

SANTA BARBARA HARBOR  
WATER QUALITY TEST RESULTS  
JANUARY THROUGH DECEMBER 2011

APR 19 2012  
#1

Total Coliform MPN/100mls				
Station	July	August	April	June
SBH #7	41	52	74	52
SBH #8	97	282	4884	31
SBH #9	145	97	98	20
SBH #10	41	10	2613	20
SBH #11	26	1274	156	109
SBH #12	565	20	86	63
SBH #13	10	<10	<10	<10
Limit: <10,000 MPN/100mls				

Fecal Coliform MPN/100mls				
Station	July	August	April	June
SBH #7	10	10	20	10
SBH #8	<10	31	<10	10
SBH #9	<10	10	10	<10
SBH #10	20	<10	1333	<10
SBH #11	20	480	20	10
SBH #12	145	20	10	41
SBH #13	10	<10	<10	<10
Limit: < 400 MPN/100mls				

Enterococcus MPN/100mls				
Station	July	August	April	June
SBH #7	10	<10	<10	,10
SBH #8	<10	20	10	,10
SBH #9	<10	20	10	<10
SBH #10	<10	<10	41	<10
SBH #11	10	10	110	11
SBH #12	20	20	<10	<10
SBH #13	<10	<10	<10	<10
Limit: < 104 MPN/100mls				

