



# Aspen

## Environmental Group

Spring 2002

Issue No. 7

### ASPEN WINS 3RD CONSECUTIVE CORPS CONTRACT

Aspen was recently awarded a third consecutive Miscellaneous Environmental Services contract for the U.S.



Army Corps of Engineers, Los Angeles District (Corps). Aspen will again perform a wide range of services for the Corps for up to three years, including EISs, Environmental Assessments (EA), environmental restoration plans, habitat management plans, water quality studies, biological monitoring and surveys.

With more than seven studies in progress, Aspen is emerging as a leader in the formulation of habitat restoration and rehabilitation plans, especially under the Corps' Continuing Authorities Programs, such as Section 1135 and Section 206 aquatic restoration projects. Aspen is currently working on two such habitat restoration projects in Arizona and three projects in southern California. In addition, Aspen is working for the Corps on three major Feasibility Studies for environmental restoration projects, including the removal of the **Matilija Dam** in Ventura County and the rehabilitation of the **Morro Bay Estuary** on the central California coast. In total, Aspen has worked on more than 12 environmental restoration projects for the Corps in the last five years and several new projects are scheduled to start later this year.

Other notable recent projects for the Corps include the Final SEIS/EIR and construction monitoring for **Prado Basin and Reach 9** (Santa Ana River Mainstem Project), **Agua Fria** restoration project in Phoenix, **El Vado** restoration project in Tucson, **Wood Canyon** and **Sulphur Creek** restoration projects in Orange County, and **Harbor/South Bay Water Recycling Project** EA in L.A. County.

### CALIFORNIA'S POWER GENERATION GREW CLEANER OVER TIME

#### AN HISTORICAL PERSPECTIVE

by Dr. Suzanne L. Phinney  
Aspen Vice President, Sacramento Operations

Aspen, as prime consultant to the California Energy Commission's (CEC) Siting Division, provided significant support to the recently released Environmental Performance Report of California's Electric Generation Facilities. This report was prepared in response to directives contained in Senate Bill 110 and reports to the Governor and the Legislature on:

- The current status and historical trends in the environmental performance of California's electric generating facilities
- The geographical distribution of any environmental or socioeconomic impacts from these power plants
- The extent to which operations of existing facilities (and their impacts) could be displaced by newer facilities.

[\(click here to cont. on page 2\)](#)

## Recent Accomplishments and Ongoing Projects

### ASPEN ASSISTS CALTECH WITH RADIO TELESCOPE ARRAYS



Aspen has begun the scoping process on the Joint EIS/EIR for the U.S. Forest Service and the Regents of the University of California on the CARMA radio telescope project. The project, led by Caltech, involves the movement and placement of a number of radio antennas at a high altitude site in the Inyo National Forest. So far Aspen has been asked to develop a Study Plan, conduct site reconnaissance, and hold kick-off meetings with the project proponent and the lead agencies for the EIS/EIR. Our knowledge and experience with the U.S. Forest Service on other projects like the Yellowstone Pipeline as well as our extensive experience in the State help us to understand the relevant NEPA and CEQA requirements, issues, and processes to seamlessly address all the requirements in one document.



Three of Caltech's six 10.4-meter Owens Valley radio antennas proposed to be moved to a high elevation site (as part of the CARMA Project).

### ASPEN UP TO 580 WORK AUTHORIZATIONS AT OVER 40 PROPOSED PLANTS FOR CEC



Aspen continues to provide engineering and environmental technical assistance to the California Energy Commission (CEC) to prepare Staff Assessments (equivalent to impact assessments under CEQA) and to conduct special studies. With 580 Work Authorizations, Aspen has completed work on 20 power plant projects with a total capacity of 5,864 megawatts, and is currently working on 21 power plant projects with a total capacity of 11,893 megawatts.

Aspen has also been asked to monitor the implementation of Conditions of Certification during construction and start-up of each proposed project. Aspen's Compliance Project Managers are currently responsible for 12 power plant projects located throughout California. In addition to Staff Assessments, Aspen continues to work on several special studies for the CEC. These studies include the Alternative Technology and Readiness Study and the Coastal Plant Inventory Study.

