

**Environment and Natural Resources Trust Fund
2011-2012 Request for Proposals (RFP)**

LCCMR ID: 093-C3+4

Project Title: Sustainable Land-use & Infrastructure Planning

Category: C3+4. Technical Assistance and Community-Based Planning

Total Project Budget: \$ \$385,000

Proposed Project Time Period for the Funding Requested: 2 yrs, July 2011 - June 2013

Other Non-State Funds: \$ 0

Summary:

Demonstrate using community planning tools--ordinances, best practices, economic impact analysis--to protect, improve and carefully use natural resources (land, water, wildlife) on the North Shore and associated inland watersheds.

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Sponsoring Organization: Applied Ecological Services, Inc.

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Location

Region: NE

Ecological Section: Northern Superior Uplands (212L)

County Name: Cook, Lake, St. Louis

City / Township:

| | | | |
|--------------------------|-------------------------|-----------------------------|----------------------|
| _____ Funding Priorities | _____ Multiple Benefits | _____ Outcomes | _____ Knowledge Base |
| _____ Extent of Impact | _____ Innovation | _____ Scientific/Tech Basis | _____ Urgency |
| _____ Capacity Readiness | _____ Leverage | _____ Employment | _____ TOTAL _____% |

2011-2012 MAIN PROPOSAL

PROJECT TITLE: SUSTAINABLE LAND-USE & INFRASTRUCTURE PLANNING

I. PROJECT STATEMENT

a. **Rationale.** With good information about natural resources, communities can better plan locations for new development and roads, protect water quality and groundwater, and maintain fish and wildlife habitat and populations—even rare species. The challenge is to make this information central in local decision-making in order to protect, improve and carefully use natural resources. Minnesota municipalities use comprehensive plans to develop in an orderly way, but decisions about land use and infrastructure are made before decisions about natural resources. A better approach is to use ecological science and identify locations in a municipality which require protection, restoration or careful use in order to maintain the functions of land and water systems. These systems purify water runoff and recharge groundwater, support populations of fish, game and rare species, maintain soil depth and fertility, and deliver other ecosystem services to people. A locally-led planning effort to learn about and use this information would address water quality and quantity, habitat fragmentation, rare species, maintenance of ecosystem services, and stewardship of natural resources. It implements the five key strategic areas of the Statewide Plan: Integrated Planning, Critical Land Protection, Land & Water Restoration & Protection, Sustainable Practices, and Economic Incentives for Sustainability.

b. **Goals & Outcomes.** Demonstrate how land and water conservation is compatible with development in municipalities doing land use and infrastructure planning. This addresses multiple natural resource issues: water quality and quantity, groundwater recharge, habitat fragmentation, wildlife populations, rare species, land and water stewardship. Products are GIS maps and data, ecological analysis tools, zoning ordinances, conservation best practices and economic impact analysis.

c. **Project Activities.** The project is in Superior’s North Shore and associated inland watersheds, excluding Duluth and the St. Louis River. With the region’s elected officials, municipal staff and citizens, the project will demonstrate how an integrated planning approach protects and improves key natural resources, the natural functioning of land and water systems, and promotes sustainable development. Land use and infrastructure plans will build on ecological plans. The project will provide information—zoning ordinances, best practices, economic information—to elected officials and staff of municipalities and joint powers organizations who are responsible for land use and infrastructure planning.

II. DESCRIPTION OF PROJECT ACTIVITIES

Activity 1. Establish Planning Foundation

Budget: \$65,000

Hire local liaison, create advisory committee and engage municipalities of Superior’s North Shore and inland watersheds (excluding Duluth, St. Louis River). Bring elected officials, municipal staff and key citizens into a discussion about an integrated ecological, land use and infrastructure planning approach.

| Outcome | Completion Date |
|--|-----------------|
| 1. Engage all municipalities in three North Shore counties (except Duluth). | September, 2011 |
| 2. Conduct 20 in-depth interviews and 20 public meetings with key decision-makers and stakeholders about municipal land use and infrastructure planning. | December, 2011 |

