M.L. 2020 Environment and Natural Resources Trust Fund (ENRTF) Proposals Tentatively Recommended as of July 17, 2019 (FY 2021)

As of July 17, 2019, the Legislative-Citizen Commission on Minnesota Resources (LCCMR) has tentatively selected through simple majority 77 projects totaling \$61,387,000 to recommend to the 2020 Minnesota Legislature for funding from the Environment and Natural Resources Trust Fund (ENRTF). A final decision on recommendations is pending. In response to LCCMR's 2020 Request for Proposal (RFP), 290 proposals requesting a total of approximately \$203 million were received and considered through a competitive, multi-stage evaluation. The following *tentative recommendations* range from funding the full proposal and dollar amount requested to partial funding for specific proposal elements.

Topic Area	ENRTF \$ (\$61,387,000)	Percentage of Total
Subd. 03 Foundational Natural Resource Data and Information 15 Projects	\$8,593,000	14.00%
Subd. 04 Water Resources 8 Projects	\$3,653,000	5.95%
Subd. 05 Technical Assistance, Outreach, and Environmental Education 9 Projects	\$2,738,000	4.46%
Subd. 06 Aquatic and Terrestrial Invasive Species 7 Projects	\$10,425,000	16.98%
Subd. 07 Air Quality and Renewable Energy 3 Projects	\$573,000	0.93%
Subd. 08 Methods to Protect or Restore Land, Water, and Habitat 12 Projects	\$4,219,000	6.87%
Subd. 09 Land Acquisition, Habitat, and Recreation 21 Projects	\$29,551,000	48.14%
Subd. 10 Administration and Contract Agreement Reimbursement 1 Project	\$135,000	0.22%
Subd. 11 Wastewater Treatment Recommendations 1 Project	\$1,500,000	2.44%
Total Project \$	\$61,387,000	100.00%

Fund Source		ENRTF \$
FY 2021 - Environment and Natural Resources Trust Fund (ENRTF)		\$61,387,000
	Total \$	\$61,387,000

M.L. 2020 Environment and Natural Resources Trust Fund (ENRTF) Projects Tentatively Recommended as of July 17, 2019 (FY2021)

Draft Work	Orginal Proposal		Total ENRTF \$							
Plan Subd.	ENRTF ID	Title	FY2021		Organization	Project Manager	Region*			
Subd. 03 Fou	Subd. 03 Foundational Natural Resource Data and Information (15 Projects - Subtotal = \$8,593,000)									
03a	001-A	Geologic Atlases for Water Resource Management	\$	2,000,000	U of MN - Minnesota Geological Survey	Barbara Lusardi	Statewide			
03b	002-A	Expanding Minnesota Ecological Monitoring Network	\$	800,000	MN DNR	Hannah Texler	Statewide			
03c	007-A	County Groundwater Atlas	\$	1,125,000	MN DNR	Paul Putzier	Statewide			
03d	008-A	Foundational Hydrology Data for Wetland Protection and Restoration	\$	400,000	MN DNR	Doug Norris	Statewide			
03e	014-A	Voyageurs Wolf Project – Phase II	\$	575,000	U of MN	Joseph Bump	NE			
03f	016-A	Expanding Restoration and Promoting Awareness of Native Mussels	\$	489,000	Minnesota Zoological Society	Seth Stapleton	Statewide			
03g	017-A	Improving Pollinator Conservation by Revealing Habitat Needs	\$	500,000	U of MN	Colleen Satyshur	Statewide			
03h	018-A	Bee Minnesota - Protect our Native Bumblebees	\$	650,000	U of MN	Declan Schroeder	Statewide			
03i	019-A	Bobcat and Fisher Habitat Use and Interactions	\$	400,000	U of MN	Michael Joyce	Central, Metro, NW, NE			
03j	025-A	Healthy Prairies III: Restoring Minnesota Prairie Plant Diversity	\$	500,000	U of MN	Ruth Shaw	Central, Metro, NW, SW, SE			
03k	040-A	Freshwater Sponges and AIS: Engaging Citizen Scientists	\$	400,000	U of MN	Venugopal Mukku	Statewide			
031	047-AH	Do Beavers Buffer Against Droughts and Floods?	\$	168,000	Voyageurs National Park	Steve Windels	NE			
03m	048-AH	Enhancing Bat Recovery by Optimizing Artificial Roost Structures	\$	190,000	MN DNR	Ed Quinn	Statewide			
03n	049-AH	Tools for Supporting Healthy Ecosystems and Pollinators	\$	198,000	MN DNR	Jessica Petersen	Statewide			
030	056-AH	Conserving Black Terns and Forster's Terns in Minnesota	\$	198,000	U of MN - Duluth NRRI	Annie Bracey	Statewide			

