Re: CWA Section 303(d) Listing

Dear Chairman Minan and Boardmembers:

San Diego BayKeeper, a community-based 501(c)(3) non-profit organization dedicated to protecting and restoring the region’s bays, coastal waters and watersheds, submits these comments on the 2002 Clean Water Act (CWA) section 303(d) listing. San Diego BayKeeper has serious concerns with the adequacy of the current 303(d) list for the region, and we are equally concerned about the direction staff may be taking in compiling the April 2002 listing.

First, we remain concerned that Region 9’s proposed 303(d) list is not based on a comprehensive assembly and review of information and data on water quality and other impairments regarding all water bodies in Region 9, as the Clean Water Act and its implementing regulations require. See, e.g., 40 C.F.R. Section 130.7. Indeed, wholly apart from the Section 303(d) scheme, under Clean Water Act Section 305(b) and accompanying regulations, each regional board must conduct a regional water quality assessment (WQA) of all water bodies in its region. It is clear from an even cursory review of the most recent 1998 California Water Quality Assessment Report, prepared in August 1999 by the Division of Water Quality, State Water Resources Control Board, that such a comprehensive review has yet to be performed in the San Diego region. After a brief review of data in the 1998 WQA, BayKeeper has concluded that, more than twenty years after these requirements were established, at least 80% of San Diego’s waters have not yet been fully assessed. Moreover, much of the data that has been gathered may not be easily accessed or understandable. In other words, this data is never fully reviewed or analyzed.

BayKeeper is also concerned about the requirements placed upon organizations wishing to submit information to support the upcoming 2002 CWA section 303(d) listing. The 305(b) and 303(d) lists are essential steps in first understanding and then addressing the overall health of our waters. Not only will the development of comprehensive and accurate 303(d) and 305(b) reports ensure that waters receive the appropriate level of protection through development of Total Maximum Daily Loads or antidegradation policies, but accurate lists will help ensure resources will be allocated wisely. Proper listings will also allow the region to tap into state and federal dollars earmarked for protecting impaired waters (e.g. SWRCB’s 319(h) program or Proposition 13). Despite the importance of the 303(d) list, though, those local residents most knowledgeable about their local waters and most impacted by pollution will have a difficult time complying with the submittal requirements established by this Board even though they may have vital and reliable data. Some of our specific concerns relate to:

Timeframe – Region 9, like other regions, is requiring all information to be submitted by May 15, 2001, a full 11 months prior to the final 2002 303(d) listing. We believe this deadline is not only arbitrary, but also extremely difficult to comply with due to the amount of information being requested in a short timeframe. The San Diego Regional Board did not issue their solicitation for information until March 2001, and a formal workshop to discuss the Board’s submission requirements was not held until April 4, 2001. This has left interested parties with a scant six weeks to gather and process information.

Considering the more than twenty years the regional board has had to develop sufficient 305(d) and
pre-1997 data (particularly that data that the Board already possess) that demonstrates impairment, but which has not yet led to a listing, must be considered by this Board. If fact, as is discussed in greater detail below, the 1998 WQA report includes listings of several water bodies that show some level of impairment but which have not yet been listed. Listing those waters for which information already exists must be the first step in the 2002 listing.

Finally, while BayKeeper – through its ever-expanding Citizen Water Quality Monitoring taskforce – looks forward to working closely with regional board staff to undertake a more comprehensive assessment of local waters, the ultimate burden of listing lies with your agency. Because of the importance of the 2002 list in terms of water quality protections as well as access to resources to help restore waters, we will do everything within our power to point regional board staff in the direction of identifying impaired waters. However, we believe it is the duty of this Board – a duty that has not yet been met – to prepare complete and accurate 305(b) and 303(d) lists. The following information on waters we believe should be listed will need follow-up from regional board staff, and in no way is meant to represent a comprehensive listing of all of San Diego’s waters which may be impaired.

303(d) List
BayKeeper believes the first step in preparing an accurate 2002 303(d) list is necessarily to review the most recent 1998 Water Quality Assessment. In that report, a matrix is provided which lists each separate hydrological unit in San Diego, and indicates whether each unit has or has not been assessed. For those that have been assessed, the matrix indicates whether these waters are supporting designated beneficial uses fully, partially, not at all, or whether beneficial uses are threatened. For the reasoning highlighted above, BayKeeper believes it is incumbent on the regional board to err on the side of environmental and human health protection, meaning that listing should occur for every assessed water body that is not meeting designated beneficial uses. This is not the case with the 1998 WQA report, and some examples follow:

Dana Point Harbor (Hydrological Unit 901.140) – listed as 215 acres fully supporting designated beneficial uses. Yet, the assessment comments column indicates that Dana Point Harbor and Baby Beach were closed from 8/96 to 7/97 to water contact recreation. As Dana Point Harbor is listed as meeting Recreation-1 and 2 standards, it should be listed as impaired if it was indeed closed for nearly a year to water contact.

San Diego Bay (Hydrological Unit 900.00) – While 222 acres of San Diego bay are listed as impaired due to benthic community effects, sediment toxicity and copper, 11772 acres are threatened, but not listed as impaired. The WQA assessment indicates that the entire bay (12000 acres) is posted with warnings for pregnant women and young children against consumption of fish due to elevated levels of PCB’s, mercury and PAH’s. By the Regional Board’s own findings and by definition, BayKeeper believes the entire Bay should be listed as impaired.

Escondido Creek - (Hydrological Unit 904.600) – 23 miles of Escondido Creek are considered ‘threatened’ due to excessive sediment and nutrients, and should thus be listed as impaired.

Forester Creek - (Hydrological Unit 907.130) – 1 mile of Forester Creek is considered ‘threatened’ due to elevated fish tissue levels, and should thus be listed as impaired.

Otay River - (Hydrological Unit 910.200) – 5 miles of the Otay River are listed as only partially supporting designated beneficial uses, and should thus be listed as impaired.

Salt Creek - (Hydrological Unit 901.140) – Salt Creek was closed regularly in 1996 and 1997 due to elevated coliform levels from sewage spills, and should thus be listed as impaired.
From: "Hiram Sarabia" <hsarabia@sdbaykeeper.org>
To: <colek@rb9.swrcb.ca.gov>
Date: 7/30/01 5:23PM
Subject: 303(d)

Keri,

Thank you for including these materials to the existing list of documents being reviewed for the San Diego River 303(d) evaluation.

Below is a brief summary of independent and in-house lab water quality analyses results for samples taken at four monitoring sites along the San Diego River. Two of the sites listed here (i.e., Forrester Creek and Mission Dam) have been sampled in the past by the Padre Dam Municipal Water District.

The first item (Table 1), shows values of interest from the EnvironMatrix lab report I submitted to you. The fourth column on the table lists the date of the lab report from which the results were taken. I have also attached bacterial data (Table 2) that BayKeeper generated from samples collected from these four sites.

I hope that these data can be of support to existing materials, please contact me if you have any comments or questions, thank you.

Hiram Sarabia
San Diego BayKeeper
Citizen Water Monitoring Program

CC: "Bruce Reznik" <breznik@sdbaykeeper.org>
San Diego Baykeeper – San Diego River 303(d) Water Quality Data

Table 1. Environ Matrix Analytical lab results, showing exceedances in Bacteria and TDS levels based on the numerical criteria listed in the San Diego Regional Water Quality Control Board (SDRWQCB) Basin Plan (Pages 3-5 (REC-1), 3-24) for four sites along the Sna Diego River.

<table>
<thead>
<tr>
<th>Site ID</th>
<th>Location</th>
<th>Date Sampled</th>
<th>Lab Report</th>
<th>Parameter</th>
<th></th>
<th></th>
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<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<td>Total coliform (MPN)</td>
<td>Fecal coliform (MPN)</td>
<td>TDS (mg/l)</td>
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<tr>
<td>SDR 10</td>
<td>Linda Vista YMCA</td>
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<td>5/22/01</td>
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<td>SDR 20</td>
<td>Mission Valley Golf Course</td>
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<td>1200</td>
<td>1529</td>
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<tr>
<td>SDR 30</td>
<td>Forrester Creek at Trolley Station</td>
<td>5/8/01</td>
<td>5/18/01</td>
<td>240</td>
<td>240</td>
<td></td>
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<tr>
<td>SDR 40</td>
<td>Mission Dam at Mission Trails Park</td>
<td>5/8/01</td>
<td>5/18/01</td>
<td>500</td>
<td>300</td>
<td>1090</td>
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</table>

Table 2. In-house bacteria analyses results. Bacteria analyses at BayKeeper were completed using the IDEXX Colilert-18 Method with Quantitray/2000.

