

## V. Recommendations

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*“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 \$46,337,000 available for expenditure in each year of the FY16-17 biennium from the Environment and Natural Resources Trust Fund (ENRTF) –biennial total available \$92,674,000. 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, 2014 was \$842,499,260.15.

The LCCMR is making a funding recommendation to the 2015 Legislature totaling \$46,383,000. Of this amount, \$46,324,000 is from the Environment and Natural Resources Trust Fund for FY16 and \$59,000 is from the Great Lakes Protection Account (M.S. 116Q.02) for FY16. The LCCMR will be making a future additional funding recommendation for FY17 totaling up to \$46,337,000 from the Environment and Natural Resources Trust Fund to the 2016 Legislature. As stated in M.S. 116P, the LCCMR may make an annual or a biennial funding recommendation.

The list of recommended appropriations totaling \$46,383,000 is provided in “Section V. Recommendations”. The funding levels and the proposed legislative bill were adopted by the LCCMR on December 9, 2014. Both actions were through affirmative votes of at least 12 of the 17 members as required by M.S. 116P.05, Subd. 2.



# LCCMR M.L. 2015 ENVIRONMENT AND NATURAL RESOURCES TRUST FUND RECOMMENDATIONS BY SUBDIVISION - H.F. XXX & S.F. XXX

## LCCMR Process for M.L. 2015 Recommendations

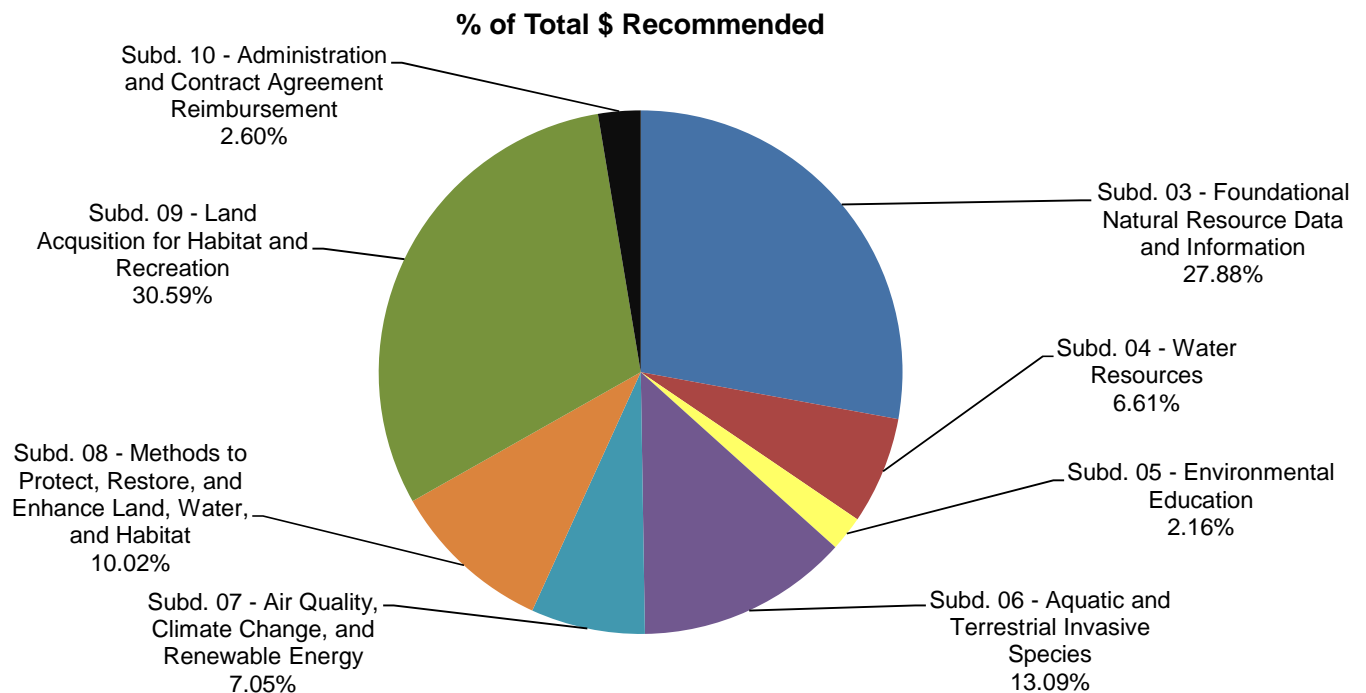
For the FY 2016 and FY 2017 biennium (July 1, 2015 - June 30, 2017), approximately \$46.3 million is available each year (total = \$92,674,000) for funding from the Environment and Natural Resources Trust Fund. In response to the 2015 Request for Proposal (RFP) 152 proposals requesting a total of approximately \$126.3 million were received. Through a competitive multi-step process, 76 of these proposals, requesting a total of \$74.9 million, were chosen to present to the LCCMR and 65 proposals were selected to receive a recommendation for funding. These recommendations are for the FY 2016 funds available beginning July 1, 2015.