Activity 2. Ecological Planning for Land & Water Conservation

Budget: \$100,000

Use existing information (e.g., county water plans, hydrological data, land cover, wildlife conservation plans, rare natural features, geology/soils) to identify key locations that support high water quality, natural hydrological regimes, wildlife habitat, rare species, etc. Develop conservation zoning ordinances and best practices to protect, improve, and carefully use natural resources and land and water systems.

| Outcome | Completion Date |
|---|-----------------|
| 1. For all land/water systems and all habitats in region, identify critical land and water areas, and areas needing best practices and conservation ordinances. | March, 2012 |

Activity 3. Land Use and Infrastructure Planning

Budget: \$130,000

Identify the locations of land uses (e.g., residential, industrial) and infrastructure in order to support natural resource conservation, improvement and careful use; and to promote sustainable development. Develop conservation best practices and zoning ordinances. Identify locations for infrastructure which support natural resource conservation, and locations for development and redevelopment. Develop best practices for locating infrastructure to avoid conflict with natural resource conservation.

| Outcome | Completion Date |
|---|-----------------|
| 1. Land use and infrastructure plan for all municipalities in region | September, 2012 |
| 2. Conservation best practices and zoning ordinances to support ecological plan | December, 2012 |

Activity 4. Economic Impact Analysis

Budget: \$40,000

Using existing analyses from Minnesota and elsewhere, estimate the range of impact that conservation of open space and natural areas may have on property values. Use existing research to aggregate the total property value impact that parcels near and far from open space and natural areas will experience. Estimate the amount of property tax revenue that will be collected by cities, townships, counties, school districts and the State, as a result of being associated with an “open space premium.”

| Outcome | Completion Date |
|--|-----------------|
| 1. Land value and tax revenue analysis of land use and infrastructure plan | March, 2013 |

Activity 5. Implementation

Budget: \$50,000

Deliver findings (public views, analyses, data, maps, ordinances, best practices) to residents of region via newspaper articles, television and radio spots, and e-media. Conduct pre- and post-project ecological literacy test to evaluate whether approach increases community support for making ecological information central to decision-making for future land use and infrastructure.

| Outcome | Completion Date |
|--|-----------------|
| 1. Ecological literacy level in project area is higher after project than before | June, 2013 |
| 2. Regularly inform 500 key leaders and stakeholders; | |

III. PROJECT STRATEGY

a. **Project/Team Partners.** Project success requires a team with a local presence and significant experience in public engagement; working with municipalities and agencies; planning for greenways, natural areas and land and water systems; in community land use and infrastructure planning; and in economic impact analysis. The assembled team has this experience. Members of the team have worked together on prior projects. See the qualifications submittal for details.

b. **Timeline Requirements.** This 24-month project will be completed as follows:

Jul 1-Dec 31, 2011: Complete Activity 1. Begin Activities 2, 3, 4, 5.

Jan 1-Dec 31, 2012: Complete Activities 2 & 3. Continue Activity 4 & 5.

Jan 1-Jun 30, 2013: Complete Activities 4 & 5.

c. **Long-Term Strategy and Future Funding Needs.** We have shared this proposal and discussed this concept with the Arrowhead Regional Development Commission, and discussed the potential for funding with Minnesota’s Lake Superior Coastal Program. We will continue that discussion after submitting this proposal. The integrated ecological, land use and infrastructure data and plans will be made available to municipalities on the North Shore and associated watersheds (except Duluth and St. Louis River). Other products available to municipalities are: findings from interviews and public input; results of ecological literacy test; conservation ordinances; best practices; economic land value and tax revenue analysis. Comprehensive planning is not required of municipalities in rural Minnesota, but information from this project provides significant baseline data should they engage in planning. The implementation activity (5) will ensure that all data, products and findings of this project are made available to municipalities. Comprehensive plans for one community typically cost \$300,000-\$500,000.

