Attachment 1: Machado Lake Nutrient TMDL Year 1 Dry Event 3 Monitoring Site Field Logs

Machado Lake Nutient TMDL Sampling

Sampling Data Log Sheet

Site: **Island Outlet - Academy Dr/ Palos Verdes Dr**

Site Id: **1O_ACAD** Sample Region: **LWA**

Personnel: Bryant, Greg Date: **02/01/2013** Time: 1015 Pictures: 2

	GPS Reference	GPS Readings
Latitude:	33.7831	33°46.981
Longitude:	-118.3537	-118° 21.225

Samples Collected

☒ Intermediate container used to transfer water to sample bottles?

Sample ID	Time	Sample Depth (ft)	Analytes	Bottle Count	Notes
☒ MLMRP-005-1O_ACAD-01	1015	n/a	TSS, TDS	1	
☒ MLMRP-005-1O_ACAD-02	1015	↓	Diss Phosphorus, OrthoP, Nitrate, Nitrite	2	MS/MSD
☒ MLMRP-005-1O_ACAD-03	1015	↓	Total Kjeldahl Nitrogen	2	MS/MSD
☒ MLMRP-005-1O_ACAD-04	1015	↓	Ammonia-N, Total Phosphorus	2	MS/MSD

Field Measured Data

(Note: At Tox sites, If EC > 3000 uS/cm, collect an additional container)

Time	Temp(ºC)	pH	D.O.(mg/L)	D.O.(%Sat)	Sp.Cond(uS/cm)	Turbidity(NTU)
1056	16.21	7.65	9.64	98.6	1704	0.0

Field Observations

(See attached "Field Observations" sheet for standard comments and futher guidance)

Air Temp (ºC)	Algae % Filamentous	Algae % Periphyton	Dominant Substrate
n/a	0	0	K

% Bank Vegetation Left Bank	% Bank Vegetation Right Bank	% Shading
0	0	100

Weather	Sunny, clear
Water Color	Clear
Instream Activity	None
Odor	None
Foreign Matter	None

Flow Data

Flow Start Time — End Time —

	Path# __	Path# __
Width at TOP (ft)		
Width at MIDDLE (ft)		
Width at BOTTOM (ft)		
Depth at 25% at TOP (ft in)		
Depth at 50% at TOP (ft in)		
Depth at 75% at TOP (ft in)		
Depth at 25% at MIDDLE (ft in)		
Depth at 50% at MIDDLE (ft in)		
Depth at 75% at MIDDLE (ft in)		
Depth at 25% at BOTTOM (ft in)		
Depth at 50% at BOTTOM (ft in)		
Depth at 75% at BOTTOM (ft in)		
Distance marked-off (ft)		
Flow time #1 (sec)		
Flow time #2 (sec)		
Flow time #3 (sec)		

R. Bank Dist (ft)	Depth (ft)	Velocity (ft/sec)	R. Bank Dist (ft)	Depth (ft)	Velocity (ft/sec)

Reason if flow not measured: Estimated (manhole)

Additional Notes or Comments

Wildlife present? ☐ Non-contact recreation? (If present, describe below)

Depth = 0.05 ft; Width = 0.5 ft; Velocity = 0.45 ft/s

Machado Lake Nutient TMDL Sampling

Sampling Data Log Sheet

Site: **Island Outlet - Vermont Ave/ Sepulveds Blvd**

Site Id: **3O_VAND** Sample Region: **LWA**

Personnel: Bryant, Greg K Date: **02/01/2013** Time: 12:25 Pictures:

GPS Reference	GPS Readings
Latitude: 33.8083	
Longitude: -118.2883	

Samples Collected

☒ Intermediate container used to transfer water to sample bottles?