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May 18, 2001

San Diego Baykeepers
Attn.: Hiram Sarabia
2924 Emerson St., Suite 220
San Diego, California 92106

Project Name/No.: None
Laboratory Log No.: 1223-01
Date Received: 05/08/01
Sample Matrix: Two water samples
PO No.: Verbal per Hiram Sarabia

Please find the following enclosures for the above referenced project identified:

1) Analytical Report
2) QA/QC Report
3) Chain of Custody Form

Certificate of Analysis

Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. Date of extraction, date of analysis, detection limits and dilution factor are reported for each compound analyzed. All samples were analyzed within the method required holding time from sample collection.

Data for each analytical method was evaluated by assessing the following QA/QC functions, as applicable to the methodology:

- Quality Control Standard
- Surrogate Percent Recovery
- Laboratory Control Sample (LCS) percent recoveries for all analyses
- Matrix Spike Recovery/Matrix Spike Duplicate Recovery (MSR & MSDR) and/or
- Relative Percent Difference (RPD from MSR & MSDR)

I certify that this data report is in compliance both technically and for completeness. Release of the data contained in this hardcopy data report has been authorized by the following signature.

Janis Columbo
Vice President/Laboratory Director
**ANALYSIS RESULTS - TPH EXTENDED RANGE**  
**BY ASTM D2887**

**CLIENT:** SAN DIEGO BAYKEEPERS

**PROJECT NAME/No.:** NONE

**PTAS LOG #:** METHOD BLANK

**CLIENT SAMPLE ID:** N/A

**DILUTION FACTOR:** 1

---

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<th>RESULTS</th>
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<tr>
<td>TOTAL HC</td>
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**TPH IDENTIFICATION:** NONE

**HC = HYDROCARBON**

**ND = ANALYTE NOT DETECTED AT OR ABOVE THE INDICATED REPORTING LIMIT**

Reporting limits and results have been adjusted accordingly to account for dilution factor.

---

**SURROGATE PARAMETER**  
1-BROMO-4-FLUOROBENZENE

**ACCEPTABLE RANGE**  
77-135

**% RECOVERY**  
112
ANALYSIS RESULTS - TPH EXTENDED RANGE
BY ASTM D2887

CLIENT: SAN DIEGO BAYKEEPERS

PROJECT NAME/No.: NONE
PTAS LOG #: 1223-01-1
CLIENT SAMPLE ID: SDR30
DILUTION FACTOR: 1

REPORTING LIMITS

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<th>RESULTS</th>
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<td>ND</td>
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<tr>
<td>C32 ≤ HC &lt; C36</td>
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<td>ND</td>
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<td>ND</td>
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<tr>
<td>C40 ≤ HC &lt; C42</td>
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<tr>
<td>TOTAL HC</td>
<td>15</td>
<td>ND</td>
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TPH IDENTIFICATION: NONE

HC = HYDROCARBON
ND = ANALYTE NOT DETECTED AT OR ABOVE THE INDICATED REPORTING LIMIT
REPORTING LIMITS AND RESULTS HAVE BEEN ADJUSTED ACCORDINGLY TO ACCOUNT FOR DILUTION FACTOR.

SURROGATE PARAMETER

1-BROMO-4-FLUOROBENZENE

ACCEPTABLE RANGE 77-135
% RECOVERY 98

PTAS DCN 300-062 (Rev 6/99)
# Analysis Results - TPH Extended Range

**By ASTM D2887**

**Client:** San Diego Baykeepers  
**Project Name/No.:** None  
**PTAS Log #:** 1223-01-2  
**Client Sample ID:** SDR40  
**Dilution Factor:** 1

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<th>Results PPB (UG/L)</th>
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<td>C8 ≤ HC &lt; C9</td>
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</tr>
<tr>
<td>C9 ≤ HC &lt; C10</td>
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<tr>
<td>C40 ≤ HC &lt; C42</td>
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**Total HC**  
15 ND

**TPH Identification:**  
None

**HC = Hydrocarbon**  
**ND = Analyte Not Detected At Or Above The Indicated Reporting Limit**  
Reporting limits and results have been adjusted accordingly to account for dilution factor.

**Surrogate Parameter**  
1-Bromo-4-Fluorobenzene  
**Acceptable Range:** 77-135  
**% Recovery:** 98

---

EnviroMatrix Analytical, Inc.
ANALYSIS RESULTS
TOTAL COLIFORM BY MTF

CLIENT: SAN DIEGO BAYKEEPERS

PROJECT NAME/No.: NONE
ANALYTE: TOTAL COLIFORM
PREP/ANALYSIS METHODS: SMEWW 9221 B
MATRIX: WASTEWATER

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<th>MPN/100 ML</th>
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<td>SDR 40</td>
<td>1223-01-2</td>
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MPN = MOST PROBABLE NUMBER INDEX PER 100 ML SAMPLE
ANALYSIS RESULTS
Fecal Coliform by MTF

CLIENT: SAN DIEGO BAYKEEPERS

PROJECT NAME/No.: NONE

ANALYTE: FECAL COLIFORM
PREP./ANALYSIS METHODS: SMEWW 9221 E
MATRIX: WATER

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MPN = MOST PROBABLE NUMBER INDEX PER 100 ML SAMPLE
## ANALYSIS RESULTS

**CLIENT:** SAN DIEGO BAYKEEPERS  
**PROJECT NAME/No.:** NONE  
**EMA LOG #:** 1223-01-1  
**SAMPLE ID:** SDR 30  

**DATE SAMPLED:** 05/08/01  
**DATE RECEIVED:** 05/08/01  
**DATE ANALYZED:** 05/08/01  
**MATRIX:** WATER

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<td>NITRATE AS N</td>
<td>SMEWW 4500 NO3 E</td>
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<td>1.5</td>
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DF = DILUTION FACTOR  
REPORTING LIMITS AND RESULTS HAVE BEEN ADJUSTED ACCORDINGLY TO ACCOUNT FOR DILUTION FACTOR.
# ANALYSIS RESULTS

**CLIENT:** SAN DIEGO BAYKEEPERS

**PROJECT NAME/No.:** NONE

**EMA LOG #:** 1223-01-2

**SAMPLE ID:** SDR 40

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<tr>
<th>ANALYTE</th>
<th>PREP./ANALYSIS METHODS</th>
<th>REPORTING LIMITS</th>
<th>DF</th>
<th>RESULTS</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>pH</td>
<td>EPA 150.1</td>
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<tr>
<td>TDS</td>
<td>SMEWW 2540 C</td>
<td>20</td>
<td>1</td>
<td>1.090</td>
<td>MG/L</td>
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<tr>
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<td>1</td>
<td>ND</td>
<td>MG/L</td>
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**DATE SAMPLED:** 05/08/01  
**DATE RECEIVED:** 05/08/01  
**DATE ANALYZED:** 05/08-09/01  
**MATRIX:** WATER

DF = DILUTION FACTOR  
ND = ANALYTE NOT DETECTED AT OR ABOVE THE INDICATED REPORTING LIMIT  
REPORTING LIMITS AND RESULTS HAVE BEEN ADJUSTED ACCORDINGLY TO ACCOUNT FOR DILUTION FACTOR.
<table>
<thead>
<tr>
<th>SPIKED ANALYTE</th>
<th>LCS % R</th>
<th>LCSD % R</th>
<th>RPD</th>
<th>ACCEPTABLE LCS/LCSD CRITERIA</th>
<th>ACCEPTABLE RPD CRITERIA</th>
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<tr>
<td>DIESEL</td>
<td>120</td>
<td>123</td>
<td>2</td>
<td>75-125</td>
<td>&lt;30</td>
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LCS % R = LABORATORY CONTROL SAMPLE PERCENT RECOVERY
LCSD % R = LABORATORY CONTROL SAMPLE DUPLICATE PERCENT RECOVERY
RPD = RELATIVE PERCENT DIFFERENCE
## QA/QC REPORT

<table>
<thead>
<tr>
<th>QA/QC SAMPLE</th>
<th>NSI 3162</th>
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<tr>
<td>SPIKED ANALYTE</td>
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<td>pH 4.99</td>
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<tr>
<td>AR</td>
<td>pH 4.90-5.10</td>
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<table>
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<tr>
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<th>ERA 99102</th>
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</tr>
<tr>
<td>TV</td>
<td>TDS 263</td>
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<tr>
<td>DV</td>
<td>TDS 260</td>
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<tr>
<td>%R</td>
<td>99</td>
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<table>
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<tbody>
<tr>
<td>DATE ANALYZED</td>
<td>05/08/01</td>
</tr>
<tr>
<td>SPIKED ANALYTE</td>
<td>NITRATE AS N</td>
</tr>
<tr>
<td>LCS % R</td>
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</tr>
<tr>
<td>MS % R</td>
<td>92</td>
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<tr>
<td>MSD % R</td>
<td>0</td>
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<tr>
<td>RPD</td>
<td>80-120</td>
</tr>
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</table>