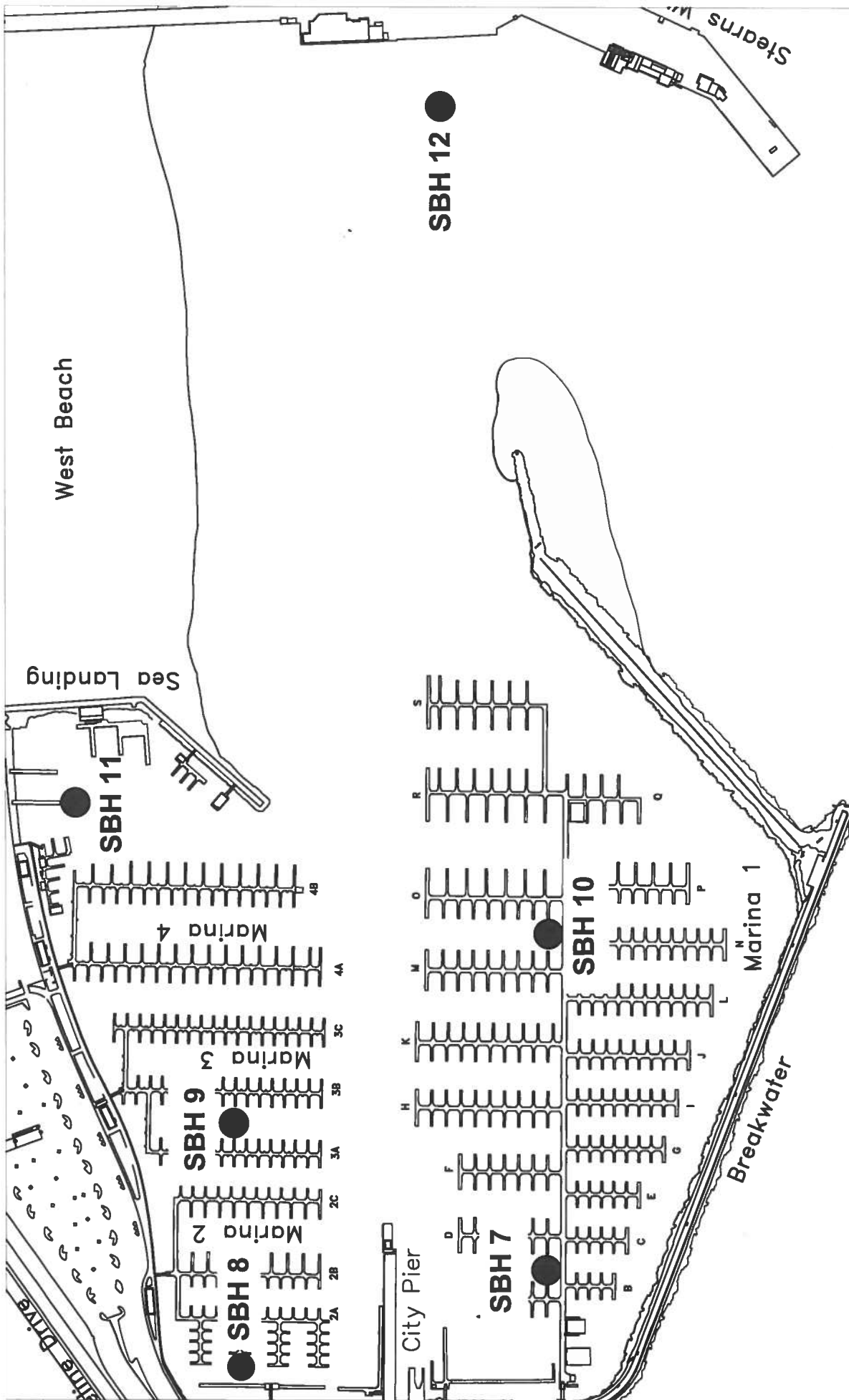
ATTACHMENT #1

SANTA BARBARA HARBOR  
WATER QUALITY TEST RESULTS  
JANUARY THROUGH DECEMBER 2011

APR 19 2012  
#17

MBAS MPN/l		
Station	April	June
SBH #7	ND	ND
SBH #8	ND	ND
SBH #9	ND	ND
SBH #10	ND	ND
SBH #11	ND	ND
SBH #12	ND	ND
SBH #13	ND	ND
Limit: < .2 MPN mg/l		

APR 19 2012  
#7



● SBH 13

# Water Quality Sampling Locations

EAST BEACH MOORING  
WATER QUALITY TEST RESULTS  
JANUARY 2011 THROUGH DECEMBER 2011

APR 19 2012  
#17