Sample ID	Time	Sample Depth (ft)	Analytes	Bottle Count	Notes
☒ MLMRP-005-3O_VAND-05	1240	0.05'	TSS, TDS	1	Bacon Fill method
☒ MLMRP-005-3O_VAND-06	↓	↓	Diss Phosphorus, OrthoP, Nitrate, Nitrite	1	
☒ MLMRP-005-3O_VAND-07			Total Kjeldahl Nitrogen	1	
☒ MLMRP-005-3O_VAND-08			Ammonia-N, Total Phosphorus	1	

Field Measured Data

(Note: At Tox sites, If EC > 3000 uS/cm, collect an additional container)

Time	Temp(ºC)	pH	D.O.(mg/L)	D.O.(%Sat)	Sp.Cond(uS/cm)	Turbidity(NTU)
1249	25.24	9.95	16.06	197.5	3480	6.7

Field Observations

(See attached "Field Observations" sheet for standard comments and futher guidance)

Air Temp (ºC)	Algae % Filamentous	Algae % Periphyton	Dominant Substrate
~73	0	65	K

% Bank Vegetation Left Bank	% Bank Vegetation Right Bank	% Shading
0	0	0

Weather	Sunny
Water Color	
Instream Activity	none
Odor	
Foreign Matter	none

Flow Data

Flow Start Time: Flow End Time:

	Path# __	Path# __
Width at TOP (ft)		
Width at MIDDLE (ft)		
Width at BOTTOM (ft)		
Depth at 25% at TOP (ft in)		
Depth at 50% at TOP (ft in)		
Depth at 75% at TOP (ft in)		
Depth at 25% at MIDDLE (ft in)		
Depth at 50% at MIDDLE (ft in)		
Depth at 75% at MIDDLE (ft in)		
Depth at 25% at BOTTOM (ft in)		
Depth at 50% at BOTTOM (ft in)		
Depth at 75% at BOTTOM (ft in)		
Distance marked-off (ft)		
Flow time #1 (sec)		
Flow time #2 (sec)		
Flow time #3 (sec)		

R. Bank Dist (ft)	Depth (ft)	Velocity (ft/sec)	R. Bank Dist (ft)	Depth (ft)	Velocity (ft/sec)

Reason if flow not measured:

54 68 56.31 62.73
48 62.73 56.31
9.58 8

Additional Notes or Comments

Wildlife present? ☐ Non-contact recreation? (If present, describe below)

Picked up police report from previous wet event from Carson sheriff's station.

Time: 21.23 sec. – est vol. – 575 ml
: 6.62 sec – vol. – 225 ml
: 6.42 sec. – Vol – 260 ml

} estimated capture % 65

Machado Lake Nutient TMDL Sampling

Sampling Data Log Sheet

	GPS Reference	GPS Readings
Latitude:		
Longitude:		

Site: **Field Blanks**

Site Id: **TAHOE** Sample Region: **LWA**

Personnel: BryantA, GreggR Date: **02/01/2013** Time: 11:05 Pictures:

Samples Collected

☐ Intermediate container used to transfer water to sample bottles?

Sample ID	Time	Sample Depth (ft)	Analytes	Bottle Count	Notes
☒ MLMRP-005-TAHOE-09	1115	DTC	Diss Phosphorus, OrthoP, Nitrate, Nitrite	1	Field Blank
☒ MLMRP-005-TAHOE-10	1115	↓	Total Kjeldahl Nitrogen	1	Field Blank
☒ MLMRP-005-TAHOE-11	1115	↓	Ammonia-N, Total Phosphorus	1	Field Blank

Field Measured Data

(Note: At Tox sites, If EC > 3000 uS/cm, collect an additional container)

Time	Temp(ºC)	pH	D.O.(mg/L)	D.O.(%Sat)	Sp.Cond(uS/cm)	Turbidity(NTU)

Field Observations

(See attached "Field Observations" sheet for standard comments and futher guidance)

Air Temp (ºC)	Algae % Filamentous	Algae % Periphyton	Dominant Substrate

% Bank Vegetation Left Bank	% Bank Vegetation Right Bank	% Shading

Weather	
Water Color	
Instream Activity	
Odor	
Foreign Matter	

Flow Data

Flow Start Time: End Time:

