September 30, 2009

Request for Information
“Incorporating Conservation Objectives into Transportation Planning”
Contract No. C030901

ANNOUNCEMENT NUMBER ONE

The New York State Department of Transportation (NYSDOT) has received questions regarding the subject Request for Information (RFI) and is releasing the following in response to those questions.

NOTE: The RFI Response Deadline has been extended to Friday, October 16, 2009.

Questions and Answers

1. Regarding question 4, the question starts out with a statement regarding a current agreement between NYSDOT and The Nature Conservancy. Please clarify the question and your need. Specifically, is NYSDOT asking for a firm to be capable of developing and applying dynamic buffer models to the program data currently being offered by The Nature Conservancy under that contract or to data in general offered by The Nature Conservancy. Any additional information will be appreciated.

_The dynamic buffer models being created by The Nature Conservancy under Contract No. C030564 are not inclusive of all species of greatest conservation need (SGCN) in New York State. NYSDOT is interested in the capability of firms or entities to develop and apply dynamic buffer models that are consistent and compatible with The Nature Conservancy models based on NY Natural Heritage Program data for some or all of the remaining aquatic SGCN._
2. Regarding Item 10, can you provide more information as to the specific scope of the work, and an estimate of the size of the areas to be assessed? Is the scope that described in Item 4?

_The scope of work for this project will incorporate the activities in questions 4 through 8 of the RFI. The pilot watershed to be assessed using the aquatic fragmentation model (currently in development under Contract No. C303569) should be on a basin-scale, encompassing at least 2,000 square miles of drainage area._

3. The FHWA Eco-Logical framework for infrastructure planning focuses on integrating ecosystem level information into planning for and mitigating impacts from infrastructure development. A key outcome of that process is development of a regional ecosystem framework (REF) to be used to identify conservation priorities. Is the purpose of this NYSDOT project to develop a REF, or to focus on conservation objectives to guide the development of an REF?

_The purpose of this NYSDOT project would be to focus on conservation objectives to guide the development of a REF rather than to develop a REF. Eco-Logical outlines on eight-step framework for integrated planning (1. Build and strengthen collaborative partnerships; 2. Identify management plans; 3. Integrate plans; 4. Assess effects; 5. Establish and prioritize opportunities; 6. Document agreements; 7. Design projects consistent with regional ecosystem framework; 8. Balance predictability and adaptive management). This effort would go through step 5, establish and prioritize opportunities._

4. Further, the Eco-Logical framework emphasizes the value of an ecosystem approach in the design of infrastructure projects to minimize the individual and cumulative impacts of infrastructure projects such as habitat fragmentation; protect larger scale, multi-resource ecosystems; guide mitigation; and help establish ecological performance metrics. Will the NYSDOT project address all four of these goals, or only a subset?

_This effort would focus primarily on the goals to “protect larger scale, multi-resource ecosystems” and “guide mitigation”._

_It is DOT’s ultimate goal to build from the outcomes of Contract No. C303569 and work in conjunction with the Interagency Aquatic Connections Team (InterACT) to address all four of these goals in the long term. The InterACT group is focusing on “design of infrastructure projects to minimize the individual and cumulative impacts of infrastructure projects such as habitat fragmentation” and “help establish ecological performance metrics”._
5. Does NYSDOT intend the work to focus exclusively on aquatic conservation objectives, as specified in Questions 2, 5, 6, and 7 in the RFI; or on a broader suite of conservation objectives as suggested by the RFI title (“Incorporating Conservation Objectives into Transportation Planning”) and by Questions 1, 3, 4, 8, and 9?

The work is intended to focus on conservation objectives for aquatic species of greatest conservation need.

6. If the focus is to be on aquatic conservation objectives alone, then, with respect to Questions 2-5 in the RFI, does NYSDOT intend to focus only on strictly aquatic SGCN, or will the project address additional concerns, such as: riparian communities and species; other species that may use riparian zones as movement corridors; rare and/or exemplary natural communities found along or within some distance of streams and rivers; or host species on which freshwater mussel SGCN depend, all of which can be affected by transportation projects, such as stream crossings?