Total Coliform MPN/100ml			
Station	July	September	October
EBM #1	<10	20	<10
EBM #2	<10	10	<10
EBM #3	<10	30	<10
EBM #4	<10	<10	<10
EBM #5	<10	20	<10
EBM #6	<10	73	<10
CONTROL	<10	52	<10
Limit: < 10,000 MPN/100 ml			

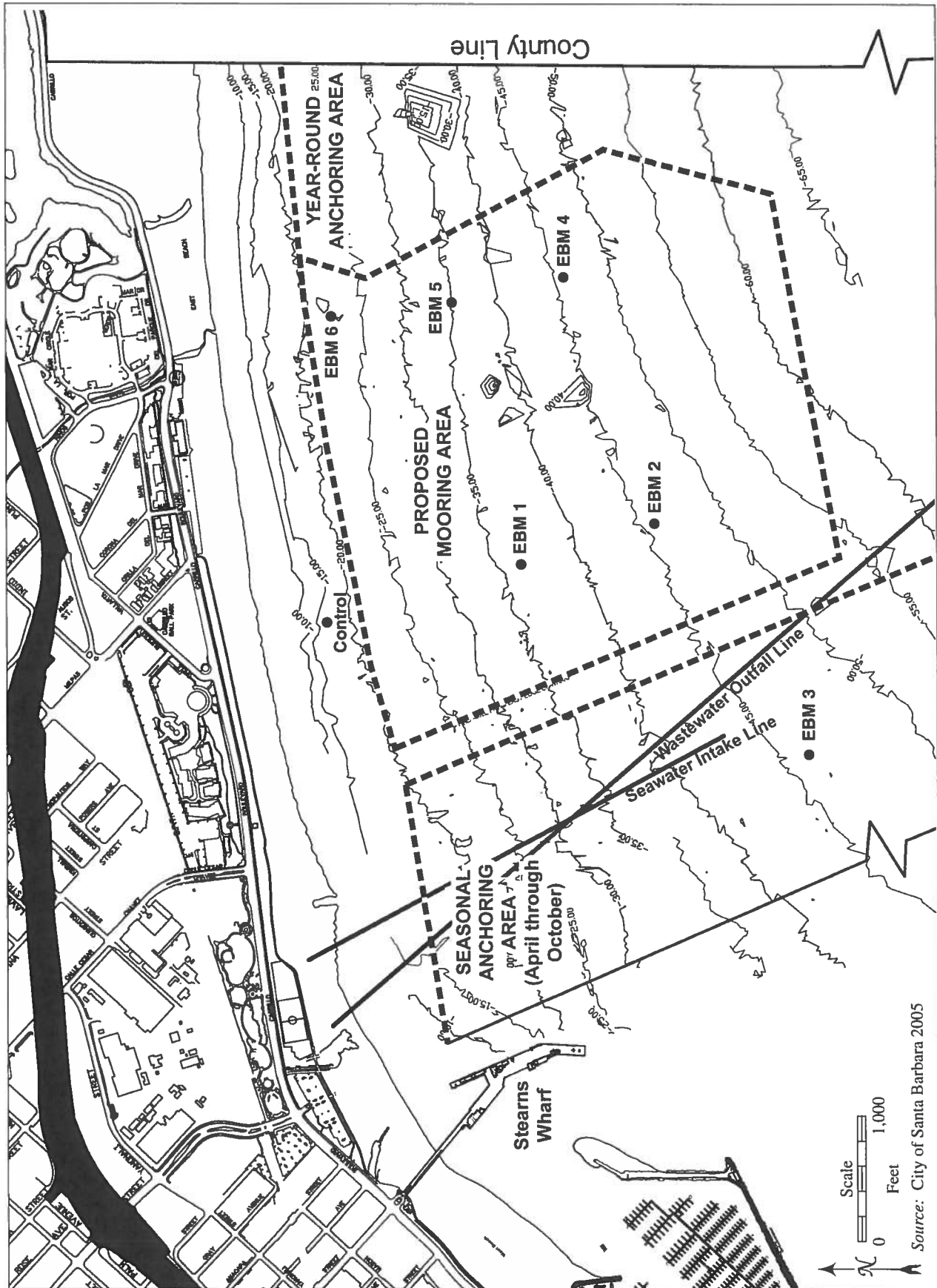
Fecal Coliform MPN/100ml			
Station	July	September	October
EBM #1	<10	<10	<10
EBM #2	<10	<10	<10
EBM #3	<10	10	<10
EBM #4	<10	<10	<10
EBM #5	<10	10	<10
EBM #6	<10	10	<10
CONTROL	<10	<10	<10
Limit: < 400 MPN/100ml			

