2016 Funding Priorities

Projects are sought that provide multiple ecological and other public benefits, are consistent with the LCCMR Six-Year Strategic Plan for the Environment and Natural Resources Trust Fund (http://www.lccmr.leg.mn/documents/strategic_plan/lccmr_strategic_plan.pdf), and address at least one of the adopted funding priorities detailed below. Projects should be **innovative** and must accelerate or supplement, not supplant, existing efforts.

Note:

- Project Eligibility: Projects being done to meet regulatory requirements will not be considered for funding. Additionally, see specific limitations indicated in *italics* within individual funding priorities.
- Other Funding Opportunities: As applicable, projects eligible for established, topic-specific state agency grant programs—such as for renewable energy, sustainable agriculture, clean water implementation, local parks and trails, and habitat acquisition and restoration—are encouraged to go directly to the particular state agency grant program as funds may be available in a more timely manner. Contact LCCMR staff for more information and guidance about these other established grant programs.
- As appropriate, projects involving citizen science and community involvement in scientific efforts are encouraged.
- Proposals pertaining to new or emerging natural resource issues not directly addressed in the below priorities, particularly issues that may have been unanticipated or emerged after issuance of this RFP, may also be eligible for consideration by the LCCMR. Proposers should contact LCCMR staff to discuss.

Proposals must address one or more of the seven funding priorities detailed below. The order of the priorities below does not indicate a level of priority within the priorities.

A. Foundational Natural Resource Data and Information

Proposals must address one or more of the following:

1. Data acquisition, information management, research, or analysis to develop foundational natural resource, ~~or~~ wildlife, pollinator, or plant data and information.
2. Coordination, facilitation, or training pertaining to statewide sharing, distribution, or innovative application of natural resource data (e.g., maps, inventories, and surveys) and information tools (e.g., Geographic Information Systems (GIS), Light Detection and Ranging (LiDAR), and other remote sensing techniques).

B. Water Resources

Proposals must address one or more of the following:

1. Research, monitoring, or evaluation to increase protection, conservation, and sustainability of the quality, quantity, or function of water resources. This includes efforts pertaining to:
   i. Ground and surface water interaction, including stream flow and groundwater flow;
   ii. Aquifer recharge;
   iii. Wetland, river, and lake ecosystems, including Lake Superior;
   iv. Mitigation of impacts resulting from artificial hydrological modifications in both urban and agricultural areas;
   v. Effects of climate change on water resources.
2. Research, evaluation, technology development, or engineering design pertaining to regulated, unregulated, or emerging water contaminants, including sources, fates, movements, or effects

of these contaminants within ground or surface waters or across ecological communities. Contaminants of interest include, but are not limited to, nitrates, phosphates, estrogenic compounds, pharmaceuticals, personal care products, chlorides, PAHs (polycyclic aromatic hydrocarbons), and pesticides. Efforts pertaining to the following are of particular emphasis:

i. Understanding the impacts of contaminants on the health of humans or terrestrial or aquatic species.

ii. Preventing or reducing levels of contaminants in ground and surface waters.

iii. Advancing development or implementation of standards for contaminants.

~~1. Protect or restore water quality by reducing soil erosion, reducing peak water flows, or improving water and land use practices. Projects must include monitoring and evaluation.~~

~~2. Research and evaluation to identify the causes of observed changes in the health of fish and wildlife that may pertain to contaminants of emerging concern.~~

~~i. Research, technology development, or engineering design to protect the health of humans and aquatic and terrestrial species by i) advancing development or implementation of standards for nitrates or other contaminants; or ii) broadly reducing levels of nitrates, phosphates, estrogenic, pharmaceutical, or other contaminants in ground and surface waters.~~

~~3. Research, monitoring, or evaluation pertaining to i) ground and surface water interaction, protection, conservation, and sustainability, or ii) lake ecosystems, including Lake Superior.~~

C. Environmental Education

Proposals must address education, information dissemination, and training efforts that will increase the knowledge and skills of students or the public to cultivate a sustainable lifestyle, improve and maintain water quality, reduce and monitor energy and water consumption, or restore and maintain a healthy and biodiverse natural environment. *Funding for capital projects (e.g., buildings) will not be considered.* Priority will be given to projects that address one or more of the following:

1. Efforts that are locally-led, involve broad-based partnerships, provide outdoor experiences, or are committed to building a long-lasting and action-based conservation ethic in a community.
2. Efforts that deliver and implement existing curriculum, especially integration of environmental education into school curriculum. Proposals to develop new curriculum will not be considered.

