

# Stream Habitat Evaluation Training Courses



EnviroScience is excited to offer two training courses on collecting credible and quality data for stream habitat evaluation programs developed by the Ohio EPA: the Qualitative Habitat Evaluation Index (QHEI) and Headwater Habitat Evaluation Index (HHEI).

These training courses will be held either at our [headquarters](#) in Stow, Ohio, or other locations in Ohio as indicated below. The course will be taught by [Mr. Paul Anderson](#), an experienced aquatic biologist who has over 30 years of professional experience, including 18 years of experience as a field biologist with the Ohio EPA Division of Surface Water. Paul is qualified as a Trainer for Stream Habitat Assessment using the QHEI and for Fish Community Biology through the Ohio EPA Credible Data Program.

The course cost is \$400 per student. For more details, see the upcoming training sessions, additional course information, and registration form below.

# Upcoming Training Courses

ES Office Location: 5070 Stow Road, Stow, Ohio 44224

Field Training Location: TBD

## **Headwater Habitat Evaluation Training Index (HHEI) Training**

(Session ES-2020-04): June 15-16, 2020

- Day 1 Training (Classroom + Field) at ES offices
- Day 2 Training (Field Training and Introduction to Primary Headwater Biology) in West Branch State Park

## **Qualitative Habitat Evaluation Index (QHEI) Training**

(Session ES-2020-03): June 8-9, 2020

- Day 1 Training (Classroom + Field) at ES offices
- Day 2 Training (Field Training and Level 2 Qualified Data Collector [QDC] Testing) in Nearby Metro Parks



For more information on these or other upcoming courses, contact Paul Anderson at [PAAnderson@EnviroScienceInc.com](mailto:PAAnderson@EnviroScienceInc.com). Please note that for clients who need training for multiple students, EnviroScience can bring the courses to your location. Contact Paul for more information and a price quote.

## **Training Course Information**

# **Qualitative Habitat Evaluation Index (QHEI) Training**

The [Qualitative Habitat Evaluation Index](#), or QHEI, is a visual observation methodology developed by Ohio EPA for assessing the ability of stream ecosystems to support well-balanced fish communities. The QHEI is a crucial data component for assessing streams under the Ohio EPA [biological water quality criteria](#) system. The index uses a series of six metrics to

assign a score for the habitat quality concerning this context. The overall score and results of observation for several sub-metrics can then be interpreted to evaluate habitat-related issues that may govern fish community structure and to compare sites with one another using a standardized assessment method.



Training for the use of the QHEI is provided by EnviroScience to familiarize field scientists and others interested in conducting stream ecological and habitat assessments in the use of the method. The [two-day training course](#) includes both classroom and field instruction in the use of the [Ohio EPA QHEI manual](#) for conducting field assessments using the index. The training course meets the Ohio EPA criteria for the [Credible Data Program](#) to qualify as a [Level 2 Credible Data Collector](#) (QDC). Testing is provided at the end of the training through the scoring of a site that has also been scored by a qualified instructor.

Upon successful completion of the course, trainees may apply for [Level 2 QDC status](#), or evaluate stream sites designated by Ohio EPA to achieve Level 3 QDC status. Completion of the QHEI training is also a required component to receive [Level 3 QDC status](#) for macroinvertebrate or fish community biology.

# Headwater Habitat Evaluation Index (HHEI) Training

The Headwater Habitat Evaluation Index, or HHEI, was developed by Ohio EPA as a critical component in the assessment of small headwater streams, typically with drainage areas less than 1 square mile (640 acres). These small streams are referred to as [Primary Headwater \(PHW\) streams](#). These streams have different [biological characteristics](#) than larger streams and rivers, and often cannot achieve attainment of the Ohio EPA biological water quality criteria, even in unimpacted condition. This is the result of a smaller stream size, which produces a unique ecological condition where fish communities become simplified and where salamanders can replace fish as the dominant vertebrate fauna.



Physical habitat characteristics for these PHW streams are assessed using the HHEI, a three-metric index, which replaces the use of the Qualitative Habitat Evaluation Index (QHEI). The scoring results for assessments using HHEI can be used to predict the characteristics of the fauna of these PHW streams.

The [two-day HHEI training course](#) consists of several classroom

presentations followed by 8-10 hours of fieldwork at headwater stream sites. The classroom portion of the course includes instruction regarding the ecology of PHW streams, the PHW biological classification system, the development and use of the HHEI, and the use of the [Ohio EPA PHW field assessment manual](#). The field portion of the training focuses intensely on the scoring and evaluation of the HHEI. The field training also includes demonstrations to introduce the methodologies for conducting biological assessments for PHW stream ecology and assessment.

Ohio EPA currently does not have established training or testing requirements finalized to achieve Credible Data Collector (QDC) status for the HHEI under the Credible Data Program. However, the training offered by EnviroScience is modeled upon past Ohio EPA training efforts. If and when the Ohio EPA develops final procedures for training and testing for QDC status, EnviroScience hopes to offer training that meets these requirements at that time.

## **Training Course Registration**

## **Required Policy Documents**

[Training Cancellation Policy](#) (Acknowledgment required for registration.)

[Training Liability Waiver](#) (Complete and return on or before the first day of training.)

# Payment Information

**Methods of payment include the following options:**

- 1) By check or money order
- 2) By credit card over the phone
- 3) By invoice billing

QHEI Training Cost per Student: \$400.00

HHEI Training Cost per Student: \$400.00

*Option 1:* Mail checks to the EnviroScience, Inc. Accounting Department at 5070 Stow Road, Stow, Ohio 44224.

*Option 2 or 3:* An EnviroScience accounting representative will call you at the number listed below to set up payment.

Please select your payment method in the form below.

# Registration Form

**Which course are you registering for?**

QHEI (Session ES-2020-03)

HHEI (Session ES-2020-04)

**Personal Information:**

Full Name (required)

Organization (optional)

Email Address (required)

Address (required):

Address 1 (required)

Address 2 (optional)

City (required)

State (required)

Zip Code (required)

Phone Number (required)

**Payment Method:**

Check or Money Order  Credit Card (over the phone)  Invoice Billing

**Terms and Conditions (You must accept to submit the form):**

I have read and accept the terms of the [Training Cancellation Policy](#).

I have read and will return the completed [Training Liability Waiver](#).

Submit