

**Cambria Community Service District
Adaptive Management Plan
Biological Bi-Monthly Monitoring Report**



Prepared by

Cleveland Biological, LLC
cindycleve@gmail.com
805.234.3759


January 16, 2022

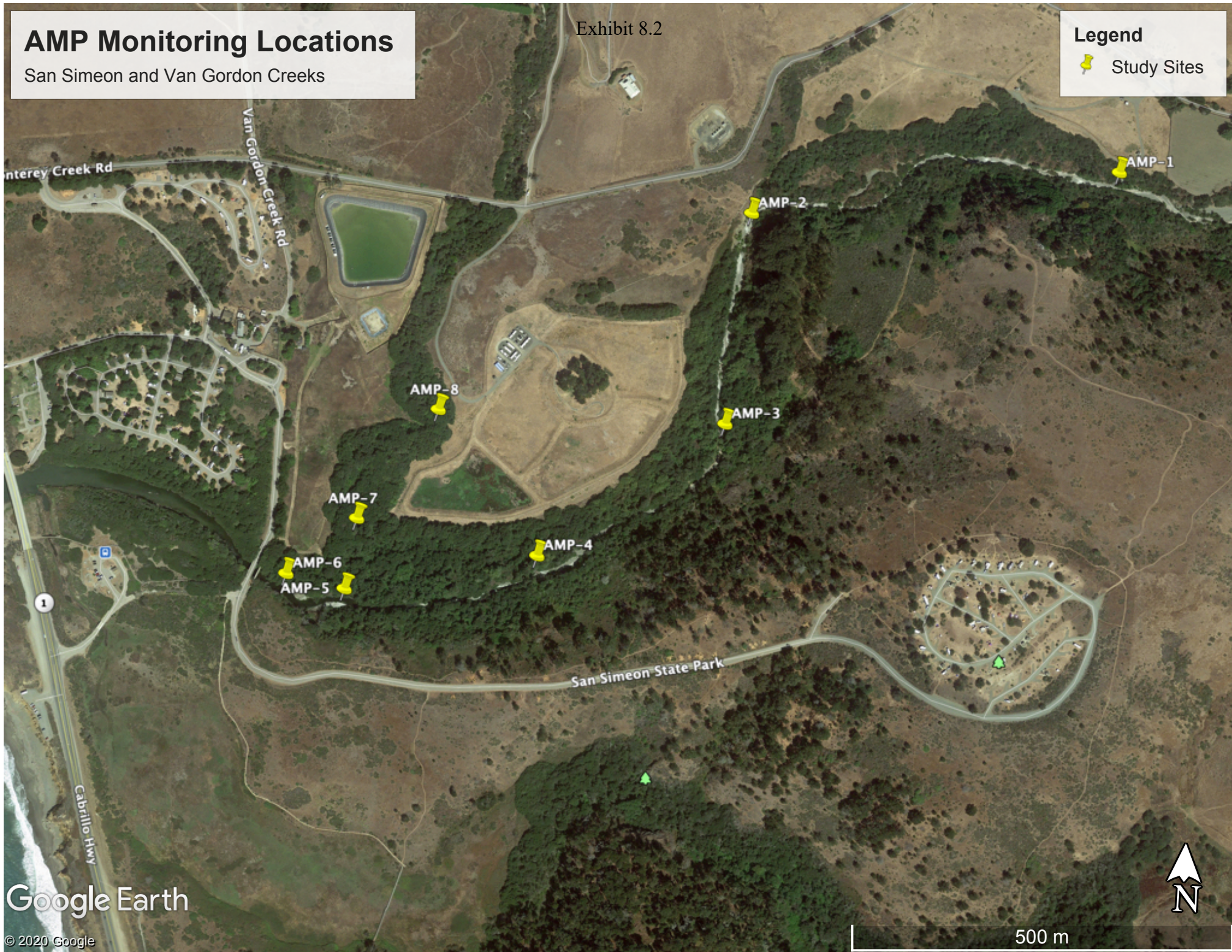
AMP Monitoring Locations

San Simeon and Van Gordon Creeks

Exhibit 8.2

Legend

 Study Sites



Google Earth

© 2020 Google

500 m



Exhibit 8.2

Cleveland Biological, LLC		CCSD AMP Biological Monitoring in San Simeon and Van Gordon Creeks							
Cindy & Paul Cleveland									
Survey Date: 1-16-2022	High Tide: 5.48 ft @ 8:40 AM	Low Tide: -0.57 ft @ 4:17 PM			Sandbar Breached: Yes		Stage (718): 2.71		
Location	<u>Site 1</u>	<u>Site 2</u>	<u>Site 3</u>	<u>Site 4</u>	<u>Site 5</u>	<u>Site 7*</u>	<u>Site 8</u>		
Time	1:18 PM	12:53 PM	12:12 PM	11:54 PM	11:33 AM	11:13 AM	11:05 AM		
Weather (°F, Cloud cover)	64, cloudy	62, cloudy	62, cloudy	62, cloudy	62, cloudy	62, cloudy	62, cloudy		
Habitat									
Stream type (run, riffle, pool)	Pool	Riffle	Run	Run	Pool	Run	Riffle		
Instream cover type (lwd,swd,etc)	swd	riparian veg	none	swd	riparian veg	none	none		
Substrate type (cobble, gravel, silt)	c, s	c, g	c, g	c, g	s, c	c	c		
Substrate embededness (%)	75	50	50	50	100	75	75		
Algae Surface (%)	0	0	0	0	0	0	0		
Algae Subsurface (%)	0	0	0	0	0	0	0		
Vegetation									
Instream cover (%)	0	0	0	10	10	0	0		
Overhead cover (%)	10	0	10	30	10	80	80		
Riparian width-Rt Bank (ft)	.	35	210	135	25	30	30		
Riparian width-Lt Bank (ft)	100	10	8.6	230	85	85	55		
Riparian Moisture-Rt Bank (%)	25.3	19.7	14.4	50	24.1	22.9	23.3		
Riparian Moisture-Lt Bank (%)	17.2	14.1	19.9	25.3	50	20.37	17.4		
Hydrology									
Maximum depth (ft)	2.9	1.1	0.85	1.2	3.6	dry	0.1		
Wetted width (ft)	22.5	27	21.5	17.5	52.0	dry	1.6		
Flow = Area x Rate (cfs)	8.9	13.4	7.1	7.6	9.8	dry	na		
Hydrology Calculations									
Depth 1 @ 1/4 (ft)	2.4	0.5	0.2	0.6	1.4	dry	na		