October 23 & December 10, 2013	2015 Funding Priorities Determined and RFP Adopted
December 16, 2013	2015 RFP Issued
March 28, 2014	2015 RFP Proposal Deadline (Received 152 Proposals totaling \$126,332,461)
June 4, 2014	2015 Selection of Proposals for Presentations
June 17, 18, 19, 24, & 25, 2014	2015 Proposal Presentations (Selected 76 proposals totaling \$74,867,915 to present)
July 10, 2014	2015 Allocations Recommendations
August - December, 2014	Research Projects Recommended Undergo Peer Review
November 19 & December 9, 2014	2015 Appropriation Language Review & Adoption

## Summary of Recommendations by Subdivision

Subdivision	\$ Recommended	# Appropriations
Subd. 03 - Foundational Natural Resource Data and Information	\$12,932,000	19
Subd. 04 - Water Resources	\$3,065,000	9
Subd. 05 - Environmental Education	\$1,004,000	5
Subd. 06 - Aquatic and Terrestrial Invasive Species	\$6,071,000	4
Subd. 07 - Air Quality, Climate Change, and Renewable Energy	\$3,268,000	4
Subd. 08 - Methods to Protect, Restore, and Enhance Land, Water, and Habitat	\$4,646,000 *	11
Subd. 09 - Land Acquisition for Habitat and Recreation	\$14,190,000	11
Subd. 10 - Administration and Contract Agreement Reimbursement	\$1,207,000	2
<b>TOTAL</b>	<b>\$46,383,000</b>	<b>65</b>

\*One appropriation in Subd. 8 includes \$59,000 from the Great Lakes Protection Account

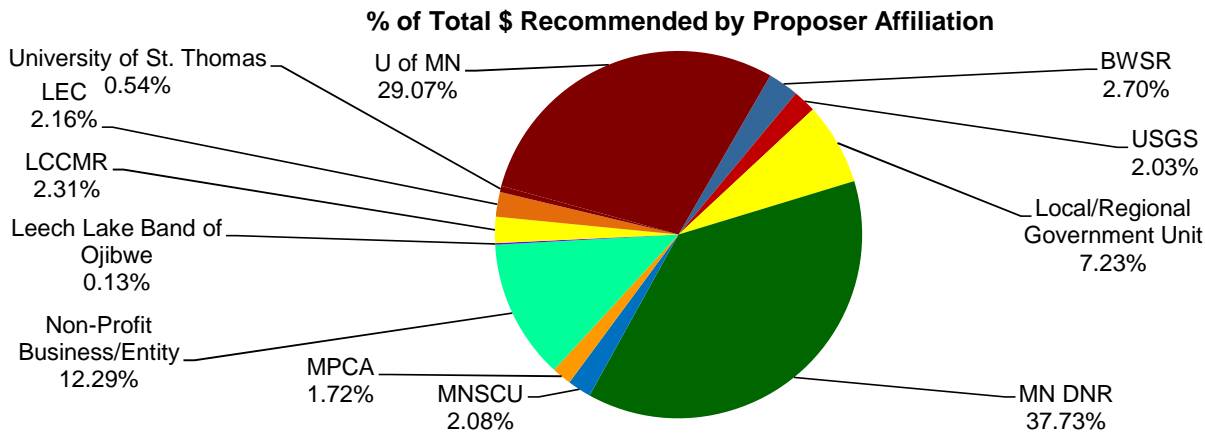


**LCCMR M.L. 2015 ENVIRONMENT AND NATURAL RESOURCES TRUST FUND  
RECOMMENDATIONS BY AFFILIATION AND AREA OF IMPACT - H.F. XXX and S.F. XXX**

<b>Summary of Recommendations by Proposer Affiliation*</b>		
<b>Affiliation Type by Proposer Affiliation</b>	<b>\$ Recommended</b>	<b># Appropriations</b>
Minnesota Board of Water and Soil Resources (BWSR)	\$1,253,000	2
U.S. Geological Survey (USGS)	\$943,000	2
Local/Regional Government Unit	\$3,355,000	8
Minnesota Department of Natural Resources (MN DNR)	\$17,501,000	12
Minnesota State Colleges and Universities (MNSCU)	\$966,000	3
Minnesota Pollution Control Agency (MPCA)	\$800,000	1
Non-Profit Business/Entity	\$5,699,000	13
Leech Lake Band of Ojibwe	\$61,000	1
Legislative-Citizen Commission on Minnesota Resources (LCCMR)	\$1,072,000	1
Legislative Energy Commission (LEC)	\$1,000,000	1
University of St. Thomas	\$250,000	1
University of Minnesota (U of MN)	\$13,483,000 **	20
<b>TOTAL</b>	<b>\$46,383,000</b>	<b>65</b>

\*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.

\*\*One appropriation to the University of Minnesota includes \$59,000 from the Great Lakes Protection Account.

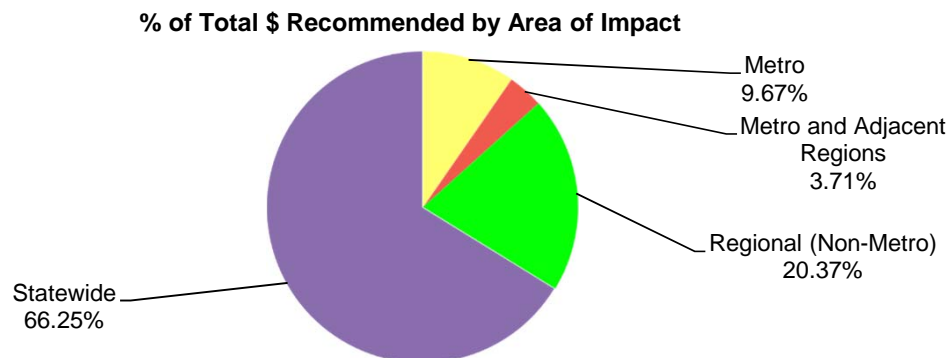


<b>Summary of Recommendations by Area of Impact</b>		
<b>Area of Impact</b>	<b>\$ Recommended</b>	<b># Appropriations</b>
Metro*	\$4,485,000	12
Metro and Adjacent Regions	\$1,723,000	3
Regional (Non-Metro)**	\$9,446,000 ***	18
Statewide	\$30,729,000	32
<b>TOTAL</b>	<b>\$46,383,000</b>	<b>65</b>

\* "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.