	Path# __	Path# __
Width at TOP (ft)		
Width at MIDDLE (ft)		
Width at BOTTOM (ft)		
Depth at 25% at TOP (ft in)		
Depth at 50% at TOP (ft in)		
Depth at 75% at TOP (ft in)		
Depth at 25% at MIDDLE (ft in)		
Depth at 50% at MIDDLE (ft in)		
Depth at 75% at MIDDLE (ft in)		
Depth at 25% at BOTTOM (ft in)		
Depth at 50% at BOTTOM (ft in)		
Depth at 75% at BOTTOM (ft in)		
Distance marked-off (ft)		
Flow time #1 (sec)		
Flow time #2 (sec)		
Flow time #3 (sec)		

R. Bank Dist (ft)	Depth (ft)	Velocity (ft/sec)	R. Bank Dist (ft)	Depth (ft)	Velocity (ft/sec)

Reason if flow not measured:

Additional Notes or Comments

Wildlife present? ☐ Non-contact recreation? (If present, describe below)

Machado Lake Nutient TMDL Sampling

Sampling Data Log Sheet

	GPS Reference	GPS Readings
Latitude:	33.7831	33° 46 981
Longitude:	-118.3537	-118° 21.225

Site: **Field Duplicates**

Site Id: **DUPREE** Sample Region: **LWA**

Personnel: _____ Date: **02/01/2013** Time: 1030 Pictures: 0

Samples Collected

☒ Intermediate container used to transfer water to sample bottles?

Sample ID	Time	Sample Depth (ft)	Analytes	Bottle Count	Notes
☒ MLMRP-005-DUPREE-12	1030	n/a	TSS, TDS	1	Field Duplicate
☒ MLMRP-005-DUPREE-13	↓	↓	Diss Phosphorus, OrthoP, Nitrate, Nitrite	1	Field Duplicate
☒ MLMRP-005-DUPREE-14			Total Kjeldahl Nitrogen	1	Field Duplicate
☒ MLMRP-005-DUPREE-15			Ammonia-N, Total Phosphorus	1	Field Duplicate

Field Measured Data

(Note: At Tox sites, If EC > 3000 uS/cm, collect an additional container)

Time	Temp(°C)	pH	D.O.(mg/L)	D.O.(%Sat)	Sp.Cond(uS/cm)	Turbidity(NTU)
—	—	—	—	—	—	—

Field Observations

(See attached "Field Observations" sheet for standard comments and futher guidance)

Air Temp (°C)	Algae % Filamentous	Algae % Periphyton	Dominant Substrate
—	—	—	—

% Bank Vegetation Left Bank	% Bank Vegetation Right Bank	% Shading
—	—	—

Weather	Sunny, clear
Water Color	Clear
Instream Activity	None
Odor	None
Foreign Matter	None

Flow Data

Flow Start Time — End Time —

	Path# __	Path# __
Width at TOP (ft)		
Width at MIDDLE (ft)		
Width at BOTTOM (ft)		
Depth at 25% at TOP (ft in)		
Depth at 50% at TOP (ft in)		
Depth at 75% at TOP (ft in)		
Depth at 25% at MIDDLE (ft in)		
Depth at 50% at MIDDLE (ft in)		
Depth at 75% at MIDDLE (ft in)		
Depth at 25% at BOTTOM (ft in)		
Depth at 50% at BOTTOM (ft in)		
Depth at 75% at BOTTOM (ft in)		
Distance marked-off (ft)		
Flow time #1 (sec)		
Flow time #2 (sec)		
Flow time #3 (sec)		

R. Bank Dist (ft)	Depth (ft)	Velocity (ft/sec)	R. Bank Dist (ft)	Depth (ft)	Velocity (ft/sec)
SEE 10ACAD					

Reason if flow not measured: Field Duplicate

Additional Notes or Comments

Wildlife present? ☐ Non-contact recreation? (If present, describe below)

