Attachment 1: Machado Lake Nutrient TMDL Year 1 Wet Event 2 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 (LWA), Greg (LWA) Date: 1/25/13 Time: 2036 Pictures: 4

GPS Reference	GPS Readings
Latitude: 33.7831	33.78303
Longitude: -118.3537	-118.35373

Samples Collected

☐ Intermediate container used to transfer water to sample bottles?

Sample ID	Time	Sample Depth (ft)	Analytes	Bottle Count	Notes
☑ MLMRP-004-1O_ACAD-01	2036	n/a	Water Composite	1	MS/MSD and Dup

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)
2042	15.8	7.95	9.69	97.6	465	0.0

Field Observations

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

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

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

Weather	Overcast, Raining
Water Color	Clear
Instream Activity	None
Odor	None
Foreign Matter	Worm

Flow Data

Flow Start Time: 2043 End Time: 2044

	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: Manhole (estimate)

Additional Notes or Comments

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

Sampler set to start at 2330 on 1/24/13. 100 mL/20 min; 90 cycles. Head=3ft, Total tube length=7ft; At 1013 on 1/25/13, verified that sample was being collected and placed ice on sample. Sampler stopped at 2036. Depth=0.1ft; Width=0.6ft; Velocity= 2.5ft/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 (LWA), Greg (LWA) Date: 01/25/13 Time: 1751 Pictures: 17

GPS Reference Latitude: **33.8083** Longitude: **-118.2883**

GPS Readings 33.81565 / -118.28764

Samples Collected

☐ Intermediate container used to transfer water to sample bottles?

Sample ID	Time	Sample Depth (ft)	Analytes	Bottle Count	Notes
☐ MLMRP-004-3O_VAND-02			Water Composite	1	

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)
1751	16.43	7.90	8.28	84.0	160.3	82.7

Field Observations

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

Air Temp (°C)	Algae % Filamentous	Algae % Periphyton	Dominant Substrate
n/a	0	40	Ka

% Bank Vegetation Left Bank	% Bank Vegetation Right Bank	% Shading
0	0	5

Weather	Raining, Overcast
Water Color	Brown
Instream Activity	None
Odor	None
Foreign Matter	Trash, Leaf litter

Flow Data

Flow Start Time 1751 **End Time** 1756

	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)
0	0	0	3.9	0.20	1.01
0.3	0.25	0.92	4.2	0.20	0.91
0.6	0.25	0.95	4.5	0	0
0.9	0.25	1.07			
1.2	0.25	1.08			
1.5	0.20	1.31			
1.8	0.20	1.33			
2.1	0.20	1.39			
2.4	0.20	1.30			
2.7	0.20	1.22			
3.0	0.20	1.12			
3.3	0.20	1.14			
3.6	0.20	1.13			

Reason if flow not measured:

Additional Notes or Comments

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

Sampler programmed to begin at ~~0315~~ 1315 on 1/24/13. 100 mL / 20 minutes. 90 Cycles. Head = 11 ft; Total tube length = 13 ft; At 0830, verified that there was some sample that had been collected and placed ice on sample. At 1520 on 1/25/13, it was discovered that the auto sampler had been stolen. The Police Report Number is 913-00842-1697-089 (LA County Sheriff's Dept.)

Machado Lake Nutient TMDL Sampling

Sampling Data Log Sheet

Site: **Field Blanks**

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

Personnel: Bryant, Greg Date: 1/25/13 Time: 1700 Pictures: 0

	GPS Reference	GPS Readings
Latitude:	33.80483	33.815606
Longitude:	-118.2983	-118.28764

Samples Collected

☐ Intermediate container used to transfer water to sample bottles?

Sample ID	Time	Sample Depth (ft)	Analytes	Bottle Count	Notes
☑ MLMRP-004-TAHOE-03	1700		Diss Phosphorus, OrthoP, Nitrate, Nitrite	1	Field Blank
☑ MLMRP-004-TAHOE-04	1700		Total Kjeldahl Nitrogen	1	Field Blank
☑ MLMRP-004-TAHOE-05	1700		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(°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	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:

Field Blank

Additional Notes or Comments

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

Machado Lake Nutient TMDL Sampling

Sampling Data Log Sheet

Site: **Field Duplicates**

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

Personnel: Bryant, Greg (LWA) Date: 1/25/13 Time: 2106 Pictures: 0

	GPS Reference	GPS Readings
Latitude:	33.7831	33.78303
Longitude:	-118.3537	-118.35373

Samples Collected

☑ Intermediate container used to transfer water to sample bottles?

Sample ID	Time	Sample Depth (ft)	Analytes	Bottle Count	Notes
☑ MLMRP-004-DUPREE-06	2106	n/a	Water Composite	1	Field Duplicate

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	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:

Field Dup

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 - Crenshaw Blvd/ Palos Verdes Dr**

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

Personnel: Bryant (LWA), Greg R (LWA) Date: 1/25/13 Time: 2015 Pictures: 18

GPS Reference	GPS Readings
Latitude: **33.7844**	33.78302
Longitude: **-118.3441**	-118.34535

Samples Collected

☐ Intermediate container used to transfer water to sample bottles?

