

CCSD Monthly Creek Monitoring

January 2020

Monthly monitoring of San Simeon Creek, Van Gordon Creek, the San Simeon Estuary, and the Evaporation Pond



by
Cleveland Biological, LLC
535 Cuesta Place
Arroyo Grande, CA 93420
805.234.3759

Cleveland Biological	
Cindy & Paul Cleveland	
	1/20/20
	9:30 AM
<u>Estuary</u>	
Comments	4.38 receding tide. Sandbar is breached.
<u>Van Gordon Confluence</u>	
Water Depth (ft)	1.5
Stream Width (ft)	29
Water Temp (F)	53
Species Noted	1 Kingfisher
Stream Type	Run
Algae % Surface/Subsurface	0/0
Substrate	Cobble, Gravel, and Silt
Substrate embededness %	50
Comments	Stage (718) 2.73
<u>Red Legged Pool</u>	
Water Depth (ft)	2.1
Stream Width (ft)	22.5
Water Temp (F)	53
Species Noted	2 Snowy egrets
Stream Type	Run
Algae Surface/Subsurface (%)	0/0
Substrate	Cobble, Gravel, and Silt
Substrate embededness %	50
Comments	
<u>Evaporation Pond</u>	
Species Noted	None
Water Temp (F)	NA
<u>General Comments</u>	
Comments	Some water from recent rain.

CCSD Monitoring January 20, 2020



Estuary



Estuary

CCSD Monitoring January 20, 2020



Estuary



Downstream, Walking Bridge

CCSD Monitoring January 20, 2020



Upstream, Van Gordon Cr



Downstream, Van Gordon Cr

CCSD Monitoring January 20, 2020



Van Gordon Cr, Water Depth



Van Gordon Cr, Water Depth

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Red Legged Pool, Upstream



Downstream, Red Legged Pool

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Red Legged Pool, Water Depth



Red Legged Pool, Water Depth

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Aerial, Estuary



Aerial, Upstream

CCSD Monitoring January 20, 2020



Aerial, Downstream



Evaporation Pond

CCSD Monitoring January 20, 2020



Evaporation Pond



Aerial, Evaporation Pond

CCSD Monitoring January 20, 2020



Aerial, Evaporation Pond

CCSD Monthly Creek Monitoring

February 2020

Monthly monitoring of San Simeon Creek, Van Gordon Creek, the San Simeon Estuary, and the Evaporation Pond



by
Cleveland Biological, LLC
535 Cuesta Place
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805.234.3759

Cleveland Biological	
Cindy & Paul Cleveland	
	2/16/20
	9:30 AM
<u>Estuary</u>	
Comments	1.06 receding tide. Sandbar not breached.
<u>Van Gordon Confluence</u>	
Water Depth (ft)	2.5
Stream Width (ft)	34
Water Temp (F)	57
Species Noted	1 Great egret, 1 stickleback
Stream Type	Run
Algae % Surface/Subsurface	0/0
Substrate	Cobble, Gravel, and Silt
Substrate embededness %	50
Comments	Stage (718) 2.63
<u>Red Legged Pool</u>	
Water Depth (ft)	2.8
Stream Width (ft)	39
Water Temp (F)	57
Species Noted	None
Stream Type	Run
Algae Surface/Subsurface (%)	0/80
Substrate	Cobble, Gravel, and Silt
Substrate embededness %	50
Comments	
<u>Evaporation Pond</u>	
Species Noted	None
Water Temp (F)	NA
<u>General Comments</u>	
Comments	Very small amount of water.

CCSD Monitoring February 16, 2020



Estuary



Estuary

CCSD Monitoring February 16, 2020



Estuary



Downstream, Walking Bridge

CCSD Monitoring February 16, 2020



Upstream, Van Gordon Cr



Downstream, Van Gordon Cr

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Van Gordon Cr, Water Depth



Van Gordon Cr, Water Depth

CCSD Monitoring February 16, 2020



Red Legged Pool, Upstream



Downstream, Red Legged Pool

CCSD Monitoring February 16, 2020

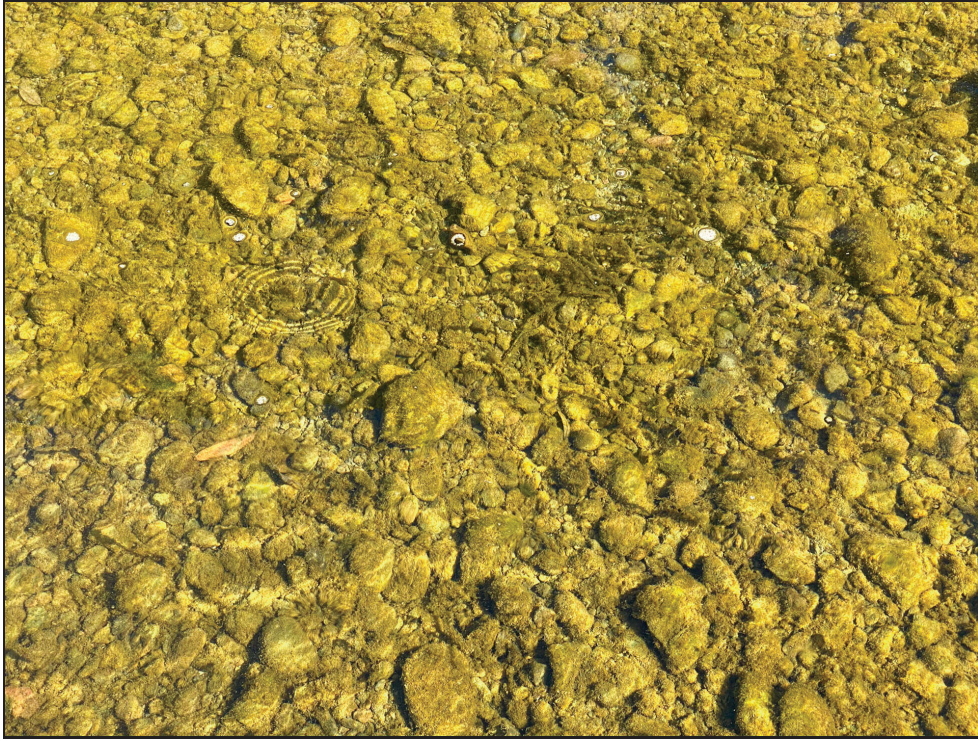


Red Legged Pool, Water Depth



Red Legged Pool, Water Depth

CCSD Monitoring February 16, 2020



Red Legged Pool, Substrate



Aerial, Estuary

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Aerial, Upstream



Aerial, Downstream

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Evaporation Pond



Evaporation Pond

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Aerial, Evaporation Pond



Aerial, Evaporation Pond

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



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cindycleve@gmail.com
805.234.3759

March 18, 2020

AMP Monitoring Locations

San Simeon and Van Gordon Creeks

Legend

 Study Sites



Location	Site 1	Site 2	Site 3	Site 4	Site 5	Site 7*	Site 8
Water Quality							
Temperature (F)	57	56	57	58	58	58	57
Dissolved Oxygen (%)	**	**	**	**	**	**	**
Dissolved Oxygen (ppm)	**	**	**	**	**	**	**
Total Dissolved Solids (mg/L)	**	**	**	**	**	**	**
Salinity (ppt)	**	**	**	**	**	**	**
Species Observed			Stickleback (5), red-shouldered hawk				
Comments	Study set up initial site identification, photo points, gps and mapping, and data collection protocols.						
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 121° 6'33.42"W	35°35'57.55"N 121° 6'53.39"W	35°35'48.09"N 121° 6'54.29"W	35°35'41.88"N 121° 7'4.04"W	35°35'40.00"N 121° 7'14.25"W	35°35'43.10"N 121° 7'13.85"W	35°35'48.06"N 121° 7'9.81"W
*Site 6 is on State Parks property and is not accessible at this time.							
** Initial site set up, data not taken							

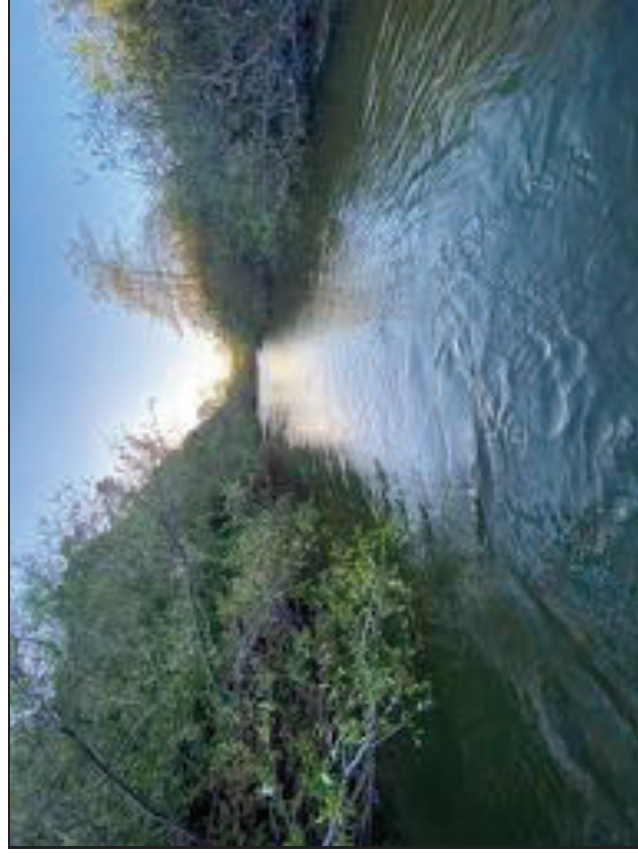
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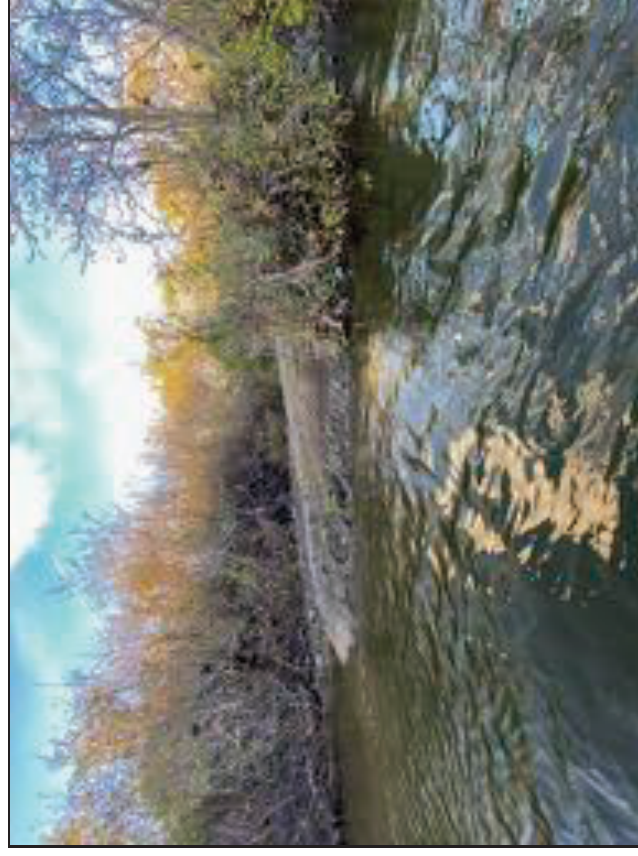
PS-2



PS-2

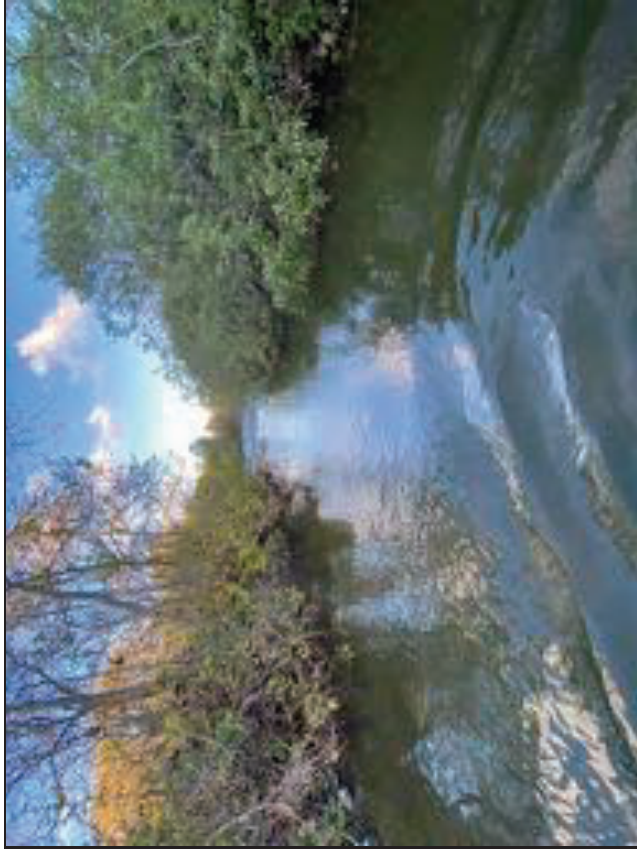


Site 1



Site 1

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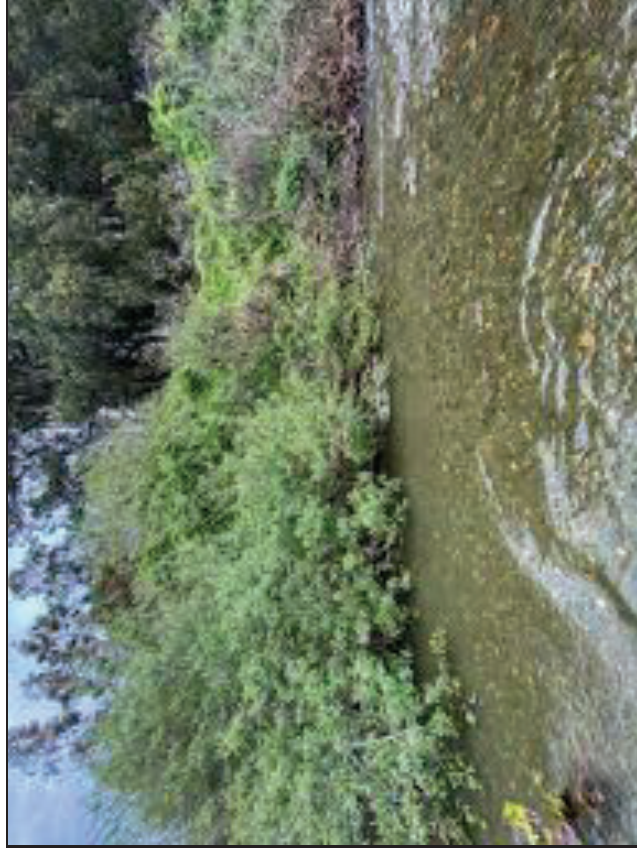
Site 1



Site 1



Site 2



Site 2

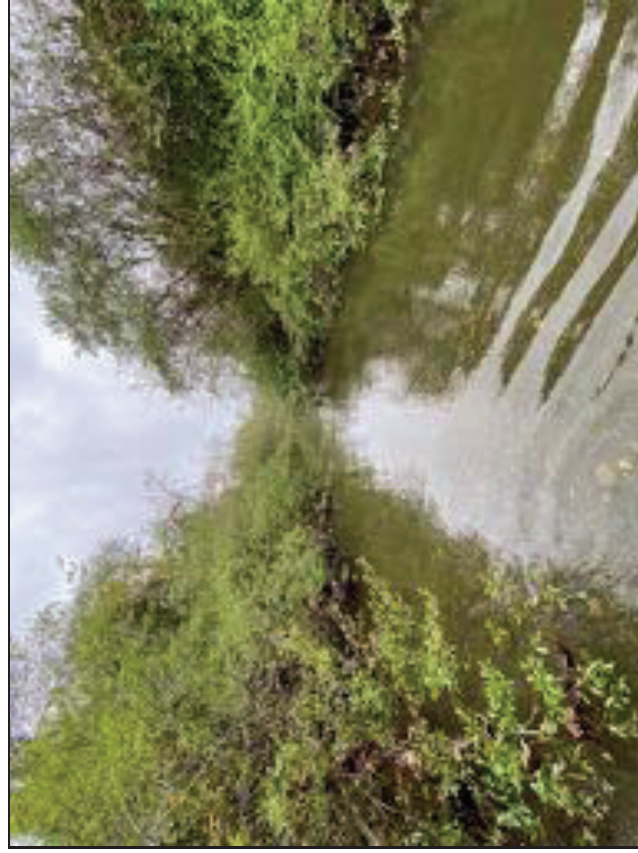
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Site 2



Site 2



Site 3



Site 3

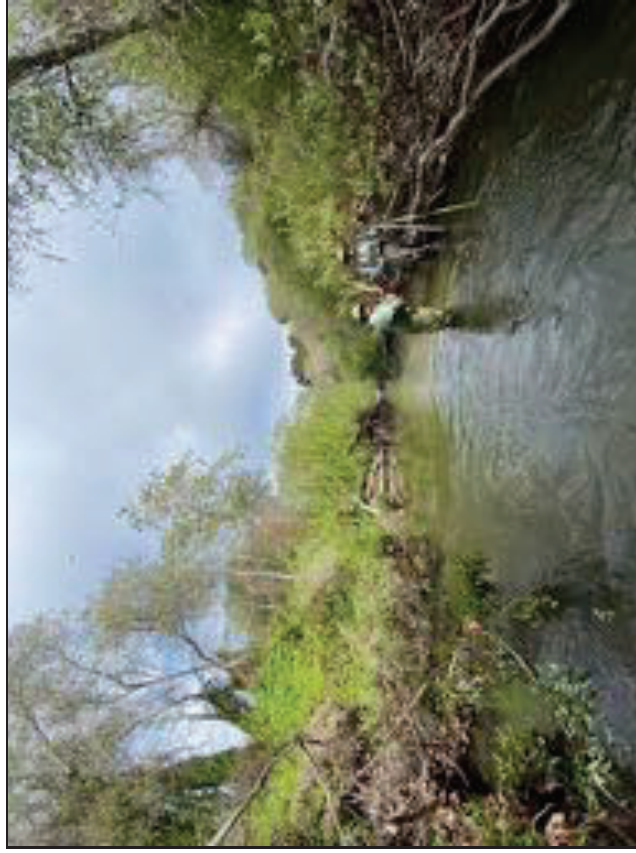
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Site 3



Site 3



Site 4



Site 4

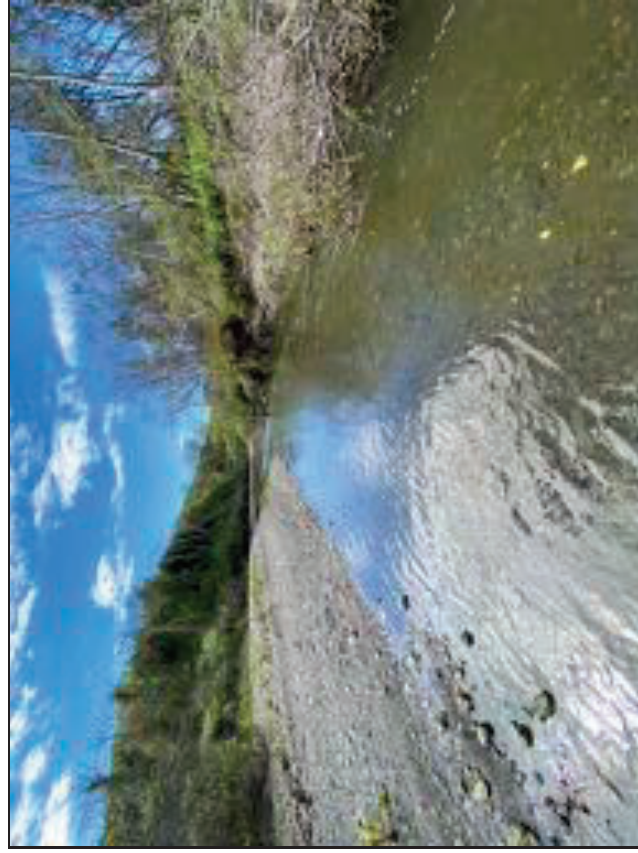
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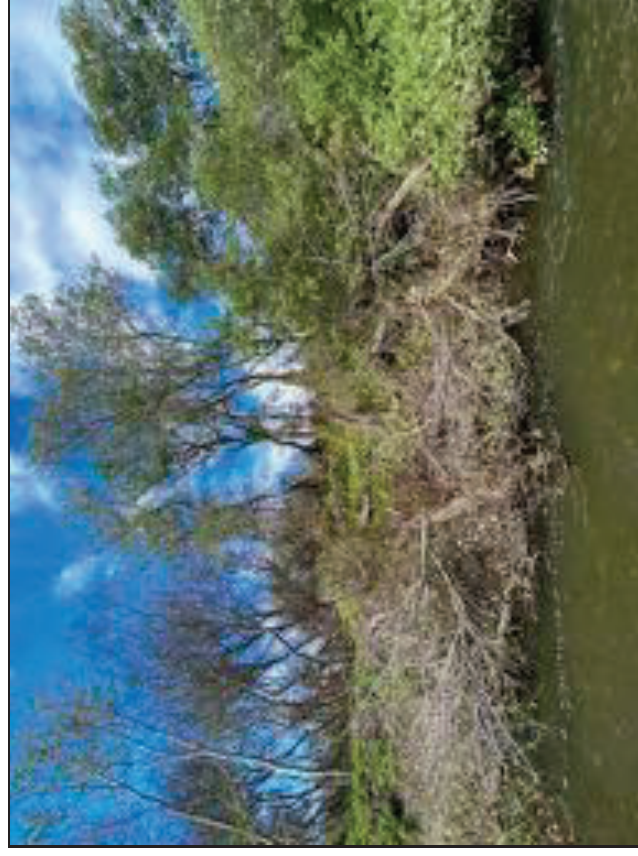
Site 5



Site 5

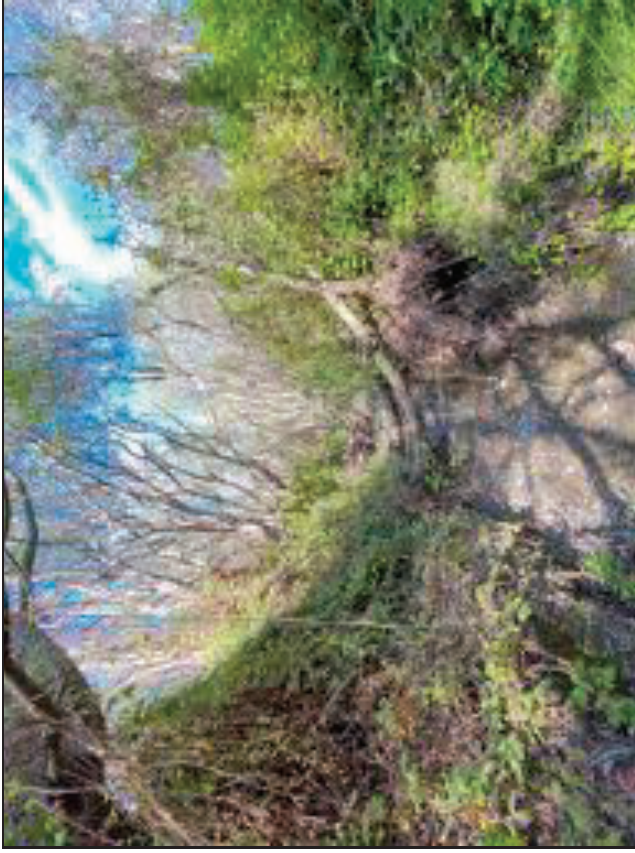


Site 5



Site 5

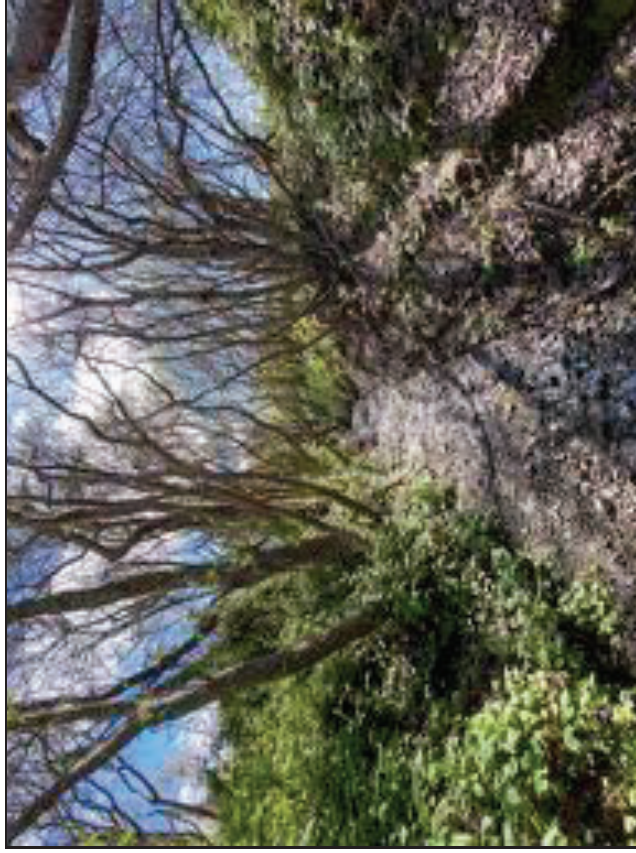
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Site 7



Site 7



Site 7



Site 7

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Site 8



Site 8



Site 8



Site 8

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



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March 29, 2020

AMP Monitoring Locations

San Simeon and Van Gordon Creeks

Legend

 Study Sites



	Site 1	Site 2	Site 3	Site 4	Site 5	Site 7*	Site 8
Water Quality							
Temperature (F)	57.6	61.5	60.9	60	59.3	na	54.8
Dissolved Oxygen (%)	99	110	110	106	102	na	96
Dissolved Oxygen (ppm)	10.2	10.8	10.9	10.5	10.4	na	10.6
Total Dissolved Solids (mg/L)	320	329	331	335	365	na	274
Salinity (ppt)	0.24	0.25	0.25	0.25	0.27	na	0.02
Species Observed	Small schools of stickleback observed between sites 2 and 5.						
Comments							
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 121° 6'33.42"W	35°35'57.55"N 121° 6'53.39"W	35°35'48.09"N 121° 6'54.29"W	35°35'41.88"N 121° 7'4.04"W	35°35'40.00"N 121° 7'14.25"W	35°35'43.10"N 121° 7'13.85"W	35°35'48.06"N 121° 7'9.81"W
*Site 6 is on State Parks property and is not accessible at this time.							

CCSD Monitoring March 29, 2020



Site 1



Site 1



Site 1

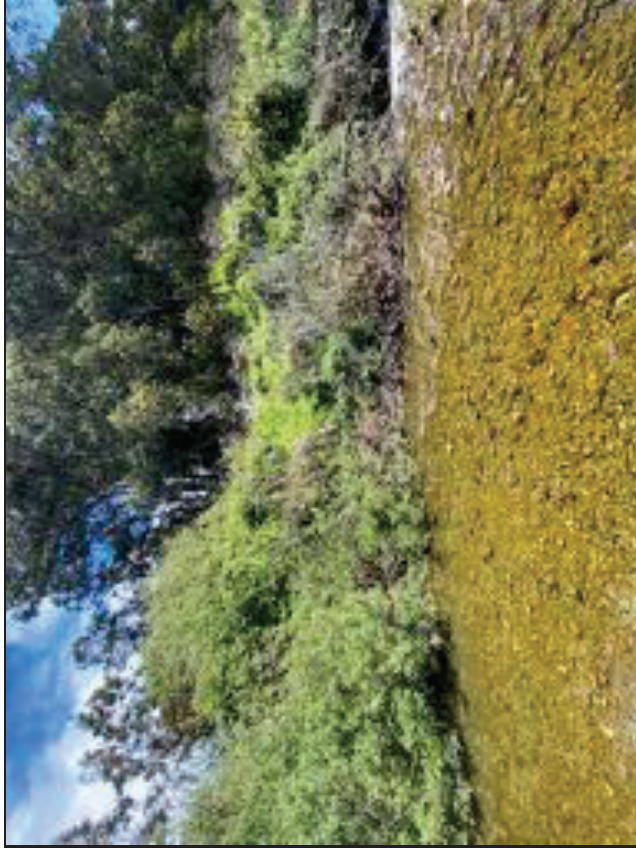


Site 1

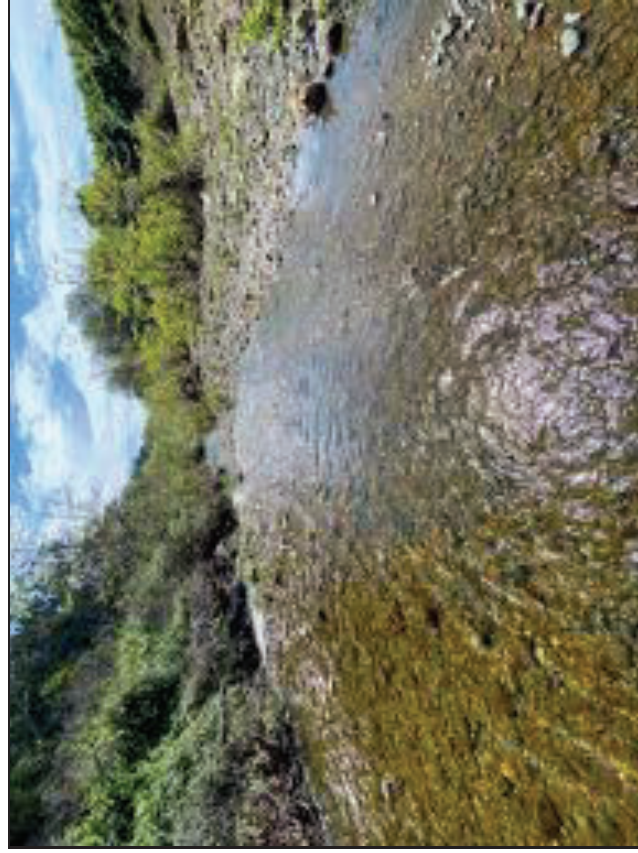
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Site 2



Site 2



Site 2

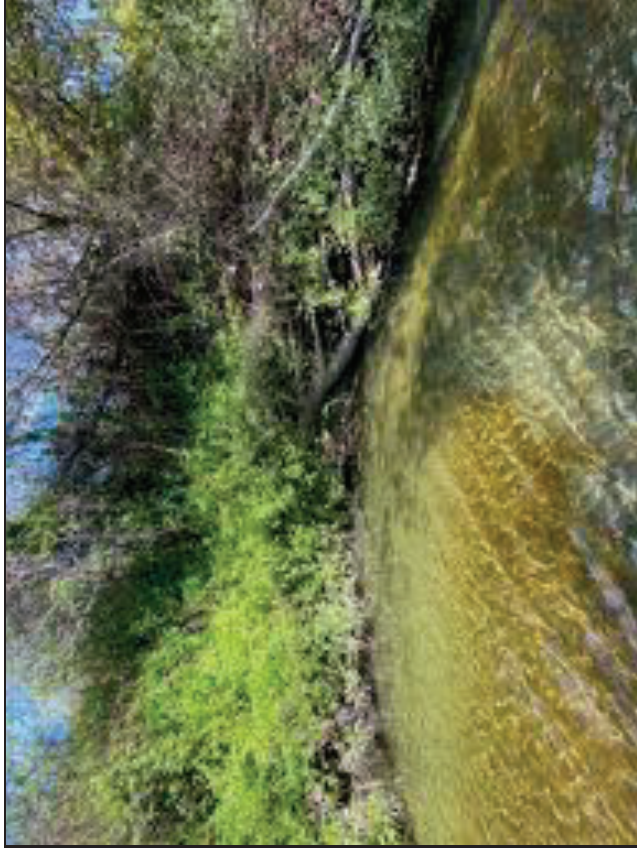


Site 2

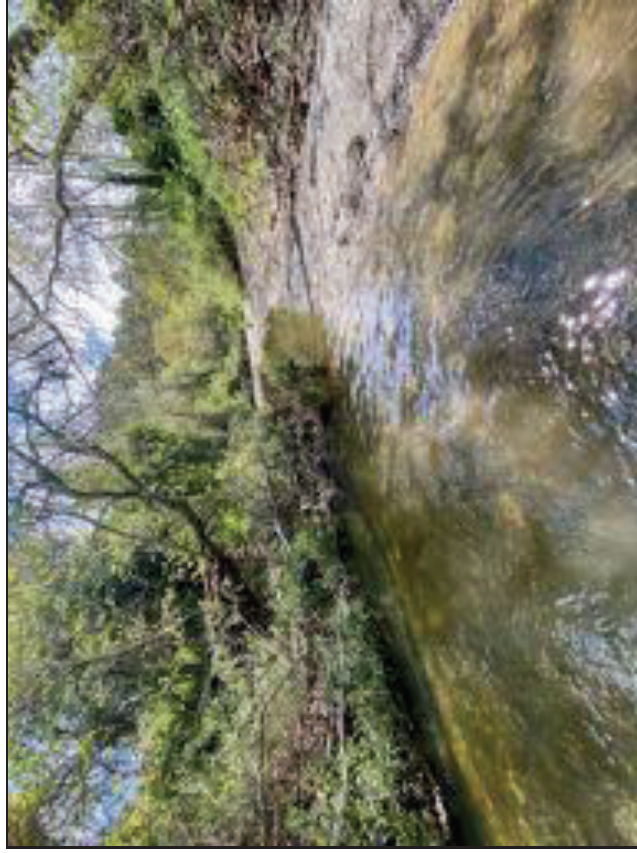
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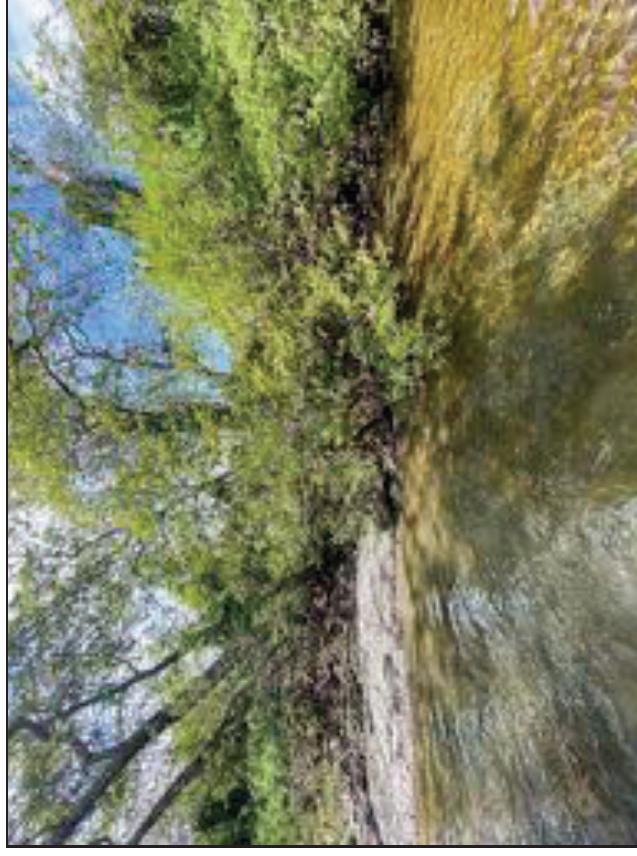
Site 3



Site 3



Site 3



Site 3

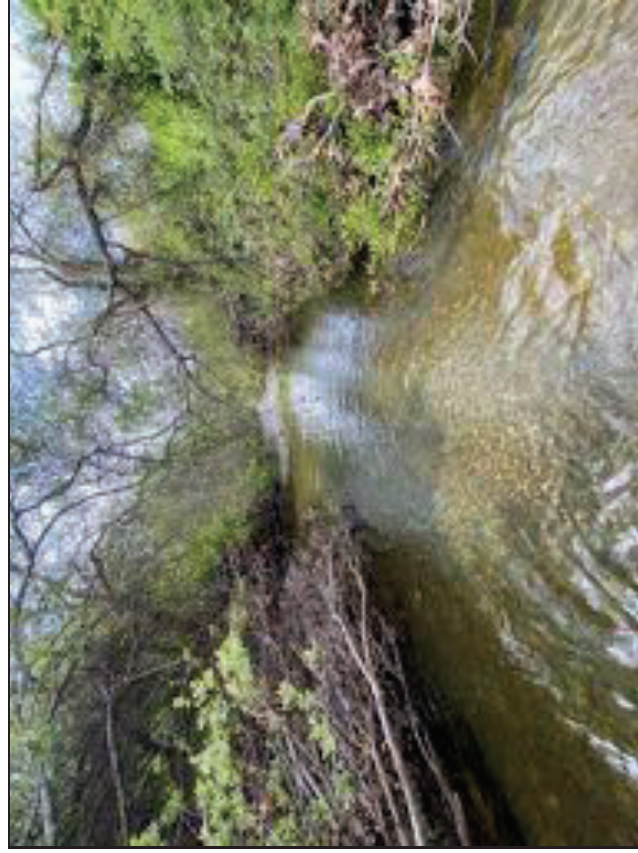
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Site 4



Site 4



Site 4



Site 4

CCSD Monitoring March 29, 2020



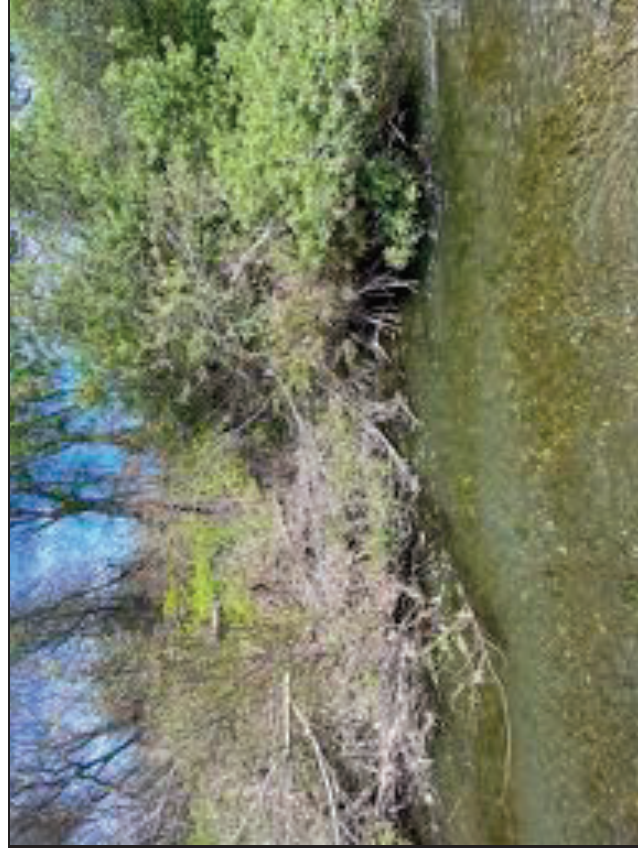
Site 5



Site 5



Site 5



Site 5

CCSD Monitoring March 29, 2020



Site 7



Site 7



Site 7



Site 7

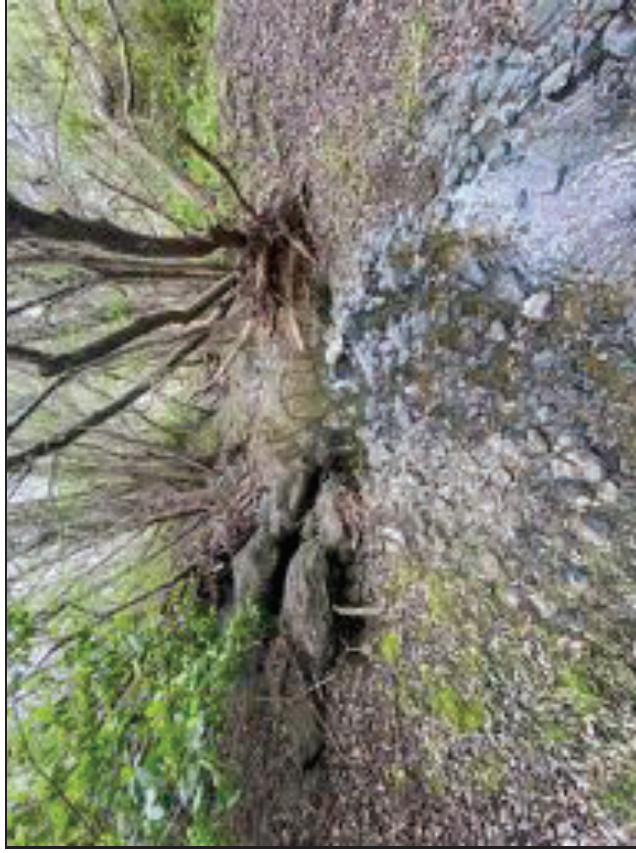
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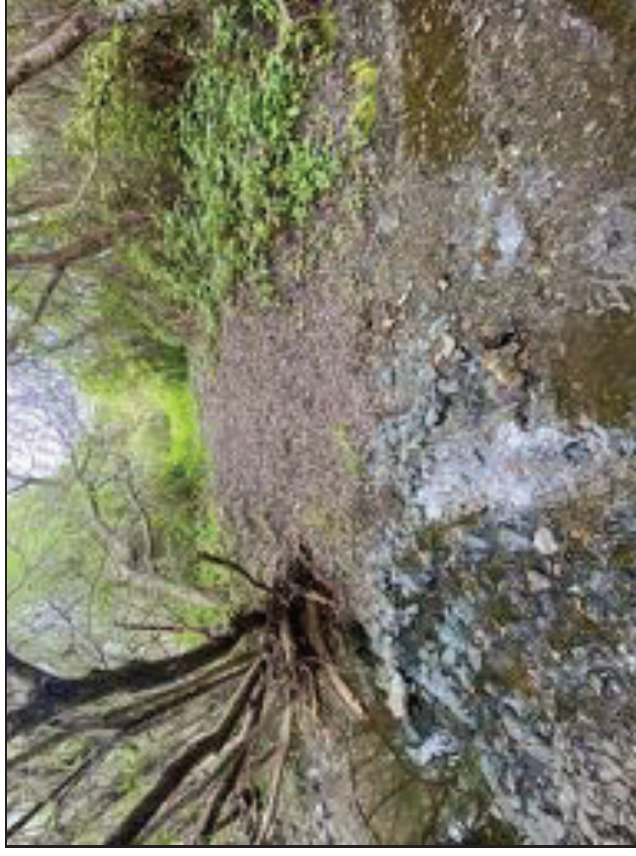
Site 8



Site 8



Site 8



Site 8

CCSD Monitoring March 29, 2020



Photopoint 1



Photopoint 2

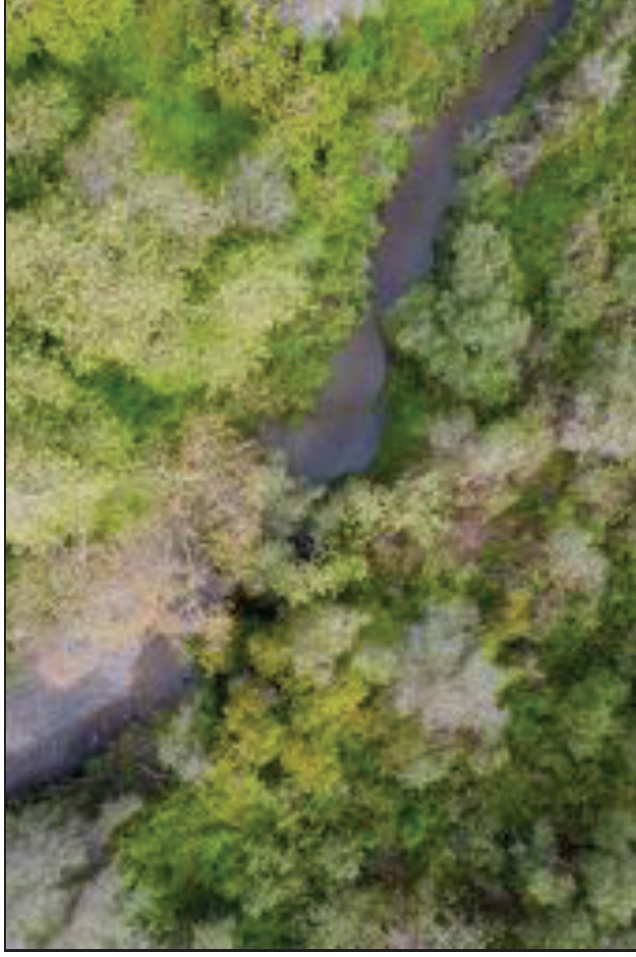


Site 1 (camera angle incorrect) Aerial



Site 2 Aerial

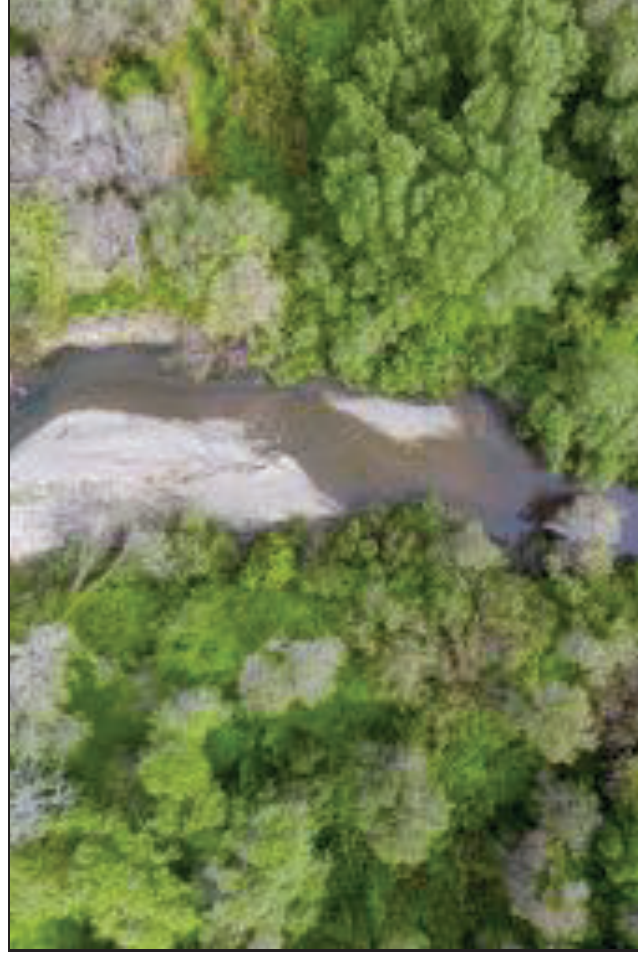
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Site 3 Aerial



Site 4 Aerial



Site 5 Aerial



Site 7 Aerial

CCSD Monitoring March 29, 2020



Site 8 Aerial



Well Field, 9P7

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



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cindycleve@gmail.com
805.234.3759

April 13, 2020

AMP Monitoring Locations

San Simeon and Van Gordon Creeks

Legend

 Study Sites



2000 ft

	Site 1	Site 2	Site 3	Site 4	Site 5	Site 7*	Site 8
Water Quality							
Temperature (F)	57.8	56.9	56.6	56.1	56	55.2	55.3
Dissolved Oxygen (%)	97	97	95	94	92	99	96
Dissolved Oxygen (ppm)	10	10.1	9.9	9.9	9.7	10.5	10.2
Total Dissolved Solids (mg/L)	287	178	291	178	312	647	440
Salinity (ppt)	0.21	0.13	0.22	0.13	0.23	0.49	0.33
Species Observed	Two juvenile steelhead trout visually observed in pool upstream of site 1. Fish surface flashing observed between sites 4 and 5 (possible trout). A few small fish (not Steelhead) observed in Van Gordon Creek.						
Comments							
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 121° 6'33.42"W	35°35'57.55"N 121° 6'53.39"W	35°35'48.09"N 121° 6'54.29"W	35°35'41.88"N 121° 7'4.04"W	35°35'40.00"N 121° 7'14.25"W	35°35'43.10"N 121° 7'13.85"W	35°35'48.06"N 121° 7'9.81"W
*Site 6 is on State Parks property and is not accessible at this time.							
9P7 Soil Moisture†							
North (%)	9.6						
East (%)	12.8						
South (%)	13.2						
West (%)	17.8						
†Moisture measured on each side of well casing. Max reading is 50%.							

CCSD Monitoring April 13, 2020



Site 1



Site 1



Site 1



Site 1

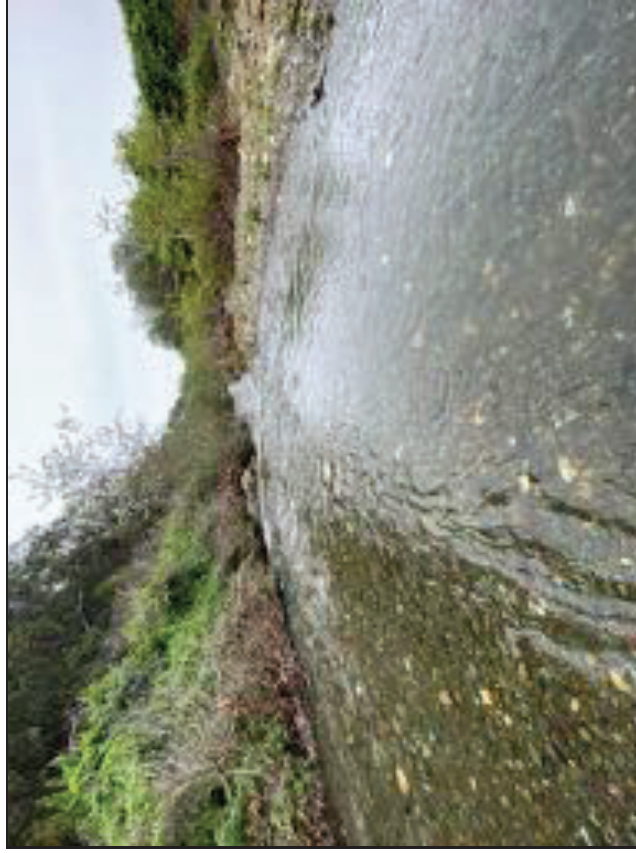
CCSD Monitoring April 13, 2020



Site 2



Site 2



Site 2



Site 2

CCSD Monitoring April 13, 2020



Site 3



Site 3



Site 3



Site 3

CCSD Monitoring April 13, 2020



Site 4



Site 4



Site 4



Site 4

CCSD Monitoring April 13, 2020



Site 5



Site 5



Site 5



Site 5

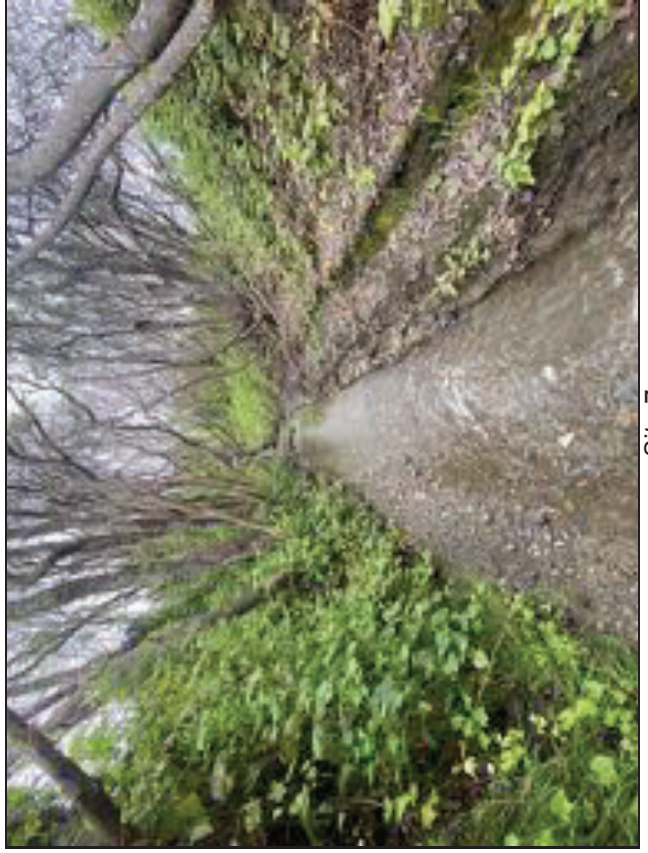
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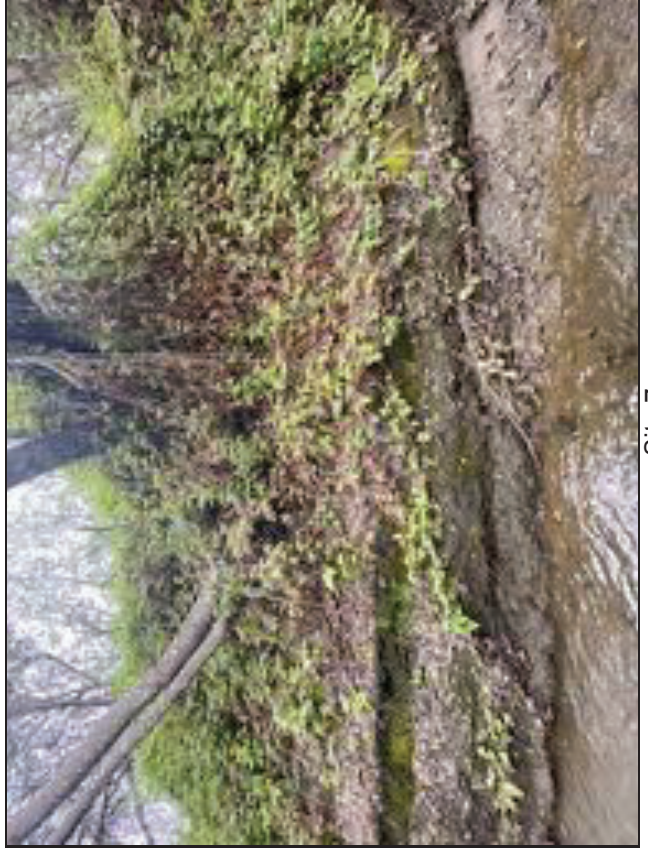
Site 7



Site 7



Site 7



Site 7

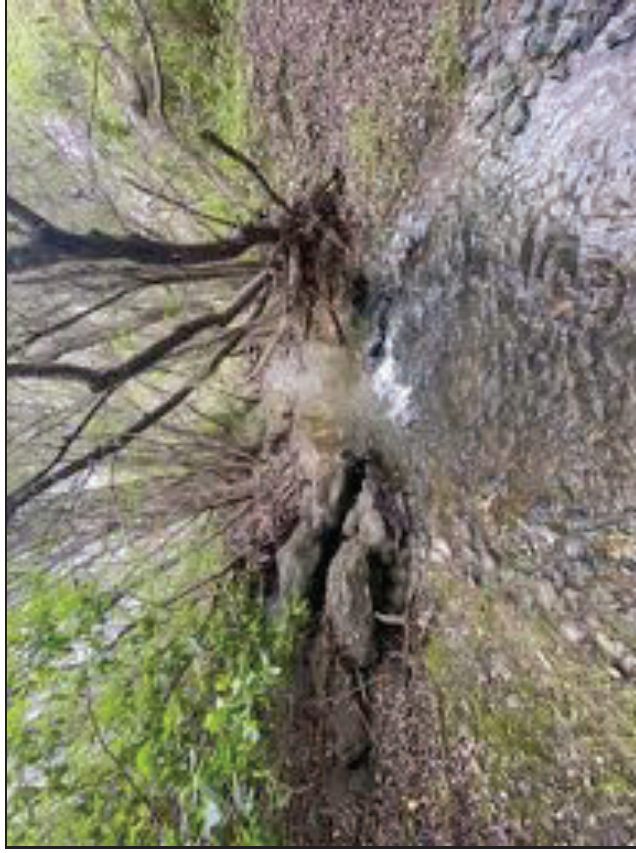
CCSD Monitoring April 13, 2020



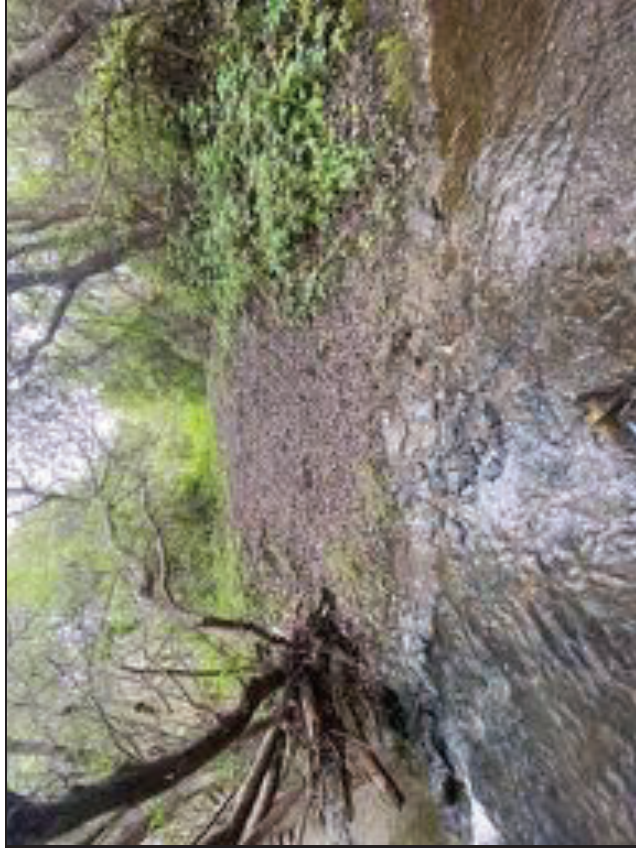
Site 8



Site 8



Site 8



Site 8

CCSD Monitoring April 13, 2020



9P7 Well

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



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Cleveland Biological, LLC
cindycleve@gmail.com
805.234.3759

April 27, 2020

AMP Monitoring Locations

San Simeon and Van Gordon Creeks

Legend

 Study Sites



2000 ft

Google Earth

© 2020 Google

Cleveland Biological, LLC		CCSD AMP Biological Monitoring in San Simeon and Van Gordon Creeks				Cindy & Paul Cleveland	
Survey Date: 4-27-2020		High Tide: 3:06 @ 3:25 PM		Low Tide: -0.21 @ 7:17 AM		Sandbar Breached: Yes	
Location		Site 1	Site 2	Site 3	Site 4	Site 5	Site 7*
Time		1:24 PM	12:30 PM	11:45 AM	11:13 AM	10:31 AM	10:22 AM
Weather (°F, Cloud cover)		66, Clear	69, Clear	72, Clear	76, Clear	66, Clear	68, Clear
Habitat							
Stream type (run, riffle, pool)	Pool	Top of riffle	Pool above riffle	Run above riffle	Run below riffle	Dry	Run above riffle
Instream cover type (lwd,swd,etc)	swd	riparian veg	lwd	lwd, swd	riparian veg	none	none
Substrate type (cobble, gravel, silt)	c, s	c, g	c, g	c, g	s, c	s, g	c, g, s
Substrate embeddedness (%)	85	25	50	50	50	75	75
Algae Surface (%)	0	0	0	0	0	0	0
Algae Subsurface (%)	0	0	0	0	0	0	0
Vegetation							
Instream cover (%)	10	15	15	25	10	0	0
Overhead cover (%)	10	5	15	25	10	80	90
Riparian width-Rt Bank (ft)	150	35	210	135	25	30	30
Riparian width-Lt Bank (ft)	100	10	220	230	85	85	55
Riparian Moisture-Rt Bank (%)	19.9	22.5	23.1	9.6	19.5	14.7	18.8
Riparian Moisture-Lt Bank (%)	20.3	24.5	17.8	24.5	10.2	22.8	18.3
Hydrology							
Maximum depth (ft)	2.3	0.9	1.6	0.8	1.4	Dry	0.2
Wetted width (ft)	24	32.5	27.5	21	14.2	Dry	4.6
Flow = Area x Rate (cfs)	7.2	2.8	4.3	15.8	8.4	Dry	0.05
Hydrology Calculations							
Depth 1 @ 1/4 (ft)	1.6	0.3	1.2	0.7	0.8	Dry	0.05
Depth 2 @ 1/2 (ft)	2.2	0.6	1.2	0.5	1.3	Dry	0.18
Depth 3 @ 3/4 (ft)	2.2	0.8	0.7	0.8	1.3	Dry	0.2
Average Depth = total/4 (ft)	1.5	0.4	0.8	0.5	0.9	Dry	0.1
Area = Width x Avg Depth (ft^2)	36.0	13.8	21.3	10.5	12.1	Dry	0.5
Rate from meter (ft/sec)	0.2	0.2	0.2	1.5	0.7	Dry	0.1

	Site 1	Site 2	Site 3	Site 4	Site 5	Site 7*	Site 8
Water Quality							
Temperature (F)	68.3	67.1	64.3	61.5	60.5	Dry	56.2
Dissolved Oxygen (%)	103	102	91	88	85	Dry	91
Dissolved Oxygen (ppm)	9.3	9.4	8.7	8.6	8.5	Dry	9.5
Total Dissolved Solids (mg/L)	364	366	373	358	418	Dry	775
Salinity (ppt)	0.27	0.27	0.28	0.27	0.31	Dry	0.6

Species Observed
Steelhead trout observed between Sites 1 - 4. Several pools had 8 to 20 fish each for a total estimate of 60 fish. Size classes of 1.5", 5 and 8". Redds observed in runs between pools. A juvenile western pond turtle was in the dry channel of Van Gordon Creek at Site 7. A resident green heron was at Site 6.

Comments
Riparian moisture was measured today. Readings were taken 10 feet from the center of the channel. In some cases this location was under water if the channel was more than 20 feet across.

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
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*Site 6 is on State Parks property and is not accessible at this time.							
9P7 Soil Moisture†							
North (%)	10.3						
East (%)	8.5						
South (%)	9.6						
West (%)	11.3						
†Moisture measured on each side of well casing. Max reading is 50%.							