Depth 2 @ 1/2 (ft)	2.9	0.7	0.3	1.2	2.6	dry	na		
Depth 3 @ 3/4 (ft)	2.6	1	0.7	1.1	3.5	dry	na		
Average Depth = total/4 (ft)	2.0	0.6	0.3	0.7	1.9	dry	na		
Area = Width x Avg Depth (ft^2)	44.4	14.9	6.5	12.7	97.5	dry	na		
Rate from meter (ft/sec)	0.2	0.9	1.1	0.6	0.1	dry	na		

Exhibit 8.2

	<u>Site 1</u>	<u>Site 2</u>	<u>Site 3</u>	<u>Site 4</u>	<u>Site 5</u>	<u>Site 7*</u>	<u>Site 8</u>
Water Quality							
Temperature (F)	57.7	57.1	56.7	56.8	56.3	dry	na
Dissolved Oxygen (%)	96	95	93.5	88.4	101	dry	na
Dissolved Oxygen (ppm)	9.82	9.78	9.68	9.17	9.32	dry	na
Total Dissolved Solids (mg/L)	360	359	363	398	20,946	dry	na
Salinity (ppt)	0.27	0.24	0.27	0.30	20.15	dry	na
Water Guage							
Water Level (ft)				na	na		
Site 4 guage is in pool approx.50 m upstream of Site 4 near right bank. Site 5 guage is at site on left bank.							
Species Observed	Only a few Stickleback below Site 4 and one likely Prickly sculpin below Site 2.						
Comments	The rain and high flows caused several changes - the deepest pool above Site 4 has filled into a run. The large tree that fell at Site 4 is gone, and both stream gauges at Sites 4 and 5 are gone. Between 12/13/21 and 12/29/21 there was 8.07 inches of rainfall recorded.						
Location Descriptions	Trail by SS-1	Downstream of rock pool	Draw a line from 9P7 along road to the creek	Stream flow starts/ends	Upstream of Van Gordon confluence	Van Gordon accessed at MW-4	Van Gordon accessed from AWTP
GPS	35°36'0.23"N	35°35'57.55"N	35°35'48.09"N	35°35'41.88"N	35°35'40.00"N	35°35'43.10"N	35°35'48.06"N
	121° 6'33.42"W	121° 6'53.39"W	121° 6'54.29"W	121° 7'4.04"W	121° 7'14.25"W	121° 7'13.85"W	121° 7'9.81"W
*Site 6 is on State Parks property and is not accessible at this time.							
9P7 Soil Moisture †							
North (%)	16.3						
East (%)	12.9						
South (%)	11.8						
West (%)	13.3						
†Moisture measured on each side of well casing. Max reading is 50%.							

