

Drinking Water Source Assessment

Water System

COUNTY SERVICE AREA 7

San Mateo County

Water Source

ALPINE CREEK

Assessment Date

November, 2002

California Department of Health Services
Drinking Water Field Operations Branch
LPA San Mateo County

District No.	71
System No.	4100509
Source No.	001
PS Code	4100509-001

Vulnerability Summary

District Name LPA San Mateo County **District No.** 71 **County** San Mateo
System Name COUNTY SERVICE AREA 7 **System No.** 4100509
Source Name ALPINE CREEK **Source No.** 001 **PS Code** 4100509-001
Completed by Chris Day **Date** December, 2002

THE FOLLOWING INFORMATION MUST BE INCLUDED IN THE SYSTEM CONSUMER CONFIDENCE REPORT:

A source water assessment was conducted for the ALPINE CREEK INTAKE of the COUNTY SERVICE AREA 7 water system in November, 2002.

The source is considered most vulnerable to the following activities not associated with any detected contaminants:

- Septic Systems – Low Density (<1/acre)
- Other Animal Operations
- Agricultural Drainage
- Wells – Agricultural/Irrigation

Discussion of Vulnerability

There have been no contaminants detected in the water supply, however the source is still considered vulnerable to activities located in the watershed. The source is most vulnerable to the following activities that were identified within the watershed:

1. Low Density Septic Systems (<1/acre)
2. Animal Operations (Horse Camp)
3. Agricultural Drainage
4. Wells – Agricultural/Irrigation
5. Drinking Water Treatment Plant (for CSA 7)
6. Irrigated and Non-irrigated Crops
7. Fertilizer, Pesticide/Herbicide Application
8. Wells – Water Supply
9. Transportation Corridors – Road Right-of-Ways (herbicide use) and Roads and Streets
10. Injection wells/dry wells/ sumps (unknown if these exist in watershed)
11. Campgrounds/Recreational Areas
12. Surface water – streams and lakes

A complete copy of the assessment may be viewed at:

Environmental Health Services
455 County Center, 4th floor
Redwood City, CA 94063

You may request a summary of the assessment be sent to you by contacting:

Christopher Day
Environmental Health Specialist
650-363-4727
650-363-7882 (fax)
cday@co.sanmateo.ca.us

Physical Barrier Effectiveness (PBE)

District Name LPA San Mateo County District No. 71 County San Mateo
System Name COUNTY SERVICE AREA 7 System No. 4100509
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Items in bold indicate the designated characteristic(s):

1. Type of Source: a. Reservoir **b. Stream intake** c. Other
2. Source Characteristics: **Area of watershed is approximately 15 square miles**
Maximum rate of withdrawal through intake is ~ 55 gpm
The primary tributary (Alpine Creek) is perennial.
3. Travel time: **a. direct, no impoundment** b. less than 30 days
c. more than 30 days d. more than 1 year
4. Topography of watershed: a. flat terrain (<10% slopes) b. hilly (10 to 30% slopes)
c. mountainous (>30% slopes) d. not sure
5. Geology of watershed: **a. materials prone to landslides**
b. materials not prone to landslides
c. not sure
6. Soil types on the watershed: **a. rock** **b. loams, sands** **c. clay** d. not sure
7. Vegetation most common: a. grasses **b. low growing plants & shrubs** **c. trees**
d. not sure
8. Mean seasonal precipitation: a. > 40 inches/year **b. 10 to 40 inches/year**
c. < 10 inches/year d. not sure
9. Significant groundwater recharge to the water body: **a. yes** b. no c. not sure

Physical Barrier Effectiveness (PBE) Determination:

Parameters indicating low PBE: any of the following: 3a, 4c, 4d, 5a, 5c, 7c, 7d, 8a, 8d, or 9a
Parameters indicating high PBE: all of the following: 3d, 4a, 5b, 7a, 8c, and 9b
All other sources have moderate PBE.

Determination for this source: **Low Physical Barrier Effectiveness**

Inventory of Possible Contaminating Activities (PCA)

District Name LPA San Mateo County **District No.** 71 **County** San Mateo
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Y = yes N = no U = unknown ** = a contaminant potentially associated
with this activity has been detected in the water supply.

