

City of Newport Beach

Water Quality/Coastal Tidelands Committee Minutes

Date: March 13, 2014

Time: 3:00 p.m.

Location: Newport Coast Conference Room, 2nd Floor, Bay E

1. Welcome/Self Introductions

Committee Members present:

Chairwoman/Council Member Nancy Gardner

Dennis Baker

Carl Cassidy

George Robertson

Tom Houston

Guests present:

Jim Mosher, resident

Jack Skinner, SPON

Robyn Vettraino, Newport Banning Land Trust

Staff present:

John Kappeler, Water Quality Manager

Shari Rooks, Public Works Specialist

Bob Stein, Assistant City Engineer

The agenda for the Water Quality/Coastal Tidelands Committee was posted at 12:15 pm on March 5, 2014, in the binder located in the entrance of the Council Chambers at 100 Civic Center Drive.

2. Approval of Previous Meeting's Minutes

The February 13, 2014 meeting minutes will be approved at the April meeting.

3. Old Business

a. Bay and Ocean Bacteriological Test Results

John Kappeler reviewed recent water quality test results within Newport Bay and along the ocean shoreline.

- The high hits of all three indicators at Newport Boulevard Bridge on the 24th were likely the result of some sort of release, but after investigating possible upstream sources and contacting Costa Mesa we were unable to determine the cause.

4. New Business

a. **Committee Members** listed recommended medians for turf removal and retrofitting – focusing on those using potable water.

- Jamboree Road medians starting at upper portion
- San Joaquin Hills Road medians
- Irvine Avenue medians
- Dover Drive corner median
- Pacific Coast Highway and MacArthur Boulevard corners
- MacArthur Boulevard and Ford Road corners
- Corner of Irvine Avenue and Cliff Drive (Ensign School)

ACTION: **John Kappeler** will prepare a resolution to take to City Council recommending the City apply for Grant Funding for turf removal and retrofitting.

ACTION: **Nancy Gardner** will ask City Manager or Mayor to contact President of School Board regarding partnering with City for Grant Funds.

b. Bob Stein gave the Committee an update and presentation on the **Big Canyon Selenium Mitigation Program**. (See attached PowerPoint).

- The highest concentration of selenium is found in the Port Streets and a water balance study was done to see if there was any relationship to the selenium in the groundwater and the small amount of natural leakage of water from the reservoir. It was determined that 1/3 of the ground water was from the reservoir, 1/3 was from rainfall, approximately 20% was from overwatering and the remaining percentage was from leaking water and sewer lines.
- Mitigation measures to reduce the rate of groundwater flowing into the Nature View Park could include a run off reduction program to get people to use the Smart irrigation controllers and we could check for leakage in our water and sewer lines, but overall the rate of flow into the park is relatively low at 39 gallons per minute.
- The Nature View Park diversion will be in place in April and it will capture the flow from the boggy area near the 11th green of the golf course just off Mac Arthur Boulevard and divert it into the sewer and prevent the conversion of selenate to selenite. Results will be monitored and if we don't see good results in the reduction of selenium, Plan B would be to install mixing devices or Plan C would be to line the golf course lakes.
- The City was just awarded a \$2.3M Measure M Grant for a bioreactor treatment for the wetlands that uses a 2-stage process to pull selenium from the Big Canyon Creek as well as runoff from Jamboree. **Dennis Baker** suggested some of the grant funds could be used to erect interpretive signage explaining the project.
- Big Canyon Lower Reach Freshwater Pond is currently the County's No. 1 Vector Control problem. There have been a series of meetings held with all the resource agencies to find out how to move forward and deal with the problem on the Fish and Wildlife Agency's property. All agencies (except Coastal Commission thus far) have agreed that Vector Control has the authority to go in and do what they need to do to abate the nuisance.
- The current plan calls for the installation of a Vector Control Siphon upstream of the gravel and concrete weir near Back Bay Drive that will draw down the level of the pond every week or two and refill it so the surface of the water and the banks will be disrupted and the mosquitos will have a hard time breeding. If the Coastal Commission determines the project requires a permit it may not be approved until mid-April.
- The selenium TMDL is expected to be released by the end of the year for the entire watershed.

ACTION: **Nancy Gardner** will look for an article she read recently on TMDL levels being re-examined on a national level.

