Sycamore Cyn Creek
907.120

File Name: J:\LIMSUSER\rkf\syc2-an.csv
San Diego Water Quality Laboratory
WQL

Report By: RKF
Report Date: June 1, 2000 1:41 PM

Report Selection Criteria
Analysis IN ('ANIONS_IC')
Reportable(1/0) = 1
Sample Date BETWEEN '01-Jan-2000' AND '31-May-2000'
Source IN ('SCY2')
Test Type IN ('SAMP')

Report Options
Equal_Weight_Samples=Y
Equal_Weight_Days=N
Apply_Less_Than=Y
Non_Detect_Mdl_Factor=NULL
Concatenate_Cells_Calculation=N
Quote_Strings=Y
Strip_Internal=N
Print_Comments=Y

Output Specification
- Sample Date
- Sample Id
- Source
- Protocol
- Analyte
- Avg Qualifier
- Avg Value
- Avg Units
- Avg MDL

Report Data
Number of result records queried: 10
Number of summary records found: 10

Sample Da	Sample Id	Source	Protocol	Analyte	Avg Qualifi	Avg Value	Avg Units	Avg MDL
6-Mar-00	W133162	SCY2	EPA300A	BROMIDE		0.288	MG/L	0.1
21-Feb-00	W131086	SCY2	EPA300A	BROMIDE		0.194	MG/L	0.1
6-Mar-00	W133162	SCY2	EPA300A	CHLORIDE		192	MG/L	0.5
21-Feb-00	W131086	SCY2	EPA300A	CHLORIDE		40.8	MG/L	0.5
6-Mar-00	W133162	SCY2	EPA300A	NITRATE		11.9	MG/L	0.2
21-Feb-00	W131086	SCY2	EPA300A	NITRATE		26.6	MG/L	0.2
6-Mar-00	W133162	SCY2	EPA300A	PHOSPHATE_O		1.5	MG/L	0.2
21-Feb-00	W131086	SCY2	EPA300A	PHOSPHATE_O		4.75	MG/L	0.2
6-Mar-00	W133162	SCY2	EPA300A	SULFATE		288	MG/L	0.5
21-Feb-00	W131086	SCY2	EPA300A	SULFATE		85.7	MG/L	0.5

File Name: J:\LIMSUSER\rkf\SYC2-ANIONS.csv
San Diego Water Quality Laboratory
WQL

Report By: RKF
Report Date: May 31, 2000 2:03 PM

Report Selection Criteria
Analysis IN ('ANIONS_IC')
Reportable(1/0) = 1
Sample Date BETWEEN '01-Jan-2000' AND '31-May-2000'
Source IN ('GVC2')
Test Type IN ('SAMP')

Report Options
Equal_Weight_Samples=Y
Equal_Weight_Days=N
Apply_Less_Than=Y
Non_Detect_Mdl_Factor=NULL
Concatenate_Cells_Calculation=N
Quote_Strings=Y
Strip_Internal=N
Print_Comments=Y

Output Specification
- Sample Date
- Sample Id
- Source
- Protocol
- Analyte
- Avg Qualifier
- Avg Value
- Avg Units
- Avg MDL

Report Data
Number of result records queried: 71
Number of summary records found: 60

Sample Da	Sample Id	Source	Protocol	Analyte	Avg Qualifi	Avg Value	Avg Units	Avg MDL
3-Apr-00	W138336	GVC2	EPA300A	BROMIDE		0.721	MG/L	0.1
6-Mar-00	W133136	GVC2	EPA300A	BROMIDE		0.146	MG/L	0.1
10-Apr-00	W140968	GVC2	EPA300A	BROMIDE		0.723	MG/L	0.1
13-Mar-00	W134395	GVC2	EPA300A	BROMIDE		0.422	MG/L	0.1
14-Feb-00	W128776	GVC2	EPA300A	BROMIDE		0.19	MG/L	0.1
14-Feb-00	W128953	GVC2	EPA300A	BROMIDE		0.206	MG/L	0.1
15-Feb-00	W128954	GVC2	EPA300A	BROMIDE		0.226	MG/L	0.1
15-Feb-00	W128955	GVC2	EPA300A	BROMIDE		0.222	MG/L	0.1
18-Apr-00	W141890	GVC2	EPA300A	BROMIDE		0.131	MG/L	0.1
21-Mar-00	W135239	GVC2	EPA300A	BROMIDE		0.647	MG/L	0.1
22-Feb-00	W130336	GVC2	EPA300A	BROMIDE	ND		MG/L	0.1
29-Feb-00	W132079	GVC2	EPA300A	BROMIDE		0.344	MG/L	0.1
3-Apr-00	W138336	GVC2	EPA300A	CHLORIDE		394	MG/L	0.1