\*\*\* One appropriation with a "Regional" area of impact contains \$59,000 from the Great Lakes Protection Account.





## ENVIRONMENT AND NATURAL RESOURCES TRUST FUND M.L. 2015 LCCMR Recommendations – H.F. XXX & S.F. XXX

### SUMMARY OF ML 2015 APPROPRIATIONS BY SUBDIVISION (\$46,383,000)

- SUBD. 3. Foundational Natural Resource Data and Information: \$12,932,000 – 19 Appropriations**
- Collection, interpretation, mapping, and dissemination of foundational data and information pertaining to groundwater, wetlands, and distributions of plant and animal species and ecological systems.
  - Planning and development of online inventories for data and imagery pertaining to Minnesota wildlife, plant, fungi, and pollinator species
  - Surveying and monitoring for distributions and habitat use of pollinators, wetland birds, elk, carnivore species, turtles, goblin fern, and bats in order to guide conservation, management, and mitigation strategies.
  - Research and analysis pertaining to conservation grazing, impacts of forest management practices on water resources, and loon and pelican populations impacted by the Deepwater Horizon oil spill.
  - Development of Blue Mounds and Minneopa State Parks to assist in the reintroduction and preservation of American bison and provide interpretive learning opportunities.
  - Data collection and compilation to improve understanding of forest disturbance impacts and of resulting changes to Mississippi River flow from the St. Anthony Falls lock closure to inform future management.
- SUBD. 4. Water Resources: \$3,065,000 – 9 Appropriations**
- Modeling, mapping, and assessment to increase understanding of water sustainability issues throughout the state, including the associated economic and ecological risks and costs, in order to inform and improve water management strategies and practices.
  - Development of technologies and materials designed to remove pollutants and capture nutrients for recycling from stormwater, agricultural runoff, and polluted water bodies.
  - Research and analysis initiatives pertaining to contaminants of emerging concern in Minnesota lakes and to the impacts of agricultural drainage on groundwater recharge and sustainability in southeast Minnesota.
  - Monitoring and assessment to improve measurement of suspended sediment in rivers and enhance sediment reduction efforts.
  - Outreach, technical assistance, and demonstration initiatives to promote cover crops for soil and water quality protection; to advance irrigation best management practices; and to encourage residential water conservation.
- SUBD. 5. Environmental Education: \$1,004,000 – 5 Appropriations**
- Outreach and demonstration to hunters to promote voluntary selection of nontoxic alternatives to lead hunting ammunition in order to protect non-target wildlife species from accidental lead poisoning.
  - Development and delivery of hands-on environmental education to engage students and communities on issues relating to water quality and watershed stewardship, including the establishment of six permanent recreational and educational sites located throughout the Zumbro River watershed.
- SUBD. 6. Aquatic and Terrestrial Invasive Species: \$6,071,000 – 4 Appropriations**
- Establishment, development, and support of a new research center at the University of Minnesota specifically dedicated to developing and implementing new techniques for controlling terrestrial invasive plants, pathogens, and pests, including agricultural weeds and pests.
  - Research and analysis to assess the potential impacts of emerald ash borer on Minnesota black ash forests and related ecology; to establish early detection and prevention efforts for an invasive root rot fungus recently discovered in Minnesota; and to develop a biological control for Canada thistle.
- SUBD. 7. Air Quality, Climate Change, and Renewable Energy: \$3,268,000 – 4 Appropriations**
- Data collection and analysis of energy systems in Minnesota to develop short and long term strategies for energy sustainability throughout the state and inform future planning efforts.
  - Development and demonstration of technologies intended to enable renewable and sustainable production of fertilizer and energy in localized manners, particularly within rural areas.
  - Development and testing of a model to make building deconstruction and material reuse a competitively viable alternative to demolition in order to provide a variety of environmental and economic benefits.
- SUBD. 8. Methods to Protect/Restore/Enhance Land, Water & Habitat: \$4,646,000 – 11 Appropriations**
- Analysis and planning initiatives to inform efforts aimed at sustaining trout fisheries along the north shore and to guide future conservation efforts within the Minnesota River Valley.
  - Surveying, collection, and propagation of plant species for prairie restoration and of native orchid species to enable long-term conservation.
  - Restoration efforts including forest and prairie restoration in the greater metropolitan area; restoration and monitoring of prairie and riparian habitat near Moorhead; and restoration of Sargent Creek in Duluth.
  - Technical assistance to residents, businesses, and governments to promote shoreland conservation and protection along the St. Croix River; to communities around the state for community forestry; and to private landowners for participation in existing land conservation programs.
  - Research, analysis, and public engagement to improve restoration techniques in order to create increased resilience against changing climate conditions and to benefit pollinators.
- SUBD. 9. Land Acquisition for Habitat and Recreation: \$14,190,000 – 11 Appropriations**
- Protection and restoration of priority, high quality, and unique lands within Minnesota's Scientific and Natural Area and Native Prairie Bank systems and outreach and technical assistance to engage the public and assist landowners in relation to these programs and their associated opportunities.
  - Expansion of outdoor recreational opportunities through additions to state parks and trails and metropolitan regional parks and trails, and through construction and development of the Mesabi Trail.
  - Acquisition in fee title and conservation easement of priority lands to protect prairies, forests, and wetlands and ensure wildlife corridors within the greater metropolitan area and in Crow Wing and Cass counties.
  - Research and analysis of existing conservation easements acquired through state expenditures to determine their effectiveness at achieving intended outcomes and guide future investments in conservation easements.
- SUBD. 10. Administration and Contract Agreement Reimbursement: \$1,207,000 – 2 Appropriations**
- LCCMR administration for FY16-17 and project contract agreement reimbursement for non-state entities.

