

NORTH ATLANTIC LANDSCAPE CONSERVATION COOPERATIVE GRANT 2015 PROGRESS REPORT

Quarter: 1st, 2015

Grant Number and Title: NALCC 2013-02 “Increasing Resiliency for Riverine Ecosystems via Collaborative Culvert Assessment”

Organization: University of Massachusetts Amherst

Project Leader: Scott Jackson, Extension Associate Professor

Abstract: To conduct assessments of river and stream continuity and set priorities for restoring aquatic and terrestrial connectivity at a regional scale, such as that of the NALCC project, it is necessary to reconcile disparate approaches for road-stream crossing assessment and knit them together into a compatible system for use across state lines and over large areas. The goals of the project are to 1) create a network of individuals and organizations working together to assess barriers, set priorities, and implement projects that restore river and stream continuity and enhance the resiliency of transportation infrastructure, and 2) create an infrastructure of GIS data, assessment protocols, scoring algorithms, databases and data sharing applications to support road-stream crossing assessments and priority setting for the restoration of aquatic connectivity.

Were planned goals/objectives achieved last quarter? Yes

Progress Achieved:

- Regular core and work group meetings and webinars occurred
- Protocol was refined with work group input
- Field trainings were planned for spring
- Prioritization of areas for field surveys was completed
- The existing UMass Stream Continuity database continues to be updated and expanded to accommodate the needs of the entire region and represent the NAACC.

TASK	TASK DESCRIPTION	% DONE	PROGRESS NARRATIVE
1.1	Assemble and coordinate a team of Northeast Partners	80%	<ul style="list-style-type: none"> • Core and work group continued to participate regularly • Held two webinars on prioritizing for field

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			<p>surveys and QA/QC</p> <ul style="list-style-type: none"> • Developed and analyzed surveys to solicit feedback following webinars • Held a core team meeting in March to finalize field survey protocol & prioritization, plan QA/QC materials, and plan for field trainings
1.2	<p>Create a broad network of individuals and organizations to conduct assessments of stream crossings</p>	80%	<ul style="list-style-type: none"> • Conducted extensive outreach to state level contacts, conservation organizations, and federal agency partners to solicit L2 coordinators and trainers • Reviewed / edited survey protocol manual
2.1	<p>Identify sources of road-stream crossing data currently available in the region</p>	30 %	<ul style="list-style-type: none"> • Some sources have already been identified and obtained. • All states encompassed by the NAACC project area will be contacted to attempt to locate all existing crossing datasets from state and federal agencies and non-governmental organizations.
2.2	<p>Reconfigure River and Stream Continuity online database to accept data from NY and data collected using other protocols</p>	35 %	<ul style="list-style-type: none"> • Worked with collaborators in NY to establish a system to coordinate crossing assessments in that state • Incorporated about 950 new survey records from NY into the database • Developed a PDF version of the field data form that can be completed in the field using smart phones and other hand held devices and updated to include counties/towns from all 13 states for the new protocol
2.3	<p>Compile currently available data</p>	5%	<ul style="list-style-type: none"> • Incorporated some data collected from CT and VT using old protocols

TASK	TASK DESCRIPTION	% DONE	PROGRESS NARRATIVE
	into the River and Stream Continuity Project's online database		<ul style="list-style-type: none"> Best to wait until have the new protocol in order to know how 'old' data can be incorporated.
3.1	Compile information on the various protocols and scoring systems currently being used in the region or in neighboring regions	100 %	<ul style="list-style-type: none"> Completed in previous quarters
3.2	Crosswalk assessment data fields across protocols and implement scoring algorithms that will yield comparable scores for multiple data collection methodologies	15 %	<ul style="list-style-type: none"> We will begin work on scoring algorithms over the next quarters
4.1	Create categories for assessment protocols based on objective or level of rigor	100 %	<ul style="list-style-type: none"> Completed in previous quarters
4.2	Evaluate the strengths and weaknesses of the various protocols available for use in the region	100 %	<ul style="list-style-type: none"> Completed in previous quarters
4.3	Make recommendations on protocols that should be broadly used throughout the region	90%	<ul style="list-style-type: none"> Provided updated protocol to Work Group after incorporating their feedback. Protocol will be refined after April-May trainings.
5.1	Identify road-stream crossings across the North Atlantic region and make available by state and for the region as a whole	100 %	<ul style="list-style-type: none"> Completed in previous quarters
5.2	Assign xycodes to all identified crossings across the region	100 %	<ul style="list-style-type: none"> All crossings in the North Atlantic region have been assigned xycodes as of Q3.
5.3	Make recommendations for an online database that can store, score and make available data on road-stream crossings across the	95%	<ul style="list-style-type: none"> The Core Group has recommended that the existing UMass Stream Continuity database is be updated and expanded to accommodate the needs of the entire

TASK	TASK DESCRIPTION	% DONE	PROGRESS NARRATIVE
	region		<p>region.</p> <ul style="list-style-type: none"> Recommendations for maintaining this database over time will be made during the last quarter for this project.
5.4	Identify existing data gaps and prioritize areas for new field surveys	80%	<ul style="list-style-type: none"> Developed consensus-based prioritization results Posted consensus results on a web map for core team and work group use: http://arcg.is/1F2rPJU Designed, implemented & documented a desktop-GIS tool to allow users to run customized analyses based on a subset of the relevant metrics
6.1	Complete report of results and recommendations of next steps	0 %	
6.2	Make road-stream crossing assessment and GIS data available for download	15 %	<ul style="list-style-type: none"> Road-stream crossing assessment data from MA, RI, CT, NY and some crossings in NH and VT are available for download as Excel files or GIS shapefiles.

Difficulties Encountered: None.

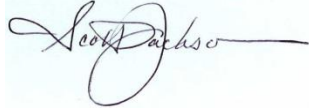
Activities Anticipated Next Quarter:

- Finalize protocol for start of field season
- Continue updating database and website
- Conduct work group webinars on prioritization of crossing for assessment, electronic data entry and scoring systems
- Draft scoring systems
- Begin compiling data not yet included in the Crossings Database

Expected End Date: 18 months from contract finalization between WMI and UMass (Sept. 30, 2015)

Costs:

Total expenses this quarter: \$14,632 (\$13,126 direct)
Total life to date expenses (including this quarter): \$52,365 (\$45,937 direct)
Total Approved Budgeted Funds: \$150,000 (\$134,644 direct costs)
Are you within the approved budget plan and categories: Yes

A handwritten signature in black ink, appearing to read "Scott Pacheco", is centered on a light blue rectangular background.

Signature:

Date: April 30, 2015