



**M.L. 2015 ENVIRONMENT AND NATURAL RESOURCES TRUST FUND  
H.F. 390 – 1<sup>ST</sup> ENGROSSMENT**

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

- SUBD. 3. Foundational Natural Resource Data and Information: \$12,932,000 – 18 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**
- 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.
  - Grants for trap shooting sports facilities.
- 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: \$2,268,000 – 3 Appropriations**
- 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: \$5,646,000 – 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.



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

- Natural Resource Research and Analysis: ~\$12.7 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: ~\$11.3 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: ~\$6.5 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, 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: ~\$4.4 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; *design and construction* of a Mesabi Trail segment in northern Minnesota; and *grants* for trap shooting sports facilities.
- 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**

