$ -	Public Facilities Authority	Jeff Freeman	Statewide
11	---	Point Source Implementation Program	\$ 1,000,000	\$ 1,000,000	\$ -	Public Facilities Authority	Jeff Freeman	Statewide
Wastewater Treatment Recommendations Subtotal =			\$ 2,000,000	\$ 2,000,000	\$ -			
Total \$ Recommendations =			\$ 53,696,000	\$ 53,547,000	\$ 149,000			

* 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.