### 5-Day General CRAM Training Prospectus

# Training Course Description and Objectives

CRAM is a method for rapidly assessing the condition of California wetlands and closely associated riparian areas. For the past decade a consortium of scientists has worked to develop this tool, which is applicable to all wetland types in the state. CRAM can be used in any context where knowledge about wetland condition improves decision-making. These circumstances include, but are not limited to, assessing ambient condition on the scale of a watershed or the entire state; assessing the effects of management on condition at a watershed scale; assisting with identifying sites for restoration; and monitoring and reporting the outcome of mitigation, enhancement, or restoration projects.

This course is intended for practitioners who will conduct site assessments and interpret CRAM scores, including agency staff, consultants, and other practitioners. The course has the following objectives:

1. Provide an understanding of the conceptual structure and approach of CRAM;
2. Provide hands-on experience with CRAM in the office and field, including the use of *e*CRAM and attendant quality assurance procedures;
3. Build capacity for the use of CRAM by providing a solid technical grounding in the method so that practitioners can reliably perform CRAM assessments for the wetland types utilized in the class;
4. Provide practitioners with sufficient knowledge of the CRAM methodology to enable them to develop proficiency in other CRAM modules; and
5. Provide an overview of known applications of CRAM for project and regulatory purposes.

**Sample Session Schedule**

**Day 1**

Introductions & Purpose of the Training Course

Presentation: Introduction to the CA Wetland Monitoring Framework and CRAM

Presentation: Ambient versus Project Assessment

Presentation: CRAM Applications

Lunch

Presentation: CRAM Module for first example wetland type

CRAM Field Demonstration at Site # 1

Discussion of Field Demonstration #1, Q/A

Presentation: Introduction to eCRAM website

Distribute take-home test

Adjourn

**Day 2**

Introduction to Day 2 objectives

Presentation: The Meaning of CRAM Scores

Presentation: How to Establish AAs for Different Wetland Modules and Create Draft AAs

Exercise: Trainees produce AAs for two case studies

Presentation: The Buffer and Landscape Context Attribute in CRAM

Presentation: The Hydrology Attribute in CRAM

Presentation: The Physical Structure Attribute in CRAM

Presentation: The Biotic Structure Attribute in CRAM

Lunch

Presentation: The Stressor Checklist

Presentation: CRAM Module for second example wetland type

CRAM Field Demonstration at Site # 2

Discussion of Field Demonstration #2, Q/A

Adjourn

**Day 3**

Introduction to Day 3 objectives, hand in take home test

CRAM Assessment at Site #3

Discuss Assessment #3

Lunch

CRAM Assessment Field Site #4

Discuss Assessment #4, general Q&A

Adjourn

**Day 4**

Introduction to Day 4 objectives

CRAM Field Assessment Site #5

Discuss Assessment #5, general Q&A

Lunch

CRAM Field Assessment Site #6

Discuss Assessment #6, general Q&A

Adjourn

**Day 5**

Introduction to Day 5 objectives

CRAM Field Assessment (“Practicum”) Site #7

Discuss Assessment #7, general Q&A

Lunch

CRAM Field Assessment (“Practicum”) Site #8

Discuss Assessment #8, general Q&A

Wrap-up

Close Training

**Notes**

Participants are expected to visit the CRAM website ([www.cramwetlands.org](http://www.cramwetlands.org)) and download the CRAM Users Manual from the “documents” page. Participants will be provided with field books for example wetland types, aerial imagery of the field sites, and data sheets.

For the field component of this workshop, participants should bring both light-hiking boots and waterproof **knee boots**; appropriate field attire, including a hat and a sweater or light jacket; sunscreen; mosquito repellant; water bottle, and data-recording materials including clipboard, calculator, ruler, and pencils. Participants may find a digital camera, metric measuring tape, and plant identification manual useful.