

***JURISDICTIONAL DELINEATION OF WATERS OF THE U.S.,  
INCLUDING WETLANDS ON THE CALIFORNIA COAST:  
LEGAL AND ECOLOGICAL PROTOCOLS FOR DIVERSE AND  
CHANGING LANDSCAPES***



***A Training Course Offered By:***



***The Elkhorn Slough Coastal Training Program***



***In Cooperation with:***

***Wetland Science Training Cooperative, a Division of WSP Environment & Energy***

***April 1-4, 2008***

***Moss Landing Marine Laboratories***

***and the***

***Elkhorn Slough National Estuarine Research Reserve***

***Northern Monterey County, California***

## **I. Introduction And Objectives**

The Elkhorn Slough National Estuarine Research Reserve's *Coastal Training Program* in cooperation with the *National Wetland Science Training Cooperative (NWSTC)*, a Division of *WSP Environment & Energy* is pleased to announce a course:

### ***"Jurisdictional Delineation of Waters of the U.S., Including Wetlands On the California Coast: Legal and Ecological Protocols For Diverse and Changing Landscapes"***

Individuals from the private sector, all federal, state, regional, county and municipal agencies, universities and private non-profit organizations are encouraged to attend and will be accepted on a first-come-first-served basis. Total course enrollment will be limited to 45 individuals. Tuition for the course will be \$1300. In addition to tuition, all participants will be expected to pay for their travel and per diem expenses. Further details concerning tuition, lodging, and course logistics are explained below.

The chief objective of the training will be to provide participants with a comprehensive, lecture and field-based introduction to delineation of Waters of the United States, including wetlands. The technical foundations for the course will be the 1987 "Corps Of Engineers Wetlands Delineation Manual," the "Interim Regional Supplement to the Corps: Arid West Region," and the "Draft Regional Supplement to the Corps Manual: Western Mountains, Valleys, and Coast Region." In order to accomplish the overall objective, specific segments of the course agenda will focus on:

- (a) Recognition and description of hydrologic indicators of wetland conditions on California's central coast
- (b) Identification and characterization of hydric soils and soil-forming processes characteristic to wetland sites in central, coastal California
- (c) Identification and characterization of hydrophytic plant communities typical to wetlands on California's central coast
- (d) Synthesis of hydrologic, soils, and plant community information for jurisdictional delineation of relatively pristine as well as highly degraded wetlands on California's central coast consistent with (1) the 1987 Corps Of Engineers Wetlands Delineation Manual , (2) the 1994 *National Food Security Act Manual*, and (3) current federal, state (including California Coastal Commission) and local agency policies and operating procedures.
- (e) Field and administrative techniques for (1) documentation and/or presentation of delineations of Waters of the U.S., including wetlands, and (2) recognition and documentation of non-compliance with federal, California and local waters/wetlands protection statutes.

Throughout the course, lectures and classroom exercises will be combined with field trips to several different types of waters/wetland ecosystems in the vicinity of northern Monterey and southern Santa Cruz counties. Field exercises and discussions during the course will focus on a range of waters/wetland types that are typical to the Central Coast region of California. Field exercises are designed to vary in difficulty from the most basic to the most difficult jurisdictional calls. Stops will include estuarine tidal and freshwater marshes, riparian forests, vernal pools, seasonally wet meadows, slope wetlands, filled wetlands and other highly degraded sites.

Participants will work closely with instructors to develop state-of-the-art knowledge of how to recognize and accurately map the geographic extent of Waters of the U.S, including wetlands. In particular, the course will focus on how to use the 1987 Corps Of Engineers methodology for identifying and delineating jurisdictional wetlands and relationships between the 1987 Corps Manual and the "Interim Regional Supplement to the Corps: Arid West Region," and the "Draft Regional Supplement to the Corps Manual: Western Mountains, Valleys, and Coast Region." Given the moderate size of the class (45 students total), and the collective expertise of the instructor team, participants will have a rare opportunity to hone existing wetland delineation skills and to develop and apply new skills in a course that is specifically tailored for wetlands typical to California's central coast. This is a field based course. In this regard, a "hands-on" approach will be emphasized during all phases of lecture and field instruction.

Upon successful completion of the course and requisite lecture and field examinations, participants will receive *NWSTC CERTIFICATION* that documents 40+ hours of training in the use of the *1987 Corps of Engineers Wetlands Delineation Manual*, the *Interim Regional Supplement to the Corps: Arid West Region*, and the *Draft Regional Supplement to the Corps Manual: Western Mountains, Valleys, and Coast Region*.