Enterococcus MPN/100ml			
Station	July	September	October
EBM #1	<10	<10	<10
EBM #2	<10	<10	<10
EBM #3	<10	<10	<10
EBM #4	<10	<10	<10
EBM #5	<10	<10	<10
EBM #6	<10	<10	<10
CONTROL	<10	10	<10
Limit: < 104 MPN/100ml			

ATTACHMENT #3

APR 19 2012

#4



Map 1. Proposed Mooring and Anchoring Areas

ATTACHMENT #4

# Dissolved Oxygen Levels in the Harbor

1/26/2011

		<i>Near Surface DO</i>	<i>Near Bottom DO</i>
Station #7	Marina 1A002	5.83 mg/l	6.57 mg/l
Station #8	Marina 2B300	5.98 mg/l	5.82 mg/l
Station #9	Marina 3A030	6.07 mg/l	6.08 mg/l
Station #10	Marina 1M001	6.26 mg/l	6.63 mg/l
Station #11	West Finger of Launch Ramp	6.26 mg/l	5.71 mg/l
Station #12	Red Bouy #10, Mouth of Harbor	7.63 mg/l	8.06 mg/l
Station #13	Control, 100 yards Offshore	9.79 mg/l	9.03 mg/l

2/23/2011

		<i>Near Surface DO</i>	<i>Near Bottom DO</i>
Station #7	Marina 1A002	6.18 mg/l	6.43 mg/l
Station #8	Marina 2B300	5.61 mg/l	5.71 mg/l
Station #9	Marina 3A030	6.36 mg/l	6.69 mg/l
Station #10	Marina 1M001	5.79 mg/l	5.91 mg/l
Station #11	West Finger of Launch Ramp	5.32 mg/l	5.42 mg/l
Station #12	Red Bouy #10, Mouth of Harbor	7.07 mg/l	6.75 mg/l
Station #13	Control, 100 yards Offshore	7.17 mg/l	7.30 mg/l

3/22/2011

		<i>Near Surface DO</i>	<i>Near Bottom DO</i>
Station #7	Marina 1A002	6.08 mg/l	6.72 mg/l
Station #8	Marina 2B300	5.43 mg/l	4.55 mg/l
Station #9	Marina 3A030	5.98 mg/l	6.99 mg/l
Station #10	Marina 1M001	6.30 mg/l	6.31 mg/l
Station #11	West Finger of Launch Ramp	5.68 mg/l	5.00 mg/l
Station #12	Red Bouy #10, Mouth of Harbor	8.43 mg/l	8.08 mg/l
Station #13	Control, 100 yards Offshore	8.48 mg/l	8.47 mg/l