D. Aquatic and Terrestrial Invasive Species

"Invasive species" includes any plants, animals, worms, insects, and diseases that are non-native, introduced species in the state and that are currently having, or pose a threat to have, significant adverse impacts on Minnesota's native ecosystems and biodiversity. Proposals must address one or more of the following:

1. Prevent introduction or provide early detection of new invasive species.
2. Reduce the spread of invasive species with best management practices along streams, rivers, land transportation routes, and other vectors.
3. Alternative control techniques – particularly involving biocontrol, integrated pest management, or minimization of non-target effects, including pollinators – for containing or suppressing invasive species already present in Minnesota. *Standard control, removal, and maintenance activities of invasive species will not be considered.*
4. Restore lands with native vegetation as practicable following implementation of invasive species control techniques on disturbed lands where a native seed bank no longer exists.
5. Inform and educate landowners about all invasive species threats to their land and offer actions they can take in response.

E. Air Quality, Climate Change, and Renewable Energy

Funding for capital projects will not be considered. Proposals must address one or more of the following:

1. Innovative approaches to air quality improvement that reduce impacts on human health, the environment, or natural resources, such as by reducing and mitigating airborne contaminants including PAHs (polycyclic aromatic hydrocarbons).
2. Acquisition of data at a scale appropriate to assess natural resource changes attributable to climate change.
3. Research to help understand how to mitigate, adapt, or make Minnesota's ecosystems more resilient to climate change impacts, including drought and extreme weather events.
4. Implementation of innovative efforts aimed at mitigating, adapting, or making Minnesota's ecosystems more resilient to climate change impacts, including drought and extreme weather events.
5. Development, ~~E~~evaluation of applicability, ~~and/~~or facilitation of effective implementation of clean energy technologies (e.g., biofuels, solar, geothermal, wind) or energy conservation in Minnesota. Examples include efforts involving carbon emissions reduction; community-based, locally-produced renewable energy technologies; renewable energy life cycle costs and impacts; or smart energy technologies. ~~*Funding for capital projects will not be considered.*~~
6. Reduction of greenhouse gas emissions through new and innovative approaches to waste reduction or energy efficiency ~~to increasing recycling and composting~~. *Standard, required, and ongoing efforts will not be considered.*

F. Methods to Protect, Restore, and Enhance Land, Water, and Habitat

Activities should utilize native species and ~~P~~proposals must address one or more of the following (see p.7 for additional project requirements pertaining to this category):

1. Innovative protection, restoration, or enhancement of lands with high-quality natural resources, ~~, habitat,~~ ecological value, ~~, or~~ water protection value, or habitat, particularly for pollinators.
2. Long term preservation of native forest, wetland, or prairie plant genetics and viability.
3. Technical assistance for stewardship of prairies, ~~stewards~~hip, ~~,~~ forests, ~~, stewardship,~~ wetlands, or other habitat, or technical assistance for agricultural land management in order to protect water quality and aquatic habitat or to improve pollinator habitat. ~~stewardship of Conservation Reserve Program (CRP) lands and other agricultural lands, or aquatic buffer management to improve water quality.~~
4. Planning and implementation of community-based efforts to permanently conserve natural resources and reduce habitat fragmentation impacts on natural resources, including the impacts of transportation and other infrastructure.

G. Land Acquisition for Habitat and Recreation

Proposals must address ~~fee title or permanent conservation easement~~ acquisition of strategic lands with:

i. high quality natural resources, ~~, habitat,~~ ecological value, ~~, and/or~~ recreational value, water protection value, or habitat, particularly for pollinators; and

ii. ~~, and~~ the greatest capacity to contribute multiple conservation benefits to wildlife, humans, and ground and surface water quality.

All lands to be acquired should be part of an adopted state, regional, or local natural resource plan and a restoration/enhancement or management plan for the site must be created. Proposals should provide an explanation as to how such plans will be developed, implemented, and funded. Priority will be given to projects that address one or more of the following (see p.7 for additional project requirements

pertaining to this category):

1. Efforts based on precision conservation methods and analysis that quantifiably identify the lands most critical to acquire. Precision conservation is an emerging practice that considers lands in terms of the interconnected systems of which they are a part. As a practice, precision conservation compiles and integrates multiple types of available data layers and analysis (e.g., terrain analysis, soil productivity, habitat potential, economic analysis, erosion potential, proximity to surface water) to identify and guide efforts that will maximize conservation benefits.
2. Efforts involving Scientific and Natural Areas (SNA) or other areas that aim to protect unique ecosystems, such as native prairie as defined in M.S. 84.02, Subd. 5, or rare, endangered, or threatened species. Areas of these types that may not presently qualify as a priority for other State of Minnesota funds directed toward land acquisition for habitat or recreation are of particular interest.
3. Efforts that enhance habitat connectivity, benefit ground or surface water quality, improve access for natural resource management, or increase public access for recreation, particularly in areas of the state with limited protected public lands.
4. Efforts expanding outdoor recreational opportunities through additions to a state or regional park or trail.