The work will address riparian communities/species and non-SGCN only in cases where they play a direct role in the life cycle of aquatic SGCN (e.g., freshwater mussels and host fish) and this role is affected in some way by aquatic connectivity at highway stream crossings.

7. Similarly, if the focus is to be on aquatic conservation objectives alone, then, with respect to Questions 2-5 in the RFI, does NYSDOT intend the work to focus exclusively on transportation projects that cross streams, or will the work also include infrastructure that parallels streams or otherwise occupies riparian zones and thereby affects stream and/or riparian ecological conditions more broadly?

It is a primary objective of this project to develop tools that will assist in prioritization of highway stream crossing improvements, specifically in regard to barriers to upstream movement. Therefore, it is not anticipated that the work will address impacts stemming from adjacency/proximity where a crossing is not present.

8. With respect to Question 5 in the RFI, how does NYSDOT define the term, "fragmenting"? Does it use this term to mean (a) actual fragmenting effects on species present in a watershed, (b) potential effects on species that might be present, or (c) potential effects on species known to have been extirpated from a watershed but which could be restored? For example, a stream crossing may potentially be capable of barring the passage of some aquatic species in a particular watershed that is part of that species' historic distribution. However, if this species is today absent from the watershed, the crossing will not have any actual fragmenting effect on that species until that species is restored to the watershed.

The term “fragmenting” is intended to include actual and potential effects, as described in (a) and (b) above. Potential effects on species known to have been extirpated from a watershed as a result of migratory barriers, as described in (c) above may be considered when there is a reasonable expectation that the species could be restored to that stream section.
9. With respect to Question 5 in the RFI, does NYSDOT contemplate a study focused only on a 2,000 sq. mi. "pilot watershed" or does it contemplate some statewide assessment or modeling as well – and if so, what combination of statewide and pilot-watershed work does it contemplate? Further, does NYSDOT have any specific watershed(s) in mind for the pilot study?

_The work is expected to include both a) development of dynamic buffer models for aquatic SGCN (statewide applicability), and b) application of the model currently being developed by The Nature Conservancy to a large pilot watershed, including field verification. The specific pilot watershed to be used is not predetermined. It is our ultimate goal to apply a statewide assessment or model, but that would not be part of this effort._

10. Since The Nature Conservancy-Adirondack Chapter model (currently under development) appears to be important to this project, can we review either the State Wildlife Grant proposal submitted by TNC and/or any products submitted to date so that we can adequately address Question 5 in the RFI? How does this modeling work compare or relate to work carried out by The Nature Conservancy on stream crossings and watershed connectivity elsewhere in the U.S., e.g., in the Connecticut River basin?

_The SWG proposal is provided on our website for your reference. We do not have enough familiarity with the other modeling work carried out by TNC to answer the latter part of the question._

11. With respect to Question 7 in the RFI, how much collection of new field data does NYSDOT envision will be required under this project, versus using existing data? Would the new field data be confined to ecological data or include information on the location, type, size, etc. of transportation infrastructure (e.g., roads proximate to a river, bridge, culverts, etc.) as well? Additionally, in Question 7, it is not clear what is meant by “training others to collect aquatic ecology field data”. Does this mean that NYSDOT or other organizations will be trained to help with field data collection to meet the existing data needs for the project; or is the training meant to enable NYSDOT to assess crossings and their ecological impacts upon the conclusion of the contract period? If the former, would NYSDOT assist with any landowner contact or permission for access for field work?

_Field data will be used to refine existing geospatial data on the location of aquatic fragmenting features and assess the impact of these features. It is envisioned that field data would include attributes of the waterbody (e.g., bankfull width, channel gradient, substrate), broad biological characterization (e.g., habitat description, known/suspected species), crossing attributes (e.g., span, length, structure type, material), and an aquatic connectivity assessment (e.g., velocity barrier, outlet drop, crossing substrate)._ 

_The reference to “training others to collect aquatic ecology field data” inquires as to the firm’s ability to assemble a sufficient field crew, if one does not already exist._
12. Does NYSDOT contemplate including any public outreach or communication as a component of the project? If so, would the contractor have any responsibilities in this?

