

## **Summary of Changes to the CRAM Depressional Field Book**

*Version 5.0.2 to Version 6.1*

*2/2013*

### **Title Page:**

- New background image (Tuolumne meadows)
- Updated version number and date of release

### **Basic Information Page:**

- Changed order of Names and ID numbers so that the AA Name is first
- Changed “Project Site ID” to “Project ID #” still for use with mitigation or other projects that have a unique identifying number that should be on each data sheet
- Changed “CRAM Site ID” to “Assessment Area ID #” for use with large-scale projects that have many AAs.
- Added AA location
- Added new categories for AA type: pre- and post-restoration, etc.
- Added new section for Origin of wetland (natural or artificial) and type of management (waterfowl, stormwater, etc.)
- Changed categories for Type of Marsh section: removed alkali flat, added brackish marsh
- Added section for outlet type (defined or undefined)

### **Score Sheet Page:**

- Added alpha and numeric columns for scores
- Added page number references for each attribute

### **Identify Wetland Type:**

- Updated figure with slope wetlands and new pathway for groundwater supported depressional wetlands

### **Depressional Wetlands Description:**

- Updated description with additional language
- Removed a lot of the background language and transferred it to CRAM manual
- Added some background on artificial depressional wetlands

### **Establish the Assessment Area:**

- Clarified rules for AA establishment, particularly for the backshore boundary of the AA and the overhanging “riparian” vegetation
- Re-arranged several of the paragraphs
- Added new example figures of various AA configurations
- Added caveat to features used to establish AAs to clarify that project or property boundaries can be used to outline an AA if required for the purpose of the assessment or by the access parameters.
- Updated dimensions for recommended AA sizes (56 m radius circle for 1 ha AA, etc.)

## **Attribute 1: Buffer and Landscape Context**

- Streamlined headings: all metrics now have a “Definition” heading and a “Procedure to Assess this Metric for Depressional Wetlands” heading, all other headings have been removed (rationale, field indicators, etc.). Some metrics have a “Special Notes” section, with additional information in *italics*

### Metric 1-Aquatic Area Abundance

- Changed named of Landscape Connectivity to Aquatic Area Abundance
- Simplified definition, removed some of the language on isolated wetlands and added it to CRAM manual.
- Added example figures for depressional wetlands
- Worksheet: changed “wetland habitat of any kind” to “aquatic feature of any kind.”
- Adjusted bins to better reflect statewide data, reduced minimum for an “A” from 75% to 46%.

### Metric 2- Buffer

- Rearranged paragraphs specific to each sub-metric
- Added new figures with examples from 2 sites, and updated language to match figures
- For buffer width, added figure that shows the buffer lines extending away from the AA and through open water that is not directly adjoining the AA
- For buffer condition, added new “B” option for a buffer dominated by native vegetation but with some soil disturbance or human visitation

## **Attribute 2: Hydrology**

### Metric 1- Water Source

- Streamlined language in the definition

### Metric 2- Hydroperiod

- Added clarification on berms, levees, or spillways. These don’t automatically reduce the score, but structures that actively change the hydroperiod do.

### Metric 3- Hydrologic Connectivity

- Added additional language to the definition on berms, levees and steep banks. If they are steep and abrupt this reduces the score, but if levees are designed with a more gradual transition zone then the hydrologic connectivity is not impacted.

## **Attribute 3 Physical Structure:**

### Metric 1-Structural Patch Richness

- Changed “Abundant wrackline” to “abundant wrack”
- Adjusted bins to better reflect statewide data distribution

### Metric 2- Topographic Complexity

- Changed figure to more realistic looking diagram of a wetland with plants etc.

#### **Attribute 4 Biotic Structure:**

- Added metric and submetric headings

##### Metric 1-Plant Community

- Clarified where each layer is expected to be present in the AA
- Changed example species for each layer to depressional species
- Added instructions to collect voucher specimens of unknown species
- Added reference to the CRAM photo dictionary
- Changed bins for Percent Invasion metric to make it more stringent
- Changed bins for Number of Co-dominant Species to make it easier to get a higher score

##### Metric 2-Horizontal Interspersion

- Added instructions to assess the metric using both aerial interpretation and field reconnaissance
- Added examples of species assemblages for zones in different types of wetlands.
- Added worksheet to sketch the zones in the AA
- Changed “D” category to “minimal or no plan-view interspersion”

##### Metric 3-Vertical Biotic Structure

- Revised metric to include two methods: entrainment and overlap methods
- New figure for overlap specific to depressional wetlands

#### **Scoring Guidelines:**

- Added instructions for calculating CRAM scores, including not rounding until the final calculation