TV = TRUE VALUE  
DV = DETERMINED VALUE  
AR = ACCEPTABLE RANGE  
%R = PERCENT RECOVERY  
LCS % R = LABORATORY CONTROL SAMPLE PERCENT RECOVERY  
MS % R = MATRIX SPIKE PERCENT RECOVERY  
MSD % R = MATRIX SPIKE DUPLICATE PERCENT RECOVERY  
RPD = RELATIVE PERCENT DIFFERENCE
CHAIN-OF-CUSTODY RECORD

PTAS LOG #: 1923-01

Client: Bakersfield
Address: 2979 Envision, # 20
San Diego, CA 92106

Attn: Michael Sanders Phone: (619) 754-7790
Sampled by: Michael Sanders Fax: (619) 758-7740
Billing Address: Same as above

Project: PO #:

<table>
<thead>
<tr>
<th>PTAS ID #</th>
<th>Client Sample ID</th>
<th>Sample Date</th>
<th>Sample Time</th>
<th>Sample Matrix</th>
<th>Container(s) # Type*</th>
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<tbody>
<tr>
<td>1</td>
<td>SDP 240</td>
<td>6/5</td>
<td>2:00</td>
<td>HoP</td>
<td></td>
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<tr>
<td>2</td>
<td>SDP 40</td>
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<td>3:05</td>
<td>HoP</td>
<td></td>
</tr>
</tbody>
</table>

*Container Types: B=Brass Tube; V=VOA; G=Glass; P=Plastic; O=Other (list)

RELinQuISHED BY: Signature

DATE/TIME: 5/1/01

RECEIVED BY: Signature

DISPOSAL: JC (aerose) *PTAS (@$5.00/sample) Return Hold

Turnaround Time: 24 hr 48 hr 3 day 4 day 5 day (Normal)

Comments:

