



THE STATE OF NEW HAMPSHIRE
DEPARTMENT OF TRANSPORTATION



CHRISTOPHER D. CLEMENT, SR.
COMMISSIONER

JEFF BRILLHART, P.E.
ASSISTANT COMMISSIONER

Bureau of Environment
October 7, 2013

Her Excellency, Governor Margaret Wood Hassan
and the Honorable Council
State House
Concord, New Hampshire 03301

Sole Source

REQUESTED ACTION

Authorize the Department of Transportation, Bureau of Environment, to enter into a **SOLE SOURCE** Memorandum of Understanding (MOU) with the Department of Resources and Economic Development, Natural Heritage Bureau (NHB) (Vendor #177887) in an amount not to exceed \$22,724.55, for exporting technology, training staff, and developing a pilot wetland mitigation evaluation program, effective upon Governor and Council approval, through December 31, 2015. 100% Federal Funds.

Funding is as follows:	<u>FY 2014</u>	<u>FY 2015</u>
04-96-96-963515-3054		
Consolidated Federal Aid		
046-500464 General Consultants Non-Benefit	\$17,707.79	\$5,016.76

EXPLANATION

This item is sole source as the Department of Transportation (DOT) received a State Highway Research Program 2 (SHRP 2) grant from the Federal Highway Administration (FHWA) to specifically partner with NHB on this effort. The award of the funds is contingent upon the partnership between DOT and NHB, and the potential programmatic-type agreement for future development of mitigation projects resulting from the partnership.

The DOT was awarded a SHRP 2 User Assistance Grant to deploy implementation of an Eco-Logical approach to wetland mitigation. Eco-Logical is a FHWA ecosystem approach to developing infrastructure projects to bring early consideration of ecological resources into the standard long-range transportation planning process of State Departments of Transportation and Metropolitan Planning Organizations, and into environmental review processes of State and Federal resource and regulatory agencies.

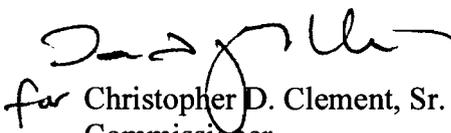
The DOT, as the grant recipient, is seeking to provide SHRP 2 funding up to, but not to exceed \$22,724.55 to NHB to partner on utilizing the SHRP 2 funds to implement a pilot program at DOT to evaluate a standardized, scientifically defensible wetland assessment methodology to monitor DOT

wetland creation sites, and help establish standards for wetland mitigation. The wetland assessment methodology will consist of the Level 2 Ecological Integrity Assessment (EIA), a protocol developed by NatureServe, and member programs to assess the integrity of wetland systems.

As the State's steward of the NH natural heritage program, NHB is the singularly most capable state agency to provide the existing technology infrastructure, and training in the EIA to successfully assist DOT in development of this wetland assessment methodology. Furthermore, NHB has the existing knowledge, skills, and regulatory capability to ensure project success.

Your approval of this resolution is respectfully requested.

Sincerely,


for Christopher D. Clement, Sr.
Commissioner

CDC/ktn
Attachments

Broad-based Ecological Approach to Highway Planning Stretches Project Implementation Dollars

An early focus on ecological resources reduces review times and costs when projects move from planning to implementation

In today's economic climate, transportation agencies must find ways to stretch dollars while meeting ever-shifting operating demands. The context is changing. Ecosystem and watershed restoration and species recovery needs are expanding as a more holistic view of the Endangered Species Act is taking hold. Stakeholders expect more from government agencies in terms of avoiding impacts to ecosystems and using transportation projects as a way to support ecosystem recovery. Environmental mitigation comes at a real cost to transportation agencies. The Environmental Law Institute estimates that \$2.9 billion is spent annually on compensatory wetland mitigation alone.

The benefits of integrating ecosystem-level environmental considerations into highway planning are widely recognized, and there is an immediate need for practical guidance on how to implement these approaches cost-efficiently. A new tool developed through the second Strategic Highway Research Program (SHRP2) provides a step-by-step process for making decisions within an ecological framework, effectively integrating conservation with transportation planning. It is a blueprint for a structured, multi-agency approach, including supporting tools and data.

Integrating Ecological Mitigation to Enhance Efficiency

The Solution

The Integrated Ecological Framework (IEF) is a nine-step, science-based process that helps planners integrate ecological priorities and make timely decisions about transportation capacity enhancements and other system investments at the pre-NEPA planning stage. The framework provides clear, practical steps to enhance integration and to support an ecological approach to environmental stewardship.