CCSD Monitoring April 27, 2020



Site 1



Site 1



Site 1



Site 1

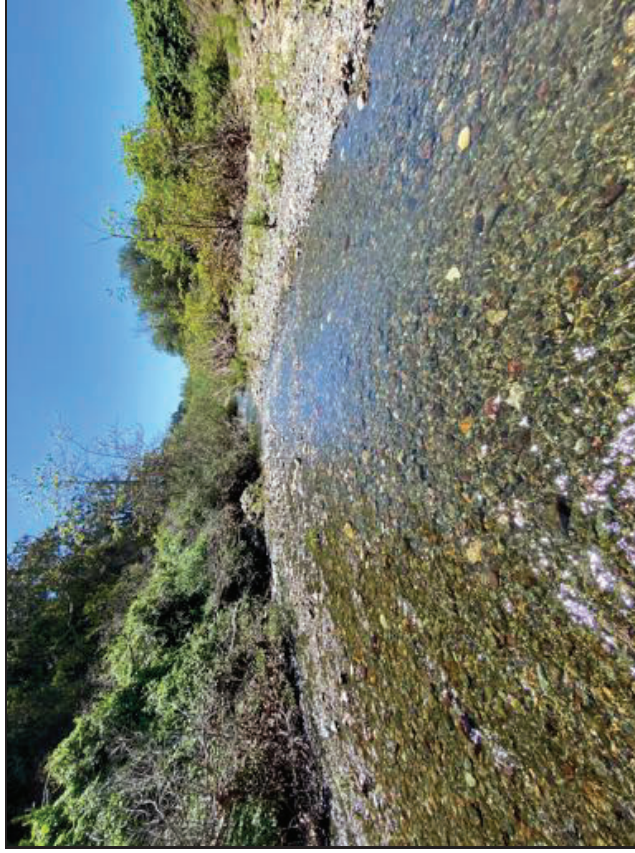
CCSD Monitoring April 27, 2020



Site 2



Site 2



Site 2



Site 2

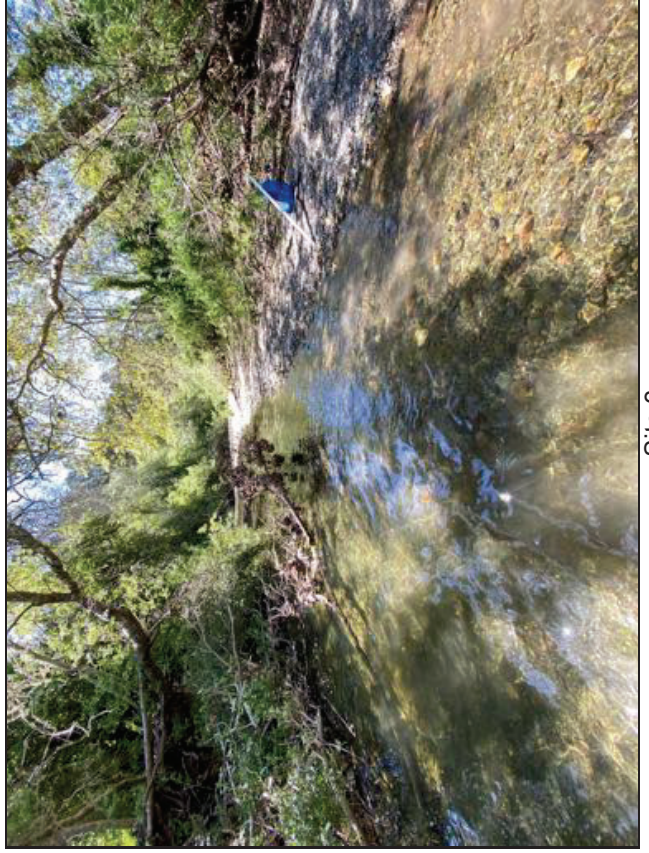
CCSD Monitoring April 27, 2020



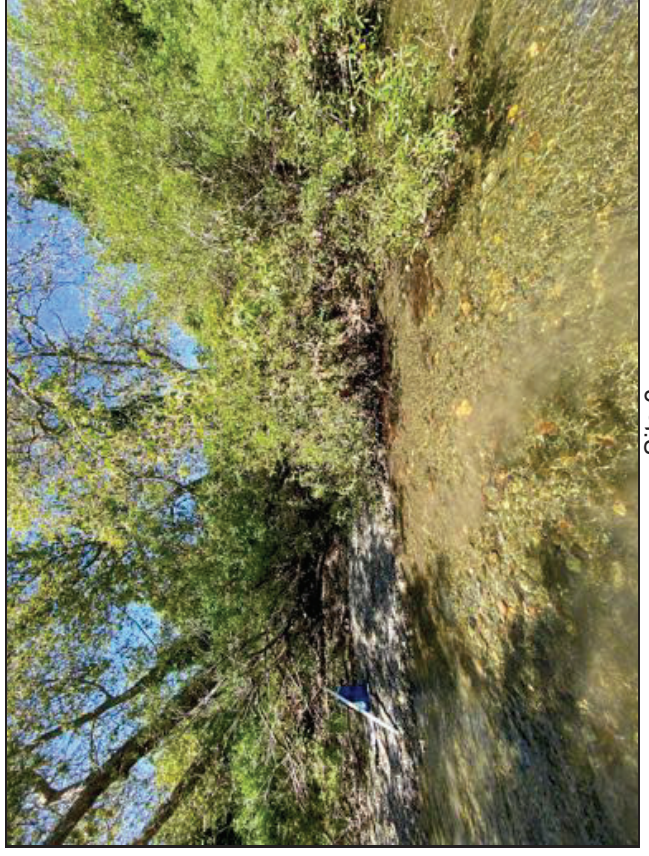
Site 3



Site 3



Site 3



Site 3

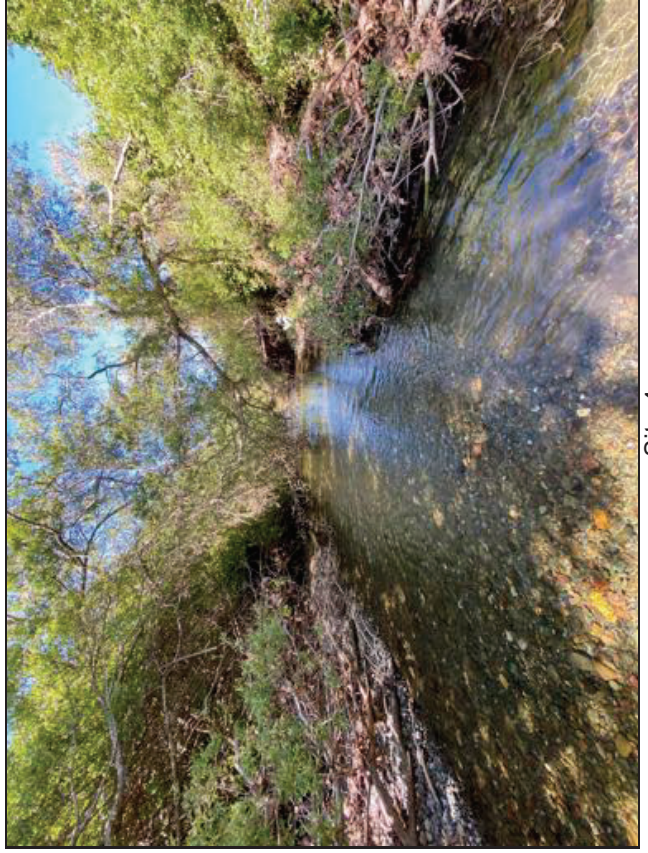
CCSD Monitoring April 27, 2020



Site 4



Site 4



Site 4

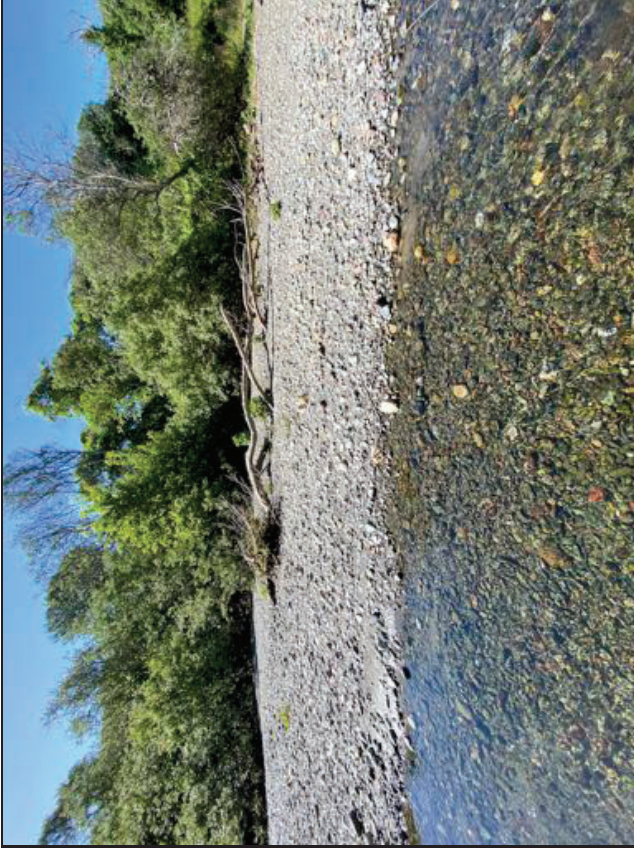


Site 4

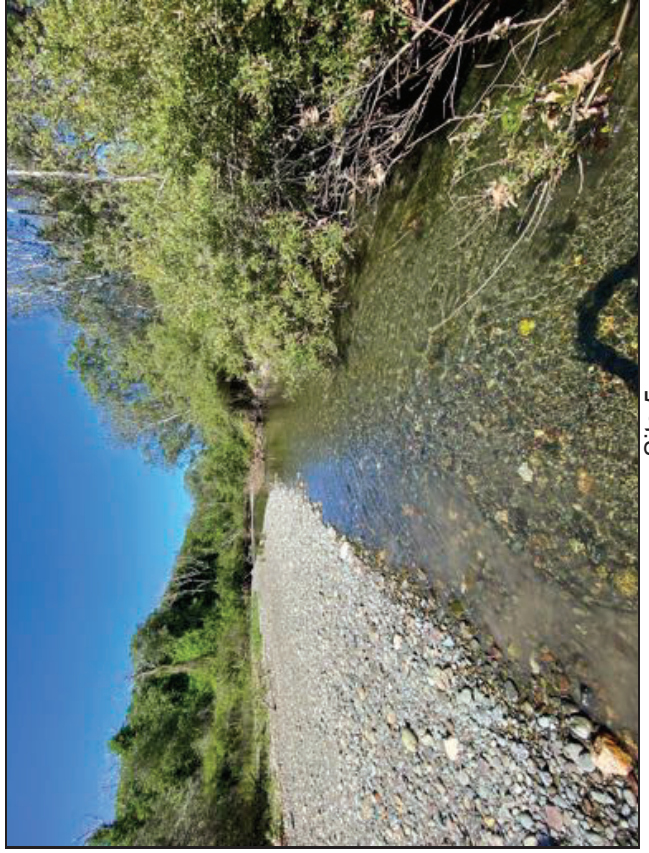
CCSD Monitoring April 27, 2020



Site 5



Site 5



Site 5



Site 5

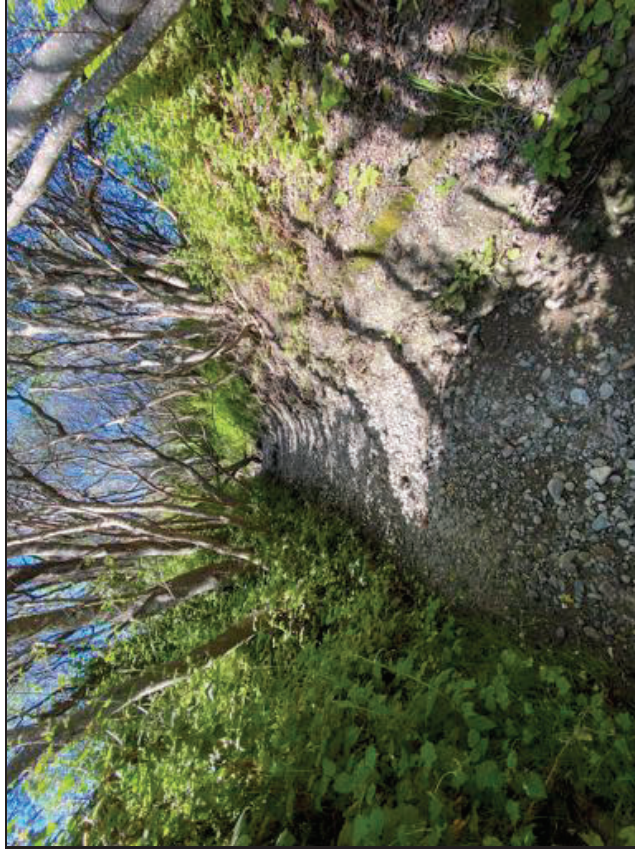
CCSD Monitoring April 27, 2020



Site 7



Site 7



Site 7



Site 7

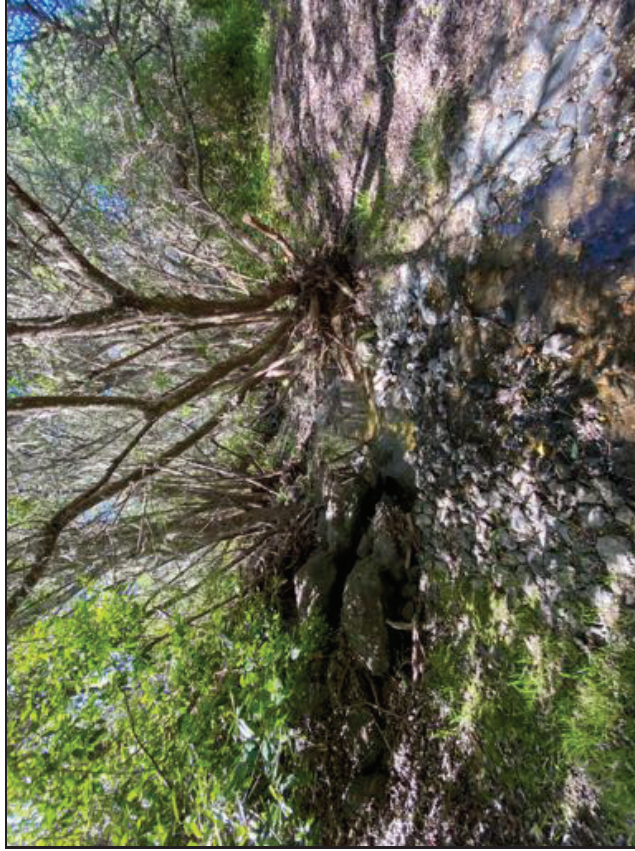
CCSD Monitoring April 27, 2020



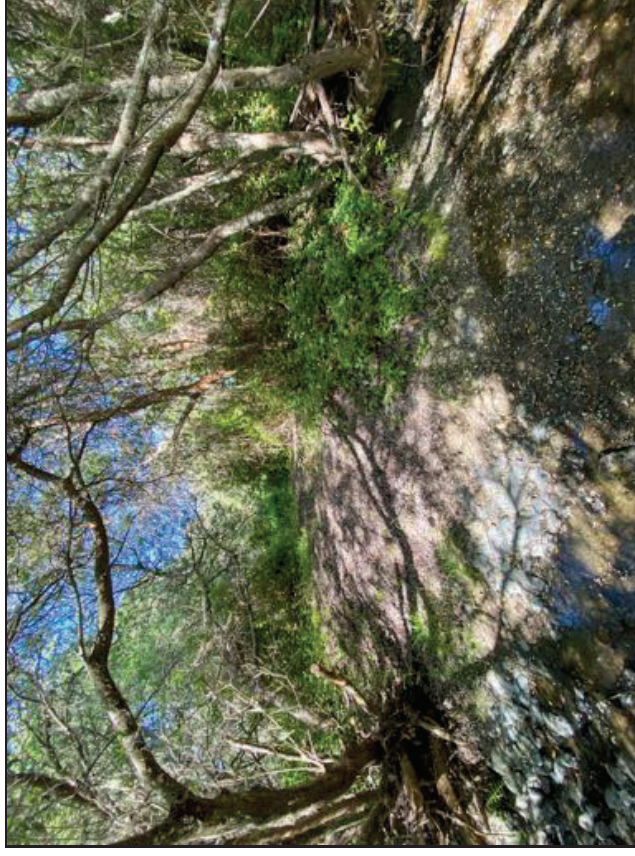
Site 8



Site 8



Site 8

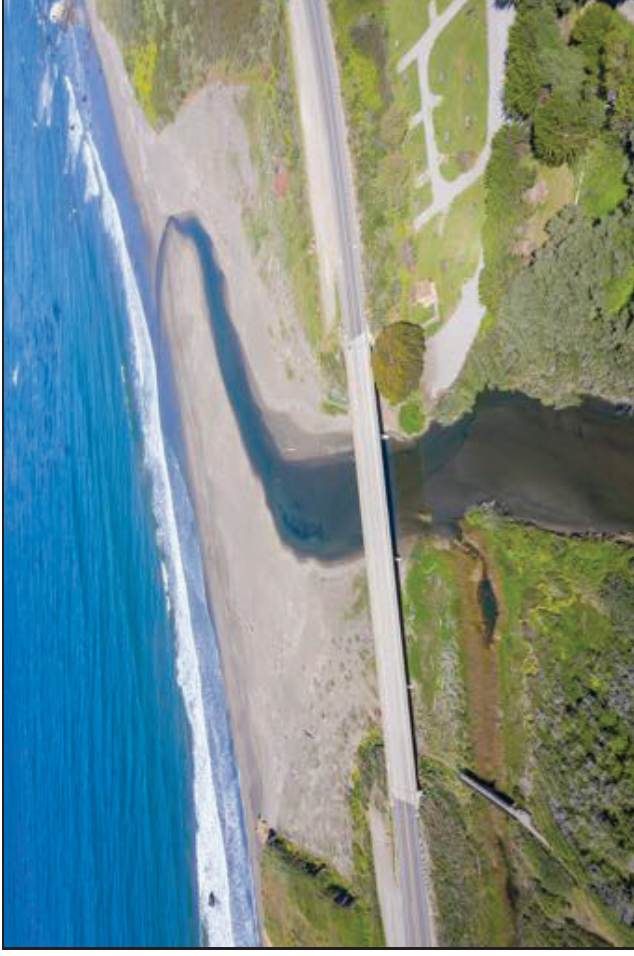


Site 8

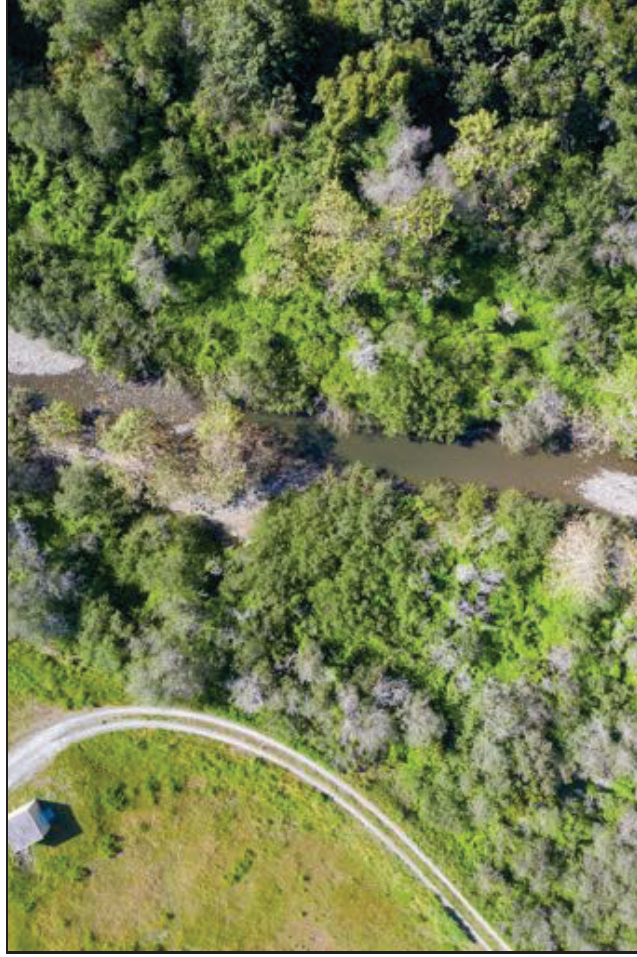
CCSD Monitoring April 27, 2020



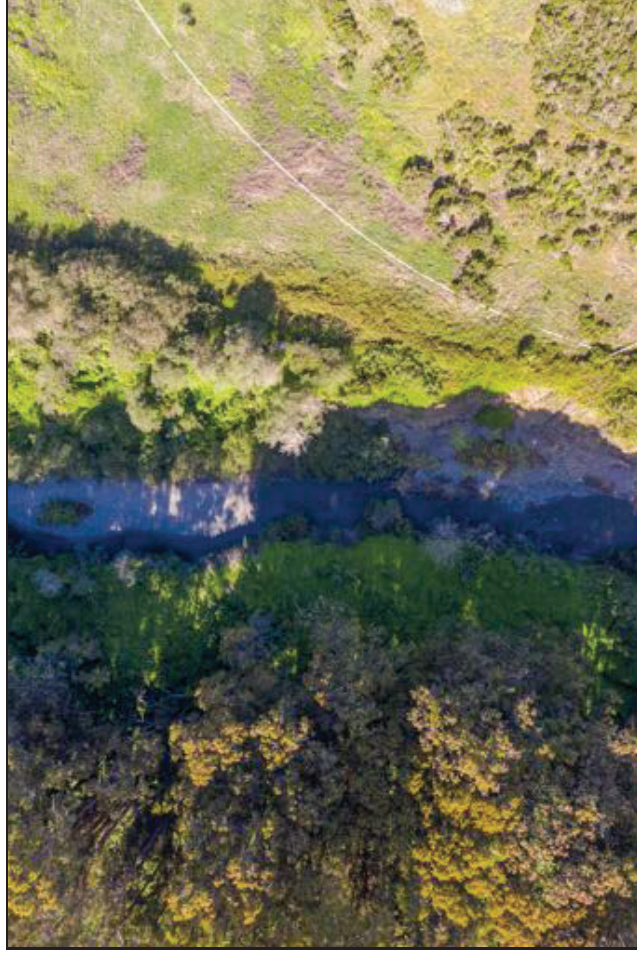
Walking Bridge PS-1



Estuary PS-2



Site 1 Aerial

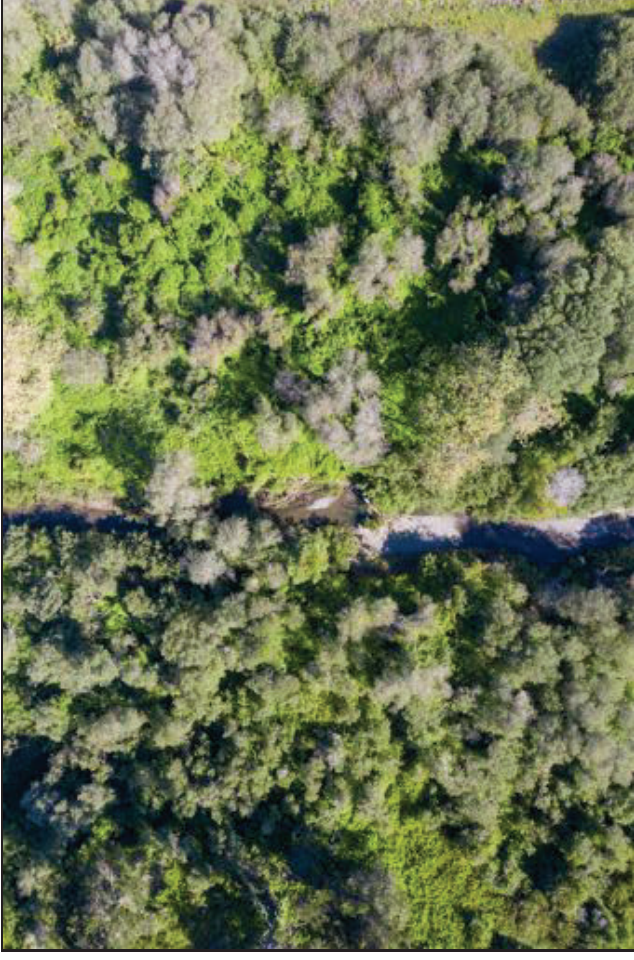


Site 2 Aerial

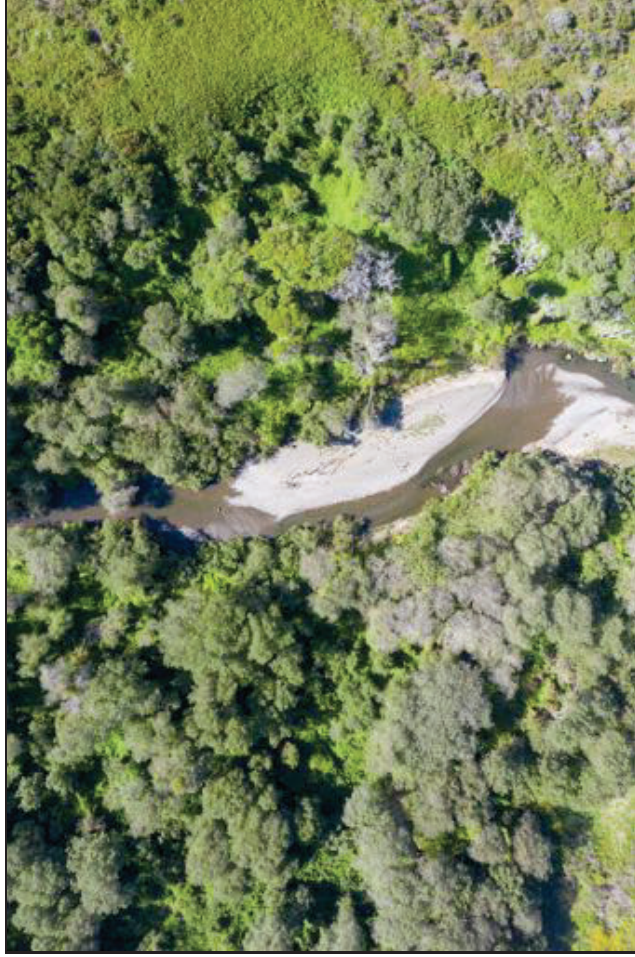
CCSD Monitoring April 27, 2020



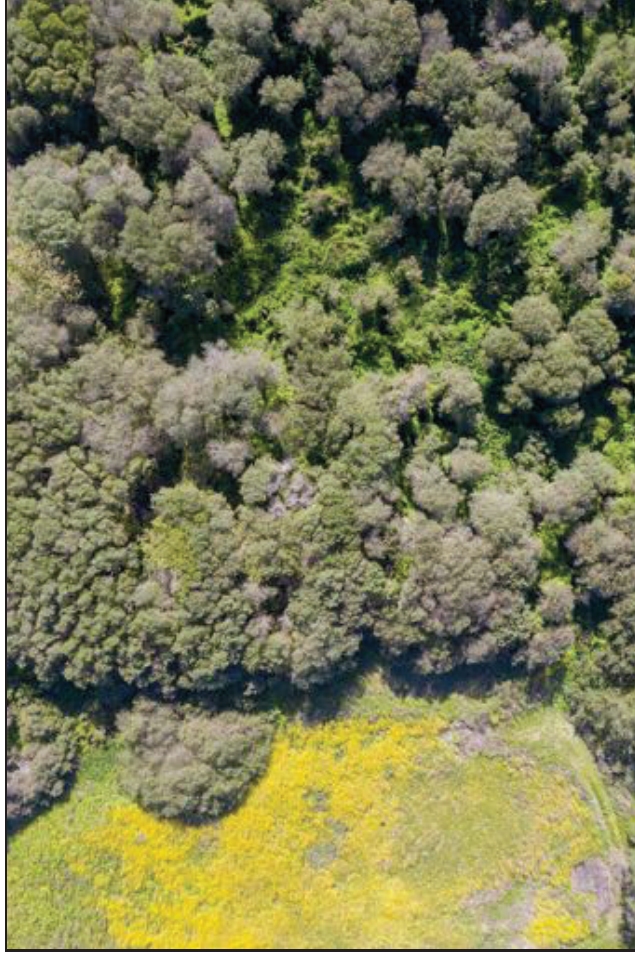
Site 3 Aerial



Site 4 Aerial

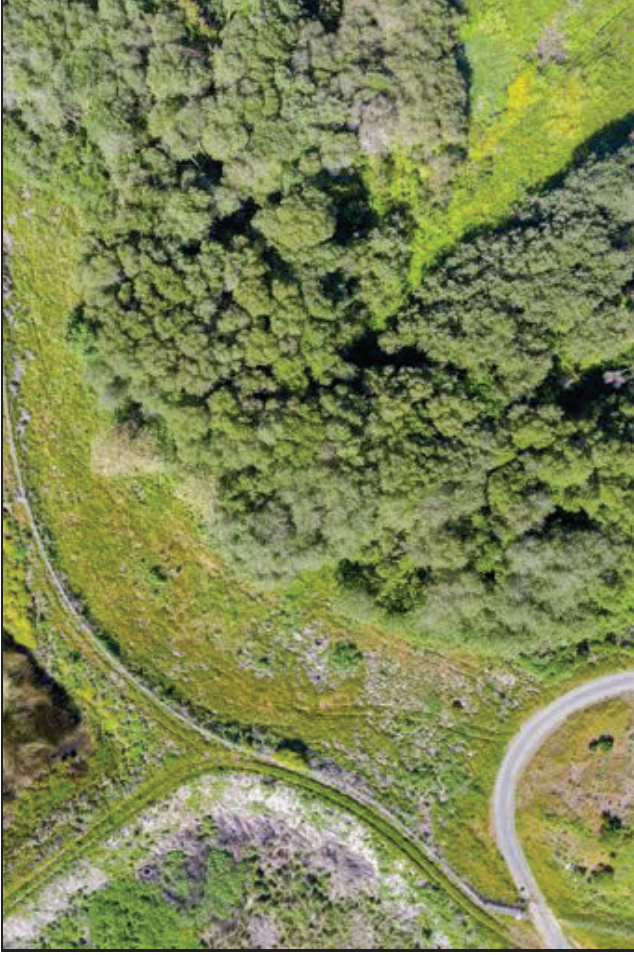


Site 5 Aerial



Site 7 Aerial

CCSD Monitoring April 27, 2020

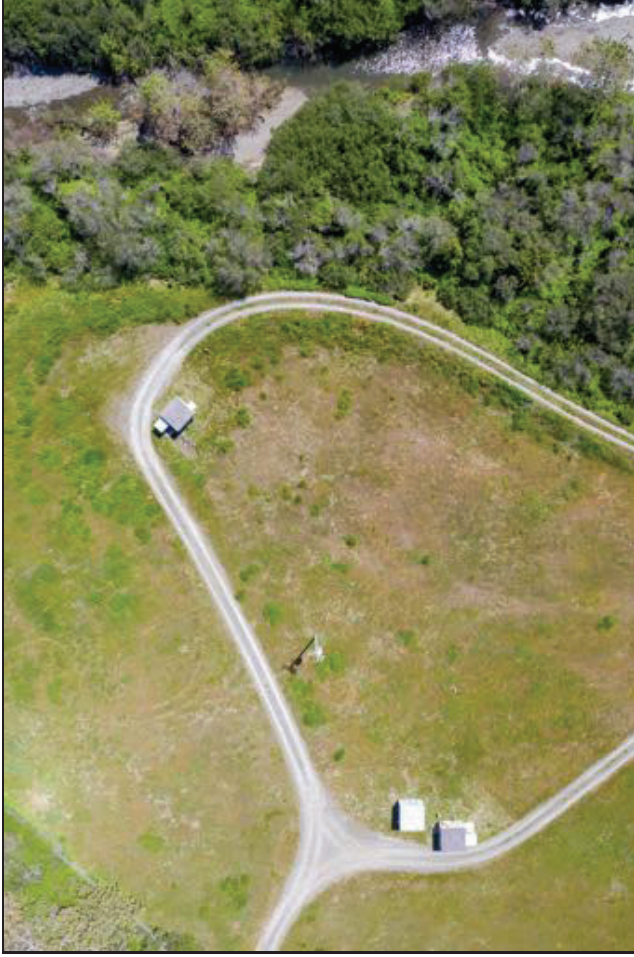


Site 8 Aerial

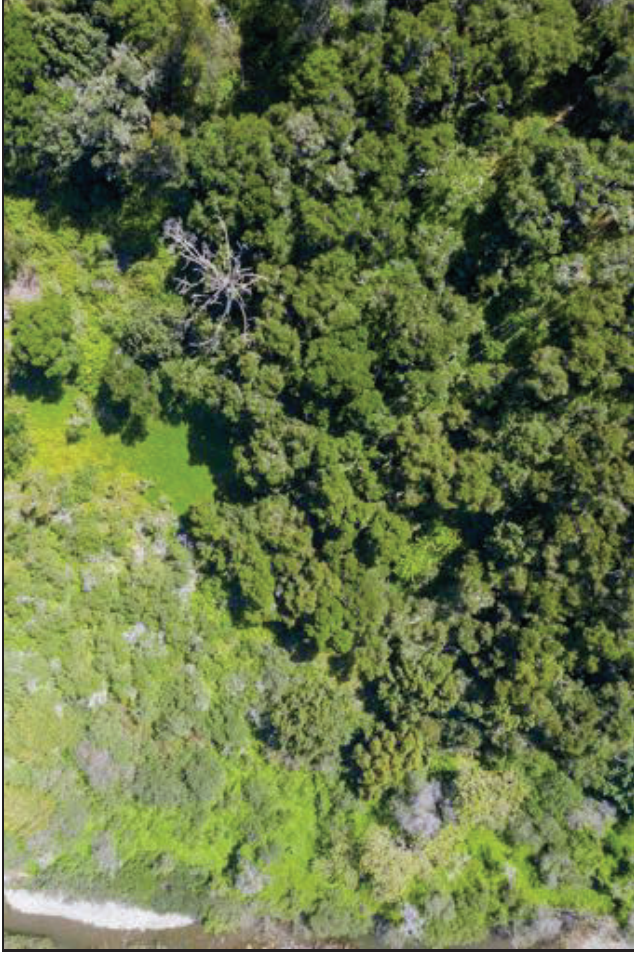


9P7 Well

CCSD Monitoring April 27, 2020



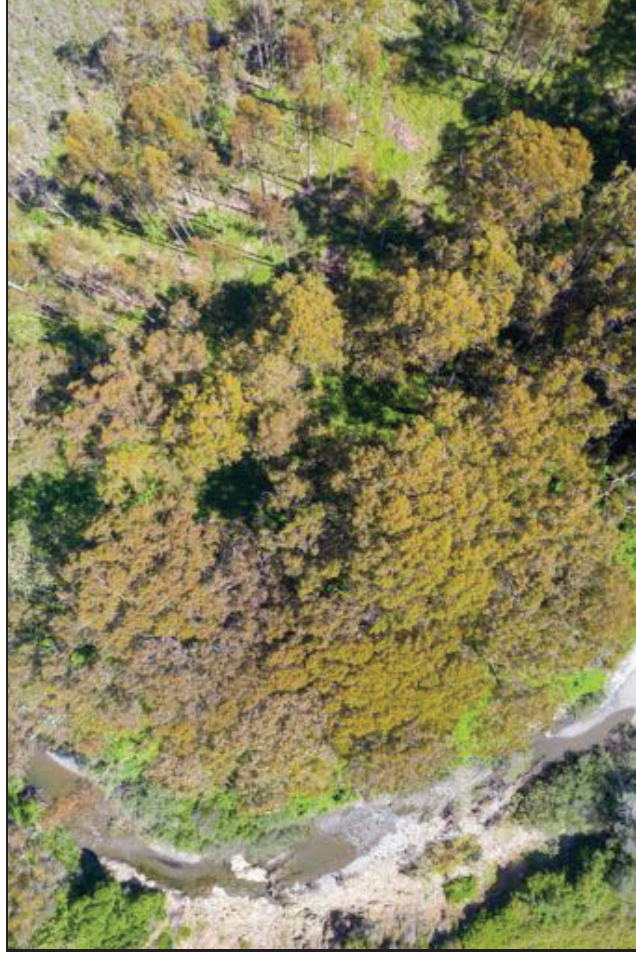
Site 1 Left Riparian



Site 1 Right Riparian



Site 2 Left Riparian



Site 2 Right Riparian

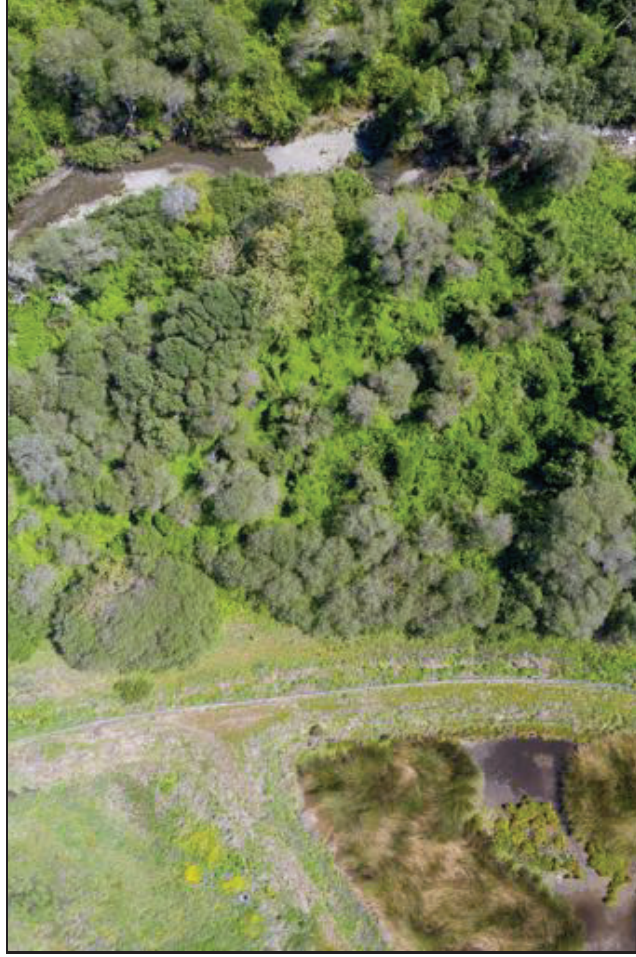
CCSD Monitoring April 27, 2020



Site 3 Left Riparian



Site 3 Right Riparian



Site 4 Left Riparian

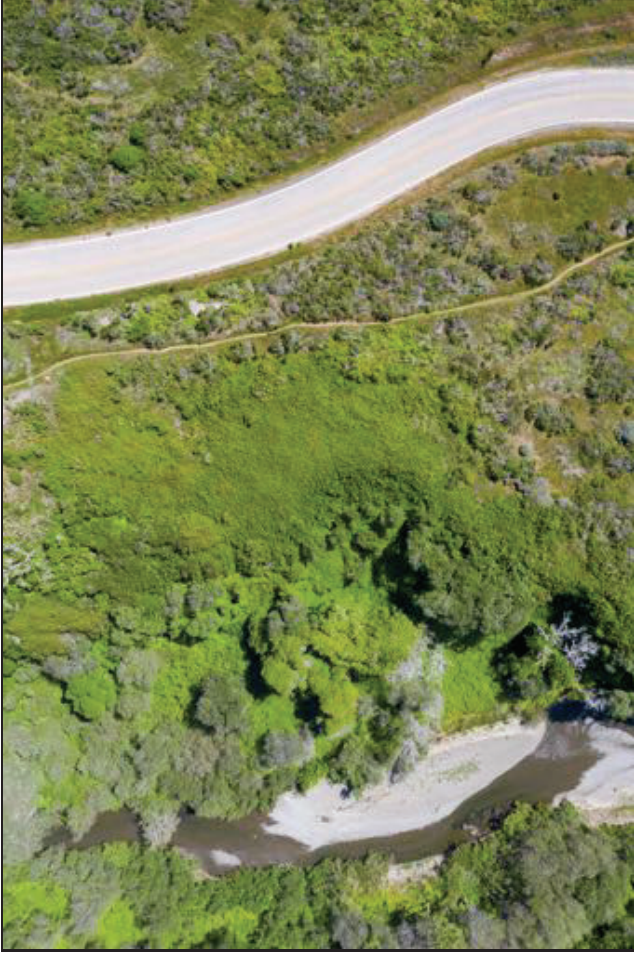


Site 4 Right Riparian

CCSD Monitoring April 27, 2020



Site 5 Left Riparian



Site 5 Right Riparian

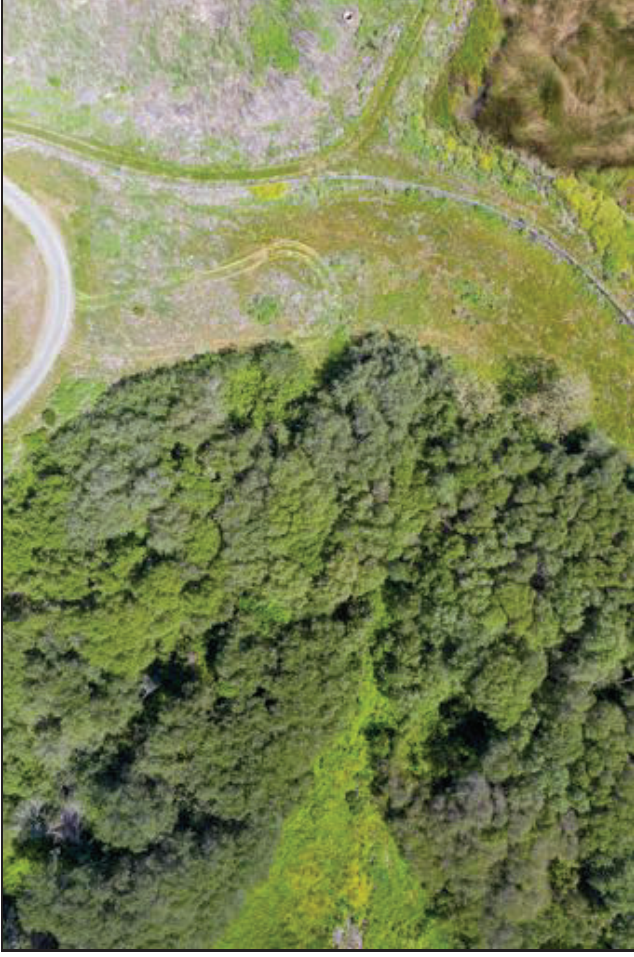


Site 7 Left Riparian



Site 7 Right Riparian

CCSD Monitoring April 27, 2020



Site 8 Right and Left Riparian

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



Prepared by

Cleveland Biological, LLC
cindycleve@gmail.com
805.234.3759

May 10, 2020

AMP Monitoring Locations

San Simeon and Van Gordon Creeks

Legend

 Study Sites



2000 ft

Cleveland Biological, LLC Cindy & Paul Cleveland		CCSD AMP Biological Monitoring in San Simeon and Van Gordon Creeks								
Survey Date: 5-10-2020		High Tide: 3:59 ft @ 2:32 PM			Low Tide: -1.26 ft @ 7:32 AM		Sandbar Breached: Yes		Stage (718): 2.65	
Location	Site 1 1:15 PM	Site 2 12:30 PM	Site 3 11:40 AM	Site 4 11:10 AM	Site 5 10:35 AM	Site 7* 10:30 AM	Site 8 10:15 AM			
Weather (°F, Cloud cover)	62, overcast	66, overcast	70, overcast	66, overcast	56, overcast	55, overcast	61, overcast			
Habitat										
Stream type (run, riffle, pool)	Pool	Top of riffle	Pool above riffle	Run above riffle	Run below riffle	Dry	Run above riffle			
Instream cover type (lwd,swd,etc)	swd	riparian veg	lwd	lwd,swd	riparian veg	none	none			
Substrate type (cobble, gravel, silt)	c,s	c,g	c,g	c,g	s,c	s,g	c,g,s			
Substrate embeddedness (%)	85	25	50	50	50	75	75			
Algae Surface (%)	5	0	0	0	0	0	0			
Algae Subsurface (%)	5	0	0	0	0	0	0			
Vegetation										
Instream cover (%)	10	15	15	25	10	0	0			
Overhead cover (%)	10	5	15	25	10	80	90			
Riparian width-Rt Bank (ft)	150	35	210	135	25	30	30			
Riparian width-Lt Bank (ft)	100	10	220	230	85	85	55			
Riparian Moisture-Rt Bank (%)	19.7	19.8	22.9	7.3	17.5	16.5	24.5			
Riparian Moisture-Lt Bank (%)	21.9	24.2	18.1	24.6	12.7	20.4	16.8			
Hydrology										
Maximum depth (ft)	2.1	0.8	1.4	0.8	1.45	Dry	Dry			
Wetted width (ft)	23.5	31.5	25.5	20	14.5	Dry	Dry			
Flow = Area x Rate (cfs)	3.3	1.1	5.5	8.0	4.1	Dry	Dry			
Hydrology Calculations										
Depth 1 @ 1/4 (ft)	1.5	0.25	1.1	0.5	1.35	Dry	Dry			
Depth 2 @ 1/2 (ft)	2.1	0.4	1.15	0.3	1.45	Dry	Dry			
Depth 3 @ 3/4 (ft)	2	0.7	0.6	0.8	0.95	Dry	Dry			
Average Depth = total/4 (ft)	1.4	0.3	0.7	0.4	0.9	Dry	Dry			
Area = Width x Avg Depth (ft^2)	32.9	10.6	18.2	8.0	13.6	Dry	Dry			
Rate from meter (ft/sec)	0.1	0.1	0.3	1.0	0.3	Dry	Dry			

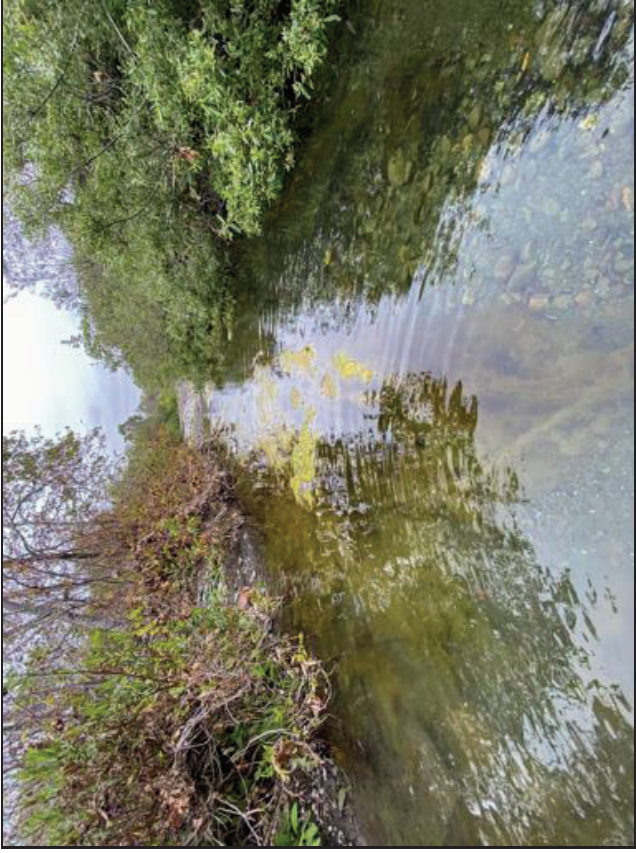
	Site 1	Site 2	Site 3	Site 4	Site 5	Site 7*	Site 8
Water Quality							
Temperature (F)	63.6	62.9	61.9	61	60.2	Dry	Dry
Dissolved Oxygen (%)	102	104	94	82	74	Dry	Dry
Dissolved Oxygen (ppm)	9.8	10	9.2	8.1	7.3	Dry	Dry
Total Dissolved Solids (mg/L)	389	388	395	400	488	Dry	Dry
Salinity (ppt)	0.29	0.29	0.3	0.3	0.37	Dry	Dry

Species Observed
Steelhead trout observed between Sites 1 - 4, estimate of 3 fish, size of 5" - 6" . Redds observed in runs between pools with nearby possible fry. Several schools of threespine stickleback throughout, many very small.

Comments
Long strands of filamentous are starting to grow between sites making it more difficult to see steelhead trout.

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 121° 6'33.42"W	35°35'57.55"N 121° 6'53.39"W	35°35'48.09"N 121° 6'54.29"W	35°35'41.88"N 121° 7'4.04"W	35°35'40.00"N 121° 7'14.25"W	35°35'43.10"N 121° 7'13.85"W	35°35'48.06"N 121° 7'9.81"W
*Site 6 is on State Parks property and is not accessible at this time.							
9P7 Soil Moisture†							
North (%)	7.5						
East (%)	8.2						
South (%)	8.7						
West (%)	10.3						
†Moisture measured on each side of well casing. Max reading is 50%.							