## **II. Team Of Instructors**

Instructor team members are nationally recognized scientists and wetland regulatory experts with broad experience in wetland community and ecosystem ecology, hydrology, soils science, botany, wetlands protection, enforcement and compliance, functional and cumulative impact assessment in wetlands, and mitigation of impacts to wetlands. All instructors have worked extensively throughout the American West, and specifically in California for a significant part of their careers. Collectively, they have unparalleled experience in research, teaching, applied science and regulation of waters/wetlands in the West. A listing of Instructors follows:

**Peggy L. Fiedler, Ph.D., PWS**

Principal Botanist/Conservation Ecologist, Co-Director  
Ecosystem Science & Restoration Services  
WSP Environmental Strategies

Plant taxonomy; wetland community ecology  
Plant population biology; protection and management of rare vascular plants

**Lyndon C. Lee, Ph.D., PWS**

Principal Ecologist & Vice President  
Ecosystem Science & Restoration Services  
WSP Environmental Strategies

Lead Instructor; Ecosystem ecology; Federal delineation methodologies Federal, State,  
and Local Regulatory Programs  
Assessment of impacts to wetlands

**Andrew D. Harley, Ph.D.**

Project Director  
Ecosystem Science & Restoration Services  
WSP Environmental Strategies

Soil science, geochemistry, hydrology and hydrogeology

**Robert R. Curry, Ph.D., RPG**

Principal  
Watershed Systems

Geology, hydrology, soil science; watershed science  
Cumulative impact analysis; public policy; glacial geology  
Geologic hazard evaluation

**Grey F. Hayes, Ph.D**

Coordinator  
Elkhorn Slough National Estuarine Research Reserve  
Coastal Training Program

Restoration ecology, botany, wetlands conservation

### **III. Course Registration Information**

**Registration** for the course will be coordinated by Dr. Grey Hayes, Coordinator, Coastal Training Program, Elkhorn Slough National Estuarine Research Reserve, 1700 Elkhorn Road, Watsonville, CA 95076, phone: (831) 274-8700, fax: (831) 728-1056, E-mail grey@elkhornslough.org. Please pre-register online as soon as possible at:

[http://www.elkhornsloughctp.org/training/show\\_train\\_detail.php?TRAIN\\_ID=Ju3V815](http://www.elkhornsloughctp.org/training/show_train_detail.php?TRAIN_ID=Ju3V815)

**THE DEADLINE FOR REGISTRATION IS MARCH 12, 2008 5 p.m.**

**Payment:** In order to guarantee a space in the course after pre-registering online, you must provide the **Elkhorn Slough Foundation** with a check, cash payment, or money order for the \$1300 registration fee by 5:00 PM Friday, March 12. Tuition covers costs of all course handout materials, field trip transportation, lunch, and coffee breaks (Tuesday & Wednesday, only- cold drinks available Thursday and Friday in the field).

Please make all Money Orders and Checks payable to:  
*Elkhorn Slough Foundation*

*-please note on check your pre-registration number and abbreviated course title-*

**Address payment to:** Elkhorn Slough Foundation, attn: Grey Hayes; 1700 Elkhorn Road, Watsonville, CA 95076

**Cancellation Policy:** If participants enroll in the course and then cancel before March 12, 2008 they will be granted a refund minus a \$50 handling fee. In the event of cancellation after March 12, 2008 no refund will be provided and the Elkhorn Slough Foundation will retain the full amount. If, because of insufficient enrollment, NWSTC chooses to cancel or postpone the course, a determination will be made by March 12, 2008, the Coastal Training Program will (a) immediately notify participants of the cancellation by phone and/or fax, (b) provide a full refund of the deposit, and (c) notify interested individuals of other available delineation workshops.

PLEASE **do not register** if you are not reasonably certain you can attend, and/or if you are unwilling to observe the registration/cancellation policy outlined above.

## **IV. Logistics**

### ***A. Place Of Instruction & Lodging***

The first 2 days (April 1 & 2) of the course will be based out of the Moss Landing Marine Laboratories, which are located at 8272 Moss Landing Road, Moss Landing, CA 95039. The second 2 days (April 3 & 4) will depart at 8 a.m. sharp from the Elkhorn Slough Reserve, which is located at 1700 Elkhorn Road, Watsonville, CA 95076. Participants are responsible for coordinating their own hotel accommodations. A partial list of hotels and motels that are reasonably close to the venue and local restaurants is given below.