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	Orginal										
Draft Work	Proposal		Total ENRTF \$								
Plan Subd.	ENRTF ID	Title		FY2021	Organization	Project Manager	Region*				
	Foundation	onal Natural Resource Data and Information Subtotal =	\$	8,593,000	<u> </u>						
Subd. 04 Wa	Subd. 04 Water Resources (8 Projects - Subtotal = \$3,653,000)										
04a	070-B	Unprecedented Change Threatens Minnesota's Pristine Lakes	\$	600,000	Science Museum of Minnesota	Mark Edlund	Central, NW, NE				
04b	080-B	Managing Highly Saline Waste from Municipal Water Treatment	\$	250,000	U of MN	Natasha Wright	Statewide				
04c	083-B	Technology for Energy-Generating On-site Industrial Wastewater Treatment	\$	450,000	U of MN	Paige Novak	Statewide				
04d	087-B	Microplastics: Transporters of Contaminants in Minnesota Waters	\$	425,000	U of MN	Lee Penn	Statewide				
04e	098-B	Developing Strategies to Manage PFAS in Land-Applied Biosolids	\$	1,000,000	Minnesota Pollution Control Agency	Summer Streets	Statewide				
04f	104-B	Quantifying New Urban Precipitation and Water Reality	\$	500,000	U of MN	Joe Magner	Statewide				
04g	114-B	Innovative Solution for Protecting Minnesota from PFAS Contamination	\$	250,000	Dem-Con	Bill Keegan	Metro				
04h	116-BH	Expanding Protection of Minnesota Water through Industrial Conservation	\$	178,000	U of MN	Laura Babcock	Statewide				
		Water Resources Subtotal =	\$	3,653,000							
Subd. 05 Tec	hnical Assista	ance, Outreach, and Environmental Education (9 Project	s - Su	ıbtotal = \$2,7	38,000)						
05a	122-C	Statewide Environmental Education via Public Television Outdoor Series	\$	300,000	Pioneer Public Television	Cindy Dorn	Statewide				
05b	123-C	Minnesota Freshwater Quest: Environmental Education on State Waterways	\$	500,000	Wilderness Inquiry	Julie Edmiston	Statewide				
05c	124-C	Teach Science: Schools as STEM Living Laboratories	\$	250,000	Climate Generation: A Will Steger Legacy	Kristen Poppleton	Statewide				
05d	125-C	Mentoring Next Generation of Conservation Professionals	\$	500,000	Minnesota Valley National Wildlife Refuge Trust, Inc.	Deborah Loon	Central, Metro, SE				

M.L. 2020 Environment and Natural Resources Trust Fund (ENRTF) Projects Tentatively Recommended as of July 17, 2019 (FY2021)

Draft Work Plan Subd.	Orginal Proposal ENRTF ID	Title		tal ENRTF \$	Organization	Project Manager	Region*	
05e	127-C	Jay C. Hormel Nature Center Supplemental Teaching Staff	\$	225,000	City of Austin	Luke Reese	SE	
05f	129-C	375 Underserved Youth Learn Minnesota Ecosystems by Canoe	\$	375,000	YMCA of the Greater Twin Cities	Kurt Simer	Metro, NE	
05g	137-CH	YES! Students Take on Water Quality Challenge - Phase	\$	199,000	Prairie Woods Environmental Learning Center	Shelli-Kae Foster	Statewide	
05h	138-CH	Engaging Minnesotans with Phenology: Radio, Podcasts, Citizen Science	\$	198,000	Northern Community Radio, Inc.	Maggie Montgomery	Statewide	
05i	139-CH	Driving Conservation Behavior for Native Mussels and Water Quality	\$	191,000	Minnesota Zoo	Emily Kalnicky	Statewide	
Tech	nical Assistar	nce, Outreach, and Environmental Education Subtotal =	\$	2,738,000				
Subd. 06 Aqu	uatic and Terr	estrial Invasive Species (7 Projects - Subtotal = \$10,425,	,000)					
06a	155-D	Minnesota Invasive Terrestrial Plants and Pests Center (MITPPC) - Phase V	\$	5,000,000	U of MN - MITPPC	Robert Venette	Statewide	
06b	156-D	Protect Community Forests by Managing Ash for Emerald Ash Borer	\$	3,500,000	MN DNR	Valerie McClannahan	Statewide	
06c	157-D	Biological Control of White-Nose Syndrome in Bats - Phase III	\$	440,000	U of MN	Christine Salomon	Statewide	
06d	158-D	Applying New Tools and Techniques Against Invasive Carp	\$	478,000	MN DNR	Brian Nerbonne	Central, SW	
06e	159-D	Emerald Ash Borer and Black Ash: Maintaining Forests and Benefits	\$	700,000	U of MN	Robert Slesak	Statewide	
06f	167-DH	Testing Effectiveness of Aquatic Invasive Species Removal Methods	\$	110,000	U of MN - Duluth NRRI	Valerie Brady	Statewide	
06g	168-DH	Invasive <i>Didymosphenia</i> Threatens North Shore Streams	\$	197,000	Science Museum of Minnesota	Mark Edlund	NE	
		Aquatic and Terrestrial Invasive Species Subtotal =	\$	10,425,000				
Subd. 07 Air	ubd. 07 Air Quality and Renewable Energy (3 Projects - Subtotal = \$573,000)							