* PTAS reserves the right to return samples that do not match our waste profile.
**GROK® AREA PERCENT REPORT**

```
**05-13-2001 17:14:51 Version 5.1**
* Sample Name: 1223-1C    Data File: E051OE12 *
* Date: 05-10-1901 22:40:01 Method: CI7CH5NEW *
* Interface: 5. Cycle#: 12 Operator CK Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: .01 Area Threshold: 50 *

Starting Delay: 0.00 Run Time: 37.00

<table>
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<tr>
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<th>Ret Time</th>
<th>Peak Area</th>
<th>% L</th>
<th>Peak Height</th>
<th>Normalized Area/Height</th>
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Total Area: 969771  Area Rejects: 100C - One sample per 1,000 sec.

Entry time: 0.00 min. Stop time: 39.00 min. Offset: 0 mv.
LL Range: 200 millivolts

![Graph](7.98-5.58)
**AREA PERCENT REPORT**

**Sample Name:** 1223-2C  
**Date:** 05-10-1991 23:28:10  
**Method:** Cr/TP/NEW  
**Interfaces:** 3  
**Cycle:** 13  
**Operator CK:** Channel: 0  
**Starting Peak Width:** 1  
**Threshold:** .01  
**Area Threshold:** 50  
**Starting Delay:** 0.00  
**Run Time:** 39.00

<table>
<thead>
<tr>
<th>Pk</th>
<th>Ret</th>
<th>Peak Time</th>
<th>Area %</th>
<th>Area L</th>
<th>Peak</th>
<th>Normalized Area</th>
<th>Area Height</th>
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</thead>
<tbody>
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**Total Area:** 771491  
**Area Reject:** 100 0  
**One sample per 1.000 sec.**

Data File = E:0510E13.PTS  
Printed on 05-13-2001 at 17:15:10  
Start time: 0.00 min.  
Stop time: 39.00 min.  
Offset: 0 mv.  
Full Range: 200 millivolts
- 21.17
- 23.32
- 28.63
- 30.72
- 31.13
- 32.92
- 34.17
- 35.85
- 37.73
-PD-
May 22, 2001

San Diego Baykeepers
Attn.: Hiram Sarabia
2924 Emerson St., Suite 220
San Diego, California 92106

Project Name/No.: 303 (d)
Laboratory Log No.: 1239-01
Date Received: 05/09/01
Sample Matrix: Two water samples
PO No.: Verbal per Hiram Sarabia

Please find the following enclosures for the above referenced project identified:

1) Analytical Report
2) QA/QC Report
3) Chain of Custody Form

Note: EPA 8140 analysis was performed by subcontract laboratory, results to follow.

Certificate of Analysis

Samples were analyzed pursuant to client request utilizing EPA or other ELAP approved methodologies. Date of extraction, date of analysis, detection limits and dilution factor are reported for each compound analyzed. All samples were analyzed within the method required holding time from sample collection.

Data for each analytical method was evaluated by assessing the following QA/QC functions, as applicable to the methodology:

- Quality Control Standard
- Surrogate Percent Recovery
- Laboratory Control Sample (LCS) percent recoveries for all analyses
- Matrix Spike Recovery/Matrix Spike Duplicate Recovery (MSR & MSDR) and/or
- Relative Percent Difference (RPD from MSR & MSDR)

I certify that this data report is in compliance both technically and for completeness. Release of the data contained in this hardcopy data report has been authorized by the following signature.

Janis Columbo
Vice President/Laboratory Director
ANALYSIS RESULTS - EPA 8150
CHLORINATED HERBICIDES

CLIENT: SAN DIEGO BAYKEEPER
PROJECT NAME/No.: 303 (D)
EMA LOG #: METHOD BLANK
SAMPLE ID: N/A
DILUTION FACTOR: 1

<table>
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<tr>
<th>ANALYTE</th>
<th>REPORTING LIMITS</th>
<th>RESULTS</th>
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<tbody>
<tr>
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<td>2,4-DB</td>
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<td>2,4,5-T</td>
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<td>2,4,5-TP (SILVEX)</td>
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<tr>
<td>DALAPON</td>
<td>5.8</td>
<td>ND</td>
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<tr>
<td>DICAMBA</td>
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<td>MCPA</td>
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<td>MCPP</td>
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SECOND COLUMN CONFIRMATION PERFORMED ON ALL DETECTED ANALYTES.

ND = ANALYTE NOT DETECTED AT OR THE ABOVE INDICATED REPORTING LIMIT
REPORTING LIMITS AND RESULTS HAVE BEEN ADJUSTED ACCORDINGLY TO ACCOUNT FOR DILUTION FACTOR.

SURROGATE SPIKE DATA
DCAA

ACCEPTANCE CRITERIA
42-135

% RECOVERY
117
**ANALYSIS RESULTS - EPA 8150**  
**CHLORINATED HERBICIDES**

**CLIENT:** SAN DIEGO BAYKEEPER  
**PROJECT NAME/No.:** 303 (D)  
**EMA LOG #:** 1239-01-1  
**SAMPLE ID:** SDR10  
**DILUTION FACTOR:** 10  
**DATE SAMPLED:** 05/09/01  
**DATE RECEIVED:** 05/09/01  
**DATE EXTRACTED:** 05/14/01  
**DATE ANALYZED:** 05/16/01  
**MATRIX:** WATER  
**SAMPLE VOL./WT.:** 1000 ML

<table>
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<tr>
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<td>2,4-DB</td>
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<tr>
<td>2,4,5-TP (SILVEX)</td>
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<td>ND</td>
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<tr>
<td>DALAPON</td>
<td>58</td>
<td>ND</td>
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<tr>
<td>DICAMBA</td>
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<td>DICHLOROPROP</td>
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SECOND COLUMN CONFIRMATION PERFORMED ON ALL DETECTED ANALYTES.  
ND = ANALYTE NOT DETECTED AT OR THE ABOVE INDICATED REPORTING LIMIT  
REPORTING LIMITS AND RESULTS HAVE BEEN ADJUSTED ACCORDINGLY TO ACCOUNT FOR DILUTION FACTOR.

**SURROGATE SPIKE DATA**  
**ACCEPTANCE CRITERIA**  
**% RECOVERY**  
DCA 42-135 72

* NOTE: SAMPLE DILUTION NECESSARY TO REDUCE INTERFERENCES FROM NON-TARGET ANALYTES.
## QA/QC REPORT

<table>
<thead>
<tr>
<th>SPIKED ANALYTE</th>
<th>LCS % R</th>
<th>MS % R</th>
<th>RPD</th>
<th>ACS LCS, MS/MSD</th>
<th>ACS RPD</th>
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<td>66</td>
<td>28</td>
<td>52-169</td>
<td>&lt;30</td>
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</tbody>
</table>

LCS % R = LABORATORY CONTROL SAMPLE PERCENT RECOVERY
MS % R = MATRIX SPIKE PERCENT RECOVERY
MSD % R = MATRIX SPIKE DUPLICATE PERCENT RECOVERY
RPD = RELATIVE PERCENT DIFFERENCE
ANALYSIS RESULTS - TPH EXTENDED RANGE
BY ASTM D2887

CLIENT: SAN DIEGO BAYKEEPER

PROJECT NAME/No.: 303 (D)
PTAS LOG #: METHOD BLANK
CLIENT SAMPLE ID: N/A
DILUTION FACTOR: 1

<table>
<thead>
<tr>
<th>ANALYTE</th>
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<th>RESULTS PPB (UG/L)</th>
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<td>C9 ≤ HC &lt; C10</td>
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<tr>
<td>C10 ≤ HC &lt; C11</td>
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<td>C11 ≤ HC &lt; C12</td>
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<td>ND</td>
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<tr>
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<td>67</td>
<td>ND</td>
</tr>
<tr>
<td>C20 ≤ HC &lt; C24</td>
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<td>ND</td>
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<tr>
<td>C24 ≤ HC &lt; C28</td>
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<td>C28 ≤ HC &lt; C32</td>
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<td>C32 ≤ HC &lt; C36</td>
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</tr>
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<td>C36 ≤ HC &lt; C40</td>
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<td>C40 ≤ HC &lt; C42</td>
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<td>ND</td>
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TOTAL HC | 67 | ND |

TPH IDENTIFICATION: NONE

HC = HYDROCARBON
ND = ANALYTE NOT DETECTED AT OR ABOVE THE INDICATED REPORTING LIMIT
REPORTING LIMITS AND RESULTS HAVE BEEN ADJUSTED ACCORDINGLY TO ACCOUNT FOR DILUTION FACTOR.

SURROGATE PARAMETER | ACCEPTABLE RANGE | % RECOVERY |
1-BROMO-4-FLUOROBENZENE | 77-135 | 112 |
ANALYSIS RESULTS - TPH EXTENDED RANGE
BY ASTM D2887

CLIENT: SAN DIEGO BAYKEEPER

PROJECT NAME/No.: 303 (D)
PTAS LOG #: 1239-01-1
CLIENT SAMPLE ID: SDR10
DILUTION FACTOR: 1

ANALYTE                  REPORTING LIMITS   RESULTS
                          PPB (UG/L)         PPB (UG/L)

C7 ≤ HC < C8             67               ND
C8 ≤ HC < C9             67               ND
C9 ≤ HC < C10            67               ND
C10 ≤ HC < C11           67               ND
C11 ≤ HC < C12           67               ND
C12 ≤ HC < C14           67               ND
C14 ≤ HC < C16           67               ND
C16 ≤ HC < C18           67               ND
C18 ≤ HC < C20           67               ND
C20 ≤ HC < C24           67               ND
C24 ≤ HC < C28           67               ND
C28 ≤ HC < C32           67               ND
C32 ≤ HC < C36           67               ND
C36 ≤ HC < C40           67               ND
C40 ≤ HC < C42           67               ND

TOTAL HC                  67               ND

TPH IDENTIFICATION: NONE

HC = HYDROCARBON
ND = ANALYTE NOT DETECTED AT OR ABOVE THE INDICATED REPORTING LIMIT
REPORTING LIMITS AND RESULTS HAVE BEEN ADJUSTED ACCORDINGLY TO ACCOUNT FOR DILUTION FACTOR.

SURROGATE PARAMETER      ACCEPTABLE RANGE % RECOVERY
1-BROMO-4-FLUOROBENZENE  77-135            97
ANALYSIS RESULTS - TPH EXTENDED RANGE  
BY ASTM D2887

CLIENT: SAN DIEGO BAYKEEPER
PROJECT NAME/No.: 303 (D)
PTAS LOG #: 1239-01-2
CLIENT SAMPLE ID: SDR20
DILUTION FACTOR: 1

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<th>ANALYTE</th>
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<td>ND</td>
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<tr>
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<td>C10 ≤ HC &lt; C11</td>
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<td>67</td>
<td>ND</td>
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<tr>
<td>TOTAL HC</td>
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<td>ND</td>
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TPH IDENTIFICATION:  
NONE

HC = HYDROCARBON  
ND = ANALYTE NOT DETECTED AT OR ABOVE THE INDICATED REPORTING LIMIT  
REPORTING LIMITS AND RESULTS HAVE BEEN ADJUSTED ACCORDINGLY TO ACCOUNT FOR DILUTION FACTOR.

SURROGATE PARAMETER  ACCEPTABLE RANGE  % RECOVERY
1-BROMO-4-FLUOROBENZENE  77-135  91

DATE SAMPLED: 05/09/01  
DATE RECEIVED: 05/09/01  
DATE EXTRACTED: 05/10/01  
DATE ANALYZED: 05/11/01  
MATRIX: WATER

PTAS DCN 300-062 (Rev 6/99)
**QA/QC REPORT**

**METHOD:** TPH-ASTM D2887  
**DATE ANALYZED:** 05/10/01  
**QA/QC SAMPLE:** EMA 1239-01-BLANK

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<th>SPIKED ANALYTE</th>
<th>LCS % R</th>
<th>LCSD % R</th>
<th>RPD</th>
<th>ACCEPTABLE LCS/LCSD CRITERIA</th>
<th>ACCEPTABLE RPD CRITERIA</th>
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<tbody>
<tr>
<td>DIESEL</td>
<td>120</td>
<td>123</td>
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<td>%</td>
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LCS % R = LABORATORY CONTROL SAMPLE PERCENT RECOVERY  
LCSD % R = LABORATORY CONTROL SAMPLE DUPLICATE PERCENT RECOVERY  
RPD = RELATIVE PERCENT DIFFERENCE
# ANALYSIS RESULTS

**-client**: SAN DIEGO BAYKEEPER

**Date Sampled**: 05/09/01

**Date Received**: 05/09/01

**Project Name/No.**: 303 (D)

**EMA Log #**: 1239-01-2

**Sample ID**: SDR20

**Matrix**: WATER

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<th>Results</th>
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<td>TDS</td>
