Summary of Changes to the CRAM Estuarine Field Book
Version 6.0 to Version 6.1
1/2013

Title Page:
- Updated version number and date of release

Basic Information Page:
- Removed M/D/Y from date entry
- 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.

Score Sheet Page:
- Added page number references for each attribute
- Updated name of Aquatic Area Abundance metric
- Removed language that says to round the raw attribute scores and Plant Community Metric scores to nearest integer.

Identify Wetland Type:
- Changed flowchart to better describe various wetland types

Estuarine Wetlands Description:
- No changes

Establish the Assessment Area:
- Table 1: changed the word delineate to "establish"
- Inserted reference to the CRAM photo dictionary
- Corrected radius measurement for a 1 ha AA from 55 m to 56 m

Attribute 1: Buffer and Landscape Context

Metric 1-Aquatic Area Abundance
- Changed named of Landscape Connectivity to Aquatic Area Abundance
- Added second example to Figure 3 with a standard circular AA
- Added guidance to scoring the Aquatic Area Abundance metric to round the result to the nearest integer

Metric 2- Buffer
- Added to special notes that "*However, any area of open water that is within 250 m of the AA but is not adjoining the AA is considered part of the buffer if there is continuous buffer cover > 5 m between the edge of the AA and the open water.*"

- Percent with Buffer: removed old figure, added to new figure with example of circular AA, and changed language to match new figure.
- Inserted reference to the CRAM photo dictionary
- Buffer Width: added to new figure with example of circular AA, and changed language to match new figure
- Buffer Width: added directions to round the Buffer Width measurements to the nearest whole number.
- Buffer Condition: added to new figure with example of circular AA, and changed language to match new figure
- Added option to D for buffer condition: "or there is no buffer present"

Attribute 2: Hydrology

Metric 1- Water Source
- Added additional language to the definition

Metric 2- Hydroperiod
- Changed examples of altered hydroperiod
- Removed examples of increased inundation as they do not apply to the estuarine hydroperiod metric
- Question: should there be another B option for areas that have increased tidal inflow that is detrimental (Elkhorn Slough, maybe others?)?

Metric 3- Hydrological Connectivity
- Added additional language to the definition
- Added suggestion to indicate on aerial where restrictions to water movement occur
- Added limit to the distance from the AA a practitioner is supposed to consider when assessing this metric

Attribute 3 Physical Structure:

Metric 1-Structural Patch Richness
- Inserted reference to the CRAM photo dictionary
- Revised some of the patch type definitions
- Added Large Woody Debris

Metric 2- Topographic Complexity
- Revised definition
- Added instructions for scoring the metric based on sketches

Attribute 4 Biotic Structure:

Metric 1-Plant Community
- Minor changes to definition

- Question/Comment: is it possible to have a floating layer in an estuarine wetland? Are there examples of species?
- Changed examples of species for each layer
- Added examples of sparsely vegetated wetlands that may have to be assessed using CRAM (new restoration, etc.)
- Revised Special Note on how to take a plant sample for identification of the species
- Added guidance to round the percent invasion calculation to get the final score
- Revised flowchart for plant dominance: changed

Step 1: Determine the number of plant layers. Estimate which possible layers comprise at least 5% of the portion of the AA that is suitable for supporting **vascular vegetation**.
Changed to: suitable for supporting **that layer.**

Metric 2-Horizontal Interspersion
- Added both scientific and common names for examples of plant zones
- Removed the word "complexity" from the worksheet title

Stressor Worksheet:
- Changed "seasonal estuarine" to "bar-built estuarine"