

# Wetlands and Waters Delineation

**CEC uses a sequential approach to provide wetlands and waters (streams, ponds, etc.) identifications, delineations and permitting, and also develops designs for approved and successful mitigation projects.**



## PROVEN WETLANDS APPROACH

Wetlands regulations significantly impact the overall feasibility, economics, and efficiency of new land development projects. CEC has extensive experience in working with regulatory agencies to address and solve wetland issues for land development, producing positive, timely results.

## WETLANDS IDENTIFICATION AND DELINEATION

CEC recommends that wetlands be identified during site consideration and planning due to the negative impact wetlands can have upon site feasibility. CEC's delineation services include a review of background information (soil surveys, aerial photography, National Wetlands Inventory Maps, flood insurance maps) and initial site reconnaissance to determine the presence of wetlands.

Delineations confirm the presence and determine the boundaries of potentially jurisdictional wetlands and other waters. CEC selects the appropriate delineation methodology based on an initial review of site conditions and proceeds to determine the wetland/non-wetland boundary in accordance with regulatory requirements. CEC prepares a formal report and supporting documentation presenting data forms, site photographs, methodology and other information required for state and/or federal permitting, and typically coordinates and leads the on-site jurisdictional determination (JD) meeting with the U.S. Army Corps of Engineers and appropriate state agencies to verify the limits of the delineation and discuss permitting strategies.

## WETLANDS PERMITTING

Encroachments upon jurisdictional wetlands and other waters require state and/or federal permit applications. CEC can recommend a permit application strategy based on the results of the wetlands delineation, the land developer's objectives, the regulatory requirements, and agency information obtained during the JD meeting. CEC prepares permit applications along with the required supporting documentation, including environmental assessments, wetland value and function assessment, and alternatives analysis. CEC can also prepare a cumulative impact assessment, which compares specific project impacts to a larger-scale assessment area. In addition, CEC works with the developer and regulatory agencies to develop, design, and prepare construction documents, as well as monitor the performance of wetlands mitigation plans.

## RELATED WETLAND SERVICES

- Wetland and Stream Functional Assessment
- Mitigation Design, Construction Oversight, and Long-Term Success Monitoring
- Design of Wetland Treatment Systems
- Threatened and Endangered Species Surveys and Habitat Assessments
- Fish and Benthic Macroinvertebrate Surveys
- Invasive Plant Inventory
- Technical Assistance to Mitigation Bankers