6-Mar-00	W133136	GVC2	EPA300A	CHLORIDE		97.6 MG/L	0.5
10-Apr-00	W140968	GVC2	EPA300A	CHLORIDE		403 MG/L	0.5
13-Mar-00	W134395	GVC2	EPA300A	CHLORIDE		230 MG/L	0.5
14-Feb-00	W128776	GVC2	EPA300A	CHLORIDE		116 MG/L	0.5
14-Feb-00	W128953	GVC2	EPA300A	CHLORIDE		126 MG/L	0.5
15-Feb-00	W128954	GVC2	EPA300A	CHLORIDE		135 MG/L	0.5
15-Feb-00	W128955	GVC2	EPA300A	CHLORIDE		135 MG/L	0.5
18-Apr-00	W141890	GVC2	EPA300A	CHLORIDE		88.8 MG/L	0.5
21-Mar-00	W135239	GVC2	EPA300A	CHLORIDE		378 MG/L	0.5
22-Feb-00	W130336	GVC2	EPA300A	CHLORIDE		82.4 MG/L	0.5
29-Feb-00	W132079	GVC2	EPA300A	CHLORIDE		216 MG/L	0.5
3-Apr-00	W138336	GVC2	EPA300A	NITRATE		0.419 MG/L	0.1
6-Mar-00	W133136	GVC2	EPA300A	NITRATE		2.69 MG/L	0.2
10-Apr-00	W140968	GVC2	EPA300A	NITRATE		0.929 MG/L	0.2
13-Mar-00	W134395	GVC2	EPA300A	NITRATE		2.88 MG/L	0.2
14-Feb-00	W128776	GVC2	EPA300A	NITRATE		2.95 MG/L	0.2
14-Feb-00	W128953	GVC2	EPA300A	NITRATE		3.04 MG/L	0.2
15-Feb-00	W128954	GVC2	EPA300A	NITRATE		3.12 MG/L	0.2
15-Feb-00	W128955	GVC2	EPA300A	NITRATE		3.1 MG/L	0.2
18-Apr-00	W141890	GVC2	EPA300A	NITRATE		2.75 MG/L	0.1
21-Mar-00	W135239	GVC2	EPA300A	NITRATE	ND	MG/L	0.2
22-Feb-00	W130336	GVC2	EPA300A	NITRATE		3.72 MG/L	0.2
29-Feb-00	W132079	GVC2	EPA300A	NITRATE		4.88 MG/L	0.2
3-Apr-00	W138336	GVC2	EPA300A	PHOSPHA	ND	MG/L	0.1
6-Mar-00	W133136	GVC2	EPA300A	PHOSPHATE_O		0.58 MG/L	0.2
10-Apr-00	W140968	GVC2	EPA300A	PHOSPHATE_O		0.283 MG/L	0.2
13-Mar-00	W134395	GVC2	EPA300A	PHOSPHATE_O		0.33 MG/L	0.2
14-Feb-00	W128776	GVC2	EPA300A	PHOSPHATE_O		0.542 MG/L	0.2
14-Feb-00	W128953	GVC2	EPA300A	PHOSPHATE_O		0.51 MG/L	0.2
15-Feb-00	W128954	GVC2	EPA300A	PHOSPHATE_O		0.531 MG/L	0.2
15-Feb-00	W128955	GVC2	EPA300A	PHOSPHATE_O		0.535 MG/L	0.2
18-Apr-00	W141890	GVC2	EPA300A	PHOSPHATE_O		0.48 MG/L	0.1
21-Mar-00	W135239	GVC2	EPA300A	PHOSPHA	ND	MG/L	0.2
22-Feb-00	W130336	GVC2	EPA300A	PHOSPHATE_O		1.08 MG/L	0.2
29-Feb-00	W132079	GVC2	EPA300A	PHOSPHATE_O		0.541 MG/L	0.2
3-Apr-00	W138336	GVC2	EPA300A	SULFATE		473 MG/L	0.1
6-Mar-00	W133136	GVC2	EPA300A	SULFATE		126 MG/L	0.5
10-Apr-00	W140968	GVC2	EPA300A	SULFATE		479 MG/L	0.5
13-Mar-00	W134395	GVC2	EPA300A	SULFATE		313 MG/L	0.5
14-Feb-00	W128776	GVC2	EPA300A	SULFATE		169 MG/L	0.5
14-Feb-00	W128953	GVC2	EPA300A	SULFATE		181 MG/L	0.5
15-Feb-00	W128954	GVC2	EPA300A	SULFATE		191 MG/L	0.5
15-Feb-00	W128955	GVC2	EPA300A	SULFATE		189 MG/L	0.5
18-Apr-00	W141890	GVC2	EPA300A	SULFATE		118 MG/L	0.1
21-Mar-00	W135239	GVC2	EPA300A	SULFATE		499 MG/L	0.5
22-Feb-00	W130336	GVC2	EPA300A	SULFATE		127 MG/L	0.5
29-Feb-00	W132079	GVC2	EPA300A	SULFATE		296 MG/L	0.5

