



## Project

Devil's Gate Reservoir Restoration  
Pasadena, CA, USA

## Application

Site Remediation

## Scope

Community and compliance air monitoring of dust emissions from soil disturbance and combustion pollutants from on-site construction equipment, and from offsite trucks hauling sediment.



## Equipment and services

7x Aeroqual AQS 1 monitors  
Aeroqual Cloud software

PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>2</sub>, Ozone,  
Black Carbon (BC)

## Client

Los Angeles County Public Works

## Consultants

Tetra Tech and CET Engineering

## Date

2019 - 2023

## Project cost

Est. \$100 million

# Devil's Gate Reservoir Restoration Project

Tetra Tech oversaw environmental aspects of the Devil's Gate Reservoir Restoration Project by Los Angeles County Public Works (LACPW). The project entailed removing 1.3 million cubic yards of wildfire debris sediment. Tetra Tech and CET Engineering operated an air monitoring network of Aeroqual AQS 1 stations for compliance purposes and to monitor potential air quality impacts. These stations, approved by the California Air Resources Board, South Coast Air Quality Management District, and the local community group, tracked ozone, particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>), nitrogen dioxide (NO<sub>2</sub>), black carbon (BC), and meteorological data in real-time.

## Project challenges

The community was sensitive to air pollution concerns from 425 daily truck movements during sediment removal. In addition to the on-site monitors, stations were installed near the site perimeter to collect air quality data in the community. Using Aeroqual Cloud to receive real-time feedback and alerts, LACPW applied best management practices to mitigate emissions and relieve potential environmental and public health risks. Tetra Tech used an application to pull data from Aeroqual Cloud automatically and calculate the Air Quality Index (AQI). The public could view the AQI and local air quality readings on a community website.

## Project outcome

Sharing air quality data helped to ease community concerns. On-site compliance monitoring ensured activities conformed to Rule 403 for fugitive dust emissions. Aeroqual's low-touch solutions and data tools minimized site visits, saving time and costs. The project restored flood control capacity, offering recreational spaces and over 70 acres of rejuvenated wildlife habitat.

"Aeroqual has provided excellent service and has been very responsive from the initial order to setup of the equipment and cloud."

**Robert Sabater**  
Senior Project Manager, Tetra Tech, Inc.