## MITIGATION MONITORING- DEDICATED DIVISION EXPANDS ACTIVITIES

Aspen has actively expanded Mitigation Monitoring activities through creating a division dedicated to these services. Monitoring is a critical part of any NEPA or CEQA project, and Aspen has become well known for its highly trained, exceptional team of scientists as well as our management of such projects, especially for large scale, linear programs.

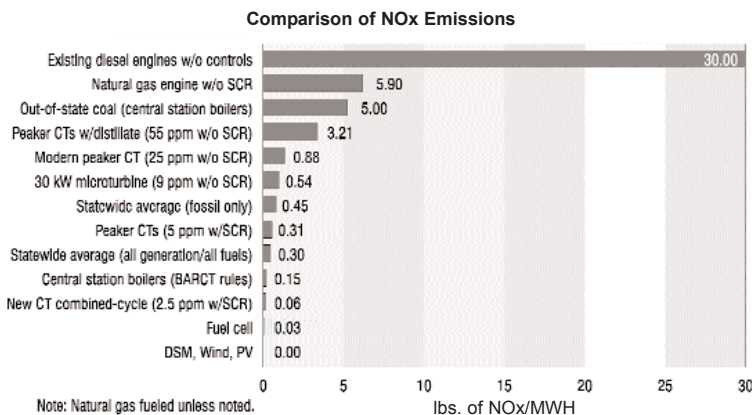
Construction of the 2,000 mile **Level 3 Communications Project** was completed in November 2001. Aspen monitored this statewide construction effort. A Final Construction Completion Report, summarizing (by construction segment) the effort, non-compliance activity, variance and extra work space requests, was submitted to CPUC in February 2002.

Construction of **PG&E's Line 401 Capacity Loops Project**, scheduled to start in early-May 2002, is comprised of two separate 42-inch natural gas pipeline installations in Shasta and Modoc Counties. Aspen will monitor construction, including a pre-construction compliance review for the CPUC. Aspen also monitored the clearing of both rights-of-way in late-2001. Working for the Corps, Aspen also monitored the clearing of the **Prado Dam and Reach 9** areas earlier this year. Construction, slated to start in late-June, will also be monitored by Aspen.

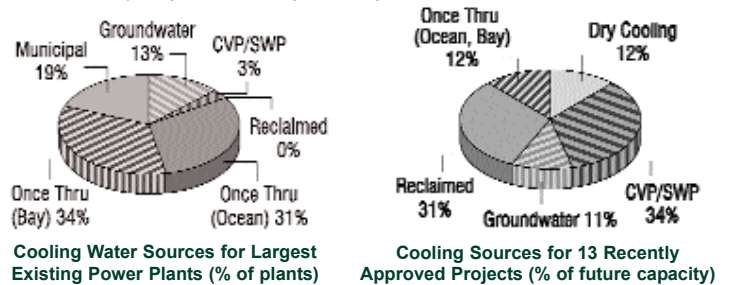
*(Phinney cont. from page 1)*

The report provides an overview of the West Coast's electric generation system describing the diverse network of resources, shaped by geography and shared through transmission lines. It also describes the development of California's power plants since the early 1900s. The early period of hydroelectric dominance was followed by oil-fired power plant development in the 1930s that peaked in the 1950s and 1960s. A few nuclear plants were introduced in the 1960s to 1980s. Oil-fired plants switched to natural gas in the 1970s causing a significant drop in air pollutants released from the plants. The 1980s were characterized by the development of geothermal, wind, waste-to-energy, and solar energy facilities. Natural gas and coal-fired cogeneration facilities also came on-line during that time frame.

Aspen helped the CEC research, analyze and document the changes in environmental and socioeconomic impacts over time from these facilities. Key conclusions include:



- Advancements in air pollution control and the switch to cleaner burning natural gas have significantly reduced pollutants, especially nitrogen oxide (a key element in the formation of ground-level ozone). NOx emission control technologies for boilers (flue-gas recirculation, low-NOx burners and selective catalytic reduction) can reduce NOx emissions by as much as 99 percent.
- Water use for steam production and cooling has declined as plants' efficiency has increased. A new combined-cycle 500 MW plant uses 15,000 gallons per megawatt hour (MWh), while a similarly sized older steam boiler uses 30,000-40,000 gallons per MWh. Additionally, new plants no longer use seawater for cooling, which reduces the entrainment (organisms pulled into the cooling water stream) and impingement (organisms captured on the screens) impacts to aquatic species.