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

ADDENDUM NO 1 TO ORDER NO. 98-60
NPDES NO. CA0107492
AN ADDENDUM MODIFYING THE MONITORING AND REPORTING PROGRAM
FOR
PADRE DAM MUNICIPAL WATER DISTRICT
PADRE DAM WATER RECYCLING FACILITY
DISCHARGE TO SYCAMORE CREEK AND THE SAN DIEGO RIVER
SAN DIEGO COUNTY

The California Regional Water Quality Board, San Diego Region (hereinafter Regional Board), finds that:

1. On May 9, 1998, the Regional Board adopted Order No. 98-60, *National Pollutant Discharge Elimination System Permit No. CA0107492, Waste Discharge Requirements for Padre Dam Municipal Water District, Padre Dam Water Recycling Facility Discharge to Sycamore Creek and The San Diego River, San Diego County*. Order No. 98-60 establishes requirements for the discharge of up to 2.0 million gallons per day (MGD) of treated sewage from the Padre Dam Water Recycling Facility (PDWRF) through the Santee Lakes to Sycamore Creek and the San Diego River.

2. On April 1, 1998, Padre Dam Municipal Water District (PDMWD) submitted a report of waste discharge requesting the Monitoring and Reporting Program of Order No. 98-60 be modified to change testing methods for measurement of biological activity and sampling benthic invertebrates, locations of sampling stations, and frequency of sampling for priority pollutants and biological oxygen demand.

3. The Monitoring and Reporting Program as modified by this Addendum is reasonable for determining compliance with the terms and conditions of Order No. 98-60 and all applicable State and federal water quality standards.

4. The issuance of this Addendum is exempt from the requirements for preparation of environmental document under the California Environmental Quality Act in accordance with Section 13389 of the Clean Water Code.

5. The Regional Board has considered all environmental factors associated with the existing discharge.

6. The Regional Board has notified PDMWD and all known interested parties of its intent to modify waste discharge requirements for the existing discharge.

Padre Dam (influent and receiving waters) (907.120) – 303(d) Fact Sheet
Padre Dam Municipal Water District Receiving Water Sampling & Analysis
(Padre Dam, Carlton Hills Blvd Bridge, Forester Creek, **Sycamore Creek**, Old Mission Dam, Mission Pond, I-5 Estuary and Fashion Valley Road)

Carlton Hills Blvd Bridge, Forester Creek, Sycamore Creek, Old Mission Dam, Mission Pond, I-5 Estuary and Fashion Valley Road should be listed as threatened for ammonia-nitrogen and total phosphorus. In addition, Forester Creek should be listed as threatened for total dissolved solids.

Watershed Characteristics
Padre Dam is a Publicly Owned Treatment Work (POTW) that sits on Sycamore Canyon Creek, a tributary to the San Diego River. Sampling sites were located at influence to the facility, Carlton Hills Blvd Bridge, Forester Creek, Old Mission Dam, Mission Pond and Fashion Valley Road. These areas are located in the Lower San Diego River in the San Diego River Watershed of Region 9. Sycamore Canyon Creek is classified inland surface water with the following beneficial uses: AGR, IND, REC1, REC2, WARM, COLD WILD and Rare[1]. This designation also covers the Padre Dam, Carlton Hills Blvd Bridge, Old Mission Dam and Mission Pond sites. Forester Creek is classified inland surface water with the following beneficial uses: **MUN**, IND, REC1, REC2, WARM, COLD and WILD[1]. Fashion Valley Road and the I-5 Estuary are located further downstream and is classified inland surface water with the following beneficial uses: AGR, IND, REC1, REC2, WARM, COLD and WILD[1].

Water Quality Objectives not Obtained
Typical values (Metcalf and Eddy, 1991) for specific conductance were exceeded. Basin plan standards[1] for ammonia-nitrogen, total-nitrogen, nitrate-nitrogen, total-phosphorus, ortho-phosphate, chlorine, total dissolved solids (TDS), dissolved oxygen (DO), boron, sulfate, manganese and mercury were exceeded. Note that drinking water standards were only applied to Forester Creek.

Evidence of Impairment
Sampling occurred at point of influence into the plant, effluent ponds, at Cl_2 contact ponds, at a "raw sludge" point and at seven receiving bodies. Point of influence, Cl_2 contact ponds and "raw sludge" data were analyzed.