Sample ID	Time	Sample Depth (ft)	Analytes	Bottle Count	Notes
MLMRP-004-2O_SCBG-07			Water Composite	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)

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	Overcast, Raining
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:

Site Dry.

Additional Notes or Comments

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

Sampler set to begin at 0339 on 1/25/13. 115mL/20min; 78cycles; Head = 4ft; Total = 5ft; At 0940, on 1/25/13, verified that no sample had been collected and placed ice on the sample container. The site was torn down at approximately 2015. No sample was collected.

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: Greg, Bryant, John Date: 1/25/13 Time: 1941 Pictures: 3

GPS Reference Latitude: **33.7809** Longitude: **-118.3506**

GPS Readings 33.78074 -118.3509

Field Measured Data

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

Time	Temp(°C)	pH	EC(uS/cm)	Turbidity(NTU)	DO mg/L	DO %
1941	15.40	7.77	264.8	72.0	9.68	96.6

Field Observations

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

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

% Bank Vegetation

Left Bank	Right Bank	% Shading
0	0	100

Weather	Overcast
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: Manhole (estimate)

Additional Notes or Comments

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

Velocity = 10 ft/s; Depth = 0.1 ft; width = 0.75

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, John Date: 1/25/13 Time: 1831 Pictures: 3

	GPS Reference	GPS Readings
Latitude:	33.8258	33.8084
Longitude:	-118.2878	-118.2901

Field Measured Data

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

Time	Temp(°C)	pH	EC(uS/cm)	Turbidity(NTU)	DO mg/L	%
1831	15.82	7.96	267.2	20.6	9.47	95.4

Field Observations

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

Air Temp (°C)	Algae % Filamentous	Algae % Periphyton	Dominant Substrate
n/a	Unknown	Unknown	K

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

Weather	Overcast, Drizzle
Water Color	Light green
Instream Activity	None
Odor	None
Foreign Matter	Litter

Flow Data

Flow Start Time: 1832 End Time: 1838

	Path# 1	Path# __
Width at TOP (ft)	34	
Width at MIDDLE (ft)	34	
Width at BOTTOM (ft)	34	
Depth at 25% at TOP (ft) in)	0.1	
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)	20	
SB,SS Flow time #1 (sec)	12.43	
Flow time #2 (sec)	08.51	
Flow time #3 (sec)	15.22	

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)

Lock on gate was missing.

Machado Lake Nutient TMDL Sampling

Sampling Data Log Sheet

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

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

	GPS Reference	GPS Readings
Latitude:	33.8082	33.8086
Longitude:	-118.2954	-118.2959

Personnel: Bryant, Greg, John Date: 1/25/13 Time: 1851 Pictures: 5

Field Measured Data

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

Time	Temp(°C)	pH	EC(uS/cm)	Turbidity(NTU)	DO mg/L	%
1851	16.38	8.01	89.0	97.7	9.50	96.5

Field Observations

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

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

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

Weather	Overcast, drizzle
Water Color	Brown
Instream Activity	None
Odor	None
Foreign Matter	None

Flow Data

Flow Start Time: 1952 End Time: 1855

	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: Manhole (estimate)

Additional Notes or Comments

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

Width = 3 ft, Depth = 0.4 ft; Velocity = 5–6 ft/s (at centroid)

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, Greg, John Date: 1/25/13 Time: 1906 Pictures: 4

GPS Reference	GPS Readings
Latitude: **33.8058**	33.80662
Longitude: **-118.2989**	-118.2982

Field Measured Data

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

Time	Temp(°C)	pH	EC(uS/cm)	Turbidity(NTU)	DO mg/L	DO %
1906	16.33	7.86	136.8	84.0	9.39	95.3

Field Observations

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

Air Temp (°C)	Algae % Filamentous	Algae % Periphyton	Dominant Substrate
n/a	UnKnown	UnKnown	K

% Bank Vegetation Left Bank	% Bank Vegetation Right Bank	% Shading
0	0	5

Weather	Overcast, Drizzling
Water Color	Light Brown
Instream Activity	None
Odor	None
Foreign Matter	Trash

Flow Data

Flow Start Time 1907 **End Time** 1913

	Path# 1	Path# __
Width at TOP (ft)	34.1	
Width at MIDDLE (ft)	↓	
Width at BOTTOM (ft)	↓	
Depth at 25% at TOP (ft) in)	0.75	
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)	20	
SS.SS **Flow time #1 (sec)**	07.79	
SS.SS **Flow time #2 (sec)**	06.98	
SS.SS **Flow time #3 (sec)**	06.72	

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)

Lock was unlocked when we arrived at site.