2011-2012 Detailed Project Budget

IV. TOTAL TRUST FUND REQUEST BUDGET - 2 Years

| <u>BUDGET ITEM</u> | <u>AMOUNT</u> |
|--|-------------------|
| Personnel: | NA |
| | |
| Contracts: | |
| Activity 1. Planning Foundation - Katherine Barton & Associates | \$ 65,000 |
| Activity 2. Ecological Planning - Applied Ecological Services | \$ 100,000 |
| Activity 3. Land-Use and Infrastructure Planning - Short, Elliott, Hendrickson | \$ 130,000 |
| Activity 4. Economic Impact Analysis - Donjek | \$ 40,000 |
| Activity 5. Implementation - Dovetail Partners | \$ 50,000 |
| | |
| Equipment/Tools/Supplies: | |
| | |
| Acquisition (Fee Title or Permanent Easements): | NA |
| | |
| Travel: | |
| | |
| Additional Budget Items: | NA |
| | |
| TOTAL ENVIRONMENT & NATURAL RESOURCES TRUST FUND \$ REQUEST | \$ 385,000 |

V. OTHER FUNDS

| <u>SOURCE OF FUNDS</u> | <u>AMOUNT</u> | <u>Status</u> |
|---|---------------|------------------|
| Other Non-State \$ Being Applied to Project During Project Period: | \$0 | |
| Other State \$ Being Applied to Project During Project Period: | \$0 | |
| In-kind Services During Project Period: | | |
| Donated Internships | \$15,000 | <i>Committed</i> |
| Remaining \$ from Current ENRTF Appropriation (if applicable): | NA | |
| Funding History: | \$0 | |

2011-2012 Project Manager Qualifications and Organization Description

Sustainable Land-Use and Infrastructure Planning

Kim Alan Chapman (Project Manager)

Before joining AES, Dr. Chapman worked for The Nature Conservancy and taught at local colleges. With 25 years experience as an ecologist, he works with people to design, build and live sustainably. He has done community planning of greenways, natural areas and watersheds in a dozen communities and conservation site design for over twenty projects. He has led or participated in multi-stakeholder processes involving controversial and complex natural resource issues.

Applied Ecological Services, Inc. (www.appliedeco.com) – Ecological Land & Water Planning

Established in 1978, Applied Ecological Services brings the science of ecology to everyday decisions affecting land, water and natural resources. In thousands of projects around the world AES uses a design process that balances conservation and human needs—creating practical, positive outcomes for society and the economy. Its ecologists and ecologically- trained water engineers, planners and restoration practitioners work in integrated teams. AES has worked with all members of the team.

Short, Elliott, Hendrickson, Inc. (www.sehinc.com) – Land Use and Infrastructure Planning

SEH is known for comprehensive and other plans for communities, cities, and towns. Currently SEH and AES are working on an innovative comprehensive plan in Douglas County. Scott Sannes has over 20 years experience with SEH and public agencies. He completed dozens of infrastructure planning projects, including the Cirrus expansion in Duluth and the Two Harbors marina. Recently he worked on a sustainable energy plan for St. Louis County. Dan Jochum has led or had a major role in several comprehensive land use plans in rural, suburban and urban settings. He has special expertise in addressing rural and small town issues.

Donjek, Inc. (www.donjek.com) – Economic Impact Analysis

Donjek, Inc. provides public finance and policy expertise for public, private and philanthropic sectors. Jon Commers, researcher, has analyzed the impacts of open space and natural areas for the City of Minneapolis, City of Pequot Lakes, Trust for Public Lands and Embrace Open Space. He assisted the City of Little Rock with a financing plan for parks and conservation. Jon is a project manager for the Brookings Institution's metropolitan business plan initiative and coordinates development of a competitiveness plan for the Twin Cities Region.

Dovetail Partners, Inc. (www.dovetailinc.org) – Implementation Communications

Dovetail promotes land use planning and programs to encourage responsible land use. Recent projects include the Northwoods Regional ATV Trail (with AES), Aitkin County Comprehensive Recreation Trail Plan and assessing High Conservation Value Forests in Crow Wing County. Kathryn Fernholz is a forester and an authority on impacts and trade-offs of environmental decisions, e.g., consumption choices, land use, policy alternatives. Dovetail excels at delivering technical information to citizens and municipalities in project areas via traditional and e-media.

Katherine Barton & Associates – Planning Foundation

Katherine Barton & Associates specializes in gathering public input and engaging key community decision-makers to address challenging topics. Working as a planner for 25 years, she spent 9 years at the Minnesota Department of Resources with a focus on including ecological concerns into landscape planning. Recently she completed an assessment of the Minnesota Hmong community's attitude and behavior regarding water issues and water conservation for the Mississippi Watershed Management Organization in the Twin Cities.