PCA (Risk Ranking) Residential/Municipal	PCA in Watershed	**	Comments
Airports – Maintenance fueling areas (VH)	N		
Landfills/dumps (VH)	N		
Railroad yards/maintenance/fueling (H)	N		
Septic systems – high density (>1/acre) (M)	N		
Sewer collection systems (L)	N		
Utility stations – maintenance areas (H)	N		
Wastewater treatment/disposal facilities (H)	N		
Drinking Water Treatment Plants (M)	--Y--		CSA 7 Treatment Plant
Golf Courses (M)	N		
Housing high density (>1 house/0.5 acre)(M)	N		
Motor pools (M)	N		
Parks (M)	N		
Waste transfer/recycling stations (M)	N		
Apartments and Condominiums (L)	N		
Campgrounds/Recreational areas (L)	--Y--		Sam McDonald County Park
Fire stations (L)	N		
RV Parks (L)	N		
Schools (L)	N		
Hotels, Motels (L)	N		
Other (list)	N		
Agricultural/Rural			
Grazing (>5 large animals/acre) (M)	N		
Concentrated Animal Feeding Operations(H)	N		
Animal feeding Operations (H)	N		
Other animal operations (M)	--Y--		Sam McDonald Park HorseCamp
Concentrated Aquatic Animal Production Facilities(H)	N		
Other Aquatic Animal Production Operations (M)	N		
Managed Forests (H)	N		
Farm chemical distributor/application service (H)	N		
Farm machinery repair (H)	N		
Septic systems – low density (<1/acre) (L)	--Y--		Residential Septic Systems

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PCA (Risk Ranking) Other Activities	PCA in Watershed	**	Comments
Salt Water Intrusion (H)	N		
Recreational area – surface water (H)	N		
Snow ski areas (M)	N		
Recent (<10 years) Burn Areas (M)	N		
Dredging (M)	N		
Confirmed leaking UST (VH)	N		
Decommissioned – inactive UST (L)	N		
Non-regulated tanks (H)	N		
Not yet upgraded or registered tanks (H)	N		
Upgraded and/or registered active tanks (L)	N		
Above ground storage tanks (M)	--U--		May exist in watershed
Wells – Water supply (M)	--Y--		
Construction/demolition staging areas (M)	N		
Contractor or government agency equipment storage yards (M)	N		
Freeways/state highways (M)	N		
Railroads (M)	N		
Historic railroad right-of-ways (M)	N		
Road Right-of-ways (herbicide use areas) (M)	--Y--		Alpine Road
Roads/Streets (L)	--Y--		
Hospitals (M)	N		
Storm Drain Discharge Points (M)	N		
Storm Water Detention Facilities (M)	N		
Injection wells (potable water) (L)	N		
Injection wells (nonpotable water) (M)	N		
Spreading Basins (potable water) (L)	N		
Spreading Basins (nonpotable water)(M)	N		
Medical/dental offices/clinics (L)	N		
Veterinary offices/clinics (L)	N		
Surface water– streams/lakes/rivers (L)	--Y--		
Other (list)			

Source Water Intake Location and Assessment Maps

District Name LPA San Mateo County District No. 71 County San Mateo
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Method of Determining Source Water Intake Location:

Global Positioning System (GPS)