4/12/2011

		<i>Near Surface DO</i>	<i>Near Bottom DO</i>
Station #7	Marina 1A002	3.22 mg/l	0.95 mg/l
Station #8	Marina 2B300	2.83 mg/l	1.00 mg/l
Station #9	Marina 3A030	2.11 mg/l	0.93 mg/l
Station #10	Marina 1M001	3.65 mg/l	3.12 mg/l
Station #11	West Finger of Launch Ramp	1.84 mg/l	1.80 mg/l
Station #12	Red Bouy #10, Mouth of Harbor	8.51 mg/l	6.32 mg/l
Station #13	Control, 100 yards Offshore	7.75 mg/l	7.92 mg/l

4/19/2011

		<i>Near Surface DO</i>	<i>Near Bottom DO</i>
Station #7	Marina 1A002	5.85 mg/l	6.22 mg/l
Station #8	Marina 2B300	3.30 mg/l	4.44 mg/l
Station #9	Marina 3A030	2.14 mg/l	5.58 mg/l
Station #10	Marina 1M001	5.02 mg/l	6.20 mg/l
Station #11	West Finger of Launch Ramp	3.58 mg/l	4.32 mg/l
Station #12	Red Bouy #10, Mouth of Harbor	8.77 mg/l	9.40 mg/l
Station #13	Control, 100 yards Offshore	9.70 mg/l	9.75 mg/l

5/19/2012

		<i>Near Surface DO</i>	<i>Near Bottom DO</i>
Station #7	Marina 1A002	4.02 mg/l	3.77 mg/l
Station #8	Marina 2B300	3.25 mg/l	3.53 mg/l
Station #9	Marina 3A030	4.07 mg/l	5.72 mg/l
Station #10	Marina 1M001	5.06 mg/l	3.73 mg/l
Station #11	West Finger of Launch Ramp	2.87 mg/l	2.66 mg/l
Station #12	Red Bouy #10, Mouth of Harbor	7.33 mg/l	7.58 mg/l
Station #13	Control, 100 yards Offshore	7.60 mg/l	8.05 mg/l

# Dissolved Oxygen Levels in the Harbor

APR 19 2012  
#7

6/11/2011

		<i>Near Surface DO</i>	<i>Near Bottom DO</i>
Station #7	Marina 1A002	1.81 mg/l	1.58 mg/l
Station #8	Marina 2B300	1.48 mg/l	1.50 mg/l
Station #9	Marina 3A030	2.05 mg/l	1.83 mg/l
Station #10	Marina 1M001	1.13 mg/l	0.74 mg/l
Station #11	West Finger of Launch Ramp	1.66 mg/l	1.54 mg/l
Station #12	Red Bouy #10, Mouth of Harbor	8.62 mg/l	8.74 mg/l
Station #13	Control, 100 yards Offshore	8.95 mg/l	7.72 mg/l

8/17/2011

		<i>Near Surface DO</i>	<i>Near Bottom DO</i>
Station #7	Marina 1A002	5.55 mg/l	6.00 mg/l
Station #8	Marina 2B300	5.98 mg/l	6.34 mg/l
Station #9	Marina 3A030	6.43 mg/l	6.71 mg/l
Station #10	Marina 1M001	6.04 mg/l	5.28 mg/l
Station #11	West Finger of Launch Ramp	5.75 mg/l	5.36 mg/l
Station #12	Red Bouy #10, Mouth of Harbor	7.24 mg/l	6.89 mg/l
Station #13	Control, 100 yards Offshore	8.68 mg/l	9.03 mg/l

10/26/2011

		<i>Near Surface DO</i>	<i>Near Bottom DO</i>
Station #7	Marina 1A002	3.40 mg/l	3.70 mg/l
Station #8	Marina 2B300	3.25 mg/l	4.34 mg/l
Station #9	Marina 3A030	3.37 mg/l	4.37 mg/l
Station #10	Marina 1M001	4.35 mg/l	3.52 mg/l
Station #11	West Finger of Launch Ramp	3.51 mg/l	3.57 mg/l
Station #12	Red Bouy #10, Mouth of Harbor	6.26 mg/l	6.95 mg/l
Station #13	Control, 100 yards Offshore	7.99 mg/l	7.70 mg/l

