### Title: Fish, Wildlife & Biodiversity Conservation - River and Stream Continuity

**Project Leader: Scott Jackson**

## Project Overview

Massachusetts is the third most densely populated state in the nation.  The rate of land consumption for residential development is steadily increasing far out of proportion to its population growth. Haphazard growth has impacted water resources, natural resource-based enterprises, open space, wildlife habitat, and community character. Nearly half the state's communities lack professional planning staff, while volunteer boards struggle with increasing levels of responsibility, liability, time demands and public mistrust. The Fish, Wildlife & Biodiversity Conservation Project addresses these concerns through related initiatives that focus on habitat loss and fragmentation, establishing priorities for ecological restoration and mitigating development impacts on wildlife and ecosystems.

**The River & Stream Continuity Project - focuses on** the impact of road-stream crossings (culverts, bridges, fords) on fish and other aquatic organism passage by providing technical guidance and standards, field surveys, and other tools and approaches for setting priorities for culvert upgrade or replacement

## Activity Summary - 2012

## Assessment and Prioritization of Road-Stream Crossings in the Housatonic River Watershed (1)

## Continued development and refinement of crossing standards, assessment protocols, training materials, and scoring algorithm tool (1)

## Evaluate and analyze data collected by volunteers the Crossings Database (1)

## Maintain and expand content for the [streamcontinuity.org](http://streamcontinuity.org/) web site (1)

## Manage and continue to improve and expand the online Crossings Database for volunteer assessment of road-stream crossings (1)

## Service on Graduate Research Committees (1)

## Training programs on new regulations and technical issues related to road-stream crossings (13)

### *Educational contacts*

|  |  |  |
| --- | --- | --- |
|  | Adult Contacts | Youth Contacts |
| In Person | 257 | 0 |
| Indirect Contacts (Print, Web, etc…)  | 2,350 | 0 |

## Narrative Summary - 2012

A number of groups are using methods developed as part of the River and Stream Continuity Project to assess bridges and culverts and set priorities for restoring river and stream continuity in targeted watersheds in five of the six New England states. In 2011-2012, 874 additional road-stream crossings were surveyed and entered into the Crossings Database; the Database now contains over 5,500 road-stream crossing assessments.

The Massachusetts Department of Environmental Protection (MassDEP) has embraced the project and is committed to assess 600 crossings in 2012. The Massachusetts Environmental Trust (MET) has for a number of years funded local watershed groups to conduct road-stream crossing assessments and this past year put out a special call for proposals to fund assessments in the Taunton River watershed. We expect New Jersey to join the network in 2013.

The Massachusetts River and Stream Crossing Standards continue to inform policy at both the state and federal level. Multiple references to the Massachusetts River and Stream Crossing Standards and Road-Stream Crossing Assessment protocols were included in the Massachusetts Department of Transportation’s handbook “Design of Bridges and Culverts for Wildlife Passages at Freshwater Streams.” The Standards are referenced in the U.S. Army Corps of Engineers Programmatic General Permit (PGP) for Massachusetts and similar references have been included in drafts of the New England Regional General Permit currently under development. New crossings of rivers and streams must meet these standards in order to qualify for non-reporting status under the General Permit. MassDEP has indicated that it intends to make direct reference to the Crossing Standards when it revises its wetland regulations in 2013.

###  Collaborating Organizations

### Massachusetts Department of Environmental Protection

### Massachusetts Division of Fish and Game

### Massachusetts Highway Department

### The Nature Conservancy

### United States Environmental Protection Agency