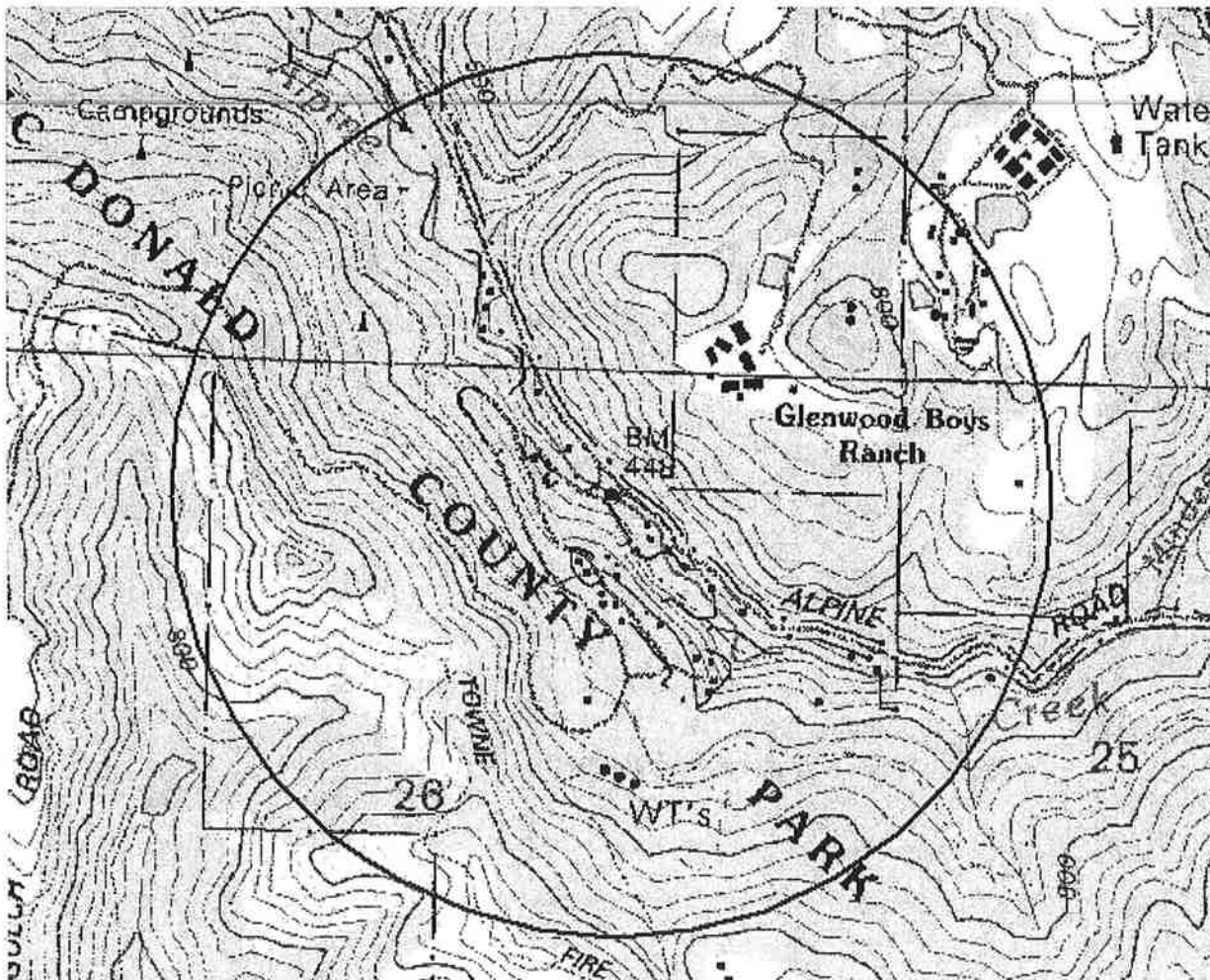
Unit: Trimble Pro XR

Differential Correction: Yes

Accuracy and Precision: The instrumental accuracy is plus or minus three (3') feet.

A minimum of 30 GPS readings per location were collected.

Assessment Maps:



Base Map: County Service Area 7 Intake at Alpine Creek.
2,500 ft. (Protection Zone) radius drawn around intake point.

SURFACE WATER ASSESSMENT FORMS

SURFACE WATER DATA SHEET

Complete as much information as possible. Leave blank if information is not available, use N.A. if not applicable.

* Indicates items required for Source Water Assessment CSA #7 ALPINE CREEK 4100509-001

	(separate multiple entries in field with semi-colon)	Actual, Estimated or Default?
GENERAL INFORMATION		
System Name	CSA #7	from DHS database
System Number	4100509	from DHS database
Source of Information (well log, DHS/County files, system, etc)	County files	
Organization Collecting Information (DHS, County, System, other)	County	
Date Information Collected/Updated	12/11/02	
SOURCE IDENTIFICATION		
* Source Name	Alpine Creek	from DHS database
* DHS Source Identification Number (FRDS ID No.)		from DHS database
Source Status (Active, Standby, Inactive)	Active	from DHS database
SOURCE LOCATION		
Inlet Ground Surface Elevation (ft above Mean Sea Level)		
Street or Road	Pescadero Rd.	
Nearest Cross Street		
City	La Honda	
County		
Site plan on file? ("YES" or "NO")		
TYPE OF SOURCE		
Type of Source: (Lake, Reservoir, River, Stream, Creek, Other)	Stream	
Production (gallons per year)	50 gpm	
Frequency of Use (hours/year)		
LAKE/RESERVOIR DATA (If Applicable)		
Name of Lake or Impounding Reservoir		
Date Dam Constructed		
Dam Length (feet)		
Dam Height (feet)		
Dam Width - Base (feet)		
Dam Width - Top (feet)		
Surface Area when full (acres)		
Capacity (acre-feet)		
Reservoir Yield (gallons per day)		
Yield Reliability (% of time the above yield can be supplied)		
Outlet Location		
Outlet Level(s) (distance below maximum water surface) (feet)		
Multiple Outlet Depths Available? "YES" or "NO"		
Outlet Distance to Inflow (feet)		
Algae Control Measures		
Type of Recreational Activities in Reservoir (list all that apply: boating, swimming, fishing, water skiing, etc.)		
Distance to Nearest Sewage Facilities to Outlet (feet)		
STREAM INTAKE DATA (If Applicable)		
Name of River, Stream or Creek	Alpine Creek	
Intake Location	Pescadero Rd.	