11/22/2011

		<i>Near Surface DO</i>	<i>Near Bottom DO</i>
Station #7	Marina 1A002	5.47 mg/l	4.29 mg/l
Station #8	Marina 2B300	5.25 mg/l	4.72 mg/l
Station #9	Marina 3A030	5.07 mg/l	6.23 mg/l
Station #10	Marina 1M001	5.19 mg/l	5.74 mg/l
Station #11	West Finger of Launch Ramp	4.75 mg/l	5.21 mg/l
Station #12	Red Bouy #10, Mouth of Harbor	5.54 mg/l	6.59 mg/l
Station #13	Control, 100 yards Offshore	7.03 mg/l	7.48 mg/l

12/1/2011

		<i>Near Surface DO</i>	<i>Near Bottom DO</i>
Station #7	Marina 1A002	5.21 mg/l	5.45 mg/l
Station #8	Marina 2B300	5.09 mg/l	4.90 mg/l
Station #9	Marina 3A030	5.33 mg/l	6.31 mg/l
Station #10	Marina 1M001	5.45 mg/l	6.60 mg/l
Station #11	West Finger of Launch Ramp	5.18 mg/l	5.24 mg/l
Station #12	Red Bouy #10, Mouth of Harbor	7.26 mg/l	7.35 mg/l
Station #13	Control, 100 yards Offshore	7.39 mg/l	7.36 mg/l



Matthew Rodriguez  
Secretary for  
Environmental Protection

California Regional Water Quality Control Board  
Central Coast Region

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Edmund G. Brown Jr.  
Governor

APR 19 2012  
#7

Public Notice of  
Plan for  
No Further Action

Santa Barbara Harbor  
Santa Barbara, CA  
March 14, 2012

The Central Coast Regional Water Quality Control Board is providing this notification to Harbor users and other interested persons to inform you of our plan to recommend no further action for the Santa Barbara Harbor cleanup case. The purpose of this fact sheet is to provide the public with information or answer questions regarding why we intend to close the site described below, and to solicit your comments.

**Introduction**

Since 2003, the Central Coast Regional Water Quality Control Board (Water Board) has been the lead regulatory agency responsible for overseeing cleanup of illegal marine battery disposal into the Santa Barbara Harbor (Harbor) and the investigation of Harbor bottom sediment. Based on the successful removal of six marine batteries by California Department of Fish and Game (DFG) staff in 2003 and information from Harbor investigations conducted in 2002, 2004, and 2006, Water Board and DFG staff concur with the City of Santa Barbara's Waterfront Department's (City's) request to close this cleanup case.

**No Further Action Justification**

The City leased space to a dry dock operation in the Harbor until 2010. Between 2002 and 2006, sediment samples were collected from the Harbor bottom below this dry dock, a much older former dry dock, two storm drain outlets, and in the vicinity of the City Pier and fuel docks. In addition, sediment, water, and fish and mussel tissue samples were collected from six stations within the Harbor in 2004 as part of a multi-harbor study to evaluate average conditions in six Central Coast harbors. Collectively, analysis of all samples indicates the following:

- No additional marine batteries have been discovered on the Harbor bottom since 2002. With the removal of six batteries in 2003, there are no additional issues associated with marine battery disposal in the Harbor.
- Metals and organotin compounds have been detected in Harbor sediment. These constituents are commonly associated with leaching and/or scrapings from anti-fouling paint used on vessel bottoms. Due to the anti-fouling nature of the paint, adverse health effects may occur in non-targeted organisms, such as those in/on the Harbor bottom.
- Investigation results indicate sediment in contact with the anti-fouling paint debris is localized below the dry dock and is limited in extent. It is also expected that some benthic Harbor organisms are in contact with this sediment below the dry dock.
- Toxicity testing indicates that average Harbor-wide sediment conditions do not have a toxic effect on benthic organisms throughout the Harbor. The absence of a Harbor-wide toxic effect supports the conclusion that sediment below the dry dock is localized and has not migrated.
- The elimination of the dry dock in 2010 has eliminated a concentrated ongoing source of bottom paint debris accumulation on the Harbor bottom.
- The Harbor Marine Works (HMW) boat yard just west of the Harbor was connected to the City storm sewer in 2006, thereby eliminating HMW's long-established practice of discharging runoff containing boat hull sanding and scraping debris from its property into the Harbor via storm drains near the City Pier.
- The banning of the use of tributyltin in anti-fouling paints in 1988, along with the current phasing out of the use of copper represent additional reductions in future water or sediment quality impairment.
- The City periodically conducts Harbor maintenance dredging, and has satisfactorily complied with Water Board requirements associated with its discharge of dredge and fill material to waters of the United States. The City has never dredged the area below the dry dock, nor does it expect to dredge this area in the future. However, Water Board staff will require the City to continue to comply with all applicable regulations in the unlikely event that dredging below the former dry dock becomes necessary.

