# San Antonio Reservoir

## Description

Created by the 195 foot high Turner Dam across San Antonio Creek, the San Antonio Reservoir holds 16.5 billion gallons of water. It is located in Alameda County and its construction was completed in 1964, at a cost of 9.4 million dollars.

The regional water system provides water to 2.4 million people in San Francisco, Santa Clara, Alameda and San Mateo counties. Eighty-five percent of the water delivered to SFPUC customers comes from Sierra Nevada snowmelt stored in the Hetch Hetchy reservoir situated on the Tuolumne River in Yosemite National Park. The Hetch Hetchy water travels 160 miles via gravity from Yosemite to the San Francisco Bay Area. The remaining 15 percent of water comes from runoff in the Alameda and Peninsula watersheds. This “local” water is captured in reservoirs located in San Mateo and Alameda Counties. The entire system delivers approximately 260 million gallons of water per day to its customers.

The regional system consists of over 280 miles of pipelines, over 60 miles of tunnels, 11 reservoirs, 5 pump stations and 2 water treatment plants.

The local water system provides distribution and storage for water and fire protection within the City and County of San Francisco . The local water system includes 14 reservoirs, 9 water tanks, 17 pump stations and 1,250 miles of transmission lines and water mains within the City.

The Alameda Watershed lands encompass 36,000 acres of rolling grassland and native Oak woodlands in the East Bay. A variety of plant and animal species make their home on the Watershed and much of the land is leased for grazing, quarrying and nursery uses.

## Location

The Alameda Watershed lands are split between Alameda (23,000 acres) and Santa Clara (13,000 acres) Counties and contain two reservoirs -- the San Antonio Reservoir to the north and the Calaveras Reservoir to the south. Highway I-680

and Route 84 meet in the northern portion of the Watershed, and Calaveras Road extends north-south down the center. Milpitas and Fremont lie to the west and the Pleasanton and Livermore are located to the northeast.

The SFPUC Alameda Watershed lands include 30,000 acres of primary watershed, lands which are tributary to San Antonio and Calaveras Reservoirs as well as lands which drain into Alameda Creek above the proposed Fish Release and Recapture Facility. The primary watershed lands are the most sensitive lands in terms of water quality protection. SFPUC Alameda Watershed Lands also include 6,000 acres of secondary watershed. These are lands where runoff enters Alameda Creek below the proposed Fish Release and Recapture Facility and is not currently captured for water supply purposes.

## Land Use

In contrast to the Peninsula Watershed lands, a portion of the Alameda Watershed lands are leased by and produce revenue for the SFPUC from a variety of uses including grazing, plant nurseries and quarry operations. Several utility companies have easements for routing of public utilities such as gas pipelines, electrical transmission lines and water aqueducts. A portion of the SFPUC's lands are also leased by the East Bay Regional Park District as part of the Sunol Regional Wilderness.

Existing adjacent uses include residential uses and cattle ranching. Union Pacific Railroad runs daily trains on their tracks located along the northwest boundary of the Watershed.

Land uses proposed adjacent to SFWD's primary watershed lands have caused some concern due to their potential impacts on water quality. Land uses such as grazing, quarries and other agricultural uses upstream of primary watershed lands and open space may adversely impact water quality if not properly controlled and managed. Residential development is also a concern as development pressure encroaches, topography permitting, on all sides of the SFPUC's land.

## Geology

The southern portion of the Alameda Creek Watershed drains a 175-square mile area that includes Mount Hamilton and is approximately three times larger than the SFPUC-owned portion. This dry and rugged Watershed has a varied topography that ranges from flatlands to areas of over sixty percent slope.

The Calaveras fault runs through the central portion of this Watershed, and elevations rise to over 3,000 feet in some areas. Soils in the San Antonio Reservoir area are subject to high erosion because of the steep slopes and the proximity to faults.

An intricate system of streams and tributaries winds through the Alameda Watershed; the main streams on SFPUC land include San Antonio, Indian and Alameda Creeks in the north and Calaveras, Arroyo Hondo and Alameda Creeks in the south.

## Natural Environment

Vegetation in the area is predominantly grasslands with brush in the flatter areas. Riparian woodlands containing Bay laurels and sycamores, are found along the Alameda Creek corridor and other creek beds.

Wildlife within the Watershed includes tule elk, coyotes, deer, mountain lions, feral pigs and magpies. The Watershed also provides a home to several endangered species including bald and golden eagles in the vicinity of Calaveras Reservoir.


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