ACTION: **John Kappeler** will do an update on Grant Funding at the April meeting.

c. **John Kappeler** gave the committee a presentation of Goals and Priorities for consideration for the current year and the following items were discussed and are not listed in any particular order:

1. Street Sweeping and Catch Basin Cleaning – Homeowner Association’s Workshop
2. Identifying Locations for Future Trash Booms and Skimmers in the Newport Bay Watershed
3. Storm Drain to Sewer Diversions – The Arches – Opted Not to Do a Diversion and Follow Up on the Donna Ferguson Study
4. Marine Protected Areas (MPAs) and Areas of Special Biological Significance (ASBSs) – Dry Weather Flows and Related Issues – Monitor this issue for now
5. Newport Bay Total Maximum Daily Loads (TMDLs) – Grant for diversion – Includes Natural Source Exclusion
6. Refuse and Household Hazardous Waste Pickup – Currently in place
7. Grey Water Standards – Presentation and Possible Study Session
8. Biofilm Research Continues – San Diego County has duplicated Newport’s Study
9. Semeniuk Slough - Presentation and Update on Ownership and other Issues
10. Bight '13 – Regional Board Project Sampling
11. Banning Ranch – Carried Over from previous year – pending Coastal Commission
12. Reclaimed Water – Tiered Water Rates – Presentation(s) by George Murdoch
13. Habitat Restoration – Big Canyon

ACTION: Committee Members asked to prioritize goals and priorities based on the items discussed.

5. Public Comments on Non-Agenda Items

- **Jack Skinner** shared a discussion he had with Wanda Cross from the recent Regional Board at a Southern California Coastal Water Research Program (SCCWRP) meeting studying of all the monitoring done in Newport Bay to determine which monitoring tests should continue and which could be cut back. He will email **Nancy Gardner** recapping the discussion that ensued regarding TMDLs in Newport Bay.
- **Dennis Baker** asked if the Committee could add an item to a future agenda for an update on the other watershed’s projects.
- **Carl Cassidy** encouraged Committee members to review the new EIR that comes out next week and during the 45-day review process.

6. Topics for Future Agendas

- (a) Bacteriological Dry-Weather Runoff Gutter Study (Phase III)
- (b) Prop 84 ASBS Grant Program
- (c) Big Canyon Project
- (d) Rhine Channel Project Wrap Up
- (e) Senate Bill – SB 1447
- (f) Marine Protected Areas (MPAs)
- (g) Eelgrass Program
- (h) Trash Project for Storm Drains
- (i) Harbor Commission Copper Report
- (j) Orange County Coastal Regional Sediment Management Plan
- (k) Fracking Free City
- (l) Adopting a Natural Source Exclusion

7. Set Next Meeting Date

The next meeting date was set for April 10, 2014, at 3 PM in the **Newport Coast Conference Room, Bay E, 2nd Floor.**

8. Adjournment

The meeting was adjourned at 4:28 pm.

Chairwoman / Nancy Gardner


Health Care Agency / Environmental Health Newport Bay Bacteriological Monitoring Program
Total Coliform (TC), Fecal Coliform, Enterococcus (ENT) Colony Forming Units / 100 ml Sample