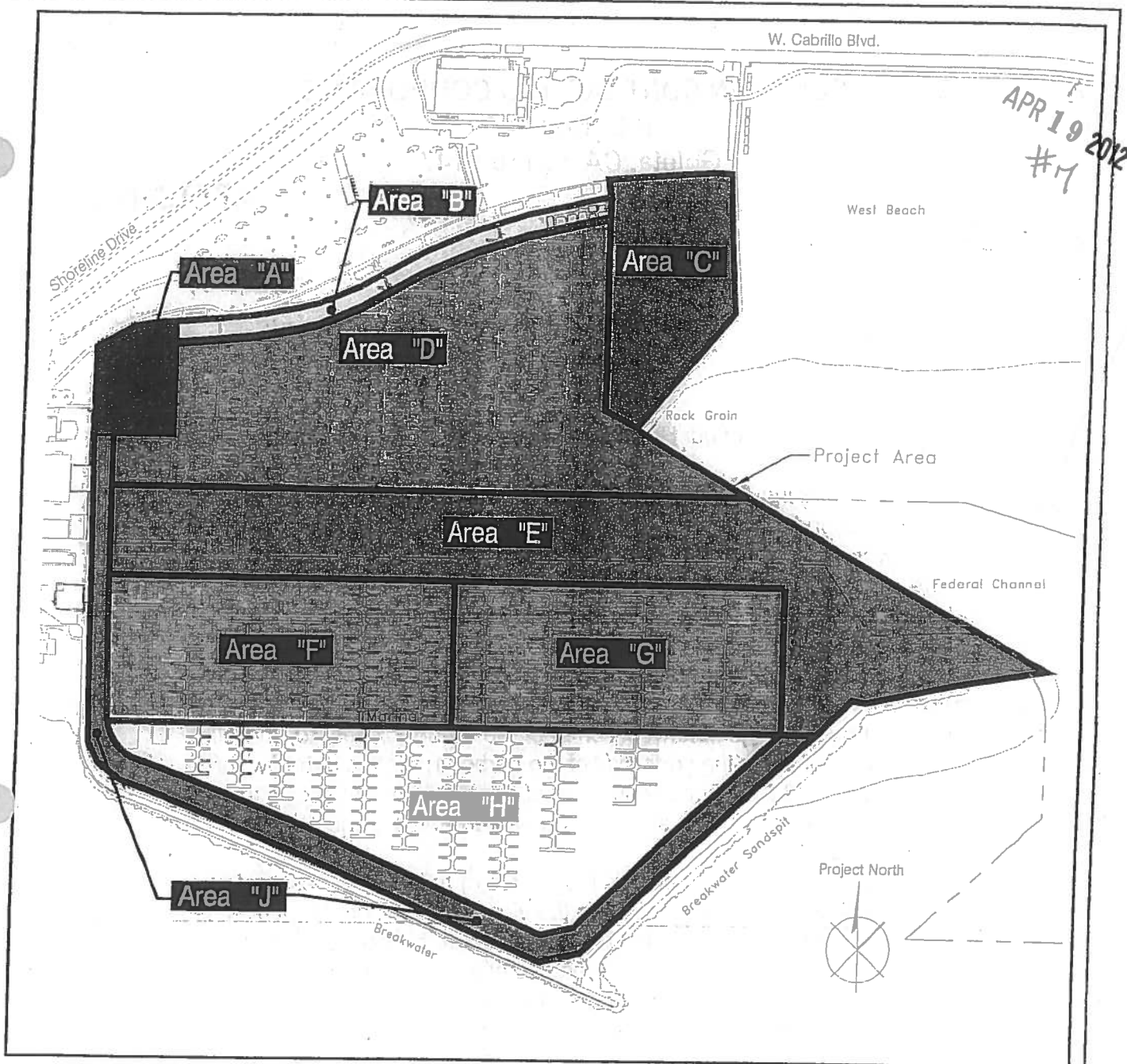
**Public Comment Period**

Additional documents related to this cleanup case are available for public review at [http://geotracker.waterboards.ca.gov/profile\\_report.asp?global\\_id=SLO608336723](http://geotracker.waterboards.ca.gov/profile_report.asp?global_id=SLO608336723). Water Board staff invites interested persons to comment on the proposed closure of this cleanup case on or before April 14 2012. You may send all public comments to:

Diane Kukol  
Central Coast Regional Water Quality Control Board  
895 Aerovista Place, Suite 101  
San Luis Obispo, CA 93401  
Office: (805) 542-4637 or Fax: (805) 788-3546  
[dkukol@waterboards.ca.gov](mailto:dkukol@waterboards.ca.gov)

California Environmental Protection Agency





Cleanup Date: \_\_\_\_\_ Operator: \_\_\_\_\_

Cleanup Hours: \_\_\_\_\_

Debris Profile:

<input checked="" type="checkbox"/>	Area "A"
<input type="checkbox"/>	Area "B"
<input checked="" type="checkbox"/>	Area "C"
<input checked="" type="checkbox"/>	Area "D"
<input checked="" type="checkbox"/>	Area "E"
<input checked="" type="checkbox"/>	Area "F"
<input checked="" type="checkbox"/>	Area "G"
<input type="checkbox"/>	Area "H"
<input checked="" type="checkbox"/>	Area "J"

General Comments:

PROJECT AREA: 100% OF THE PROJECT AREA IS TO BE CLEANED UP AND RESTORED TO ORIGINAL CONDITION.

**CUSHMAN CONTRACTING CORPORATION**  
**P.O. Box 147**  
**Goleta, CA 93116-0147**

APR 19 2012  
#17

Subject: Harbor Debris Cleanup: July, 2011-March, 2012  
**Date: March 26, 2012**

During the course of our Harbor Debris cleanup efforts much regularity has been noticed.

Most west-facing docks and fingers are the primary collecting spots for debris. The reason this side collects more debris is most likely due to the direction in which debris are moving. The wind, along with the out-to-sea current at low tide is in an easterly direction. This results in a "comb like" effect, trapping the debris in these areas. Area "G" on the west fingers has been the area where we pick up the most trash on a bi-weekly basis; every time we show up this area is always dirty. Area "H" usually only has a small amount of trash; but after a storm there is always a good amount of trash. We use a skiff on a regular basis in this area. Because there are more areas for trash and debris to collect in at these areas "G" and "H", this is where our main effort has been concentrated.

A second collection area for debris is in the areas of the Harbor designated as "A" and "B" on the maintenance map. Area "A" is in the vicinity of the storm drain outfall in the northwest corner of the harbor closest to Shoreline Drive. Area "B" is all along the north side of the harbor in the rocks below the seawall in Marinas 2, 3 & 4. For cleanup, a skiff or some small vessel is the only way to reach these areas. These areas are monitored at least once a month and always after holidays. The majority of trash when picked up in this area is after a storm; otherwise it is usually one of the cleanest areas in the harbor.

A third collection area for debris is in the area of the Harbor designated as "C" on the maintenance map. Area "C" is in the vicinity of the boat launch. The main collection point in this area is along the east side of the harbor along the rock jetty. This is most likely due to the same easterly moving debris direction described above. This area sometimes requires cleanup by skiff or some small vessel; although we mainly get the rock area by foot. The trash usually stays right by the drain located in the rocks.

The debris collected that can be categorized as regular or reoccurring consist of; newspapers, cigarettes, plastic bottles and buckets, bags, styrofoam, candy and food wrappers, aluminum cans, tennis balls, rope, kelp, big limbs, and bamboo.

We have found that walking along the marinas and docks is more time efficient, covers a larger area and produces a much higher volume of debris than working from a skiff. A skiff is used in areas inaccessible by foot, for removal of larger debris and where it is more efficient.

There was one rainfall during this time period that created excessive runoff in many of our local creeks, which in turn carried out to sea a considerable amount of debris. Following this storm we were called upon to do an additional cleanup in the Harbor.

ATTACHMENT #8