- More stringent siting requirements mean that new plants use less land and are not sited in sensitive biological areas. In addition, the impacts from new facilities are generally mitigated; e.g., the significant cumulative impacts of new and existing power plants in the southern San Joaquin Valley area are being mitigated through off-site habitat preservation programs. Of the various power generation facilities in use in California, hydroelectric facilities eliminate the greatest amount of acreage/habitat. While wind farms disrupt, they do not eliminate wildlife habitats.
- Socioeconomic benefits of electric generation facilities significantly outweigh their socioeconomic drawbacks when considered from a regional or statewide perspective. Contributions to local tax revenues can be significant although employment is not. An analysis of 13 older and larger plants did not reveal any long-term socioeconomic impacts to the local area when compared to neighboring communities without such a plant.

Aspen worked closely with the CEC to create a user-friendly and graphically rich report. The text is presented with heading titles and sidebar graphics to allow the reader to quickly spot important data and conclusions. The multi-color photographs allow the reader to visualize the size and footprint of the various types of facilities as well as their setting in the environment. The report was produced with a CD inserted in the jacket back to allow easy downloading of the report and the supporting appendices. According to CEC staff, the report has been very popular with the Legislature and the public; the original supply available through the CEC's Publication Department has now completely "sold-out".

To review the Environmental Performance Report, go to the CEC's web-site ([www.energy.ca.gov](http://www.energy.ca.gov)), then click on Report and Publications, then 700, and then download #700-01-001.

## ASPEN BIOGRAPHY:



### MEET PHILIP O. LOWE, P.E.

Senior Associate,  
Water and Earth Resources

Phil Lowe came to Aspen only eight months ago, and has already become an invaluable asset. His unique combination of expertise in water resources (hydraulics and hydrology) and an understanding of biological resources are a perfect fit for Aspen's environmental work, especially projects such as dams, wetlands restoration, and erosion control.

Phil grew up in southern Arizona and obtained B.A. and M.A. degrees in Wildlife Management at the University of Arizona in Tucson. He next joined a program sponsored by the Smithsonian Institute in cooperation with the U. S. Peace Corps and spent two years in Colombia researching rodent populations at an experimental agricultural farm.

Upon returning to the U.S., Phil switched from wildlife management to watershed management. After attending water resources courses, he worked for the Pima County, Arizona Flood Control District where he found hydraulic engineering challenging and rewarding. Phil learned surface water hydraulics and hydrology on the job and stuck with it. He later moved to a higher position at the City of Tucson, Flood Plain Management Department.

In 1986, Phil joined Simons, Li & Associates (SLA), a specialized surface water resources engineering firm in Tucson, achieving his Arizona registration as a professional civil engineer (P.E.) in 1988. After three years, he moved to the SLA Newport Beach office, achieving his California civil engineering registration in 1996. In California, Phil began expanding into environmental impact analysis and environmental permitting to utilize his biological experience from the standpoint of an engineer. SLA was purchased by Tetra Tech in 1993. Phil remained at Tetra Tech performing surface water hydraulics, hydrology, sediment transport analysis, and flood plain analysis, until joining Aspen in 2001.

While at Tetra Tech, Phil worked on the Pacific Pipeline project (completed in 1996) alongside some of Aspen's staff. He continued working closely with Aspen, on and off, until the Yellowstone Pipeline project (which concluded in 2001). As a result of his long association with Aspen, Phil was very impressed by the company and left Tetra Tech to join Aspen as a Senior Associate, Water and Earth Resources, in September 2001. He is currently involved in several ecosystem restoration projects in which his dual background in water resources engineering and biology is a valuable asset.

Phil's family lives in Arizona and New Mexico. His hobbies include photography, desert trekking, hiking, bird-watching, reading (mostly history), and a stunning collection of antique fountain pens.