STATION	Location Description		11/4/13	11/12/13	11/18/13	11/25/13	12/2/13	12/9/13	12/16/13	12/23/13	12/30/13	1/6/14	1/13/14	1/21/14	1/27/14	2/3/14	2/10/14	2/18/14	2/24/14	3/3/14	3/10/14	
NEWPORT BAY (Lower Bay)						RAIN	RAIN	RAIN								RAIN				RAIN		
BNB09	43rd Street Beach	TC	10	20	<10	140	20	200	20	40	50	20	370	20	10	140	20	50	10	>1340	190	
		FC	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	10	<10	<10	<10	<10	30	<10
		ENT	10	4	10	<2	10	20	4	4	4	2	6	2	<2	6	26	10	2	8	20	20
BNB10	38th Street Beach	TC	50	10	20	60	60	140	20	<10	>390	<10	50	10	110	>8600	10	<10	>820	>720	80	
		FC	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	330	<10	<10	<10	<10	<10	<10
		ENT	20	2	20	2	48	20	10	2	246	2	8	2	4	180	2	4	86	4	28	
BNB11	33rd Street Channel	TC	20	>5600	<10	60	>130	>370	70	330	130	<10	2000	<10	170	>840	>1420	40	80	270	>210	
		FC	<10	<10	<10	10	10	<10	10	<10	<10	50	<10	<10	<10	70	50	<10	<10	10	<10	20
		ENT	<2	600	<2	<2	68	24	44	2	46	4	10	2	4	10	56	8	4	4	84	
BNB32	Lido Yacht Club Beach	TC	<10	10	10	70	80	>1500	<10	<10	40	<10	<10	<10	30	<10	240	<10	20	6000	30	
		FC	<10	<10	<10	<10	<10	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	50	<10	
		ENT	2	<2	<2	<2	<2	6	4	<2	<2	<2	4	2	<2	<2	<2	<2	4	28	<2	
BNB07	Via Genoa Beach	TC	20	>380	<10	60	60	>630	10	30	220	20	<10	<10	10	300	10	10	10	8600	<10	
		FC	30	10	<10	<10	10	10	<10	<10	<10	50	<10	<10	<10	<10	<10	<10	<10	10	<10	
		ENT	4	8	2	<2	34	86	<2	4	>56	10	<2	2	20	20	<2	<2	4	96	2	
BNB35	Newport Blvd. Bridge	TC	320	>940	20	6000	>330	>940	>720	10	>8000	2800	>560	>1530	>40000	>1000	>6800	>1300	>17000	880	>8000	
		FC	10	<10	<10	10	30	<10	50	<10	160	<10	20	50	9200	130	180	130	1170	70	450	
		ENT	2	92	<2	8	78	38	140	10	2000	2	228	4	8400	24	250	32	2000	10	226	
BNB12	Rhine Channel	TC	560	10	<10	120	<10	>1480	10	400	40	70	<10	10	>530	<10	180	70	20	>700	20	
		FC	<10	<10	<10	<10	<10	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	
		ENT	4	8	<2	<2	<2	<2	<2	<2	<2	<2	<2	4	26	<2	<2	<2	4	2	<2	
BNB14	19th Street Beach	TC	100	>130	<10	120	30	>1910	<10	10	<10	<10	<10	<10	<10	<10	<10	260	<10	4800	<10	
		FC	30	<10	<10	<10	<10	120	<10	<10	<10	<10	<10	<10	<10	<10	<10	80	<10	150	<10	
		ENT	52	20	<2	10	10	86	<2	<2	2	<2	<2	<2	<2	<10	<2	4	<2	20	<2	
BNB15	15th Street Beach	TC	30	60	<10	150	95	>140	20	10	>100	30	120	<10	>940	40	>40	<10	30	4600	>440	
		FC	<10	<10	<10	<10	<10	<10	<10	10	>80	<10	<10	<10	<10	>10	<10	<10	<10	140	<10	
		ENT	<2	<2	<2	2	4	10	8	<2	50	<2	<2	<2	4	10	2	6	<2	36	26	
BNB17	10th Street Beach	TC	40	>380	<10	190	60	>8000	80	10	10	10	95	10	30	80	<10	20	10	6000	20	