#### **Local Hotels:**

##### Marina

15 minutes south on the coast highway, Hwy. 1. This is a small, ex-military town that is transitioning into a college town. There are a handful of restaurants and access to miles of little-used beaches or inland hiking trails.

Marina Dunes Resort:

<http://www.state-of-california-hotels.com/marina-lodging/marina-dunes-resort.html>

Comfort Inn:

<http://www.state-of-california-hotels.com/marina-lodging/comfort-inn-marina.html>

Holiday Inn Express:

<http://www.ichotelsgroup.com/h/d/ex/1/en/hd/MMRCA>

##### Watsonville

20 minutes to the venues. This largely agricultural or service-based community is home to a lively Latino community with a historic town square, authentic cuisine, and lots of shopping. It is a few minutes drive, through agricultural fields, to the beach and even further to any inland hiking opportunities.

Comfort Inn: a little farther than the last, also not the best surroundings:

<http://www.state-of-california-hotels.com/watsonville-lodging/comfort-inn-watsonville.html>

##### Monterey

30 minutes from the venues, depending on traffic, etc. This historic town is a highly

desired tourist destination including the spectacular Monterey Bay Aquarium and the awesome Pt. Lobos State Park, gateway to the breathtaking drive down the coast highway into Big Sur. There are ample opportunities to dine and partake in all manner of tourist affairs.

There are so many places to stay, and none that we have stayed at, that it would be worth your while, if you want to stay there, to do some web searching yourself on this city.

### **Local restaurants near the venues:**

Sea Harvest Fish Market and Restaurant  
2420 Highway 1, Moss Landing  
(831) 728-8686  
11am-8pm daily

Haute Enchilada  
Moss Landing Road, Moss Landing  
(831) 633-5843  
7am-5pm daily

Fiesta Tepa-Sahuayo  
15 First St., Watsonville  
(831) 724-3492  
9am-9pm daily

Mai Thai Cuisine  
210 Reindollar Ave  
Marina, CA 93933  
(831) 883-9677

### ***B. Transportation***

Transportation to and from the workshop will be the responsibility of each participant. If you are arriving by air from out of town, flights routed into San Jose International Airport will be the most convenient. If you are coming from San Jose International Airport, there are several shuttle services and other options, please contact Grey Hayes for more information.

If you are travelling from out-of-town, plan to arrive on the night of Monday, March 31, 2008. Plan departures from the venue no sooner than 7:00 PM on Friday, April 4, 2008.

### ***Field Trips & Safety***

**Buses, Not Your Car:** Participants should come prepared to travel to field sites via commercial bus on Wednesday, Thursday, and Friday (all day each day). Please do not plan or request to drive your own car on field trips. It fragments the group, causes significant safety concerns, and/or results in chaos if drivers get lost or if their cars break down.

**Food:** Field lunches will be provided on field days (see Preliminary Agenda on website).

Weather: April weather in the Monterey Bay region should be “partly cloudy with a chance of showers.” Plan on rain and rather cool weather. In this regard, appropriate field gear for spring in central California is recommended. Field trips will run with all due regard for safety, but generally in spite of weather conditions. Therefore, bring jackets, hats, sun screen, sun glasses, insect repellent, ankle, knee or hip-length rubber boots (not chest waders), and personal water bottles.

Equipment: All maps, field equipment, and transportation necessary for field work will be provided. Participants may elect to bring cameras, field glasses, and field guides for their personal use.

***PLEASE BE PREPARED TO GET SOAKING WET, HOT OR COLD, TIRED AND EXPOSED TO THE SUN, AND/OR INSECTS ALL DAY LONG***

Health: Because field conditions for the course could be stressful, the Course Leaders & Safety Specialists (Drs. Lee and Hayes) request to be advised at the earliest possible time if any participants have concerns for their health in the field, specifically in the wetland environments in and around the Monterey Bay area. If at all possible, plan ahead for long intervals (4-5 hours) without a formal “meal” or deviation from the course agenda.

Liability Release: There are inherent risks in participating in field-based training. In this regard, the course instructors, NWSTC, Elkhorn Slough Foundation, and/or WSP Environment & Energy shall assume no liability and shall be held harmless for injuries and/or accidents that occur during the course. Participants will be required to sign a Liability Release. Health concerns include but are not limited to hyper or hypoglycemia, diabetes, epilepsy or other potentially convulsive conditions, allergies (especially to bee or wasp stings), susceptibility to exhaustion, heart conditions, heat stroke, etc.