CCSD Monitoring May 10, 2020



Site 1



Site 1



Site 1



Site 1

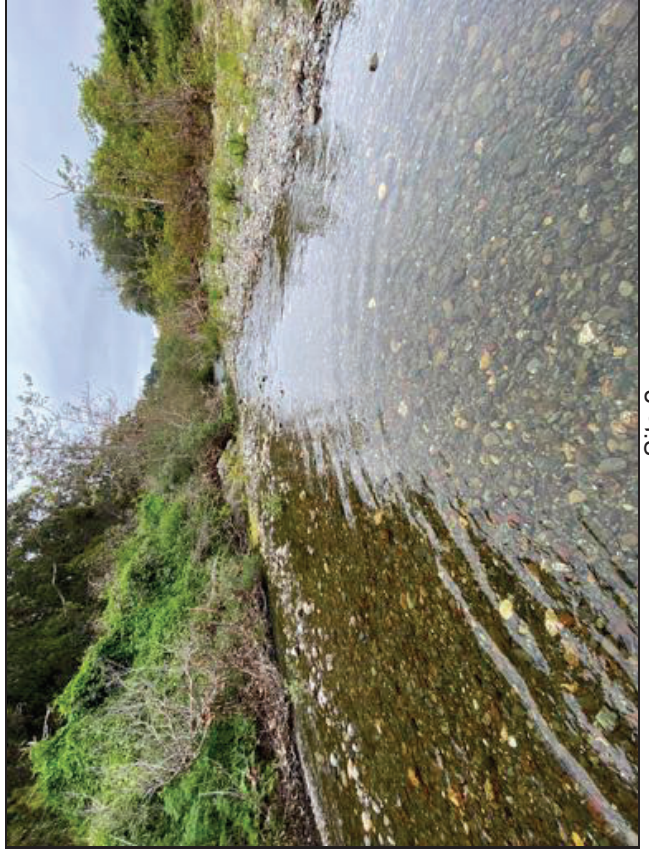
CCSD Monitoring May 10, 2020



Site 2



Site 2



Site 2



Site 2

CCSD Monitoring May 10, 2020



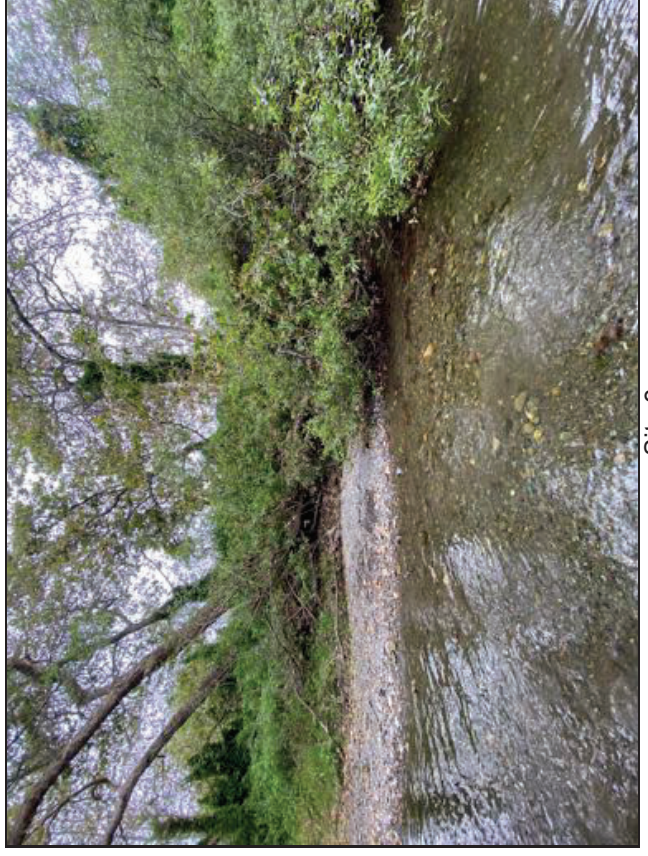
Site 3



Site 3



Site 3



Site 3

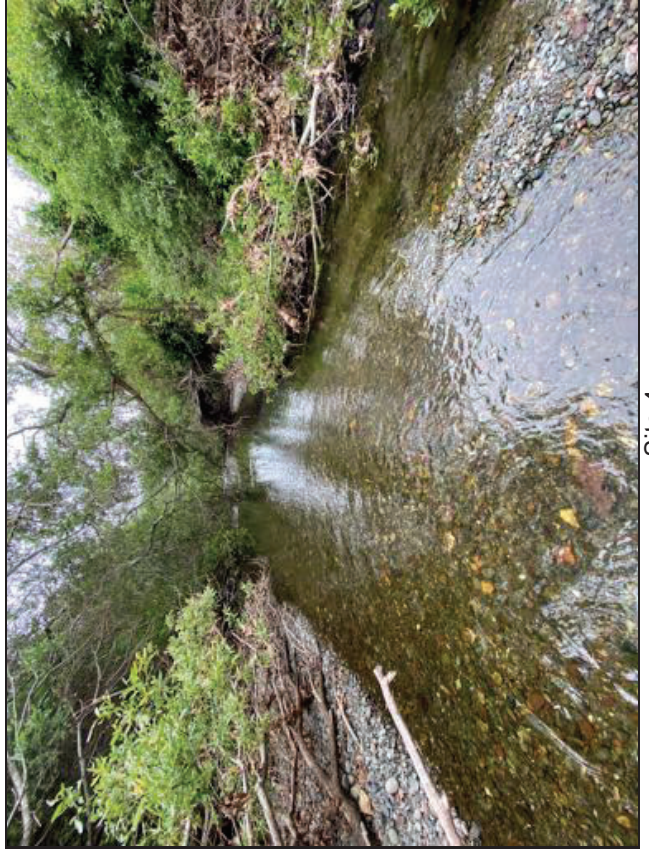
CCSD Monitoring May 10, 2020



Site 4



Site 4



Site 4



Site 4

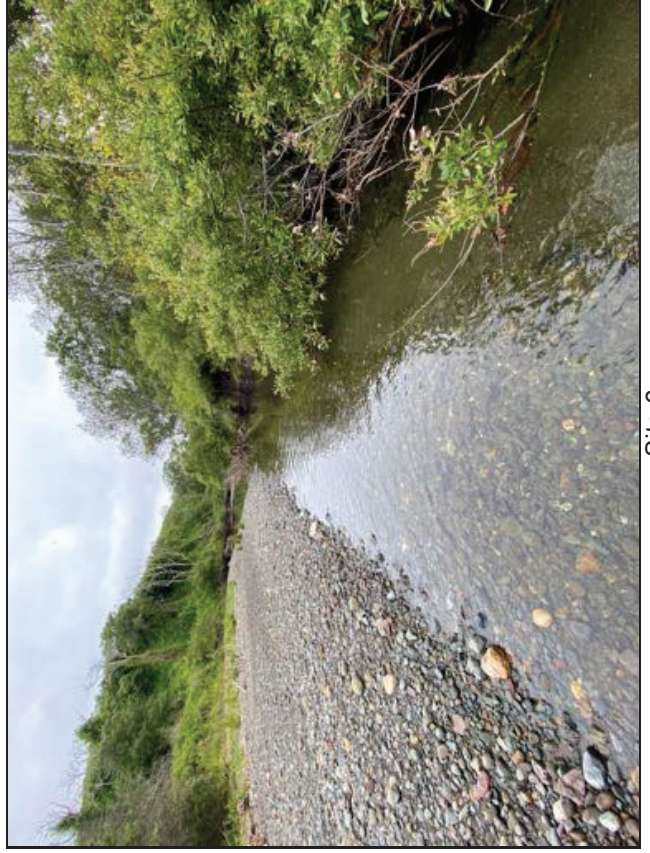
CCSD Monitoring May 10, 2020



Site 6



Site 6



Site 6



Site 6

CCSD Monitoring May 10, 2020



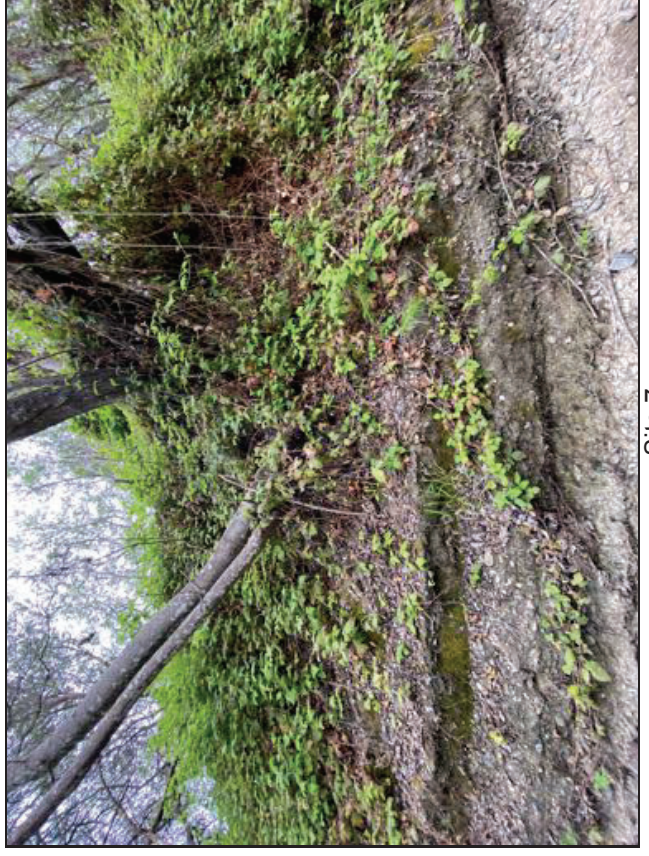
Site 7



Site 7



Site 7



Site 7

CCSD Monitoring May 10, 2020



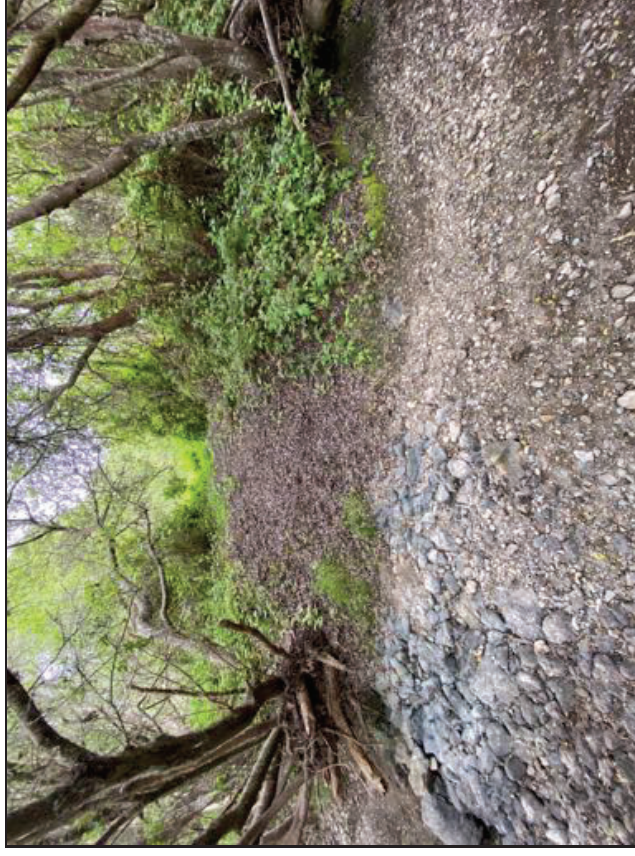
Site 8



Site 8

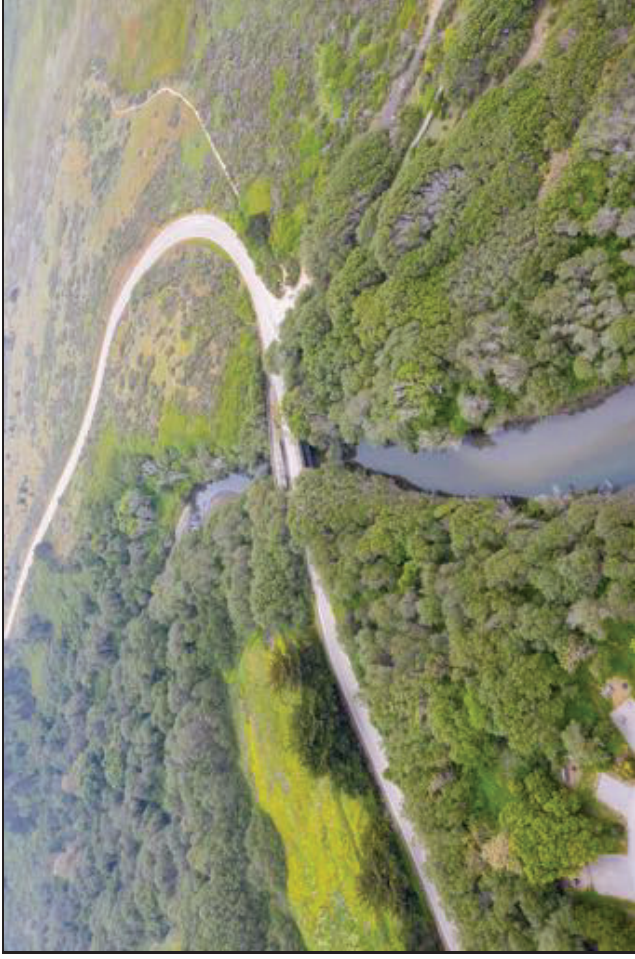


Site 8



Site 8

CCSD Monitoring May 10, 2020



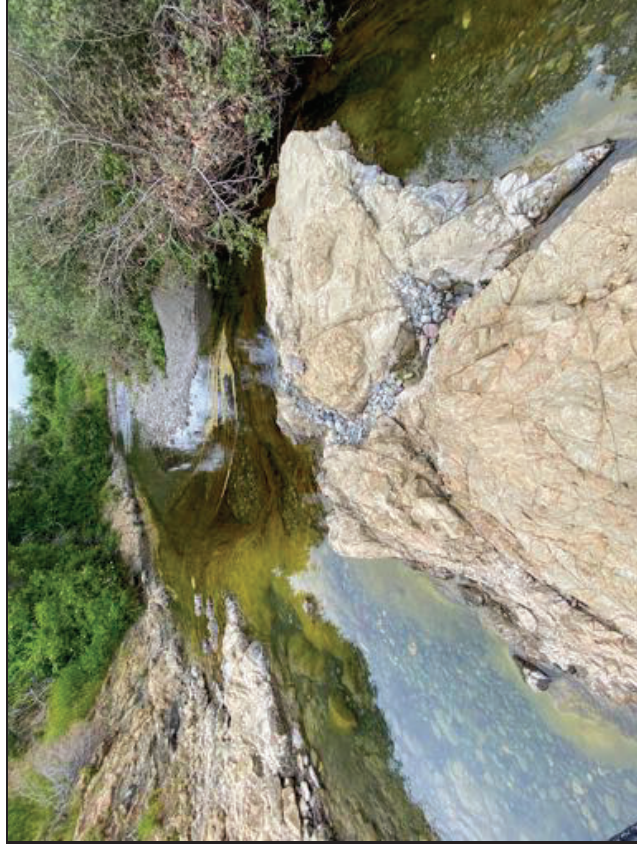
Walking Bridge PS-1



Estuary PS-2

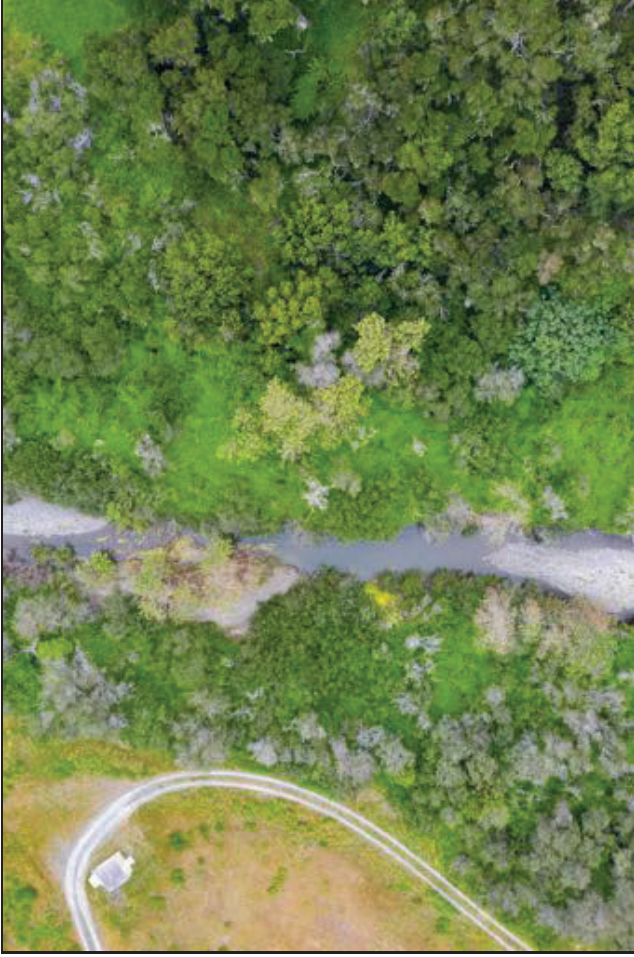


9P7 Well



Filamentous algae near Site 2

CCSD Monitoring May 10, 2020



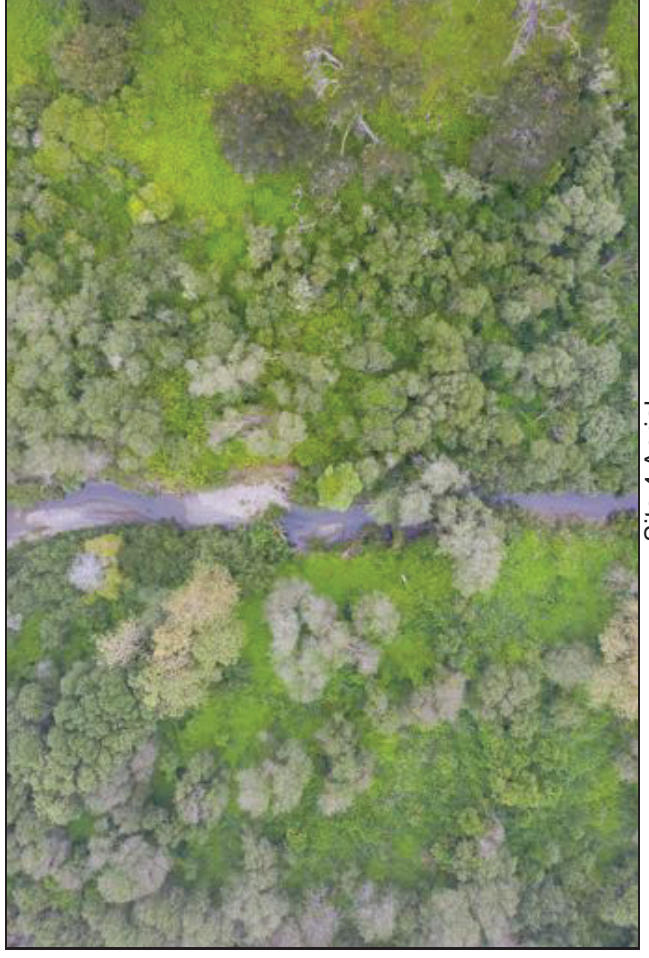
Site 1 Aerial



Site 2 Aerial



Site 3 Aerial



Site 4 Aerial

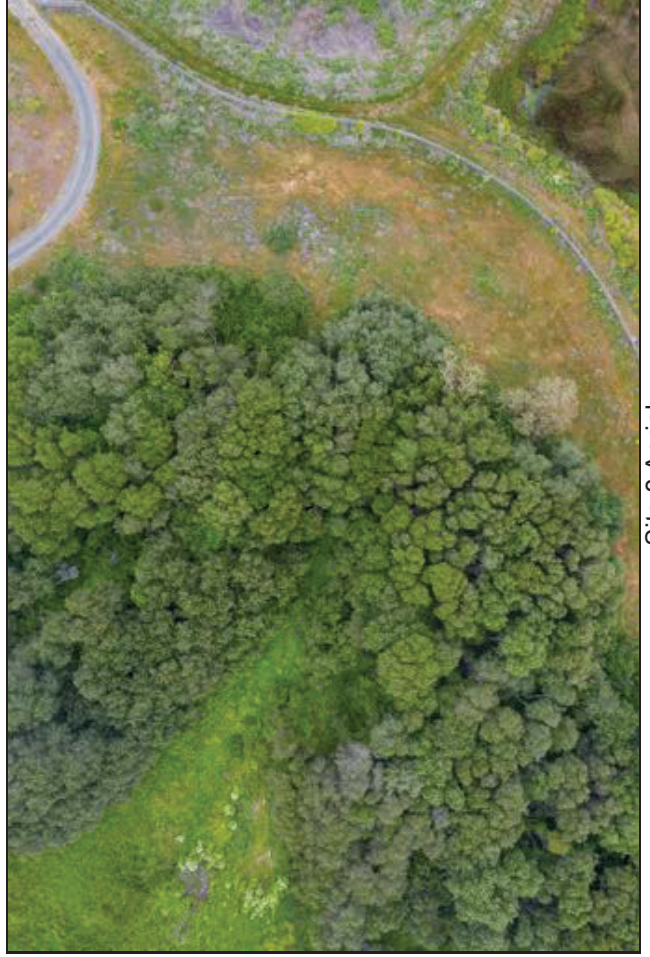
CCSD Monitoring May 10, 2020



Site 5 Aerial



Site 7 Aerial



Site 8 Aerial

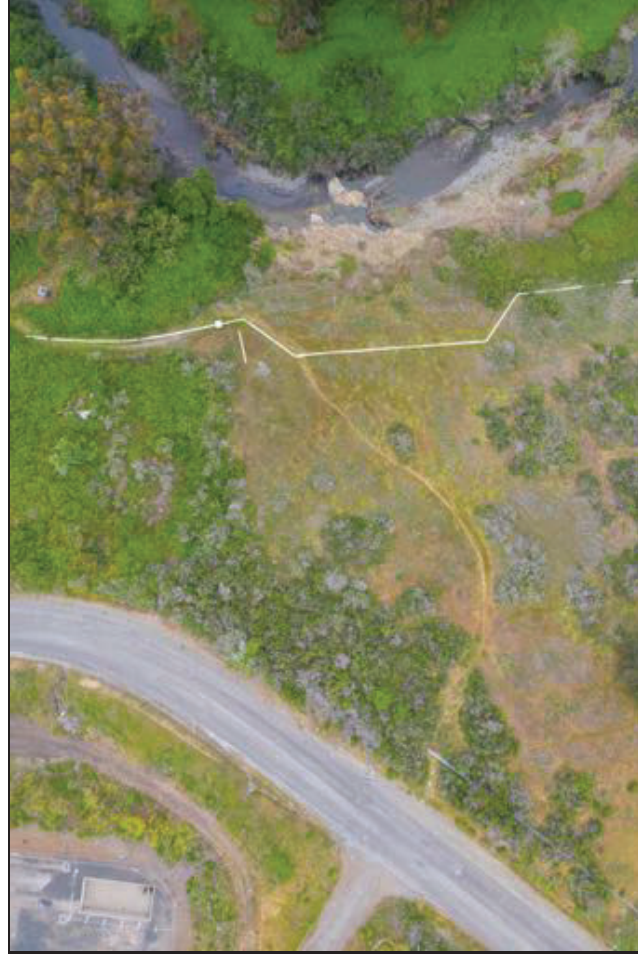
CCSD Monitoring May 10, 2020



Site 1 Left Riparian



Site 1 Right Riparian



Site 2 Left Riparian



Site 2 Right Riparian

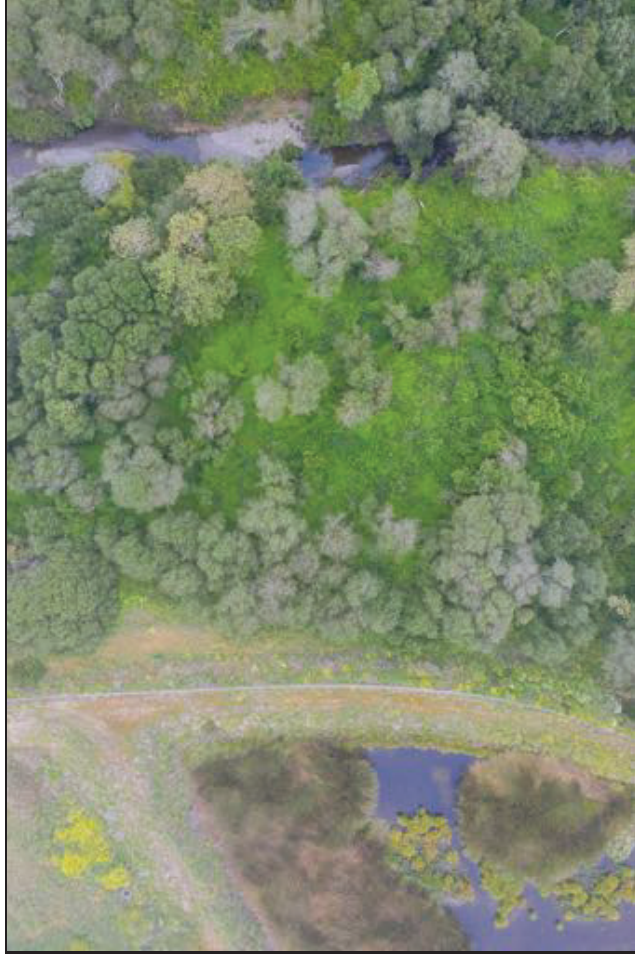
CCSD Monitoring May 10, 2020



Site 3 Left Riparian



Site 3 Right Riparian



Site 4 Left Riparian

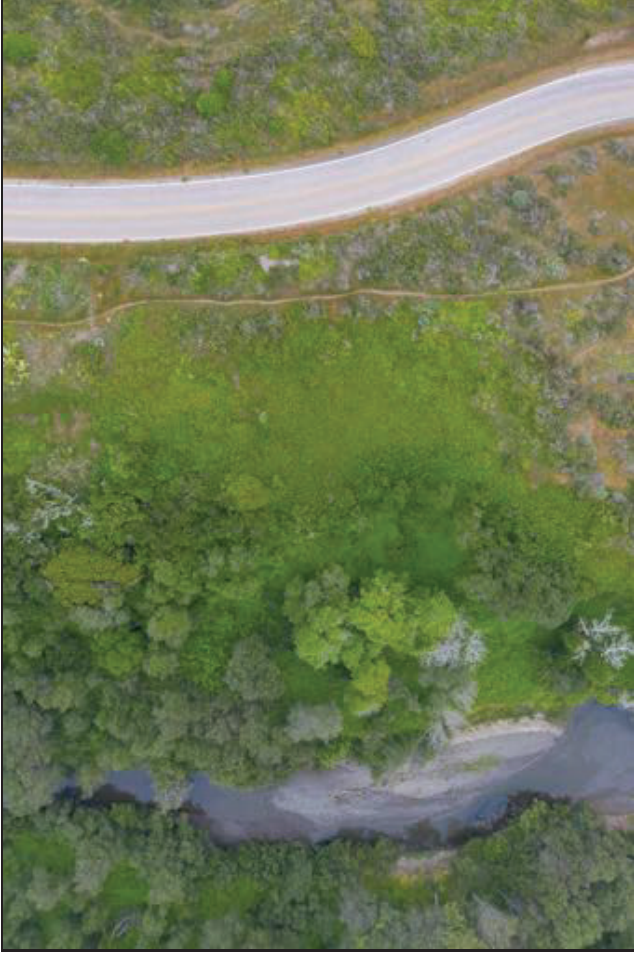


Site 4 Right Riparian

CCSD Monitoring May 10, 2020



Site 5 Left Riparian



Site 5 Right Riparian

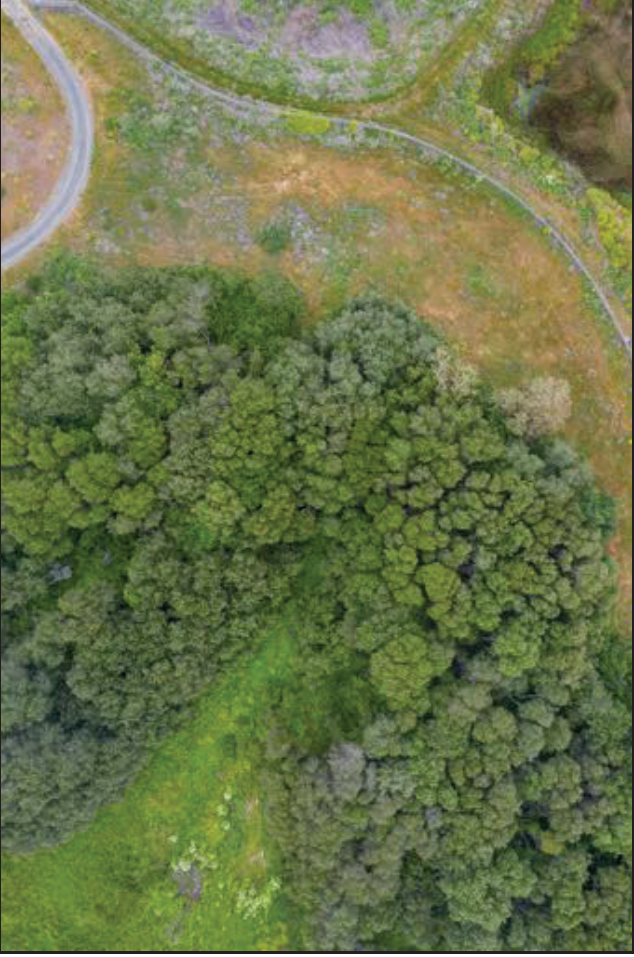


Site 7 Left Riparian



Site 7 Right Riparian

CCSD Monitoring May 10, 2020



Site 8 Right and Left Riparian

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



Prepared by

Cleveland Biological, LLC
cindycleve@gmail.com
805.234.3759

May 25, 2020

AMP Monitoring Locations

San Simeon and Van Gordon Creeks

Legend

 Study Sites



Cleveland Biological, LLC		CCSD AMP Biological Monitoring in San Simeon and Van Gordon Creeks					
Cindy & Paul Cleveland							
Survey Date: 5-25-2020		High Tide: 3:32 ft @ 2:13 PM		Low Tide: -0.78 ft @ 7:05 AM			
		Sandbar Breached: No		Stage (718): 2.63			
Location	Site 1	Site 2	Site 3	Site 4	Site 5	Site 7*	Site 8
Time	1:15 PM	12:30 PM	11:53 AM	11:30 AM	11:00 AM	10:50 AM	10:35 AM
Weather (°F, Cloud cover)	72, Clear	70, Clear	70, Clear	74, Clear	68, Clear	68, Clear	68, Clear
Habitat							
Stream type (run, riffle, pool)	Pool	Top of riffle	Pool above riffle	Run above riffle	Run below riffle	Dry	Dry
Instream cover type (lwd,swd,etc)	swd	riparian veg	lwd	lwd, swd	riparian veg	none	none
Substrate type (cobble, gravel, silt)	c, s	c, g	c, g	c, g	s, c	s, g	c, g, s
Substrate embeddedness (%)	85	25	50	50	50	75	75
Algae Surface (%)	5	0	0	0	0	0	0
Algae Subsurface (%)	5	0	0	90	50	0	0
Vegetation							
Instream cover (%)	10	15	15	25	10	0	0
Overhead cover (%)	10	5	15	25	10	80	90
Riparian width-Rt Bank (ft)	150	35	210	135	25	30	30
Riparian width-Lt Bank (ft)	100	10	220	230	85	85	55
Riparian Moisture-Rt Bank (%)	21.2	21.1	24	7.8	17.4	22.6	22.4
Riparian Moisture-Lt Bank (%)	21.1	24.4	20.4	24	12.3	18	13
Hydrology							
Maximum depth (ft)	2.1	0.8	1.3	0.7	2	0	0
Wetted width (ft)	23	31.5	25.5	19	21	0	0
Flow = Area x Rate (cfs)	3.4	0.9	1.5	2.1	2.0	0	0
Hydrology Calculations							
Depth 1 @ 1/4 (ft)	1.9	0.2	1	0.5	0.5	0	0
Depth 2 @ 1/2 (ft)	2	0.3	1	0.25	1.4	0	0
Depth 3 @ 3/4 (ft)	2	0.7	0.4	0.7	2	0	0
Average Depth = total/4 (ft)	1.5	0.3	0.6	0.4	1.0	0	0
Area = Width x Avg Depth (ft^2)	33.9	9.5	15.3	6.9	20.5	0	0
Rate from meter (ft/sec)	0.1	0.1	0.1	0.3	0.1	0	0

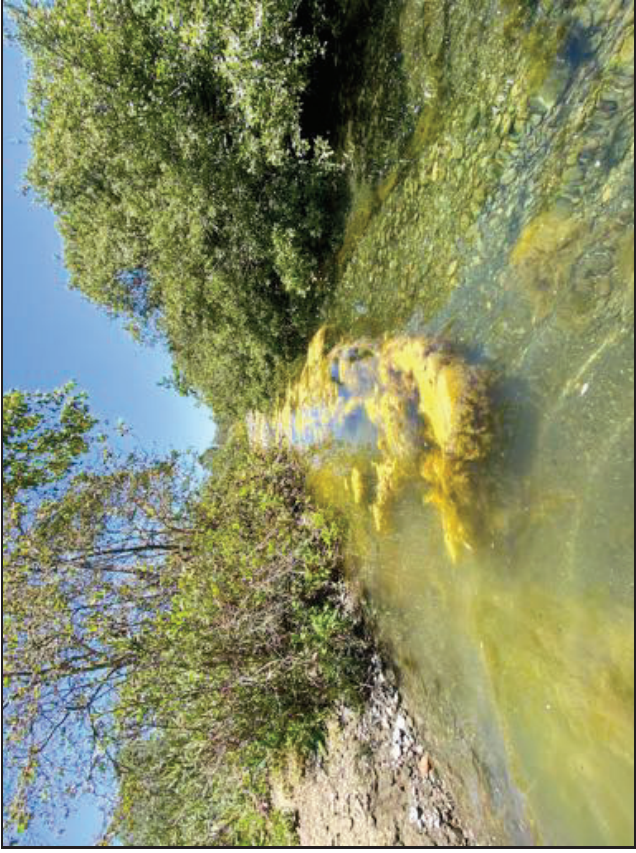
	Site 1	Site 2	Site 3	Site 4	Site 5	Site 7*	Site 8
Water Quality							
Temperature (F)	70.3	71	66.1	62.9	63.4	Dry	Dry
Dissolved Oxygen (%)	94	115	90	82	81	Dry	Dry
Dissolved Oxygen (ppm)	8.3	10.1	8.4	7.9	7.7	Dry	Dry
Total Dissolved Solids (mg/L)	400	397	404	357	555	Dry	Dry
Salinity (ppt)	0.3	0.3	0.3	0.27	0.42	Dry	Dry

Species Observed
Steelhead trout observed between Sites 1 - 2, estimate of 5 fish, size of 5" - 6". Redds observed in runs between pools with nearby possible fry. Several schools of Threespine stickleback throughout, many very small.

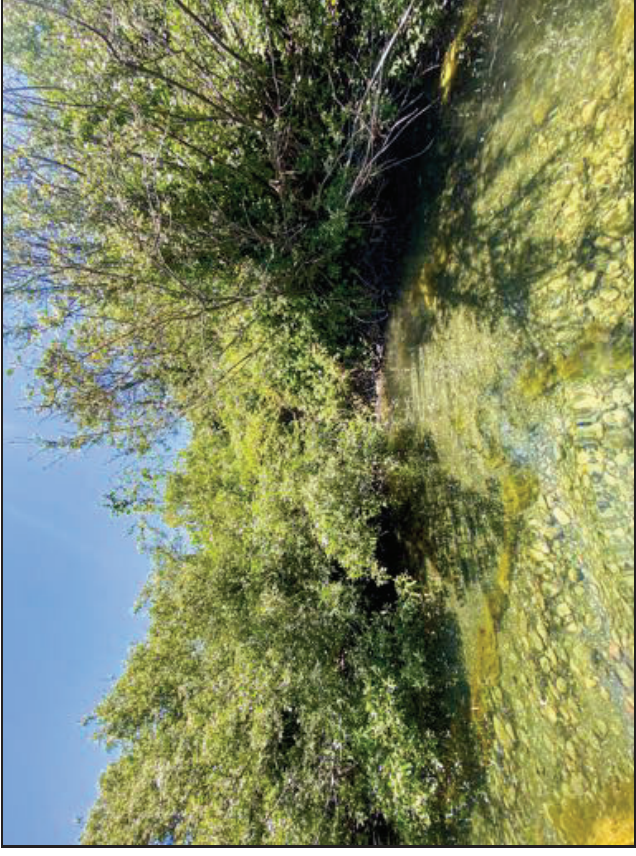
Comments
Long strands of filamentous are continuing to grow between sites making it more difficult to see Steelhead trout. There was approx. 1/2 inch of rain last week which may explain the increase in 9P7 well soil moisture.

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 121° 6'33.42"W	35°35'57.55"N 121° 6'53.39"W	35°35'48.09"N 121° 6'54.29"W	35°35'41.88"N 121° 7'4.04"W	35°35'40.00"N 121° 7'14.25"W	35°35'43.10"N 121° 7'13.85"W	35°35'48.06"N 121° 7'9.81"W
*Site 6 is on State Parks property and is not accessible at this time.							
9P7 Soil Moisture†							
North (%)	10.8						
East (%)	11.9						
South (%)	11.7						
West (%)	13.7						
†Moisture measured on each side of well casing. Max reading is 50%.							

