ESTUARY & OCEAN SCIENCE CENTER

San Francisco Bay National Estuarine Research Reserve

BASIC WETLAND DELINEATION

October 17-21, 2022

COURSE PURPOSE: The purpose of the delineation training is to learn the basic methods, techniques, and scientific foundations for performing jurisdictional determinations for wetlands as regulated under the Clean Water Act. Students should be able to apply the U.S. Army Corps of Engineers delineation methods to determine the presence of wetland vegetation, hydrology, and hydric soils, complete wetland delineation data sheets, and complete delineation reports for verification by the Corps.

LEARNING OBJECTIVES:

1. Understand and apply the delineation methods provided by the Corps
2. Understand the field observations necessary to recognize the three wetland indicators and complete a delineation
3. Develop an awareness of the issues that affect jurisdictional determinations and identify how these issues may affect the outcome of a delineation

INSTRUCTORS: Justin Semion, PWS; Aaron Arthur, MS, CCB

TRAINING METHODS: The training will consist of classroom training and field demonstration. Lectures will be accompanied by presentation materials, classroom exercises, and a soils laboratory. Ample opportunity will be provided for questions and discussion.

TRAINING MATERIALS: Students will be provided with copies of class slides and supplemental materials via Dropbox.

LOGISTICS: The first two and a half days will be lectures and labs at the EOS Center in Tiburon. There is nowhere close by to purchase lunch near the EOS Center, so we recommend bringing lunch on those days. (we do have a fridge and microwave for your use) Coffee, Tea and water dispenser available, please bring reusable mug/water bottle.

On the afternoon of the third day (Wednesday), we will conduct field demonstrations at nearby Ring Mountain (or alternate site). On Thursday, we will have a full day of field demonstrations and exercises at; plan to bring lunch and field snacks this day. On Friday, we will meet at the at the EOS Center in Tiburon for the morning and then travel to Novato for the field practicum. You can bring a lunch to eat in the field or plan to pick up something quick on your way to the field practicum.

For our field days, students must bring standard field gear including sturdy boots, water, sunscreen, hat, and any other protective clothing or accessories necessary to deal with adverse conditions outdoors as appropriate to the season. Fieldwork will occur rain or shine, so come prepared. We recommend bringing muck boots or waterproof hiking boots.

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COURSE OUTLINE AND SCHEDULE

Monday, October 17

9:00 am – 10:00 am	Welcome, Introduction, and Course Logistics (Semion)
10:00 am – 11:00 am	Overview of Wetlands and Wetland Regulation (Semion)
11:00 am – 12:00 pm	Introduction to 1987 Manual and Regional Supplements (Arthur)

Lunch Break

1:00 pm – 3:00 pm	Delineation Methods (Arthur)
3:00 pm – 4:00 pm	Wetland Delineation Reporting (Arthur)
4:00 pm – 5:00 pm	Field Demonstration at EOS Center (Semion & Arthur)

Tuesday, October 18

9:00 am – 10:30 am	Hydrophytic Plants, Adaptations, and Wetland Indicator Status (Arthur)
10:30 am – 12:00 pm	Hydrophytic Vegetation Workshop (Arthur & Semion)

Lunch Break

1:00 pm – 3:00 pm	Hydric Soils and Field Indicators (Semion)
3:00 pm – 5:00 pm	Hydric Soils Laboratory (Semion & Arthur)

Wednesday, October 19

9:00 am – 10:00 am	Indicators of Wetland Hydrology (Semion)
10:00 am – 11:00 am	WETS Analysis and Storm Frequency Analysis (Arthur)
11:00 am – 12:00 pm	Ordinary High Water Mark (Semion)

Lunch Break

1:00 pm – 5:00 pm	Local Field Site Investigations (Ring Mountain or alternate)

Thursday, October 20

9:00 am – 12 pm	Field Site Investigation – Sky Oaks Meadow (or alternate)
1:00 pm - 5:00 pm	Field Site Investigation - Bel Marin Keys

Friday, October 21

9:00 am – 10:00 am	Problem Areas, Atypical Situations, and Difficult Wetland Situations (Semion)
10:00 am – 11:00 am	Corps Jurisdiction (Semion)
11:00 am – 12:30 pm	Written Exam and Award of Certificates

Lunch Break

2:00 pm – 5:00 pm	Final Field Practicum (Deer Island Open Space Meadow – be on site at 2pm)