Machado Lake Nutient TMDL Sampling

Sampling Data Log Sheet

Site: **Island Outlet - Eastvale Rd/ Palos Verdes Dr**

Site Id: **1O_EAST** Sample Region: **LWA**

Personnel: BRYANTA, GREGR Date: **02/01/2013** Time: 1120 Pictures: Yes

	GPS Reference	GPS Readings
Latitude:	33.7809	33.78074 GK
Longitude:	-118.3506	-118.35092

Field Measured Data

(Note: At Tox sites, If EC > 3000 uS/cm, collect an additional container)

Time	Temp(ºC)	pH	EC(uS/cm)	Turbidity(NTU)
11:18	—	—	—	—

Field Observations

(See attached "Field Observations" sheet for standard comments and futher guidance)

Air Temp (ºC)	Algae % Filamentous	Algae % Periphyton	Dominant Substrate
—	N/A	N/A	K

% Bank Vegetation Left Bank	% Bank Vegetation Right Bank	% Shading
0	0	N/A

Weather	Sunny
Water Color	NONE PRESENT
Instream Activity	N/A
Odor	NONE
Foreign Matter	NONE

Flow Data

Flow Start Time: — End Time: —

	Path# __	Path# __
Width at TOP (ft)		
Width at MIDDLE (ft)		
Width at BOTTOM (ft)		
Depth at 25% at TOP (ft in)		
Depth at 50% at TOP (ft in)		
Depth at 75% at TOP (ft in)		
Depth at 25% at MIDDLE (ft in)		
Depth at 50% at MIDDLE (ft in)		
Depth at 75% at MIDDLE (ft in)		
Depth at 25% at BOTTOM (ft in)		
Depth at 50% at BOTTOM (ft in)		
Depth at 75% at BOTTOM (ft in)		
Distance marked-off (ft)		
Flow time #1 (sec)		
Flow time #2 (sec)		
Flow time #3 (sec)		

R. Bank Dist (ft)	Depth (ft)	Velocity (ft/sec)	R. Bank Dist (ft)	Depth (ft)	Velocity (ft/sec)

Reason if flow not measured:

Additional Notes or Comments

Wildlife present? ☐ Non-contact recreation? (If present, describe below)

SITE DRY

Machado Lake Nutient TMDL Sampling

Sampling Data Log Sheet

Site: **Island Outlet - Crenshaw Blvd/ Palos Verdes Dr**

Site Id: **2O_SCBG** Sample Region: **LWA**

Personnel: BRYANTA, GREGR Date: **02/01/2013** Time: 1140 Pictures: Several

GPS Reference		GPS Readings
Latitude:	33.7844	33.78298
Longitude:	-118.3441	-118.34534

Field Measured Data

(Note: At Tox sites, If EC > 3000 uS/cm, collect an additional container)

Time	Temp(ºC)	pH	EC(uS/cm)	Turbidity(NTU)
—	—	—	—	—

Field Observations

(See attached "Field Observations" sheet for standard comments and futher guidance)

Air Temp (ºC)	Algae % Filamentous	Algae % Periphyton	Dominant Substrate
	0	0	S

% Bank Vegetation Left Bank	% Bank Vegetation Right Bank	% Shading
50	50	0

Weather	SUNNY
Water Color	NONE - DRY
Instream Activity	NONE
Odor	NONE
Foreign Matter	NONE

Flow Data

Flow Start Time: — End Time: —

	Path# __	Path# __
Width at TOP (ft)		
Width at MIDDLE (ft)		
Width at BOTTOM (ft)		
Depth at 25% at TOP (ft in)		
Depth at 50% at TOP (ft in)		
Depth at 75% at TOP (ft in)		
Depth at 25% at MIDDLE (ft in)		
Depth at 50% at MIDDLE (ft in)		
Depth at 75% at MIDDLE (ft in)		
Depth at 25% at BOTTOM (ft in)		
Depth at 50% at BOTTOM (ft in)		
Depth at 75% at BOTTOM (ft in)		
Distance marked-off (ft)		
Flow time #1 (sec)		
Flow time #2 (sec)		
Flow time #3 (sec)		

