NORTH ATLANTIC LANDSCAPE CONSERVATION COOPERATIVE GRANT
2015 PROGRESS REPORT

Quarter: (circle one)   2015 1ˢᵗ   2015 2ⁿᵈ   2015 3ʳᵈ   2015 4ᵗʰ

Grant Program, Number and Title: NALCC 2012-06: F11AC00223 MOD #3 NALCC 1420
Spatially explicit models for aquatic habitats

Organization: Downstream Strategies, LLC

Project Leader: John (Fritz) Boettner

Abstract: After the scope of work was modified—refer to Q1 2015 report—the project team has been working to complete the revised scope of work, which includes:

1. Complete Chesapeake Bay brook trout model climate change scenarios. Supplementing the existing model with new climate change scenarios.
2. Complete winter flounder case study for Narragansett Bay. Ongoing effort, the focus for this model is to develop useful products for winter flounder managers, but also to create a framework that could be applied to other coastal or estuarine species.
3. Winter flounder model for Long Island Sound. Using the framework developed for the Narragansett Bay, DS will apply this approach and develop a Long Island Sound winter flounder model.
4. Develop a diadromous species framework for river herring. This effort will build from the TNC assessment, which compiled and analyzed river herring data for the Atlantic coast.
5. All of the results produced in these efforts will be incorporated into a web-based decision support tool.

Task 4 above was modified based on project developments with the technical team and data providers. Details described in the *difficulties encountered* section. A no-cost extension was granted to the project team to allow for an adjusted schedule for project completion. Anticipated project completion is Q3 2015.

Were planned goals/objectives achieved last quarter?

Planned goals for Q1 2015 include:
1. **Draft brook trout technical report** – Final technical and summary report was submitted.
2. **Geodatabase of all data and brook trout model results –** Complete but not submitted, being uploaded to decision support tool.
3. **Nar. Bay winter flounder model technical report –** Submitted final report (based on edits and comments) in draft form and awaiting approval from technical team.
4. **Geodatabase of all data and winter flounder model results –** Complete but not submitted, being uploaded to decision support tool.
5. **Long Island Sound (LIS) winter flounder model technical report –** Submitted final report (based on edits and comments) in draft form and awaiting approval from technical team.
6. **Geodatabase of all data and LIS winter flounder model results –** Complete but not submitted, being uploaded to decision support tool.

Progress Achieved: (For each Goal/Objective, list Planned and Actual Accomplishments)

- **Task 1: Inland model (Chesapeake Bay watershed brook trout model)**
    - o   Planned: Final model and report
    - o   Achieved: Final model and report, including summary report
- **Task 2. Narragansett Bay winter flounder model**
    - o   Planned: Final model and report
    - o   Achieved: Final model and report
- **Task 3: Long Island Sound winter flounder model**
    - o   Planned: Final model and report
    - o   Achieved: Final model and report
- **Task 4. Diadromous species case study**
    - o   Planned: Final model and report
    - o   Achieved: No models or reports will be developed. TNC River Herring Assessment data will be integrated into the decision support tool by Q3 2015.
- **Task 5. Decision support tool**
    - o   Planned: Stakeholder feedback and coordination, data processing, tool development
    - o   Achieved: Based on other efforts unrelated to this project, a draft tool is complete and put out for stakeholder feedback. In Q2 2015 data was transferred to subcontractor (Critigen) for integration into decision support tool. Expected release of tool and conclusion of project in Q3 2015.

Difficulties Encountered:

As mentioned in the previous report, the diadramous modeling task has encountered data limitations that will not allow a predictive model to be created to assess habitat. A decision was made by the technical review team to integrate Erik Martin's (TNC) River Herring Assessment data into the decision support tool.

Activities Anticipated Next Quarter:

   Conclusion of project, which will include the following deliverables:
1. All reports and data for Chesapeake Bay Brook Trout Model
2. All reports and data for Winter Flounder—Narragansett and Long Island Sound—models
3. All models integrated and functioning in the decision support tool

Expected End Date:

Costs:

   Total life to date expenses (include this quarter): $210,156.97

   Total Approved Budgeted Funds: $250,000

   Are you within   the approved budget plan and categories? YES

Signature:

Date: 9/18/2015