Ano Nuevo Area Groundwater Basin

- Groundwater Basin Number: 3-20
- County: San Mateo
- Surface Area: 2,032 acres (3.2 square miles)

Basin Boundaries and Hydrology

The Ano Nuevo Area Groundwater Basin is located in southern San Mateo County along the Pacific Ocean fifty-five miles south of San Francisco. It occupies a low, rocky, windswept point that juts out into the Pacific Ocean characterizes the area. The Pacific Ocean bounds it on the west. Highway 1 bounds it on the south and east, and Whitehouse Creek bounds it on the north. Three creeks, Ano Nuevo, Green Oaks and Casade, flow through the groundwater basin. These creeks originate in the Santa Cruz mountains and flow west through the basin to the Pacific Ocean. Average annual precipitation in the subbasin ranges from 20 to 32 inches, increasing from west to east.

Hydrogeologic Information

Water Bearing Formations

The water bearing aquifers in the coastal area were formed in the quaternary age. The primary deposits in the Ano Nuevo Area basin are pleistocene marine and marine terrace deposits. The water bearing materials are generally medium to fine grained and consist of sands and silts. Groundwater in the basin area is derived from precipitation and surface runoff, which percolate into the marine terraces.

Monterey Formation. The Monterey Formation material that forms the Ano Nuevo point has been lifted above sea level and shoved northward by tectonic activity along the San Gregorio Fault Zone, which cuts through the Ano Nuevo State Reserve near the western edge of the basin. Several small thrust faults associated with the major fault zone can be found along the south end of the basin.

Pleistocene Marine and MarineTerrace Deposits. The stream channel, stream terrace, and marine terrace deposits can be found throughout the entire basin. The deposits consist of unconsolidated sands, silts, and clays with some gravels (USGS 1961). The westerly portion of the marine terrace is covered by sand dunes that are migrating from north to south.

Groundwater Level Trends

DWR does not collect data in the Ano Nuevo Area Groundwater Basin at this time.

Groundwater Storage

Groundwater Storage Capacity. No published groundwater storage capacity data for the basin was found.

Groundwater in Storage. No published groundwater in storage data for the basin was found.

Groundwater Budget (Type C)

Due to lack of groundwater budget data, inflows, including natural, applied, and artificial recharge and outflows including urban and agricultural extraction have not been included.

Groundwater Quality

Characterization. No published groundwater quality data for the basin was found

Well Production characteristics

	Well yields (gal/min)		
Municipal/Irrigation			
	Total depths (ft)		
Domestic	Range: 105	Average: 105	(based on 1 well)
Municipal/Irrigation			

Active Monitoring Data

Agency	Parameter	Number of wells /measurement frequency
	Groundwater levels	NKD
	Miscellaneous water quality	NKD
Department of Health Services and cooperators	Title 22 water quality	2

Basin Management

Groundwater management:	None identified
Water agencies	
Public	None
Private	None

References Cited

California Department of Water Resources, Bulletin No. 118-80, Ground Water Basins in California, January 1980.

California Department of Water Resources, Bulletin No. 130-71, Volume III Central Coastal Area, December 1972.

California Department of Water Resources, Bulletin No. 138, Coastal San Mateo County Investigation, March 1965

California State Parks, Web site, www.parks.ca.gov , Ano Nuevo, Geology , History, October 4, 2001.

Jennings, O.P. 1973, Geologic map of California: California Division of Mines and Geology, Geologic Map Series, San Francisco Sheet, scale 1:250,000.

US Department of Agriculture, Soil Conservation Service, Soil Survey San Mateo Area California Series 1954, No. 13; May 1961

Errata

Changes made to the basin description will be noted here.