R. Bank Dist (ft)	Depth (ft)	Velocity (ft/sec)	R. Bank Dist (ft)	Depth (ft)	Velocity (ft/sec)

Reason if flow not measured:

Additional Notes or Comments

Wildlife present? ☐ Non-contact recreation? (If present, describe below)

SITE DRY

Machado Lake Nutient TMDL Sampling

Sampling Data Log Sheet

Site: **Island Outlet - Van Deene Ave/ 228th St**

Site Id: **3O_VERSEP** Sample Region: **LWA**

Personnel: Bryant, Greg R Date: **02/01/2013** Time: 1705 Pictures: 4

	GPS Reference	GPS Readings
Latitude:	33.8258	33.80842
Longitude:	-118.2878	-118.29002

Field Measured Data

(Note: At Tox sites, If EC > 3000 uS/cm, collect an additional container)

Time	Temp(ºC)	pH	EC(uS/cm)	Turbidity(NTU)	DO mg/L	%
1707	15.65	8.36	2424	0.0	12.97	131.

Field Observations

(See attached "Field Observations" sheet for standard comments and futher guidance)

Air Temp (ºC)	Algae % Filamentous	Algae % Periphyton	Dominant Substrate
—	0	80	K

% Bank Vegetation Left Bank	% Bank Vegetation Right Bank	% Shading
0	0	15

Weather	Partly Cloudy
Water Color	Clear
Instream Activity	None
Odor	None
Foreign Matter	Trash

Flow Data

Flow Start Time 1711 End Time

	Path# __	Path# __
Width at TOP (ft)	BA 17.15	
Width at MIDDLE (ft)	16	
Width at BOTTOM (ft)	19	
Depth at 25% at TOP (ft in)	1.0	
Depth at 50% at TOP (ft in)	9/8	
Depth at 75% at TOP (ft in)	3/4	
Depth at 25% at MIDDLE (ft in)	7/8	
Depth at 50% at MIDDLE (ft in)	9/8	
Depth at 75% at MIDDLE (ft in)	7/8	
Depth at 25% at BOTTOM (ft in)	11/16	
Depth at 50% at BOTTOM (ft in)	9/8	
Depth at 75% at BOTTOM (ft in)	9/8	
Distance marked-off (ft)	25	
mm:ss.ss Flow time #1 (sec)	00:21.70	
mm:ss.ss Flow time #2 (sec)	00:17.70	
mm:ss.ss Flow time #3 (sec)	00:17.70	

R. Bank Dist (ft)	Depth (ft)	Velocity (ft/sec)	R. Bank Dist (ft)	Depth (ft)	Velocity (ft/sec)

Reason if flow not measured:

Additional Notes or Comments

Wildlife present? ☐ Non-contact recreation? (If present, describe below)

Machado Lake Nutient TMDL Sampling

Sampling Data Log Sheet

Site: **Island Inlet - Ashbridge Dr/ Pasatiempo Ln**

Site Id: **3I ASHB** Sample Region: **LWA**

Personnel: Bryant, Greg R Date: **02/01/2013** Time: 1631 Pictures: 2

	GPS Reference	GPS Readings
Latitude:	33.8082	33.80835
Longitude:	-118.2954	-118.

Field Measured Data

(Note: At Tox sites, If EC > 3000 uS/cm, collect an additional container)

Time	Temp(ºC)	pH	EC(uS/cm)	Turbidity(NTU)	DO mg/L	DO %
1631	15.27	8.35	787.6	0.0	9.53	94.9

Field Observations

(See attached "Field Observations" sheet for standard comments and futher guidance)

Air Temp (ºC)	Algae % Filamentous	Algae % Periphyton	Dominant Substrate
—	0	35	K

% Bank Vegetation Left Bank	% Bank Vegetation Right Bank	% Shading
0	0	100

Weather	Overcast
Water Color	Clear
Instream Activity	None
Odor	None
Foreign Matter	Sandy Trash