CCSD Monitoring January 16, 2022

Exhibit 8.2



Site 1



Site 1



Site 1



Site 1

CCSD Monitoring January 16, 2022

Exhibit 8.2



Site 2



Site 2



Site 2



Site 2

CCSD Monitoring January 16, 2022

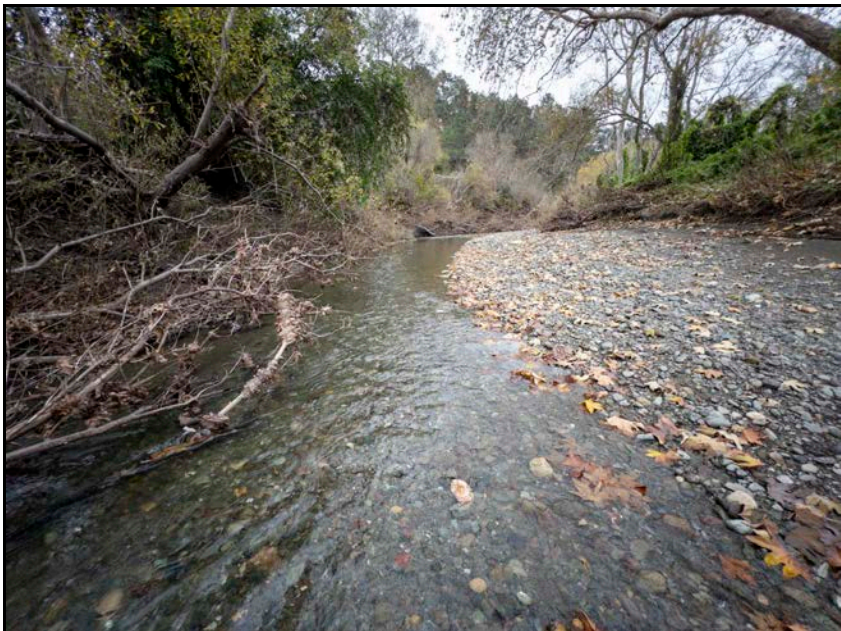
Exhibit 8.2



Site 3



Site 3



Site 3



Site 3

CCSD Monitoring January 16, 2022

Exhibit 8.2



Site 4



Site 4



Site 4



Site 4

CCSD Monitoring January 16, 2022

Exhibit 8.2