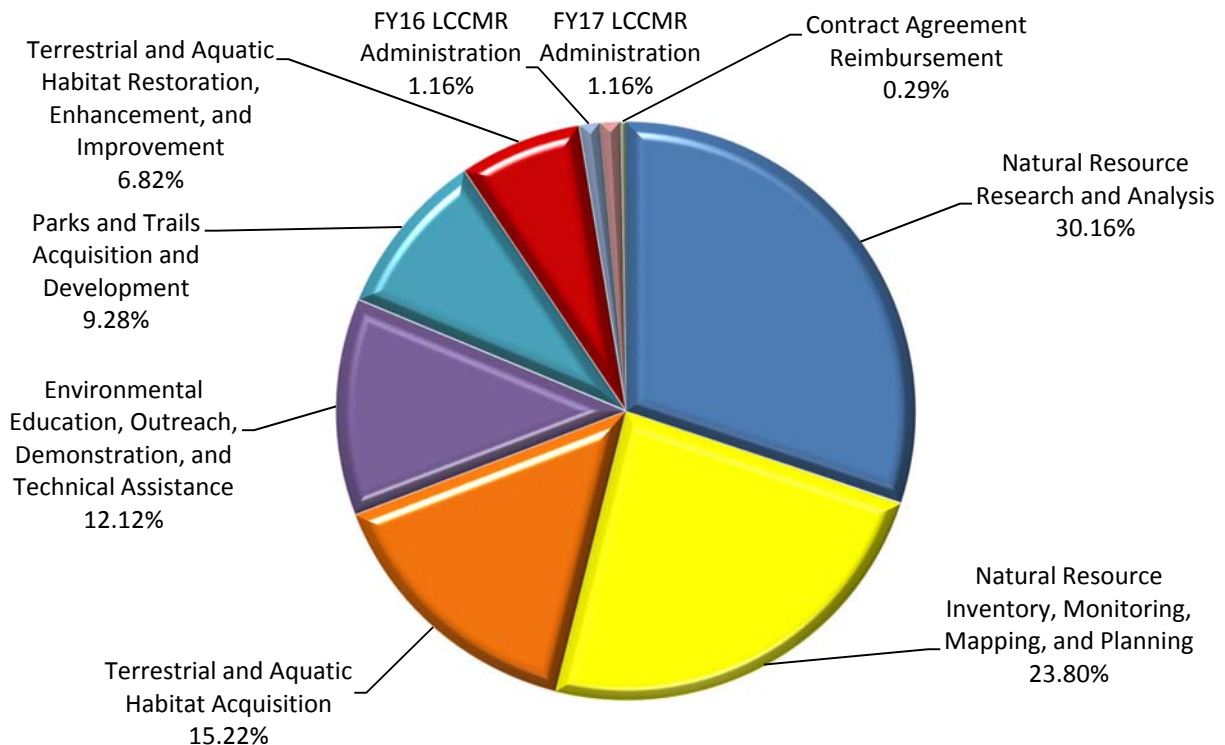


# ENVIRONMENT AND NATURAL RESOURCES TRUST FUND M.L. 2015 LCCMR Recommendations – H.F. XXX & S.F. XXX

## SUMMARY OF EXPECTED OUTCOMES ACROSS SUBDIVISIONS FOR ~\$46.4 MILLION

- Natural Resource Research and Analysis: ~\$14.0 million**  
*Research and analysis* projects that will advance our knowledge about and provide strategies and recommendations for addressing issues relating to terrestrial invasive species prevention, control, and mitigation (includes the launch of a new terrestrial invasive species research center); water resources sustainability and protection; plant and animal species protection, management, and recovery; habitat restoration practices; improvement of agricultural and forestry practices; renewable energy; climate change impacts and greenhouse gas reduction; and conservation easement valuation and effectiveness.
- Natural Resource Inventory, Monitoring, Mapping, and Planning: ~\$11.0 million**  
*Inventory, monitoring, mapping, and planning* efforts to obtain critical information and guide relevant decisions and efforts over time, including acceleration of the Minnesota Biological Survey, Minnesota Geologic Atlas program, and the National Wetlands Inventory update for Minnesota; planning and development of online inventories for data and imagery pertaining to Minnesota wildlife, plant, fungi, and pollinator species; surveying and monitoring for population distributions of pollinators, bats, elk and wetland birds; surveying, collection, and propagation of imperiled plant species; local planning efforts pertaining to recreation and conservation; planning and monitoring for the state’s Scientific and Natural Areas program; inventory and mapping of datasets pertaining to the impacts of forest disturbance; baseline data collection to study the future impacts of planned changes to Mississippi River flow; and detection and monitoring of invasive species including emerald ash borer and a pine root rot.
- Terrestrial and Aquatic Habitat Acquisition: ~\$7.1 million**  
*Acquisition* of an estimated 1,314 acres in a combination of fee title (567 acres and 1.2 miles of shoreline) and conservation easements (750 acres), including donated easements. Permanently protected areas will include forests, prairies, grasslands, blufflands, wetlands, shorelands, and other habitat, including for additions for the Minnesota Scientific and Natural Areas system.
- Environmental Education, Outreach, Demonstration, and Technical Assistance: ~\$5.6 million**  
*Environmental education, outreach, demonstration, and technical assistance* efforts that will engage and educate Minnesotans on topics including ecology, plant and wildlife species, pollinators, water resources, alternative agricultural practices, lead ammunition alternative options, and habitat protection and restoration; demonstrate options for water stewardship, renewable energy, and resource reuse; and provide training and technical assistance on community forestry, cover crops, shoreland protection, prairie stewardship, and natural resource conservation and management tools, practices, and options.
