Water Resources

CEC balances regulatory compliance and environmental stewardship with the needs of industry, government and community by providing innovative solutions in context with economic impacts.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
The Clean Water Act (CWA) of 1972 and subsequent revisions set into play the regulation of discharges to surface water. The NPDES permitting program was delegated to most states for enforcement, targeting local government and commercial, residential and industrial clients. CEC stays abreast of the current regulatory directions and trends to help clients better manage resources and risk. Services include:
- Compliance Audits and Gap Analysis
- Stormwater Master Planning
- Hydrologic and Hydraulic Analyses
- SWPPP Design, Implementation and Inspection
- Stormwater Best Management Practices (BMP) Design

WATER QUALITY MANAGEMENT AND TOTAL MAXIMUM DAILY LOAD (TMDL)
Many states are under agreements with EPA to develop TMDLs for their impaired stream segments, and depending on the data and resources available, additional modeling and data collection are needed. CEC verifies these models and provides real-time data for use in the negotiation of effluent limits. CEC also provides baseline stream condition assessments and monitoring. Senior professionals are experts in sediment load modeling and reduction, which are key skills necessary to address sediment TMDLs. Services include:
- Pollutant Modeling
- TMDL Monitoring & Negotiation

USEPA WATERSHED APPROACH
The federal government, through Section 319 of the CWA, awards grants to cities, counties and nonprofit watershed organizations through a competitive grant process. These cost-shared grants support a wide variety of activities, including technical and financial assistance, education, training, technology transfer and monitoring. CEC guides organizations in pursuit of these grants and also develops watershed assessment plans and the technical and research aspects of these projects. CEC professionals incorporate this experience with ecological experience to provide services including:
- Watershed Planning and Stream Assessments
- Water Quality and Quantity Analyses
- Endangered Species Identification and Protection
- Stream Restoration