M.L. 2020 Environment and Natural Resources Trust Fund (ENRTF) Projects Tentatively Recommended as of July 17, 2019 (FY2021)

Draft Work Plan Subd.	Orginal Proposal ENRTF ID	Title	Total ENRTF \$ FY2021	Organization	Project Manager	Region*
07a	173-E	Storing Renewable Energy in Flow Battery for Grid Use	\$ 250,000	U of MN - Morris	Bryan Herrmann	Central
07b	198-EH	Eco-Friendly Plastics from Cloquet Pulp-Mill Lignin	\$ 193,000	U of MN	Simo Sarkanen	Central, NW, NE
07c	199-EH	Diverting Unsold Food from Landfills and Reducing Greenhouse Gases	\$ 130,000	Second Harvest Heartland	April Rog	Metro
		Air Quality and Renewable Energy Subtotal =	\$ 573,000			
Subd. 08 Me	thods to Prot	ect or Restore Land, Water, and Habitat (12 Projects - S	ubtotal = \$4,219,0	000)		
08a	207-F	Pollinator Central: Habitat Improvement with Citizen Monitoring	\$ 750,000	Great River Greening	Rebecca Tucker	Central, Metro
08b	209-F	Pollinator and Beneficial Insect Strategic Habitat Program	\$ 750,000	MN Board of Water and Soil Resources	Dan Shaw	Statewide
08c	215-F	Lignin-Coated Fertilizers for Phosphate Control	\$ 250,000	U of MN - Duluth NRRI	Eric Singsaas	Statewide
08d	216-F	Implementing Hemp Crop Rotation to Improve Water Quality	\$ 700,000	Central Lakes College	Keith Olander	Central, Metro, SW
08e	218-F	Developing Cover-Crop Systems for Sugar Beet Production	\$ 300,000	U of MN	Anna Cates	Central, NW
08f	219-F	Native Eastern Larch Beetle Decimating Minnesota's Tamarack Forests	\$ 398,000	U of MN	Brian Aukema	Central, Metro, NW, NE
08g	224-F	Habitat Associations of Mississippi Bottomland Forest Marsh Birds	\$ 275,000	National Audubon Society	Luis Ramirez	SE
08h	244-FH	Peatland Restoration in the Lost River State Forest	\$ 135,000	Roseau River Watershed District	Torin McCormack	NW
08i	245-FH	Prescribed Burning for Brushland-Dependent Species - Phase II	\$ 147,000	U of MN	Rebecca Montgomery	NE
08j	247-FH	Pollinator Habitat Creation Along Urban Mississippi River	\$ 129,000	Friends of the Mississippi River	Betsy Daub	Metro
08k	255-FH	Increase Golden Shiner Production to Protect Aquatic Communities	\$ 188,000	U of MN - Duluth - Sea Grant	John Downing	Statewide