- Parks and Trails Acquisition and Development: ~\$4.3 million**  
*Acquisition* of an estimated 468 acres to expand parks and trails in the State Parks and Trails System and the Metropolitan Regional Parks and Trails System; *development* of two state parks to assist in the reintroduction and preservation of American bison; *development* of at least six local recreational and educational sites along the Zumbro River in southwest Minnesota; and *design and construction* of a Mesabi Trail segment in northern Minnesota.
- Terrestrial and Aquatic Habitat Restoration, Enhancement, and Improvement ~\$3.2 million**  
*Restoration, enhancement, and improvement* activities on an estimated 2,663 acres. Activities performed will include prescribed burning, soil preparation, seeding, native vegetation installation, woody encroachment removal, invasive species control, and monitoring and evaluation.
- LCCMR Administration: \$536,000 (FY16) and \$536,000 (FY17)**  
 FY 2016-2017 LCCMR administration.
- Contract Agreement Reimbursement: \$135,000**  
 Administering of contract agreement reimbursement for projects of non-state entities.

### % OF EXPECTED OUTCOMES ACROSS SUBDIVISIONS



## M.L. 2015 Environment and Natural Resources Trust Fund Recommendations (FY 2016)

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. As of 011/19/14, the Legislative-Citizen Commission on Minnesota's Resources (LCCMR) has selected 65 projects totaling \$46.3 million to recommend to the 2015 Minnesota Legislature for funding from the Environment and Natural Resources Trust Fund (ENRTF) and the Great Lakes Protection Account (GLPA). The recommendations are the result of the LCCMR's 2015 Request for Proposal (RFP) process, in which 152 proposals requesting a total of approximately \$126.3 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 (\$46,383,000)	Percentage of Total Recommendation
<b>Subd. 03 Foundational Natural Resource Data and Information</b> 19 Appropriations	\$12,932,000	27.88%
<b>Subd. 04 Water Resources</b> 9 Appropriations	\$3,065,000	6.61%
<b>Subd. 05 Environmental Education</b> 5 Appropriations	\$1,004,000	2.16%
<b>Subd. 06 Aquatic and Terrestrial Invasive Species</b> 4 Appropriations	\$6,071,000	13.09%
<b>Subd. 07 Air Quality, Climate Change, and Renewable Energy</b> 4 Appropriations	\$3,268,000	7.05%
<b>Subd. 08 Methods to Protect, Restore, and Enhance Land, Water, and Habitat</b> 11 Appropriations	\$4,646,000	10.02%
<b>Subd. 09 Land Acquisition for Habitat and Recreation</b> 11 Appropriations	\$14,190,000	30.59%
<b>Subd. 10. Administration and Contract Agreement Reimbursement</b> 2 Appropriations	\$1,207,000	2.60%
<b>TOTAL \$ RECOMMENDATION</b>	<b>\$46,383,000</b>	<b>100.00%</b>

Fund Source	\$ Recommended	\$ Remaining for Recommendation
<b>FY 2016 - Environment and Natural Resources Trust Fund (ENRTF)</b>	<b>\$46,324,000</b>	<b>\$13,000</b>
<b>Total \$ Available = \$46,337,000</b>		
<b>FY 2016 - Great Lakes Protection Account (GLPA)</b>	<b>\$59,000</b>	<b>\$0</b>
<b>Total \$ Available = \$59,000</b>		
<b>TOTAL \$ RECOMMENDATION</b>	<b>\$46,383,000</b>	<b>\$13,000</b>

