



The Northwest Environmental Training Center presents:

Wetlands Demystified! Navigating the Complicated World of Wetland Delineation, Regulation, and Restoration

Course ID: BIO-401 (3 days) :: **July 8-10, 2008**, 8:30 A.M. to 5 P.M.
McMenamins Edgefield :: The Ballroom :: 2126 S.W. Halsey St. :: Troutdale, Oregon

Lead Instructor: Ryan W. Taylor, PhD.

Esther Lev, Executive Director of The Wetlands Conservancy

and the author of "Heroic Tales of Wetland Restoration"

Will present a discussion on wetland conservation and restoration opportunities for private lands.

John Marshall, U.S. Fish and Wildlife Service

Wetland mitigation banking specialist for Oregon will discuss mitigation criteria and unveil their new wetland health and condition monitoring software program.

Mike Turaski, The United States Army Corps of Engineers

Jurisdictional issues specialist will discuss the Corps role in wetland regulation and recent court cases that have affected the 404 Regulatory Program. Along with the Arid west supplement to the 1987 wetland delineation manual and unveil the NEW Western Mountain, Valley, and Coastal Supplement.

Corey Owens, The Natural Resources Conservation Service

Acting Resource Soil Scientist for NW Oregon, who will discuss county soil surveys and field indicators of hydric soil types. As well as assist with providing help during the field trip with hydric soils identification.

Clyde Keebaush, The City of Troutdale Parks Department

The City of Troutdale Parks Department Supervisor will share success and pitfalls they have encountered in conducting wetland restoration at each site, along with partnering/funding techniques.

This three day course will provide participants with a solid understanding of state and federal regulatory landscape affecting wetland resources in the NW. The US Army Corps of Engineer's Section 404 Permitting Process will be described in detail with a particular focus on changes to federal jurisdiction resulting from recent federal court cases. This discussion will highlight the influence of state wetland regulations on federal wetland regulations and the 401 water quality certification process's. It will also address the influence that local political and socioeconomic factors can have on the federal wetland permitting program.

Equal attention within this course will be given to providing participants with guided, hands-on experience identifying field-indicators of different types of wetland resources. Activities will provide opportunities to identify field indicators of hydric soils, key characteristics of hydrophytic vegetation, and hydrologic characteristics for palustrine, lacustrine, and riverine wetland habitats. Wetland delineation field-trips will include visits both to natural wetlands and artificially created mitigation wetlands, where successful mitigation construction techniques will be discussed. Soil probes, spades, and munsell soil charts will be used. Waterproof boots and clothing will be required.

Each participant will receive a **copy of the "Heroic Tales of Wetland Restoration" by Esther Lev**, which tells of 12 rural landowners, who changed their farming practices to reclaim wetlands, streams and rivers. The first section of this book includes these tales of vision, passion, perseverance, and economic survival. The second section describes land conservation options and a range of state and federal technical assistance and funding programs. The last section includes descriptions of the restoration techniques employed by the landowners, as well as recommendations for the future. It outlines difficulties experienced by landowners working with federal and state incentive programs.

Course Topics | [Excel Schedule](#)

Wetland Definitions and Classification:

Wetland Regulations:

US Army Corps of Engineers
Oregon Division of State Lands
US Fish and Wildlife Service (Cowardin Classification System)

Wetland Data Sources:

National Landcover Dataset
National Wetland Inventory Maps
Local Wetland Inventory Maps
County Soil Survey Maps
USDA National Plants Database

Wetland Status and Trends:

Historic Wetland Loss in Oregon and the United States

US Army Corps of Engineers Section 404 Permits
Oregon Division of State Lands Removal-Fill Permits

Wetland Delineation:

Hydric Soils
Hydrophytic Plants
Hydrology

Wetland Mitigation:

Restoration Techniques
Mitigation Banks in Oregon

**This course includes one day FIELD TRIP on July 9, 2008*

About the lead instructor: Dr. Ryan Taylor has twelve years of experience working with wetland resources. He began his wetlands career with the Illinois Department of Natural Resources, where he worked on a variety of wetland regulatory issues and managed a number of large-scale restoration projects, ultimately becoming the state wetland policy administrator. He then went on to participate in a number of wetland preservation planning efforts for local governmental units as a watershed coordinator on the Little Miami National Scenic River in Cincinnati, Ohio. Currently, he serves as a hydrologic technician with the Bureau of Land Management, where he annually trains and leads field crews in surveying and inventorying wetland and stream habitats on public lands.

Dr. Taylor completed his PhD in Environmental Science from Oregon State University in 2006. His dissertation focused on the effect that state and federal agency interactions have on wetland permit applications and created the first nationwide model of wetland permit activity. His Masters in Environmental Administration came from the University of Illinois where his research focused primarily on the implementation of that state's wetland regulatory program, and his BS degree in Biology comes from Mount Vernon Nazarene University.