The framework includes tools for overcoming important obstacles to integrating highway planning and ecological considerations such as the need to build collaborative interagency relationships and usable data collections from existing data sets, analyze alternatives and cumulative effects, and develop regulatory assurances and ecosystem crediting strategies. The IEF also provides a template for developing organizational strategies to make ecological approaches a priority.

Practical guidance for meeting ecological priorities; win-win solutions for transportation and the environment

FOCUS AREA:
Capacity (C06)

Structured nine-step approach, tools, and templates to meet both ecosystem and transportation goals.

Save Lives

- Enhanced environmental outcomes are supportive of human health.



Save Money

- Streamlined, efficient delivery of infrastructure projects means real savings.



Save Time

- Increased predictability supports more efficient regulatory processes, saving implementation time.
- Enhances interagency coordination.



The Benefits

By better coordinating transportation planning with natural resource planning through an IEF, opportunities to avoid or minimize environmental impacts can be identified at the planning stage, potentially reducing mitigation requirements or reducing delays during project-level environmental review and permitting. The IEF process can also identify opportunities for advanced mitigation when it is needed, ensuring that a plan is in place when the project is built. The IEF provides a structure that allows transportation and natural resource agencies to systematically establish more collaborative working relationships to achieve transportation goals, mutual environmental goals, and reduced costs. In particular, reducing delay means real savings: for a \$100 million transportation project, a year of delay costs roughly \$5 million. The long-term benefits of applying the IEF process are better environmental outcomes and lowered costs associated with planning, environmental review, and regulatory decision making. In the short term, the IEF provides practical guidance on selecting and using the most appropriate effective data, methods, tools, and processes to achieve an integrated, landscape-scale approach to transportation decision making.

Who is using these tools?

The IEF process is being pilot tested in four locations:

- ▶ **Oregon:** The Rogue Valley Council of Governments has put in place the first three steps of the IEF. Outcomes: Biological and ecosystem processes were integrated. Ecological corridors were preserved, red tape reduced, and costs cut.
- ▶ **California:** Caltrans and the University of California, Davis, are working together on the SR 37 corridor study (north side of San Francisco Bay) to apply the IEF process. Outcomes: Better system planning, early stakeholder engagement, and enhanced issue awareness. Established a foundation for continued ecological actions. Is informing statewide system planning guidelines for sensitive corridors and SLR adaptation.
- ▶ **West Virginia:** The West Virginia Department of Transportation (DOT), Division of Highways, is working with the West Virginia University to revisit mitigation plans for proposed new freeways using the IEF process. Outcomes: Enhanced awareness of regional tools to conduct alternatives analysis of route selection impacts. Provided a guide for quantifying impacts within the regulatory framework of the existing mitigation tool. Provided a standardized, defensible approach to avoiding or minimizing environmental impacts. Provided a watershed-based approach to mitigation.
- ▶ **Colorado:** The Colorado DOT and the Colorado State University is using the IEF process as part of a corridor study of the widening of SH 285 in Park County. Outcomes: Confirmed IEF is well suited to long-range and corridor-level planning and that using IEF requires a shift from a permit-driven to strategy-driven approach at all levels of the DOT.

How can you learn more?

An Ecological Approach to Integrating Conservation and Highway Planning, Volume 2, is available online at <http://www.trb.org/Main/Blurbs/166938.aspx>. The IEF and related tools are being integrated into the web-based resource *Transportation for Communities: Advancing Projects through Partnerships (TCAPP)*, available at www.transportationforcommunities.com, and are scheduled for implementation in 2013. For more information, contact Shari Schaftlein at FHWA, shari.schaftlein@dot.gov; Shannon Eggleston at AASHTO, seggleston@ashto.org; or Stephen Andrie at TRB, sandrle@nas.edu.



About SHRP2 Implementation

The second Strategic Highway Research Program is a national partnership of key transportation organizations: the Federal Highway Administration, the American Association of State Highway and Transportation Officials, and the Transportation Research Board. Together, these partners conduct research and deploy products that will help the transportation community enhance the productivity, boost the efficiency, increase the safety, and improve the reliability of the Nation's highway system.