**M.L. 2015 Environment and Natural Resources Trust Fund (ENRTF) Recommendations (FY 2016)**

Subd.	ENRTF ID	Title	Total LCCMR \$ Recommended	LCCMR \$ Recommended	LCCMR \$ Recommended	Affiliation	Program Manager	Region of Impact*
				ENRTF: FY 2016	GLPA: FY 2016			
<b>Subd. 03 Foundational Natural Resource Data and Information (19 Recommendations - Subtotal = \$12,932,000 )</b>								
03a	001-A	County Geologic Atlases - Part A	\$2,040,000	\$2,040,000	\$0	U of MN - MN Geological Survey	Dale Setterholm	Statewide
03b	006-A	County Geologic Atlases - Part B	\$2,000,000	\$2,000,000	\$0	MN DNR	Jan Falteisek	Statewide
03c	002-A	Minnesota Biological Survey	\$2,450,000	\$2,450,000	\$0	MN DNR	Carmen Converse	Statewide
03d	005-A	Minnesota Biodiversity Atlas for Enhanced Natural Resource Management	\$340,000	\$340,000	\$0	U of MN - Bell Museum of Natural History	Keith Barker	Statewide
03e	003-A	Updating the National Wetland Inventory for Minnesota - Phase V	\$1,500,000	\$1,500,000	\$0	MN DNR	Steve Kloiber	Statewide
03f	014-A	Creating a Statewide Wetland Bird Monitoring Program	\$146,000	\$146,000	\$0	Audubon Minnesota	Mark Martell	Statewide
03g	011-A	Minnesota Native Bee Atlas	\$790,000	\$790,000	\$0	U of MN	Robert Blair	Statewide
03h	008-A	Reintroduction and Interpretation of Bison in Minnesota State Parks	\$600,000	\$600,000	\$0	MN DNR	Edward Quinn	Statewide
03i	004-A	Endangered Bats, White-Nose Syndrome, and Forest Habitat	\$1,250,000	\$1,250,000	\$0	MN DNR	Richard Baker	Statewide
03j	007-A	Assessing Contaminants in Minnesota Loons and Pelicans - Phase III	\$141,000	\$141,000	\$0	MN DNR	Carrol Henderson	Statewide
03k	017-A	Movement and Seasonal Habitat Use of Minnesota Elk	\$200,000	\$200,000	\$0	MN DNR	Gino D'Angelo	NW
03l	013-A	Genetic and Camera Techniques to Estimate Carnivore Populations	\$200,000	\$200,000	\$0	U of MN - NRRRI	Ron Moen	Central, NE, NW
03m	016-A	Turtle Population Dynamics in an Urban Lake	\$250,000	\$250,000	\$0	University of St. Thomas	Jennifer McGuire	Metro
03n	031-A	Digitization of Historic Gullion Ruffed Grouse Research	\$75,000	\$75,000	\$0	Central Lakes College	Kent Montgomery	Central, NE
03o	009-A	Effects of Grazing Versus Fire for Prairie Management	\$414,000	\$414,000	\$0	U of MN	Karen Oberhauser	Statewide
03p	010-A	Assessing Ecological Impact of St. Anthony Falls Lock Closure	\$125,000	\$125,000	\$0	Minneapolis Riverfront Partnership	Kathleen Boe	Metro
03q	020-A	Foundational Dataset Characterizing Historic Forest Disturbance Impacts	\$200,000	\$200,000	\$0	U of MN	Michael Falkowski	NE, NW
03r	024-A	Hydrologic Effects of Contemporary Forest Practices in Minnesota	\$150,000	\$150,000	\$0	U of MN	Diana Karwan	NE
03s	018-A	Habitat Mitigation for Goblin Fern Conservation	\$61,000	\$61,000	\$0	Leech Lake Band of Ojibwe	Bobby Henderson	Central

SOURCE: LCCMR Staff



**M.L. 2015 Environment and Natural Resources Trust Fund (ENRTF) Recommendations (FY 2016)**

Subd.	ENRTF ID	Title	Total LCCMR \$	LCCMR \$ Recommended	LCCMR \$ Recommended	Affiliation	Program Manager	Region of Impact*
			Recommended	ENRTF: FY 2016	GLPA: FY 2016			
<b>Foundational Natural Resource Data and Information Subtotal =</b>			<b>\$12,932,000</b>	<b>\$12,932,000</b>	<b>\$0</b>			
<b>Subd. 04 Water Resources (9 Recommendations - Subtotal = \$3,065,000 )</b>								
04a	033-B	Understanding Water Scarcity, Threats, and Values to Improve Management	\$234,000	\$234,000	\$0	U of MN	Bonnie Keeler	Statewide
04b	034-B	Biofilm Technology for Water Nutrient Removal	\$281,000	\$281,000	\$0	U of MN	Bo Hu	Statewide
04c	036-B	Biological Consequences of Septic Pollution in Minnesota Lakes	\$364,000	\$364,000	\$0	St. Cloud State University	Heiko Schoenfuss	Statewide
04d	035-B	Preventing Phosphorous from Entering Water Resources through Drain Tiles	\$505,000	\$505,000	\$0	U of MN	Kenneth Valentas	Statewide
04e	047-B	Southeast Minnesota Cover Crop and Soil Health Initiatives	\$253,000	\$253,000	\$0	Board of Water and Soil Resources	Matt Drewitz	SE
04f	037-B	Southeast Minnesota Subsurface Drainage Impacts on Groundwater Recharge	\$488,000	\$488,000	\$0	U.S. Geological Survey	Erik Smith	SE
04g	045-B	Using Hydroacoustics to Monitor Sediment in Minnesota Rivers	\$455,000	\$455,000	\$0	U.S. Geological Survey	Christopher Ellison	Central, Metro, SE
04h	048-B	Assessment of Irrigation Efficiencies in Benton County	\$431,000	\$431,000	\$0	Benton Soil and Water Conservation District	Gerry Maciej	Central
04i	060-B	Shoreview Water Consumption and Groundwater Awareness Project	\$54,000	\$54,000	\$0	City of Shoreview	Mark Maloney	Metro
<b>Water Resources Subtotal =</b>			<b>\$3,065,000</b>	<b>\$3,065,000</b>	<b>\$0</b>			
<b>Subd. 05 Environmental Education (5 Recommendations - Subtotal = \$1,004,000 )</b>								
05a	065-C	Promotion of Alternative Ammunition to Protect Wildlife from Lead Poisoning	\$132,000	\$132,000	\$0	U of MN	Julia Ponder	Statewide
05b	066-C	Connecting Students with Watersheds through Hands-On Learning	\$400,000	\$400,000	\$0	Minnesota Trout Unlimited	John Lenczewski	Statewide
05c	067-C	Zumbro River Watershed Recreational Learning Stewardship Sites	\$300,000	\$300,000	\$0	Zumbro Watershed Partnership	Lawrence Svien	SE
05d	073-C	Students Engaging Local Watersheds Using Mobile Technologies	\$147,000	\$147,000	\$0	Twin Cities Public Television	Joan Freese	Statewide
05e	074-C	Mississippi River Water Journey Camps	\$25,000	\$25,000	\$0	U of MN	Beth Mercer-Taylor	Metro
<b>Environmental Education Subtotal =</b>			<b>\$1,004,000</b>	<b>\$1,004,000</b>	<b>\$0</b>			
<b>Subd. 06 Aquatic and Terrestrial Invasive Species (4 Recommendations - Subtotal = \$6,071,000 )</b>								