CCSD Monitoring May 25, 2020



Site 1



Site 1

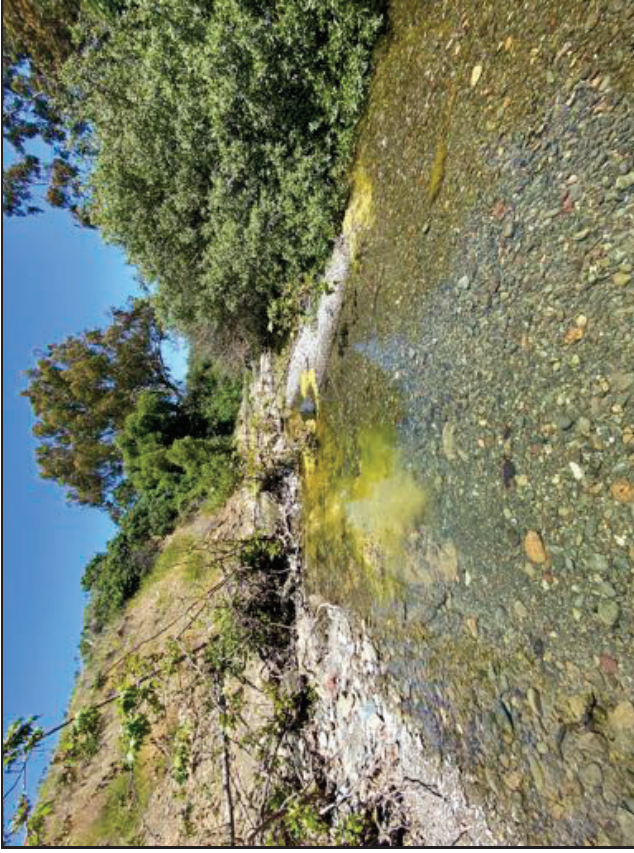


Site 1



Site 1

CCSD Monitoring May 25, 2020



Site 2



Site 2



Site 2



Site 2

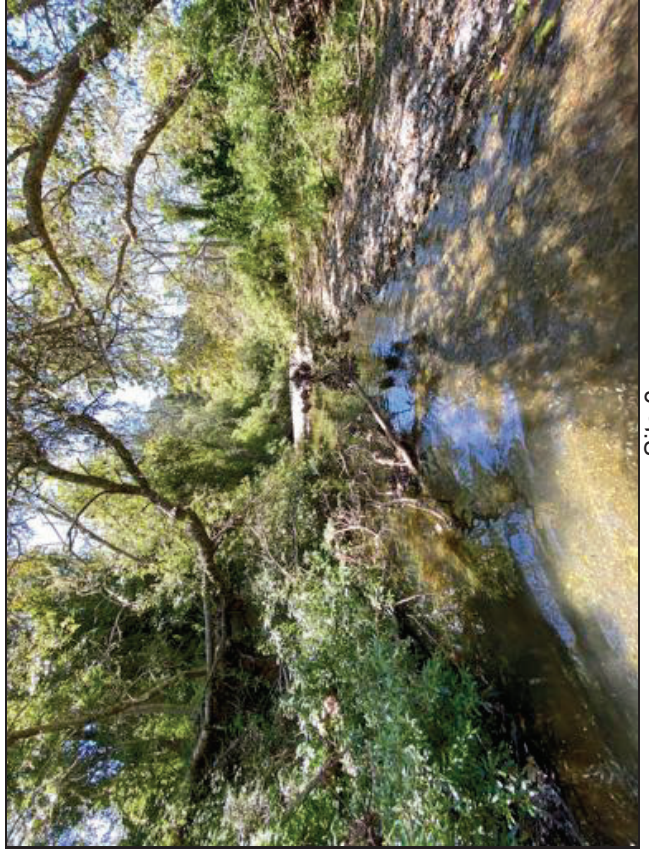
CCSD Monitoring May 25, 2020



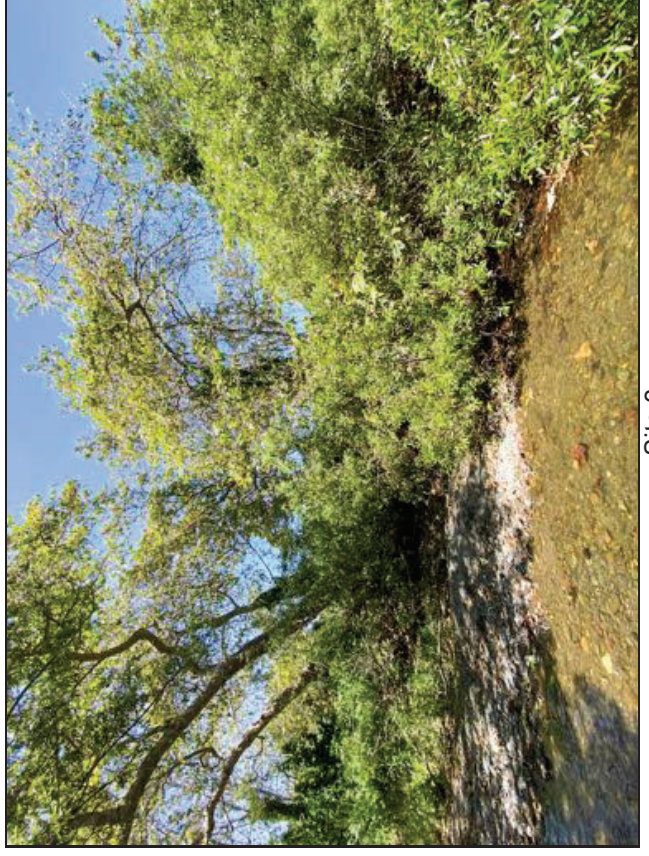
Site 3



Site 3



Site 3



Site 3

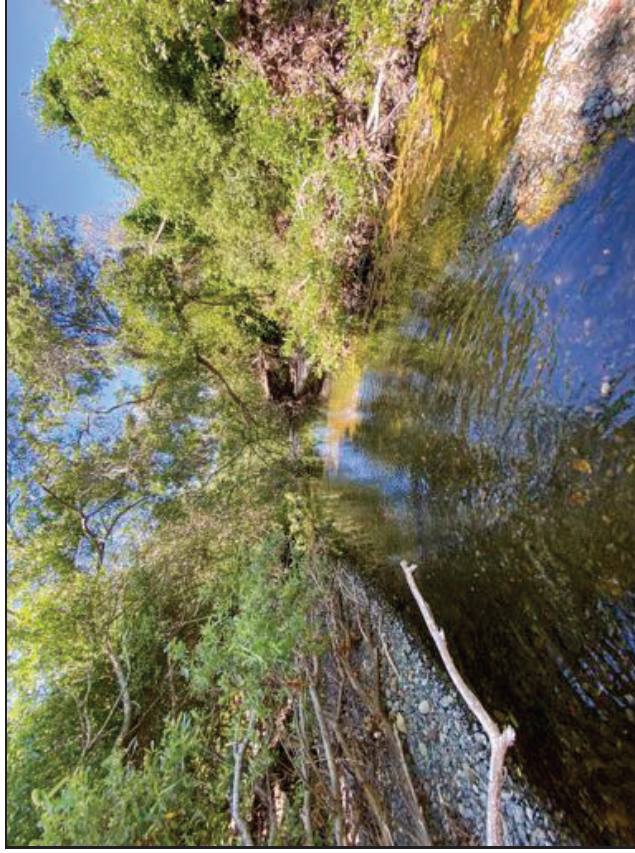
CCSD Monitoring May 25, 2020



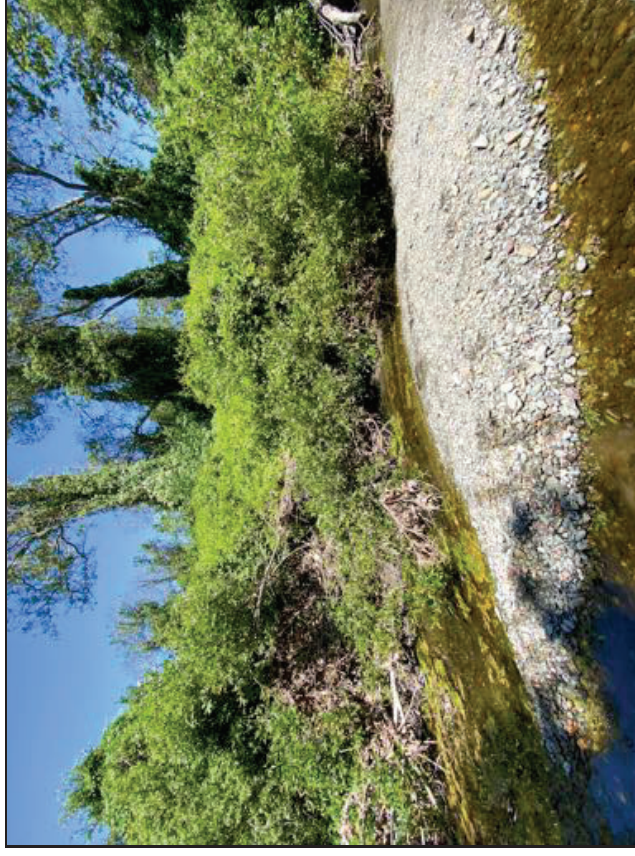
Site 4



Site 4



Site 4

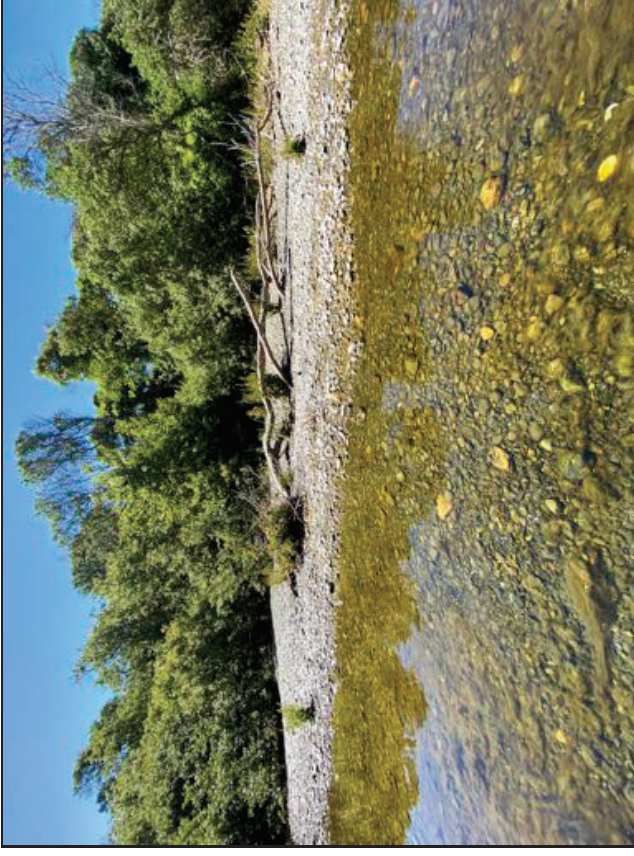


Site 4

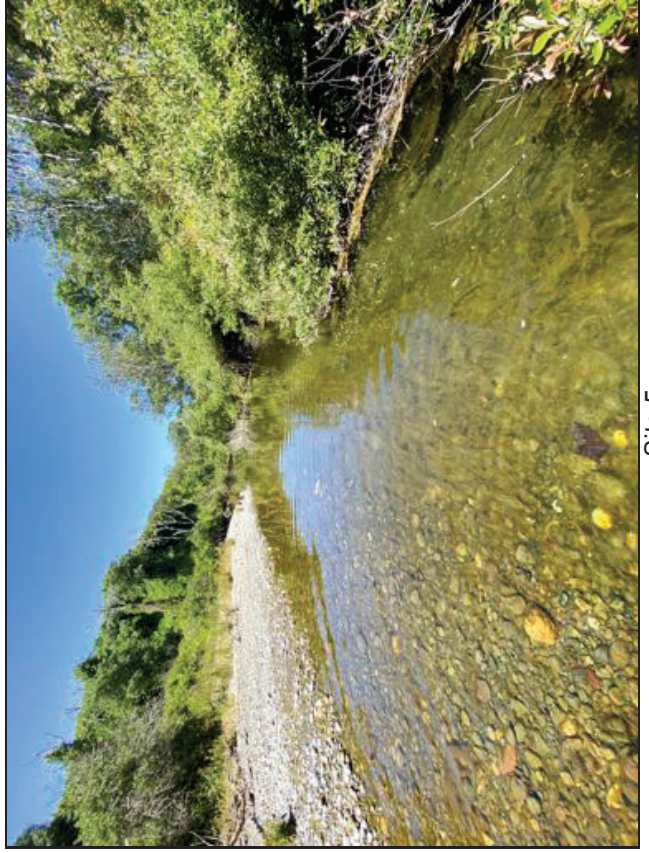
CCSD Monitoring May 25, 2020



Site 5



Site 5



Site 5



Site 5

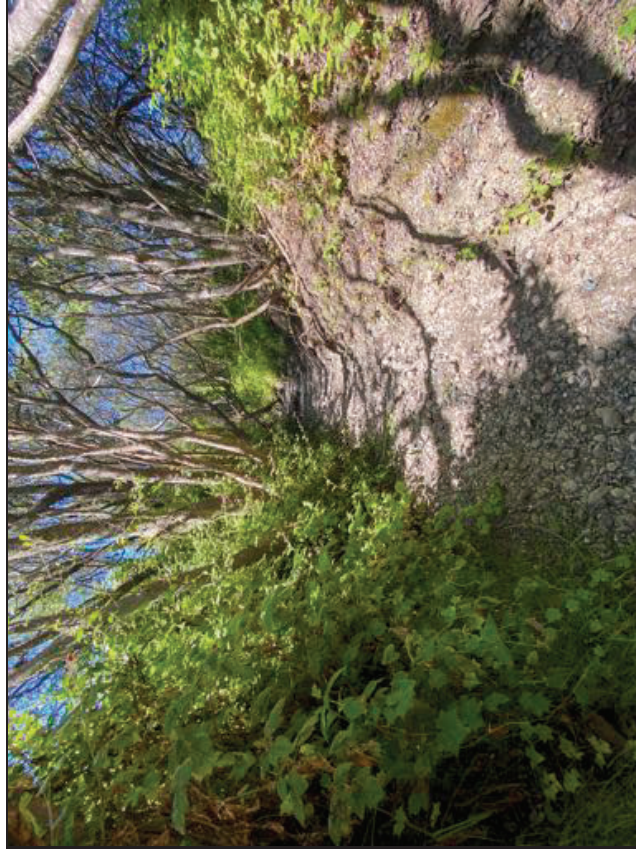
CCSD Monitoring May 25, 2020



Site 7



Site 7



Site 7

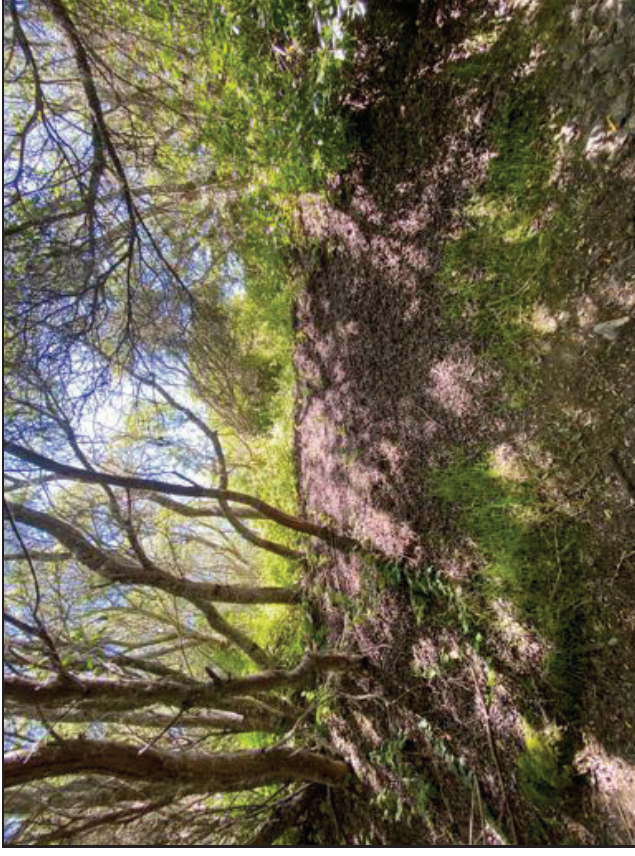


Site 7

CCSD Monitoring May 25, 2020



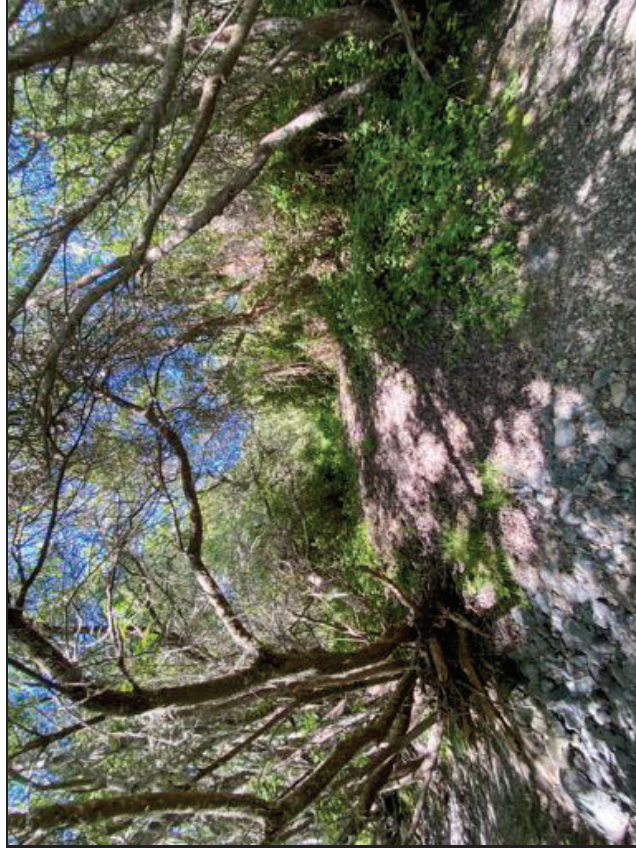
Site 8



Site 8

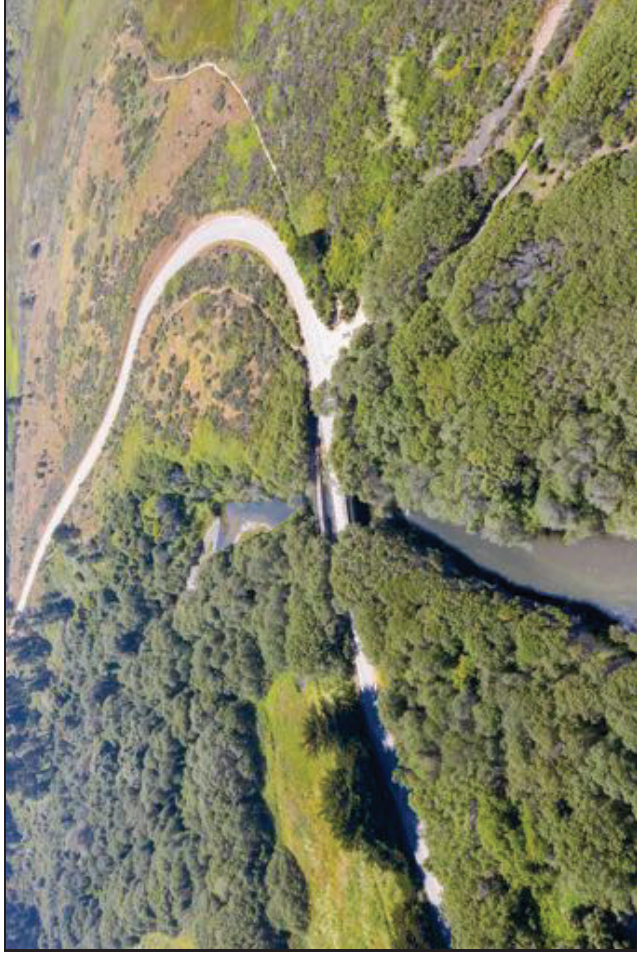


Site 8

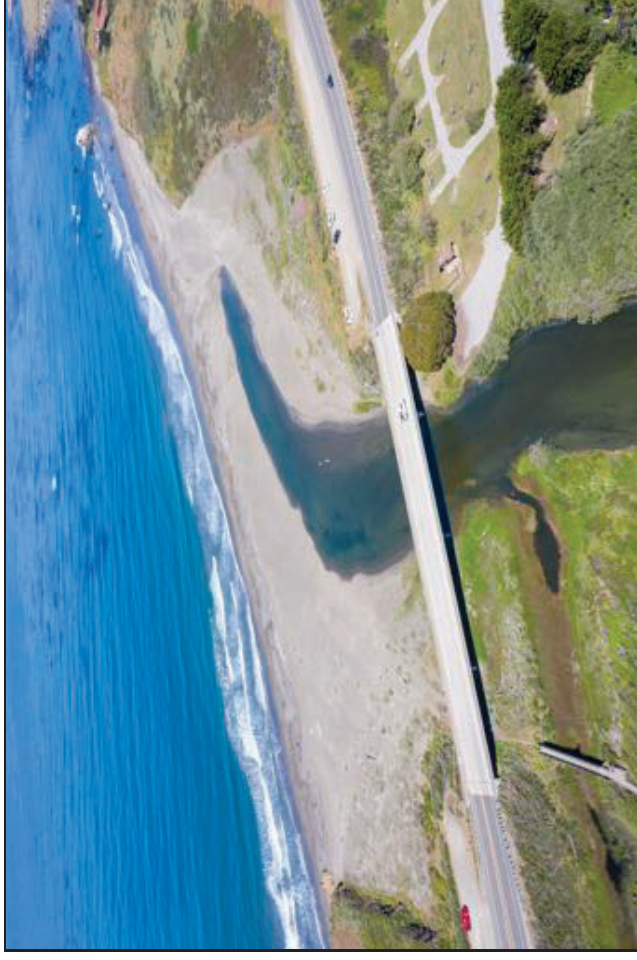


Site 8

CCSD Monitoring May 25, 2020



Walking Bridge PS-1

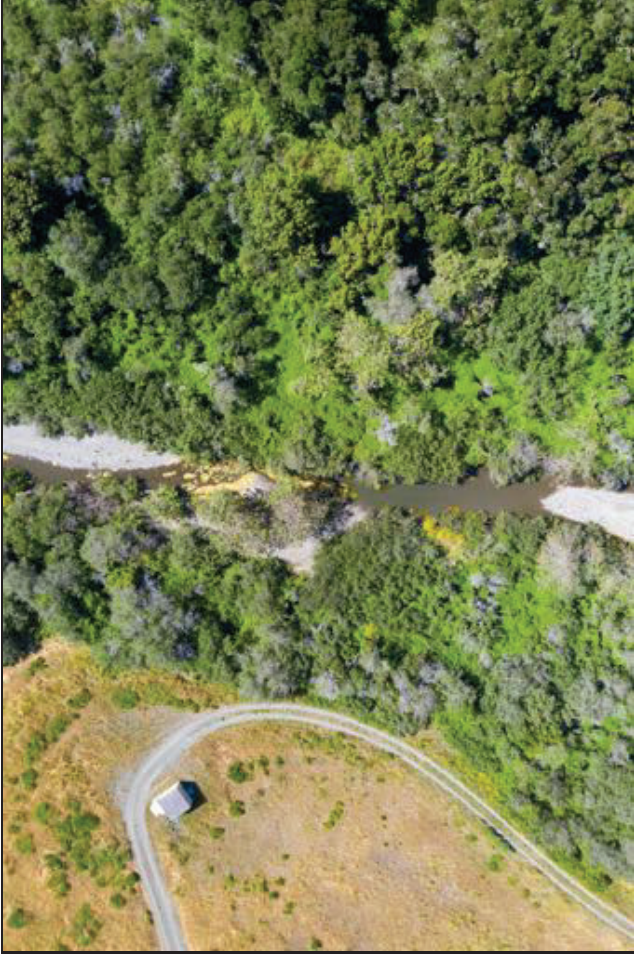


Estuary PS-2

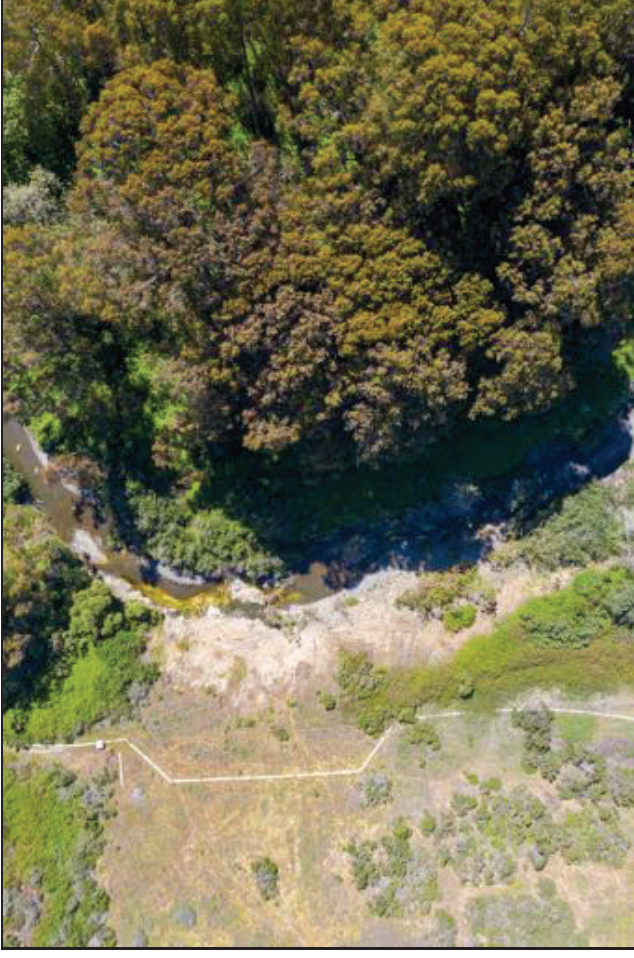


9P7 Well

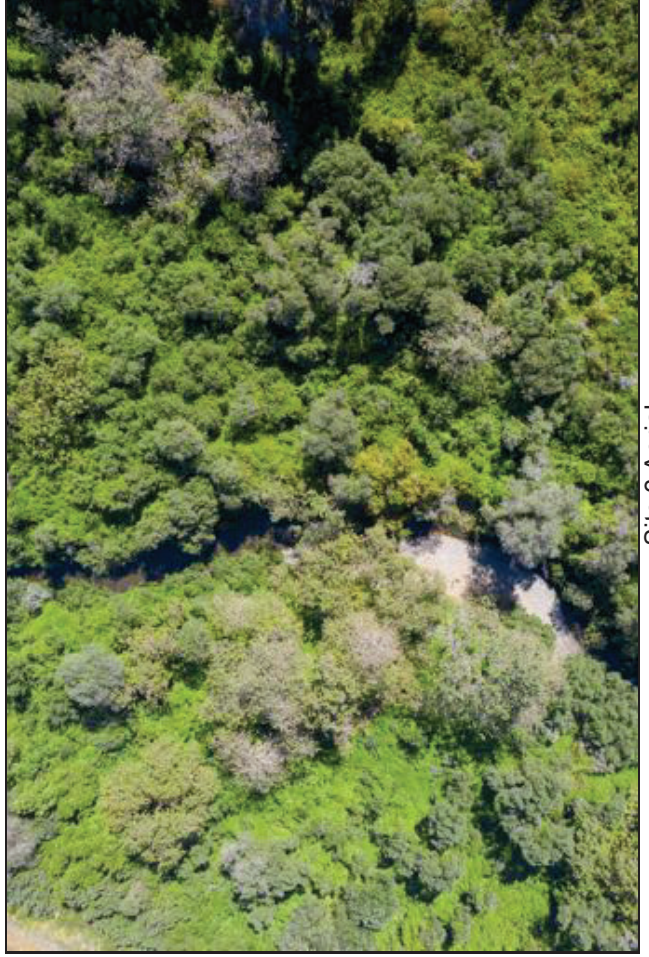
CCSD Monitoring May 25, 2020



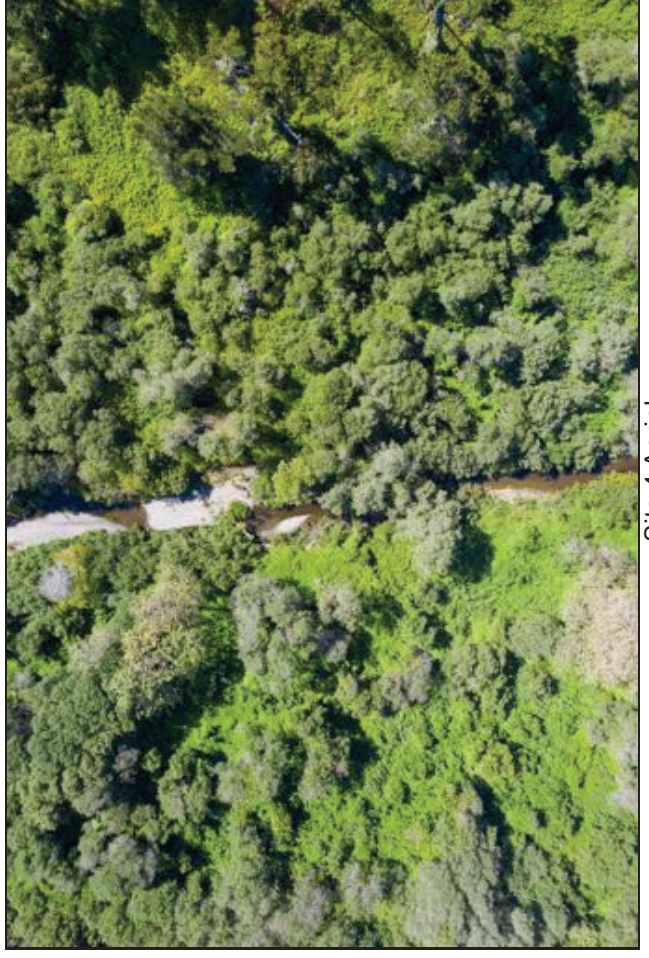
Site 1 Aerial



Site 2 Aerial

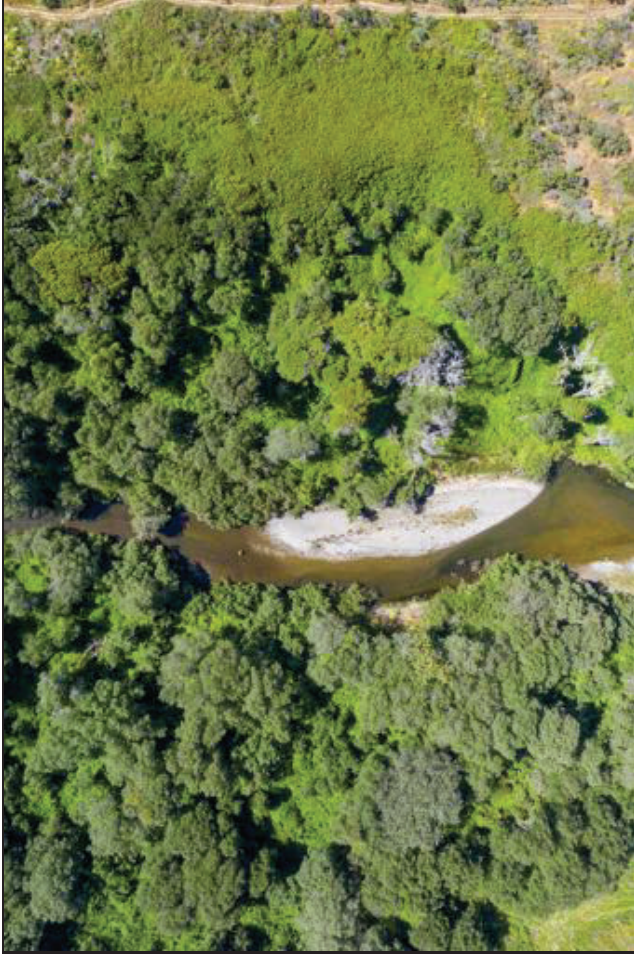


Site 3 Aerial

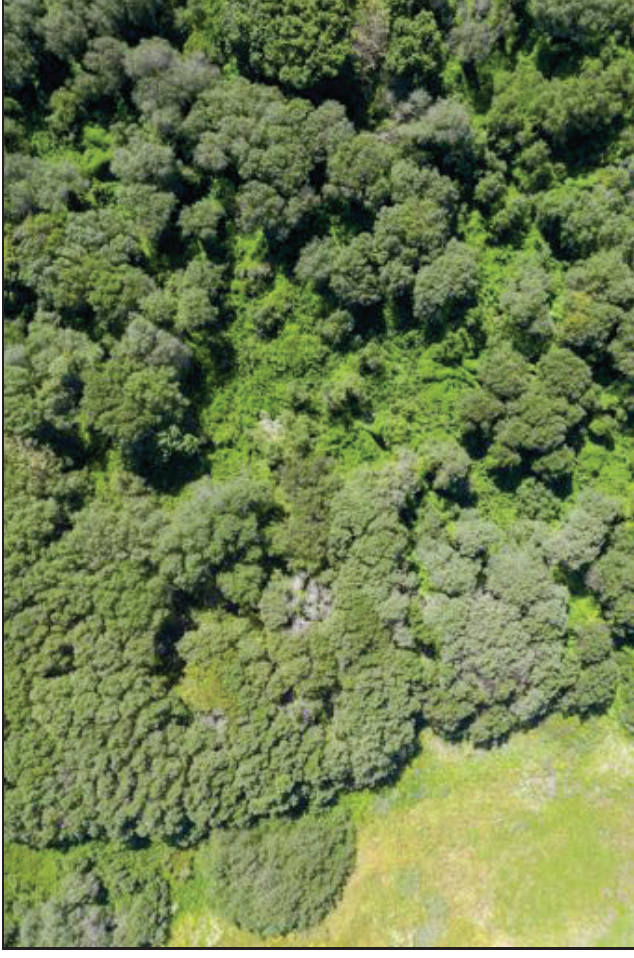


Site 4 Aerial

CCSD Monitoring May 25, 2020



Site 5 Aerial

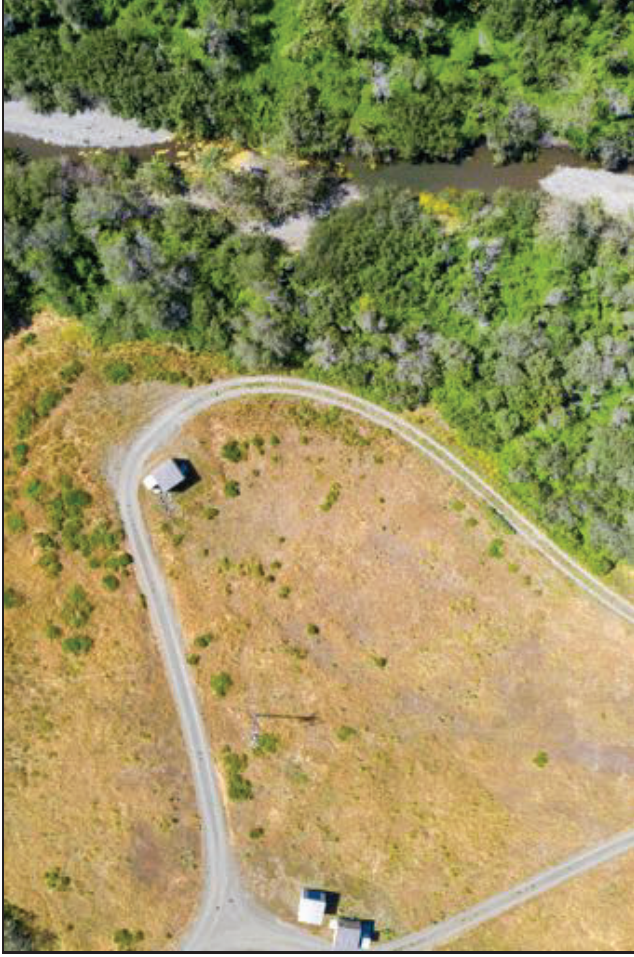


Site 7 Aerial

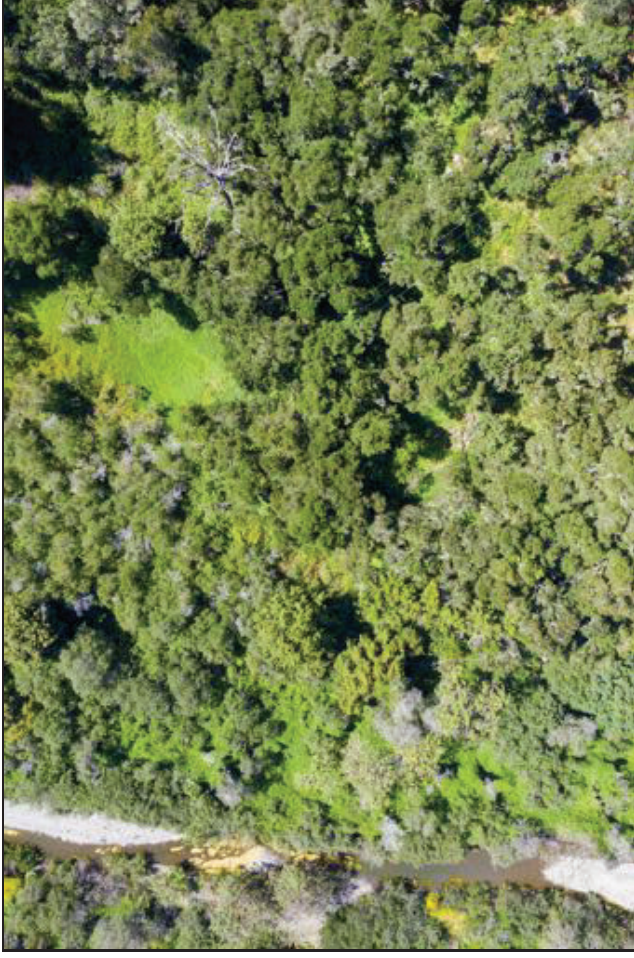


Site 8 Aerial

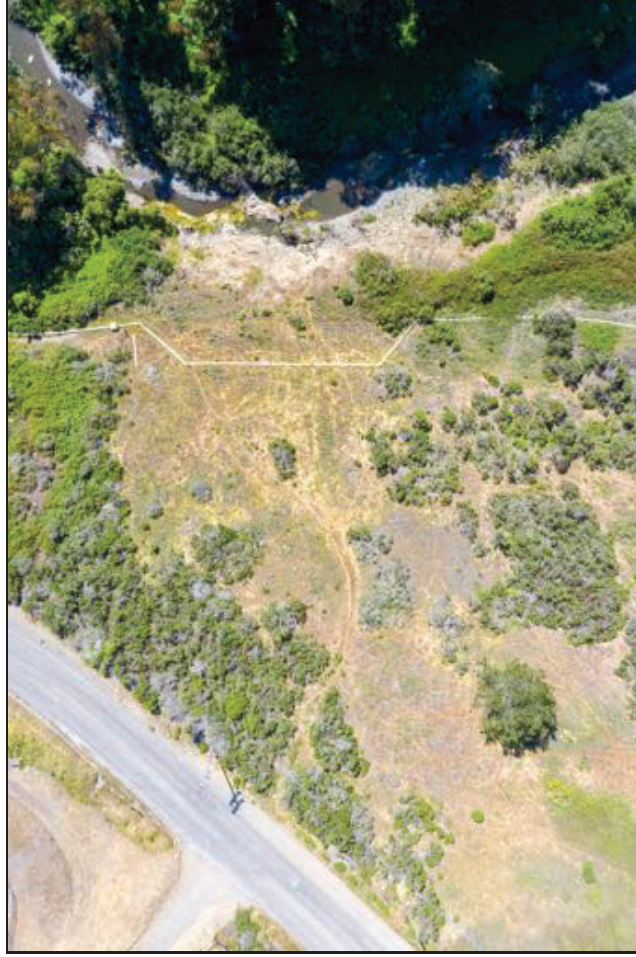
CCSD Monitoring May 25, 2020



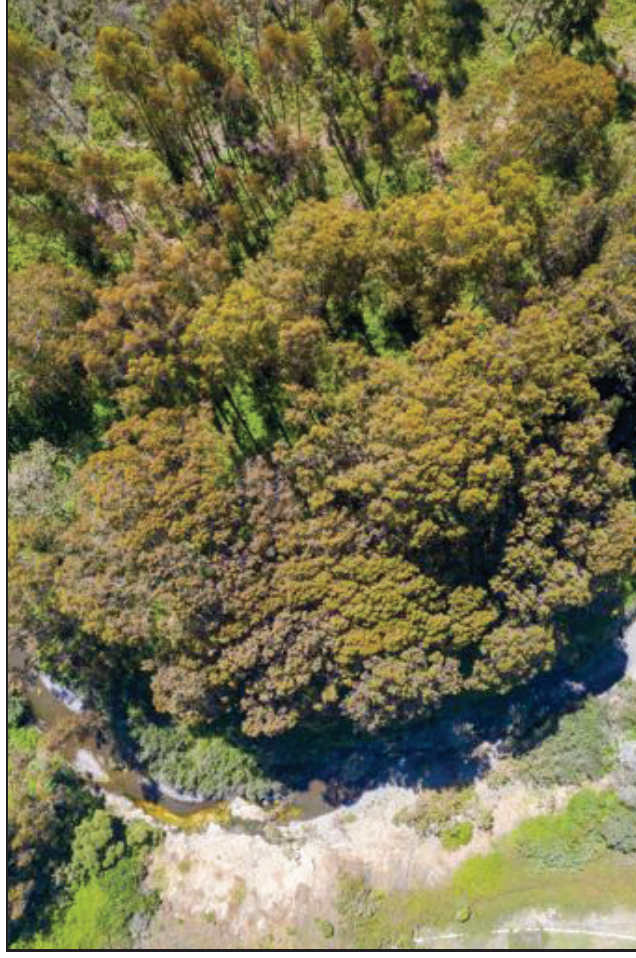
Site 1 Left Riparian



Site 1 Right Riparian

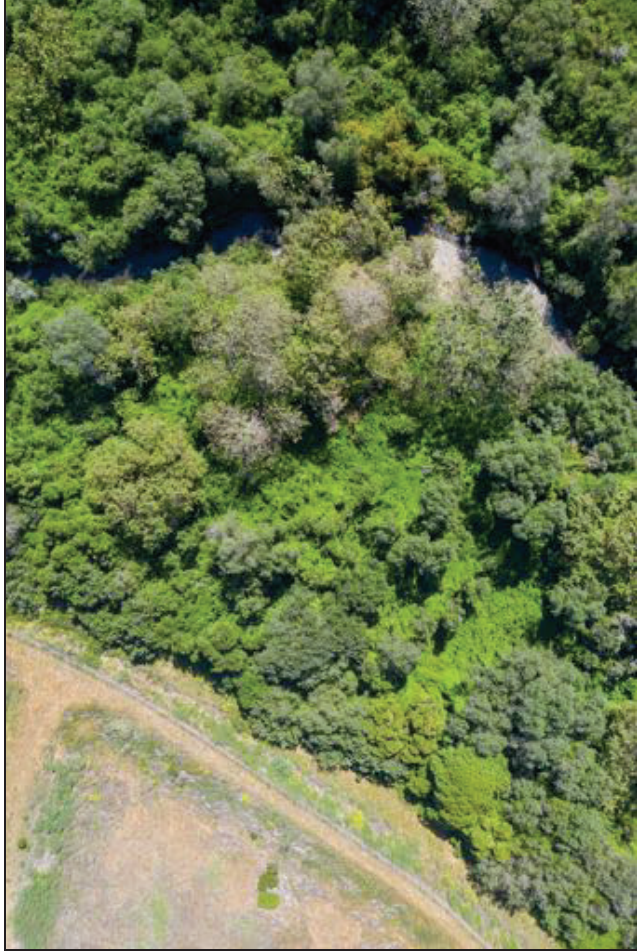


Site 2 Left Riparian

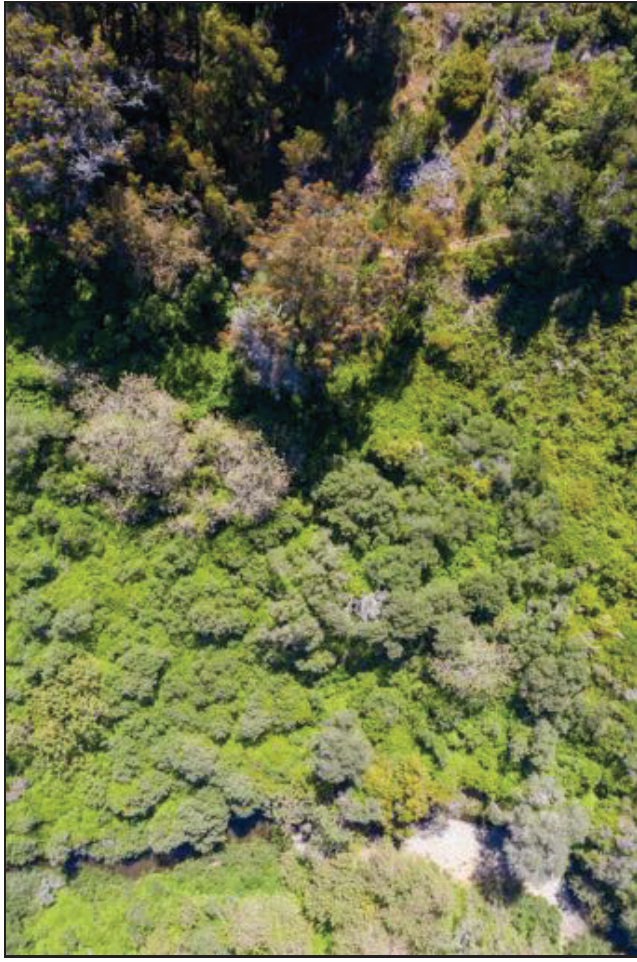


Site 2 Right Riparian

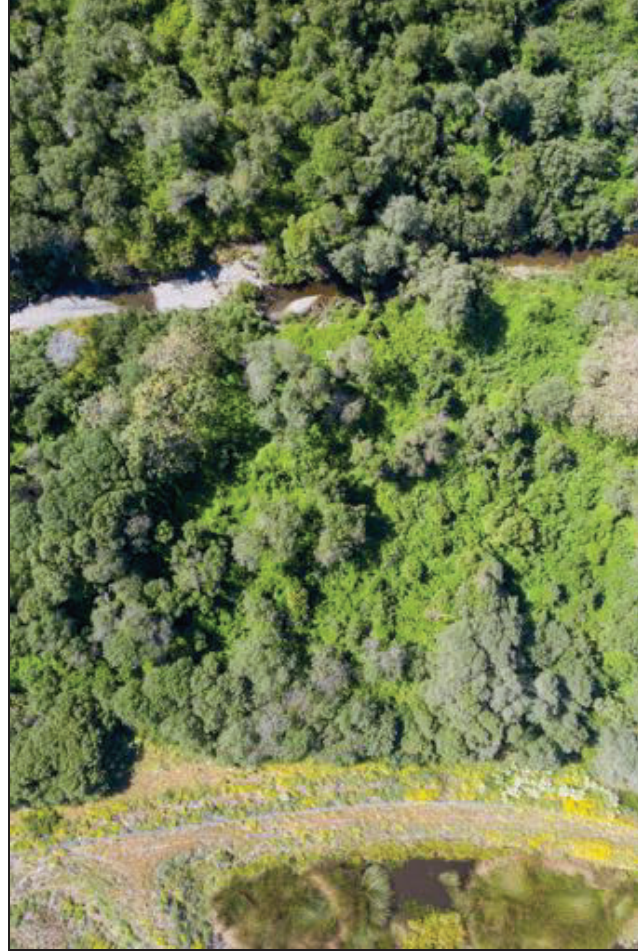
CCSD Monitoring May 25, 2020



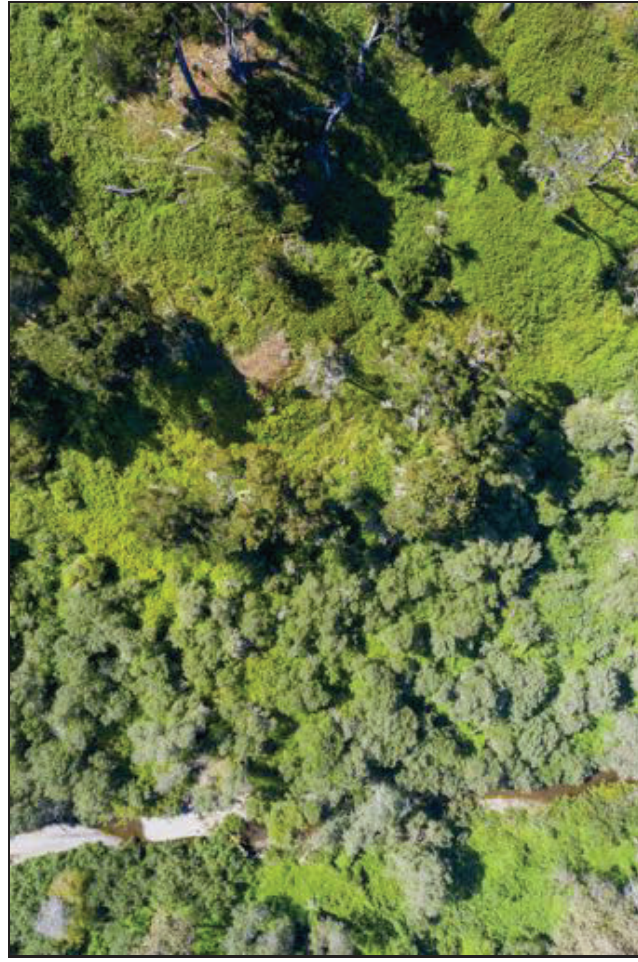
Site 3 Left Riparian



Site 3 Right Riparian



Site 4 Left Riparian

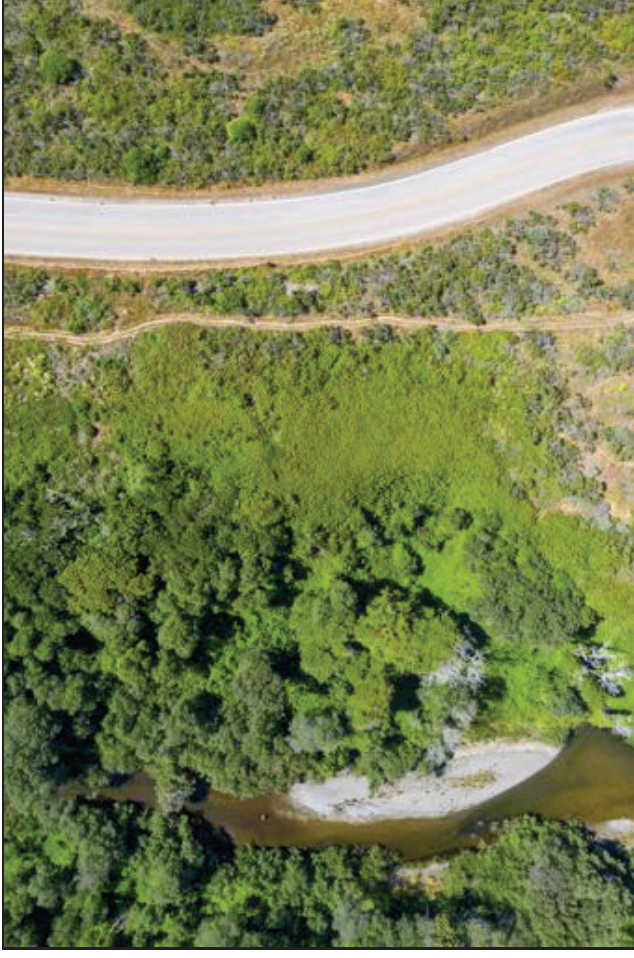


Site 4 Right Riparian

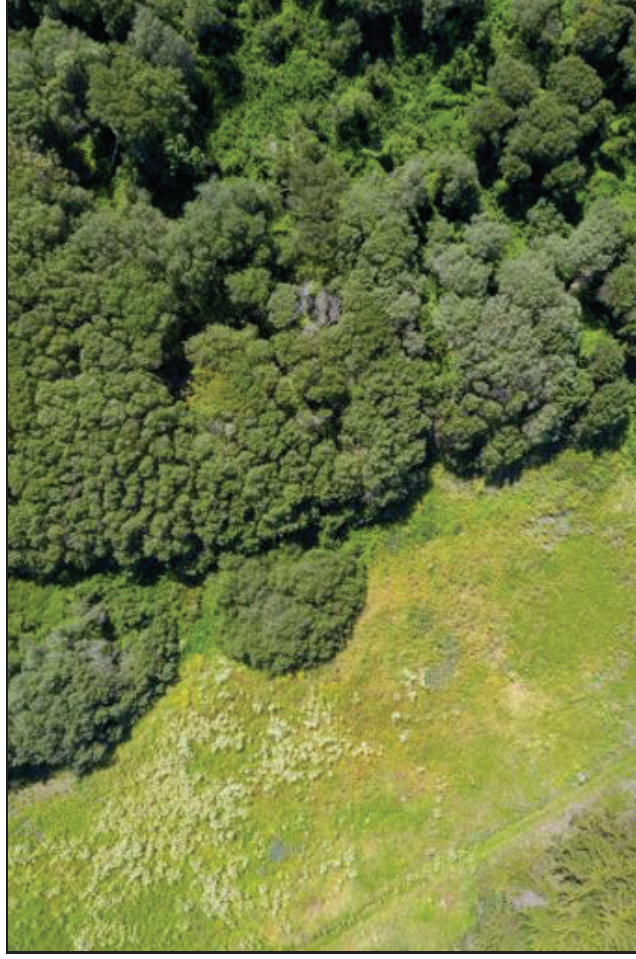
CCSD Monitoring May 25, 2020



Site 5 Left Riparian



Site 5 Right Riparian



Site 7 Left Riparian



Site 7 Right Riparian

CCSD Monitoring May 25, 2020



Site 8 Right & Left Riparian

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



Prepared by

Cleveland Biological, LLC
cindycleve@gmail.com
805.234.3759

June 7, 2020

AMP Monitoring Locations

San Simeon and Van Gordon Creeks

Legend

 Study Sites



2000 ft

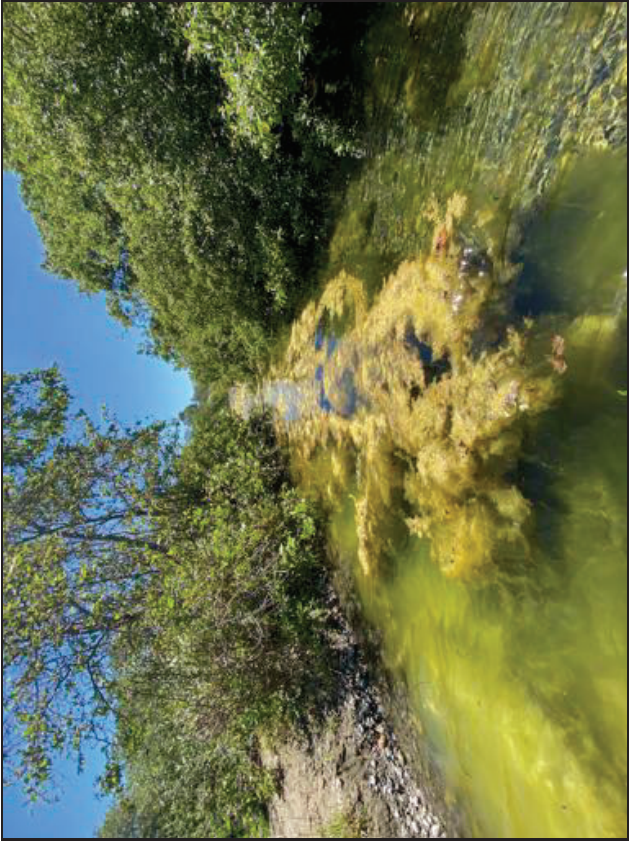
Google Earth

© 2020 Google

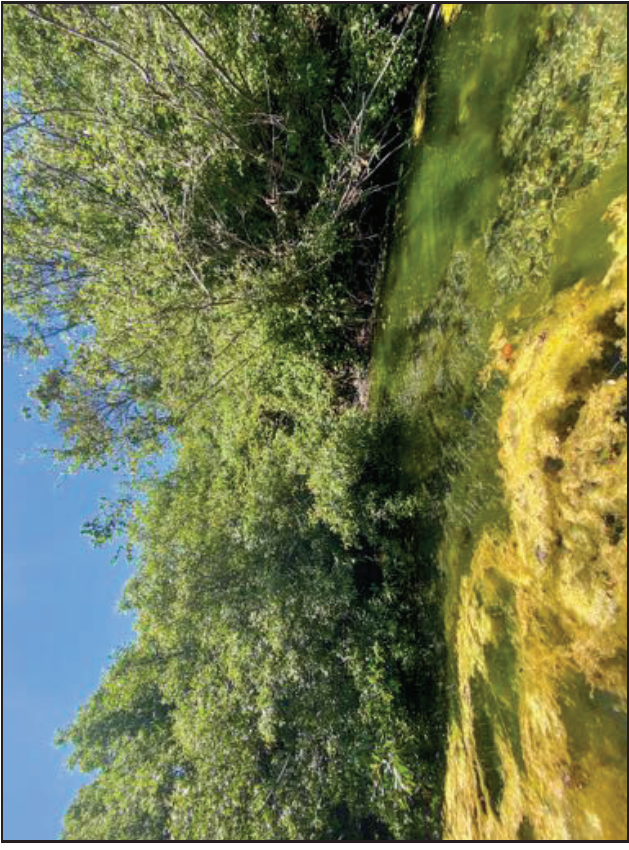
Cleveland Biological, LLC		CCSD AMP Biological Monitoring in San Simeon and Van Gordon Creeks					
Cindy & Paul Cleveland							
Survey Date: 6-7-2020		High Tide: 3:77 ft @ 1:21 PM	Low Tide: -1.52 ft @ 6:27 AM	Sandbar Breached: No	Stage (718): 2.52		
Location	<u>Site 1</u>	<u>Site 2</u>	<u>Site 3</u>	<u>Site 4</u>	<u>Site 5</u>	<u>Site 7*</u>	<u>Site 8</u>
Time	11:50 AM	11:20 AM	10:22 AM	9:43 AM	9:20 AM	9:05 AM	8:50 AM
Weather (°F, Cloud cover)	60, Clear	64, Clear	68, Clear	70, Clear	60, Clear	59, Clear	58, Clear
Habitat							
Stream type (run, riffle, pool)	Pool	Top of riffle	Pool above riffle	Run above riffle	Run below riffle	Dry	Dry
Instream cover type (lwd,swd,etc)	swd	riparian veg	lwd	lwd, swd	riparian veg	none	none
Substrate type (cobble, gravel, silt)	c, s	c, g	c, g	c, g	s, c	s, g	c, g, s
Substrate embedment (%)	85	25	50	50	50	75	75
Algae Surface (%)	75	0	0	0	0	0	0
Algae Subsurface (%)	75	0	0	100	75	0	0
Vegetation							
Instream cover (%)	10	15	15	25	10	0	0
Overhead cover (%)	10	5	15	25	10	80	90
Riparian width-Rt Bank (ft)	150	35	210	135	25	30	30
Riparian width-Lt Bank (ft)	100	10	220	230	85	85	55
Riparian Moisture-Rt Bank (%)	19.4	16.8	18.5	22	25.4	20.2	21.5
Riparian Moisture-Lt Bank (%)	14.6	19.9	23.3	24.3	10.3	18.4	16.4
Hydrology							
Maximum depth (ft)	2	0.5	1.2	0.6	2.3	0	0
Wetted width (ft)	22.5	11.2	23.5	19.5	27.5	0	0
Flow = Area x Rate (cfs)	2.9	0.3	1.4	1.1	2.7	0	0
Hydrology Calculations							
Depth 1 @ 1/4 (ft)	1.5	0.25	0.5	0.4	0.4	0	0
Depth 2 @ 1/2 (ft)	1.9	0.5	0.9	0.1	1.3	0	0
Depth 3 @ 3/4 (ft)	1.8	0.35	0.9	0.6	2.2	0	0
Average Depth = total/4 (ft)	1.3	0.3	0.6	0.3	1.0	0	0
Area = Width x Avg Depth (ft^2)	29.3	3.1	13.5	5.4	26.8	0	0
Rate from meter (ft/sec)	0.1	0.1	0.1	0.2	0.1	0	0

	<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)	68	66	60	64	60	Dry	Dry
Dissolved Oxygen (%)	Meter/Probe malfunction						
Dissolved Oxygen (ppm)							
Total Dissolved Solids (mg/L)							
Salinity (ppt)							
Species Observed	Steelhead trout observed between Sites 1 - 2, estimate of 2 fish, size of 5" - 6". Prickly sculpin observed at Site 4, one fish size of 5" - 6 Several schools of Threespine stickleback throughout, many very small.						
Comments	Water clear and deeper, likely due to backing up after sandbar closed. Water beginning to go subsurface between sites 1 and 2.						
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 121° 6'33.42"W	35°35'57.55"N 121° 6'53.39"W	35°35'48.09"N 121° 6'54.29"W	35°35'41.88"N 121° 7'4.04"W	35°35'40.00"N 121° 7'14.25"W	35°35'43.10"N 121° 7'13.85"W	35°35'48.06"N 121° 7'9.81"W
*Site 6 is on State Parks property and is not accessible at this time.							
9P7 Soil Moisture†							
North (%)	14.9						
East (%)	7.9						
South (%)	13.5						
West (%)	15.2						
†Moisture measured on each side of well casing. Max reading is 50%.							