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<td>MG/L</td>
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**DF** = DILUTION FACTOR  
**ND** = ANALYTE NOT DETECTED AT OR ABOVE THE INDICATED REPORTING LIMIT

REPORTING LIMITS AND RESULTS HAVE BEEN ADJUSTED ACCORDINGLY TO ACCOUNT FOR DILUTION FACTOR.

*NOTE*: APPLIES TO METALS ONLY.
# ANALYSIS RESULTS

CLIENT: SAN DIEGO BAYKEEPER

PROJECT NAME/No.: 303 (D)  
EMA LOG #: 1239-01-1  
SAMPLE ID: SDR10

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<th>RESULTS</th>
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DF = DILUTION FACTOR  
REPORTING LIMITS AND RESULTS HAVE BEEN ADJUSTED ACCORDINGLY TO ACCOUNT FOR DILUTION FACTOR.
**QA/QC REPORT**

**QA/QC SAMPLE:** ERA 99102  
**DATE ANALYZED:** 05/14/01

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**QA/QC REPORT**

**DATE ANALYZED:** 05/14/01

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<th>MSD % R</th>
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**TV** = TRUE VALUE  
**DV** = DETERMINED VALUE  
**% R** = PERCENT RECOVERY  
**LCS % R** = LABORATORY CONTROL SAMPLE PERCENT RECOVERY  
**MS % R** = MATRIX SPIKE PERCENT RECOVERY  
**MSD % R** = MATRIX SPIKE DUPLICATE PERCENT RECOVERY  
**RPD** = RELATIVE PERCENT DIFFERENCE
# Chain-of-Custody Record

**PTAS LOG #:** 1239-01

**Client:** Hiram Salsia

**Address:** 2974 Fisher Rd., Ste. C 770

**Attn:** Hiram Salsia

**Phone:** 619-733-7737

**Fax:** 619-733-7790

**Billing Address:** Same as above

**Project:** 30317

**PO #:**

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<th>Sample Time</th>
<th>Sample Matrix</th>
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<td>1</td>
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<td>5/14/10</td>
<td>3:28 PM</td>
<td>H</td>
<td>C</td>
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<td>2</td>
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<td>H</td>
<td>C</td>
<td>BS</td>
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</table>

**Container Types:**
- B = Brass Tube
- V = VOA
- G = Glass
- P = Plastic
- O = Other (list)

**Address:** 4340 Viewridge Ave., Ste. A • San Diego, CA 92123 • Phone (858) 560-7717 • Fax (858) 56

**PTAS DATE/TIME STAMP**

**REQUESTED ANALYSIS**

**RELINQUISHED BY**

**DATE/TIME**

**RECEIVED BY**

* PTAS reserves the right to return samples that do not match our waste profile.
### AREA PERCENT REPORT

**Sample Name:** 1239-1h  
**Date:** 03-11-1991 00:16:11  
**Method:** C:TPNNEW  
**Interface:** 5  
**Cycle:** 14  
**Operator CK:** Channel# 0  
**Via:** H.A.  
**Starting Peak Width:** 1  
**Threshold:** .01  
**Area Threshold:** 50  
**Starting Delay:** 0.00  
**Run Time:** 39.00

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**Total Area:** 933012  
**Area Reject:** 1000  
**One sample per 1.000 sec.**

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Data File = E:0510E14.PTS  
Printed on 03-13-2001 at 17:15:23  
Start time: 6.00 min.  
Stop time: 39.00 min.  
Offset: 0 mv.  
Full Range: 200 millivolts
**AREA PERCENT REPORT**

*Sample Name:* 1237-2A  
*Date:* 05-11-1991 01:04:12  
*Method:* CtTFHNEW  
*Interfaces:* 5  
*Cycle:* 15  
*Operator CK*  
*Channel:* C  
*Vial:* N.A.  
*Starting Peak Width:* 1  
*Threshold:* 0.01  
*Area Threshold:* 50  
*Starting Delay:* 0.00  
*Run Time:* 39.00

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Total Area: 891032  
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One sample per 1.000 sec.

Data File = E:0510215.PTS  
Printed on 05-13-2001 at 17:15:39  
Start time: 0.00 min.  
Stop time: 39.00 min.  
Offset: 0 mv.  
Full Range: 290 millivolts
May 15, 2001

Chairman John Minan and Boardmembers
Regional Water Quality Control Board, San Diego Region
9771 Clairemont Mesa Blvd., Suite A
San Diego, CA 92124

Re: CWA Section 303(d) Listing

Dear Chairman Minan and Boardmembers:

San Diego BayKeeper, a community-based 501(c)(3) non-profit organization dedicated to protecting and restoring the region’s bays, coastal waters and watersheds, submits these comments on the 2002 Clean Water Act (CWA) section 303(d) listing. San Diego BayKeeper has serious concerns with the adequacy of the current 303(d) list for the region, and we are equally concerned about the direction staff may be taking in compiling the April 2002 listing.

First, we remain concerned that Region 9’s proposed 303(d) list is not based on a comprehensive assembly and review of information and data on water quality and other impairments regarding all water bodies in Region 9, as the Clean Water Act and its implementing regulations require. See, e.g., 40 C.F.R. Section 130.7. Indeed, wholly apart from the Section 303(d) scheme, under Clean Water Act Section 305(b) and accompanying regulations, each regional board must conduct a regional water quality assessment (WQA) of all water bodies in its region. It is clear from an even cursory review of the most recent 1998 California Water Quality Assessment Report, prepared in August 1999 by the Division of Water Quality, State Water Resources Control Board, that such a comprehensive review has yet to be performed in the San Diego region. After a brief review of data in the 1998 WQA, BayKeeper has concluded that, more than twenty years after these requirements were established, at least 80% of San Diego’s waters have not yet been fully assessed. Moreover, much of the data that has been gathered may not be easily accessed or understandable. In other words, this data is never fully reviewed or analyzed.

BayKeeper is also concerned about the requirements placed upon organizations wishing to submit information to support the upcoming 2002 CWA section 303(d) listing. The 305(b) and 303(d) lists are essential steps in first understanding and then addressing the overall health of our waters. Not only will the development of comprehensive and accurate 303(d) and 305(b) reports ensure that waters receive the appropriate level of protection through development of Total Maximum Daily Loads or antidegradation policies, but accurate lists will help ensure resources will be allocated wisely. Proper listings will also allow the region to tap into state and federal dollars earmarked for protecting impaired waters (e.g. SWRCB’s 319(h) program or Proposition 13). Despite the importance of the 303(d) list, though, those local residents most knowledgeable about their local waters and most impacted by pollution will have a difficult time complying with the submittal requirements established by this Board even though they may have vital and reliable data. Some of our specific concerns relate to:

Timeframe – Region 9, like other regions, is requiring all information to be submitted by May 15, 2001, a full 11 months prior to the final 2002 303(d) listing. We believe this deadline is not only arbitrary, but also extremely difficult to comply with due to the amount of information being requested in a short timeframe. The San Diego Regional Board did not issue their solicitation for information until March 2001, and a formal workshop to discuss the Board’s submission requirements was not held until April 4, 2001. This has left interested parties with a scant six weeks to gather and process information.

Considering the more than twenty years the regional board has had to develop sufficient 303(d) and
303(d) reports (which we are still waiting for), less than six weeks to provide needed data is wholly insufficient. BayKeeper intends to continue providing information to regional board staff through the two remaining public comment periods – August 2001 (when RWQCBs solicit input on draft 303(d) list recommendations) and Winter/Spring 2002 (when the SWRCB conducts formal public hearings on the draft 303(d) list). It is our expectation that the data provided in this timeframe will be reviewed and assessed by regional and state board staff for the 2002 listing.

**Required Documentation** – The regional board has indicated they will consider information and data generated since July 1997 that is provided both in hard copy as well as electronic formats, and that includes ‘bibliographic citations, identification of software used, model outputs with calibration and quality assurance information and description and interpretation of information provided.’ In separate meetings with regional board staff, BayKeeper has been told that data that can demonstrate trend analysis, that has been replicated and that covers physical, chemical and biological parameters will be most useful in helping to establish an accurate 303(d) list.

BayKeeper appreciates that the more comprehensive the data we are able to provide, the better. We are nonetheless concerned that these requirements are far beyond the criteria of ‘reliability’ which we believe is appropriate. In fact, it is our assertion that the Regional Board must use all relevant, reasonably available data (e.g. water quality, sediment, fish tissue, photos, narrative standards, land use plans, videotapes media coverage) to list waters. Listing should occur if evidence under reasonably foreseeable conditions indicates that a standard (e.g., California Toxics Rule, National Toxics Rule, Basin Plans, beneficial uses) is, or will be, violated. Where judgment calls are required, BayKeeper believes the Regional Board must err on the side of environmental and human health protection.

We assert such an interpretation is embodied in the requirement that “Each State shall identify those waters within is boundaries for which the effluent limitations...are not stringent enough to implement any water quality standard applicable to such waters.” (CWA, section 303(d)(1)(A), emphasis added) Furthermore, the Clean Water Act and its implementing regulations also distinguish between those existing uses that are actually being attained and designated beneficial uses that must still be protected, whether or not they are currently being attained.

Yet, the submittal requirements of the regional board require a rigor that is both unrealistic and unnecessary for listing. First, it is extremely costly to undertake much of the scientific analysis being requested by the Board, particularly if multiple replicates are being requested, as is trend analysis. It is unreasonable to expect small, grassroots organizations or concerned citizens to incur these types of expenses. In fact, to undertake some of the water quality analysis being requested by the regional board is costing BayKeeper thousands of dollars, and these costs would be substantially higher if we rushed our orders to meet the May 15 deadline. With limited resources, we decided not to rush these orders, meaning certified lab testing of metals, pesticides and herbicides along the San Diego River will be submitted after May 15, but as soon as is practicable.

It is also often impossible for local residents to gain access to some heavily polluted waters to conduct the types of analysis being requested, particularly as these residents often fear reprisals from local businesses that may be impacted by a demonstration that they are polluting these waters. This is a real and serious problem BayKeeper has faced in trying to gather data for this listing from local residents, particularly along certain areas of the San Diego River.

