

Directions

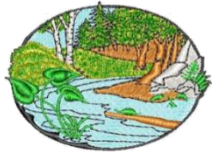
Antioch University New England is located at 40 Avon St. in Keene, NH.

From the North on Route 12 or Route 9. Drive until you see the West Street Exit. Turn left at the bottom of the ramp, go through two lights and immediately turn right on to Avon Street just before the Irving gas station.

If you are coming into Keene on Route 101, follow 101 to Route 12 North, get off at West Street exit, turn right at bottom of ramp, go through one light, turn right on to Avon Street just before the Irving gas station..

The workshop will begin in room 101.

This workshop is sponsored by:



*NH Association of
Natural Resource Scientists*

and

**ANTIOCH
UNIVERSITY**
NEW ENGLAND

*New Hampshire Association of Natural Resource Scientists
PO Box 110
Concord, NH 03302*



NHANRS and Antioch University New England present

Evaluating Community Infrastructure for Aquatic Organism Passage (AOP) and Flood Resiliency



**Thursday,
September 20, 2018
1:00 – 5:00 pm
at
Antioch University
New England
40 Avon Street
Keene, NH**

Evaluating Community Infrastructure for Aquatic Organism Passage (AOP) and Flood Resiliency

Thursday, September 20, 2018

Agenda

1:00-2:00	Classroom session (Room 101)
2:00-5:00	Field work

Registration limited to 15 participants

CONTINUING EDUCATION

Four (4) contact hours

WORKSHOP DESCRIPTION

What aquatic organism passage and hydraulic vulnerability means to community infrastructure and associated wildlife? This workshop outlines how road stream crossings [culverts] impact the movement of aquatic species as well as the transport of stormwater flows during more frequent and larger storm events. Aquatic Organism Passage (AOP) identifies whether aquatic animals such as fish, turtles or amphibians can pass through a stream crossing without obstruction. Culvert restrictions such as large vertical drops, water velocities, physical blockage, and the lack of natural substrate in a crossing all play a critical role. Ideally, culverts maintain a direct connection between the up- and downstream environment without major changes in slope or break in sediment continuity.

WORKSHOP DESCRIPTION (Cont'd.)

Vulnerability of infrastructure is evaluated by modeling a culvert's hydraulic capacity based on streamflow predictions. Results then help communities evaluate minimizing emergency repairs to infrastructure and maximize savings by proactively addressing restoration opportunities.

PRESENTERS

Colin Lawson joined Trout Unlimited (TU) in 2009 as the New England Culvert Project Coordinator (NECP). His focus is on reconnecting Eastern brook trout habitat in priority New England watersheds through the removal, replacement or retrofit of currently impassable road stream crossings and other instream barriers. Colin's graduate work in environmental science concentrated on hydro-ecology at Antioch New England University in Keene, NH. His thesis was on modeling the hydraulic capacity of stormwater infrastructure.

Erin Rodgers, Ph.D., Field and Research Manager for NECP, recently completed her doctoral degree at Antioch University New England during which time she studied the effects of Hurricane Irene and Tropical Storm Lee flooding on stream communities and the population dynamics of brook trout in the Delaware Water Gap National Recreation Area. Having joined Trout Unlimited's New England Culvert Project in 2011, Erin now leads much of the field work in Vermont, western Massachusetts, and western New Hampshire. She focuses on assessing the links between aquatic organism passage and flood vulnerability of bridges and culverts, then working with towns and other agencies to replace the worst structures. She has also started to increase the number of in-stream habitat restoration projects as well as establish a new research and monitoring program for NECP.

REGISTRATION FORM

Name: _____

Address: _____

Phone: _____

Email: _____

Check #: _____

Pre-registration is required.

Registration is limited to 15 participants.

REGISTRATION FEE (please circle)

NHANRS Members	\$40.00
Students	\$30.00
Non-Members	\$55.00

Please notify us if you have any special needs in order to participate so we can make the necessary arrangements.

Mail your registration form and check (payable to NHANRS) by September 10, 2018 to:

**NHANRS
PO Box 110
Concord, NH 03302**

Or register online using PayPal at
www.nhanrs.org

Please note: You will not be added to the registration list until payment is received.

No refunds for cancellations

Contact Amanda with any questions:
assistant@nhanrs.org
Ph: 603-224-0401