CCSD Monitoring June 7, 2020



Site 1



Site 1



Site 1

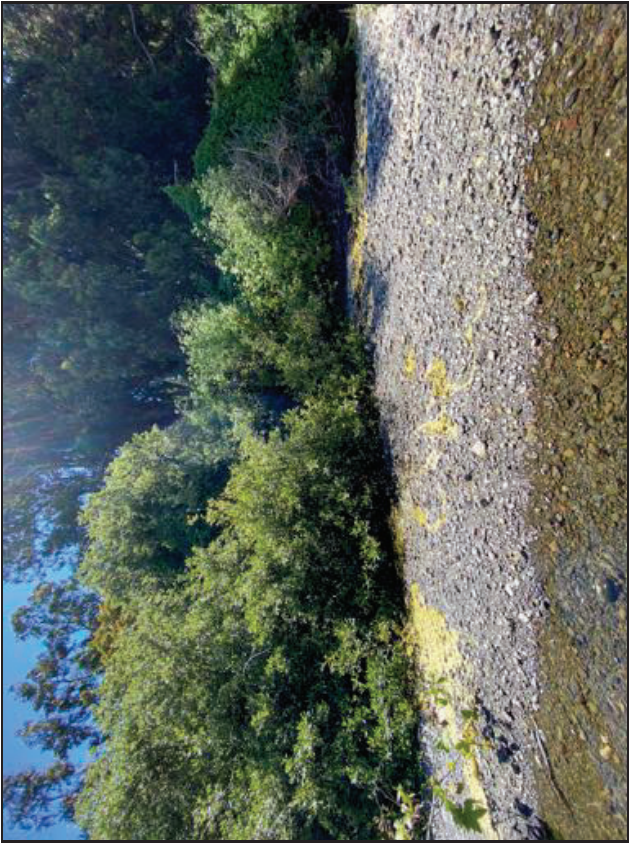


Site 1

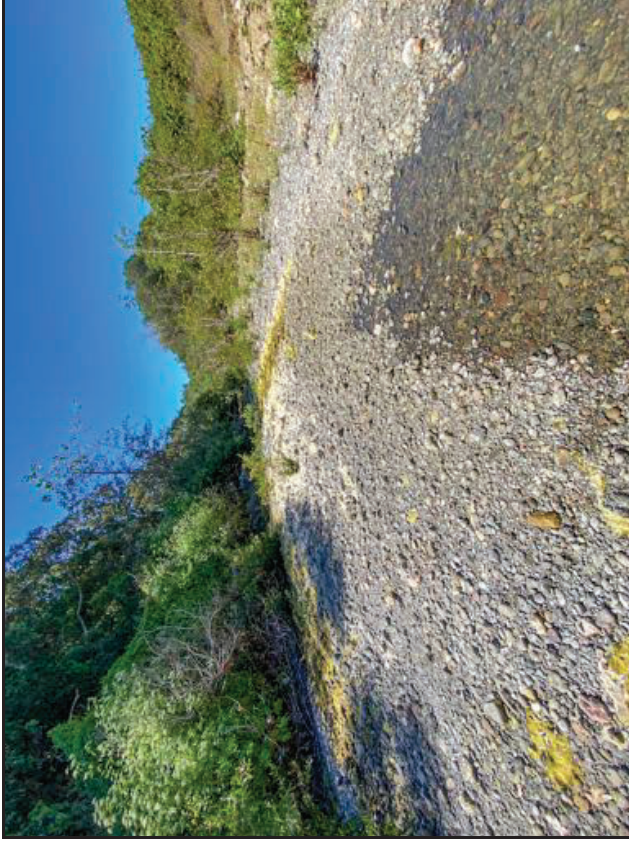
CCSD Monitoring June 7, 2020



Site 2



Site 2

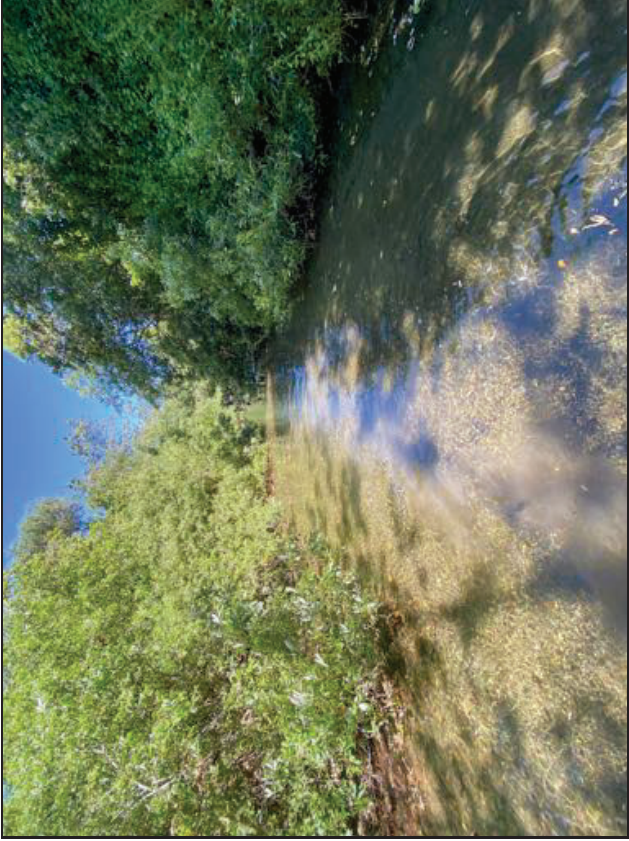


Site 2



Site 2

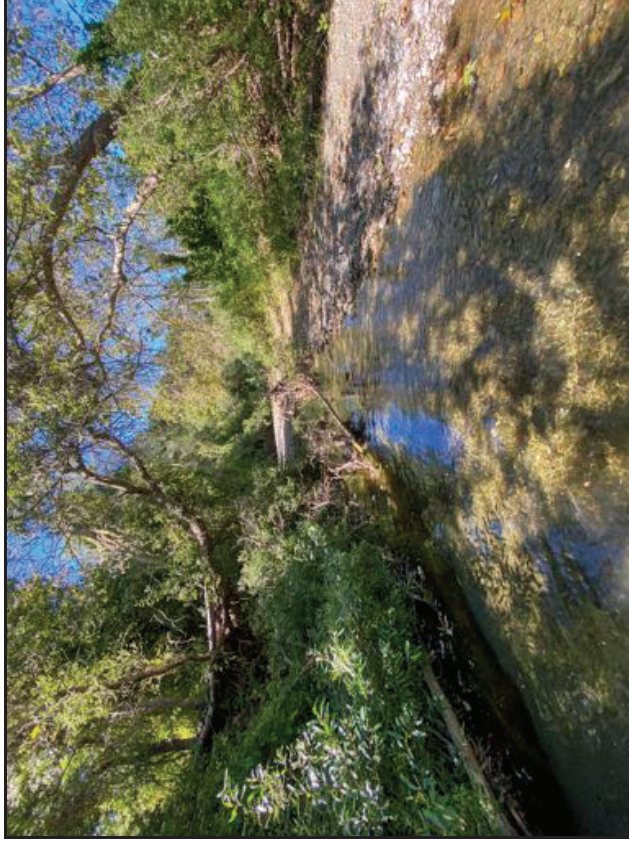
CCSD Monitoring June 7, 2020



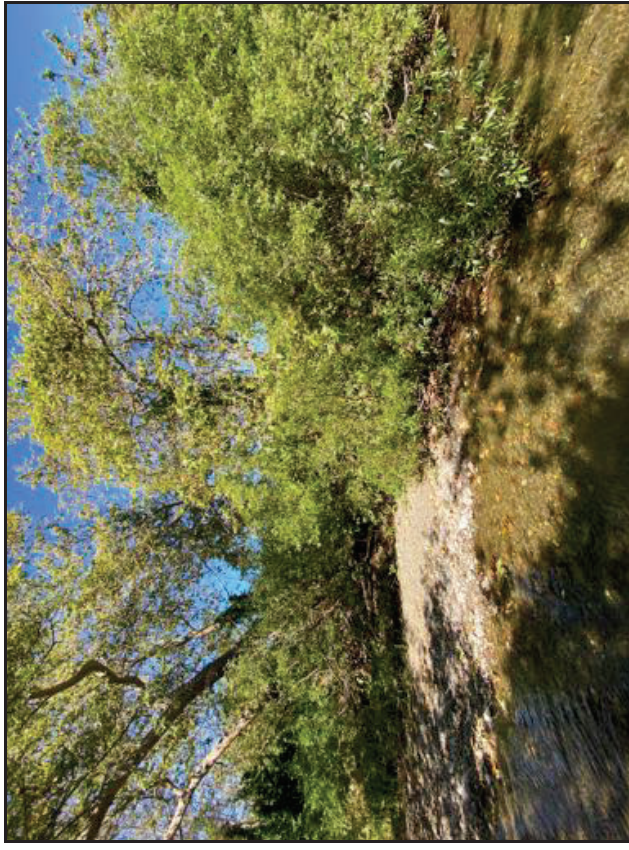
Site 3



Site 3



Site 3



Site 3

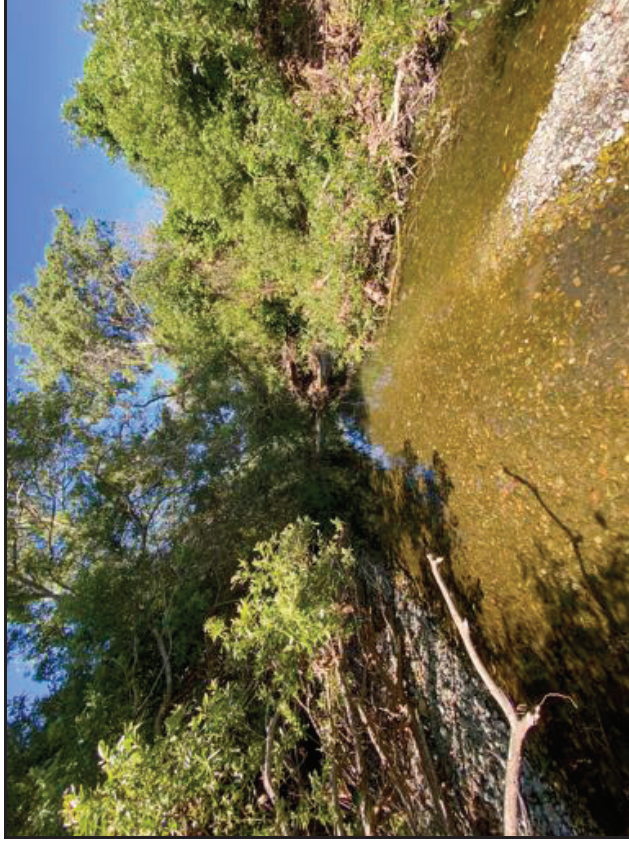
CCSD Monitoring June 7, 2020



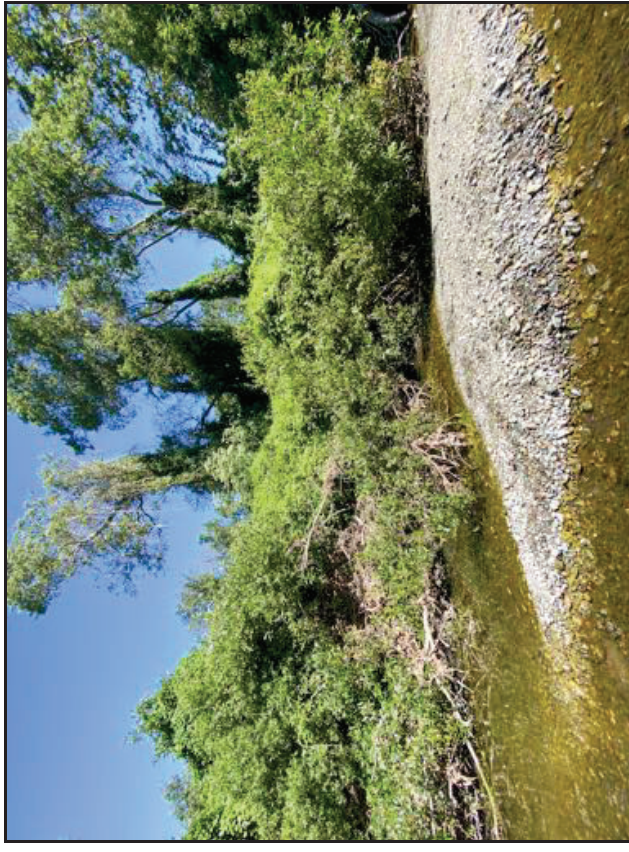
Site 4



Site 4



Site 4

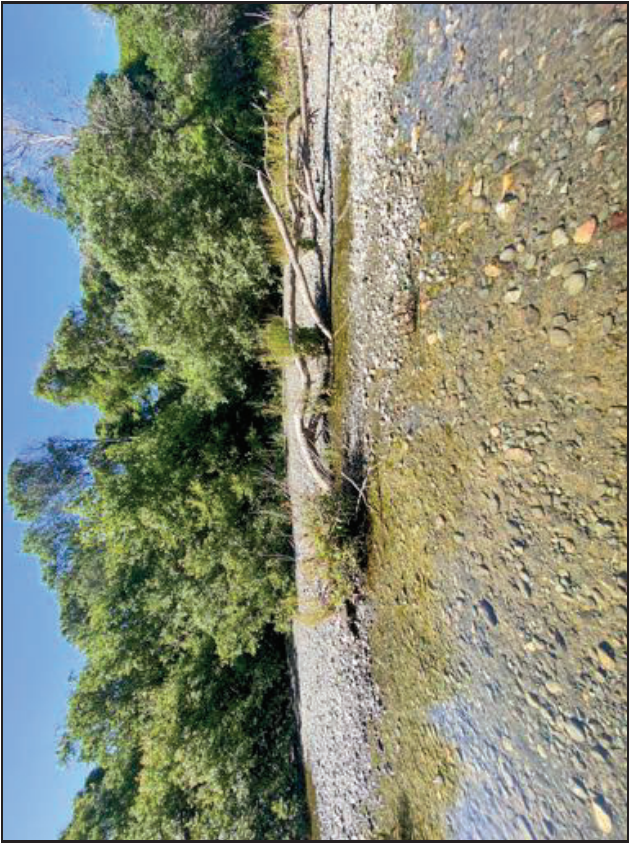


Site 4

CCSD Monitoring June 7, 2020



Site 5



Site 5



Site 5



Site 5

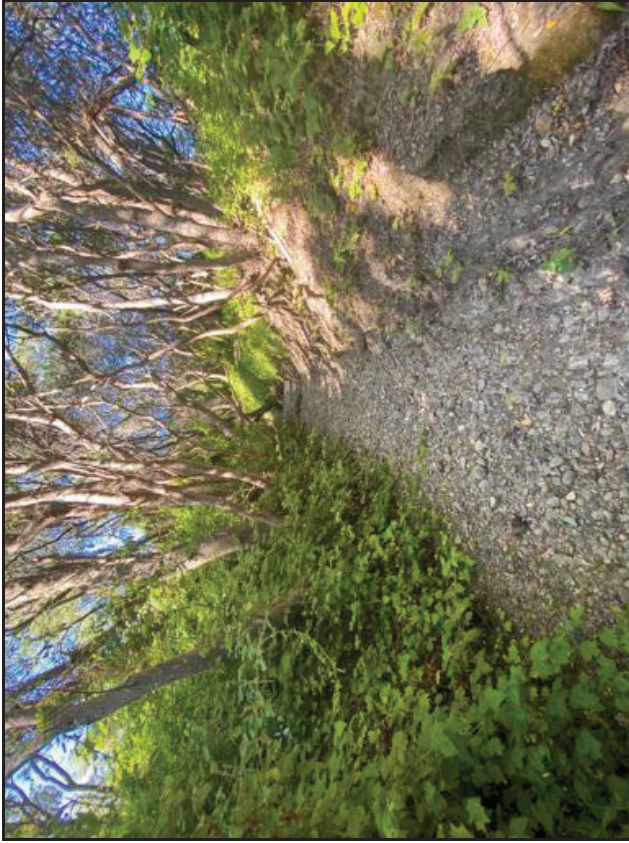
CCSD Monitoring June 7, 2020



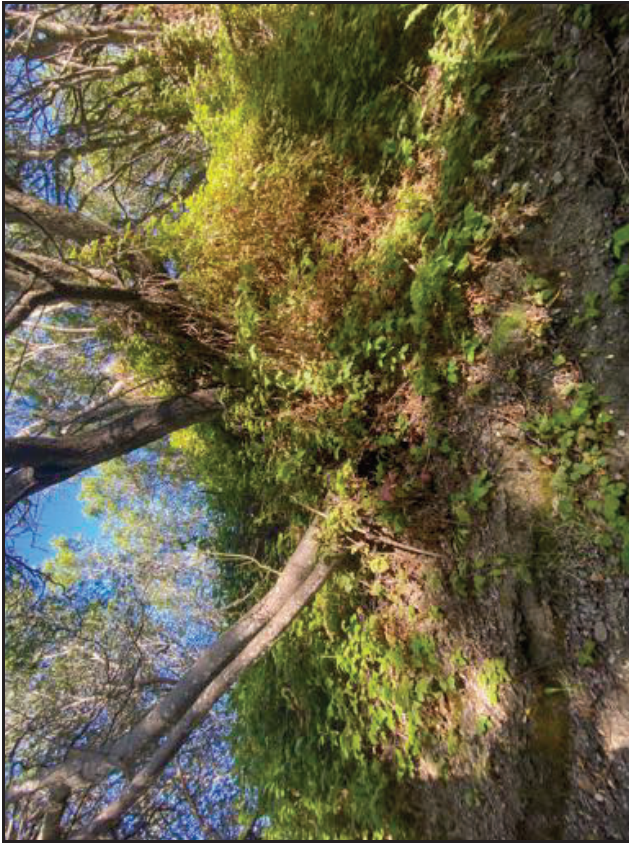
Site 7



Site 7



Site 7

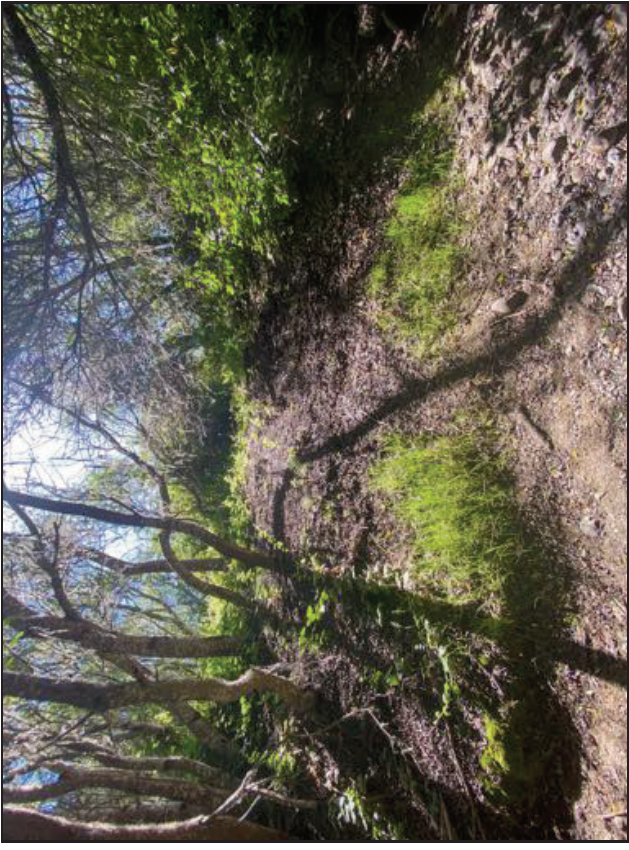


Site 7

CCSD Monitoring June 7, 2020



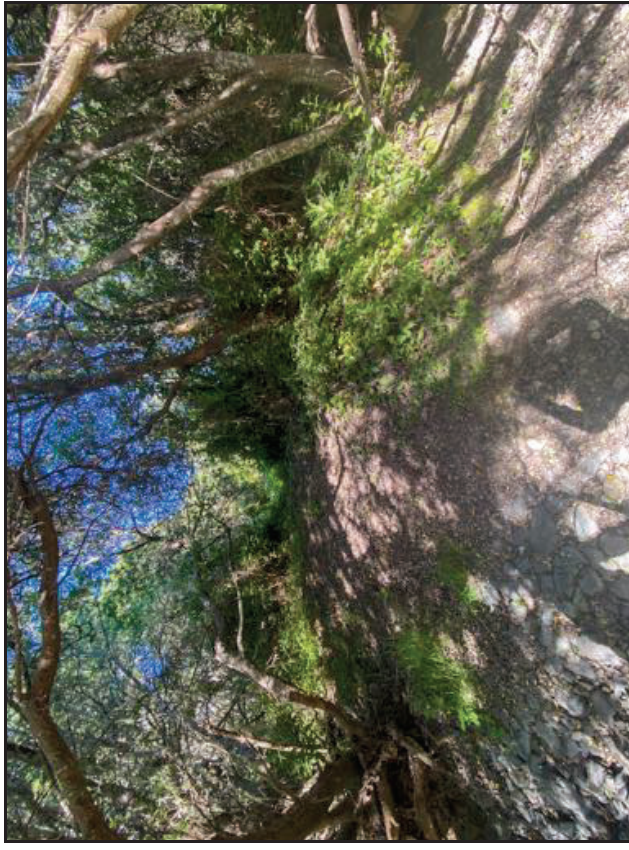
Site 8



Site 8

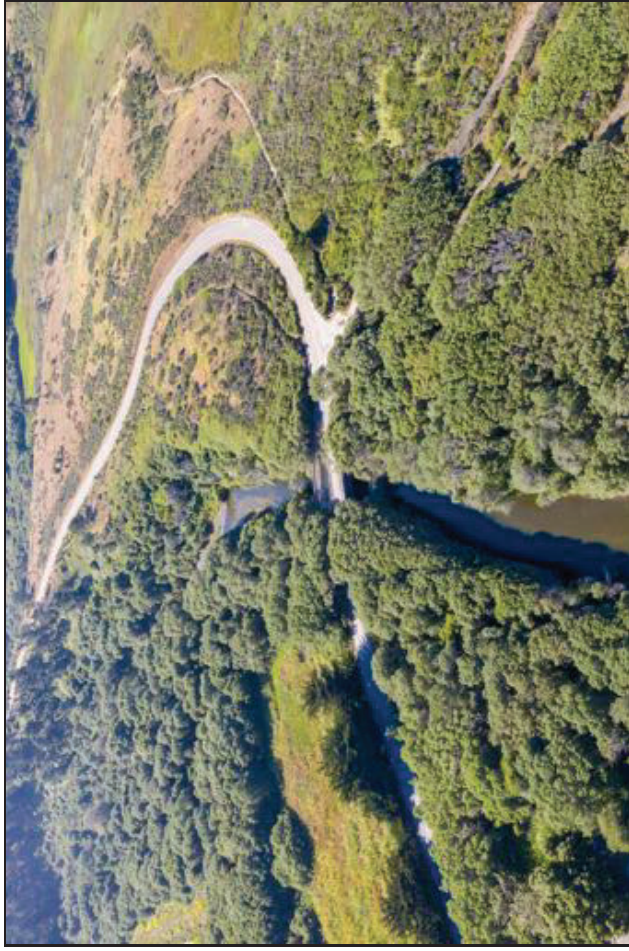


Site 8



Site 8

CCSD Monitoring June 7, 2020



Walking Bridge PS-1

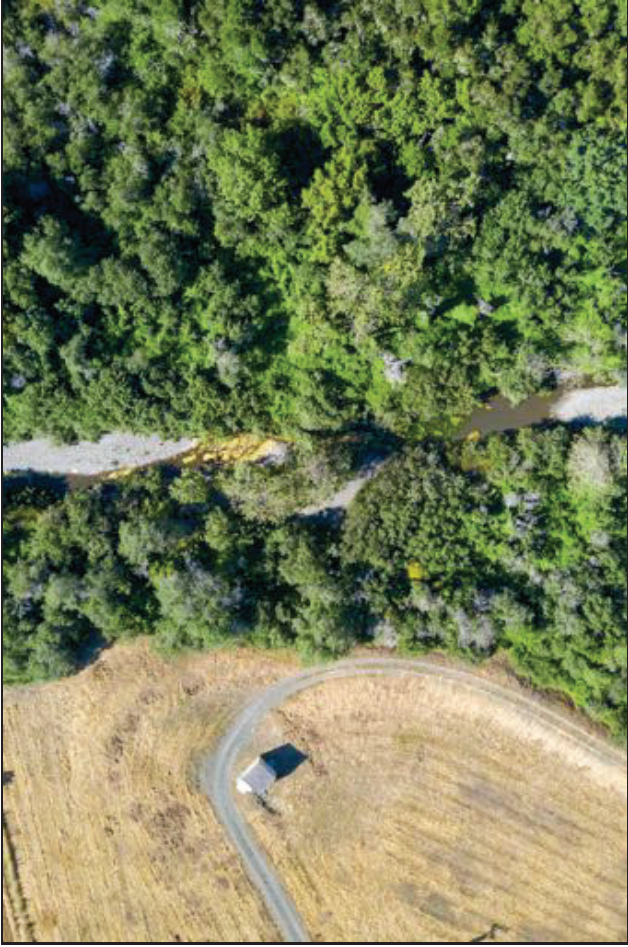


Estuary PS-2

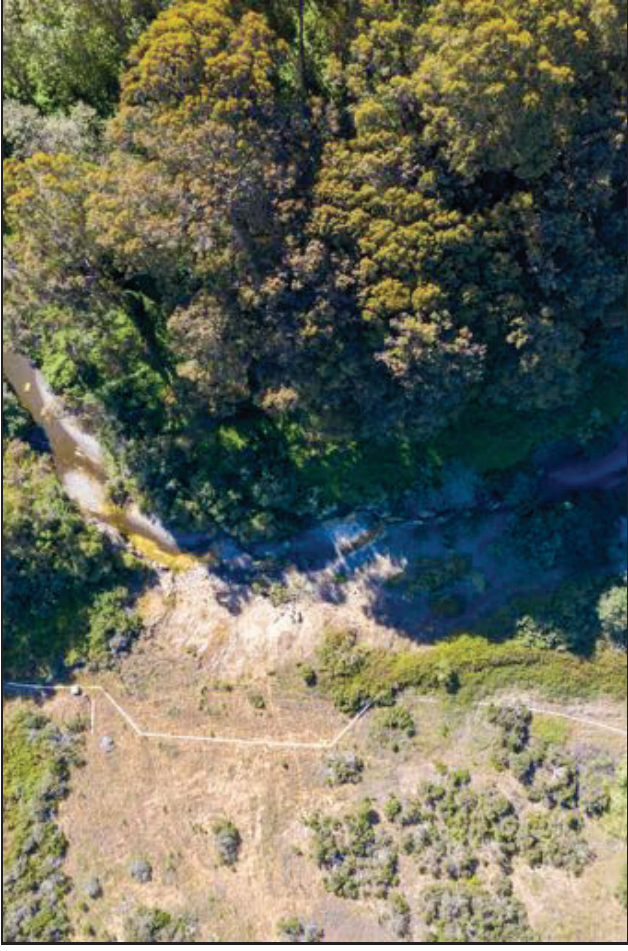


9P7 Well

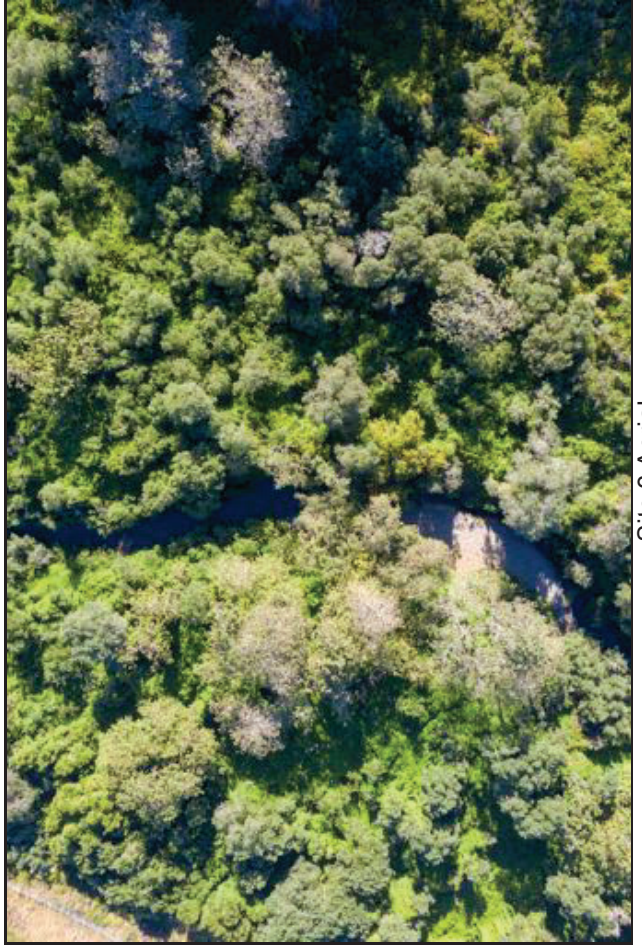
CCSD Monitoring June 7, 2020



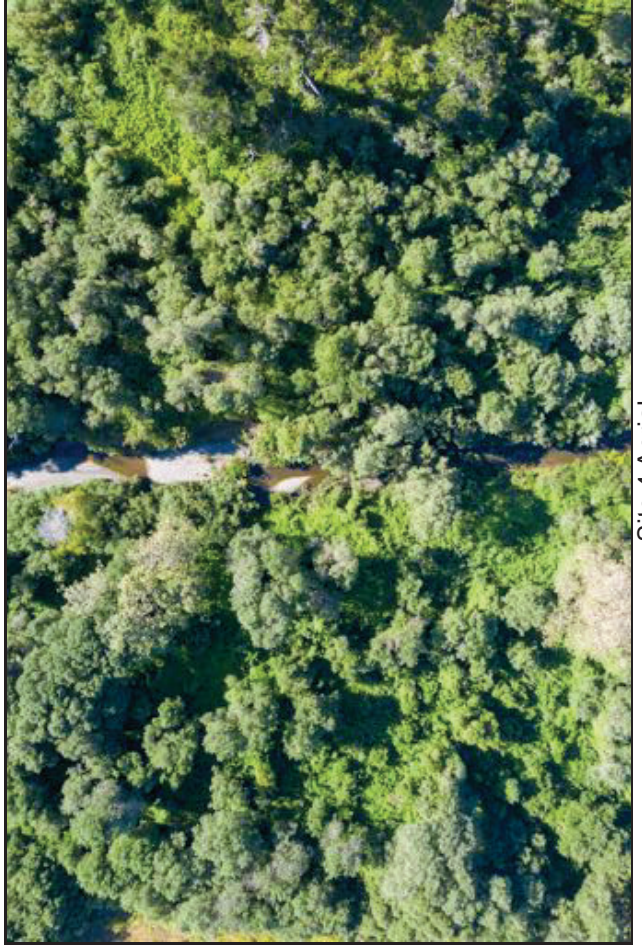
Site 1 Aerial



Site 2 Aerial

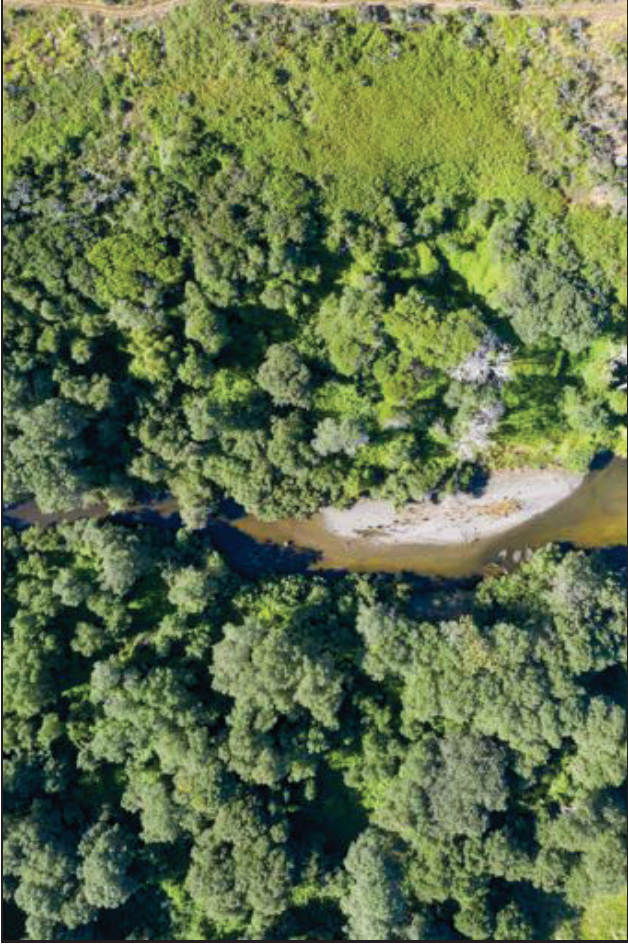


Site 3 Aerial

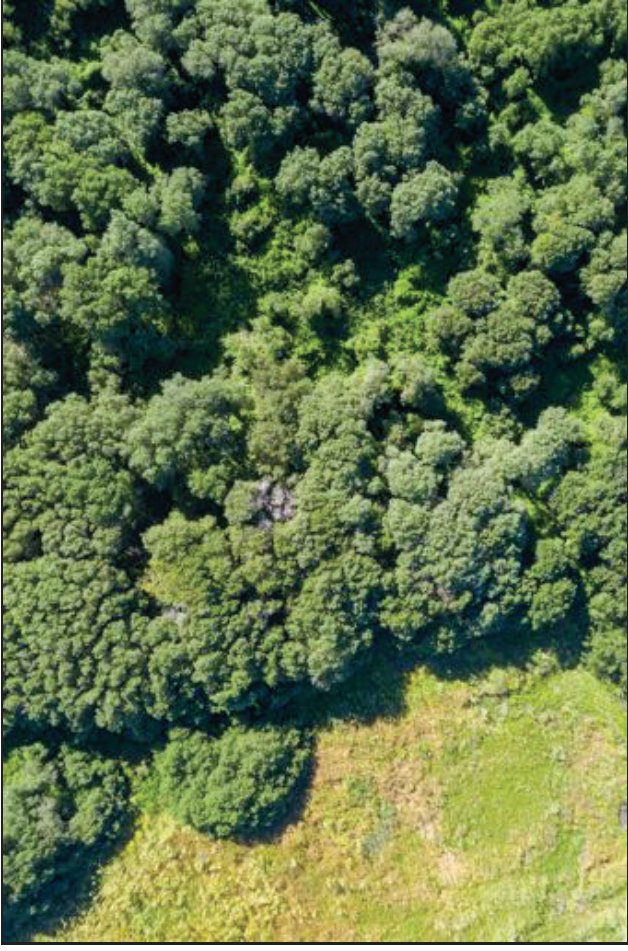


Site 4 Aerial

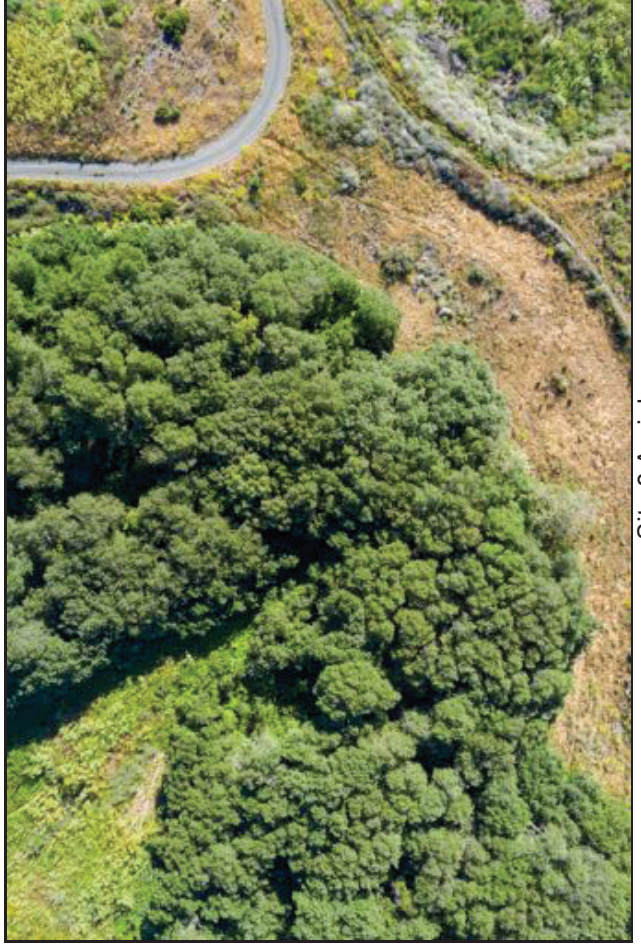
CCSD Monitoring June 7, 2020



Site 5 Aerial

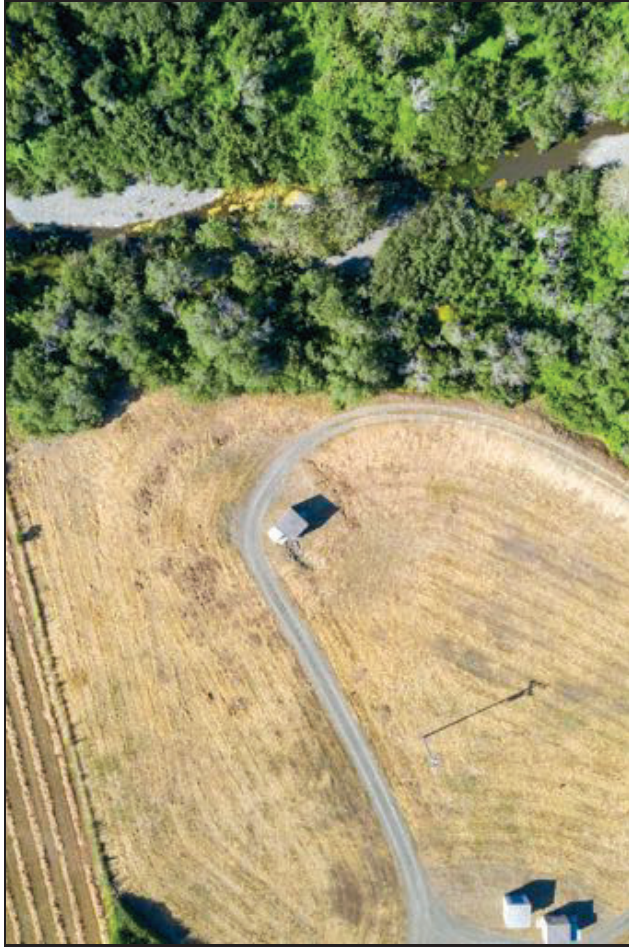


Site 7 Aerial

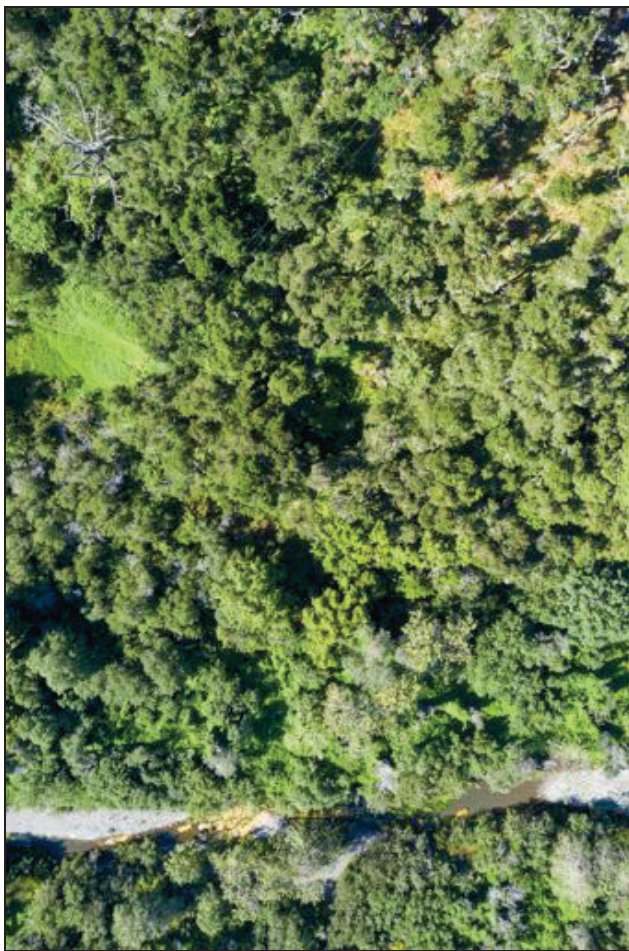


Site 8 Aerial

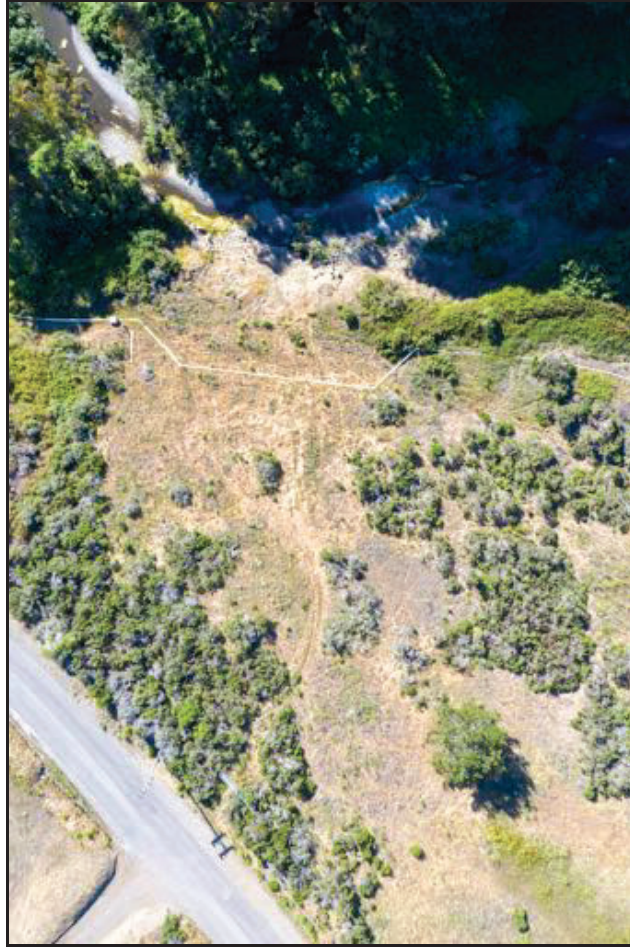
CCSD Monitoring June 7, 2020



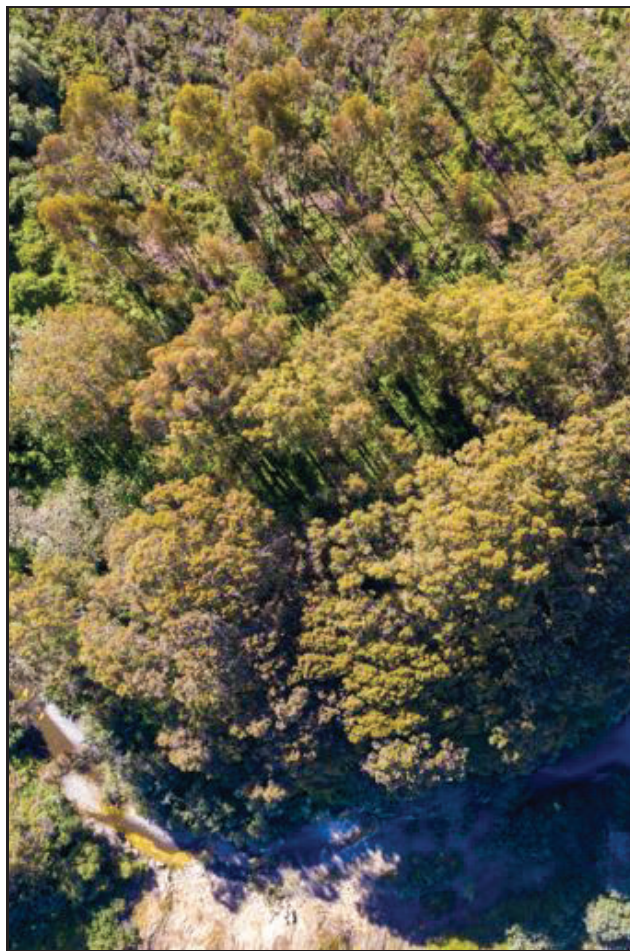
Site 1 Left Riparian



Site 1 Right Riparian

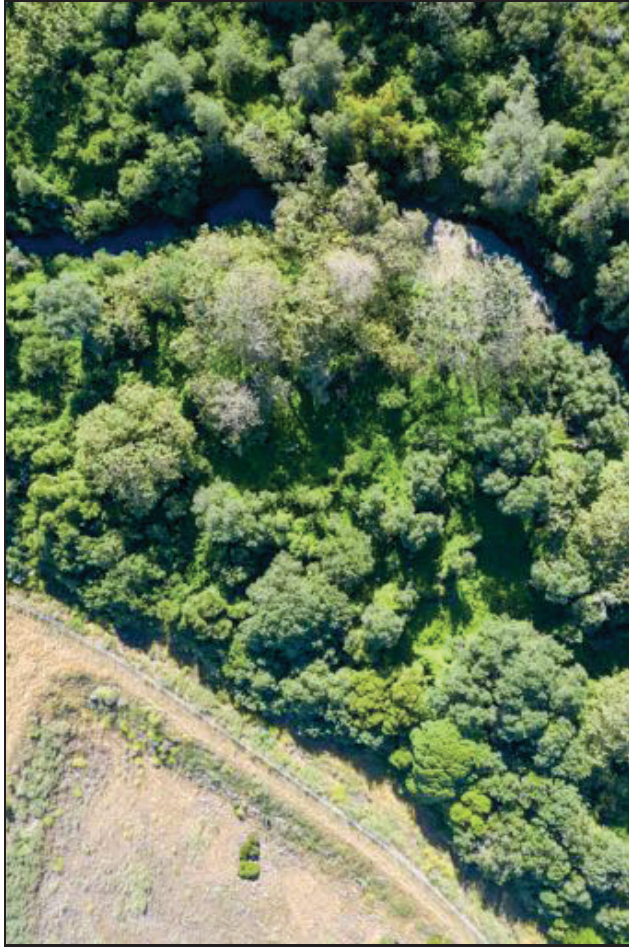


Site 2 Left Riparian

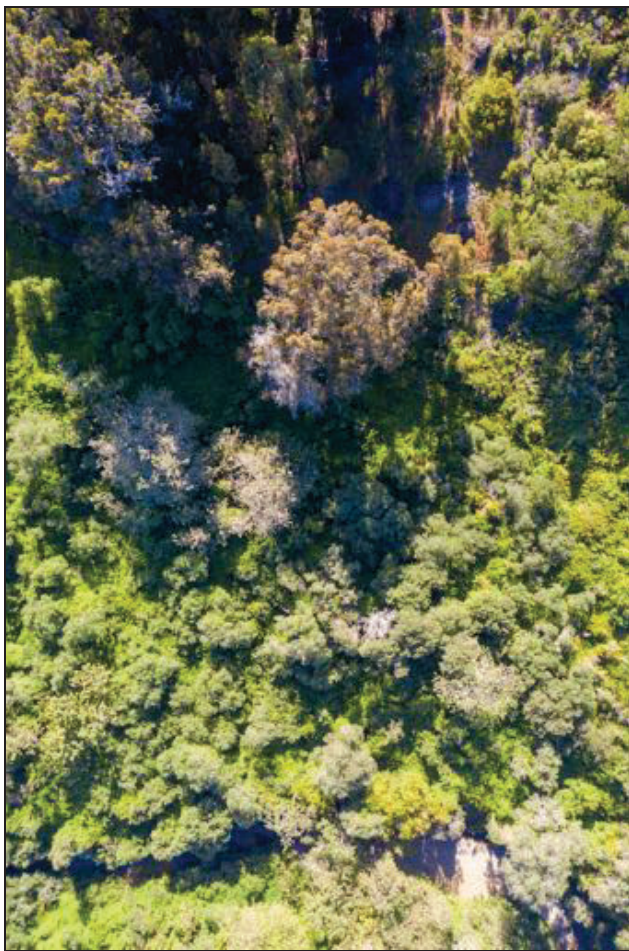


Site 2 Right Riparian

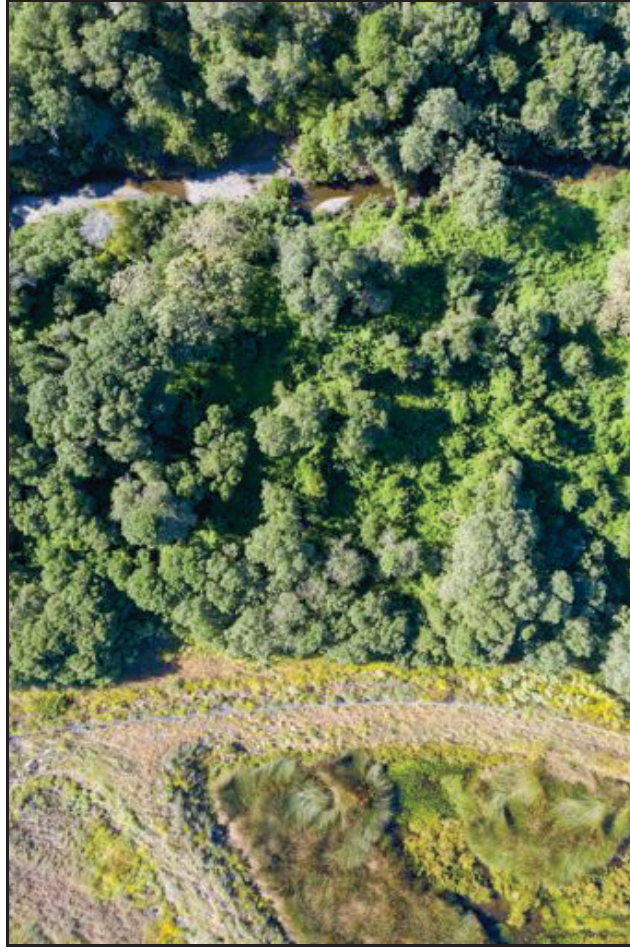
CCSD Monitoring June 7, 2020



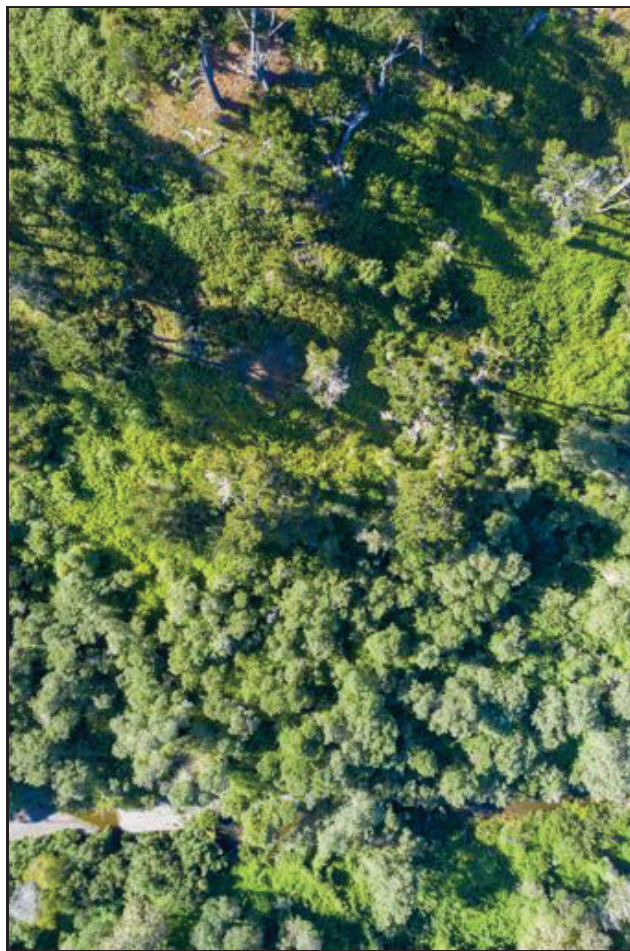
Site 3 Left Riparian



Site 3 Right Riparian

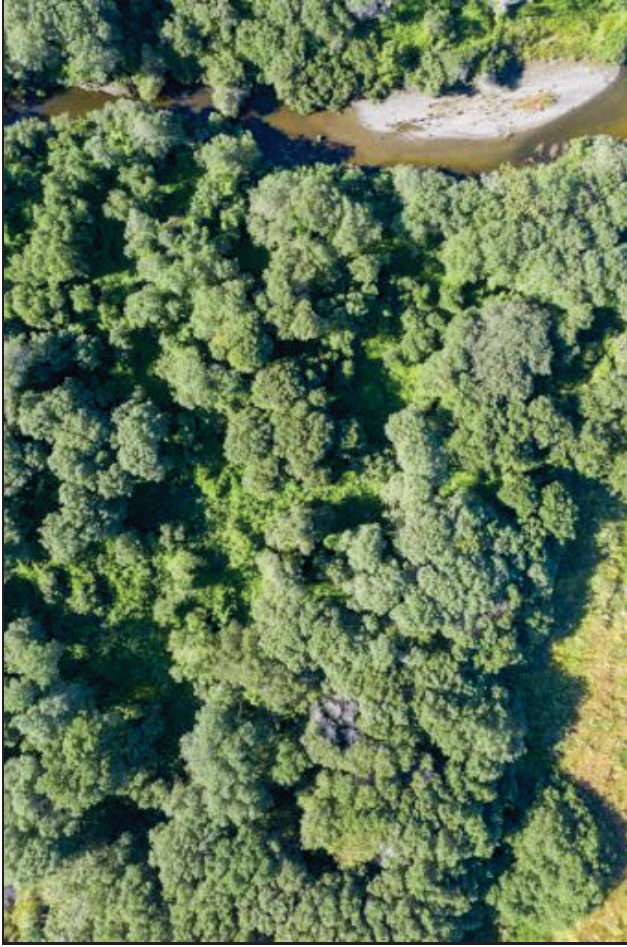


Site 4 Left Riparian

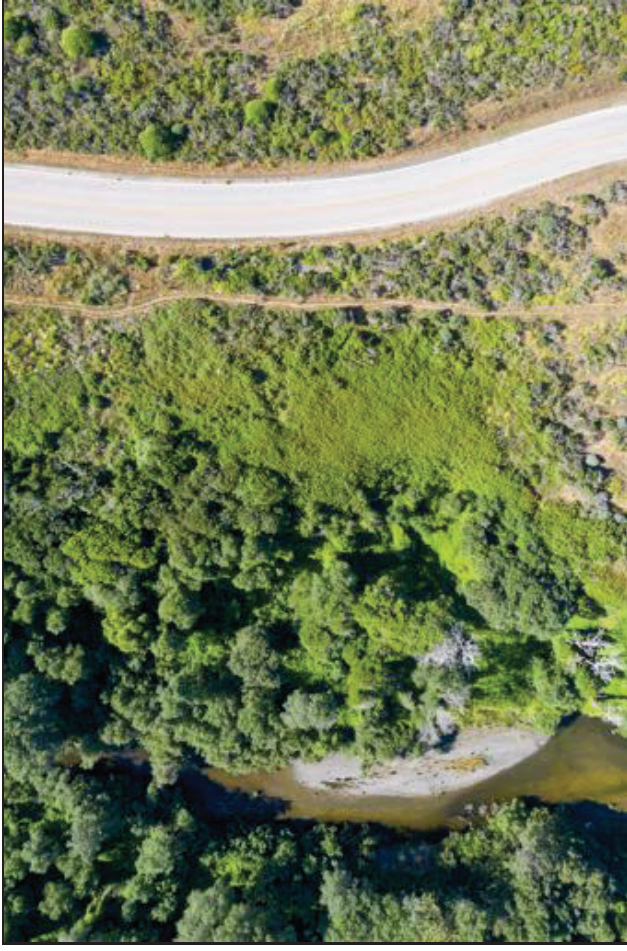


Site 4 Right Riparian

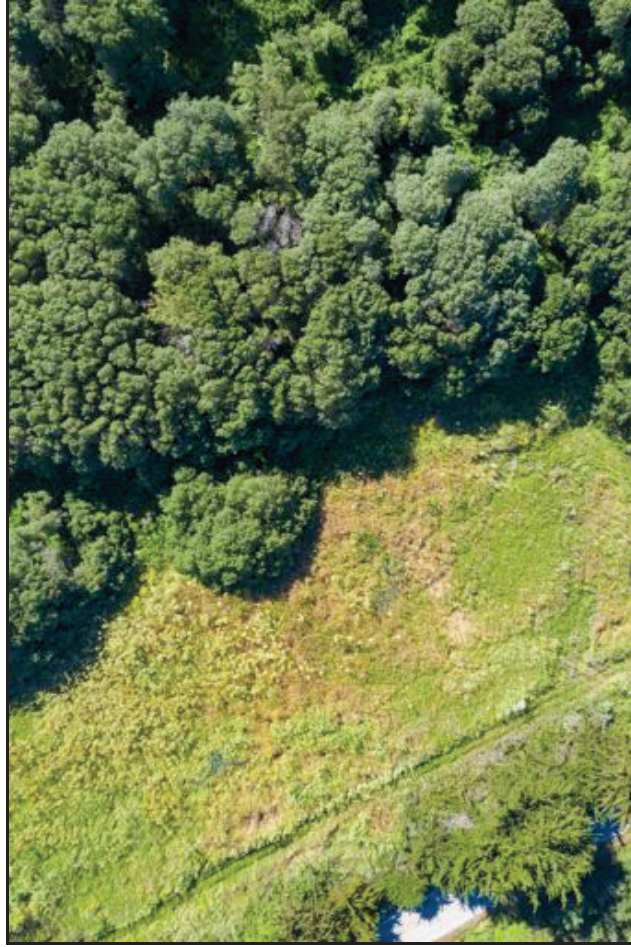
CCSD Monitoring June 7, 2020



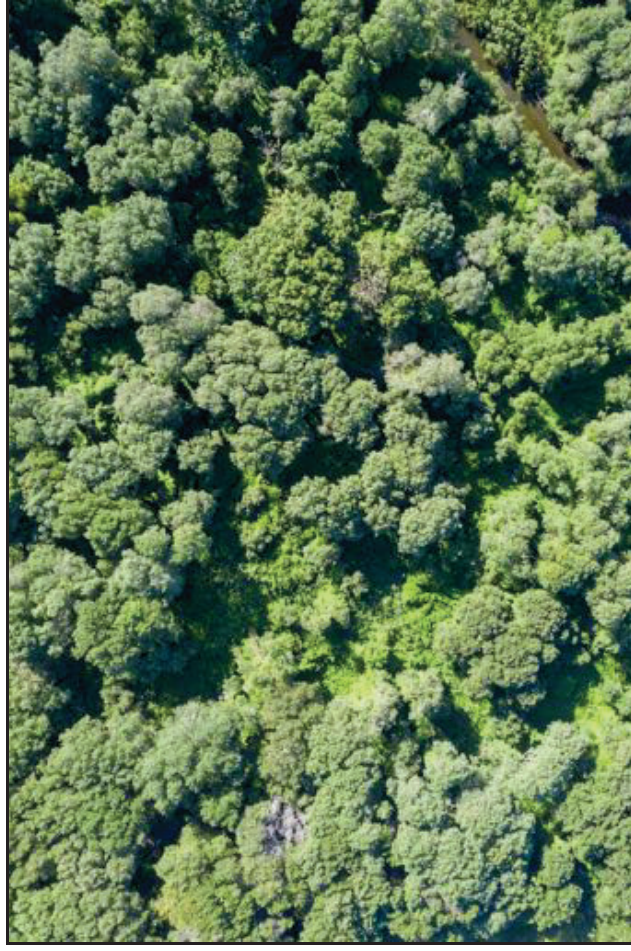
Site 5 Left Riparian



Site 5 Right Riparian

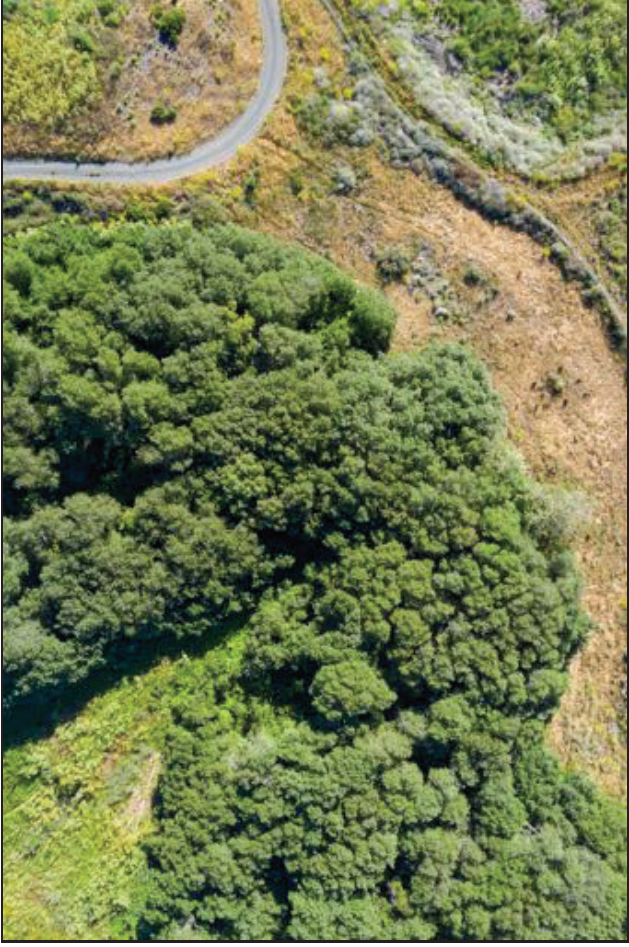


Site 7 Left Riparian



Site 7 Right Riparian

CCSD Monitoring June 7, 2020



Site 8 Left and Right Riparian

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



Prepared by

Cleveland Biological, LLC
cindycleve@gmail.com
805.234.3759

June 21, 2020

AMP Monitoring Locations

San Simeon and Van Gordon Creeks

Legend

 Study Sites

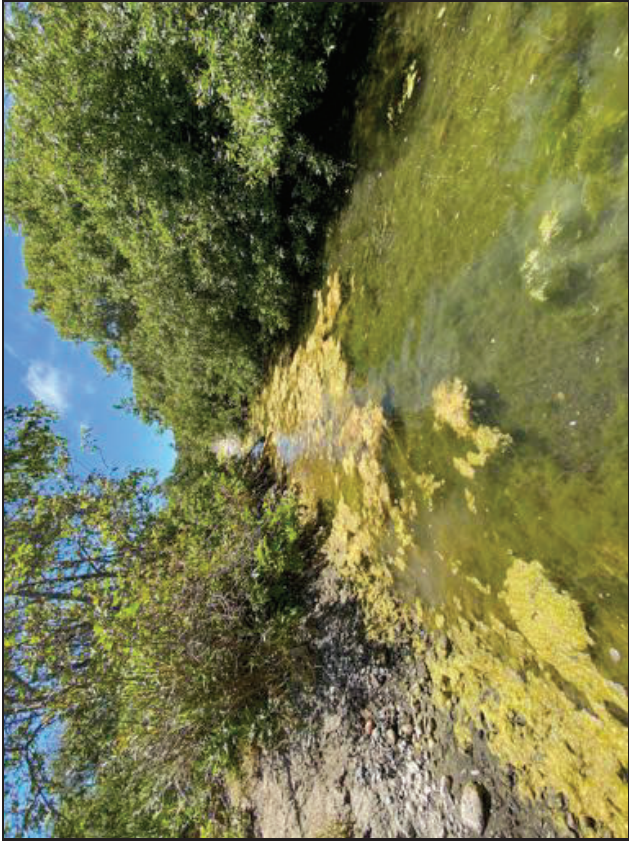


2000 ft

Cleveland Biological, LLC		CCSD AMP Biological Monitoring in San Simeon and Van Gordon Creeks				
Cindy & Paul Cleveland						
Survey Date: 7-5-2020		High Tide:		Low Tide:		Stage (718):
Location	Site 1	Site 2	Site 3	Site 4	Site 5	Site 7*
Time						Site 8
Weather (°F, Cloud cover)						
Habitat						
Stream type (run, riffle, pool)	Pool	Top of riffle	Pool above riffle	Run above riffle	Run below riffle	Dry
Instream cover type (lwd,swd,etc)	swd	riparian veg	lwd	lwd, swd	riparian veg	none
Substrate type (cobble, gravel, silt)	c, s	c, g	c, g	c, g	s, c	s, g
Substrate embedment (%)	85	25	50	50	50	75
Algae Surface (%)	75	0	0	25	0	0
Algae Subsurface (%)	100	0	50	100	75	0
Vegetation						
Instream cover (%)	10	15	15	25	10	0
Overhead cover (%)	10	5	15	25	10	80
Riparian width-Rt Bank (ft)	150	35	210	135	25	30
Riparian width-Lt Bank (ft)	100	10	220	230	85	55
Riparian Moisture-Rt Bank (%)	9.6	11.2	23.5	19.5	11.5	17.8
Riparian Moisture-Lt Bank (%)	9.7	12.2	18.5	26.5	10.4	14.9
Hydrology						
Maximum depth (ft)	2	0	1.1	0.6	1.1	0
Wetted width (ft)	18.5	0	22	19	12.7	0
Flow = Area x Rate (cfs)	0.0	0.0	1.1	0.5	0.8	0
Hydrology Calculations						
Depth 1 @ 1/4 (ft)	0.4	0	0.8	0.3	0.6	0
Depth 2 @ 1/2 (ft)	0.9	0	0.8	0.2	1	0
Depth 3 @ 3/4 (ft)	0.8	0	0.4	0.6	1	0
Average Depth = total/4 (ft)	0.5	0.0	0.5	0.3	0.7	0
Area = Width x Avg Depth (ft^2)	9.7	0.0	11.0	5.2	8.3	0
Rate from meter (ft/sec)	0	0	0.1	0.1	0.1	0

	<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)	65.4	Dry	60	61.7	61.1	Dry	Dry
Dissolved Oxygen (%)	37	Dry	44	58	46	Dry	Dry
Dissolved Oxygen (ppm)	3.4	Dry	4.4	5.7	4.5	Dry	Dry
Total Dissolved Solids (mg/L)	487	Dry	477	501	775	Dry	Dry
Salinity (ppt)	0.37	Dry	0.36	0.38	0.6	Dry	Dry
Species Observed	Many stickleback throughout, with a few Prickly sculpin. A western pond turtle and juvenile great horned owl below site one.						
Comments	Flow intermittent between Sites 3 and 4.						
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 121° 6'33.42"W	35°35'57.55"N 121° 6'53.39"W	35°35'48.09"N 121° 6'54.29"W	35°35'41.88"N 121° 7'4.04"W	35°35'40.00"N 121° 7'14.25"W	35°35'43.10"N 121° 7'13.85"W	35°35'48.06"N 121° 7'9.81"W
*Site 6 is on State Parks property and is not accessible at this time.							
9P7 Soil Moisture†							
North (%)	11.4						
East (%)	12.3						
South (%)	9.4						
West (%)	13.5						
†Moisture measured on each side of well casing. Max reading is 50%.							

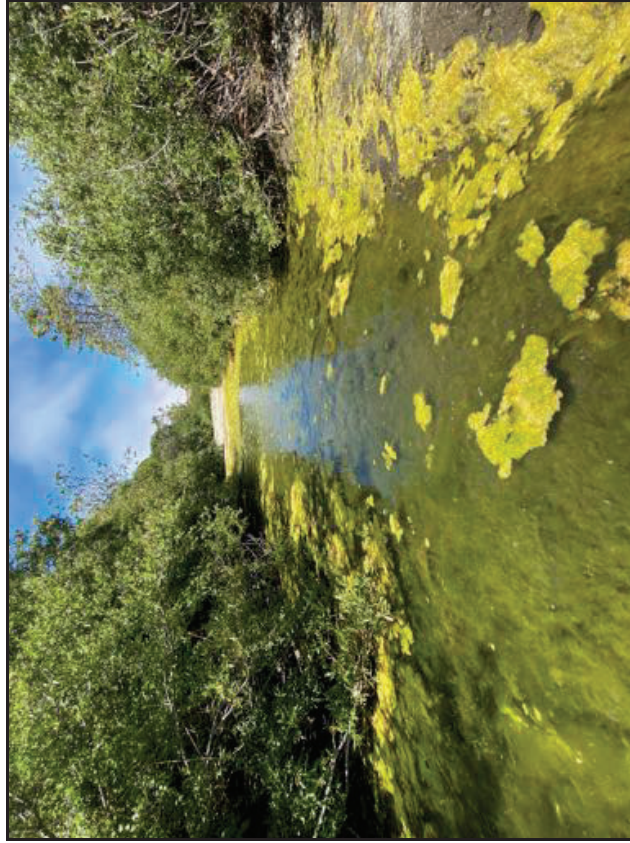
CCSD Monitoring June 21, 2020



Site 1



Site 1



Site 1



Site 1

CCSD Monitoring June 21, 2020



Site 2



Site 2



Site 2



Site 2

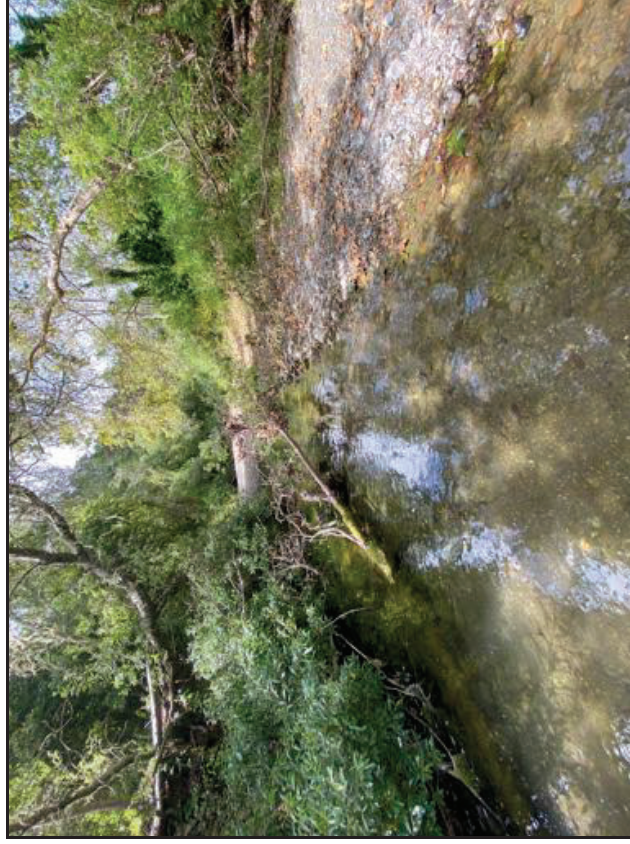
CCSD Monitoring June 21, 2020



Site 3



Site 3

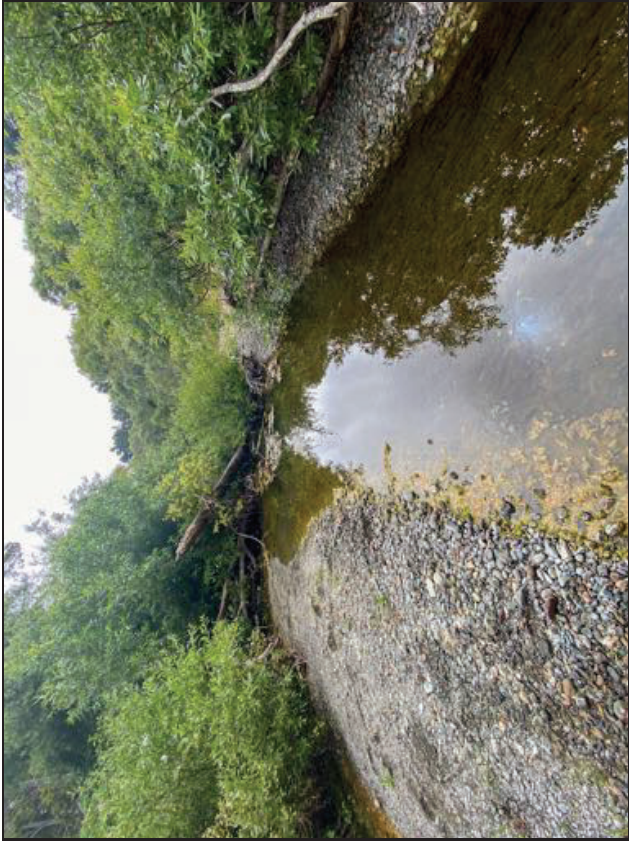


Site 3



Site 3

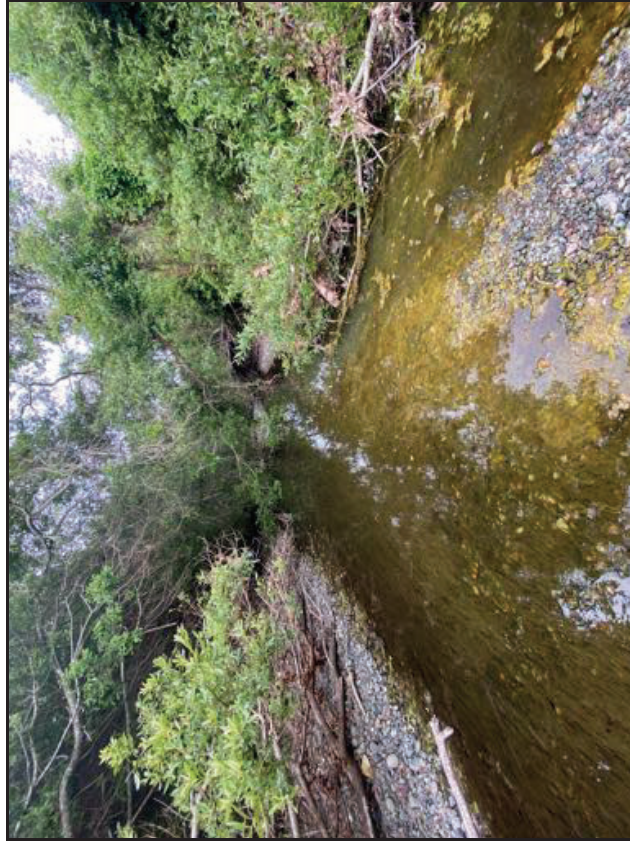
CCSD Monitoring June 21, 2020



Site 4



Site 4



Site 4



Site 4

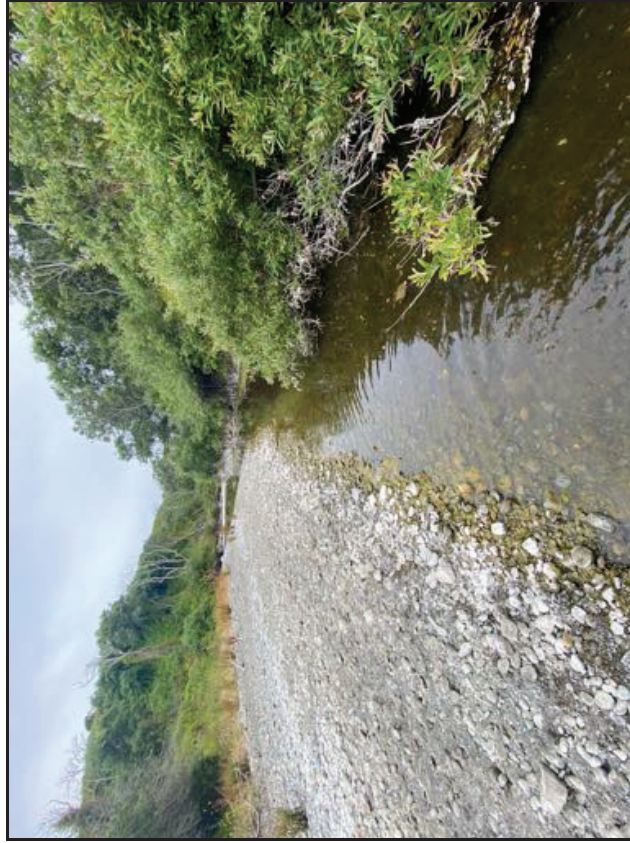
CCSD Monitoring June 21, 2020



Site 5



Site 5



Site 5



Site 5

CCSD Monitoring June 21, 2020



Site 7



Site 7



Site 7



Site 7

CCSD Monitoring June 21, 2020



Site 8

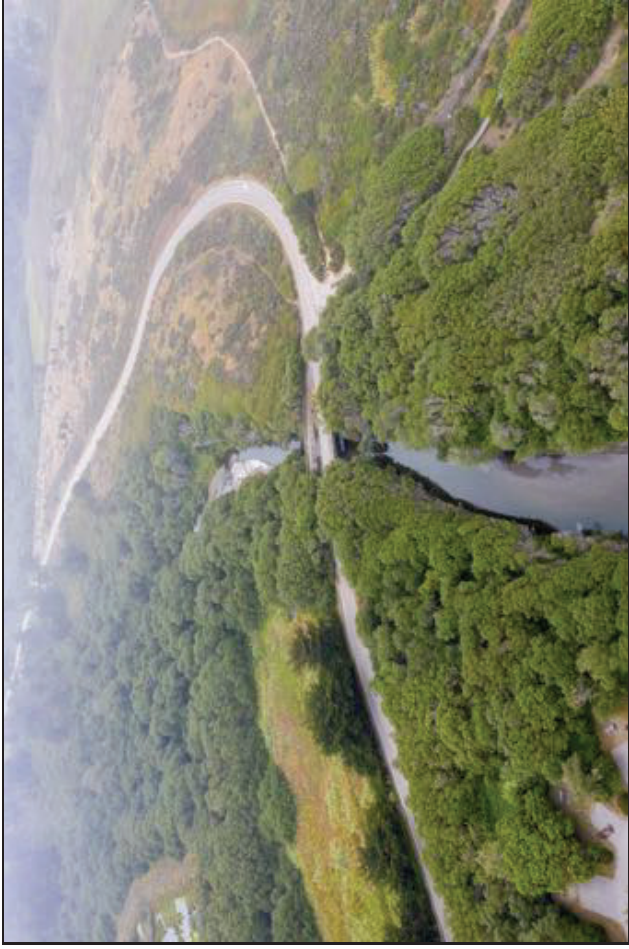


Site 8

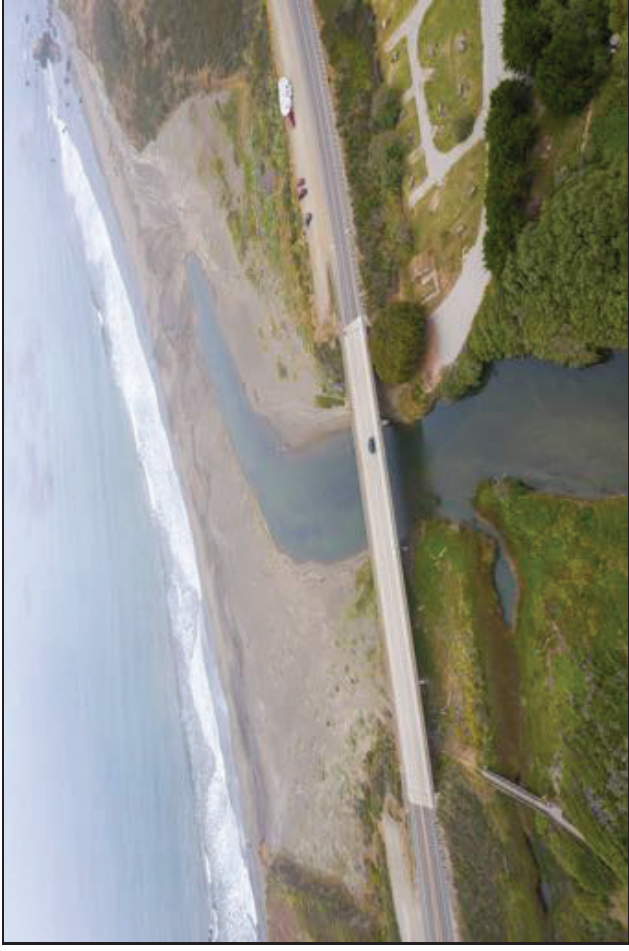


Site 8

CCSD Monitoring June 21, 2020



Walking Bridge PS-1



Estuary PS-2



9P7 Well

CCSD Monitoring June 21, 2020



Site 1 Aerial



Site 2 Aerial



Site 3 Aerial



Site 4 Aerial

CCSD Monitoring June 21, 2020



Site 5 Aerial



Site 7 Aerial



Site 8 Aerial

CCSD Monitoring June 21, 2020



Site 1 Left Riparian



Site 1 Right Riparian



Site 2 Left Riparian

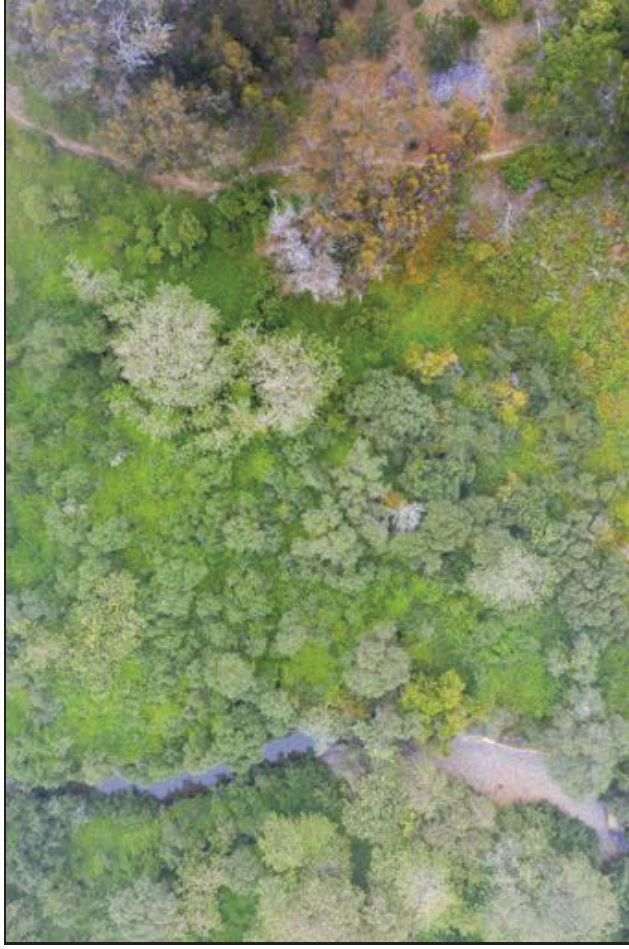


Site 2 Right Riparian

CCSD Monitoring June 21, 2020



Site 3 Left Riparian



Site 3 Right Riparian



Site 4 Left Riparian

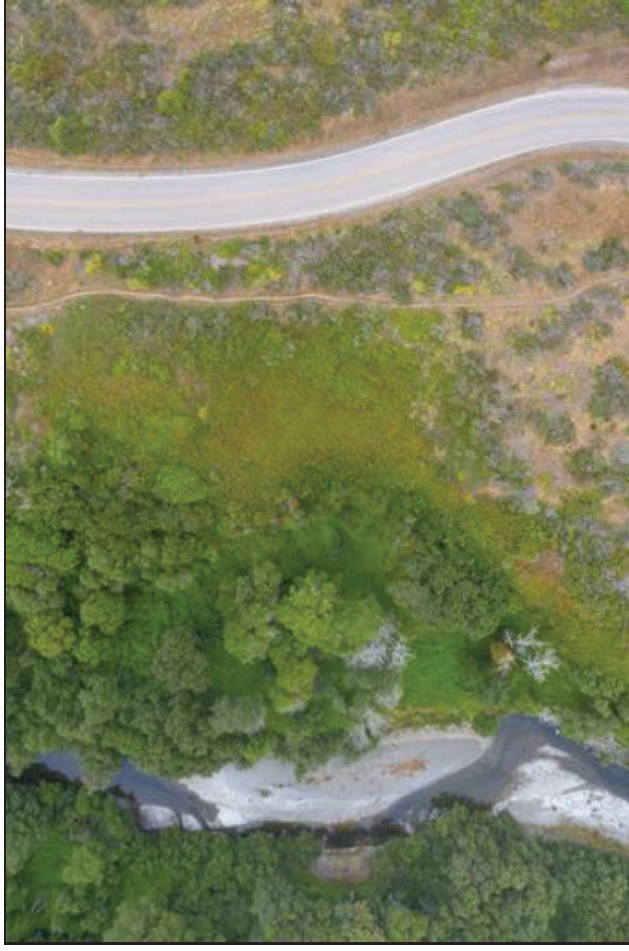


Site 4 Right Riparian

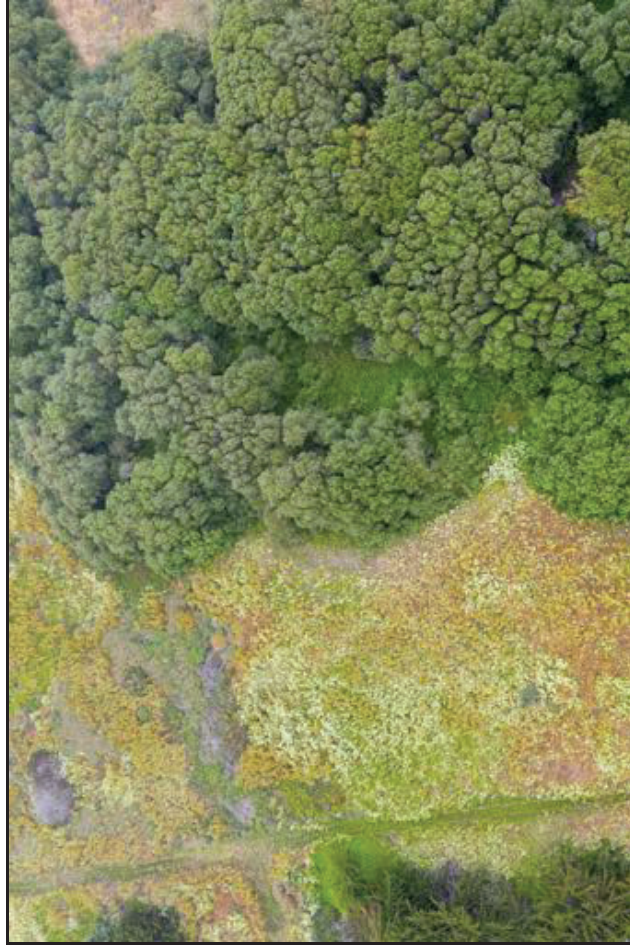
CCSD Monitoring June 21, 2020



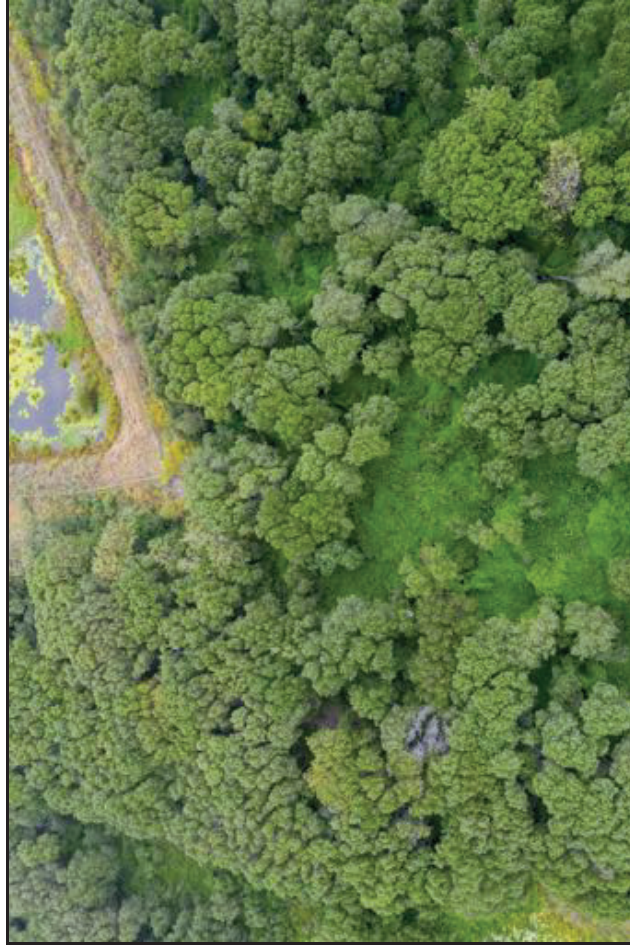
Site 5 Left Riparian



Site 5 Right Riparian



Site 7 Left Riparian



Site 7 Right Riparian

CCSD Monitoring June 21, 2020



Site 8 Left & Right Riparian

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



Prepared by

Cleveland Biological, LLC
cindycleve@gmail.com
805.234.3759

July 5, 2020

AMP Monitoring Locations

San Simeon and Van Gordon Creeks

Legend

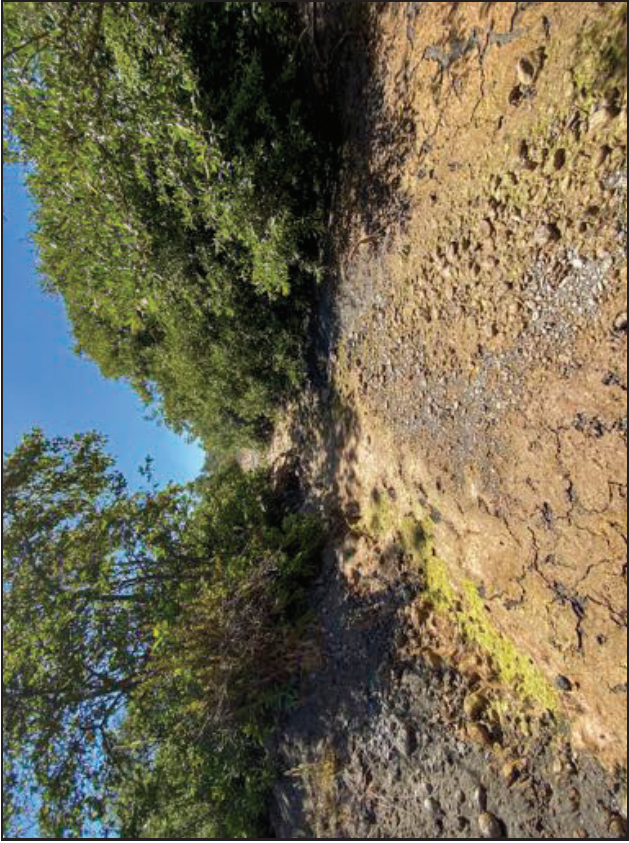
 Study Sites



Cleveland Biological, LLC		CCSD AMP Biological Monitoring in San Simeon and Van Gordon Creeks					
Cindy & Paul Cleveland							
Survey Date: 7-5-2020		High Tide: 3.92 ft @ 12:16 pm	Low Tide: -1.34 ft @ 5:28 am	Sandbar Breached: No	Stage (718): 2.05		
Location	Site 1	Site 2	Site 3	Site 4	Site 5	Site 7*	Site 8
Time	10:13 AM	9:36 AM	9:20 AM	9:00 AM	8:45 AM	8:32 AM	8:22 AM
Weather (°F, Cloud cover)	76, clear	74, clear	72, clear	72, clear	72, clear	64, clear	64, clear
Habitat							
Stream type (run, riffle, pool)	Pool	Top of riffle	Pool above riffle	Run above riffle	Run below riffle	Dry	Dry
Instream cover type (lwd,swd,etc)	swd	riparian veg	lwd	lwd, swd	riparian veg	none	none
Substrate type (cobble, gravel, silt)	c, s	c, g	c, g	c, g	s, c	s, g	c, g, s
Substrate embedment (%)	85	25	50	50	50	75	75
Algae Surface (%)	75	0	0	0	0	0	0
Algae Subsurface (%)	100	0	50	100	75	0	0
Vegetation							
Instream cover (%)	10	15	15	25	10	0	0
Overhead cover (%)	10	5	15	25	10	80	90
Riparian width-Rt Bank (ft)	150	35	210	135	25	30	30
Riparian width-Lt Bank (ft)	100	10	220	230	85	85	55
Riparian Moisture-Rt Bank (%)	7.8	0	22.7	18.7	21.6	17.2	16.9
Riparian Moisture-Lt Bank (%)	3.2	4.7	14.1	23.7	14.1	16.2	14.6
Hydrology							
Maximum depth (ft)	0	0	0.8	0.7	2.2	0	0
Wetted width (ft)	0	0	18.5	19	24.5	0	0
Flow = Area x Rate (cfs)	0.0	0.0	0.0	0.6	2.9	0	0
Hydrology Calculations							
Depth 1 @ 1/4 (ft)	0	0	0.7	0.4	0.8	0	0
Depth 2 @ 1/2 (ft)	0	0	0.5	0.2	1.8	0	0
Depth 3 @ 3/4 (ft)	0	0	0.3	0.7	2.1	0	0
Average Depth = total/4 (ft)	0.0	0.0	0.4	0.3	1.2	0	0
Area = Width x Avg Depth (ft^2)	0.0	0.0	6.9	6.2	28.8	0	0
Rate from meter (ft/sec)	0	0	0	0.1	0.1	0	0

	<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)	Dry	Dry	56.7	60.8	65.1	Dry	Dry
Dissolved Oxygen (%)	Dry	Dry	62	37	24	Dry	Dry
Dissolved Oxygen (ppm)	Dry	Dry	6.4	3.7	2.2	Dry	Dry
Total Dissolved Solids (mg/L)	Dry	Dry	475	499	724	Dry	Dry
Salinity (ppt)	Dry	Dry	0.36	0.38	0.56	Dry	Dry
Species Observed	Many stickleback throughout. Two young of the year (3-4") steelhead trout between Sites 3 and 4. White-tailed kite observed over SWF.						
Comments	Creek mostly dry upstream of Site 3. Intermittent between Sites 3 & 4. Flowing at Site 4 and downstream.						
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 121° 6'33.42"W	35°35'57.55"N 121° 6'53.39"W	35°35'48.09"N 121° 6'54.29"W	35°35'41.88"N 121° 7'4.04"W	35°35'40.00"N 121° 7'14.25"W	35°35'43.10"N 121° 7'13.85"W	35°35'48.06"N 121° 7'9.81"W
*Site 6 is on State Parks property and is not accessible at this time.							
9P7 Soil Moisture†							
North (%)	11.3						
East (%)	8.5						
South (%)	7.5						
West (%)	11.7						
†Moisture measured on each side of well casing. Max reading is 50%.							