BayKeeper is also uncertain about the requirement that data be generated since July 1997. Again, we understand the need for reliable data, and more current data would be preferable. We also recognize that it is not necessary to provide pre-1997 data that has already led to a listing in 1998 or before (other than possibly using data to ensure that inappropriate delisting does not occur). However, we believe that valid
pre-1997 data (particularly that data that the Board already possess) that demonstrates impairment, but which has not yet led to a listing, must be considered by this Board. If fact, as is discussed in greater detail below, the 1998 WQA report includes listings of several water bodies that show some level of impairment but which have not yet been listed. Listing those waters for which information already exists must be the first step in the 2002 listing.

Finally, while BayKeeper – through its ever-expanding Citizen Water Quality Monitoring taskforce - looks forward to working closely with regional board staff to undertake a more comprehensive assessment of local waters, the ultimate burden of listing lies with your agency. Because of the importance of the 2002 list in terms of water quality protections as well as access to resources to help restore waters, we will do everything within our power to point regional board staff in the direction of identifying impaired waters. However, we believe it is the duty of this Board – a duty that has not yet been met – to prepare complete and accurate 305(b) and 303(d) lists. The following information on waters we believe should be listed will need follow-up from regional board staff, and in no way is meant to represent a comprehensive listing of all of San Diego’s waters which may be impaired.

303(d) List
BayKeeper believes the first step in preparing an accurate 2002 303(d) list is necessarily to review the most recent 1998 Water Quality Assessment. In that report, a matrix is provided which lists east separate hydrological unit in San Diego, and indicates whether each unit has or has not been assessed. For those that have been assessed, the matrix indicates whether these waters are supporting designated beneficial uses fully, partially, not at all, or whether beneficial uses are threatened. For the reasoning highlighted above, BayKeeper believes it is incumbent on the regional board to err on the side of environmental and human health protection, meaning that listing should occur for every assessed water body that is not meeting designated beneficial uses. This is not the case with the 1998 WQA report, and some examples follow:

Dana Point Harbor (Hydrological Unit 901.140) – listed as 215 acres fully supporting designated beneficial uses. Yet, the assessment comments column indicates that Dana Point Harbor and Baby Beach were closed from 8/96 to 7/97 to water contact recreation. As Dana Point Harbor is listed as meeting Recreation 1 and 2 standards, it should be listed as impaired if it was indeed closed for nearly a year to water contact.

San Diego Bay (Hydrological Unit 900.00) – While 222 acres of San Diego bay are listed as impaired due to benthic community effects, sediment toxicity and copper, 11772 acres are threatened, but not listed as impaired. The WQA assessment indicates that the entire bay (12000 acres) is posted with warnings for pregnant women and young children against consumption of fish due to elevated levels of PCB’s, mercury and PAH’s. By the Regional Board’s own findings and by definition, BayKeeper believes the entire Bay should be listed as impaired.

Escondido Creek - (Hydrological Unit 904.600) – 23 miles of Escondido Creek are considered ‘threatened’ due to excessive sediment and nutrients, and should thus be listed as impaired.

Forester Creek - (Hydrological Unit 907.130) – 1 mile of Forester Creek is considered ‘threatened’ due to elevated fish tissue levels, and should thus be listed as impaired.

Otay River - (Hydrological Unit 910.200) – 5 miles of the Otay River are listed as only partially supporting designated beneficial uses, and should thus be listed as impaired.

Salt Creek - (Hydrological Unit 901.140) – Salt Creek was closed regularly in 1996 and 1997 due to elevated coliform levels from sewage spills, and should thus be listed as impaired.
San Diego River, Lower - (Hydrological Unit 907.110) – 6 miles of the Lower San Diego River is considered ‘threatened’ due to elevated coliform levels and exotic plant species, and should thus be listed as impaired. (Discussed in greater detail below.)

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On behalf of San Diego BayKeeper, I appreciate the opportunity to provide comments on the 2002 CWA section 303(d) listing, and hope they are helpful. A great deal of work is needed to ensure a complete and accurate listing in 2002 and beyond, and BayKeeper looks forward to working with the regional board to ensure such listings. Please do not hesitate to contact me should you have any questions need additional information.

Sincerely,

Bruce Reznik
Executive Director
Fax

To: [Redacted]  
From: Suzanne M. & Francie S.

Fax: 858-571-6972  
Date: 

Phone: 
Pages: 3 (including cover)

Re: 
CC: 

*Comments:

Look on the flagged page. May be some more data we need to dig up for SPR.

AM

This FAX is intended for use of the individual or entity to which it is addressed, and may contain information that is privileged, confidential or exempt from disclosure under applicable law. If you are not the intended recipient, any use, distribution or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone and return the original FAX to us at the address below by U.S. Mail. Thank you.
May 15, 2001

Chairman John Minan and Boardmembers
Regional Water Quality Control Board, San Diego Region
9771 Clairemont Mesa Blvd., Suite A
San Diego, CA 92124

Re: CWA Section 303(d) Listing

Dear Chairman Minan and Boardmembers:

San Diego BayKeeper, a community-based 501(c)(3) non-profit organization dedicated to protecting and restoring the region's bays, coastal waters and watersheds, submits these comments on the 2002 Clean Water Act (CWA) section 303(d) listing. San Diego BayKeeper has serious concerns with the adequacy of the current 303(d) list for the region, and we are equally concerned about the direction staff may be taking in compiling the April 2002 listing.

First, we remain concerned that Region 9's proposed 303(d) list is not based on a comprehensive assembly and review of information and data on water quality and other impairments regarding all water bodies in Region 9, as the Clean Water Act and its implementing regulations require. See, e.g., 40 C.F.R. Section 130.7. Indeed, wholly apart from the Section 303(d) scheme, under Clean Water Act Section 303(b) and accompanying regulations, each regional board must conduct a regional water quality assessment (WQA) of all water bodies in its region. It is clear from an even cursory review of the most recent 1998 California Water Quality Assessment Report, prepared in August 1999 by the Division of Water Quality, State Water Resources Control Board, that such a comprehensive review has yet to be performed in the San Diego region. After a brief review of data in the 1998 WQA, BayKeeper concluded that, more than twenty years after these requirements were established, at least 80% of San Diego's waters have not yet been fully assessed. Moreover, much of the data that has been gathered may not be easily accessed or understandable. In other words, this data is never fully reviewed or analyzed.

BayKeeper is also concerned about the requirements placed upon organizations wishing to submit information to support the upcoming 2002 CWA section 303(d) listing. The 305(b) and 303(d) lists are essential steps in first understanding and then addressing the overall health of our waters. Not only will the development of comprehensive and accurate 303(d) and 305(b) reports ensure that waters receive the appropriate level of protection through development of Total Maximum Daily Loads or antidegradation policies, but accurate lists will help ensure resources will be allocated wisely. Proper listings will also allow the region to tap into state and federal dollars earmarked for protecting impaired waters (e.g., SWRCB's 319(h) program or Proposition 13). Despite the importance of the 303(d) list, though, those local residents most knowledgeable about their local waters and most impacted by pollution will have a difficult time complying with the submittal requirements established by this Board even though they may have vital and reliable data. Some of our specific concerns relate to:

Timeframe - Region 9, like other regions, is requiring all information to be submitted by May 15, 2001, a full 11 months prior to the final 2002 303(d) listing. We believe this deadline is not only arbitrary, but also extremely difficult to comply with due to the amount of information being requested in a short timeframe. The San Diego Regional Board did not issue their solicitation for information until March 2001, and a formal workshop to discuss the Board's submission requirements was not held until April 4, 2001. This has left interested parties with a scant six weeks to gather and process information. Considering the more than twenty years the regional board has had to develop sufficient 303(d) and
305(b) reports (which we are still waiting for), less than six weeks to provide needed data is wholly insufficient. BayKeeper intends to continue providing information to regional board staff through the two remaining public comment periods — August 2001 (when RWQCBs solicit input on draft 303(d) list recommendations) and Winter/Spring 2002 (when the SWRCB conducts formal public hearings on the draft 303(d) list). It is our expectation that the data provided in this timeframe will be reviewed and assessed by regional and state board staff for the 2002 listing.

**Required Documentation.** The regional board has indicated they will consider information and data generated since July 1997 that is provided both in hard copy as well as electronic formats, and that includes "bibliographic citations, identification of software used, model outputs with calibration and quality assurance information and description and interpretation of information provided." In separate meetings with regional board staff, BayKeeper has been told that data that can demonstrate trend analysis, that has been replicated and that covers physical, chemical and biological parameters will be most useful in helping to establish an accurate 303(d) list.

BayKeeper appreciates that the more comprehensive the data we are able to provide, the better. We are nonetheless concerned that these requirements are far beyond the criteria of 'reliability' which we believe is appropriate. In fact, it is our assertion that the Regional Board must use all relevant, reasonably available data (e.g. water quality, sediment, fish tissue, photos, narrative standards, land use plans, videotapes media coverage) to list waters. Listing should occur if evidence under reasonably foreseeable conditions indicates that a standard (e.g., California Toxics Rule, National Toxics Rule, Basin Plans, beneficial uses) is, or will be, violated. Where judgment calls are required, BayKeeper believes the Regional Board must err on the side of environmental and human health protection.

We assert such an interpretation is embodied in the requirement that "Each State shall identify those waters within its boundaries for which the effluent limitations...are not stringent enough to implement any water quality standard applicable to such waters." (CWA, section 303(d)(1)(A), emphasis added). Furthermore, the Clean Water Act and its implementing regulations also distinguish between those existing uses that are actually being attained and designated beneficial uses that must still be protected whether or not they are currently being attained.