Intended Audience: Any environmental professional wanting to learn more about wetland resources and the regulatory landscape that affects them. Specifically invited are Watershed Coordinators, Master Watershed Stewards, Natural Resource Managers, Land-Use Planners, Transportation and Consultants who may potentially become involved in projects that impact wetland resources.

Level: Introductory/refresher

Course Materials: Attendees will receive a binder containing workshop proceedings and reference material.

Continuing Education Units: 2.0 (20 hours)

What to Bring: Pen or pencil, coffee mug, and a water bottle (to reduce waste). Please wear comfortable clothes appropriate for the prevailing weather. Drinks and snacks will be provided each day. Field/rain gear.

Registration: \$695 (*\$595 reduced tuition is available for Native American tribes; government employees; nonprofits; students; and NAEP, NEBC, NWAEP members). You may register via the link below or by calling the Northwest Environmental Training Center at 206-762-1976.

Cancellation Policy: Registration fees are fully refundable up to 30 days prior to the event and 50 percent refundable (or 100% credit) thereafter up to 7 days prior to the event. Registration may occur up to the day prior to the event provided that space is available.

Northwest Environmental Training Center

A nonprofit 501(c)(3) program of the Northwest Environmental Education Council
650 S. Orcas Street, Suite 220, Seattle, Washington 98108
Phone: (206)762-1976, Fax: (206)762-1979
www.nwetc.org



DIRECTIONS to McMenamins EDGEFIELD
McMenamins Edgefield

2126 S.W. Halsey St.
 Troutdale, OR 97060
 (503) 669-8610

Edgefield is 20 minutes from downtown Portland, five minutes from the Columbia River Gorge National Scenic Area, and 15 minutes from Portland International Airport.

From Downtown Portland:

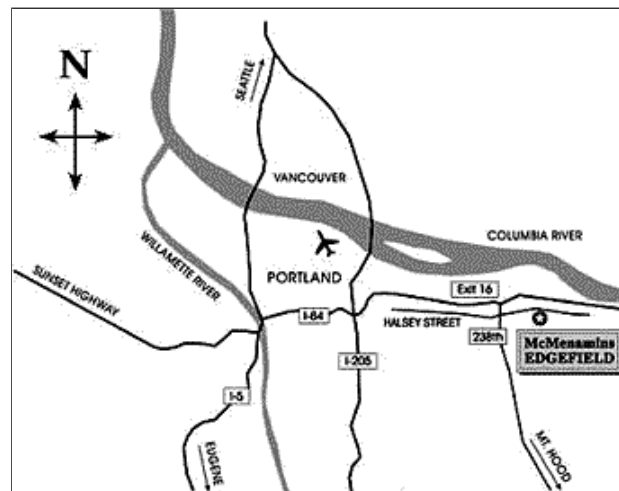
Take I-84 east to Exit 16 / 238th Drive.
 Follow 238th Drive south to the first traffic light which is Halsey Street.
 Turn left at Halsey Street and go east for one-quarter mile to McMenamins Edgefield.

From Vancouver, WA:

Take I-5 or I-205 south to I-84 east
 Take I-84 east to Exit 16 / 238th Drive.
 Follow 238th Drive south to the first traffic light which is Halsey Street.
 Turn left at Halsey Street and go east for one-quarter mile to McMenamins Edgefield.

By Transit:

