

# REDLANDS PLUME

## RAP/FS Preparation

California

### Client:

Confidential

### Contract Value:

\$220,000

### Performance Period:

July 2007–Present

### Technical Areas:

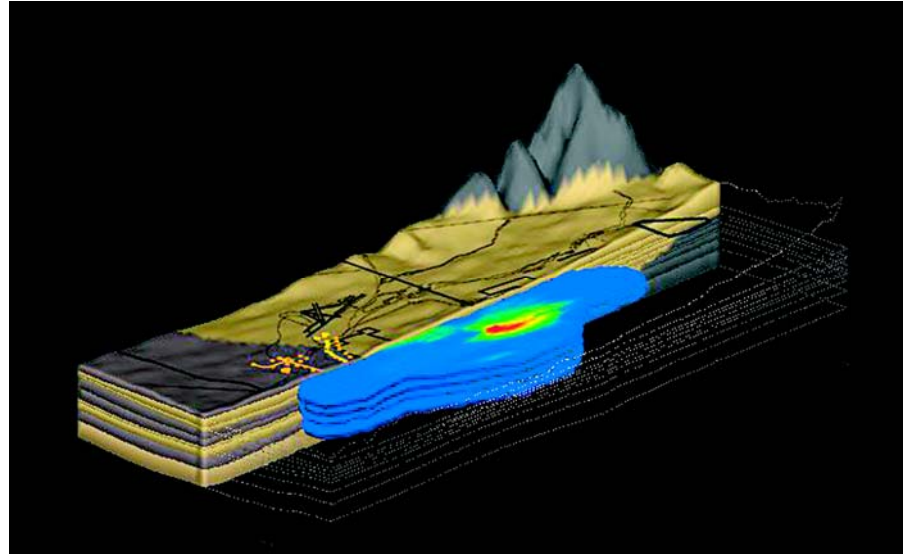
- Remediation
- Civil Design
- Geotechnical, Geologic Services
- Financial and Risk Management

### Successes:

Successfully managed a large group of consultants to complete a complex feasibility study

Planned and directed groundwater model upgrades to more accurately represent field conditions

Effective management of the feasibility study which justifies the cost-effective approach to combining remediation and water supply objectives



### BACKGROUND

This very large scale and complex project involves remediation of ground water contaminated with perchlorate and trichloroethylene. Key constraints include water rights and water supply issues, the needs of stakeholders (purveyors) including the municipal water supply companies for several cities, an electricity generating facility, and irrigation supply companies. Unique factors in this project are the large scale treatment requirements ranging from 10,000 gpm to over 40,000 gpm, and the influence of other constituents important to water quality, including nitrate, hexavalent chromium, 1,2,3-trichloropropane, and dibromochloropropane.

### SES ROLE

As part of ongoing support to a large aerospace company, SES is directing and acting as technical lead for a Remedial Action Plan and feasibility study to evaluate alternative approaches and refinements to the current approach. This strategic re-look is essentially a CERCLA-compliant feasibility analysis. The key objectives are to determine if alternative approaches can be implemented to decrease clean up time, improve effectiveness, and improve cost effectiveness. SES developed a complex cost model that uses actual and estimated costs for capital and O&M, and the results of groundwater modeling as inputs to estimate life cycle costs for a variety of alternatives. SES used sophisticated decision making software to support the alternatives analysis process. The final report will be submitted to the Regional Water Quality Control Board to allow preparation of an order that defines the endpoint for remediation and the approach that will be used to achieve the remedial objectives.



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