Yet, the submittal requirements of the regional board require a rigor that is both unrealistic and unnecessary for listing. First, it is extremely costly to undertake much of the scientific analysis being requested by the Board, particularly if multiple replicates are being requested, as is trend analysis. It is unreasonable to expect small, grassroots organizations or concerned citizens to incur these types of expenses. In fact, to undertake some of the water quality analysis being requested by the regional board is costing BayKeeper thousands of dollars, and these costs would be substantially higher if we rushed our orders to meet the May 15 deadline. With limited resources, we decided not to rush these orders, meaning certified lab testing of metals, pesticides and herbicides along the San Diego River will be submitted after May 15, but as soon as is practicable.

It is also often impossible for local residents to gain access to some heavily polluted waters to conduct the types of analysis being requested, particularly as these residents often fear reprisals from local businesses that may be impacted by a demonstration that they are polluting these waters. This is a real and serious problem BayKeeper has faced in trying to gather data for this listing from local residents, particularly along certain areas of the San Diego River.

BayKeeper is also uncertain about the requirement that data be generated since July 1997. Again, we understand the need for reliable data, and more current data would be preferable. We also recognize that it is not necessary to provide pre-1997 data that has already led to a listing in 1998 or before (other than possibly using data to ensure that inappropriate delisting does not occur). However, we believe that valid
pre-1997 data (particularly that data that the Board already possess) that demonstrates impairment, but which has not yet led to a listing, must be considered by this Board. If fact, as is discussed in greater detail below, the 1998 WQA report includes listings of several water bodies that show some level of impairment but which have not yet been listed. Listing those waters for which information already exists must be the first step in the 2002 listing.

Finally, while BayKeeper — through its ever-expanding Citizen Water Quality Monitoring taskforce — looks forward to working closely with regional board staff to undertake a more comprehensive assessment of local waters, the ultimate burden of listing lies with your agency. Because of the importance of the 2002 list in terms of water quality protections as well as access to resources to help restore waters, we will do everything within our power to point regional board staff in the direction of identifying impaired waters. However, we believe it is the duty of this Board — a duty that has not yet been met — to prepare complete and accurate 305(b) and 303(d) lists. The following information on waters we believe should be listed will need follow-up from regional board staff, and in no way is meant to represent a comprehensive listing of all of San Diego’s waters which may be impaired.

303(d) List
BayKeeper believes the first step in preparing an accurate 2002 303(d) list is necessarily to review the most recent 1998 Water Quality Assessment. In that report, a matrix is provided which lists each separate hydrological unit in San Diego, and indicates whether each unit has or has not been assessed. For those that have been assessed, the matrix indicates whether these waters are supporting designated beneficial uses fully, partially, not at all, or whether beneficial uses are threatened. For the reasoning highlighted above, BayKeeper believes it is incumbent on the regional board to err on the side of environmental and human health protection, meaning that listing should occur for every assessed water body that is not meeting designated beneficial uses. This is not the case with the 1998 WQA report, and some examples follow:

Dana Point Harbor (Hydrological Unit 901.140) — listed as 215 acres fully supporting designated beneficial uses. Yet, the assessment comments column indicates that Dana Point Harbor and Baby Beach were closed from 8/96 to 7/97 to water contact recreation. As Dana Point Harbor is listed as meeting Recreation 1 and 2 standards, it should be listed as impaired if it was indeed closed for nearly a year to water contact.

San Diego Bay (Hydrological Unit 900.00) — While 222 acres of San Diego Bay are listed as impaired due to bacterial community effects, sediment toxicity, and copper, 11,772 acres are threatened, but not listed as impaired. The WQA assessment indicates that the entire bay (12,000 acres) is posted with warnings for pregnant women and young children against consumption of fish due to elevated levels of PCB's, mercury and PAM's. By the Regional Board's own findings and by definition, BayKeeper believes the entire Bay should be listed as impaired.

Escondido Creek - (Hydrological Unit 904.600) — 22 miles of Escondido Creek are considered 'threatened' due to excessive sediment and nutrients, and should thus be listed as impaired.

Forester Creek - (Hydrological Unit 907.130) — 1mile of Forester Creek is considered 'threatened' due to elevated fish tissue levels, and should thus be listed as impaired.

Otag River - (Hydrological Unit 910.200) — 5 miles of the Otag River are listed as only partially supporting designated beneficial uses, and should thus be listed as impaired.

Salt Creek - (Hydrological Unit 901.140) — Salt Creek was closed regularly in 1996 and 1997 due to elevated coliform levels from sewage spills, and should thus be listed as impaired.
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Sincerely,

Bruce Reznik
Executive Director
Attachment B
Prepared by Suzanne M. Michel, Ph.D. Water Resources Geography

Qualitative Data Submitted

- California State of, Regional Water Quality Control Board, Region 9. 1007. Adoption of Order No. 97-63 “Waste Discharge Requirements for the U.S. Navy, Project P-338S, Pier 3, Dredging San Diego County” File: 05-0843.02
- York, Diane. Folder entitled: Lakeside a River Runs Through It. Media clippings and photos of conditions in the San Diego River, Lakeside CA.

Analysis of Qualitative Data

Residents of East County have for years been aware of actions which degrade water quality and riparian habitat in the San Diego River. These actions have been both condoned by local governments, or have been conducted illegally, often at nighttime. Since water quality testing requires training and a substantial capital investment, local volunteers are submitting to the regional board qualitative data. Data has been obtained through document analysis of government and media documents, observations of illegal polluting activities in the river, interviews of informants or simply observing visual conditions of water quality impairment. In addition, the San Diego River Watershed Management Plan is submitted that describes the significant water quality problems present in the River Basin (see sections entitled Problems Being Addressed, Problem Statement, and Specific Water Quality Goals).

The Board should note that certain regions of the San Diego River are inaccessible due to actions of private property owners. In Lakeside for example much of the river is fenced off with signs saying “No Trespassing.” Given this fact of inaccessibility any water quality testing would be impossible. Hence, the only data we were able to obtain was via videotaping or photographs on hills surrounding the River.
These observations demonstrate that even though the County and the Regional Board permit industrial activities, these activities continue to deposit pollutants into the River.

In one instance residents filmed truck washing in Lakeside. This violation of the storm water permit was reported to a Regional Board representative, and the Regional Board representative informed the permittee violator (Bill Sign’s Trucking). Subsequently, a Bill Sign’s Trucking representative threatened the two men who had conducted the videotaping verbally. This incident and other threatening activities by landowners in Lakeside has instilled an atmosphere of fear. It was very difficult to obtain information, since residents have been threatened and did not want their identities revealed. The Regional Board should investigate the incident concerning Bill Sign’s Trucking (June 10, 2000), and establish protocol that if information is submitted one’s identity is protected.

Besides videotapes, film data and document analysis, personal testimonies are submitted. The personal testimonies were recorded during the public hearing concerning water quality issues for the Upper San Diego River Improvement Project or USDRIIP in Lakeside. This hearing was conducted by the San Diego County Board of Supervisors and indicates ethnographic data concerning degrading water and riparian habitat quality in the San Diego River. This hearing along with other media documents submitted in the “Lakeside a River Runs through It” folder indicates the very high level of concern Lakeside residents have at the status and future of the San Diego River and the Santee-El Monte groundwater basin beneath the River.

Below is an overview of qualitative data submitted indicating hotspots. In these hotspots the Regional Board should review their data and other data submitted. At these sites water quality does not support the following beneficial uses: contact water recreation, warm freshwater habitat, cold freshwater habitat, wildlife habitat and rare or endangered species. In addition, since the Santee-El Monte Groundwater Basin (an unconfined groundwater basin beneath the San Diego River in East County), supports municipal drinking water sources and has been contaminated by above ground land uses, the Board should pay special attention to surface water conditions above the groundwater basin. In ALL areas, the Regional Board should set up monitoring sites.

**Lakeside:** The entire length of the San Diego River, especially areas within the Upper San Diego River Improvement District (USDRIP), areas zoned M52, M54 and M58 (to the base of San Vincente Dam) and Los Coches Creek. A portion of Lakeside’s San Diego riverbed is owned by Lakeside Land, a company that is currently under investigation for illegal dumping of contaminants in the River and destruction of riparian habitat. In the enclosed videotape and notebook (Lakeside a River Runs Through It) we have compiled media coverage of California’s Fish and Games raid upon the site.

From document analysis and personal observation, residents (who desire to keep their identities unknown) revealed to us that sediment from Pier 3, Naval Station is being disposed of in the San Diego River by Lakeside Land. This disposal of San Diego Bay sediment is disturbing to Lakeside residents for many reasons. First, as indicated in the enclosed report (Cover Letter dated December 30, 1997) the material in the top layer of sediment “has a significant bioassay toxicity and is