Typical values (Metcalf and Eddy, 1991) for specific conductance were exceeded every time it was measured. TDS values at Forester Creek always exceeded the secondary maximum contaminant levels (MCLs) for drinking water (Table 1b). Concentrations of ammonia-nitrogen, nitrate-nitrogen, total phosphorus and ortho-phosphate were frequently in excess of Basin Plan Standards at all sampling points. Of the nutrients, ammonia-nitrogen and total phosphorus showed the highest rate of exceedances and were often two-times the standard. DO values often were below 5 mg/L at all locations (Tables 2000-Table 1 and

1997-Table 1). Boron, sulfate, manganese and mercury were occasionally in excess of standards (Tables 2000-Table 2 and 1997-Table 2). See attached tables for standard values, average values and frequency of exceedance.

Extent of Impairment
Sampling occurred at Carlton Hills Blvd Bridge, Forester Creek, Sycamore Creek, Old Mission Dam, Mission Pond, I-5 Estuary and Fashion Valley Road. Determining the extent of impairment from a single point in a waterbody is difficult and dubious. An estimated extent of up and down stream for 100 meters is the conservative estimate.

Potential Sources
Unknown

TMDL Priority
No TMDL is required at this time.

Notes
Only data from the last quarter of 1997 and all of 2000 were analyzed. 1998 and 1999 data were reviewed only if the evidence of impairment condition was not clear in the 1997 and 2000 data sets.

Due to the limited nature of the sampling design, the percentage of time that water quality is impaired per year is not clear. Two samples per month are not enough to clearly show impairment. Values of ammonia-nitrogen and total-phosphorus warrant further investigation. DO sampling occurred generally in the morning hours and may be influencing the results. Boron, sulfate, manganese and mercury values were only rarely above standards.

Information Sources
[1] Water Quality Control Plan for the San Diego Basin (9), 1994
2 Metcalf and Eddy, 1991. Wastewater Engineering: Treatment, Disposal and Reuse, 3rd Edition, McGraw-Hill, Inc., 1334 pages.

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Lower San Diego River (907.110) – 303(d) Fact Sheet
Photographic Tour (Santee Segment) by V. K. Collinsworth
Also includes Forrester (907.130) and Sycamore (907.120)

The photographs and statements provided are not sufficient for 303(d) listing. These water bodies should be listed as threatened due to possible eutrophication and trash.

Watershed Characteristics
The Lower San Diego River is a 6.0-mile waterway in the San Diego River Watershed of Region 9. It is classified inland surface water with the following beneficial uses: MUN, AGR, IND, PROC, REC1, REC2, WARM, COLD and WILD[1]. Forrester Creek is a 3.0-mile waterway in the San Diego River Watershed of Region 9. It is classified inland surface water with the following beneficial uses: MUN, IND, REC1, REC2, WARM, COLD and WILD[1]. Sycamore Creek is a 7.0-mile waterway in the San Diego River Watershed of Region 9. It is classified inland surface water with the following beneficial uses: AGR, IND, REC1, REC2, WARM, COLD, WILD and RARE[1].

Water Quality Objectives not Obtained
The document[2] claims that eutrophication (algae blooms, algal mats, decomposing plant matter, offensive odors, stagnation) is occurring in all three waterbodies. The photos are said to be evidence of impairment to the following beneficial uses: MUN, AGR, IND, REC1, REC2, WARM, COLD, WILD and RARE[2]. The document[2] also purports evidence of garbage, river odors, invasive plants, fertilizer runoff, animal waste, non-point source pollution, polluted dry-flows, sediment and oil in the waterways. The only clear evidence contained in the photographs in the existence of trash and algal mats in the waterways.

Evidence of Impairment
The only evidence submitted was photographic images. Trash and algal mats are the only evidence of impairment to water quality evident in the images.

Extent of Impairment
Photographs appear to have been taken on only four dates: 3 and 4 May 01 for Forrester and Sycamore Creeks, and 5 and 8 May 01 for the San Diego River stations. Sycamore Creek was sampled at 19 locations, Forrester Creek at 5 locations and the San Diego River was sampled at 20 locations. All sites are in the Santee area; approximately from Magnolia Ave downstream to the Mission Dam and up Sycamore Creek to just past Santee Lakes.

Potential Sources - Unknown

TMDL Priority - No TMDL is required at this time.

Notes

Information Sources
[1] Water Quality Control Plan for the San Diego Basin (9), 1994
[2] Collinsworth, V. K. 2001. San Diego River Photographic Tour of a Polluted Watershed – Santee Segment.

07/27/01
jgs

Sycamore Canyon Creek 907.120

See SD River Folder for Photographic Evidence of trash, Possibly eutrophication & bacteria

Southern California Bight 1998 Regional Monitoring Program
Volume 3: Storm Event Shoreline Microbiology

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