**M.L. 2015 Environment and Natural Resources Trust Fund (ENRTF) Recommendations (FY 2016)**

Subd.	ENRTF ID	Title	Total LCCMR \$ Recommended	LCCMR \$ Recommended	LCCMR \$ Recommended	Affiliation	Program Manager	Region of Impact*
				ENRTF: FY 2016	GLPA: FY 2016			
06a	081-D	Minnesota Terrestrial Invasive Plants and Pests Center	\$5,000,000	\$5,000,000	\$0	U of MN	Brian Buhr	Statewide
06b	082-D	Emerald Ash Borer Ecological and Hydrological Impacts – Phase II	\$400,000	\$400,000	\$0	U of MN	Anthony D'Amato	Statewide
06c	083-D	Biological Control of Canada Thistle	\$300,000	\$300,000	\$0	U of MN	Roger Becker	Statewide
06d	084-D	Preventing a New Disease of Pines in Minnesota	\$371,000	\$371,000	\$0	U of MN	Robert Blanchette	Statewide
<b>Aquatic and Terrestrial Invasive Species Subtotal =</b>			<b>\$6,071,000</b>	<b>\$6,071,000</b>	<b>\$0</b>			
<b>Subd. 07 Air Quality, Climate Change, and Renewable Energy (4 Recommendations - Subtotal = \$3,268,000 )</b>								
07a	096-E	Analysis of Minnesota Energy Systems to Develop Future Energy Strategies	\$1,000,000	\$1,000,000	\$0	Legislative Energy Commission	Annie Levenson-Falk	Statewide
07b	101-E	Renewable and Sustainable Fertilizers Produced Locally	\$1,000,000	\$1,000,000	\$0	U of MN	Alon McCormick	Statewide
07c	110-E	Reducing Emissions from Open Burning through Biomass Gasification	\$268,000	\$268,000	\$0	U of MN	William Northrop	Metro, SW
07d	116-E	Building Deconstruction to Reduce Greenhouse Gas Emissions and Solid Waste	\$1,000,000	\$1,000,000	\$0	The NetWork for Better Futures d/b/a Better Futures Minnesota	Steve Thomas	Central, Metro, NE, NW
<b>Air Quality, Climate Change, and Renewable Energy Subtotal =</b>			<b>\$3,268,000</b>	<b>\$3,268,000</b>	<b>\$0</b>			
<b>Subd. 08 Methods to Protect, Restore, and Enhance Land, Water, and Habitat (11 Recommendations - Subtotal = \$4,646,000 )</b>								
08a	117-F	Prioritizing Future Management of North Shore Trout Streams	\$416,000	\$357,000	\$59,000	U of MN - NRRI	Lucinda Johnson	NE
08b	118-F	Thirteen Counties Propagating Native Plants and Restoring Diverse Habitats	\$495,000	\$495,000	\$0	Martin County Soil and Water Conservation	Rich Perrine	Central, NE, NW, SW
08c	119-F	Preserving and Protecting Minnesota Native Orchid Species	\$167,000	\$167,000	\$0	U of MN - Landscape Arboretum	David Remucal	Statewide
08d	122-F	Acceleration of Minnesota Conservation Assistance - Final Phase	\$1,000,000	\$1,000,000	\$0	Board of Water and Soil Resources	Tabor Hoek	Statewide
08e	126-F	Metro Conservation Corridors Phase VIII - Prairie, Forest, and Savanna Restoration in Greater Metropolitan Area	\$276,000	\$276,000	\$0	Friends of the Mississippi River	Tom Lewanski	Metro
08f	121-F	Metro Conservation Corridors Phase VIII - Enhancing Restoration Techniques for Improved Climate Resilience and Pollinator Conservation	\$400,000	\$400,000	\$0	Great River Greening	Wiley Buck	Metro

