



Planning for Flood Resilient and Fish-Friendly Road-Stream Crossings in the Lower Hudson Valley

Project Fact Sheet 9/2016

The problem:

Think about the thousands of miles of roads we have here in the Lower Hudson Valley. Now, think about the thousands of miles of stream in the same area that those roads need to cross. At every intersection where a road crosses over a stream, there must be a bridge, culvert, or some other structure for carrying the road over the stream. Collectively, these structures are referred to as “road-stream crossings.”



Road-stream crossings often present barriers to fish and wildlife trying to move up and down stream, and they can be vulnerable to damage during floods. In many cases the source of both of these problems is structures that are undersized, misaligned, or in poor condition. Some estimates put the number of non-bridge structures (i.e. culverts) in the region that are barriers and at risk of failure at over 50% of the total- so the scale of this issue is massive.

The Lower Hudson Coalition of Conservation Districts and the Rockland County Soil and Water Conservation District are working with the Hudson River Estuary Program and other partners to develop a template for town-scale Road-Stream Crossing Management Plans to address both flood risk and habitat restoration. These documents are based on information collected with the North Atlantic Aquatic Connectivity Collaborative assessment method (see attached NAACC Fact Sheet) and flood risk modelling conducted by the New York State Water Resources Institute, and will contain the following:

- A comprehensive town-wide inventory of bridges and culverts, including information on flood risk and fish and wildlife barrier status;
- A town-wide ranking of replacement projects based on flood risk and habitat restoration value, developed cooperatively with the Town;
- Conceptual designs and implementation strategies for top-ranked replacement projects;



- Supporting information including Best Management Practices, relevant regulations and permitting requirements, important resources available to municipalities for management, and a description of the plan development process.

Once completed, the management plan documents will provide a tool for towns to take advantage of every opportunity that arises to fix problem road-stream crossings, which is absolutely essential given the scale of the problem. This includes grant-seeking, capital planning for infrastructure management, and recovery operations in the wake of the next big flood.

We are currently piloting this project in the Town of Stony Point in Rockland County, and will be expanding into additional towns in 2017.

Project Partners:

Lower Hudson Coalition of Conservation Districts;
Rockland County Soil and Water Conservation District;
Town of Stony Point; NYS DEC Hudson River Estuary
Program; NYS Water Resources Institute; Princeton
Hydro LLC; North Atlantic Aquatic Connectivity
Collaborative

Funders:

New England Interstate Water Pollution Control
Commission; Hudson River Estuary Program.

For More Information:

If you are interested in partnering with LHCCD and your local Soil and Water Conservation District on this project, please call (315-212-4181) or e-mail (mj.lhccd@gmail.com) LHCCD Coordinator Mike Jastremski.