Strategic Highway Research Program

Statewide
X-A003(441)
27067
[2013 SHRP2 User Incentive Eco-Logical Grant]

MEMORANDUM OF UNDERSTANDING
Between the
NH DEPARTMENT OF TRANSPORTATION
And the
NH DEPARTMENT OF RESOURCES AND ECONOMIC DEVELOPMENT
NATURAL HERITAGE BUREAU

WHEREAS, the Federal Highway Administration (FHWA), through the NH Division Office, has awarded the NH Department of Transportation (NHDOT) a \$24,997 Strategic Highway Research Program 2 (SHRP2) User Assistance grant to deploy implementation of Eco-Logical; and

WHEREAS, Eco-Logical is a FHWA ecosystem approach to developing infrastructure projects to bring early consideration of ecological resources into the standard long-range transportation planning process of State Departments of Transportation and Metropolitan Planning Organizations, and into environmental review processes of State and Federal resource and regulatory agencies; and

WHEREAS, the NH Natural Heritage Bureau (NHNHB), an office within the NH Department of Resources and Economic Development, approached NHDOT to partner on utilizing SHRP2 funds to implement a pilot program to evaluate a standardized, scientifically defensible wetland assessment methodology to monitor NHDOT wetland creation mitigation sites, and help establish standards for wetland mitigation; and

WHEREAS, the wetland assessment methodology will consist of the Level 2 Ecological Integrity Assessment (EIA), a protocol developed by NatureServe, and member programs to assess the integrity of wetland systems based on five (5) major ecological factors; and

WHEREAS, the NHDOT, as the grant recipient, wishes to provide SHRP2 funding up to, but not to exceed \$22,724.55, to NHNHB for exporting technology, training staff, and developing a pilot wetland mitigation evaluation program.

NOW, THEREFORE, NHDOT and NHNHB agree to the following:

1. NHNHB will provide NHDOT with the following in exportable format:
 - a. EIA Scorecard Database,
 - b. Land Use Index Instructions,
 - c. EIA Field Data Entry Forms.

2. NHHNB will provide training to NHDOT, and NHDOT contracted environmental consultants as appropriate, as outlined below:
 - a. Pre-field office training on the use of the EIA Scorecard Database, Land Use Index Instructions, and EIA Field Data Entry Forms. Land Use Index values and maps for all training sites will be produced,
 - b. Field training at the Pequawket Pond mitigation site, and two to three (2-3) other wetlands where impacts are anticipated by a proposed roadway construction project, at a minimum,
 - c. Post-field office training on completion of EIA form.

Field training conducted by NHHNB will include EIA training, which focuses on wetland integrity. NHDOT staff and contractors can compare the EIA training to the NHDOT current method (Highway Methodology, or similar) for assessing wetland functions.

3. NHDOT and NHHNB will work with the NH Department of Environmental Services (NHDES) to create a performance standard framework for mitigation sites based on the pilot study.
4. NHHNB, with assistance from NHDOT, will prepare a final report on the development of the EIA performance standards. The report will include, but not be limited to:
 - a. Results of the pilot study
 - b. An assessment of the EIA as a potential methodology for NHDOT to adopt as a standard for monitoring and assessing wetland mitigation sites
 - c. An assessment of the EIA as a potential methodology for future incorporation into NHDES regulatory framework for mitigation.
5. NHHNB will invoice NHDOT for services rendered, no less than on a quarterly basis, and preferably on a monthly basis, not to exceed \$22,724.55.
6. The NHDOT and NHHNB agree to the following schedule, which may be amended and/or revised by mutual agreement between the agencies, for completion of the project:

Task 1:	Contract approval through G&C	June 2013 to October 2013
Task 2:	Exporting technology	October 2013 to March 2014
Task 3:	Pre-field office training	March 2014 to June 2014
Task 4:	Field training	June 2014 to October 2014
Task 5:	Post-field office training	October 2014 to February 2015
Task 6:	Final report	February 2015 to June 2015

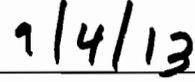
Termination of any paragraph, part, or section of this Agreement per the conditions described herein shall not be interpreted as termination of the entire Agreement. The period of this

Agreement shall be from the date of Governor and Council approval through December 31, 2015.

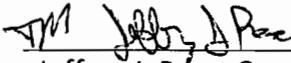
In WITNESS WHEREOF, the respective parties have hereunto set their hands on the dates indicated.



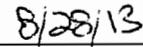
Christopher D. Clement, Commissioner
Department of Transportation



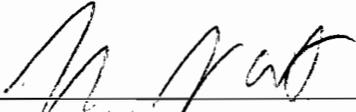
Date



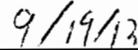
Jeffrey J. Rose, Commissioner
Department of Resources and Economic Development



Date



Print Name: John J. Conforti
Office of Attorney General



Date

SECRETARY OF STATE

I hereby certify that the foregoing contract was approved by the Governor and Executive Council of the State of the State of New Hampshire at their meeting on _____

Signed _____