		FC	<10	<10	<10	<10	<10	50	20	<10	<10	<10	10	<10	10	<10	<10	<10	<10	220	<10	
		ENT	2	70	<2	<2	2	24	2	2	<2	<2	<2	<2	46	2	2	2	<2	32	<2	
BNB18	Alvarado/ Bay Isle Beach	TC	50	<10	<10	80	50	>1210	10	30	2200	40	10	20	<10	10	40	10	20	13000	20	
		FC	<10	<10	<10	<10	<10	<10	<10	<10	2400	20	<10	<10	<10	<10	<10	<10	10	<10	290	<10
		ENT	4	4	2	<2	4	<2	2	2	2000	4	6	2	2	4	22	8	<2	100	4	
BNB22	N Street Beach	TC	<10	<10	10	30	30	>220	10	10	>150	10	20	<10	<10	10	30	20	<10	920	20	
		FC	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	10	10	20	
		ENT	<2	<2	2	<2	<2	<2	6	<2	130	<2	<2	<2	<2	2	<2	<2	<2	2	28	
BNB31	Garnet Avenue Beach	TC	70	10	>20	120	170	>1480	10	20	60	<10	10	20	30	>440	40	30	70	8000	40	
		FC	<10	<10	<10	<10	40	10	<10	<10	<10	<10	<10	<10	200	<10	10	10	180	20		
		ENT	20	2	<2	4	100	10	50	<2	279	8	2	2	24	10	2	4	26	54	2	
BNB03	Ruby Avenue Beach	TC	80	30	50	50	4800	>480	<10	100	330	<10	10	20	130	>310	<10	10	<10	6600	<10	
		FC	20	<10	<10	<10	740	30	10	20	50	<10	<10	<10	40	<10	<10	<10	<10	95	<10	
		ENT	62	2	10	2	>52	2	<2	<2	6	2	2	10	80	20	26	<2	<2	32	6	
BNB20	Sapphire Avenue Beach	TC	10	>300	10	180	40	380	10	50	40	130	10	30	130	10	<10	40	10	700	>50	
		FC	<10	30	<10	20	<10	20	20	<10	<10	80	10	<10	30	<10	<10	<10	<10	30	<10	
		ENT	24	32	<2	4	10	10	6	2	10	2	2	2	50	<2	2	4	8	10	10	
BNB34	Grand Canal	TC	20	40	60	210	40	>80	50	100	80	360	10	20	50	120	290	<10	>20	4000	>310	
		FC	<10	10	<10	100	<10	60	10	70	<10	<10	<10	<10	<10	<10	160	<10	<10	100	80	
		ENT	2	8	2	<2	10	180	4	<2	36	20	4	<2	6	2	24	6	36	22	22	
BNB21	Abalone Avenue Beach	TC	20	270	>140	110	10	>770	20	20	60	<10	10	40	20	170	10	20	<10	670	50	
		FC	<10	80	10	10	20	<10	10	<10	<10	<10	<10	20	30	20	<10	<10	10	110	<10	
		ENT	10	4	4	20	34	4	4	2	6	2	<2	4	20	4	2	6	6	20	2	
BNB01	Park Avenue Beach	TC	20	30	<10	60	70	4800	10	20	50	<10	50	10	40	110	30	<10	20	6000	70	
		FC	<10	10	10	10	<10	210	<10	<10	<10	<10	<10	<10	10	<10	<10	10	<10	95	10	
		ENT	2	22	6	<2	2	10	<2	<2	<2	2	<2	2	<2	8	2	<2	<2	34	10	
BNB02	Onyx Avenue Beach	TC	300	10	60	80	180	>610	20	80	150	30	30	30	110	>240	<10	20	<10	5000	20	
		FC	10	<10	10	<10	10	10	<10	<10	<10	10	<10	<10	<10	10	<10	20	<10	100	10	
		ENT	100	10	60	2	50	40	2	2	150	4	2	2	52	10	520	10	<2	34	10	
BNB29	Promontory Point Channel	TC	50	<10	<10	10	40	<10	<10	<10	<10	<10	<10	5800	<10	<10	60	<10	<10	800	10	
		FC	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	20	<10	
		ENT	2	2	<2	4	<2	<2	<2	<2	<2	<2	<2	4	<2	<2	2	2	<2	8	<2	
BNB33	Bayside Drive Beach	TC	>40	>95	95	40	20	40	40	20	160	40	50	40	60	30	110	30	>80	730	>140	
		FC	<10	<10	<10	<10	10	<10	20	<10	<10	150	<10	<10	<10							

