Technical Committee Recommendations: North Atlantic LCC Priority Science Needs for 2013

*\* The “alternative funding option” (last column) assumes that priority science needs of the North Atlantic LCC are addressed in part by Hurricane Sandy resilience science funding to the Department of Interior.*

| **Topic** | **Relevance to Conservation Decisions** | **Status and Relation to Other Work** | **Potential Project Type** | **Recommended Funding** | **Alternative Funding Option\*** |
| --- | --- | --- | --- | --- | --- |
| **Aquatic Resources and Ecosystems** |
| A1. Compilation of aquatic biological data | Needed for assessing habitats for and threats to high priority fish and other aquatic species, which informs conservation and restoration priorities | Support new aquatic decision support tool effort (Downstream Strategies), ecological flow assessments | Coordination with states and other partners; data collection/ entry/ validation | $25,000(Range: $10-50 K) | $25,000(Range: $10-50 K) |
| A2. Stream connectivity and barriers | Needed for better prioritizing stream restoration efforts; also benefits efforts to prevent flood damage from storms | Work would build on existing connectivity work and could leverage Hurricane Sandy funding | Identification and collection of existing data; field surveys to fill gaps; regional compilation and decision models | $150,000($100-200K) | $100,000($50-150K) |
| A3. Stream flow and temperature | Needed for understanding the capacity for streams to support aquatic life, including refugia for cold water species, which can be used in conserving streams | Build upon and inform current stream flow and temperature projects | Modeled predictions of stream thermal regimes; guidance for identifying stream cold water refugia | $0 | $100,000($50-125K)(Share costs with NE CSC, others) |
| **Terrestrial and Freshwater Wetland Resources and Ecosystems** |
| TW1. Vernal pool mapping and monitoring | Needed for assessing populations of amphibians and other vernal pool-dependent species, which can be used in directing conservation activities for these sensitive habitats | Momentum is growing to develop a regional monitoring program, and RCN proposal for this topic has been submitted | Gather existing data; identify data gaps; coordinate regional efforts; develop regional monitoring protocols | $75,000($50-100K) | $100,000($50-125K) |
| TW2. Migratory stopover habitat | Needed for identifying high priority areas for conservation of birds during the migration period | Would build on existing work with weather radar to identify stopover areas | Analyze radar data, carry out field verification, model areas of radar gaps | $75,000($50-100K) | $100,000($50-100K) |
| TW3. Forest structure and condition | Needed for assessing current and future capacity of the landscape to support wildlife populations, which can inform forest planning and conservation priorities | Incorporate directly into *Designing Sustainable Landscapes* project | Collaborate on multi-institution *North American Forest Dynamics* project | $0 | $25,000($0-50K) |
| TW4. Compilation of terrestrial species data | Needed for informing state wildlife action plans and other efforts to direct conservation activities that depend on understanding species distributions and populations | Also would be useful for Designing Sustainable Landscapes project and FWS representative species effort | Coordination with states and other partners; data collection/ entry/ validation | $0 | $25,000($10-50 K) |
| **Coastal and Marine Resources and Ecosystems** |
| CM1. Tidal wetland habitat suitability | Needed to make decisions on restoration and management of habitat for saltmarsh-dependent fish and wildlife | Relates to LCC Structured Decision Making and sea level rise decision model being developed through Northeast CSC. | Decision model for salt marsh restoration, management or acquisition. | $150,000($100-200K) | $0(assumes Hurricane funding) |
| CM2. Wetland restoration projects for resilience | Needed to ensure the effectiveness of future restoration of coastal wetlands | RFP with 3 proposals last year – none selected; similar work proposed under Hurricane Sandy resiliency | Monitoring of metrics to determine effectiveness of restoration; assessment or results; recommendations | $0 | $0(assumes Hurricane funding) |
| CM3. Natural systems response to Hurricane Sandy | Needed to reduce risk to coastal ecosystems and human communities from storm flooding | Assessments completed and proposed under Hurricane Sandy resiliency | Assessment of impacts; comparison of impacts in natural vs. managed systems; summary of results and recommendations | $0 | $0(assumes Hurricane funding) |
| **Total** | $475,000(Total range:$310-650K) | $475,000(Total range:$220-650K) |