## LARGE, COMPLEX ENERGY & INFRASTRUCTURE PROJECTS FOR THE CPUC



Aspen has become expert in assembling specialty teams and providing effective management for the environmental needs of large, complex energy and infrastructure projects. The California Public Utilities Commission (CPUC) is one of the agencies Aspen works with frequently on such projects. Following are updates on current and recent projects.

Both the **Northeast San Jose Transmission Reinforcement Project** and the **Tri-Valley 2002 Capacity Increase Project** were approved by the CPUC in 2001, and construction will begin in mid-2002. Aspen prepared EIRs for both projects and will provide mitigation monitoring services during construction. In addition, Aspen prepared the Final Supplemental EIR for the **Los Banos-Gates (Path 15) 500 kV Transmission Project**, which was issued in February 2002. The CPUC is currently holding hearings to evaluate the need for this project.



Aspen staff conferring at Tri-Valley 2002 Capacity Increase project

After preparing a Mitigated Negative Declaration and Initial Study Checklist for the **Paradise Area Reinforcement Project**, a 115 kV power line in the Sierra foothills in late 2000, Aspen monitored construction to verify implementation of mitigation measures. Construction was completed in March 2002, and the new line was put into service.

## ASPEN AWARDED FIVE NEW PROJECTS-- HELPS LAUSD RELIEVE OVERCROWDING



Aspen has been awarded five additional CEQA document projects associated with Los Angeles Unified School District's (LAUSD) efforts to relieve overcrowded conditions at existing schools. These projects are part of our ongoing Master Services Agreement for the Preparation of CEQA Documents with LAUSD, the nation's largest public works project west of the Mississippi. The CEQA documents will evaluate the potential impacts of the addition of portable classroom facilities at existing high schools throughout the District.

## ASPEN STAFF EXPANDS- RETREAT OFFERS CHANCE TO MEET

On May 10, Aspen held a Staff Retreat at Calamigos Ranch in Malibu. Since our last Retreat in April 2001, Aspen has hired 22 new employees and opened a new office in Sacramento. This was a welcomed chance to meet and mingle with new faces and catch up on company news. Aspen welcomes its newest full-time members: **Robin Palmer** as Cultural Resources Specialist on the Emergency Siting Team working on behalf of Aspen for the CEC. She performs cultural resource analysis, reviewing applications for permitting and documents for environmental compliance.

Aspen also welcomes three new full-time support staff members. **Mark Tangard** joined Aspen's San Francisco Office as Administrative Manager. He has exceptional skills in large document production and over 20 years of experience. He has been recognized by Microsoft as an "MVP" (Most Valuable Professional) for his expertise in MS Word and a degree in Geography, which will add to Aspen's ability to provide expert document services to our clients.

**30423 Canwood Street  
Suite 215  
Agoura Hills, CA 91301  
(818) 597-3407**

**235 Montgomery Street  
Suite 800,  
San Francisco, CA 94104  
(415) 955-4775**

**1760 Creekside Oaks Drive  
Suite 170  
Sacramento, CA 95833  
(916) 646-3869**

**<http://www.AspenEG.com>**

To learn more about Aspen Environmental Group and any specific project, please call (818) 597-3407.

**Veronica Pomo** works on payroll in Aspen's internal accounting. Veronica worked previously at a CPA firm in Italy (where she is from). She has freed up Vicky Tinkjian (our Accounting Supervisor) to implement improvements to Aspen's accounting systems. **Jennifer Usyak**, who worked with Aspen's accounting department since December (primarily on CEC accounts), has joined our headquarters full time as administrative assistant, helping with accounting and marketing activities. Jennifer, a Stanford University graduate, previously taught Japanese and math to high school students.

## NEW CLIENTS

Aspen is pleased to announce our first opportunity to work with **Santa Clara Valley Water District** on its upcoming Recycled Water Connection Project. Aspen will provide CEQA documentation and permitting support for a proposed short-term expansion of the District's recycled water system to provide potable water in brief periods of peak demand. Aspen will also prepare required resource agency permits.