OCSD Bacteriological Ocean Monitoring Program
Total Coliform (TC), Fecal Coliform (FC),
Enterococcus (ENT) Colony Forming Units/100 ml Sample

DATE	10/29	10/30	11/5	11/6	11/21	11/22	11/23	11/24	12/10	12/11	12/17	12/18	12/26	12/27	12/30	12/31	1/7	1/8	1/14	1/15	1/21	1/22	1/28	1/29	2/4	2/5	2/10	2/13	2/18	2/19	2/25	2/26	3/4	3/5		
Bolsa Chica Beach	TC	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	
Bolsa Chica Reserve	FC	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	
Bluffs	ENT	2	<2	2	<2	2	<2	2	<2	2	<2	2	<2	2	<2	2	<2	2	<2	2	<2	2	<2	2	<2	2	<2	2	<2	2	<2	2	<2	2	<2	
17th Street	TC	<2	<2	38	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	
Jacks Snack Bar	ENT	2	8	32	<2	8	<2	8	<2	8	<2	8	<2	8	<2	8	<2	8	<2	8	<2	8	<2	8	<2	8	<2	8	<2	8	<2	8	<2	8	<2	
Beach Blvd.	TC	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	
SCE Plant	FC	<2	22	14	<2	14	<2	14	<2	14	<2	14	<2	14	<2	14	<2	14	<2	14	<2	14	<2	14	<2	14	<2	14	<2	14	<2	14	<2	14	<2	
Magnolia Street	ENT	2	10	4	8	22	2	8	12	20	4	2	14	12	2	14	12	2	14	12	2	14	12	2	14	12	2	14	12	2	14	12	2	14	12	
Brookhurst	TC	17	440	17	33	280	<17	67	17	67	100	<17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17	
Santa Ana	FC	17	17	<17	50	17	<17	50	17	<17	50	17	<17	50	17	<17	50	17	<17	50	17	<17	50	17	<17	50	17	<17	50	17	<17	50	17	<17	50	
River Mouth	ENT	2	20	6	<2	6	<2	6	<2	6	<2	6	<2	6	<2	6	<2	6	<2	6	<2	6	<2	6	<2	6	<2	6	<2	6	<2	6	<2	6	<2	
Orange Street	TC	33	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	
52nd/53rd Street	ENT	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	
38th Street	FC	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17
15th/16th Street	ENT	2	4	12	6	<2	6	<2	6	<2	6	<2	6	<2	6	<2	6	<2	6	<2	6	<2	6	<2	6	<2	6	<2	6	<2	6	<2	6	<2	6	<2
Balboa Pier	TC	150	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	
The Wedge	FC	<17	<17	<17	<17	<17	<17	<17	<17	<17	<17	<17	<17	<17	<17	<17	<17	<17	<17	<17	<17	<17	<17	<17	<17	<17	<17	<17	<17	<17	<17	<17	<17	<17	<17	
Corona Del Mar Beach	ENT	12	<2	2	<2	2	<2	2	<2	2	<2	2	<2	2	<2	2	<2	2	<2	2	<2	2	<2	2	<2	2	<2	2	<2	2	<2	2	<2	2	<2	
Crystal Cove	TC	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	17	<17	
ENT	ENT	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	

NEW DATA
 SINGLE SAMPLE STANDARD VIOLATION
 NO SAMPLE / NO DATA
 CONFLUENT GROWTH WITHOUT SHEEN
 CONFLUENT GROWTH WITH SHEEN
 CONFLUENT GROWTH WITH BLUE (FECAL INDICATOR)
 N/S
 CWOS
 CWS
 CWB



BIG CANYON SELENIUM MITIGATION PROGRAM

Environmental Section
March 13, 2014

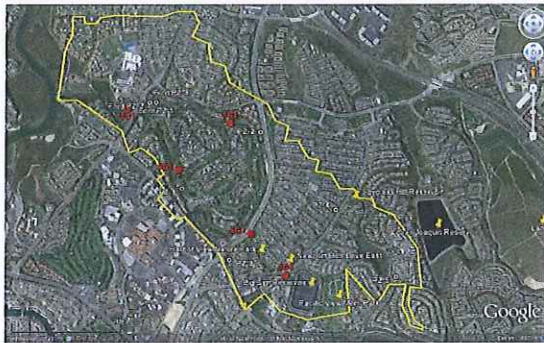
City of Newport Beach

What's the Problem?