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Draft Work Plan Subd.	Orginal Proposal ENRTF ID	Title	Total ENRTF \$ FY2021		Organization	Project Manager	Region*					
081	259-FH	Restoring Turf to Native Pollinator Gardens Across Metro	\$	197,000	Wilderness in the City	Holly Jenkins	Metro					
	Methods to Protect or Restore Land, Water, and Habitat Subtotal = \$ 4,219,000											
Subd. 09 Land Acquisition, Habitat, and Recreation (21 Projects - Subtotal = \$29,551,000)												
09a	261-G	DNR Scientific and Natural Areas	\$	3,000,000	MN DNR	Molly Roske	Statewide					
09b	262-G	Private Native Prairie Conservation through Native Prairie Bank	\$	2,000,000	MN DNR	Judy Schulte	Central, NW, SW, SE					
09c	263-G	Minnesota State Parks and State Trails Inholdings	\$	3,500,000	MN DNR	Jennifer Christie	Statewide					
09d	264-G	Grants for Local Parks, Trails, and Natural Areas	\$	2,400,000	MN DNR	Audrey Mularie	Statewide					
09e	265-G	Mississippi River Aquatic Habitat Restoration and Mussel Reintroduction	\$	1,800,000	Minneapolis Park and Recreation Board	Adam Arvidson	Metro					
09f	266-G	Minnesota Hunter Walking Trails: Public Land Recreational Access	\$	300,000	Ruffed Grouse Society	Gary Drotts	Central, NW, NE					
09g	267-G	Turning Back to Rivers: Environmental and Recreational Protection	\$	1,000,000	The Trust for Public Land	DJ Forbes	Central, Metro, SW, SE					
09h	268-G	Metropolitan Regional Parks System Land Acquisition - Phase VI	\$	1,000,000	Metropolitan Council	Jessica Lee	Metro					
09i	269-G	Minnesota State Trails Development	\$	994,000	MN DNR	Kent Skaar	Statewide					
09j	270-G	Elm Creek Restoration - Phase IV	\$	500,000	City of Champlin	Todd Tuominen	Metro					
09k	271-G	Superior Hiking Trail As Environmental Showcase	\$	450,000	Superior Hiking Trail Association	Denny Caneff	NE					
091	274-G	Upper St. Anthony Falls Enhancements	\$	2,800,000	Friends of the Lock & Dam	Kjersti Monson	Metro					
09m	275-G	Whiskey Creek and Mississippi River Water Quality, Habitat, and Recreation	\$	500,000	Mississippi Headwaters Board	Tim Terrill	Central					
09n	276-G	Perham to Pelican Rapids Regional Trail (West Segment)	\$	2,600,000	Otter Tail County	Charles Grotte	Central					

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Draft Work Plan Subd.	Orginal Proposal ENRTF ID	Title	То	tal ENRTF \$ FY2021	Organization	Project Manager	Region*
09o	277-G	Crow Wing County Community Natural Area Acquisition	\$	400,000	Crow Wing County	Ryan Simonson	Central
09p	279-G	Rocori Trail - Phase III	\$	1,200,000	Rocori Trail Construction Board	Pete Weber	Central
09q	281-G	Mesabi Trail: New Trail and Additional Funding	\$	1,000,000	St. Louis and Lake Counties Regional Railroad Authority	Robert Manzoline	NE
09r	283-G	Ranier Safe Harbor and Transient Dock on Rainy Lake	\$	762,000	City of Ranier	Sherril Gautreaux	NE
09s	284-G	Crane Lake Voyageurs National Park Campground and Visitors Center	\$	3,100,000	Town of Crane Lake	Jim Janssen	NE
09t	285-GH	Chippewa County Acquisition, Recreation and Education	\$	160,000	Chippewa County	Scott Williams	SW
09u	289-GH	Sportsmen's Training and Developmental Learning Center	\$	85,000	Minnesota Forest Zone Trappers Association	Ray Sogard	NE
		Land Acquisition, Habitat, and Recreation Subtotal =	\$	29,551,000			
Subd. 10 Cor	ntract Agreem	ent Reimbursement (1 Project - Subtotal = \$135,000)					
10	290-1	Contract Agreement Reimbursement	\$	135,000	MN DNR	Katherine Sherman-Hoehn	Statewide
		Contract Agreement Reimbursement Subtotal =	\$	135,000			
Subd. 11 Wa	stewater Trea	atment Recommendations (1 Project - Subtotal = \$1,500	0,000))			
11	291-J	Wastewater Treatment Recommendations	\$	1,500,000	Public Facilities Authority	Jeff Freeman	Statewide
		Wastewater Treatment Recommendations Subtotal =	\$	1,500,000			
		Total Project \$ =	\$	61,387,000			