CCSD Monitoring July 5, 2020



Site 1



Site 1

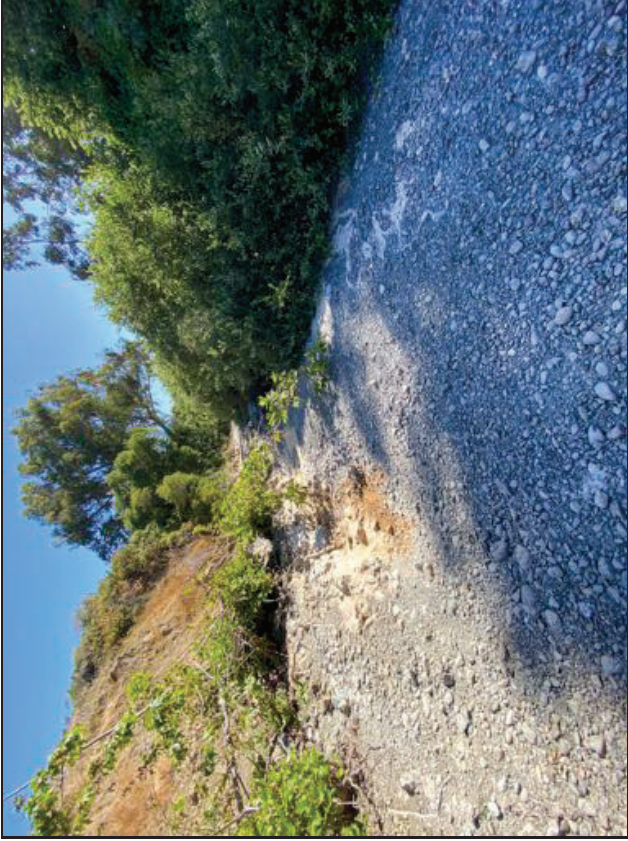


Site 1



Site 1

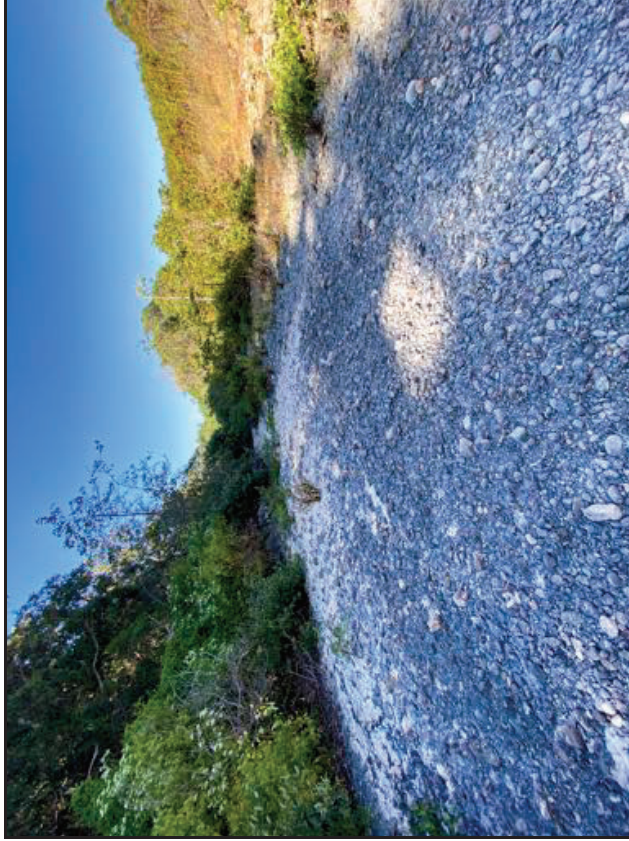
CCSD Monitoring July 5, 2020



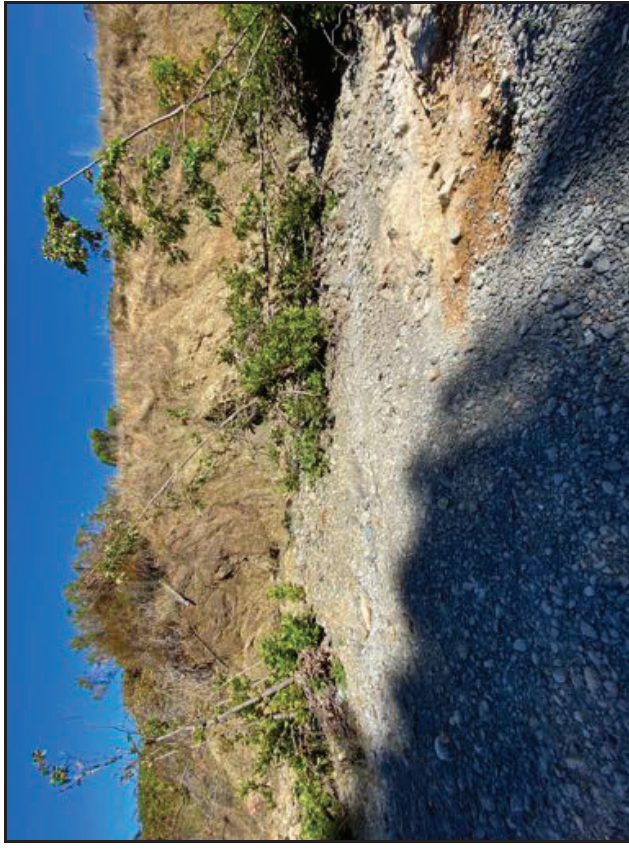
Site 2



Site 2

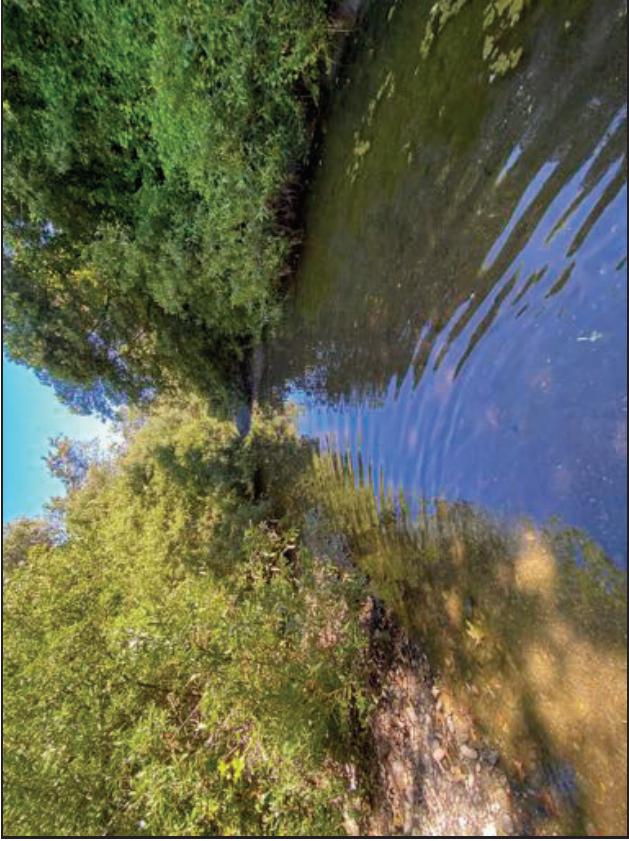


Site 2



Site 2

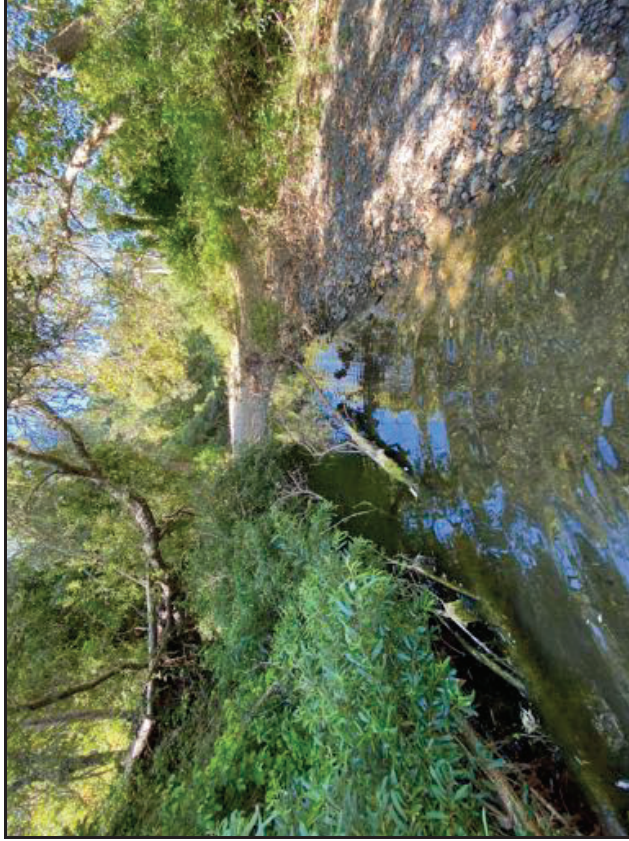
CCSD Monitoring July 5, 2020



Site 3



Site 3



Site 3



Site 3

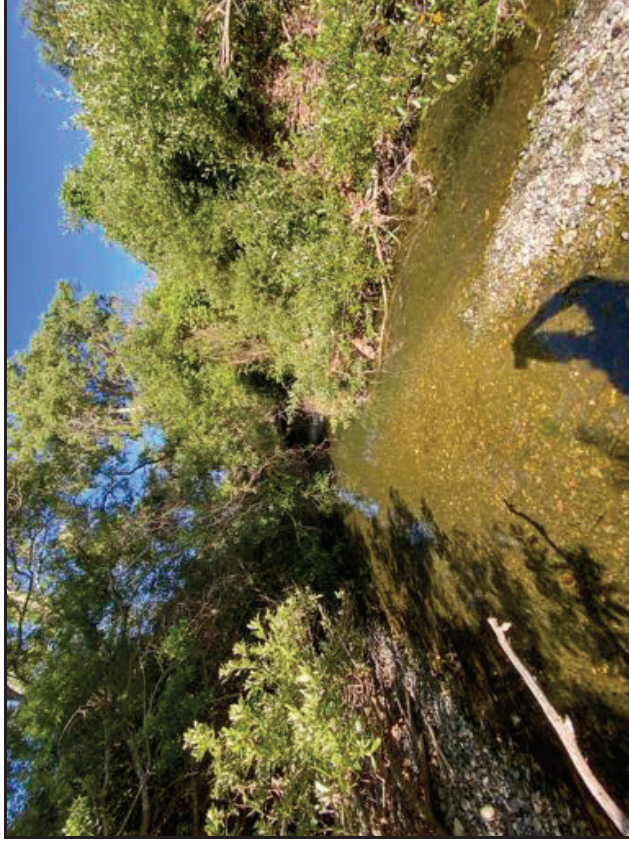
CCSD Monitoring July 5, 2020



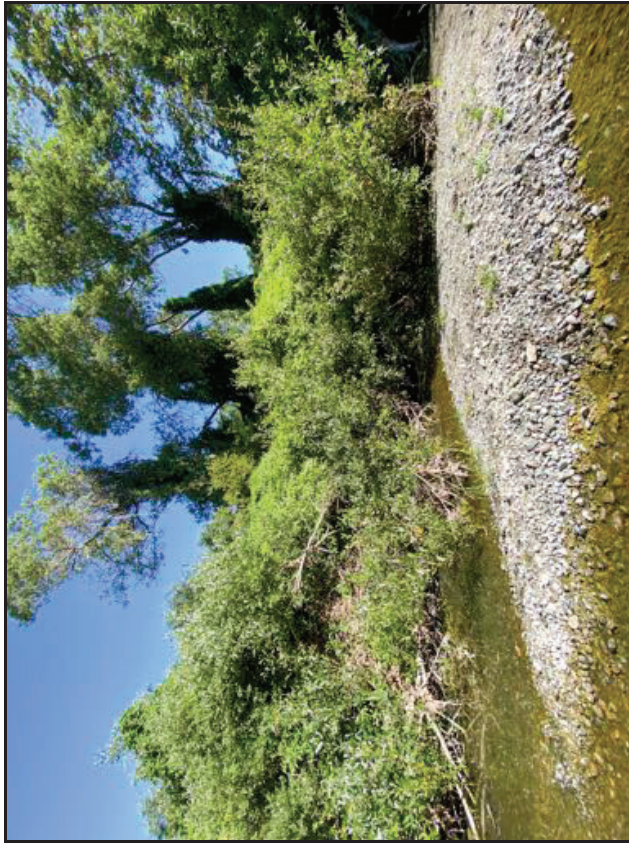
Site 4



Site 4

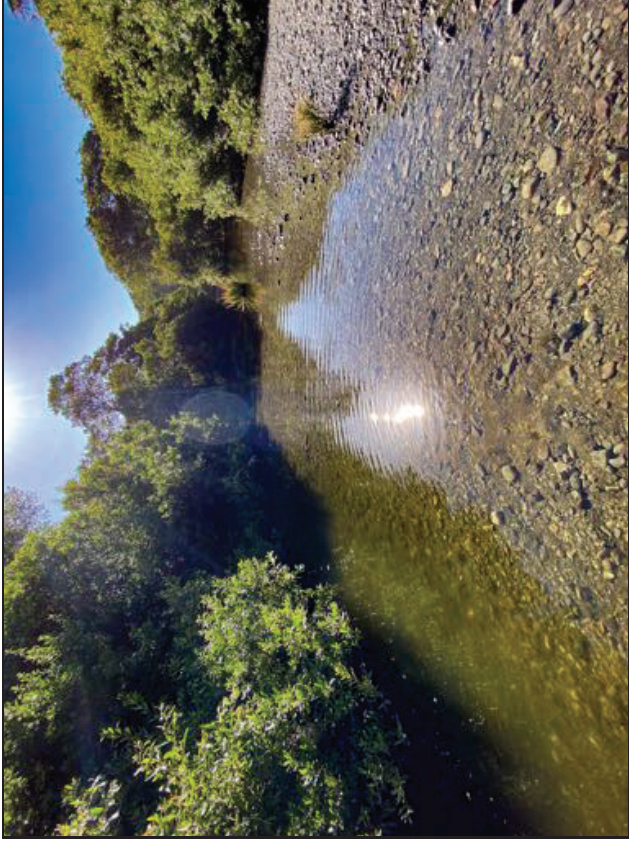


Site 4

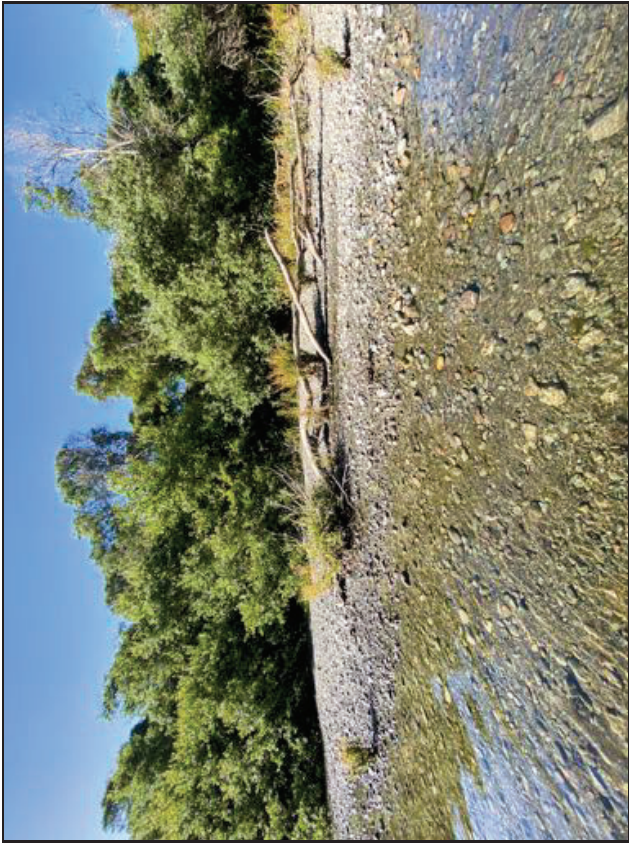


Site 4

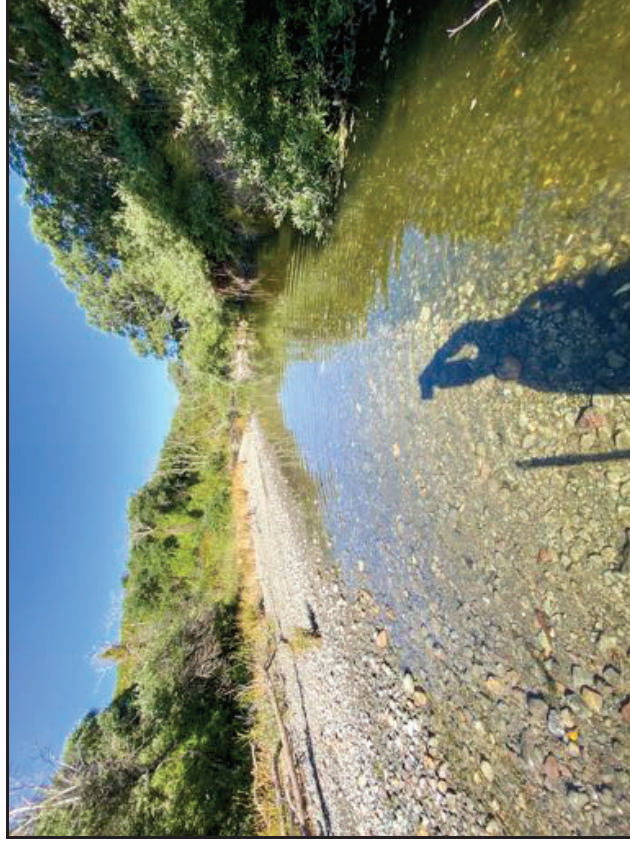
CCSD Monitoring July 5, 2020



Site 5



Site 5



Site 5



Site 5

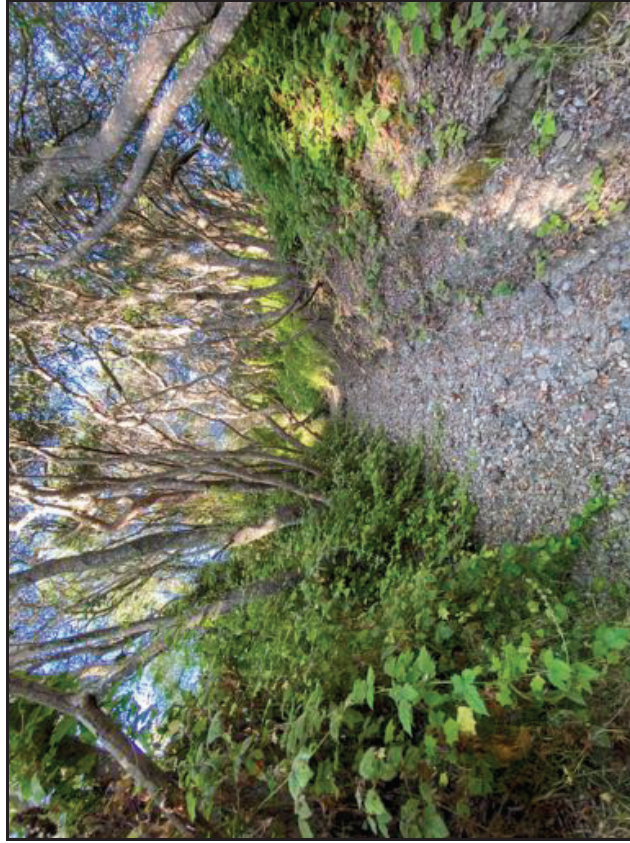
CCSD Monitoring July 5, 2020



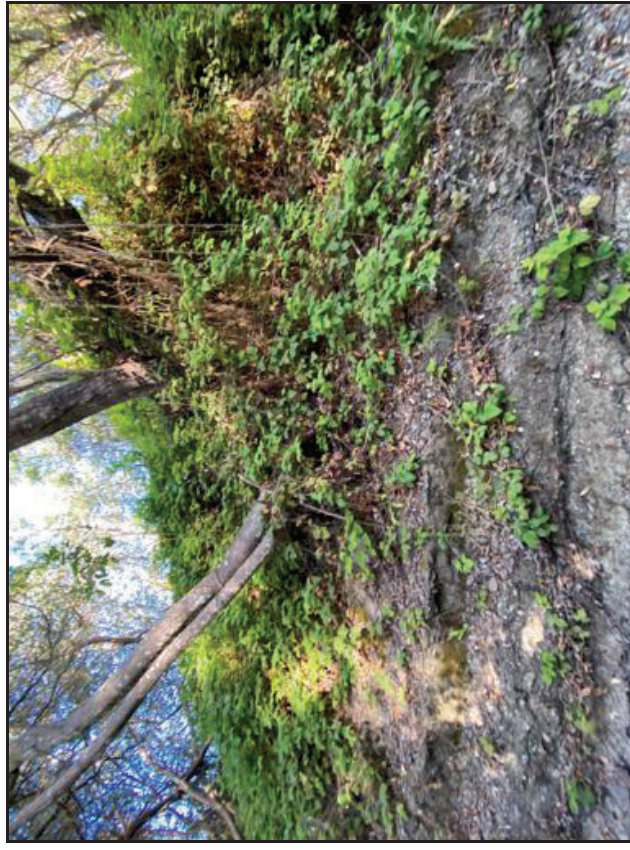
Site 7



Site 7



Site 7



Site 7

CCSD Monitoring July 5, 2020



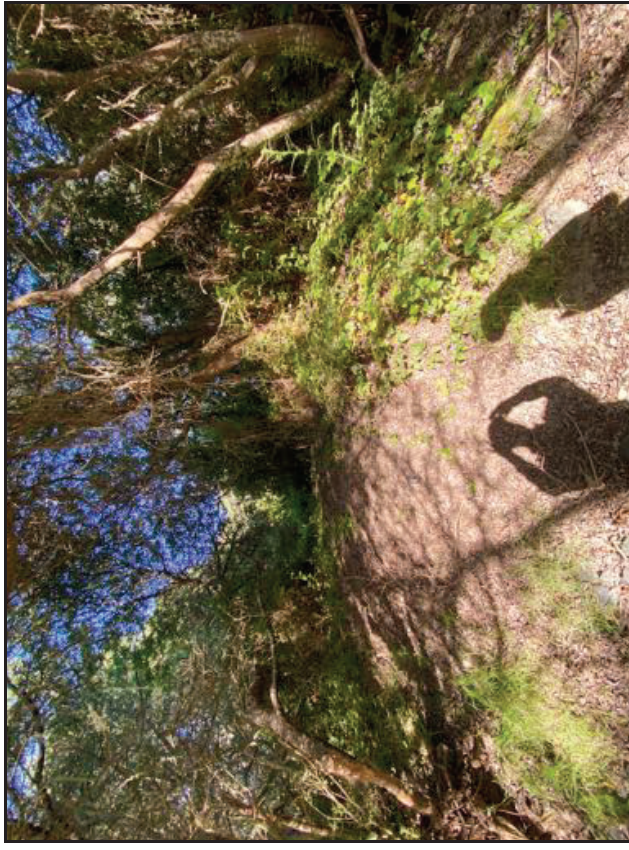
Site 8



Site 8

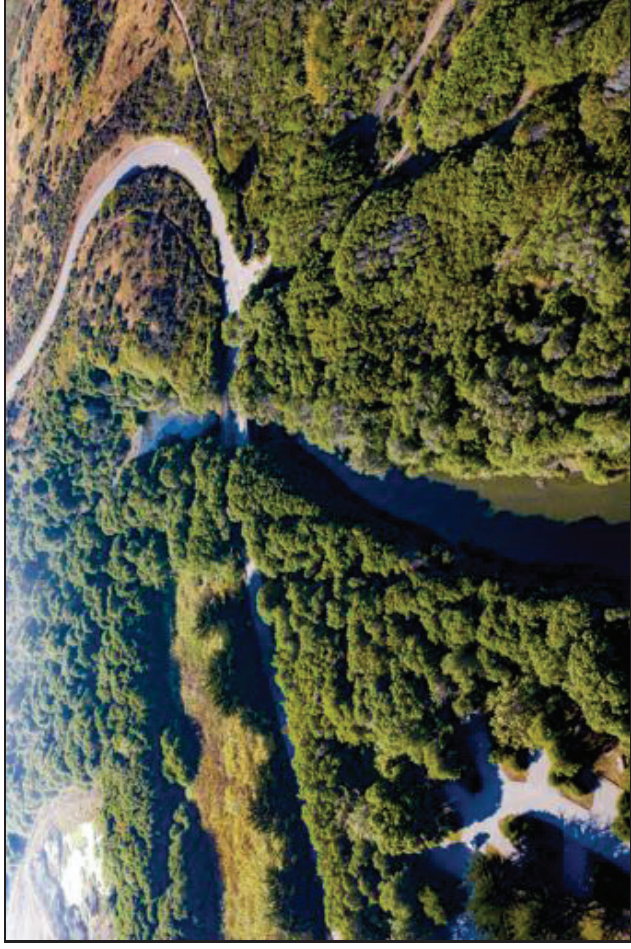


Site 8

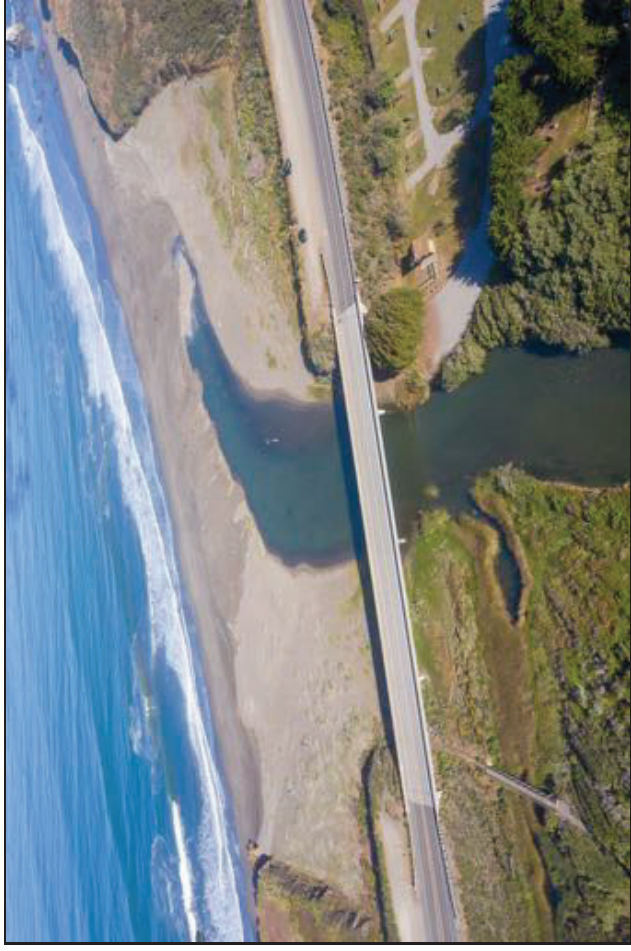


Site 8

CCSD Monitoring July 5, 2020



Walking Bridge PS-1

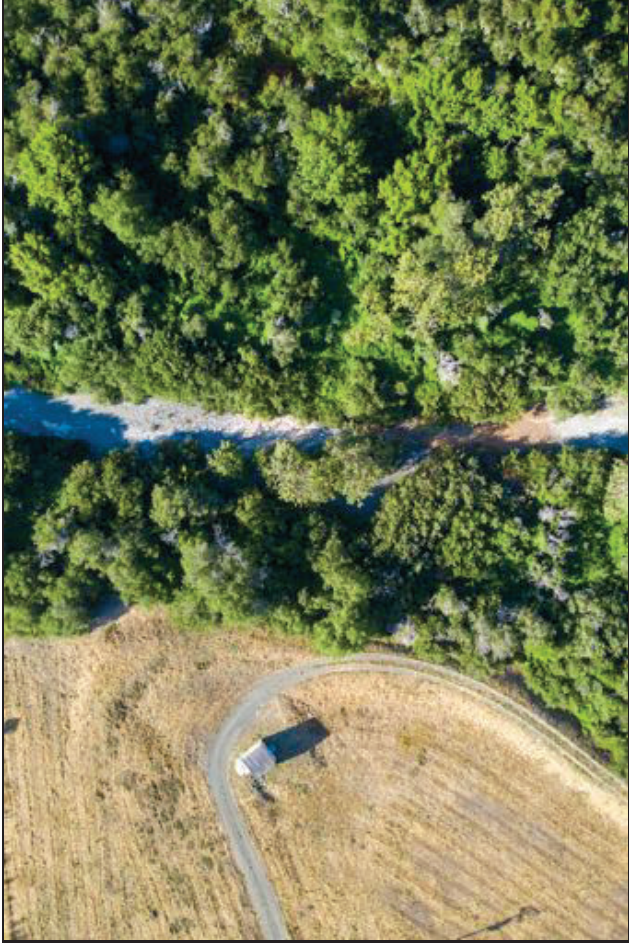


Estuary PS-2

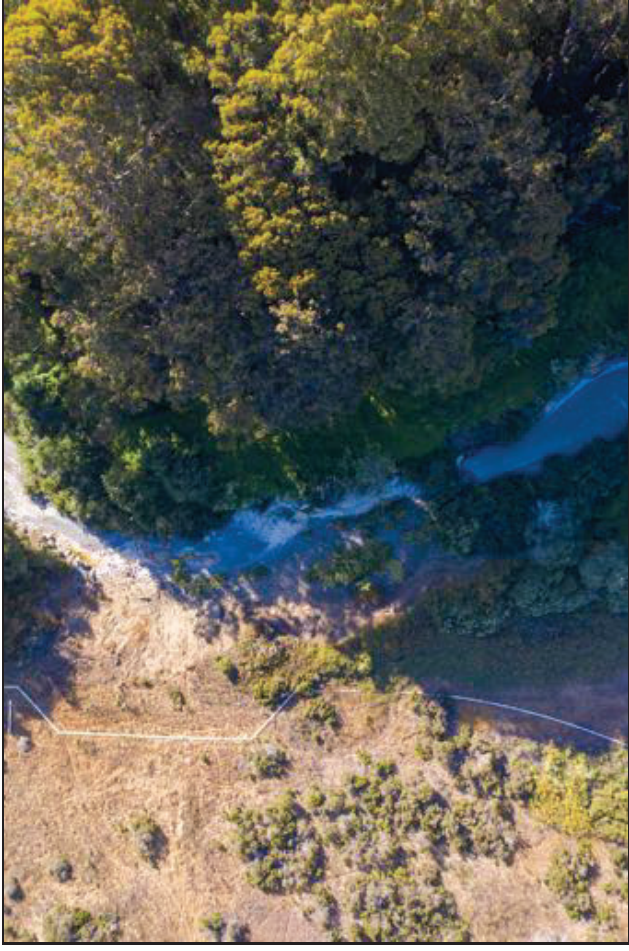


P97 Well

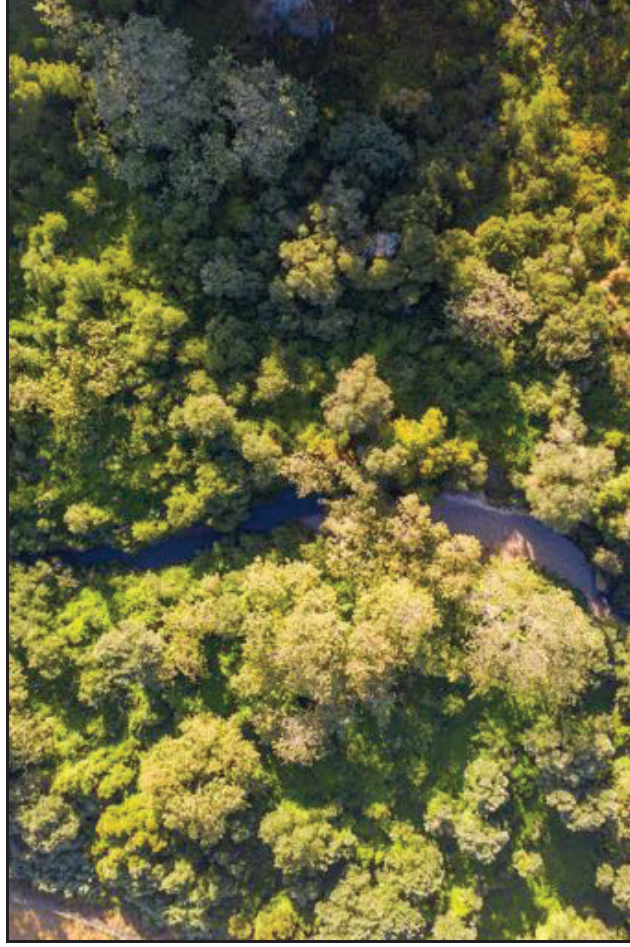
CCSD Monitoring July 5, 2020



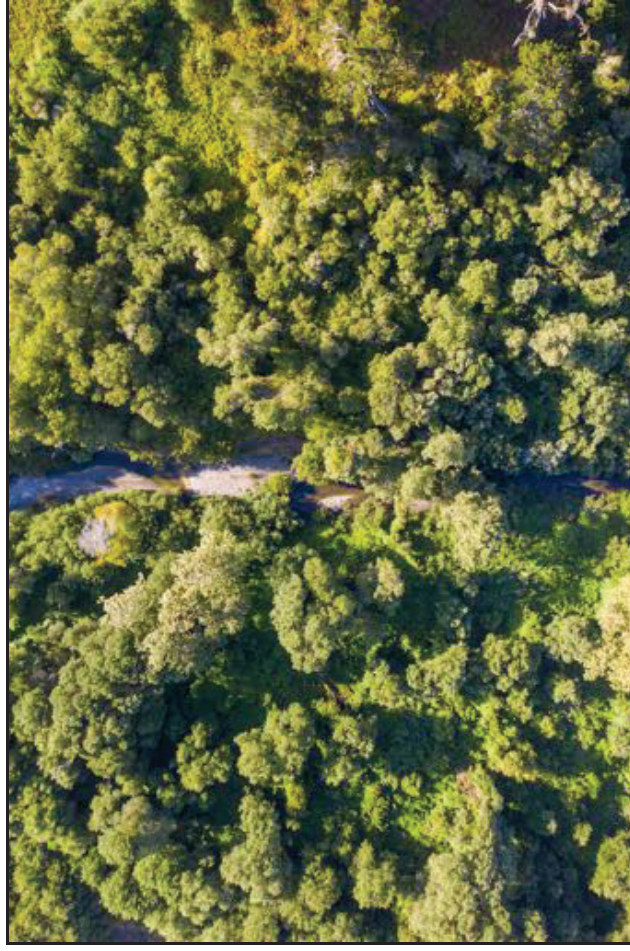
Site 1 Aerial



Site 2 Aerial

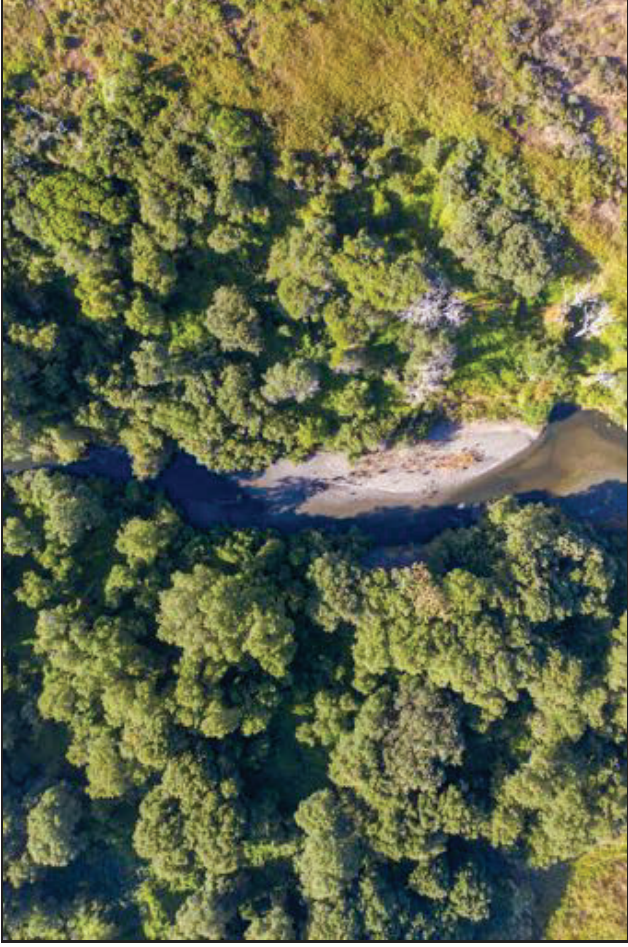


Site 3 Aerial

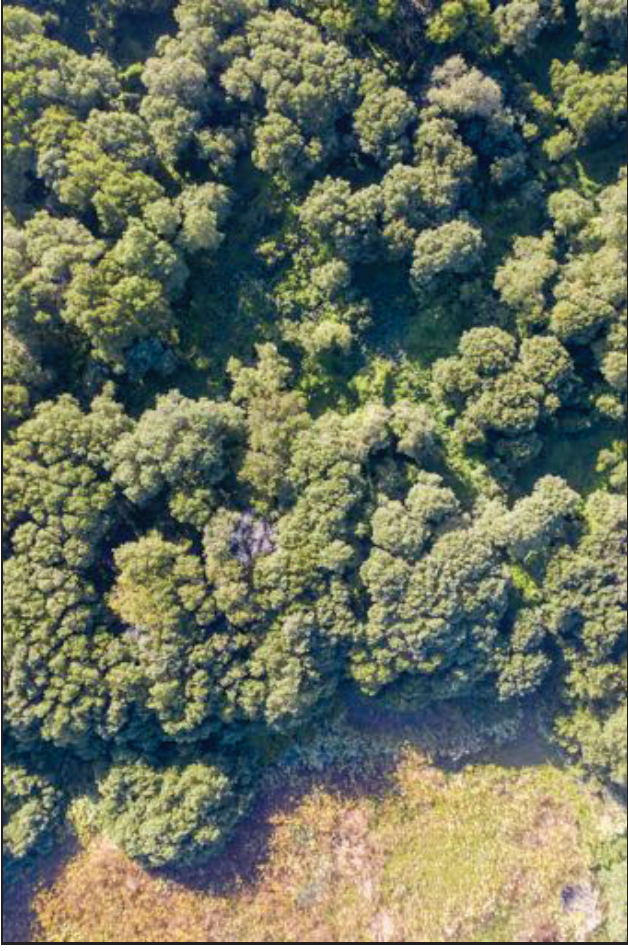


Site 4 Aerial

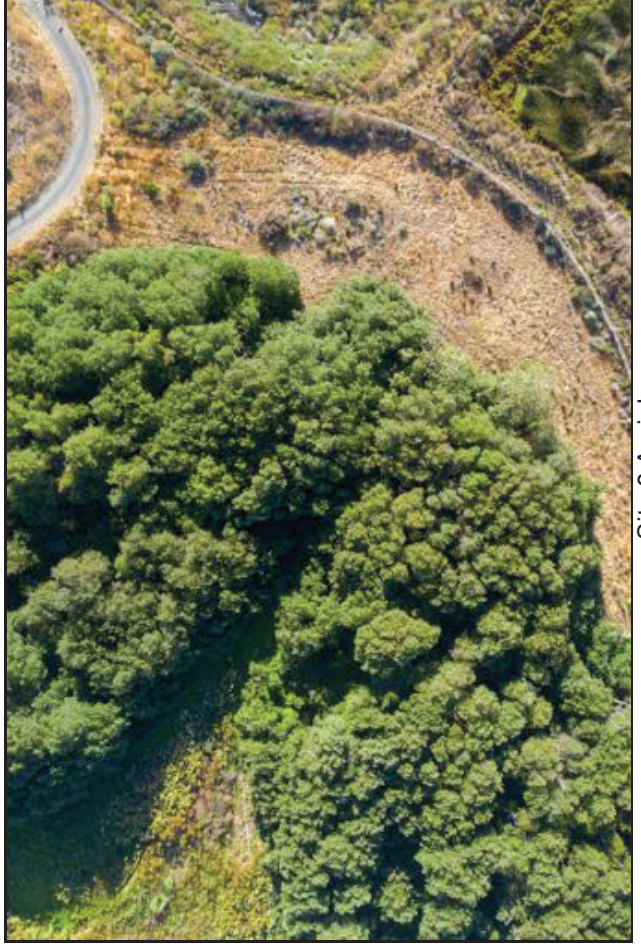
CCSD Monitoring July 5, 2020



Site 5 Aerial

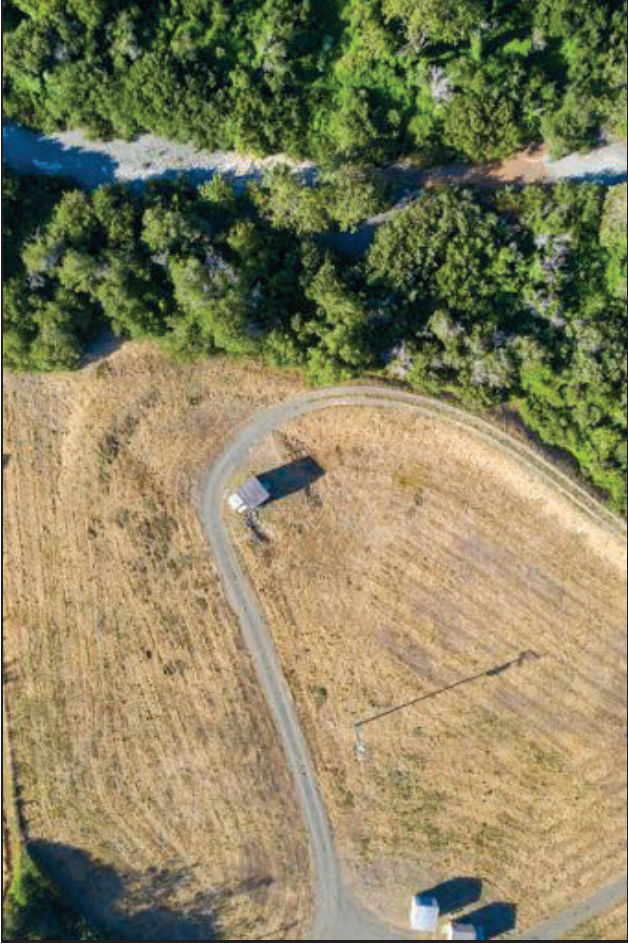


Site 7 Aerial



Site 8 Aerial

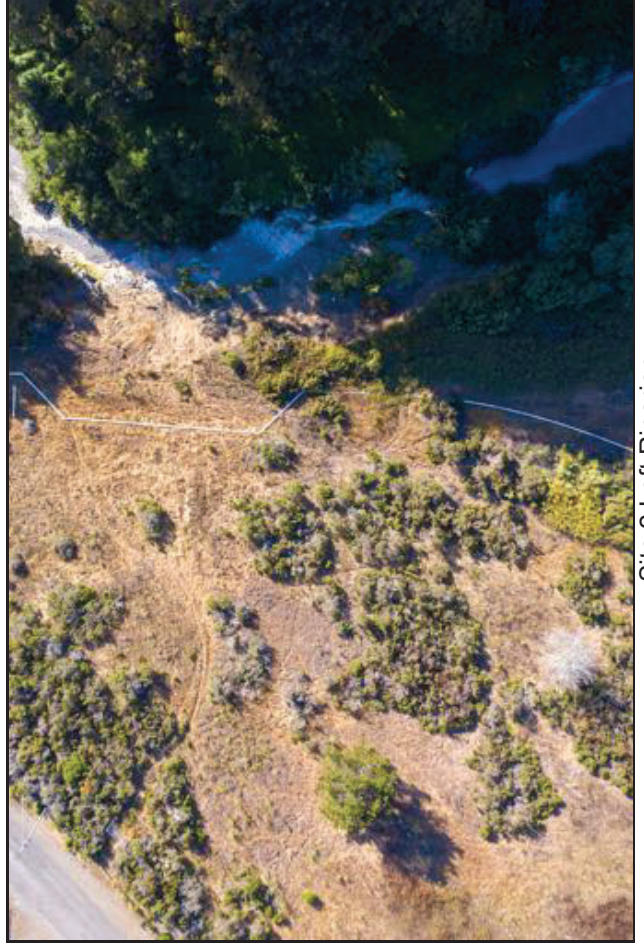
CCSD Monitoring July 5, 2020



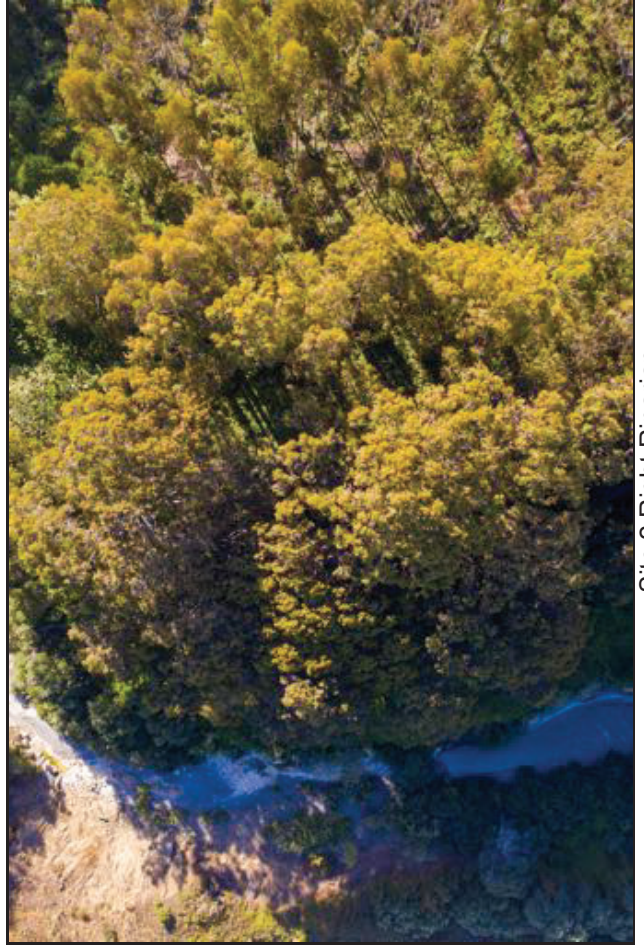
Site 1 Left Riparian



Site 1 Right Riparian

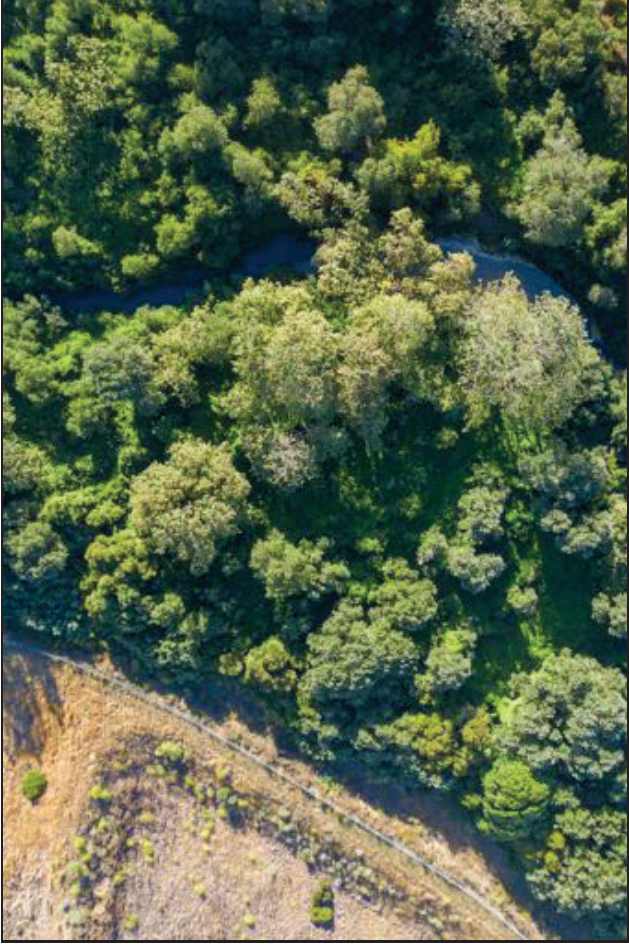


Site 2 Left Riparian



Site 2 Right Riparian

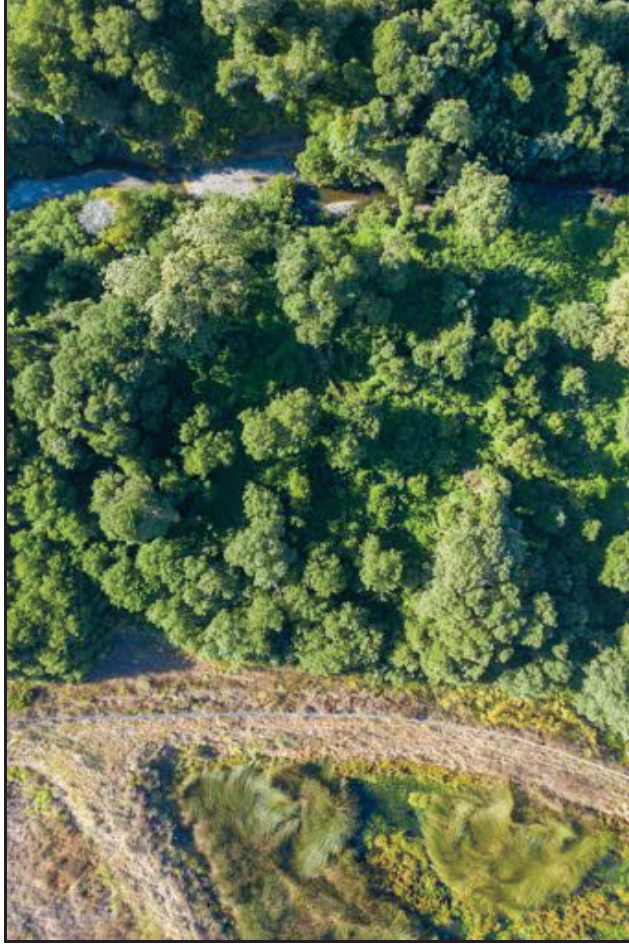
CCSD Monitoring July 5, 2020



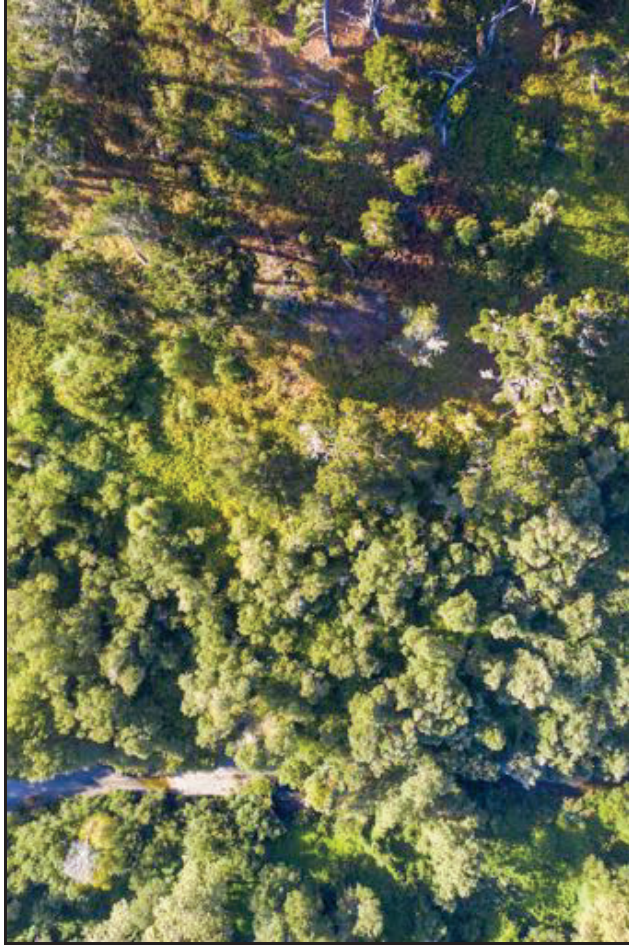
Site 3 Left Riparian



Site 3 Right Riparian

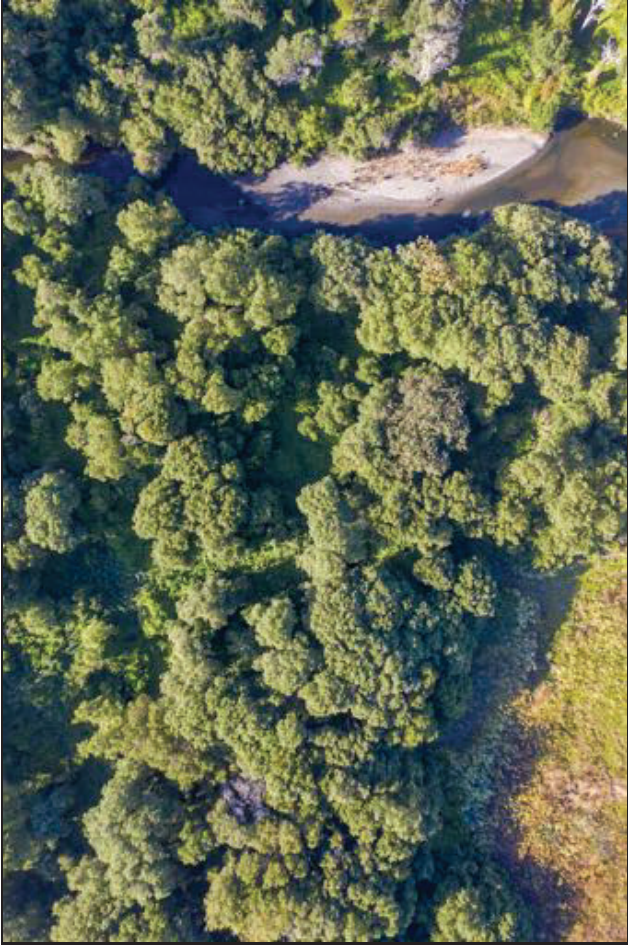


Site 4 Left Riparian



Site 4 Right Riparian

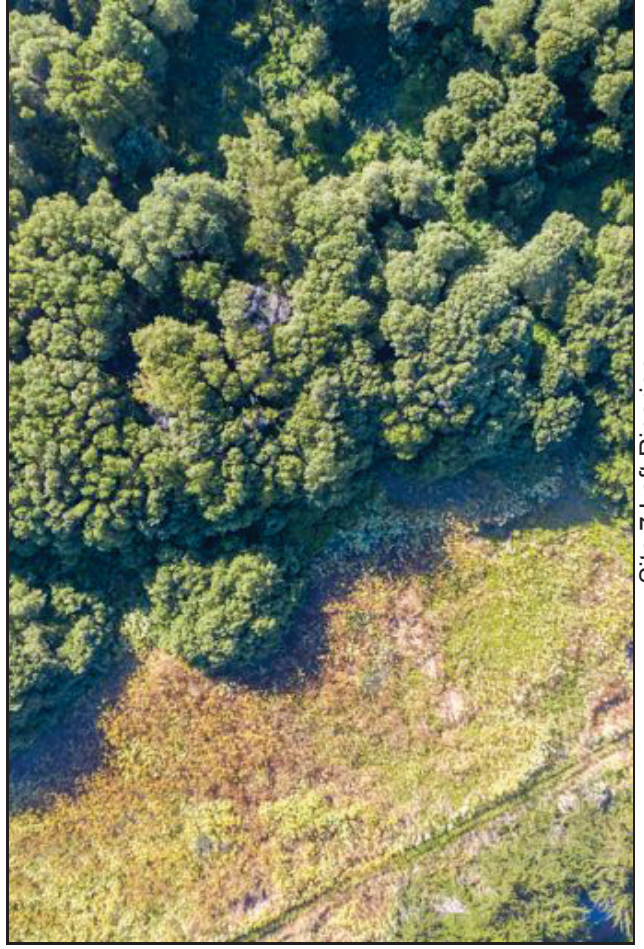
CCSD Monitoring July 5, 2020



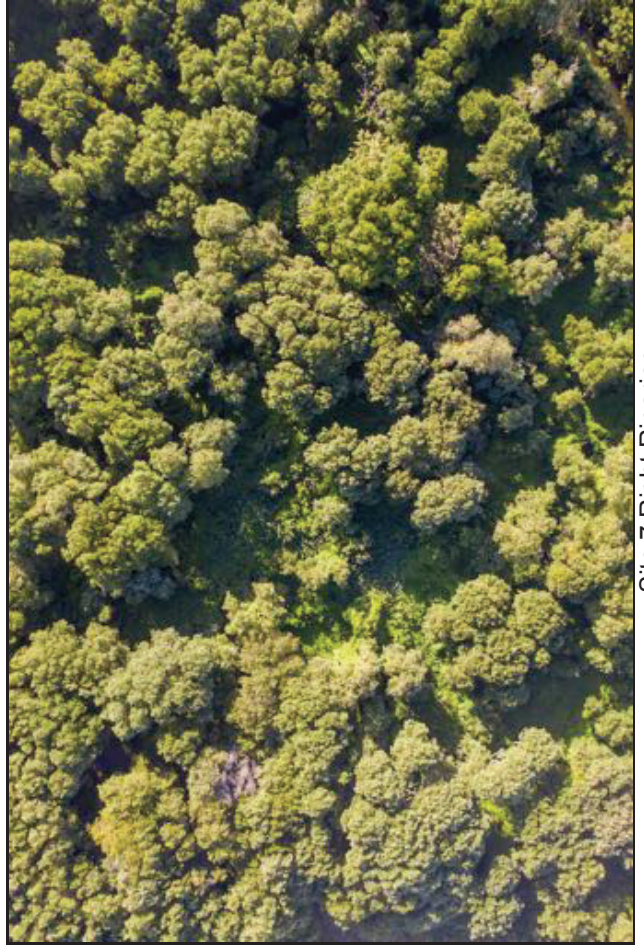
Site 5 Left Riparian



Site 5 Right Riparian

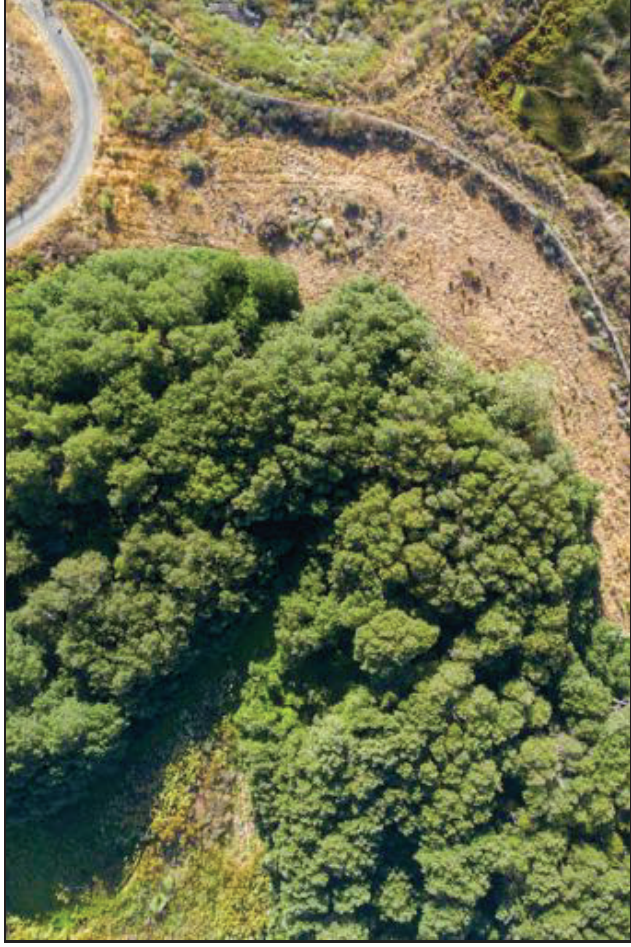


Site 7 Left Riparian



Site 7 Right Riparian

CCSD Monitoring July 5, 2020



Site 8 Left & Right Riparian

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



Prepared by

Cleveland Biological, LLC
cindycleve@gmail.com
805.234.3759

July 19, 2020

AMP Monitoring Locations

San Simeon and Van Gordon Creeks

Legend

 Study Sites



2000 ft

Cleveland Biological, LLC		CCSD AMP Biological Monitoring in San Simeon and Van Gordon Creeks					
Cindy & Paul Cleveland							
Survey Date: 7-19-2020		High Tide: 3.73 ft @ 11:15 am	Low Tide: -0.7 ft @ 4:30 am	Sandbar Breached: No	Stage (718): 2.04		
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	11:17 AM	10:39 AM	10:23 AM	10:04 AM	9:44 AM	9:37 AM	9:30 AM
Weather (°F, Cloud cover)	65, clearing	64, overcast	63, overcast	62, overcast	60, overcast	59, overcast	59, overcast
Habitat							
Stream type (run, riffle, pool)	Pool	Top of riffle	Puddle	Run above riffle	Run below riffle	Dry	Dry
Instream cover type (lwd,swd,etc)	swd	riparian veg	lwd	lwd, swd	riparian veg	none	none
Substrate type (cobble, gravel, silt)	c, s	c, g	c, g	c, g	s, c	s, g	c, g, s
Substrate embedment (%)	85	25	100	50	50	75	75
Algae Surface (%)	75	0	50	25	0	0	0
Algae Subsurface (%)	100	0	100	100	75	0	0
Vegetation							
Instream cover (%)	10	15	15	25	10	0	0
Overhead cover (%)	10	5	15	25	10	80	90
Riparian width-Rt Bank (ft)	150	35	210	135	25	30	30
Riparian width-Lt Bank (ft)	100	10	220	230	85	85	55
Riparian Moisture-Rt Bank (%)	4.3	0	14.6	19.4	1.1	13.2	18.3
Riparian Moisture-Lt Bank (%)	0	3.7	11.4	25.2	11.3	15.6	15.9
Hydrology							
Maximum depth (ft)	0	0	0.3	0.65	1.1	0	0
Wetted width (ft)	0	0	3.2	18.5	12	0	0
Flow = Area x Rate (cfs)	0.0	0.0	0.0	0.0	0.8	0	0
Hydrology Calculations							
Depth 1 @ 1/4 (ft)	0	0	0	0.3	0.7	0	0
Depth 2 @ 1/2 (ft)	0	0	0	0.2	1	0	0
Depth 3 @ 3/4 (ft)	0	0	0	0.3	1	0	0
Average Depth = total/4 (ft)	0.0	0.0	0.0	0.2	0.7	0	0
Area = Width x Avg Depth (ft^2)	0.0	0.0	0.0	3.7	8.1	0	0
Rate from meter (ft/sec)	0	0	0	0.0	0.1	0	0

	<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)	Dry	Dry	60.2	61	61.9	Dry	Dry
Dissolved Oxygen (%)	Dry	Dry	44.1	40	35.8	Dry	Dry
Dissolved Oxygen (ppm)	Dry	Dry	4.23	3.9	3.47	Dry	Dry
Total Dissolved Solids (mg/L)	Dry	Dry	407	500	740	Dry	Dry
Salinity (ppt)	Dry	Dry	0.31	0.39	0.57	Dry	Dry
Species Observed	Many stickleback throughout. One young of the year (3-4") steelhead trout near Sites 4.						
Comments	Flow intermittent between Sites 3 and 4, going dry upstream of Site 3.						
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 121° 6'33.42"W	35°35'57.55"N 121° 6'53.39"W	35°35'48.09"N 121° 6'54.29"W	35°35'41.88"N 121° 7'4.04"W	35°35'40.00"N 121° 7'14.25"W	35°35'43.10"N 121° 7'13.85"W	35°35'48.06"N 121° 7'9.81"W
*Site 6 is on State Parks property and is not accessible at this time.							
9P7 Soil Moisture†							
North (%)	4.5						
East (%)	0.9						
South (%)	3.8						
West (%)	10.7						
†Moisture measured on each side of well casing. Max reading is 50%.							

CCSD Monitoring July 19, 2020



Site 1



Site 1



Site 1



Site 1

CCSD Monitoring July 19, 2020



Site 2



Site 2



Site 2



Site 2

CCSD Monitoring July 19, 2020



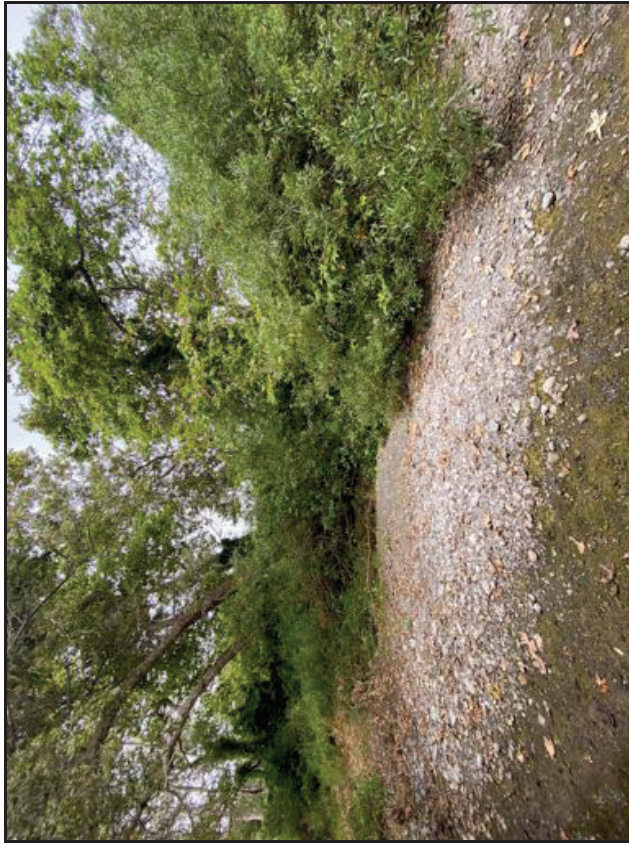
Site 3



Site 3



Site 3



Site 3

CCSD Monitoring July 19, 2020



Site 4



Site 4



Site 4

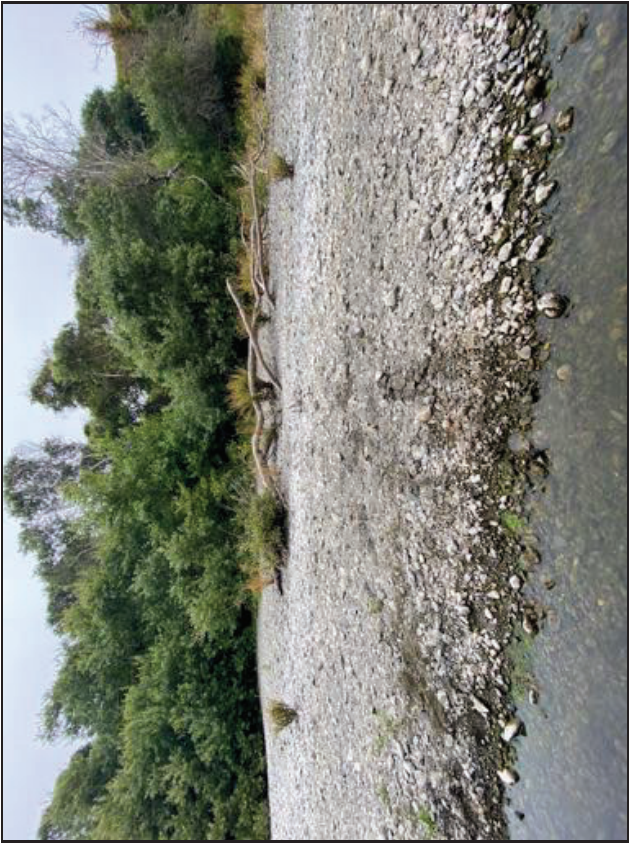


Site 4

CCSD Monitoring July 19, 2020



Site 5



Site 5



Site 5



Site 5

CCSD Monitoring July 19, 2020



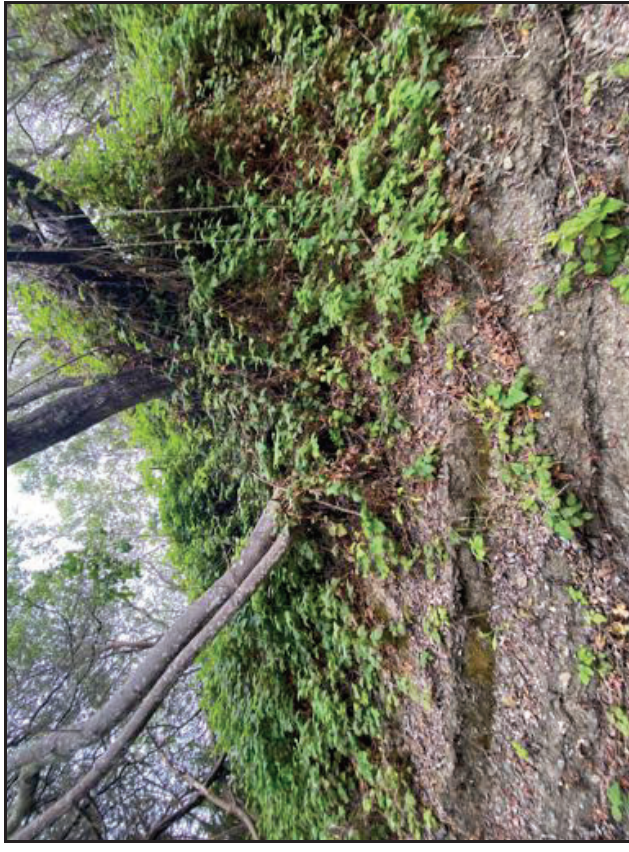
Site 7



Site 7



Site 7



Site 7

CCSD Monitoring July 19, 2020



Site 8



Site 8



Site 8



Site 8

CCSD Monitoring July 19, 2020



Walking Bridge PS-1



Estuary PS-2



Estuary PS-2

CCSD Monitoring July 19, 2020



Site 1 Aerial



Site 2 Aerial



Site 3 Aerial



Site 4 Aerial

CCSD Monitoring July 19, 2020



Site 5 Aerial

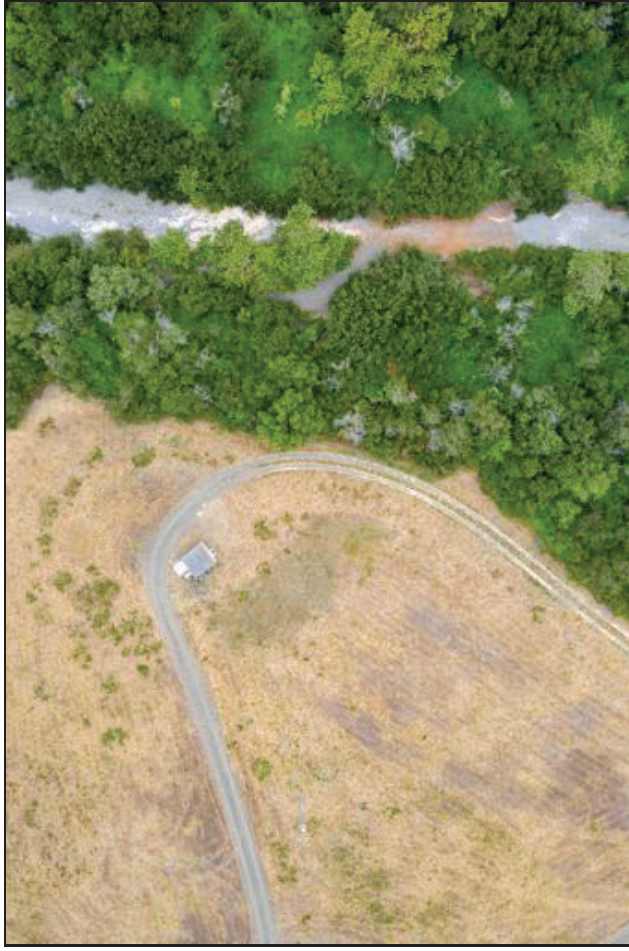


Site 7 Aerial

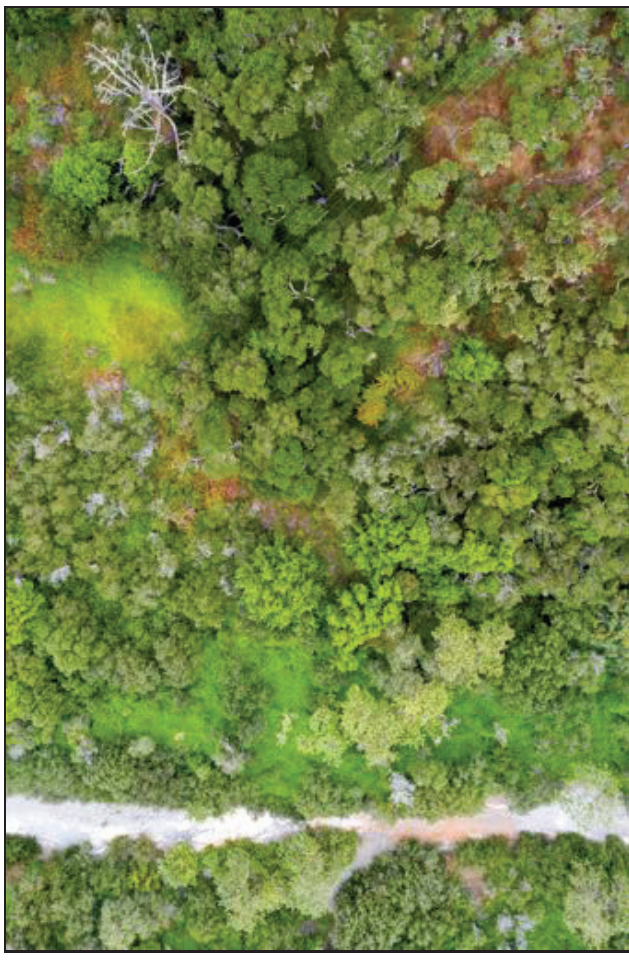


Site 8 Aerial

CCSD Monitoring July 19, 2020



Site 1 Left Riparian



Site 1 Right Riparian



Site 2 Left Riparian



Site 2 Right Riparian

CCSD Monitoring July 19, 2020



Site 3 Left Riparian



Site 3 Right Riparian



Site 4 Left Riparian



Site 4 Right Riparian

CCSD Monitoring July 19, 2020



Site 5 Left Riparian



Site 5 Right Riparian



Site 7 Left Riparian



Site 7 Right Riparian

CCSD Monitoring July 19, 2020



Site 8 Left & Right Riparian

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



Prepared by


Cleveland Biological, LLC
cindycleve@gmail.com
805.234.3759

August 2, 2020

AMP Monitoring Locations

San Simeon and Van Gordon Creeks

Legend

 Study Sites



Cleveland Biological, LLC		CCSD AMP Biological Monitoring in San Simeon and Van Gordon Creeks					
Cindy & Paul Cleveland							
Survey Date: 8-2-2020		High Tide: 4:09 @ 11:13 am	Low Tide: -0.91 @ 4:31 am	Sandbar Breached: No		Stage (718): 2.05	
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	10:55 AM	10:25 AM	10:09 AM	9:52 AM	9:37 AM	9:23 AM	9:00 AM
Weather (°F, Cloud cover)	67, clear	65, clear	64, clear	64, clear	61, clearing	59, overcast	59, overcast
Habitat							
Stream type (run, riffle, pool)	Pool	Top of riffle	Puddle	Run above riffle	Run below riffle	Dry	Dry
Instream cover type (lwd, swd, etc)	swd	riparian veg	none	swd	riparian veg	none	none
Substrate type (cobble, gravel, silt)	c, s	c, g	s	c, g	s, c	s, g	c, g, s
Substrate embeddedness (%)	85	25	100	50	50	75	75
Algae Surface (%)	75	0	50	75	0	0	0
Algae Subsurface (%)	100	0	100	100	75	0	0
Vegetation							
Instream cover (%)	10	15	15	25	10	0	0
Overhead cover (%)	10	5	15	25	10	80	90
Riparian width-Rt Bank (ft)	150	35	210	135	25	30	30
Riparian width-Lt Bank (ft)	100	10	220	230	85	85	55
Riparian Moisture-Rt Bank (%)	0.3	0	14.3	19	2.7	11.3	17.7
Riparian Moisture-Lt Bank (%)	0	0	9.1	25.5	7.5	16	14
Hydrology							
Maximum depth (ft)	0	0	0.2	0.6	1.2	0	0
Wetted width (ft)	0	0	2	19	13	0	0
Flow = Area x Rate (cfs)	0.0	0.0	0.0	0.0	0.7	0	0
Hydrology Calculations							
Depth 1 @ 1/4 (ft)	0	0	0	0.3	0.4	0	0
Depth 2 @ 1/2 (ft)	0	0	0	0.2	0.8	0	0
Depth 3 @ 3/4 (ft)	0	0	0	0.6	1.1	0	0
Average Depth = total/4 (ft)	0.0	0.0	0.0	0.3	0.6	0	0
Area = Width x Avg Depth (ft^2)	0.0	0.0	0.0	5.2	7.5	0	0
Rate from meter (ft/sec)	0	0	0	0.0	0.1	0	0

	<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)	Dry	Dry	Dry	61.1	61.8	Dry	Dry
Dissolved Oxygen (%)	Dry	Dry	Dry	39.3	40.1	Dry	Dry
Dissolved Oxygen (ppm)	Dry	Dry	Dry	3.85	3.9	Dry	Dry
Total Dissolved Solids (mg/L)	Dry	Dry	Dry	437	722	Dry	Dry
Salinity (ppt)	Dry	Dry	Dry	0.33	0.56	Dry	Dry
Species Observed	Many stickleback throughout. Two young of the year (3-4") steelhead trout between Sites 3 and 4. White tailed kite observed over SWF.						
Comments	Flow intermittent between Sites 3 and 4, going dry upstream of Site 3.						
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 121°6'33.42"W	35°35'57.55"N 121°6'53.39"W	35°35'48.09"N 121°6'54.29"W	35°35'41.88"N 121°7'4.04"W	35°35'40.00"N 121°7'14.25"W	35°35'43.10"N 121°7'13.85"W	35°35'48.06"N 121°7'9.81"W
*Site 6 is on State Parks property and is not accessible at this time.							
9P7 Soil Moisture †							
North (%)	11.6						
East (%)	7.1						
South (%)	2.4						
West (%)	9.3						
†Moisture measured on each side of well casing. Max reading is 50%.							

