North Atlantic Landscape Conservation Cooperative

Conservation in Action: Restoring Aquatic Connectivity and Increasing Flood Resilience

Background, Purpose, and Goals

Road-stream crossings, including culverts and bridges, are an essential element of transportation networks, allowing roads to pass over rivers and streams. However, undersized or poorly designed crossings fragment streams, contribute to erosion, exacerbate flooding, and prevent fish and other organisms from accessing the habitat they need to survive and reproduce.

The devastating impacts of Tropical Storm Irene and Hurricane Sandy highlighted this problem. The good news is that thoughtfully designed and well-placed culvert and bridge replacements can increase habitat connectivity for fish and wildlife while also enhancing resiliency of roads to flooding.

Restoring Aquatic Connectivity and Increasing Flood Resilience brings together partners from the academic, conservation, transportation, and state and municipal planning sectors for a region-wide effort to coordinate, assess, and prioritize upgrades and replacement of culverts and bridges based on the following goals:

- Reconnect streams and rivers to support healthier populations of fish and wildlife in a changing climate
- Proactively identify and help prioritize sites for stream crossing upgrades and replacements to bolster the flood resilience of transportation infrastructure.
- Facilitate communication and information sharing among partners working to improve stream crossings across the region.

"This regional effort will leverage actions being taken at the state and local scales and help us allocate limited restoration resources to the highest priority sites and watersheds."

– Jed Wright, Gulf of Maine Coastal Program, U.S. Fish and Wildlife Service

Support for this project came from Department of the Interior Hurricane Sandy recovery funding and from the North Atlantic LCC.

Above: Steenstra/USFWS
Left: Gange/Mansfield Heliflight

Products

- A network of individuals and organizations to coordinate the work of evaluating and upgrading road-stream crossings throughout the region - the **North Atlantic Aquatic Connectivity Collaborative**
- Standard protocols and coordinated surveys to assess road-stream crossings
- Training for federal state and local partners for carrying out field assessments and utilizing regional database and tools
- Crossing assessment results in targeted areas throughout the region
- A central clearinghouse of road-stream crossing data to coordinate and prioritize future efforts
- Online regional tools to prioritize crossings for assessment and upgrade based on their ecological benefit and risk of failure

Intended Users

The network, database, assessment results and tools can be used by federal and state resource managers, transportation officials, and municipalities as a means of coordinating identifying, prioritizing, and tracking upgrade and replacement of road and stream crossing infrastructure.

Contacts and Links for More Information

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Project webpage:
http://northatlanticlcc.org/projects/aquatic-connectivity/restoring-aquatic-connectivity-and-increasing-flood-resilience

https://www.streamcontinuity.org