SOURCE: LCCMR Staff

**M.L. 2015 Environment and Natural Resources Trust Fund (ENRTF) Recommendations (FY 2016)**

Subd.	ENRTF ID	Title	Total LCCMR \$	LCCMR \$ Recommended	LCCMR \$ Recommended	Affiliation	Program Manager	Region of Impact*
			Recommended	ENRTF: FY 2016	GLPA: FY 2016			
08g	123-F	Minnesota State University Moorhead Science Center Restoration and Monitoring	\$527,000	\$527,000	\$0	Moorhead State University	Brian Wisenden	NW
08h	127-F	Improving Community Forests Through Citizen Engagement	\$800,000	\$800,000	\$0	Minnesota Pollution Control Agency	Sarah Rudolf	Statewide
08i	128-F	Flood Recovery on Sargent Creek Duluth Habitat Restoration	\$300,000	\$300,000	\$0	City of Duluth	Christopher Kleist	NE
08j	129-F	Shoreland Protection for the Lower St. Croix River	\$190,000	\$190,000	\$0	St. Croix River Association	Deb Ryun	Metro
08k	135-F	Redwood and Renville Counties Outdoor Recreation and Conservation Master Plan	\$75,000	\$75,000	\$0	Redwood County and Renville County	Mark Erickson	Central, SW
<b>Methods to Protect, Restore, and Enhance Land, Water, and Habitat Subtotal =</b>			<b>\$4,646,000</b>	<b>\$4,587,000</b>	<b>\$59,000</b>			
<b>Subd. 09 Land Acquisition for Habitat and Recreation (11 Recommendations - Subtotal = \$14,190,000 )</b>								
09a	139-G	State Parks and State Trails Land Acquisitions	\$1,500,000	\$1,500,000	\$0	MN DNR	Jennifer Christie	Statewide
09b	136-G	Metropolitan Regional Park System Land Acquisition - Phase IV	\$1,000,000	\$1,000,000	\$0	Metropolitan Council	Arne Stefferud	Metro
09c	137-G	SNA Acquisition, Restoration, Enhancement and Public Engagement	\$4,000,000	\$4,000,000	\$0	MN DNR	Peggy Booth	Statewide
09d	138-G	Native Prairie Stewardship and Prairie Bank Easement Acquisition	\$3,325,000	\$3,325,000	\$0	MN DNR	Jason Garms	Central, NW, SE, SW
09e	145-G 148-G	Metro Conservation Corridors Phase VIII - Coordination and Mapping and Conservation Easements	\$515,000	\$515,000	\$0	Minnesota Land Trust	John Brosnan	Metro
09f	144-G	Metro Conservation Corridors Phase VIII - Strategic Lands Protection	\$750,000	\$750,000	\$0	The Trust for Public Land	Danielle Salus	Metro
09g	141-G	Metro Conservation Corridors Phase VIII - Priority Expansion of Minnesota Valley National Wildlife Refuge	\$500,000	\$500,000	\$0	Minnesota Valley National Wildlife Refuge Trust Inc	Deborah Loon	Metro
09h	143-G	Metro Conservation Corridors Phase VIII - Wildlife Management Area Acquisition	\$400,000	\$400,000	\$0	MN DNR	Patrick Rivers	Metro
09i	142-G	Mesabi Trail Development Soudan to Ely - Phase II	\$1,000,000	\$1,000,000	\$0	St. Louis & Lake Counties Regional	Bob Manzoline	NE
09j	147-G	Multi-benefit Watershed Scale Conservation on North Central Lakes	\$950,000	\$950,000	\$0	Leech Lake Area Watershed Foundation	Lindsey Ketchel	Central

**M.L. 2015 Environment and Natural Resources Trust Fund (ENRTF) Recommendations (FY 2016)**

Subd.	ENRTF ID	Title	Total LCCMR \$	LCCMR \$	LCCMR \$	Affiliation	Program Manager	Region of Impact*
			Recommended	Recommended	Recommended			
			ENRTF: FY 2016	GLPA: FY 2016				
09k	n/a	Conservation Easement Assessment and Valuation System Development	\$250,000	\$250,000	\$0	U of MN	Mike Kilgore Steve Taff	Statewide
<b>Land Acquisition for Habitat and Recreation Subtotal =</b>			<b>\$14,190,000</b>	<b>\$14,190,000</b>	<b>\$0</b>			
<b>Subd. 10 Administration and Contract Agreement Reimbursement (2 Recommendation - Subtotal = \$1,207,000 )</b>								
10a	xx	Legislative-Citizen Commission on Minnesota Resources (LCCMR)	\$1,072,000	\$1,072,000	\$0	Legislative-Citizen Commission on	Susan Thornton	Statewide
10b	152-H	Contract Agreement Reimbursement	\$135,000	\$135,000	\$0	MN DNR	Amanda Graeber	Statewide
<b>Administration and Contract Agreement Reimbursement Subtotal =</b>			<b>\$1,207,000</b>	<b>\$1,207,000</b>	<b>\$0</b>			
<b>Total \$ Recommendation =</b>			<b>\$46,383,000</b>	<b>\$46,324,000</b>	<b>\$59,000</b>			

\*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.