CCSD Monitoring August 2, 2020



Site 1



Site 1

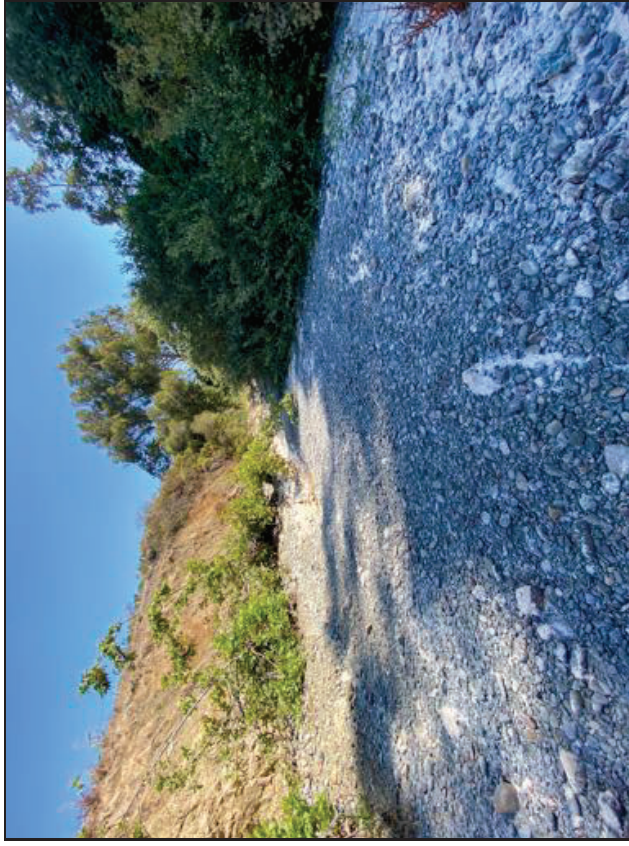


Site 1

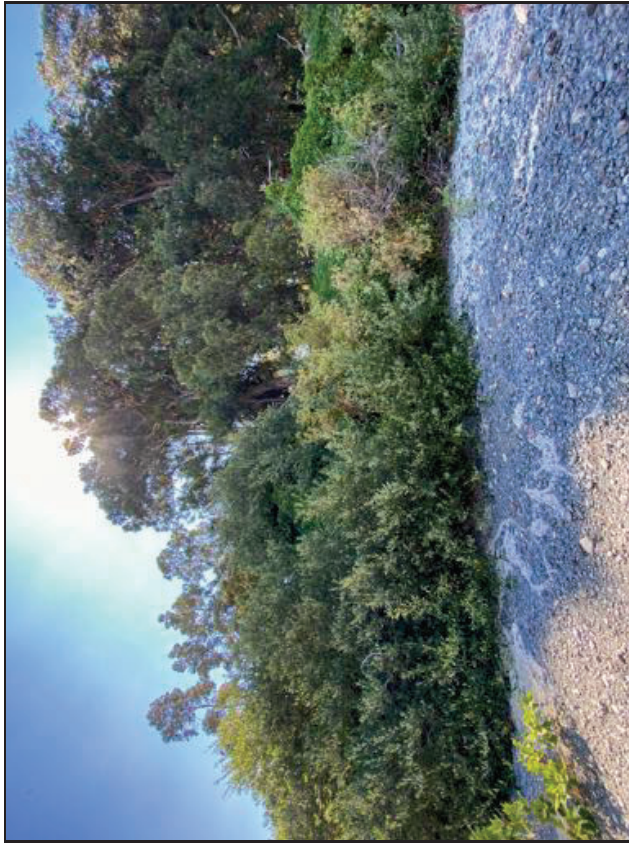


Site 1

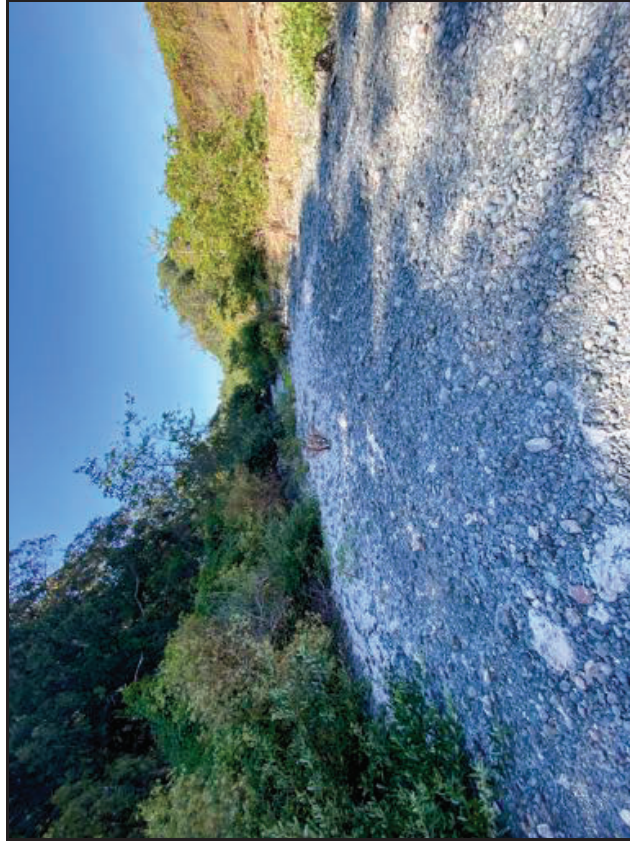
CCSD Monitoring August 2, 2020



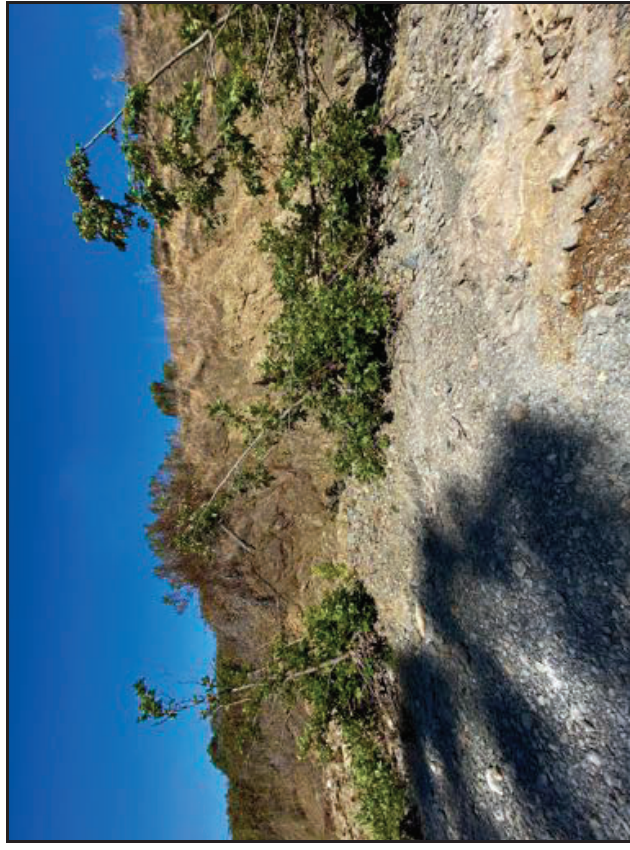
Site 2



Site 2

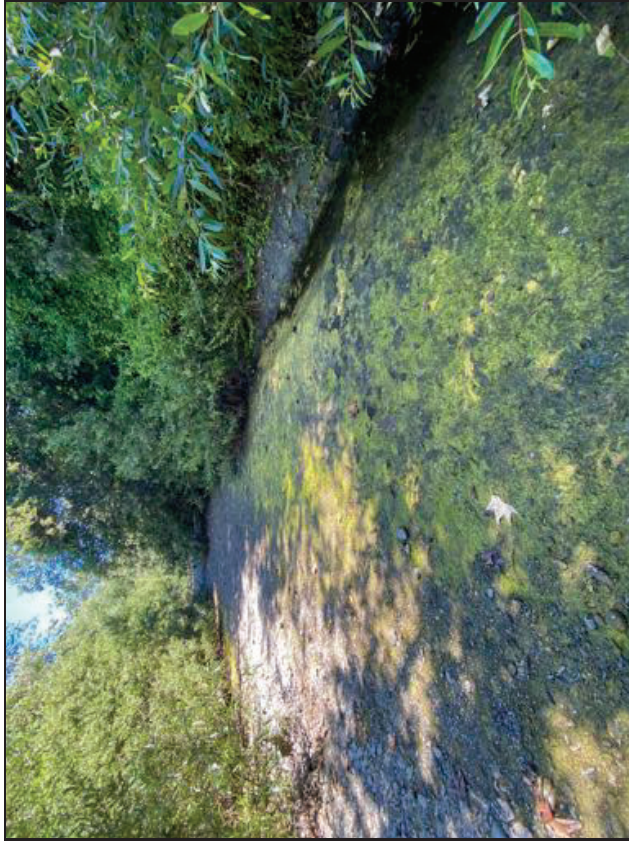


Site 2



Site 2

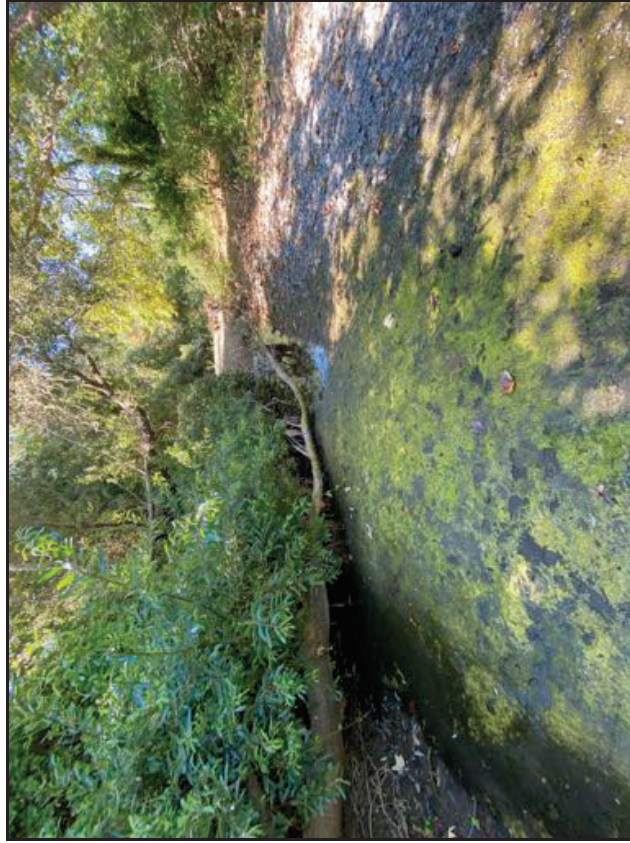
CCSD Monitoring August 2, 2020



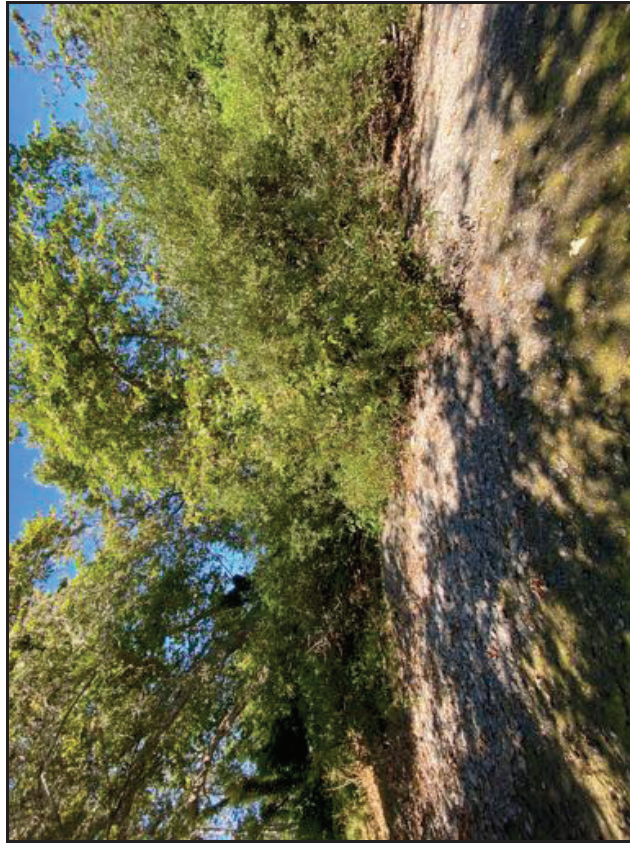
Site 3



Site 3

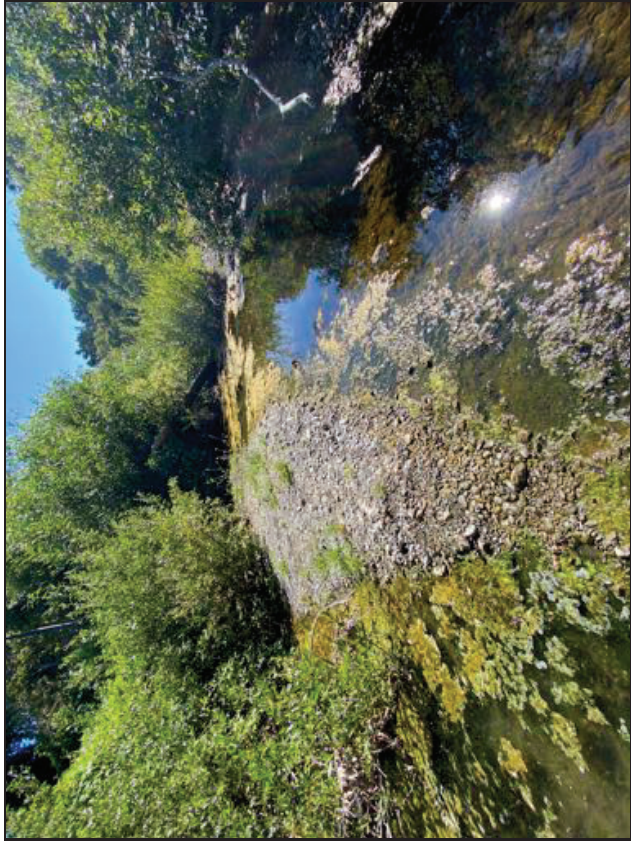


Site 3

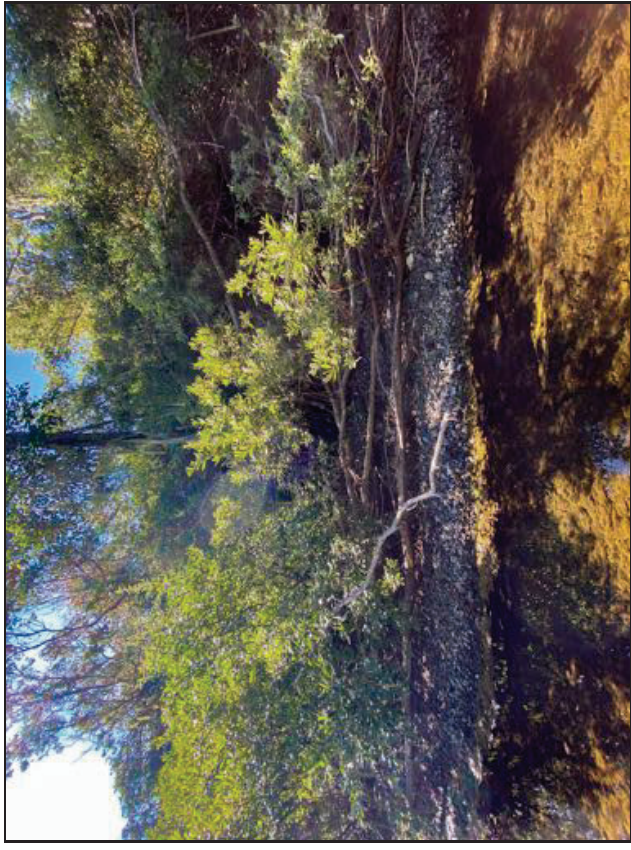


Site 3

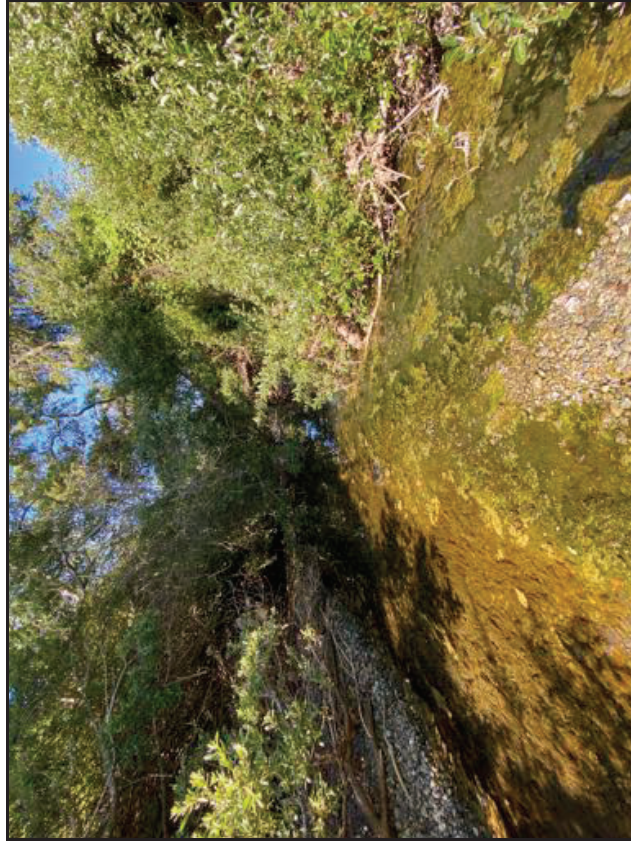
CCSD Monitoring August 2, 2020



Site 4



Site 4



Site 4



Site 4

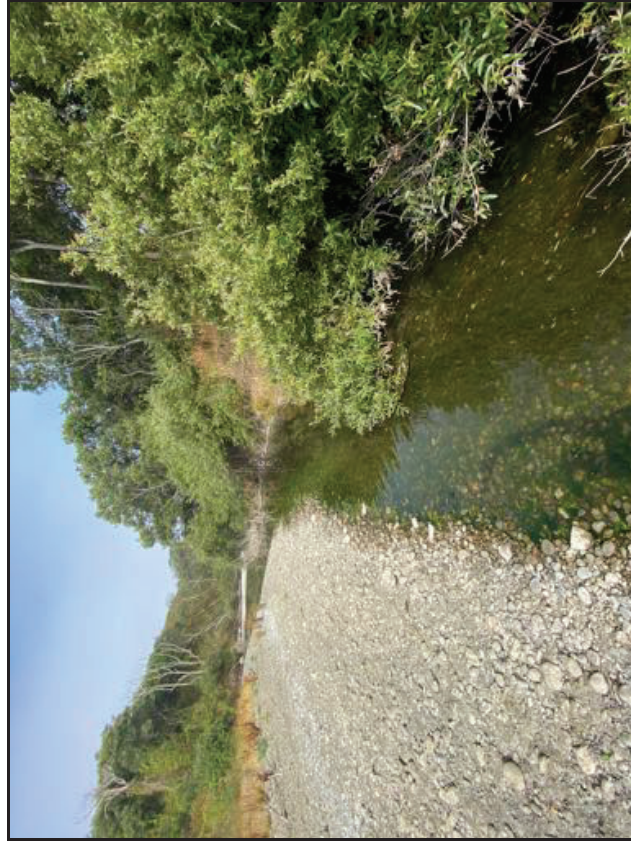
CCSD Monitoring August 2, 2020



Site 5



Site 5



Site 5



Site 5

CCSD Monitoring August 2, 2020



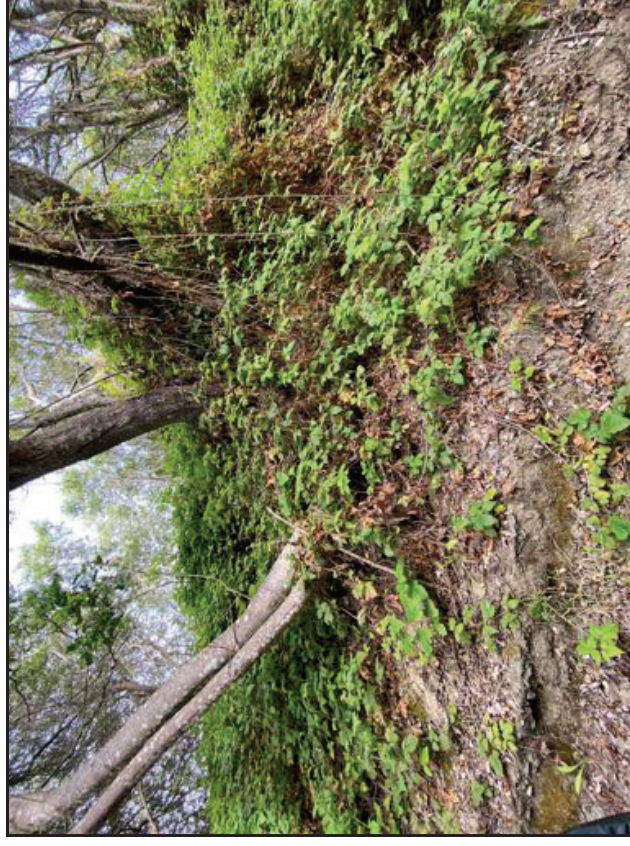
Site 7



Site 7



Site 7



Site 7

CCSD Monitoring August 2, 2020



Site 8



Site 8



Site 8



Site 8

CCSD Monitoring August 2, 2020



Walking Bridge PS-1

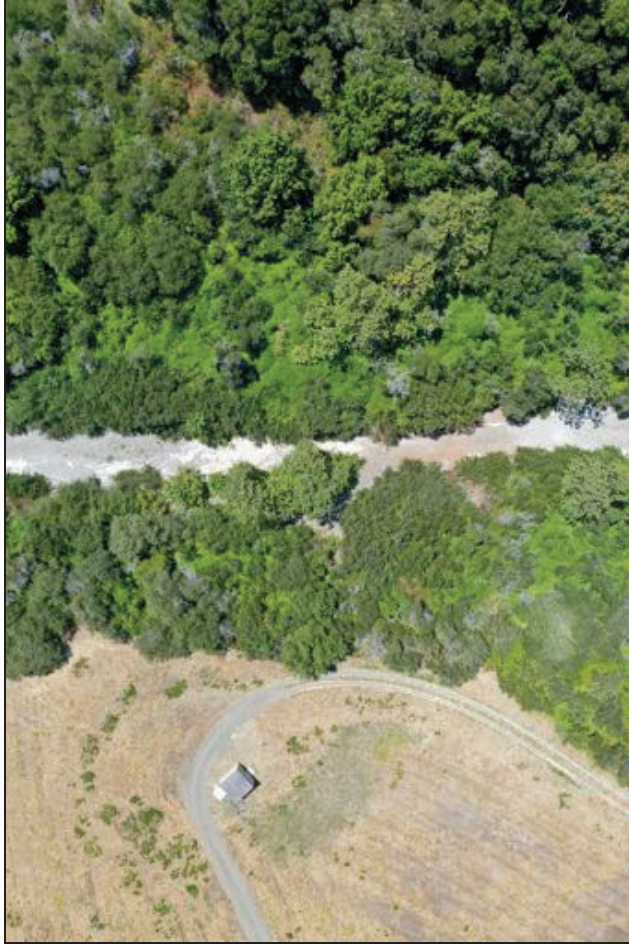


Estuary PS-2



9P7 Well

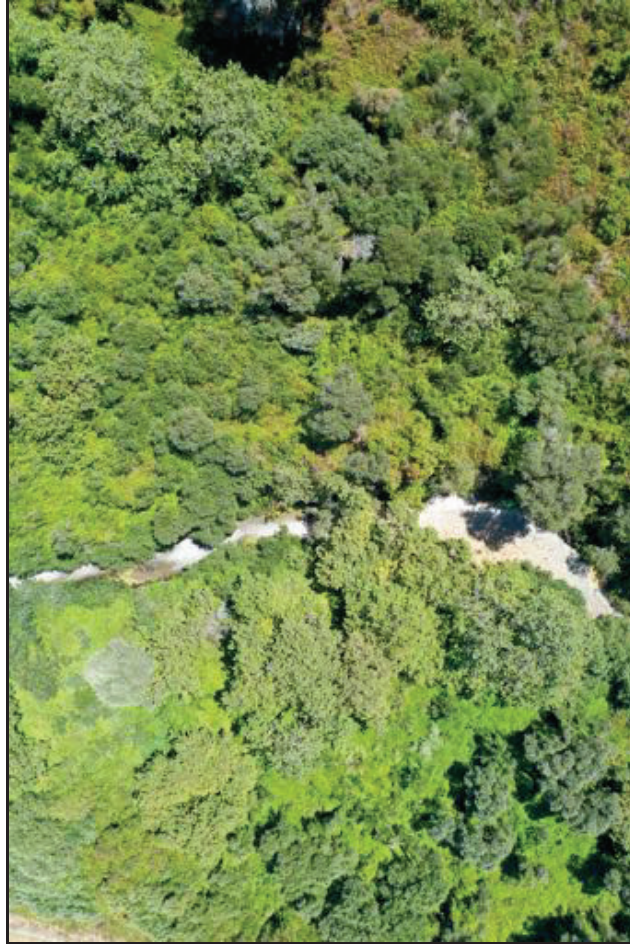
CCSD Monitoring August 2, 2020



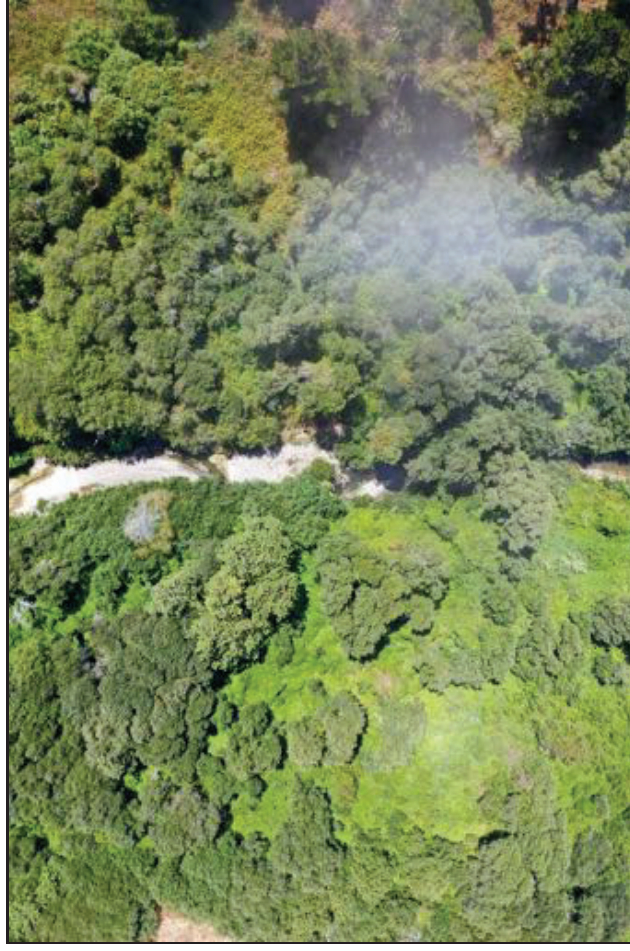
Site 1 Aerial



Site 2 Aerial



Site 3 Aerial



Site 4 Aerial

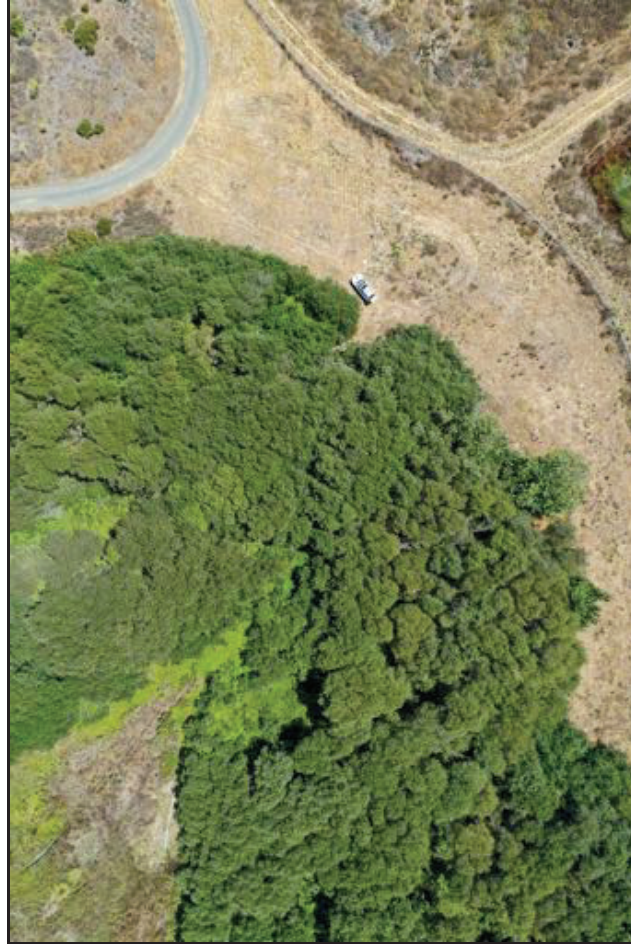
CCSD Monitoring August 2, 2020



Site 5 Aerial

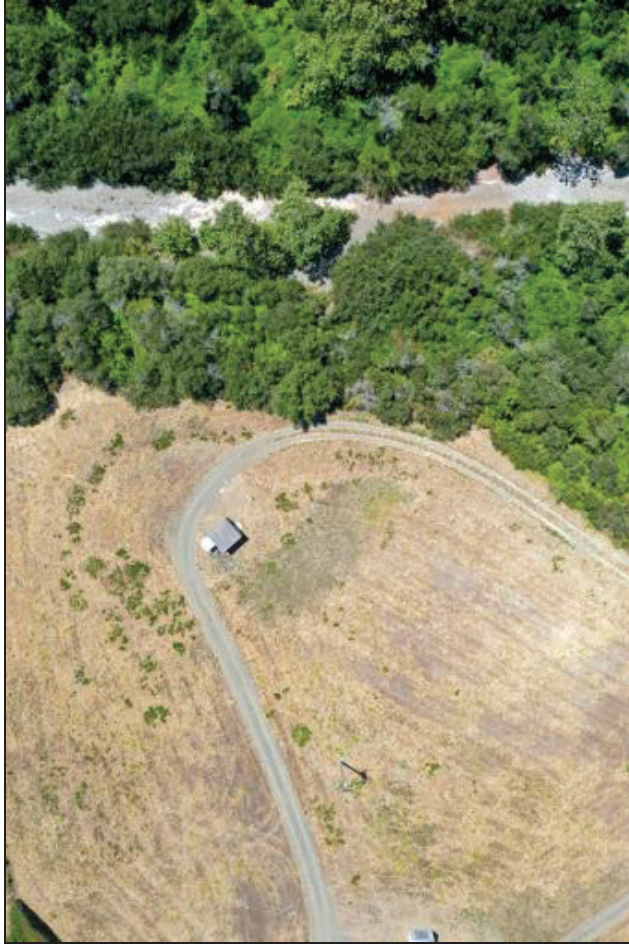


Site 7 Aerial

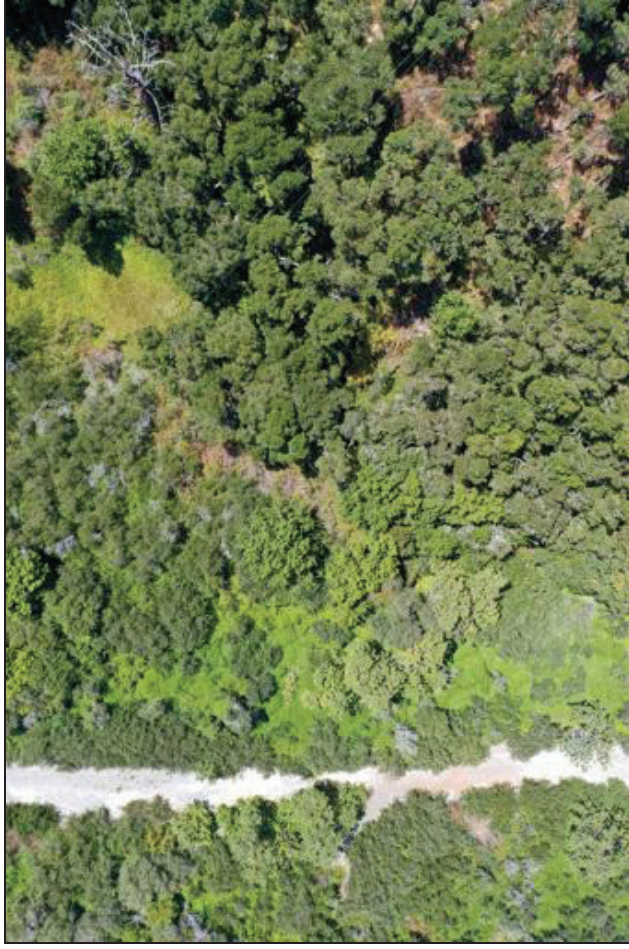


Site 8 Aerial

CCSD Monitoring August 2, 2020



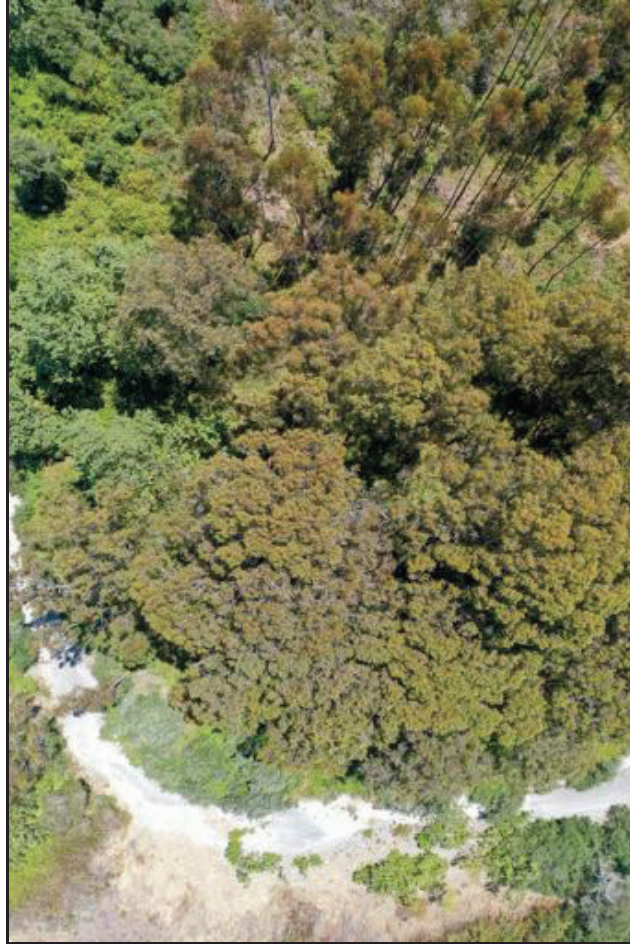
Site 1 Left Riparian



Site 1 Right Riparian

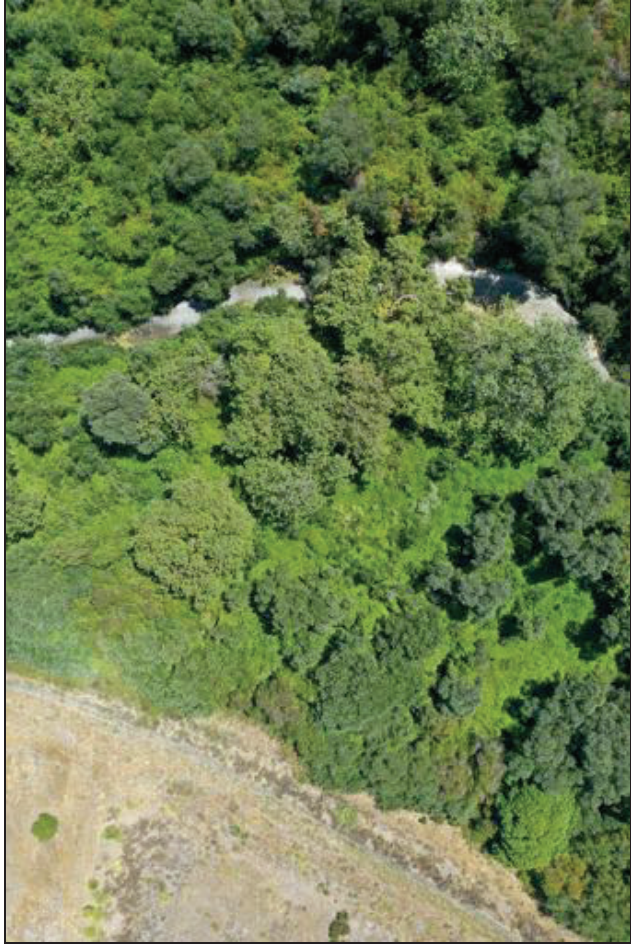


Site 2 Left Riparian

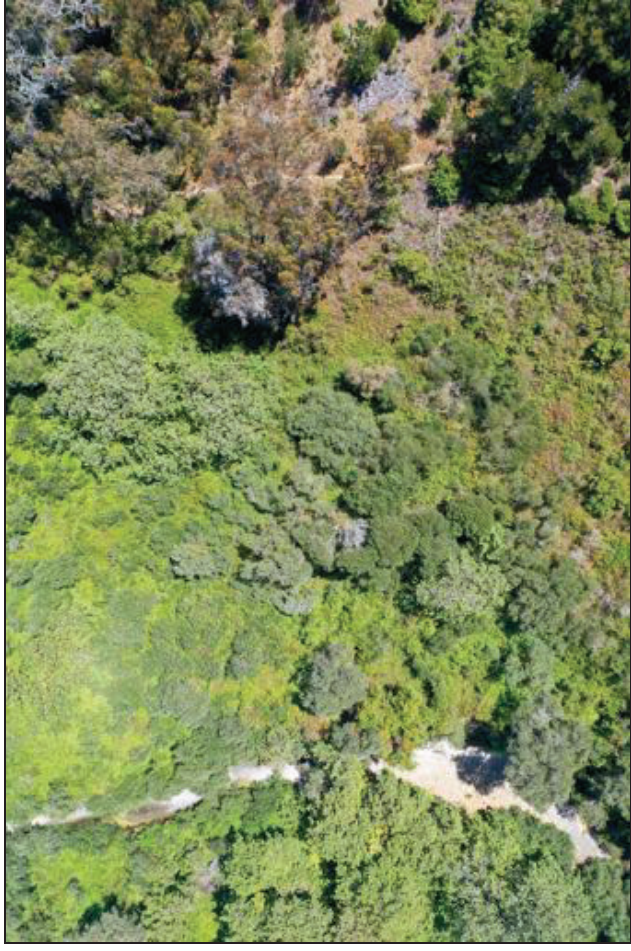


Site 2 Right Riparian

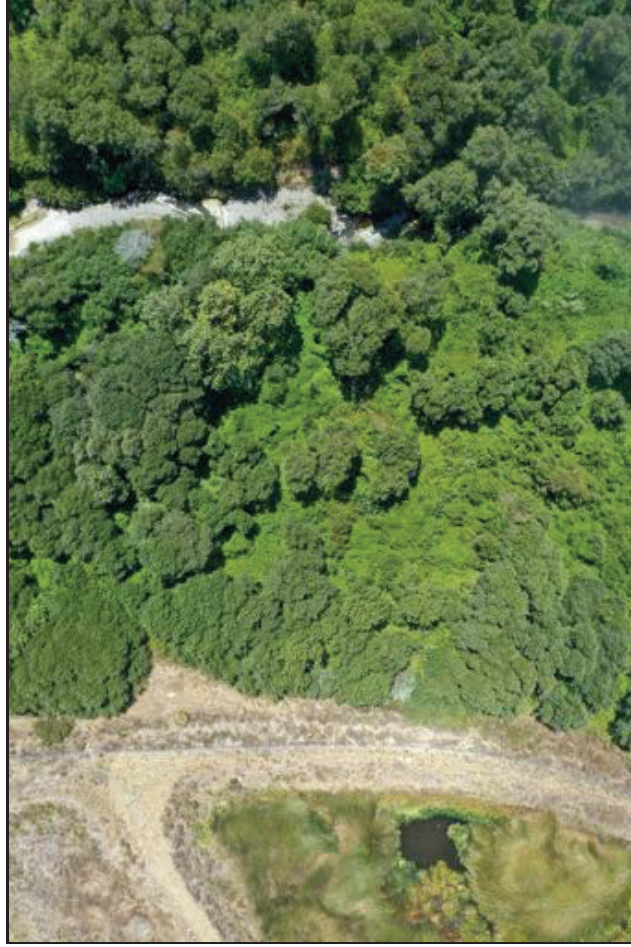
CCSD Monitoring August 2, 2020



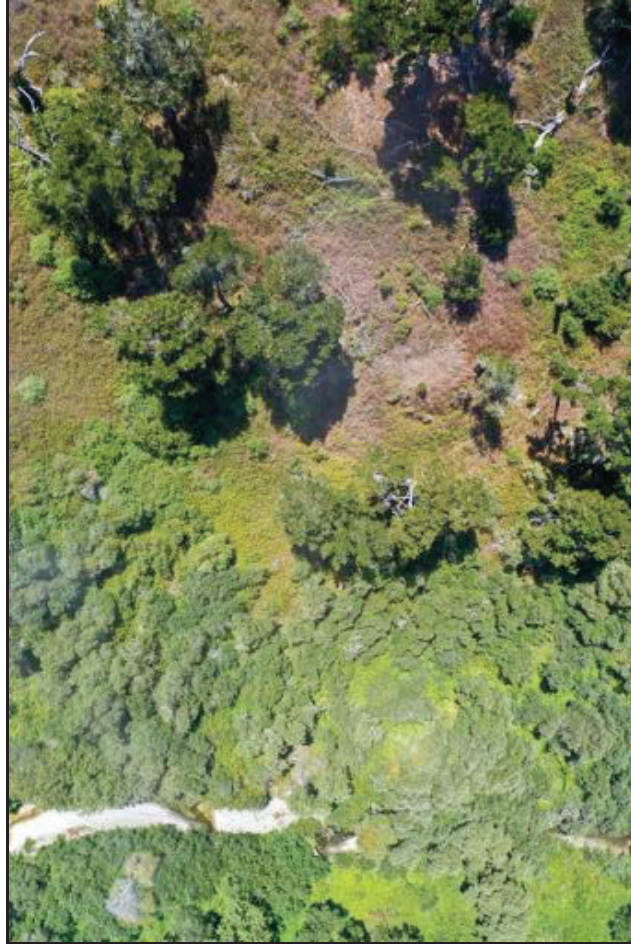
Site 3 Left Riparian



Site 3 Right Riparian

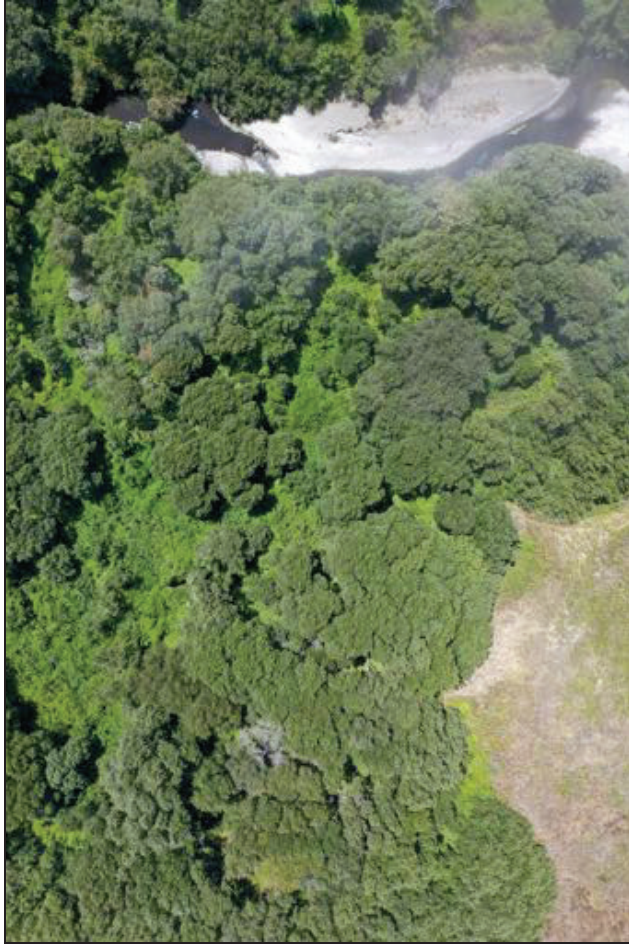


Site 4 Left Riparian

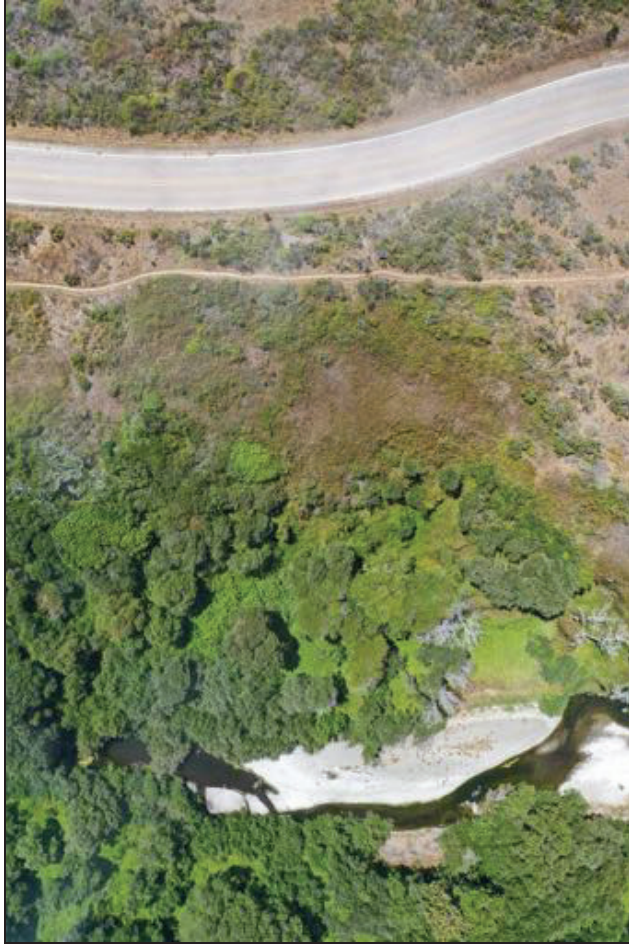


Site 4 Right Riparian

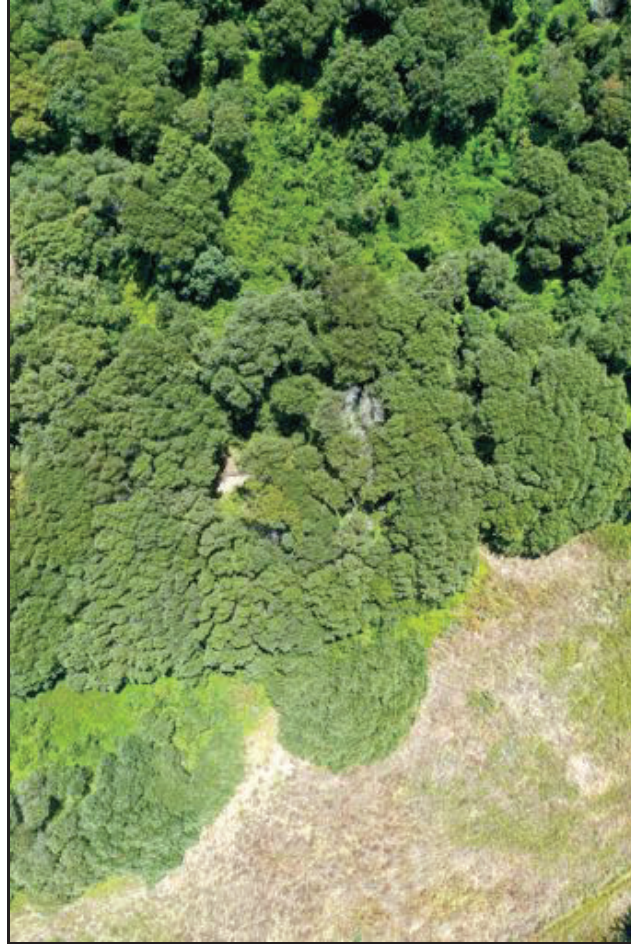
CCSD Monitoring August 2, 2020



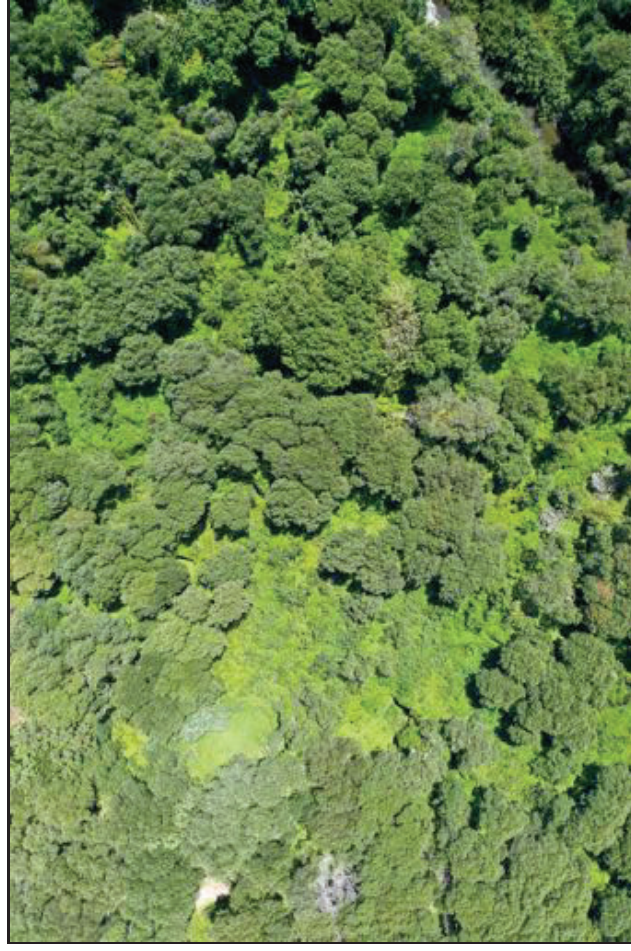
Site 5 Left Riparian



Site 5 Right Riparian



Site 7 Left Riparian



Site 7 Right Riparian

CCSD Monitoring August 2, 2020



Site 8 Left & Right Riparian

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



Prepared by


Cleveland Biological, LLC
cindycleve@gmail.com
805.234.3759

November 8, 2020

AMP Monitoring Locations

San Simeon and Van Gordon Creeks

Legend

 Study Sites



Cleveland Biological, LLC		CCSD AMP Biological Monitoring in San Simeon and Van Gordon Creeks				
Cindy & Paul Cleveland						
Survey Date: 11-8-2020		High Tide: 3.93 ft @ 5:32 AM	Low Tide: 3.23 ft @ 9:58 AM	Sandbar Breached: No	Stage (718): 2.05	
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>
Time	11:04 AM	10:30 AM	10:22 AM	10:09 AM	9:48 AM	9:43 AM
Weather (°F, Cloud cover)	58, clear	58, clear	58, clear	58, clear	58, clear	58, clear, windy
Habitat						
Stream type (run, riffle, pool)	Pool	Top of riffle	Dry	Run above riffle	Run below riffle	Dry
Instream cover type (lwd, swd, etc)	swd	riparian veg	none	swd	riparian veg	none
Substrate type (cobble, gravel, silt)	c, s	c, g	s	c, g	s, c	s, g
Substrate embeddedness (%)	85	25	100	50	75	75
Algae Surface (%)	0	0	0	0	0	0
Algae Subsurface (%)	0	0	0	75	100	0
Vegetation						
Instream cover (%)	10	15	15	25	10	0
Overhead cover (%)	10	5	15	25	10	80
Riparian width-Rt Bank (ft)	150	35	210	135	25	30
Riparian width-Lt Bank (ft)	100	10	220	230	85	85
Riparian Moisture-Rt Bank (%)	0	7.6	7.6	19.2	7.9	12.5
Riparian Moisture-Lt Bank (%)	0	3.2	10.3	25	7.3	11.6
Hydrology						
Maximum depth (ft)	0	0	0	0.6	1.1	0
Wetted width (ft)	0	0	0	19	12.6	0
Flow = Area x Rate (cfs)	0.0	0.0	0.0	0.0	0.9	0
Hydrology Calculations						
Depth 1 @ 1/4 (ft)	0	0	0	0.3	0.6	0
Depth 2 @ 1/2 (ft)	0	0	0	0.2	1.1	0
Depth 3 @ 3/4 (ft)	0	0	0	0.6	1	0
Average Depth = total/4 (ft)	0.0	0.0	0.0	0.3	0.7	0
Area = Width x Avg Depth (ft^2)	0.0	0.0	0.0	5.2	8.5	0
Rate from meter (ft/sec)	0	0	0	0.0	0.1	0

	<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)	Dry	Dry	Dry	61.2	63.8	Dry	Dry
Dissolved Oxygen (%)	Dry	Dry	Dry	25.8	28.7	Dry	Dry
Dissolved Oxygen (ppm)	Dry	Dry	Dry	2.58	2.73	Dry	Dry
Total Dissolved Solids (mg/L)	Dry	Dry	Dry	466	740	Dry	Dry
Salinity (ppt)	Dry	Dry	Dry	0.35	0.57	Dry	Dry
Species Observed	Many stickleback in wetted locations.						
Comments	Rainfall total on 2020-11-7 was approx. 0.12 inches. Rain had no effect on stream flow but did increase soil moisture in most locations. Mostly dry upstream of Site 4.						
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 121°6'33.42"W	35°35'57.55"N 121°6'53.39"W	35°35'48.09"N 121°6'54.29"W	35°35'41.88"N 121°7'4.04"W	35°35'40.00"N 121°7'14.25"W	35°35'43.10"N 121°7'13.85"W	35°35'48.06"N 121°7'9.81"W
*Site 6 is on State Parks property and is not accessible at this time.							
9P7 Soil Moisture †							
North (%)	2.3						
East (%)	3.5						
South (%)	6.1						
West (%)	9.2						
†Moisture measured on each side of well casing. Max reading is 50%.							