Site 5



Site 5



Site 5



Site 5

CCSD Monitoring January 16, 2022

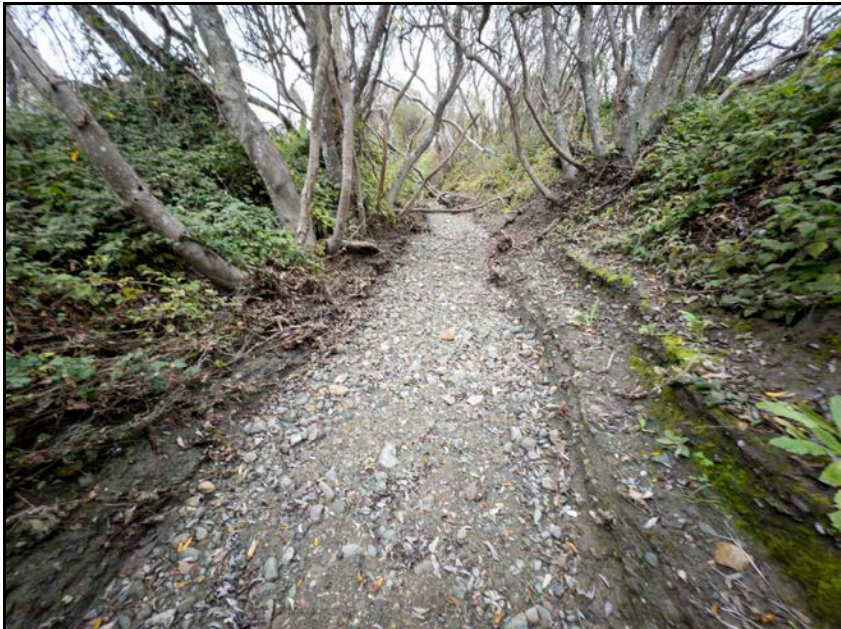
Exhibit 8.2



Site 7



Site 7



Site 7



Site 7

CCSD Monitoring January 16, 2022

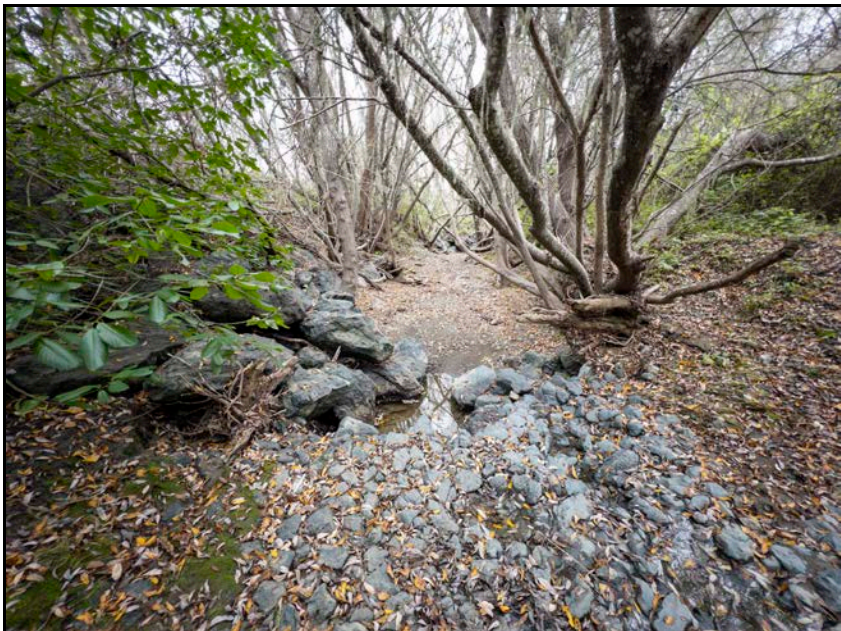
Exhibit 8.2



Site 8



Site 8



Site 8



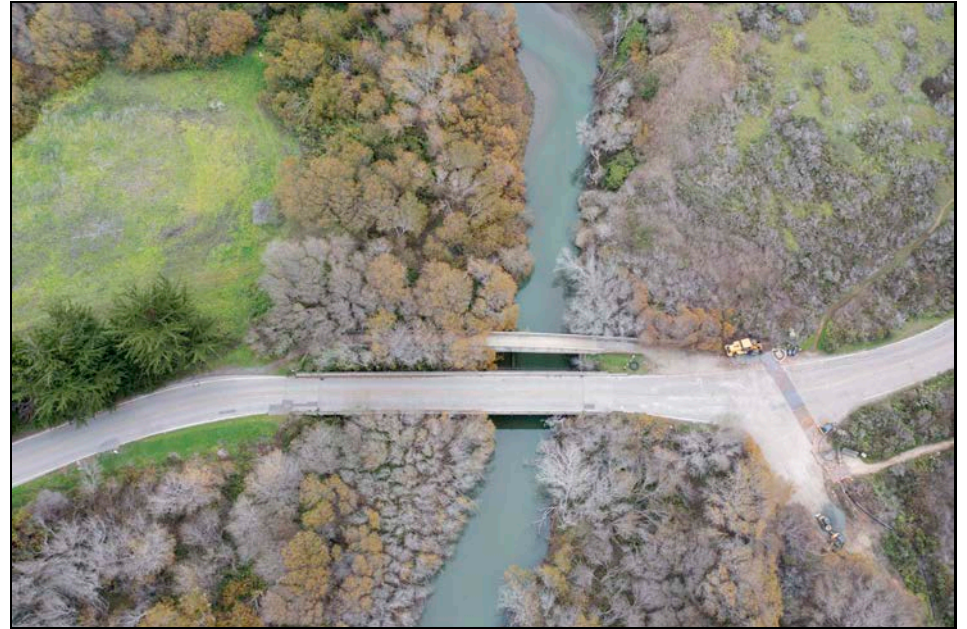
Site 8

CCSD Monitoring January 16, 2022

Exhibit 8.2



9P7 Well



Walking Bridge PS-1



Estuary PS-2

