## Chpt. 214 (HF 4425); Art 4 & 6 2018 Environment and Natural Resources Trust

**Fund ENRTF ENRTF** Subd. ID# **Project Title** Organization FY2018 FY2019 Subd. 03 Foundational Natural Resource Data and Information County Geologic Atlases - Part A U of MN - MN Geological 03a \$1,240,000 Survey 003-A Providing Critical Water Quality Information for Lake U of MN 03b \$250,000 Management 004-A Minnesota Biodiversity Atlas - Phase 2 U of MN 03c \$350,000 006-A Peatland Forest Management U of MN 03d \$600,000 Assessing Natural Resource Benefits Provided by Lichens and U of MN 013-A 03e \$213.000 Develop a System to Assess Wildlife Health Threats in Minnesota U of MN 03f 014-A \$280,000 Conservation of Minnesota's Forest Birds of Management U of MN - Duluth NRRI 016-A 03g \$500,000 U of MN - Duluth NRRI Mapping Avian Movement in Minnesota 03h 018-A \$200,000 03i 022-A Improve Trout Stream Management by Understanding Variable U of MN \$400,000 Winter Thermal Conditions 030-A Develop Sonar Data Mapping on Three Rivers to Assess Native National Park Service 03i \$200,000 Mussel Habitat Suitability Minnesota Zoological 03k 011-A Conserving Minnesota's Nine Species of Freshwater Turtles \$300,000 Garden \$0 Subtotal: \$4,533,000 **Subd. 04 Water Resources** Pilot Program to Optimize Local Mechanical and Pond Minnesota Pollution Control 04a 035-B Wastewater Treatment Plants Agency \$89,000 \$611,000 04b 034-B Assess and Develop Strategies to Remove Microscopic Plastic U of MN Particle Pollution from Minnesota Water Bodies \$300,000 037-В Reduce Chlorides in Minnesota Waters by Evaluating Road Salt U of MN 04c \$400,000 Alternatives and Pavement Innovations Protect Water Quality with Efficient Removal of Contaminants in 04d 041-B St. Cloud State University Storm Water Treatment Ponds \$325,000 048-B Develop a Small and Inexpensive Community Drinking Water U of MN 04e \$425,000 **Purification System** U of MN 054-B Evaluate Emerging Pathogens in Lakes, Rivers, and Tap Water to 04f Keep Drinking Water Safe \$325,000 064-B Characterize Unregulated Contaminants in Source Water and Minnesota Department of 04g \$1,000,000 **Drinking Water** Health 039-B Mapping Antibiotic Resistance in Minnesota to Help Protect U of MN 04h Environmental, Animal, and Human Health \$750,000 055-B Farmer-led Expansion of Alfalfa Production to Increase Water U of MN 04i \$500,000 Protection

	ENRTF			ENRTF	
Subd.	ID#	Project Title	Organization	FY2018	FY2019
04j	057-B	Using Perennial Grain Crops in Wellhead Protection Areas to Protect Groundwater	Minnesota Department of Agriculture		\$250,000
04k	094-B	Implement a Pilot Storm Water Credit Trading System in the Shell Rock River Watershed to Improve Water Quality	Shell Rock River Watershed District		\$300,000
41		Lake Alexandria Sanitary District Phosphorus Reduction	BWSR		\$600,000
			Subtotal:	\$89,000	\$5,786,000
Subd.	05 Envi	ronmental Education			
05a	109-C	Prairie Sportsman Statewide Environmental Broadcasts and Videos	Pioneer Public Television		\$300,000
05b	106-C	YES! Students Take on Minnesota Water Quality Challenge	Prairie Woods Environ. Learning Center		\$213,000
05c	112-C	Get Outdoors after School Training	Project Get Outdoors Inc		\$30,000
05d	101-C	Connecting Students with Water Stewardship through Hands-on Learning	Minnesota Trout Unlimited		\$400,000
05e	121-C	Expanding River Watch Program on the Minnesota River With High School Teams	Friends of the Minnesota Valley		\$100,000
05f	102-C	Pollinator Ambassadors Program for Gardens	U of MN		\$250,000
05g	118-C	Morris Prairie Pollinator Demonstration Area and Education	U of MN		\$550,000
05h	120-C	Expanding Nature Knowledge and Experience with New Interactive Exhibits at North Mississippi Regional Park	Minneapolis Parks and Recreation Board		\$500,000
05i	127-C	Update International Wolf Center Exhibits	International Wolf Center		\$1,000,000
05j	108-C	Expanding the State's Reuse Economy to Conserve Natural Resources	ReUSE Minnesota		\$275,000
05k	164-E	Expand Materials Reuse and Recycling Jobs Program	The NetWork for Better Futures MN		\$800,000
051	099-C	Increase Diversity in Environmental Careers to Serve Minnesota's Changing Demographics	MN DNR		\$550,000
			Subtotal:	\$0	\$4,968,000
Subd.	06 Aqua	atic and Terrestrial Invasive Species			
06a	132-D	Minnesota Invasive Terrestrial Plants and Pests Center - Phase 4	U of MN		\$3,500,000
06b	141-D	Palmer Amaranth Detection and Eradication Continuation	Minnesota Department of Agriculture		\$431,000
06c	152-D	Evaluate Control Methods for Invasive Hybrid Cattails	Voyageurs National Park		\$131,000
06d	133-D	Developing RNA Interference to Control Zebra Mussels	U.S. Geological Survey		\$500,000
06e	134-D	Install and Evaluate an Invasive Carp Deterrent for Mississippi River Locks and Dams	U of MN		\$998,000
06f	139-D	Determining Risk of a Toxic Algal in Minnesota Lakes	Science Museum of MN - St. Croix Research Station		\$200,000
			Subtotal:	\$0	\$5,760,000
Subd.	07 Air C	Quality, Climate Change, and Renewable Energy	1		
07a	158-E	Develop Solar Window Concentrators for Electricity	U of MN		\$350,000
07b	159-E	Community-Scale Renewable Energy Storage System Demonstrations	U of MN		\$550,000
	I			<u> </u>	