Flow Data

Flow Start Time 1634 End Time 1642

	Path# 1	Path# __
Width at TOP (ft)	14 in	
Width at MIDDLE (ft)	14 in	
Width at BOTTOM (ft)	17 in	
Depth at 25% at TOP (ft in)	0.5	
Depth at 50% at TOP (ft in)	11/16	
Depth at 75% at TOP (ft in)	5/8	
Depth at 25% at MIDDLE (ft in)	7/16	
Depth at 50% at MIDDLE (ft in)	5/8	
Depth at 75% at MIDDLE (ft in)	9/16	
Depth at 25% at BOTTOM (ft in)	3/4	
Depth at 50% at BOTTOM (ft in)	1.0	
Depth at 75% at BOTTOM (ft in)	7/8	
Distance marked-off (ft)	10	
mm:ss.ss Flow time #1 (sec)	00:27.50	
mm:ss.ss Flow time #2 (sec)	00:36.60	
mm:ss.ss Flow time #3 (sec)	00:28.00	

R. Bank Dist (ft)	Depth (ft)	Velocity (ft/sec)	R. Bank Dist (ft)	Depth (ft)	Velocity (ft/sec)

Reason if flow not measured:

Additional Notes or Comments

Wildlife present? ☐ Non-contact recreation? (If present, describe below)

Machado Lake Nutient TMDL Sampling

Sampling Data Log Sheet

Site: **Island Inlet - Normandie Ave/ Pasatiempo Ln**

Site Id: **3I NORMP** Sample Region: **LWA**

Personnel: Bryant A, GREGR Date: **02/01/2013** Time: 1550 Pictures: Yes

GPS Reference	GPS Readings
Latitude: 33.8058	33.80656
Longitude: -118.2989	-118.29885

Field Measured Data

(Note: At Tox sites, If EC > 3000 uS/cm, collect an additional container)

Time	Temp(ºC)	pH	EC(uS/cm)	Turbidity(NTU)
1600	16.85	8.23	2371	4.2

do mg/L 9.17
do% -95.0

Field Observations

(See attached "Field Observations" sheet for standard comments and futher guidance)

Air Temp (ºC)	Algae % Filamentous	Algae % Periphyton	Dominant Substrate
	30	75	K

% Bank Vegetation Left Bank	% Bank Vegetation Right Bank	% Shading
0	0	20

Weather	HIGH OVERCAST
Water Color	Clear
Instream Activity	NONE
Odor	NONE
Foreign Matter	SAND, RUCK, TRASH C,

Flow Data

Flow Start Time 1610 End Time 1621

	Path# __	Path# __
Width at TOP (ft)		
Width at MIDDLE (ft)		
Width at BOTTOM (ft)		
Depth at 25% at TOP (ft in)		
Depth at 50% at TOP (ft in)		
Depth at 75% at TOP (ft in)		
Depth at 25% at MIDDLE (ft in)		
Depth at 50% at MIDDLE (ft in)		
Depth at 75% at MIDDLE (ft in)		
Depth at 25% at BOTTOM (ft in)		
Depth at 50% at BOTTOM (ft in)		
Depth at 75% at BOTTOM (ft in)		
Distance marked-off (ft)		
Flow time #1 (sec)		
Flow time #2 (sec)		
Flow time #3 (sec)		

R. Bank Dist (ft)	Depth (ft)	Velocity (ft/sec)	R. Bank Dist (ft)	Depth (ft)	Velocity (ft/sec)
00	00	00			
2.0	0.05	0.15			
4.0	0.05	0.25			
6.0	0.05	0.30			
8.0	0.05	0.25			
10.0	0.10	0.47			
12.0	0.10	0.52			
14.0	0.05	0.40			
16.0	0.05	0.80			
18.0	0.05	0.65			
20.0	0.05	0.50			
22.0	0.05	0.25			
25.0	0.0	0.00			

Reason if flow not measured:

Additional Notes or Comments

Wildlife present? ☐ Non-contact recreation? (If present, describe below)