



## STREAM CROSSING ASSESSMENTS IN YOUR COMMUNITY



In the summer of 2020, the **Pomperaug River Watershed Coalition (PRWC)** began surveying stream crossings in the Pomperaug River Watershed following protocols established by the **North Atlantic Aquatic Connectivity Collaborative (NAACC)**. NAACC is a network of individuals from universities, conservation organizations, and state and federal natural resource and transportation departments focused on improving aquatic connectivity across a thirteen-state region. Members of the collaborative developed and provided a unified protocol and data management system for assessing aquatic life passability at stream crossings. Ultimately, **NAACC is an effort to inventory and more effectively address barriers to fish movement and river and stream continuity.**



### WHAT IS STREAM CONTINUITY?

As long, linear ecosystems, rivers and streams are particularly vulnerable to fragmentation. **Human activities can disrupt river and stream ecosystem processes like the continuous flow of water, transport of sediment, passage of fish and wildlife, and movement of woody debris.** The most familiar man-made disruptions of river and stream ecosystems are dams. However, there is growing concern regarding the impacts of transportation systems, especially crossing infrastructure installed where roads and streams intersect, on habitat and stream continuity.

Transportation networks and river systems have several things in common. Both are long, linear features of the landscape. Transporting materials (and organisms) is fundamental to how they function. **Connectivity is key** to the continued functioning of both systems. To maintain the functioning of these systems, **our goal should be to create transportation infrastructure that does not fragment or undermine the essential ecological infrastructure of the land.**

### WHAT ARE STREAM CROSSINGS?

**Stream crossings are sites where streams intersect roads, railways, or pipelines.** In order to allow a stream to flow from one side of the road to the other, and to allow for passage of vehicles and other traffic over the stream, a crossing structure – such as a bridge, culvert, or ford - is installed. When well-designed, these crossings maintain habitat and stream continuity by allowing the continuous passage of fish and other aquatic organisms upstream and downstream.

## WHY ARE WE ASSESSING STREAM CROSSINGS?

**Stream crossing assessments help us understand where stream continuity is being interrupted by crossing infrastructure.** Crossing infrastructure that is undersized or in poor condition can also pose a hazard to the public due to the risk of infrastructure failure during floods. The failure of crossing infrastructure can result in road closures and expensive repairs. The good news is that **the same design principles that ensure safe passage for fish and wildlife also make for safer, more resilient crossings!**

These assessments are the first step in planning infrastructure improvement projects that will restore habitat continuity and benefit local communities. **The goal of these assessments is to identify which crossings are in greatest need of restoration or replacement and to help prioritize crossing improvements that will benefit local communities and the environment.**

## WHO WILL BE DOING STREAM CROSSING ASSESSMENTS?

Stream crossing assessments will be conducted by our "Stream Team", made up of **PRWC staff, interns, and trained volunteers.**

## WHERE WILL STREAM CROSSINGS BE ASSESSED?

**From June 2023 to July 2024, PRWC will be working to assess stream crossings in the Town of Southbury,** including areas within and outside the Pomperaug River Watershed. PRWC is working with community leaders to understand which crossings are priorities for highway management, flood preparedness, and emergency services.

## RESOURCES

For more information about **NAACC**, visit: [streamcontinuity.org/naacc](https://streamcontinuity.org/naacc)

For more information about **PRWC's** assessments, visit: [pomperaug.org/streamcrossingassessments](https://pomperaug.org/streamcrossingassessments)

To view data for **assessed crossings**, visit: [streamcontinuity.org/naacc/data-center](https://streamcontinuity.org/naacc/data-center)

*For additional questions or concerns, please contact PRWC Executive Director Carol Haskins by email at [chaskins@pomperaug.org](mailto:chaskins@pomperaug.org) or by phone at 203-263-0076.*