

# NORTH ATLANTIC LANDSCAPE CONSERVATION COOPERATIVE GRANT 2014 PROGRESS REPORT

Quarter: 3<sup>rd</sup>, 2014

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.

This quarter, we successfully organized a team of Northeast and North Atlantic partners. A project core group (steering committee) and work group (advisory committee) were established and the name “North Atlantic Aquatic Connectivity Collaborative” was adopted. Research and preliminary analyses of existing stream crossing assessment protocols and scoring systems are well underway. The database was configured to accept data from New York and a mechanism was developed for recording data electronically in the field using a variety of hand-held devices. Our subcontractor, The Nature Conservancy, has begun identification of watersheds that should be a high priority for future crossing assessments.

Were planned goals/objectives achieved last quarter? Yes

Progress Achieved:

- Organizational structure for the project team was created and diverse partners were recruited
- Existing protocols and scoring systems were collected and compared
- Planning for core group and work group meetings and webinars over the next few months began and a timeline was established
- The database was updated to accept additional assessment data from NY
- Prioritization of areas for field surveys was started

TASK	TASK DESCRIPTION	% DONE	PROGRESS NARRATIVE
1.1	Assemble and coordinate a team of Northeast Partners	25%	<ul style="list-style-type: none"> <li>• Defined core group of ~12 members</li> <li>• Held a kickoff meeting for key project personnel</li> <li>• The core group defined the role of the working group and invited potential participants from state and federal resource and transportation agencies and conservation organizations</li> <li>• Over 40 people from across the NA region confirmed interest in participating in working group</li> <li>• Planned core group meeting for Oct and work group webinar for Nov</li> </ul>
1.2	Create a broad network of individuals and organizations to conduct assessments of stream crossings	10 %	<ul style="list-style-type: none"> <li>• A portion of the working group participants are actively engaged in on-the-ground assessment work</li> </ul>
2.1	Identify sources of road-stream crossing data currently available in the region	20 %	<ul style="list-style-type: none"> <li>• Some sources of crossing data were identified in the process of compiling protocols.</li> </ul>
2.2	Reconfigure River and Stream Continuity online database to accept data from NY and data collected using other protocols	20 %	<ul style="list-style-type: none"> <li>• The database is almost completely configured for NY.</li> </ul>
2.3	Compile currently available data into the River and Stream Continuity Project's online database	0 %	
3.1	Compile information on the various protocols and scoring systems currently being used in the region or in neighboring regions	75 %	<ul style="list-style-type: none"> <li>• Information was compiled on eight protocols and scoring systems.</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	10 %	<ul style="list-style-type: none"> <li>We began comparing protocols and scoring systems.</li> </ul>
4.1	Create categories for assessment protocols based on objective or level of rigor	50 %	<ul style="list-style-type: none"> <li>Draft categories were created and will be discussed by work group in November.</li> </ul>
4.2	Evaluate the strengths and weaknesses of the various protocols available for use in the region	75 %	<ul style="list-style-type: none"> <li>Strengths and weaknesses were evaluated and additional input will be solicited from the work group in November.</li> </ul>
4.3	Make recommendations on protocols that should be broadly used throughout the region	0 %	
5.1	Identify road-stream crossings across the North Atlantic region and make available by state and for the region as a whole	80 %	<ul style="list-style-type: none"> <li>Crossings have been identified for the entire North Atlantic region (not yet available by state for the whole region).</li> </ul>
5.2	Assign xycodes to all identified crossings across the region	100 %	<ul style="list-style-type: none"> <li>All crossings in the North Atlantic region have been assigned xycodes.</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	0 %	
5.4	Identify existing data gaps and prioritize areas for new field surveys	25 %	<ul style="list-style-type: none"> <li>Building off other TNC projects, HUC12 watersheds were prioritized for potential anadromous fish restoration activities. These watersheds provide a starting place for prioritizing field surveys.</li> </ul>

TASK	TASK DESCRIPTION	% DONE	PROGRESS NARRATIVE
			<ul style="list-style-type: none"> <li>• Crossings data were transferred from UMass to TNC</li> <li>• A draft approach for prioritizing culverts for field surveys, incorporating the anadromous fish priority watersheds and Critical Linkages data was developed.</li> </ul>
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	0 %	

Difficulties Encountered: None.

Activities Anticipated Next Quarter:

- Hold successful webinar and in-person core group meetings
- Core group evaluates metrics for inclusion in draft strawman protocol
- Host two work group webinars with follow-up surveys to capture feedback: 1) to present draft protocol, and 2) to discuss prioritization of field surveys
- Continue work on scoring systems

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

Costs:

Total expenses this quarter: \$14,293.43 (\$12,429.07 direct)

Total life to date expenses (including this quarter): \$14,387.57 (\$12,510.93 direct)

Total Approved Budgeted Funds: \$150,000 (\$134,644 direct costs)

Are you within the approved budget plan and categories: Yes



Signature:

Date: October 30, 2014