

# NORTH ATLANTIC LANDSCAPE CONSERVATION COOPERATIVE GRANT 2015 PROGRESS REPORT

Quarter: 2nd, 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
- Prioritization for field surveys was completed
- Protocol was refined after trainings and used in field season
- The existing UMass Stream Continuity database continued 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	100%	<ul style="list-style-type: none"> <li>• Core and work group continued to participate regularly</li> <li>• Held webinars on prioritization of crossings for assessment, electronic data</li> </ul>

TASK	TASK DESCRIPTION	% DONE	PROGRESS NARRATIVE
			<p>entry and scoring systems</p> <ul style="list-style-type: none"> <li>• Developed and analyzed surveys to solicit feedback following webinars</li> <li>• Will continue to coordinate and add participants to working group by request</li> </ul>
1.2	Create a broad network of individuals and organizations to conduct assessments of stream crossings	100%	<ul style="list-style-type: none"> <li>• Have established framework and infrastructure for network and recruited initial involvement</li> <li>• Will continue to recruit and add participants</li> <li>• Conducted NAACC communications launch: press release, website editing, field form editing, workgroup outreach</li> </ul>
2.1	Identify sources of road-stream crossing data currently available in the region	80 %	<ul style="list-style-type: none"> <li>• Have identified almost all sources of data</li> <li>• Some sources have been obtained</li> </ul>
2.2	Reconfigure River and Stream Continuity online database to accept data from NY and data collected using other protocols	75 %	<ul style="list-style-type: none"> <li>• Updated the PDF field data form to a much more efficient system</li> <li>• Database was transferred to a secure server host</li> <li>• The 'old' database and the new NAACC database can accept data from all 13 states</li> </ul>
2.3	Compile currently available data into the River and Stream Continuity Project's online database	5%	<ul style="list-style-type: none"> <li>• Expect to work on this in Sept.</li> <li>• We were waiting until the new protocol was in order to know how 'old' data can be incorporated</li> </ul>
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"> <li>• Completed in previous quarters</li> </ul>

TASK	TASK DESCRIPTION	% DONE	PROGRESS NARRATIVE
3.2	Crosswalk assessment data fields across protocols and implement scoring algorithms that will yield comparable scores for multiple data collection methodologies	50%	<ul style="list-style-type: none"> <li>• Solicited feedback on scoring systems from the work group</li> <li>• Continued finalizing two components : continuous and classification scoring systems</li> </ul>
4.1	Create categories for assessment protocols based on objective or level of rigor	100 %	<ul style="list-style-type: none"> <li>• Completed in previous quarters</li> </ul>
4.2	Evaluate the strengths and weaknesses of the various protocols available for use in the region	100 %	<ul style="list-style-type: none"> <li>• Completed in previous quarters</li> </ul>
4.3	Make recommendations on protocols that should be broadly used throughout the region	100%	<ul style="list-style-type: none"> <li>• Protocols were refined after April-May trainings and have begun being used for summer field season</li> </ul>
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"> <li>• Completed in previous quarters</li> </ul>
5.2	Assign xycodes to all identified crossings across the region	100 %	<ul style="list-style-type: none"> <li>• Completed in previous quarters</li> </ul>
5.3	Make recommendations for an online database that can store, score and make available data on road-stream crossings across the region	95%	<ul style="list-style-type: none"> <li>• The Core Group has recommended that the existing UMass Stream Continuity database be updated and expanded to accommodate the needs of the entire region.</li> <li>• Recommendations for maintaining this database over time will be made during the last quarter of this project.</li> </ul>
5.4	Identify existing data gaps and prioritize areas for new field surveys	100%	<ul style="list-style-type: none"> <li>• Developed consensus-based prioritization results</li> <li>• Posted consensus results on a web map for core team and work group use:</li> </ul>

TASK	TASK DESCRIPTION	% DONE	PROGRESS NARRATIVE
			<a href="http://arcg.is/1F2rPJU">http://arcg.is/1F2rPJU</a> <ul style="list-style-type: none"> <li>Designed, implemented &amp; documented a desktop-GIS tool to allow users to run customized analyses based on a subset of the relevant metrics</li> </ul>
6.1	Complete report of results and recommendations of next steps	10 %	<ul style="list-style-type: none"> <li>Report outline developed &amp; reviewed by core team</li> <li>Report sections prepared on shared google Drive workspace and allocated to core team staff</li> </ul>
6.2	Make road-stream crossing assessment and GIS data available for download	25 %	<ul style="list-style-type: none"> <li>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 on the old database website</li> <li>Added PA records now available for download</li> <li>Excel exports for NAACC data will be ready next quarter</li> </ul>

Difficulties Encountered: None.

Activities Anticipated Next Quarter:

- Finalize scoring system recommendations
- Continue updating database and website
- Begin compiling data not yet included in the Crossings Database
- Continue recruiting new NAACC participants and establish listservs for easy communication
- Start discussion of maintenance of NAACC network structure and changes that may be needed

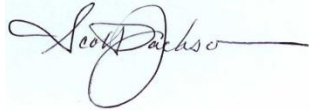
Expected End Date: 18 months from contract finalization between WMI and UMass (Sept. 30, 2015)

Costs:

Total expenses this quarter:

\$21,343 (\$19,671 direct)

Total life to date expenses (including this quarter): \$73,709 (\$65,608 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 Jackson", is written over a light blue rectangular background.

Signature:

Date: July 30, 2015