CCSD Monitoring November 8, 2020



Site 1



Site 1



Site 1



Site 1

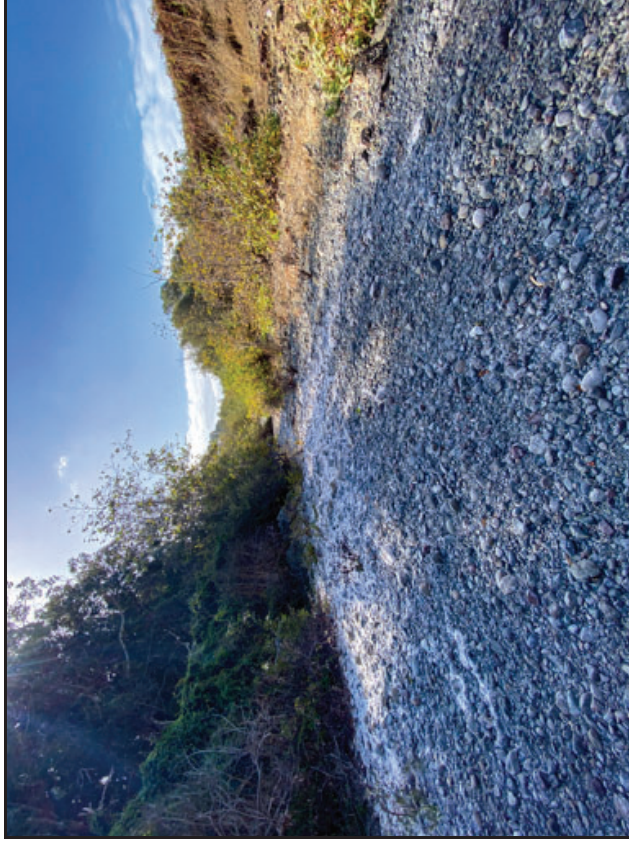
CCSD Monitoring November 8, 2020



Site 2



Site 2

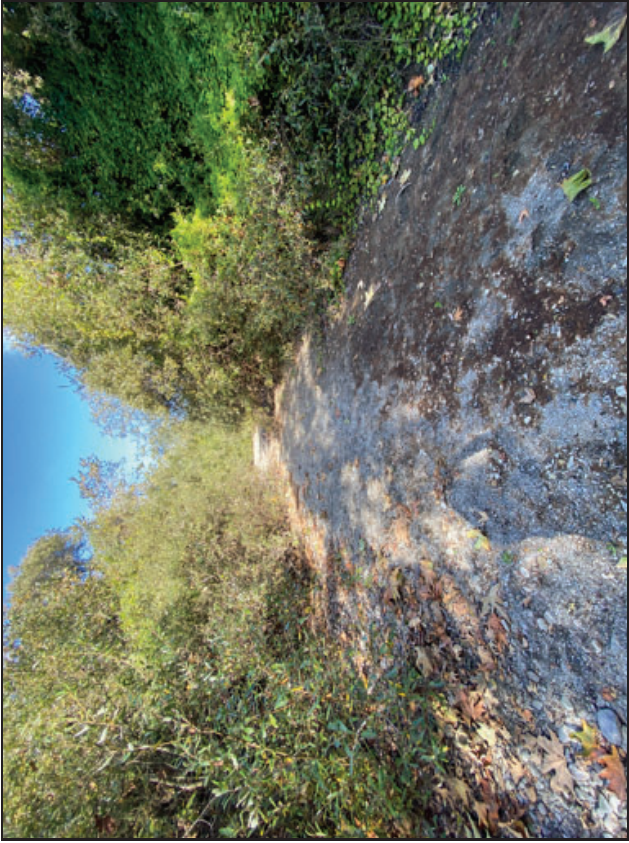


Site 2



Site 2

CCSD Monitoring November 8, 2020



Site 3



Site 3

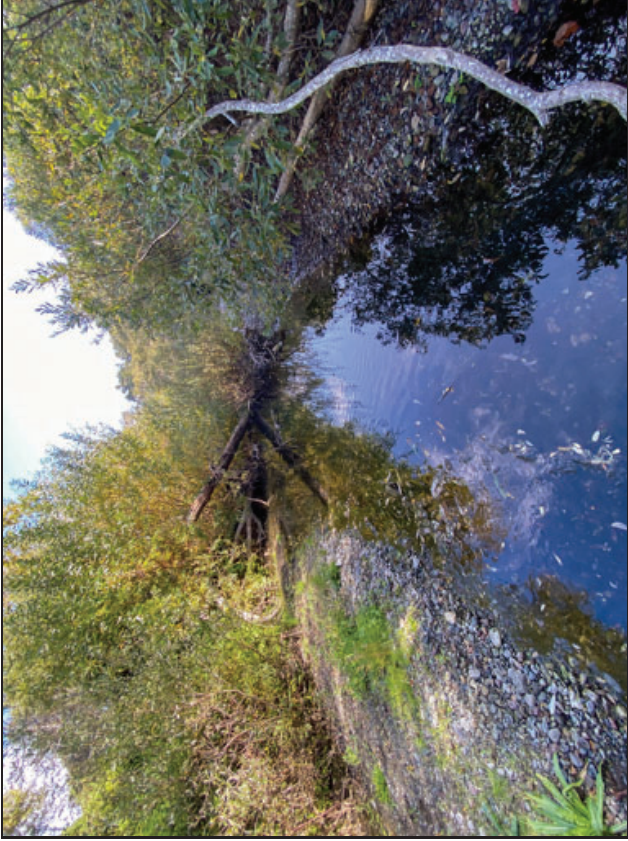


Site 3



Site 3

CCSD Monitoring November 8, 2020



Site 4



Site 4



Site 4



Site 4

CCSD Monitoring November 8, 2020



Site 5



Site 5



Site 5



Site 5

CCSD Monitoring November 8, 2020



Site 7



Site 7



Site 7



Site 7

CCSD Monitoring November 8, 2020



Site 8



Site 8



Site 8

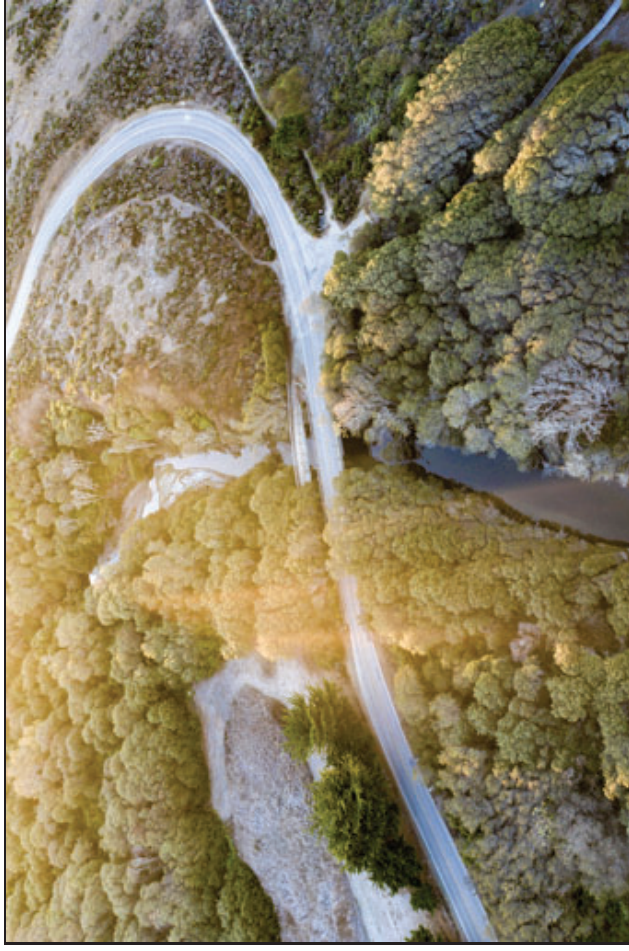


Site 8

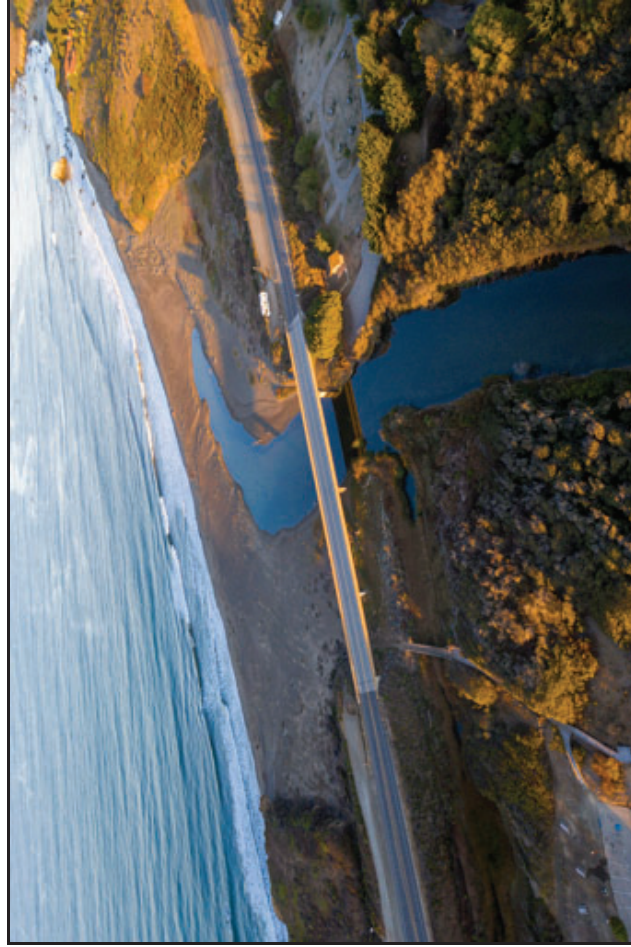
CCSD Monitoring November 8, 2020



9P7 Well

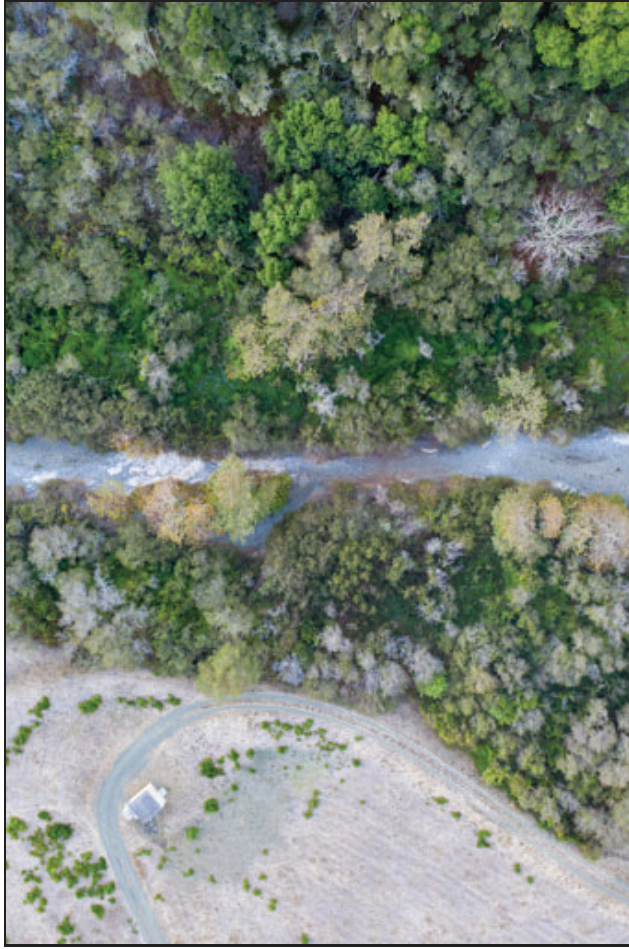


Walking Bridge PS-1



Estuary PS-2

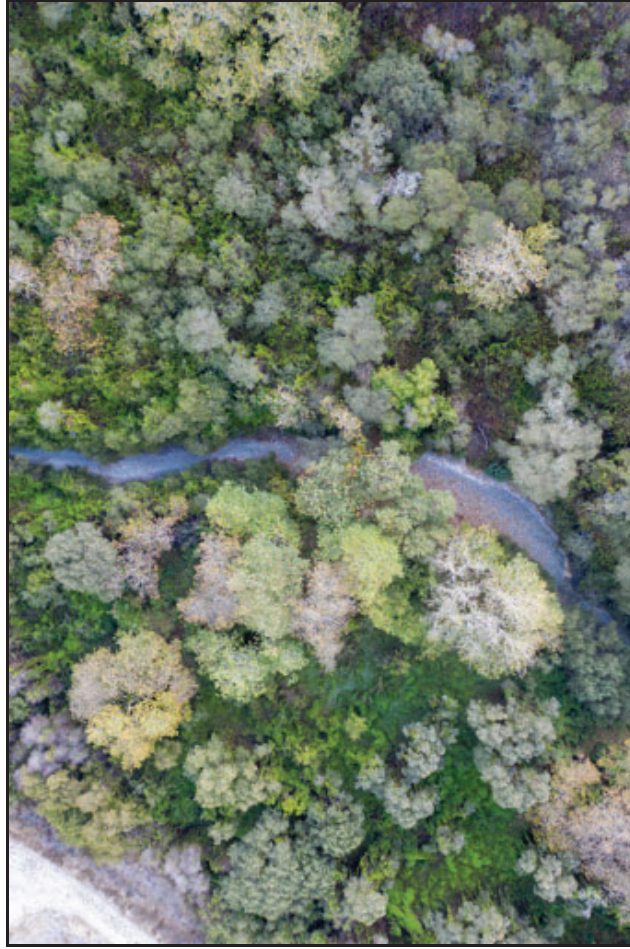
CCSD Monitoring November 8, 2020



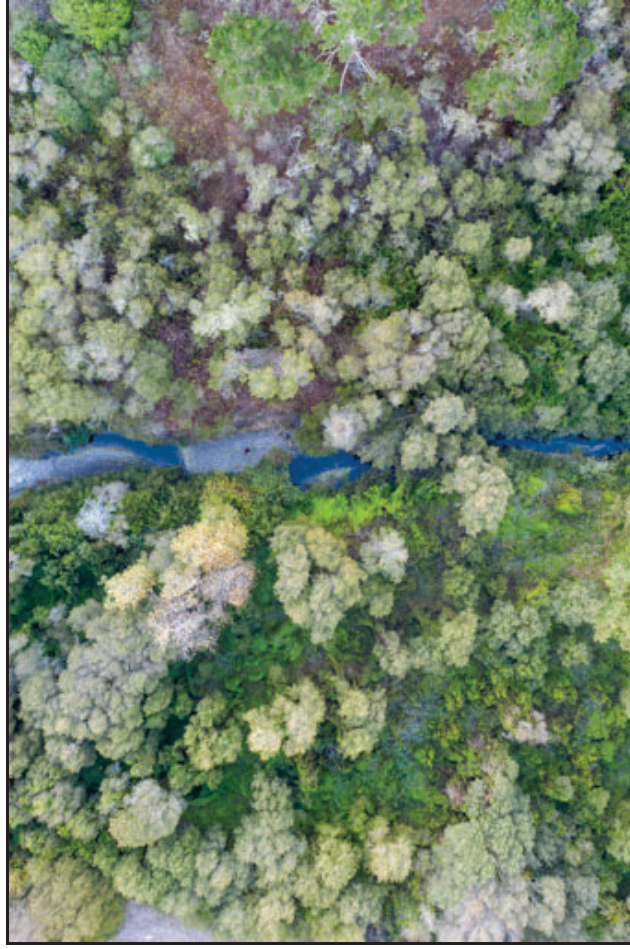
Site 1 Aerial



Site 2 Aerial



Site 3 Aerial



Site 4 Aerial

CCSD Monitoring November 8, 2020



Site 5 Aerial



Site 7 Aerial



Site 8 Aerial

CCSD Monitoring November 8, 2020



Site 1 Riparian Left



Site 1 Riparian Right



Site 2 Riparian Left

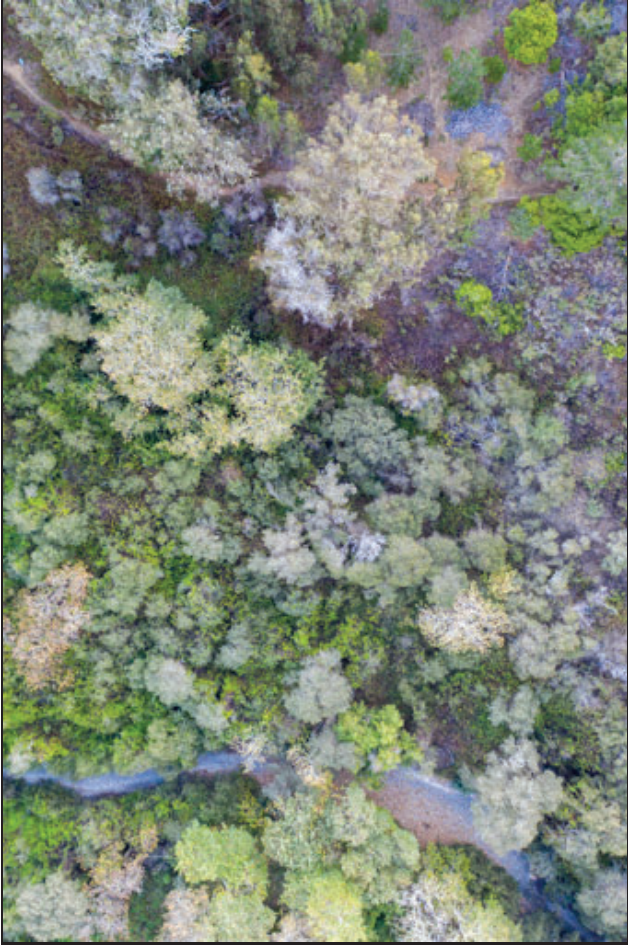


Site 2 Riparian Right

CCSD Monitoring November 8, 2020



Site 3 Riparian Left



Site 3 Riparian Right



Site 4 Riparian Left



Site 4 Riparian Right

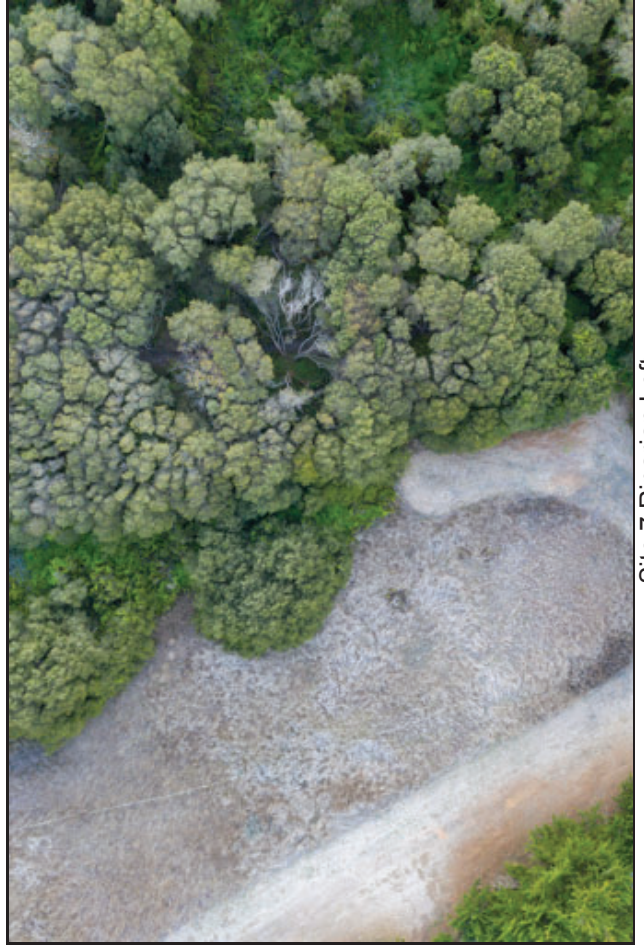
CCSD Monitoring November 8, 2020



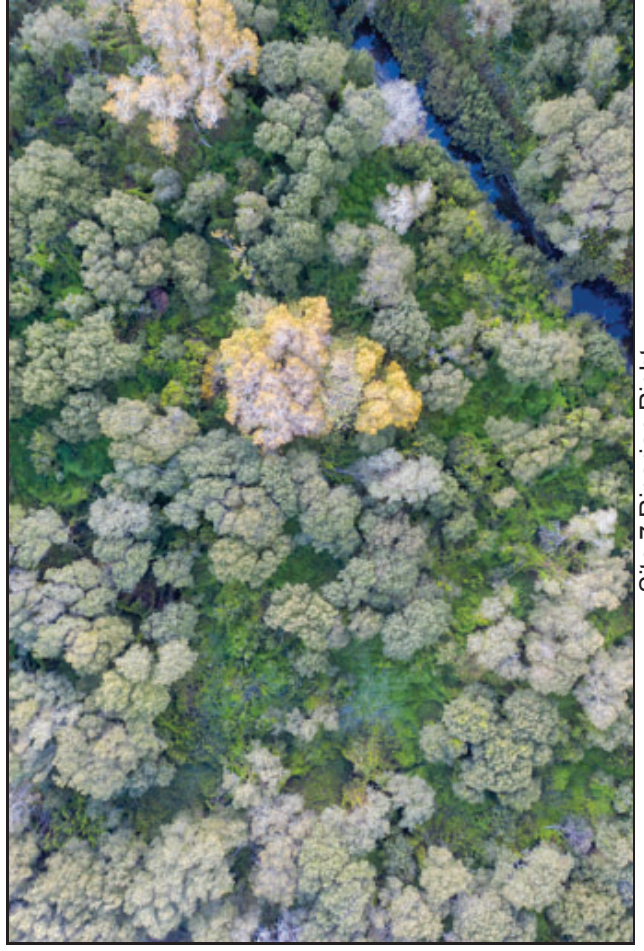
Site 5 Riparian Left



Site 5 Riparian Right



Site 7 Riparian Left



Site 7 Riparian Right

CCSD Monitoring November 8, 2020



Site 8 Riparian Left & Right

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



Prepared by


Cleveland Biological, LLC
cindycleve@gmail.com
805.234.3759

November 22, 2020

AMP Monitoring Locations

San Simeon and Van Gordon Creeks

Legend

 Study Sites



Cleveland Biological, LLC		CCSD AMP Biological Monitoring in San Simeon and Van Gordon Creeks				
Cindy & Paul Cleveland						
Survey Date: 11-22-2020		High Tide: 4.39 ft @ 5:28 AM	Low Tide: 2.66 ft @ 11:00 AM	Sandbar Breached: No	Stage (718): 2.05	
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>
Time	10:35 AM	9:45 AM	9:30 AM	9:15 AM	9:05 AM	8:55 AM
Weather (°F, Cloud cover)	56, clear	52, clear	52, clear	52, clear	52, clear	52, clear
Habitat						
Stream type (run, riffle, pool)	Pool	Top of riffle	Dry	Run above riffle	Run below riffle	Dry
Instream cover type (lwd, swd, etc)	swd	riparian veg	none	swd	riparian veg	none
Substrate type (cobble, gravel, silt)	c, s	c, g	s	c, g	s, c	s, g
Substrate embeddedness (%)	85	25	100	50	75	75
Algae Surface (%)	0	0	0	0	0	0
Algae Subsurface (%)	0	0	0	75	100	0
Vegetation						
Instream cover (%)	10	15	15	25	10	0
Overhead cover (%)	10	5	15	25	10	80
Riparian width-Rt Bank (ft)	150	35	210	135	25	30
Riparian width-Lt Bank (ft)	100	10	220	230	85	85
Riparian Moisture-Rt Bank (%)	0	8.2	7.8	18.6	8.2	11.7
Riparian Moisture-Lt Bank (%)	0	6.2	7.2	24.6	8.7	12.4
Hydrology						
Maximum depth (ft)	0	0	0	0.7	1	0
Wetted width (ft)	0	0	0	19	12.4	0
Flow = Area x Rate (cfs)	0.0	0.0	0.0	0.0	0.7	0
Hydrology Calculations						
Depth 1 @ 1/4 (ft)	0	0	0	0.3	0.5	0
Depth 2 @ 1/2 (ft)	0	0	0	0.2	0.9	0
Depth 3 @ 3/4 (ft)	0	0	0	0.6	0.9	0
Average Depth = total/4 (ft)	0.0	0.0	0.0	0.3	0.6	0
Area = Width x Avg Depth (ft^2)	0.0	0.0	0.0	5.2	7.1	0
Rate from meter (ft/sec)	0	0	0	0.0	0.1	0

	<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)	Dry	Dry	Dry	56.7	56.2	Dry	Dry
Dissolved Oxygen (%)	Dry	Dry	Dry	39.3	45.8	Dry	Dry
Dissolved Oxygen (ppm)	Dry	Dry	Dry	4.07	4.76	Dry	Dry
Total Dissolved Solids (mg/L)	Dry	Dry	Dry	470	670	Dry	Dry
Salinity (ppt)	Dry	Dry	Dry	0.36	0.51	Dry	Dry
Species Observed	Many stickleback in wetted locations.						
Comments	Rainfall total on 2020-18-7 was approx. 0.23 inches. Rain had no effect on stream flow. Mostly dry upstream of Site 4.						
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 121°6'33.42"W	35°35'57.55"N 121°6'53.39"W	35°35'48.09"N 121°6'54.29"W	35°35'41.88"N 121°7'4.04"W	35°35'40.00"N 121°7'14.25"W	35°35'43.10"N 121°7'13.85"W	35°35'48.06"N 121°7'9.81"W
*Site 6 is on State Parks property and is not accessible at this time.							
9P7 Soil Moisture †							
North (%)	10.5						
East (%)	7.1						
South (%)	5.9						
West (%)	12.6						
†Moisture measured on each side of well casing. Max reading is 50%.							

CCSD Monitoring November 22, 2020



Site 1



Site 1



Site 1



Site 1

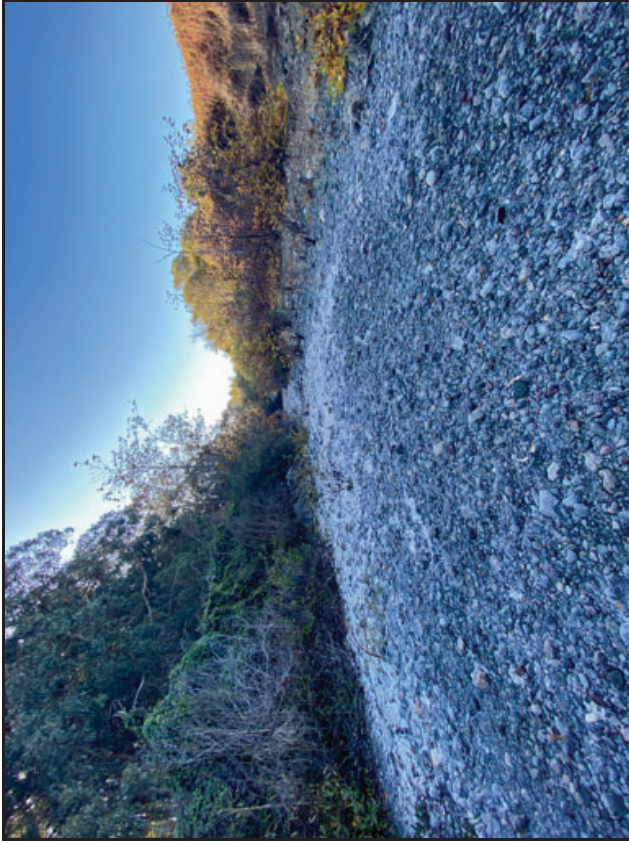
CCSD Monitoring November 22, 2020



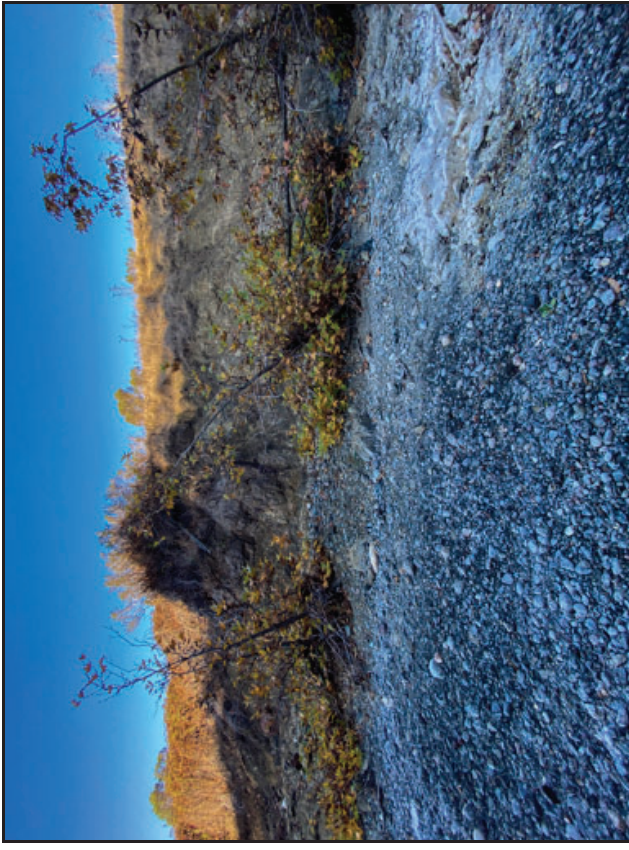
Site 2



Site 2



Site 2



Site 2

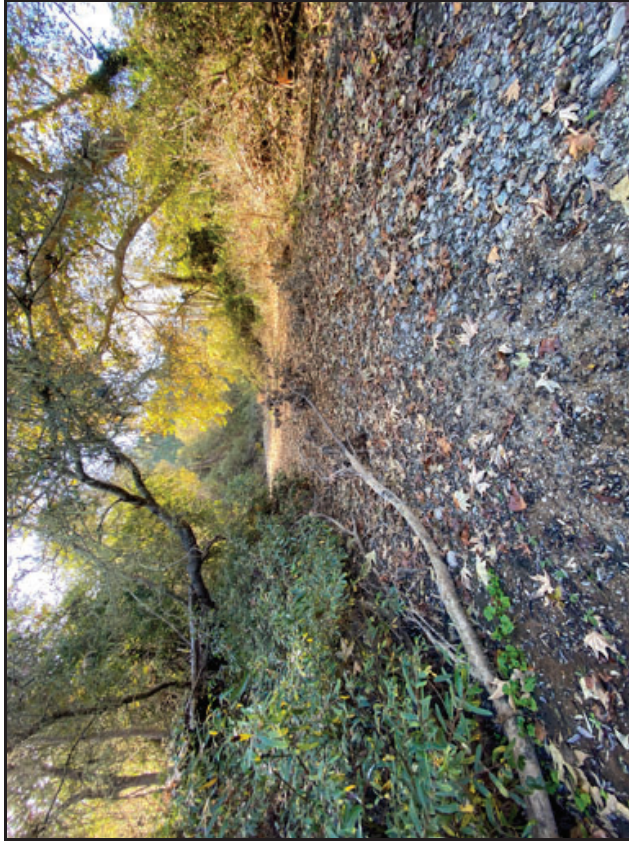
CCSD Monitoring November 22, 2020



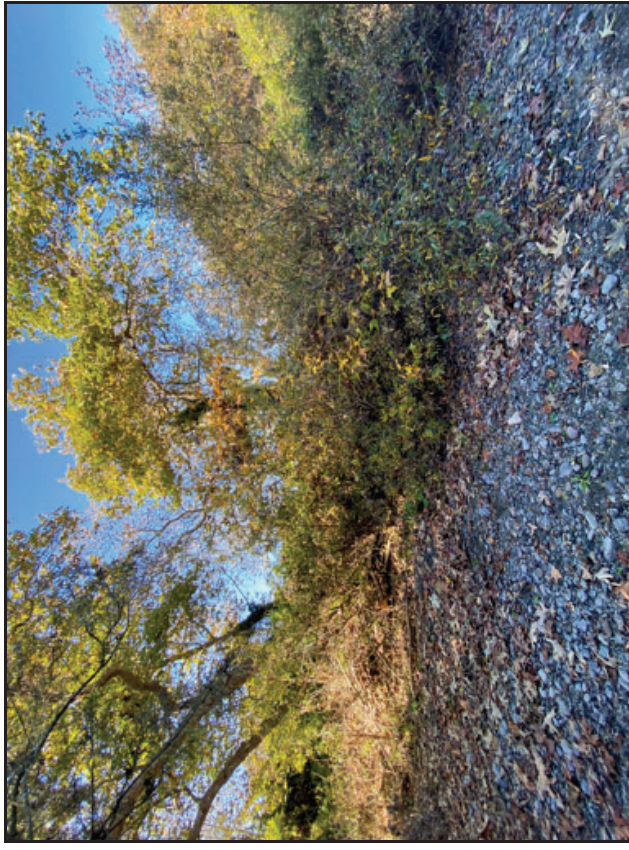
Site 3



Site 3

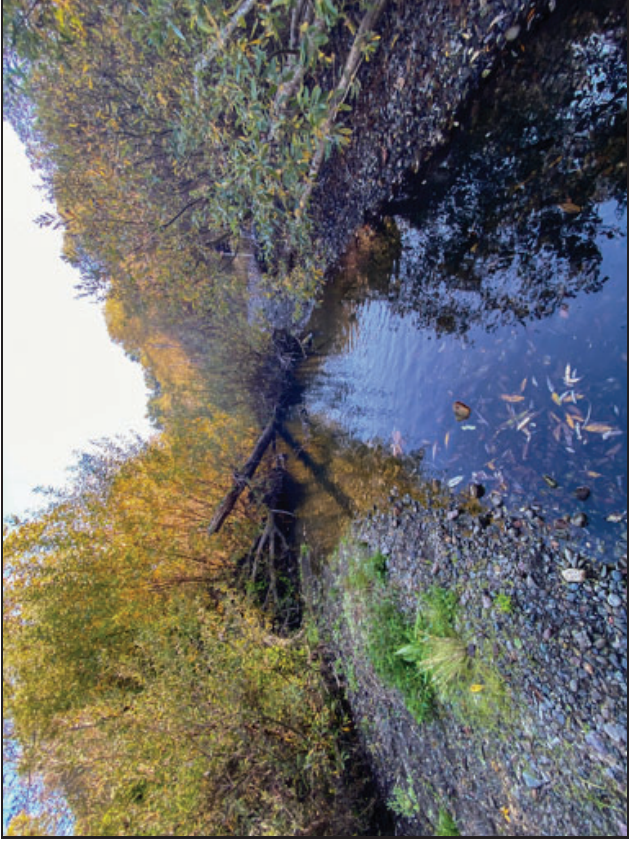


Site 3



Site 3

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Site 4



Site 4



Site 4



Site 4

CCSD Monitoring November 22, 2020



Site 5



Site 5



Site 5



Site 5

CCSD Monitoring November 22, 2020



Site 7



Site 7



Site 7



Site 7

CCSD Monitoring November 22, 2020



Site 8



Site 8



Site 8

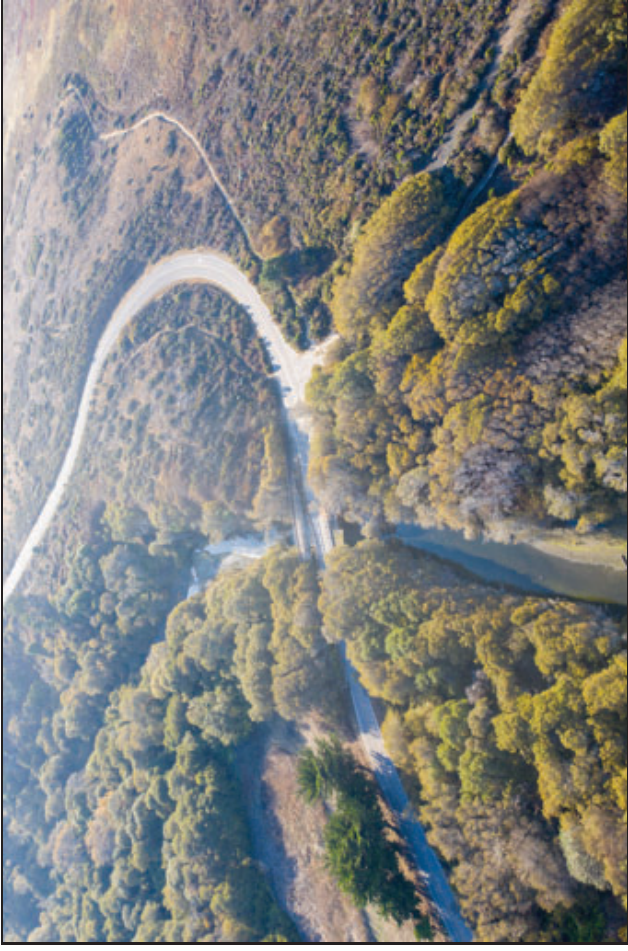


Site 8

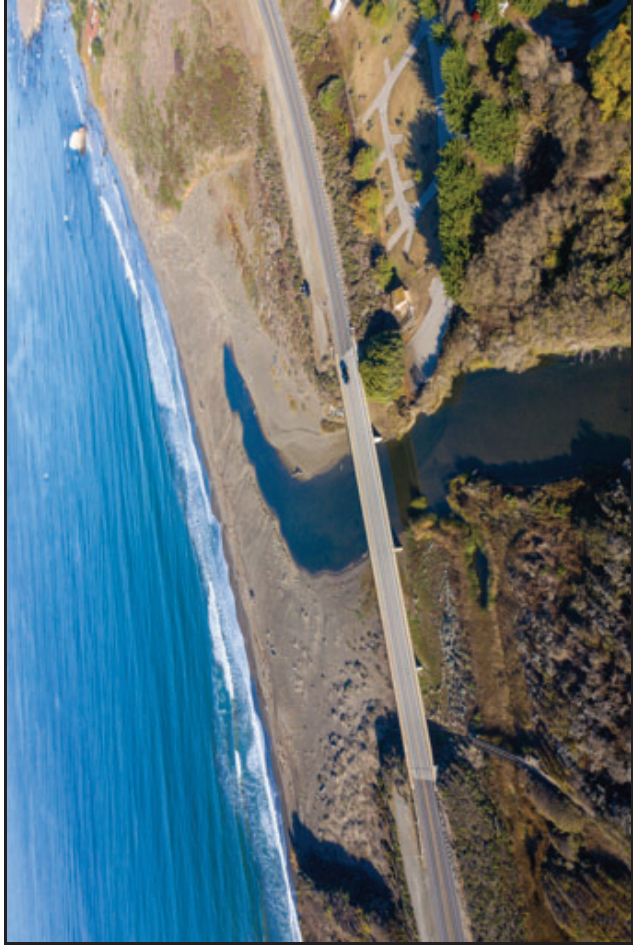
CCSD Monitoring November 22, 2020



9P7 Well

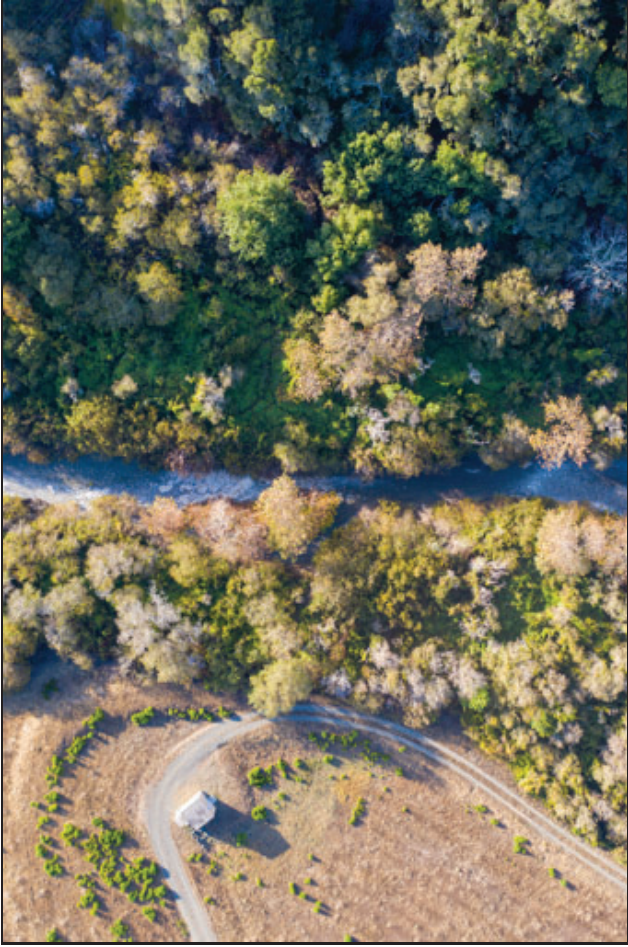


Walking Bridge PS-1



Estuary PS-2

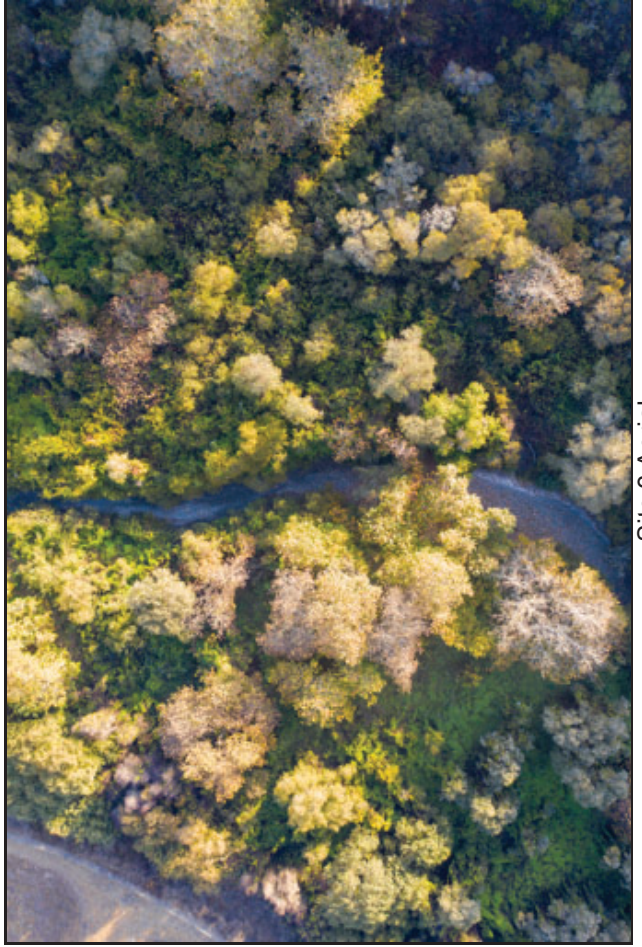
CCSD Monitoring November 22, 2020



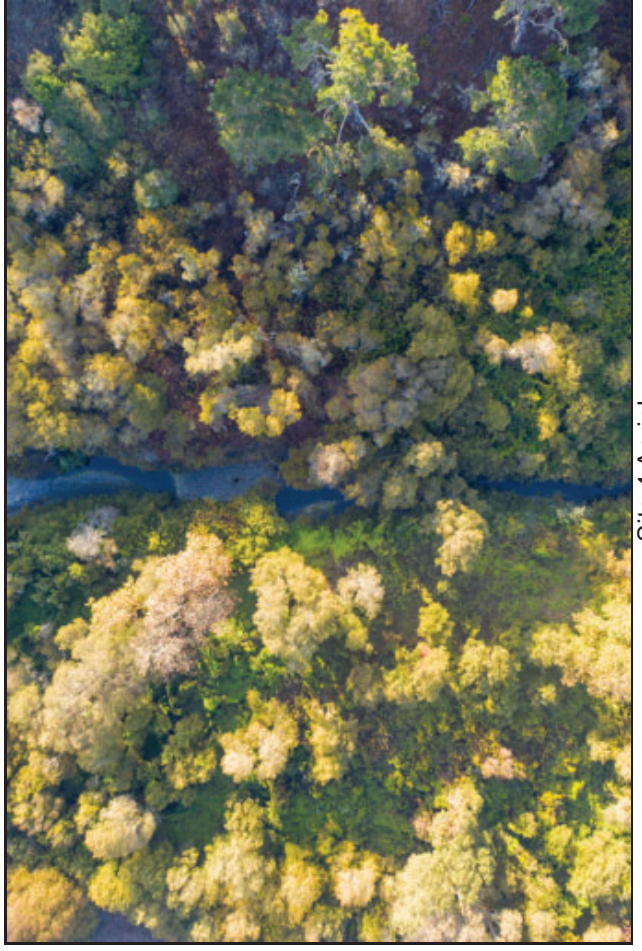
Site 1 Aerial



Site 2 Aerial

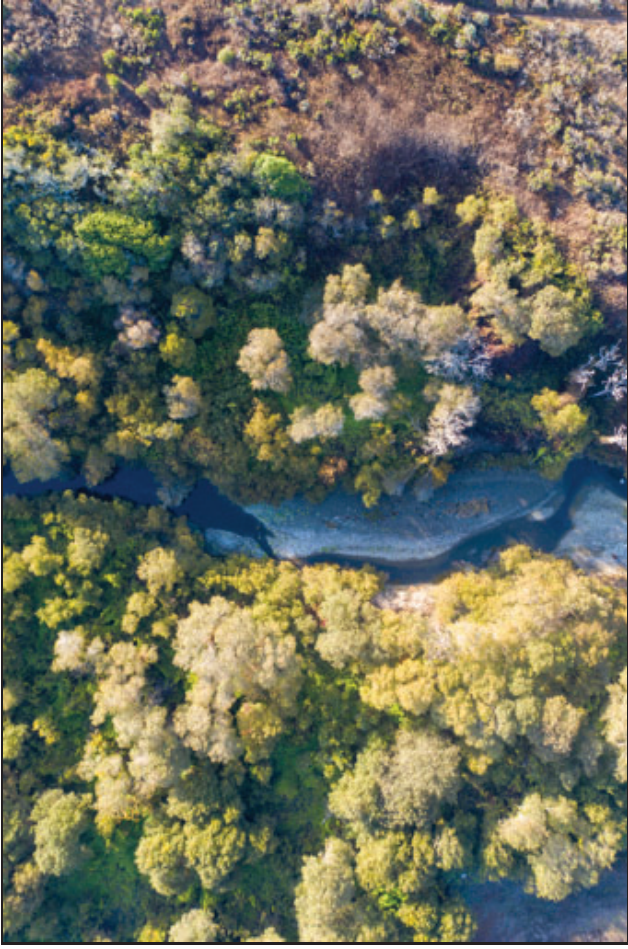


Site 3 Aerial



Site 4 Aerial

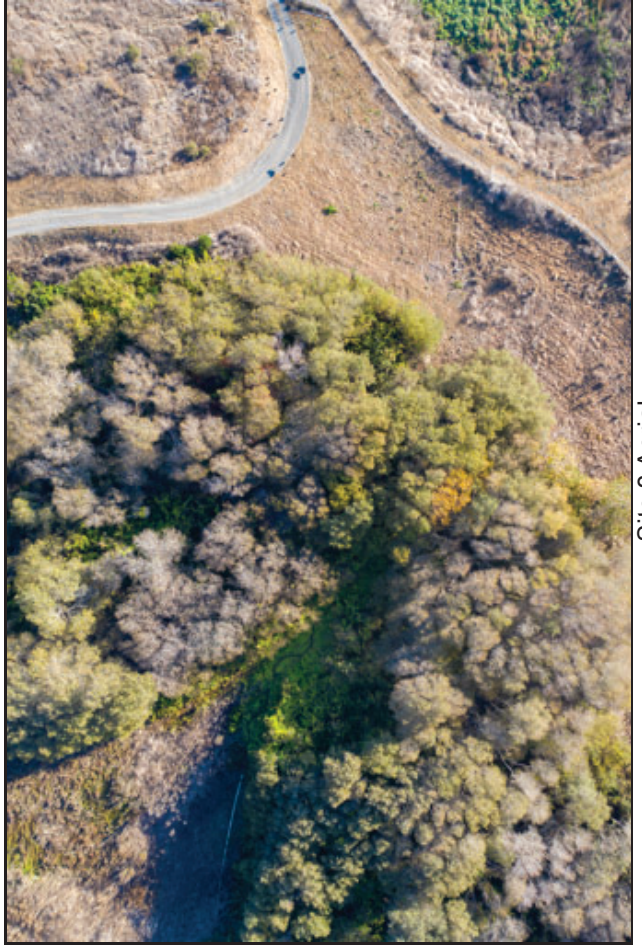
CCSD Monitoring November 22, 2020



Site 5 Aerial

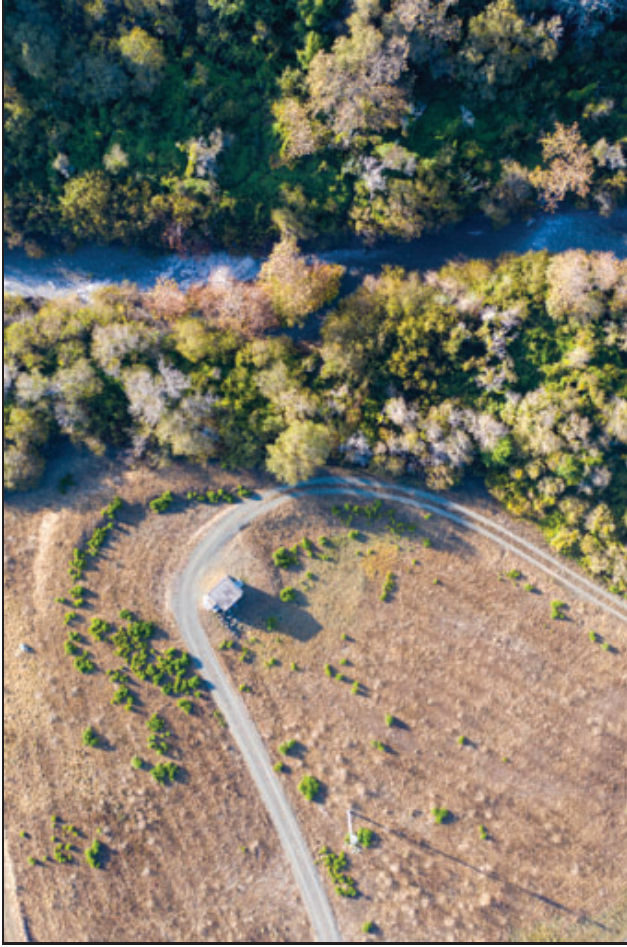


Site 7 Aerial

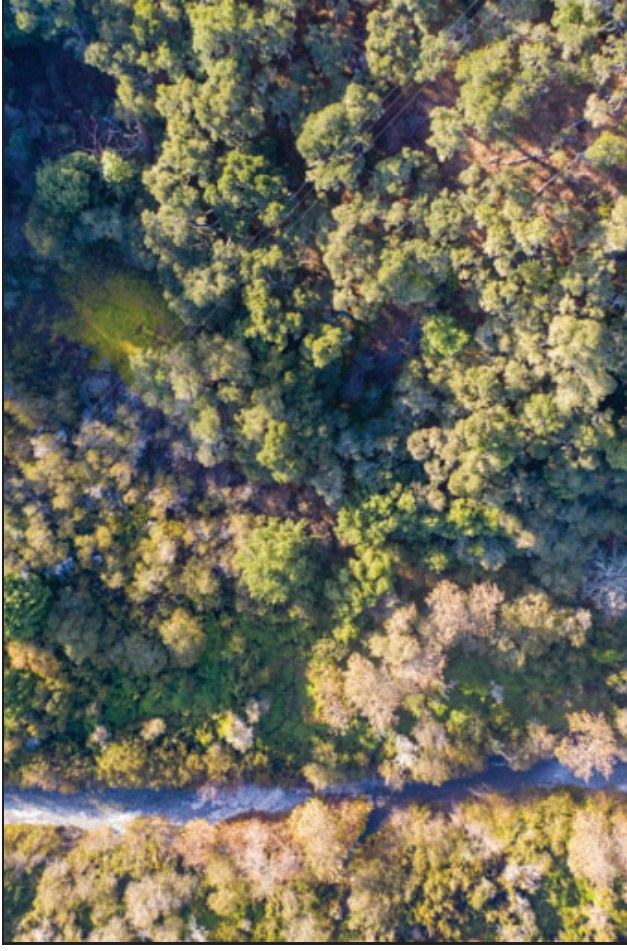


Site 8 Aerial

CCSD Monitoring November 22, 2020



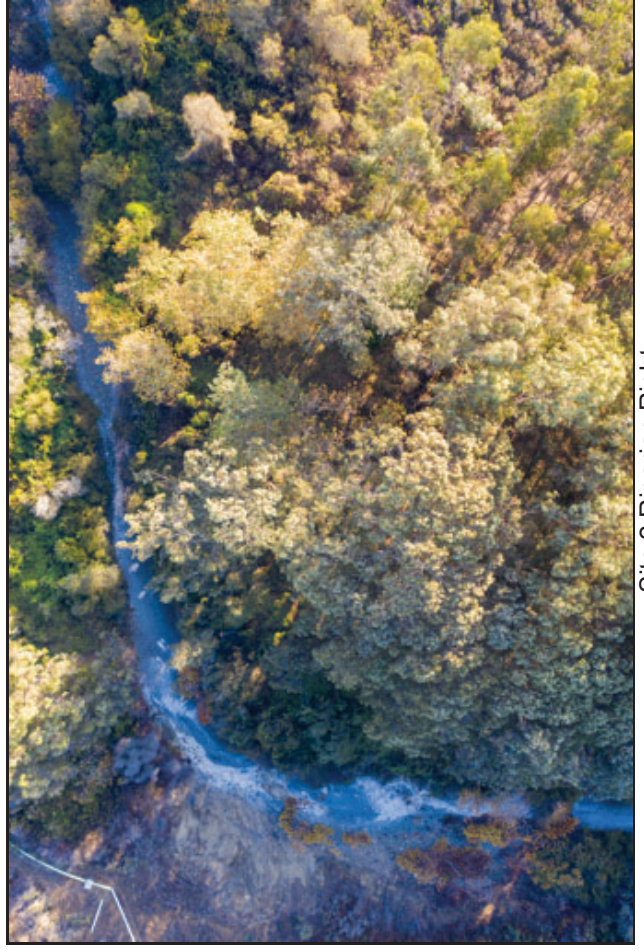
Site 1 Riparian Left



Site 1 Riparian Right

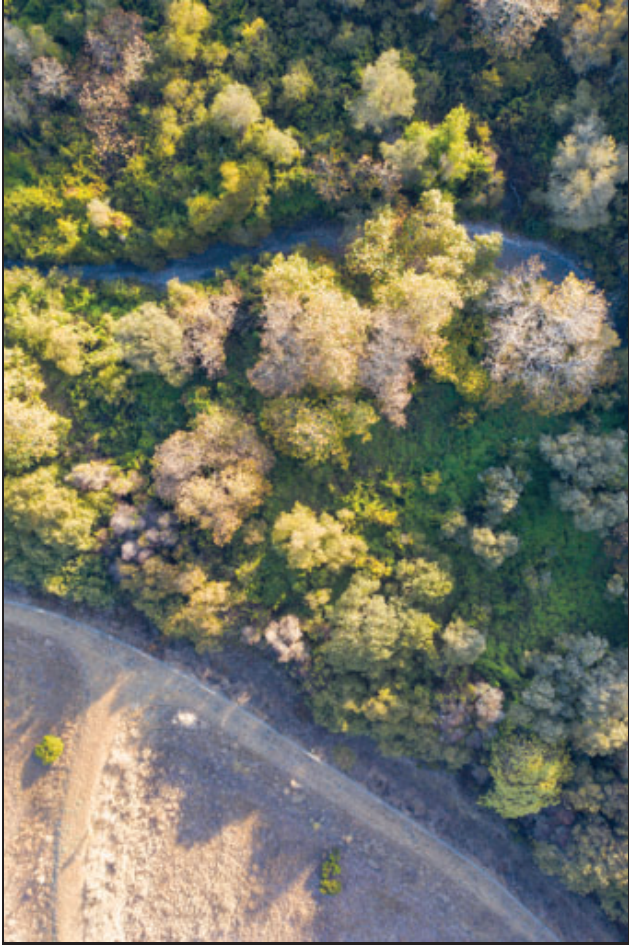


Site 2 Riparian Left



Site 2 Riparian Right

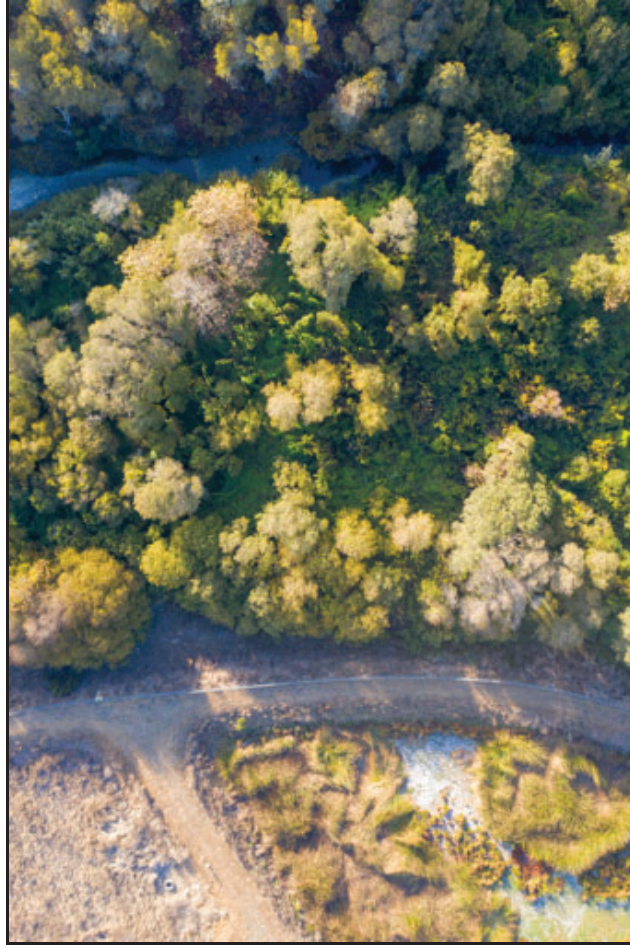
CCSD Monitoring November 22, 2020



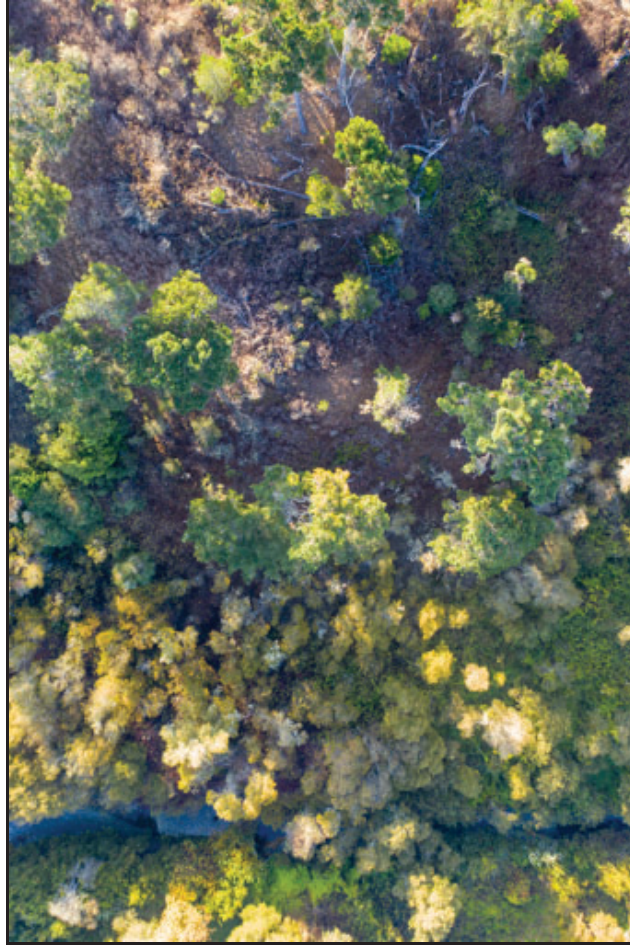
Site 3 Riparian Left



Site 3 Riparian Right

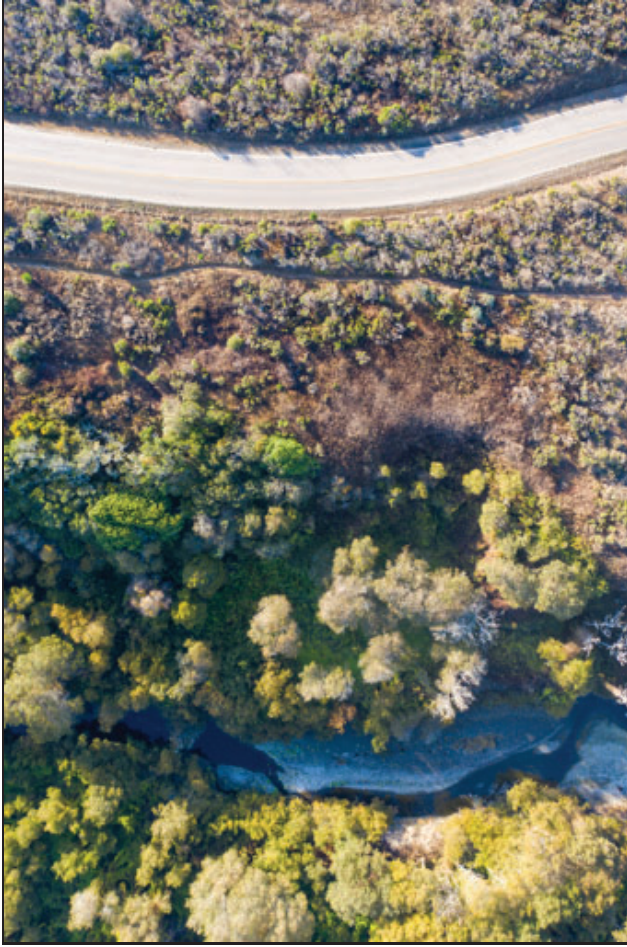


Site 4 Riparian Left

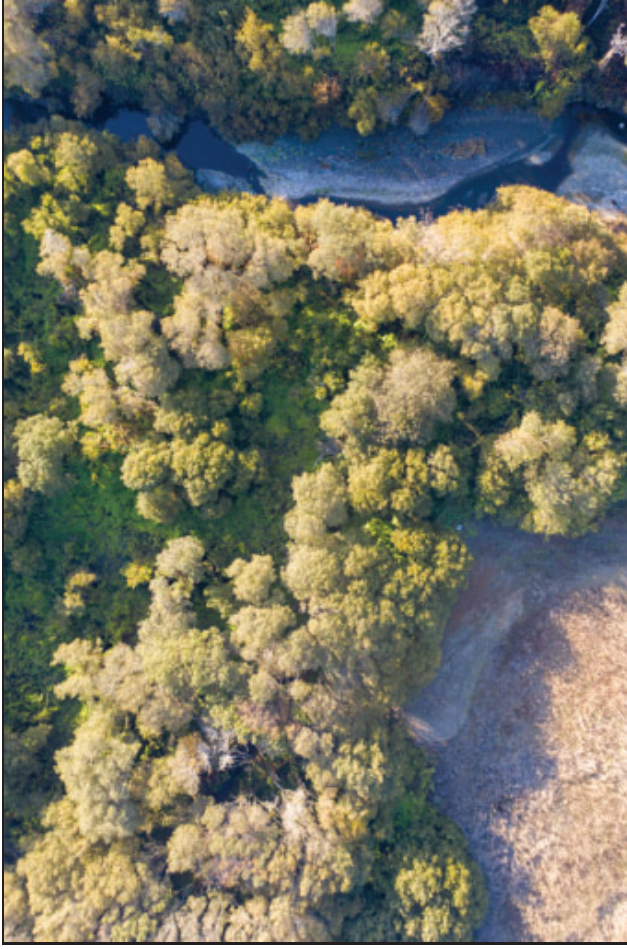


Site 4 Riparian Right

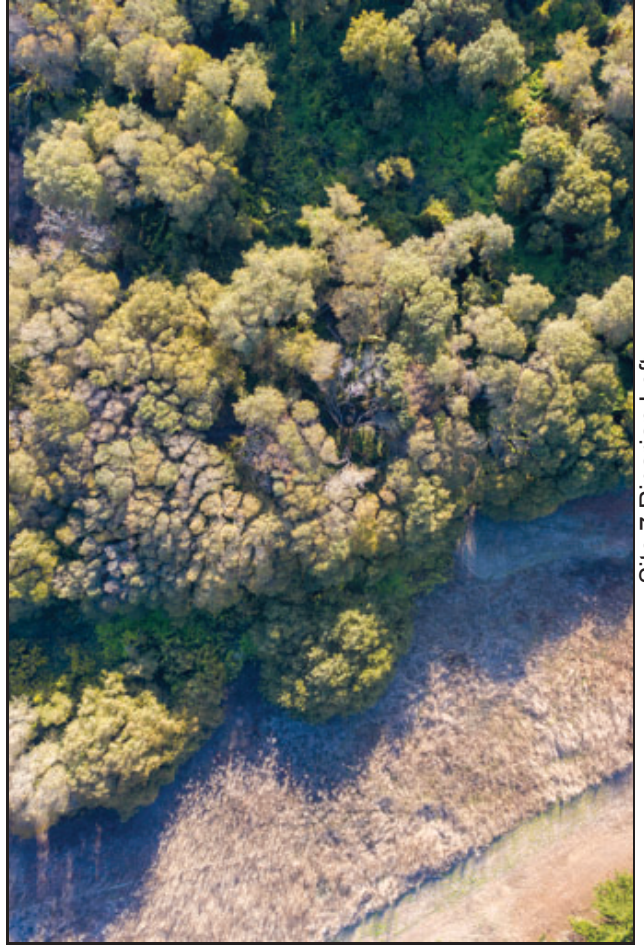
CCSD Monitoring November 22, 2020



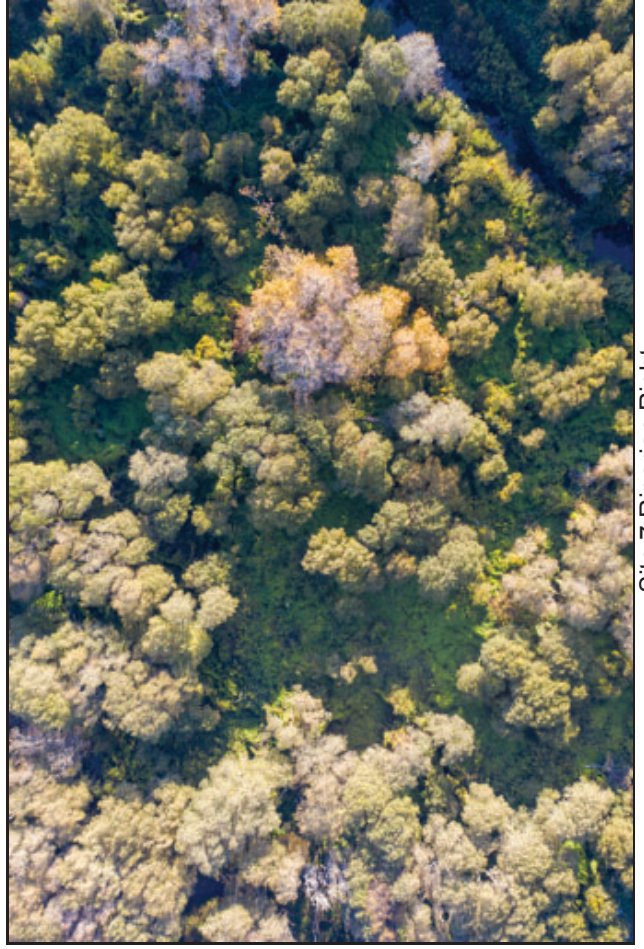
Site 5 Riparian Left



Site 5 Riparian Right

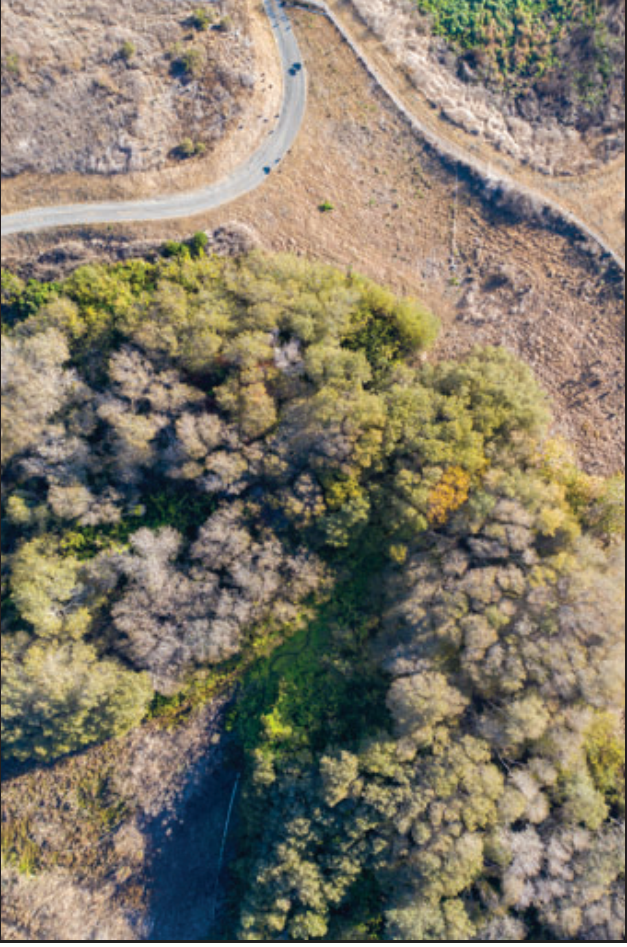


Site 7 Riparian Left



Site 7 Riparian Right

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Site 8 Riparian Left & Right