

TABLE 8
WATER QUALITY EVALUATION SUMMARY, SAN MATEO WATERSHED

Parameter	Units	MCL	Basin Plan Objectives	Range		Exceeds MCL	Exceeds Objectives	Trend				Comments
				Min.	Max.			Flat	Downward	Upward	Scattered	
Arsenic	mg/L	0.05	none	ND	0.017	No	NA	X				Most analyses are non-detect. Detected in MW-03 but not in surface water.
Akalinity	mg/L	none	none	58	484	NA	NA				X	May change seasonally.
Bicarbonate	mg/L	none	none	59	878	NA	NA				X	May change seasonally.
BOD	mg/L	none	none	ND	ND	NA	NA	X				Most analyses are non-detect. Only detected one time.
Boron	mg/L	none	0.75	ND	2.9	NA	Yes				X	Historical higher than present. Current results are below basin plan objectives.
Calcium	mg/L	none	none	16	424	NA	NA		X		X	Between 1967 and 1977 increasing trend. Current trend is downward.
Carbonate	mg/L	none	none	ND	195	NA	NA		X		X	Historical higher than present.
Chloride	mg/L	250*	250	1.3	392	Yes	Yes		X	X		Cyclic trend.
Conductivity	umhos/cm	900	none	225	2500	Yes	NA		X			Historical higher than present, but still exceeding MCL. Difference between tributaries.
Copper	mg/L	1.0	none	ND	1.47	Yes	NA		X		X	Historical higher than present. Current results below MCL.
Cyanide	mg/L	0.2	none	ND	ND	No	No	X				Less than 5 measurements, all non-detect.
Coliform	mg/L	"Present"	none	ND	>1600	Yes	NA				X	Detected in groundwater.
Hardness	mg/L	none	none	24	712	NA	NA		X			Between 1967 and 1977 increasing trend. Current trend is downward.
Fluoride	mg/L	2	1	ND	1.6	No	Yes				X	Current results are lower than historic.
Hydroxide	mg/L	none	none	ND	203	NA	NA	X				Only two out of about 40 analyses were above detection limits.
Iron	mg/L	0.3	0.3	ND	69	Yes	Yes	X				A few high measurements in historical data. Some current data exceeds MCL.
Lead	mg/L	0.001	none	ND	0.04	Yes	Yes	X				Few scattered measurements.
Magnesium	mg/L	none	none	ND	225	NA	NA		X			Slight downward trend.
Manganese	mg/L	0.05	0.05	ND	11	Yes	Yes	X				Currently MW-3 exceeding MCL.
Mercury	mg/L	0.002	none	ND	ND	No	No	X				Over 20 measurements, all non detect.
MBAS	mg/L	0.5	0.5	ND	0.66	Yes	Yes				X	
Nitrate	mg/L	10	none	ND	129	Yes	Yes	X			X	Historical concentrations higher than current.
Oil and Grease	mg/L	none	none	ND	1.5	NA	NA	X			X	About 20 measurements, only two above detection limits.
pH	pH units	none	none	6.1	9	NA	NA		X	X		Cyclic trend.
Phosphate	mg/L	none	none	ND	11	NA	NA				X	Detected at higher concentration at Station 503 than in surface water. Possible cyclic trend.
Potassium	mg/L	none	none	ND	152	NA	NA	X	X			Slight downward trend. Possibly cyclic trend.
Sodium	mg/L	none	none	1.14	240	NA	NA		X			Slight downward trend. Possibly cyclic trend.
Sulfate	mg/L	250	250	6	400	Yes	Yes	X			X	Upward trend from 1967 through 1973. Downward trend through 1977. Current trend flat. Difference between Sta 511 and 512.
TOC	mg/L	none	none	ND	7.1	NA	NA				X	Maximum 7 data points.
TDS	mg/L	500*	500	158	1750	Yes	Yes		X			Increasing trend from 1968 through 1973. Downward trend from 1973 to current.

Notes:
*Recommended level
BOD - Biochemical oxygen demand
MBAS - Methylene blue active substance
TOC - Total organic carbon
TDS - Total dissolved solids
NA - Not applicable
umhos - microhms per centimeter