

# CALIFORNIA RAPID ASSESSMENT METHOD

# GRAM

WETLANDS SCIENCE PROGRAM  
of the San Francisco Estuary Institute  
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## What is the California Rapid Assessment Method (GRAM)?

Rapid assessments have been developed around the country and are part of the EPA's three-level approach to wetlands assessment (landscape level, rapid assessment, and intensive assessment).

Rapid assessments are used to evaluate the general condition of wetlands using field indicators. These methods provide standardized, cost-effective tools for land use planning and project evaluation.

A rapid assessment method is especially helpful when full funding is not available for intensive monitoring. The score from a rapid assessment indicates where a wetland falls on the continuum ranging from full ecological integrity (or least-impacted condition) to highly-degraded.

Rapid assessment tools have been developed in Ohio, Montana, Delaware, Florida, Wisconsin and other states, including California. These methods have been validated with comparison to other, more intensive assessments.

**GRAM** was developed specifically for the wetland types of California as a tool to assess the status of and trends in the condition of wetlands throughout the state. It is designed to enable standardized ambient assessments at multiple scales: projects, watersheds, regions, and statewide. GRAM can be used to assess compensatory mitigation projects as well as restoration projects to help evaluate the performance of wetland and riparian protection policies and programs.



**GRAM's Underlying Assumptions**  
 Three tenets guided GRAM development

- 1** Wetlands are valued because of processes and functions that provide services to society (e.g., habitat for fish and game, carbon sequestration, and flood control).
- 2** The overall value of a wetland depends more on the diversity of its services rather than on the level of any one service.
- 3** The diversity of services provided by a wetland increases with its structural complexity and size. GRAM therefore favors large, structurally complex wetlands within each wetland class.

## How does CRAM work?

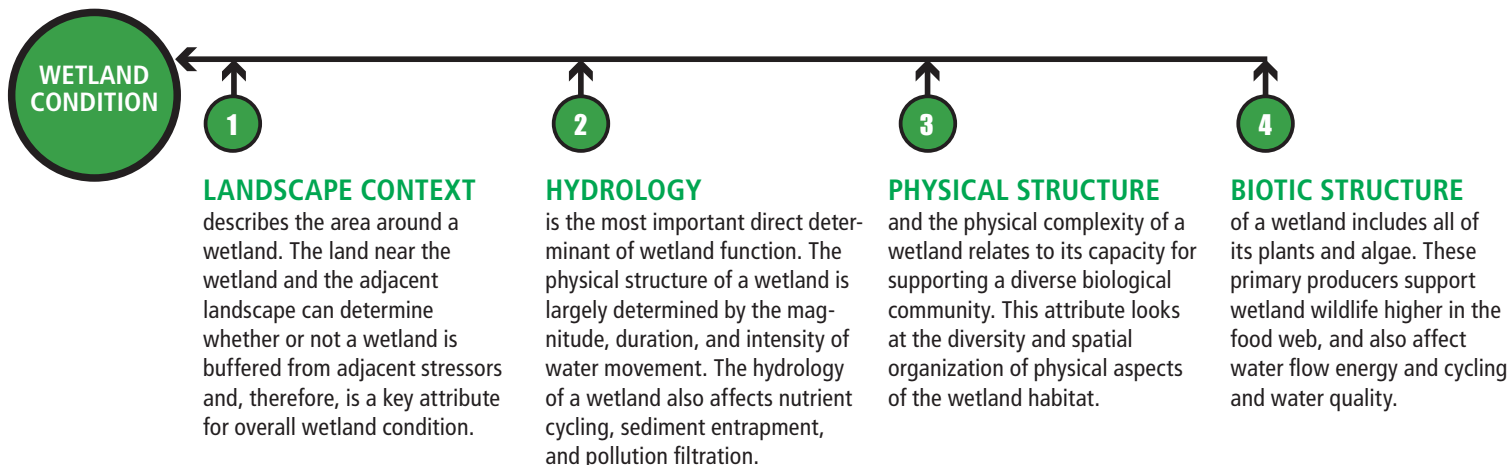
A CRAM assessment takes a team of two people less than 4 hrs of field time plus one half day of office preparation and data analysis. CRAM can be applied to seven main types of wetlands (riverine and riparian, lacustrine, depressionnal, estuarine, wet meadows, vernal pools, and playas). CRAM allows real-time data collection with eCRAM, which is a PC-based imagery-delivery and data-entry system that interfaces with the CRAM website.

The maximum CRAM score possible represents the best condition that is likely to be achieved for the type of wetland being assessed. The overall score for a wetland therefore indicates condition relative to the best achievable condition for that wetland type in the state. Local conditions can be constrained by the particular context of a wetland (in the landscape, as a project, etc.), which should be considered when comparing the CRAM score to an ambient population of wetlands.



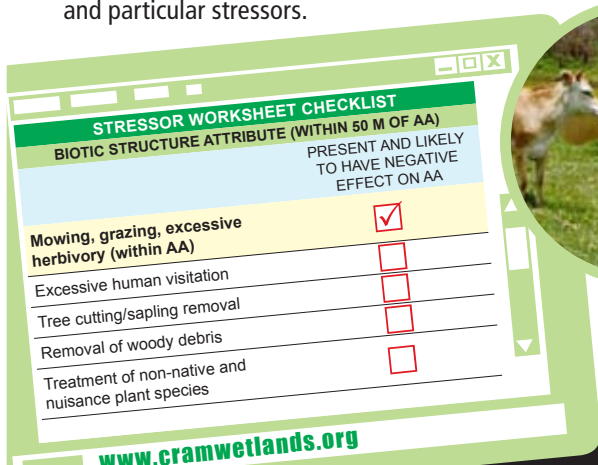
## CRAM assesses wetland condition based on four attributes.

Each of the four attributes has associated metrics, which are scored by matching the correct score from a list of descriptive narrative conditions for each metric to what is observed in the wetland. Metric scores are then compiled into numerical scores for each attribute and an overall score for the wetland. These standardized scores can then be used for comparison to other CRAM scores at different scales.

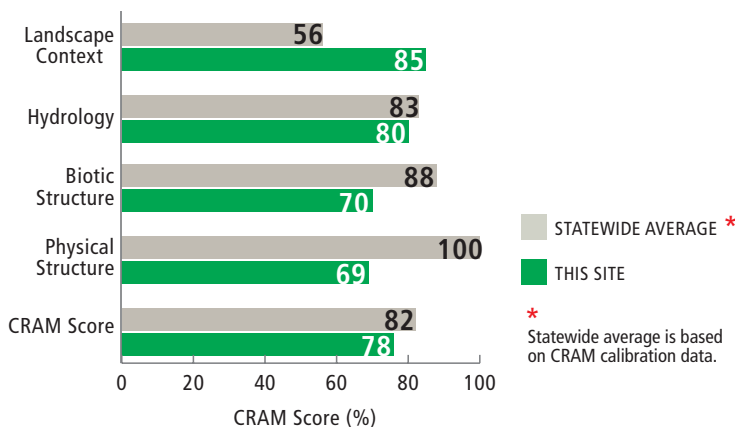


## Stressors

CRAM provides guidelines for identifying stressors that might account for low scores. A CRAM assessment is accompanied by a stressor checklist that allows researchers and managers to explore possible relationships between CRAM scores and particular stressors.



## CRAM Score CARPENTERIA SALT MARSH



For more information, please visit the CRAM website at

[www.cramwetlands.org](http://www.cramwetlands.org)