not suitable either for use as beach replenishment material or for ocean discharge." Why is it suitable for disposal into the San Diego Riverbed, which supports recreational and aquatic habitat uses? The document also stipulates that sediment disposed of will be disposed of in a hydrologic basin, which is not designated as MUN. Surface water in the San Diego River is not designated, however groundwater directly beneath the disposal site is designated MUN. What assurances do Lakeside residents have that toxic substances in the sediment are not released into their drinking water supply, and do not affect the above listed beneficial uses? Finally, Lakeside Land Company is disposing the sediment, the very same company currently under investigation for illegal dumping of pollutants in the San Diego River. At the very least, RWQCB should release data of water monitoring at the site, conduct soil tests, and hold a public hearing to inform Lakeside residents. Lakeside residents will continue an investigation into this manner, by reviewing RWQCB and County of San Diego Department of Public Health documents.

Beneath the river lies the Santee-El Monte aquifer an unconfined groundwater basin. There is surface and groundwater interaction since the groundwater basin occurs in the alluvial fill of the San Diego River Valley composed of medium-grained, fairly well sorted, loosely packed sand (State of California, Department of Water Resources 1965, page 15). In certain areas where there has been sand mining groundwater flows have created lakes or ponds in the San Diego River bed (see videotape section on truck washing activities). Most of the water quality monitoring for this region has occurred in the monitoring of well sites. It is noted in the well data that most of the contamination of groundwater occurs due to land uses on the surface or leaking underground storage tanks. Quantitative data concerning contamination of these well sites is discussed in Attachment A. Riverview Water and Lakeside Water Districts have active wells near the riverbed. Concerning River Water District all wells have been shut down due to MTBE contamination from at least two gas stations (located at the intersection of Woodside and Wintergardens Ave.). Well testing data from Riverview Water District is included in the enclosed package. Soil and water tests on the gas station sites have revealed high levels of MTBE and Benzene contamination (Bizarri 2000).

In the folder entitled, "Lakeside A River Runs Through It" residents have compiled photos of illegal trash dumping in the river, oil leaks and stains, and storage facilities which are not implementing BMPs for storm water pollution.

Santee: The entire section of the San Diego River, Forrester Creek and Sycamore Creek. Visual observations reveal foam and algal blooms, foul river odors, trash dumping. Near particular storm drains (especially those with concrete channelization) City of Santee water quality tests reveal high levels of pH and/or significant concentrations of ammonia and detergents (see Attachment A). The enclosed analysis submitted by Van Collingsworth concludes that the River cannot support beneficial uses.
El Cajon: Forrester Creek. This creek no longer exists, it is a concrete channel surrounded by industrial activities. The Regional Board should conduct a trend analysis (examine its database concerning CWA violations on or near the Creek) over the past decade. Enclosed are two incidences of contaminating activities.

Mission Ponds, Mission Valley Terminals: Reviews of the RWQCB files indicate contamination in this region by petroleum hydrocarbons. Enclosed is a PowerPoint presentation by San Diego State university students containing photos of industrial activity in the area. As with Lakeside, these students (Moses Cohen, Casey Neville and Casey Engelhardt) found that access to the River in these industrial areas was not allowed, and hence photos were taken from surrounding hillsides. This area is also the site of sewage spills by San Diego’s MWWD (see enclosed article of 34 million gallon spill)

Besides the submission of the enclosed qualitative data, trend analysis of Regional Board’s files (or qualitative data) can reveal trends of water quality degradation. Below is a listing of analysis, which should be conducted. The parameters of the trend analysis should be geographic or the San Diego River watershed, time parameter 1990-2000. When possible these analysis can be conducted using geographical information systems:

- A listing of sewage spills, total gallons spilled each year, and total number of beach closures each year.
- A listing of leaking underground storage tanks spills, what chemicals and total amounts each year.
- A trend analysis of Padre Dam’s monitoring data focusing on hot spots between 1997-2001
- A trend analysis of hazardous waste storage, use and release on or near the San Diego River.
- A trend analysis of storm water data over the past decade, storm water violations.
- A trend analysis of NPDES, WDR and storm water violations over the past decade.
- Loss of riparian habitat over the past decade due to channelization, urbanization or exotic plant invasion. Total acres of riparian habitat lost or gained.
- A trend analysis of concrete channelization, total acres of channelized rivers each year over the past twenty years.

Trend analysis of these records will determine if polluting activities are increasing or decreasing over time and if the river’s water quality and habitat degrading. The regional board has indicated that most of the River has not been assessed, and we assume this assessment entails water quality testing. However, other types of assessment such as trend analysis can be done. This data will locate sources of pollution and coupled with water quality testing should detail geographic extent and longevity of the pollution. Our previous analysis of total/fecal coliform indicates spikes of numbers in dry weather
conditions. A trend analysis of sewage spills and/or permit violations could locate the sources of bacterial contamination demonstrated in water quality tests. It was noted also in Santee's storm water reports of high levels of ammonia at certain sites. Investigators attempted to test upstream to locate the source but had to end their efforts due to inability to access the water. Again trend analysis reports may have been useful to identify sources of contamination.

Citations for Attachements A & B
(Note: Due to the length of reports, not all reports are included in our data analysis).


Analysis of Quantitative Data

In its 1998 Regional Board in 1998 505(b) report the Regional Board indicates that there has been no assessment of the San Diego River. After approximately one month of work we were able to locate several sources of quantitative water quality data going back as far as 1965, sources are listed below:

* Padre Dam Municipal Water District - Receiving Water Sampling and Analyses
* City of El Cajon - Storm Water Monitoring
* City of Santee - Storm Water Monitoring
* Groundwater Sampling Data - Santee, El Monte Monitoring Program
* SDRWQCB 1999 Biological Assessment Annual Report
* Department of Water Resources - Ground Water Conditions in the San Diego River Valley
* San Diego BayKeeper Water Quality Monitoring Program

After reviewing surface water data for the San Diego River and having conducted testing of our own we have identified several areas of concern. Review of Padre Dam surface water monitoring data going back to 1997 and independent testing indicates that recurrent exceedances in total and fecal coliform are a problem. The Padre Dam monitoring program includes sites as far downstream as the San Diego River Estuary (near I-5). Along the San Diego River typical levels of total coliform range in the thousands, a condition that is in violation of the Clean Water Act considering the beneficial uses assigned to this water body. Preliminary analyses of these data indicate that peaks consistently occur both during wet and dry weather periods, with areas like Forester Creek in El Cajon and Old Mission Dam showing the highest levels (See attached data). Further comprehensive analyses of these microbiological data involving comparisons of bacteria with surface flow and known sewage events is necessary to determine the sources of contaminants.

Also, while examining the same dataset and conducting independent testing we were able to observe recurrent exceedances in TDS, elevated levels of pH and significantly low concentrations of dissolved oxygen. The latter is particularly true for areas like Forester Creek and Mission Ponds. Also City of Santee dry weather stormwater monitoring reports indicate the presence of extremely high levels of pH and in some cases elevated levels of ammonia and detergents at sites located south of River Park Place, south of Mast Blvd., near Chubb Lane, Forester Creek, south Bank of San Diego River, east of Panta Drive. These constituents and contaminants are of crucial importance considering their impact on habitat integrity and the San Diego River's beneficial use as a wildlife and rare and endangered species habitat. Furthermore, other types of data also indicate that the habitats of the river show clear signs of impairment.

The 1999 biological Assessment Report indicates that in our county benthic communities in riparian habitats are dominated by pollution tolerant species, diversity is low, and sensitive species are rarely encountered, all of which are established indicators of impairment. The San Diego River sites in particular rank consistently below average with respect to the rest of the county. Among the San Diego River sites, the River Valley Golf Course is of particular concern. Considering that rankings where based on a
comparison between impacted sites, evaluation of these sites in comparison to better upstream reference sites will likely reveal a greater degree of impairment.

Another area of concern is groundwater contamination, given the interaction between the aquifers and the river contamination of groundwater is of serious concern. Groundwater testing data also shows elevated levels of Aluminum, Chromium, and several other organic compounds, including MTBE. These well water samples where taken from the same aquifer and even though some variability in levels is to be expected differences in levels in some cases are of two orders of magnitude or greater. Overview of these data clearly shows that some wells are in proximity to sources contamination. The heavy metals data should be reviewed carefully and evaluated in relation to historical data and known natural background. In terms of the organic compounds there is no question that these wells have been contaminated and given that this is an unconfined aquifer the risk of surface water contamination is great.

We believe that there is sufficient data available to indicate that the San Diego River is seriously impacted by contamination and that comprehensive analyses of these data will show that the impact is not confined to certain portions of the river but that the river as a whole shows significant signs of impairment. We also believe that trend analyses of these data that takes into account known events of contamination and NPDES discharge information will crucial in determining the sources of pollution. Moreover we see that there is a need for greater coordination between the different agencies conducting sampling, as well a need for review of current methodologies to determine levels of quality, comparability of data and standardization.
Fecal Coliform per Site vs. Time

Fecal Coliform (MPN)

Time