1. Groundwater: 50-149 ppb
2. Surface Water: 20-50 ppb
3. Fish Tissue: 40-60 ppm
4. Bird Eggs: 20-40 ppm



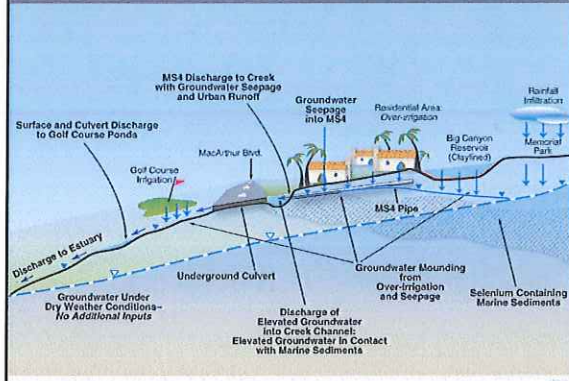
Big Canyon Watershed



Upper Watershed: Selenium in Groundwater

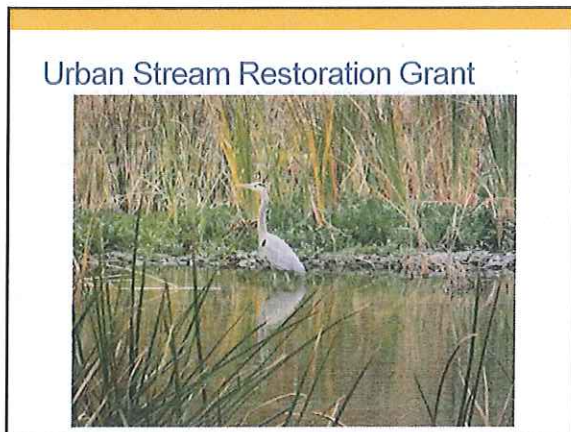
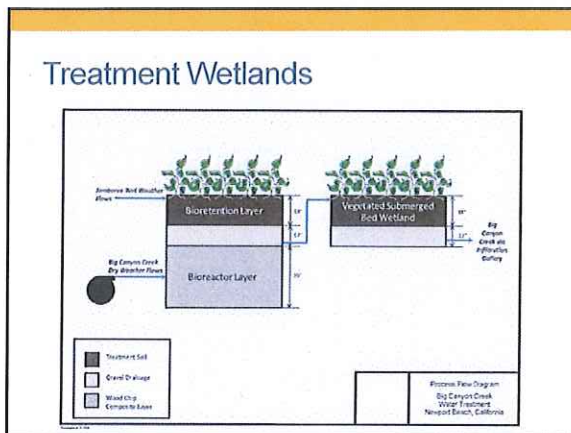
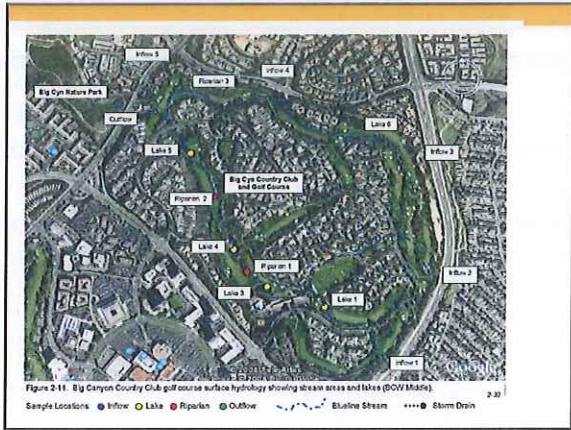


Selenium Mobilization

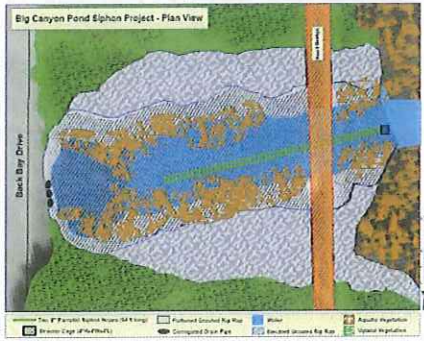


Selenate Conversion to Selenite

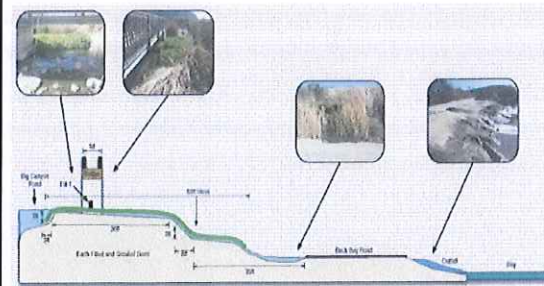




Vector Control Siphon - Plan View



Vector Control Siphon



Program Status

- Water Balance Completed
- Small Diversion will be installed next month
- Lower Canyon Trail in construction
- Measure M Grant Award – Bioreactor
- Prop 84 Urban Streams Restoration Grant Application (April)
- Vector Control Actions (April)
- Resource Management and Maintenance Plan (Fall)
- Selenium TMDL (December)



City of Newport Beach
Water Quality / Coastal Tidelands
Committee

March 13, 2014

2014 Goal Setting

- 1. Street Sweeping and Catch Basin Cleaning**
- 2. Trash Booms in the Newport Bay Watershed**
- 3. Storm Drain to Sewer Diversions – i.e. the “Arches”**
- 4. Marine Protected Areas (MPAs) and Areas of Special Biological Significance (ASBSs) – dry weather flows and related issues**
- 5. Newport Bay Total Maximum Daily Loads (TMDLs)**
- 6. Refuse and Household Hazardous Waste Pickup**
- 7. Grey Water Standards**

8. Biofilm Research

9. Semeniuk Slough

10. Bight '13

11. Banning Ranch

12. Reclaimed Water

13. Habitat Restoration

Note: Projects are not listed in any specific order.