CCSD Monitoring January 16, 2022

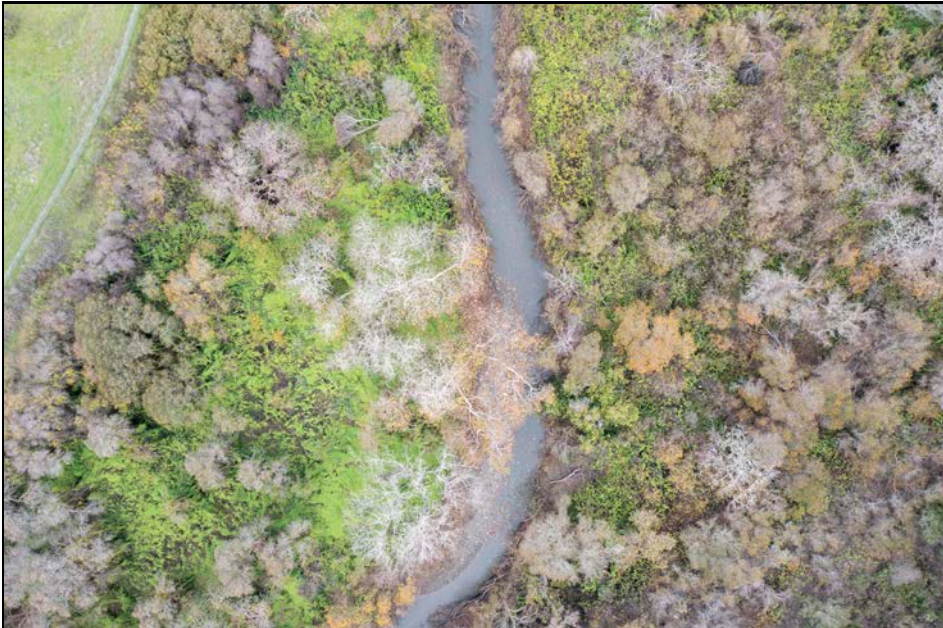
Exhibit 8.2



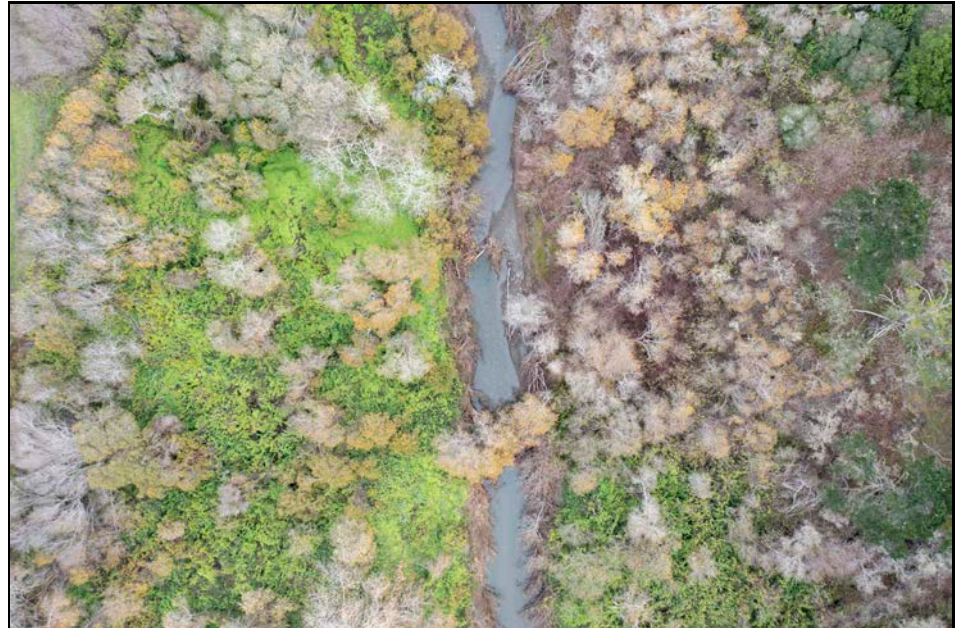
Site 1 Aerial



Site 2 Aerial



Site 3 Aerial



Site 4 Aerial

CCSD Monitoring January 16, 2022

Exhibit 8.2



Site 5 Aerial



Site 7 Aerial



Site 8 Aerial

CCSD Monitoring January 16, 2022

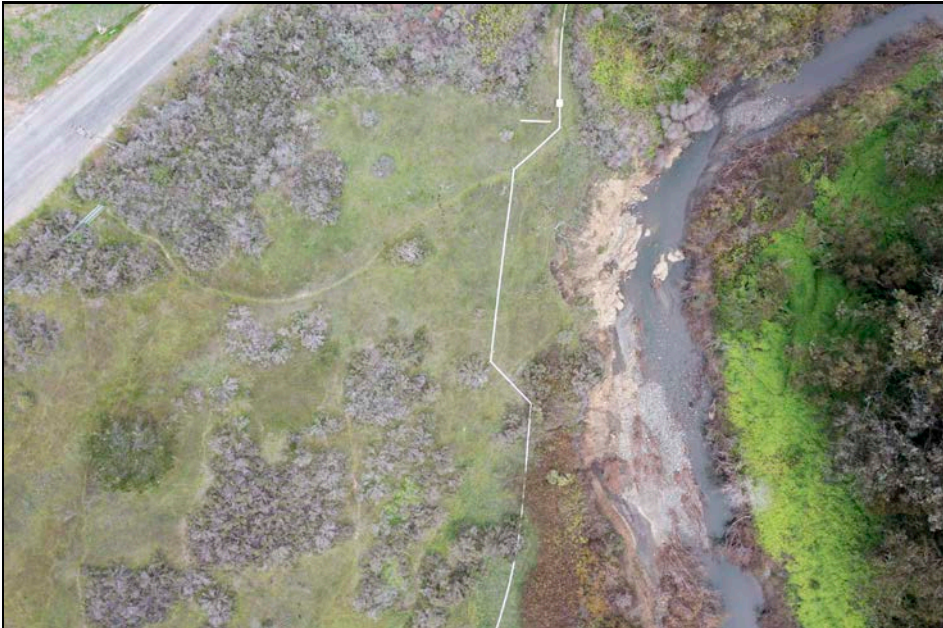
Exhibit 8.2



Site 1 Riparian Left



Site 1 Riparian Right



Site 2 Riparian Left



Site 2 Riparian Right

CCSD Monitoring January 16, 2022

Exhibit 8.2



Site 3 Riparian Left



Site 3 Riparian Right



Site 4 Riparian Left



Site 4 Riparian Right

CCSD Monitoring ^{Exhibit 8.2} January 16, 2022



Site 5 Aerial Riparian Left



Site 5 Riparian Right



Site 7 Aerial Riparian Left



Site 7 Riparian Right

CCSD Monitoring January 16, 2022

Exhibit 8.2



Site 8 Aerial Riparian Left & Right