	ENRTF ID#	Project Title	Organization	ENRTF I	
Subd.				FY2018	FY2019
07c	160-E	Develop Inexpensive Energy from Simple Roll-to-Roll Manufacturing	The University of Minnesota		\$300,000
			Subtotal:	\$0	\$1,200,000
Subd.	08 Met	hods to Protect, Restore, and Enhance Land, V	Vater, and Habitat		
08a	178-F	Nongame Wildlife Program Acceleration	MN DNR		\$220,000
08b	195-F	Develop BioMulch to Replace Plastic Soil Covering in Vegetable and Fruit Production to Increase Yield and Reduce Waste	U of MN - Southwest Research and Outreach Center Lamberton		\$310,000
08c	180-F	Develop Market-Based Alternatives for Perennial Crops to Benefit Water Quality and Wildlife	Science Museum of MN - St. Croix Research Station		\$150,000
08d	157-E	Agricultural Weed Control Using Autonomous Mowers	U of MN - Morris		\$750,000
08e	182-F	Restoring Forests in Minnesota State Parks	MN DNR		\$250,000
08f	189-F	Develop Timber Harvest Strategies to Minimize Soil Impacts to Maintain Healthy and Diverse Forests	U of MN		\$200,000
08g	186-F	Restoring Wetland Invertebrates to Revive Wildlife Habitat	MN DNR		\$400,000
08h	179-F	Preserving and Restoring Minnesota's Native Orchids - Phase 2	U of MN		\$259,000
			Subtotal:	\$0	\$2,539,000
Subd.	09 Land	Acquisition for Habitat and Recreation			
09a	201-G	Local Parks, Trails, and Natural Area Grants	MN DNR		\$2,000,000
09b	205-G	Develop a Mesabi Trail Segment From County Road 88 to Ely	St. Louis & Lake Counties Reg. Railroad Authority		\$600,000
09c	207-G	Harmony State Trail Extension Land Acquisition	City of Harmony		\$235,000
09d	208-G	Mississippi Blufflands State Trail - Red Wing Barn Bluff to Colvill Park Segment	City of Red Wing		\$550,000
09e	212-G	Swedish Immigrant Regional Trail Segment within Interstate State Park	Chisago County Environmental Services		\$2,254,000
09f	209-G	Superior Hiking Trail Enhancement Plan	Superior Hiking Trail Association		\$100,000
09g	213-G	Protecting Mississippi River Headwaters Lands through a Local State and Federal Partnership	City of Baxter		\$700,000
09h	215-G	Protecting North-Central Minnesota Lakes	Crow Wing SWCD		\$750,000
09i	203-G	Native Prairie Bank Easement Program	MN DNR		\$2,000,000
09j	202-G	Minnesota State Trail Development	MN DNR		\$2,500,000
09k	200-G	Minnesota State Parks and State Trails	MN DNR		\$2,500,000
091	199-G	Scientific and Natural Areas Program	MN DNR		\$3,250,000
			Subtotal:	\$0	\$17,439,000

	ENRTF			EN	RTF
Subd.	ID#	Project Title	Organization	FY2018	FY2019
Subd. :	10 Eme	rging Issues Acct			
10		Emerging Issues Acct			\$439,000
			Subtotal:	\$0	\$439,000
Subd. :	12 Cont	ract Agreement Reimbursement			
10a	217-H	Contract Agreement Reimbursement	MN DNR		\$135,000
			Subtotal:	\$0	\$135,000
			TOTAL BILL/ART.1:	\$89,000	\$42,799,000
Art. 6 -	- Debt S	Service*			
		FY2019 Debt Service on appropriation bonds*	MMB	T	\$2,940,000
			TOTAL ART.2:	\$0	\$2,940,000
TOTAL	. ENVIR	ONMENT AND NATURAL RESOURCES TRUST	FUND		. , ,
			TOTAL ENRTF:	\$89,000	\$45,739,000
Art. 6.	Approp	priation Bonds - ENRTF			
05/4)		Department of Natural Resources	DND		
05(1)		Natural Resources Asset Preservation	DNR		\$3,419,000
05(2)		Elk-River- Lake Orono Dredging	DNR		\$1,500,000
05(3)		Seidl's Lake; South St. Paul; Storm water Improvements	DNR		\$781,000
		Delleting Control Annual	subtotal DNR		\$5,700,000
06(1)		Pollution Control Agency  Anoka County - Closed Landfill	PCA		
		Lake Redwood Reclamation	PCA		\$6,000,000
06(2)		Lake Neuwoou Necialilation			\$7,300,000
		Board of Water & Soil Resources	subtotal PCA		\$13,300,000
(07)		Reinvest in Minnesota Program (CREP)	BWSR		\$10,000,000
			subtotal BWSR		\$10,000,000
		Public Facilities Authority			
08(1)		State Match for Federal Grants	PFA		\$6,000,000
08(2)		Water Infrastructure Funding Program	PFA		\$14,652,000
08(3)		Point Source Implementation Grants	PFA		\$38,348,000
			subtotal PFA		\$59,000,000
		Metropolitan Council			
(09)		Metro Parks & Trails Capital Improvements	Met Council		\$10,000,000
			subtotal Met Council		\$10,000,000
				40	ć00 000 000
			Total Bonds	\$0	\$98,000,000

<sup>\*</sup> FY2020-2039 annual debt service payments would be approximately \$7,840,000