*Public outreach is not an anticipated component of this contract; however stipulations for technology transfer will likely require the contracting firm to provide NYSDOT staff with informational presentations throughout the contract period as well as final training at the close of the contract period.*

13. With respect to Questions 3 and 9 in the RFI, will NYSDOT need database and GIS products that can be readily integrated into the Natural Heritage Program database? Does NYSDOT already have access to that database; and will the contractor need a separate data sharing agreement with the Heritage Program?

*The NYSDOT plans to use the database and GIS products of this contract in concert with the NY Natural Heritage Program database. Therefore, the products of this contract must at least match that database’s level of precision. NYSDOT does have access to the NYNHP database; the contractor will be responsible for negotiating a separate data sharing agreement with NYNHP.*

14. Will a comprehensive NYSDOT geospatial database on transportation infrastructure be available to the contractor, including data on all stream crossing structures and the channels (and riparian zones, if any) crossed, for the areas/watersheds included in the project?

*NYSDOT owns and maintains a variety of geospatial datasets that may be furnished to the contractor as necessary. It should be noted, however, that these datasets are primarily related to the highway and its associated structures. Existing attribute data for stream crossing structures generally does not support inference regarding their status as aquatic migration barriers.*

15. With respect to Question 10 in the RFI, can NYSDOT provide greater specificity as to the scope and breadth of the work, so that prospective contractors can more accurately assess the potential costs of the project? In particular, the RFI does not indicate what specific tasks and products NYSDOT contemplates, to help it incorporate conservation objectives or aspects of the FHWA Eco-Logical framework into its planning process.

*As noted in response to question #2 above, the scope of work for this project will incorporate the activities in questions 4 through 8 of the RFI to meet the Eco-Logical goals to “protect larger scale, multi-resource ecosystems” and “guide mitigation”, as noted in response #4 above. Final deliverables would be a final report and maps identifying and prioritizing critical locations in the study watershed for aquatic connectivity restoration, along with a document with results and methodologies. As noted in response #12 above, technology transfer will likely require the contracting firm to provide NYSDOT staff with informational presentations throughout the contract period as well as final training at the close of the contract period.*
16. Question 2 asks if the firm is knowledgeable of aquatic SGCN’s and their habitat. The list of SGCN’s compiled by DEC and NHP, identifies a variety of flora and fauna that could be considered “aquatic”. Is the NYSDOT interested in our experience with all of these “aquatic” species or certain subsets such as fisheries or amphibians?

**NYSDOT is interested in aquatic fauna that are negatively affected by barriers to upstream migration (e.g., fishes, amphibians, reptiles, crustaceans).**

17. Question 6 asks about applying a model to assess aquatic habitat fragmentation to a large (> 2,000 sq. mi.) pilot watershed. Has NYSDOT considered placing an upper limit on the extent of the pilot watershed (i.e. < 3,000 sq. mi.)? This would be useful in responding to Question 10. Also, does NYSDOT know if the pilot watershed will contain just inland (freshwater) environments or could it also include marine (estuarine and/or saltwater) environments?

**NYSDOT has not considered placing an upper size limit on the pilot watershed. In order to maximize transferability of results to other watersheds across the state, pilot watersheds containing marine environments are not preferred.**

**NOTE:** Please feel free to view a copy of the TNC-Adirondack Chapter contract with NYSDEC, Contract No. C303569, which has been added to NYSDOT’s website. This copy of the contract does not include signatures but it is a duplicate of the executed agreement between the firm and NYSDEC.

Questions regarding this announcement or the RFI should be directed to:

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Sincerely,

*Patricia A. Rowe, for*

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