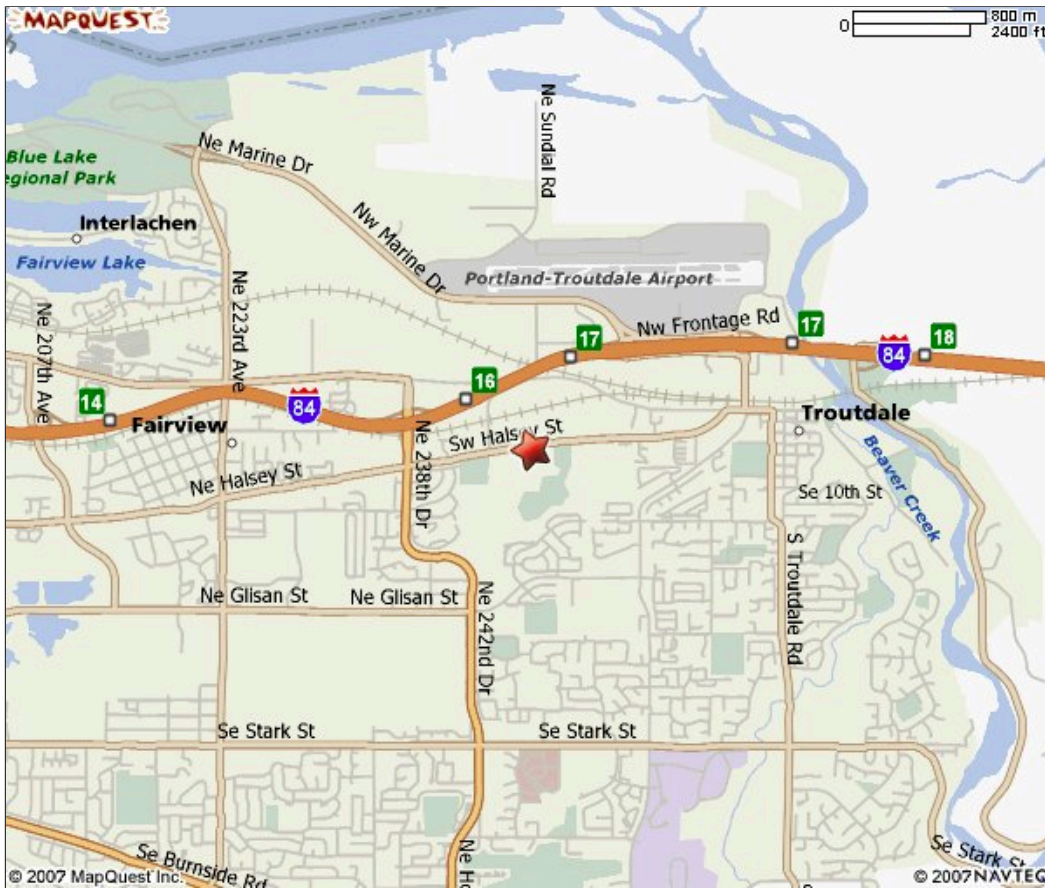
From downtown Portland, take **MAX lightrail** east to the 82nd Ave. Transit Station; transfer to Tri-Met Bus #77 (Halsey Street) east to Edgefield's main entrance.
 From Gresham Central MAX Station; transfer to **Tri-Met Bus #12** (Sandy Blvd.) to 223rd and Halsey; transfer to Tri-Met Bus #77 (Halsey Street) east to Edgefield's main entrance.



REGIONAL MAP:



CITY MAP:



STREET MAP:



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ACCOMMODATIONS near McMenamins EDGEFIELD
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 Troutdale, OR 97060
 (503) 669-8610

CLASS LOCATION
McMenamins Edgefield

5736 N.E. 33rd Ave.
 Portland, OR

**ROOMS START AT \$40.00,
 please book early, they sell out
 fast!**

(503) 669-8610

*Historic Edgefield is one of the truly remarkable destination resorts of the Pacific Northwest. It is a world of relaxation that seamlessly blends Oregon's natural beauty with McMenamins' signature whimsy: historic buildings of all sizes artfully restored and rich with cozy interiors, tranquil ponds and dazzling gardens, great food and drink, plentiful entertainment and surprising recreations. Encompassing a **lush 38-acre parcel of farmland at the mouth of the spectacular Columbia River Gorge, Edgefield is a 15 to 20-minute car ride to or from the center of downtown Portland.***

*The stately main Edgefield building (circa 1911), with over 100 European-style guestrooms and hostel accommodations, is a **national historic landmark**. Each spacious room is furnished in charming turn-of-the-century decor. There are no televisions or telephones in the rooms, encouraging tranquility as surely as do the rocking chairs on our verandas.*

*On the grounds, you will find a plethora of diversions. Enjoy **fine-dining restaurant, classic pub, numerous small bars and colorful summertime grill**. For liquid refreshment you will enjoy **handcrafted ales, wines, spirits and aromatic house-roasted coffees created by McMenamins**. Sports lovers will appreciate the **golf course and onsite massage**. Everyone will love the **extensive gardens, onsite glass-blower and pottery maker, extensive artwork everywhere, recent-run movie theater, live music concerts** and the Edgefield Gift Shop abundant with treasures from the Pacific Northwest and the world over.*

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NORTHWEST ENVIRONMENTAL TRAINING CENTER

650 S Orcas Street, Suite 220, Seattle, Washington 98108

Ph: (206)762-1976, Fax: (206)762-1979

www.nwetc.org

REGISTRATION FORM

Name: _____ Today's Date: _____

Agency/Organization: _____

Street Address: _____

Street Address (cont'd): _____

City: _____ State: _____ Zip: _____

Phone: _____ Fax: _____

Email: _____ Title: _____

Wetland Science and Delineation

\$ _____

Course ID: BIO-401 (3 days)

July 8 - 10, 2008, 8:30 A.M. to 5 P.M.

McMenamins Edgefield – The Ballroom

2126 SW Halsey St., Troutdale, OR

Registration: \$695 (\$595*)*Reduced rates for Native American Tribes; nonprofits; government; students; and NEBC, NAEP and NWAEP members.

Payment Method: Check PO Credit Card (Visa Mastercard) Total: \$ _____

Credit Card or PO #: _____ Exp: _____

Notes: Please make checks payable to Northwest Environmental Training Center.

Cancellation Policy: Registration fees are fully refundable up to 30 days prior to the event and 50 percent refundable (or 100% credit) thereafter up to 3 business days prior to the event. No refunds are issued for cancellations occurring less than 3 business days before the start day.