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 Harbor 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 Harbor 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 (FC), Enterococ (ENT) Colony Forming Units / 100 ml Sample

TATION	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
EWPORT BAY (Upper Bay)						RAIN	RAIN	RAIN								RAIN				RAIN	
BNB24	Newport Dunes - Middle	TC	110	100	95	670	>340	40000	10	>170	30	20	95	30	>680	>330	100	30	720	4800	>4(
		FC	<10	<10	40	20	<10	960	10	20	<10	<10	40	30	30	240	<10	<10	150	180	2(
		ENT	<2	6	4	28	4	244	2	56	<2	10	8	4	24	60	8	10	80	130	2(
BNB24	Newport Dunes - West	TC	110	30	30	900	>320	>32200	30	3800	20	80	130	60	180	>390	20	30	580	9800	>15(
		FC	20	10	30	50	10	1170	10	2800	10	<10	40	10	60	70	10	<10	270	150	4(
		ENT	2	4	10	38	2	327	10	36	8	8	20	4	28	246	58	8	84	130	2(
BNB24	Newport Dunes - East	TC	70	>150	80	1150	250	>38000	2400	40	<10	80	40	<10	50	130	110	20	>80	>1210	>26(
		FC	<10	30	10	760	80	950	1480	<10	10	10	20	<10	10	<10	<10	10	30	70	17(
		ENT	10	120	10	20	22	140	26	20	20	20	20	20	6	98	10	4	24	160	3(
BNB24	Newport Dunes - North	TC	10	20	10	450	>320	40000	40	>140	50	70	50	30	60	30	60	40	>130	3400	>27(
		FC	<10	<10	<10	40	20	1100	10	10	50	10	50	<10	10	10	20	70	<10	200	16(
		ENT	2	2	4	4	6	295	8	32	4	10	10	6	22	<2	8	24	10	30	3
BNB25	Vaughn's Launch	TC	>30	>10	>20	NS	300	>12000	30	NS	<10	NS	10	NS	NS	NS	40	NS	NS	NS	N
		FC	<10	<10	<10	NS	40	460	20	NS	30	NS	30	NS	NS	NS	10	NS	NS	NS	N
		ENT	20	28	6	NS	80	>96	10	NS	10	NS	60	NS	NS	NS	38	NS	NS	NS	N
BNB26	Ski Zone	TC	>100	NS	110	NS	>170	NS	>130	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	N
		FC	10	NS	<10	NS	<10	NS	30	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	N
		ENT	42	NS	24	NS	44	NS	150	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	N
BNB28	North Star Beach	TC	60	20	10	1070	>250	>40000	10	>80	110	20	30	<10	70	20	400	<10	20	6000	>42(
		FC	20	<10	<10	80	40	4800	<10	<10	20	<10	10	10	20	<10	260	<10	<10	70	4(
		ENT	8	8	6	8	8	1000	4	10	2	4	6	8	30	6	66	4	4	5000	9(
BNB30	De Anza	TC	>1280	<10	10	510	80	>22800	<10	60	20	10	10	10	30	80	<10	10	20	9600	6(
		FC	260	<10	<10	10	20	380	<10	<10	<10	10	<10	<10	<10	<10	<10	<10	10	160	<1(
		ENT	271	2	<2	4	<2	180	<2	4	<2	4	2	4	8	20	<2	<2	8	120	1(
BNB05	Bayshore Beach	TC	80	20	10	50	70	>18000	20	60	<10	<10	30	<10	10	100	20	10	20	7800	2(
		FC	<10	<10	<10	10	<10	210	10	10	<10	<10	<10	<10	<10	<10	<10	<10	<10	140	<1(
		ENT	10	<2	<2	<2	4	110	<2	2	<2	<2	<2	4	2	10	<2	4	2	94	1(
EWPORT BAY TRIBUTARIES																					
CNBCD	San Diego Creek - Campus Dr.	TC	>3200	>390	>3800	>7000	>4300	48000	>3000	>4900	>3400	>2200	>310	>340	>540	>300	>3800	>2600	>1800	>115000	>1300(
		FC	50	50	30	410	240	6400	180	170	700	300	<10	<10	10	10	80	60	40	3000	>33(
		ENT	22	42	24	190	44	7400	74	216	54	68	20	8	6	38	26	72	88	4600	29
CNBSA	Santa Ana Delhi Channel	TC	>3000	>4800	>28000	>4600	>7400	70000	>4500	>7800	>3800	>930	30000	>4900	>3000	>200000	7700	>2100	>2000	>72000	>540(
		FC	200	440	180	160	170	1180	60	210	280	80	7800	260	500	11000	120	220	40	>900	7(
		ENT	800	255	100	170	311	1000	180	251	228	76	226	190	170	27800	279	275	48	1000	60(
CNBBC	Big Canyon Creek	TC	640	>490	>480	>620	>720	>740	>420	>530	>290	>300	>640	>390	>470	>940	>480	>800	>420	NS	>38(
		FC	30	30	10	70	190	>700	<10	220	80	20	20	20	60	250	50	100	20	NS	8(
		ENT	110	110	94	150	86	40	70	220	78	62	130	84	110	271	66	78	100	NS	18(
CNBND	Backbay Drive Pipe	TC	>1220	>1520	6200	4400	>1230	>660	>960	>370	>510	>570	>1600	>1970	>3200	>740	>900	>11000	>5800	>410	>78(
		FC	370	80	470	140	110	40	20	10	30	10	10	<10	40	180	30	50	120	40	1(
		ENT	277	190	317	253	>200	283	80	110	96	76	150	110	1000	400	140	200	2600	234	7
EWPORT SLOUGH																					
BNS01	Lancaster Street &	TC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	N
	61st Street	FC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	N
		ENT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	N
BNSO2	Lancaster Street &	TC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	N
	Canal Street	FC	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	N
		ENT	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	N

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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	30	<10
		ENT	10	4	10	<2	10	20	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
		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	50	<10	<10	<10	<10	70	50	<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	50	<10	<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	50	<10
		ENT	4	8	<2	<2	<2	<2	<2	<2	<2	<2	<2	4	26	<2	<2	<2	2	<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	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	<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	150	<10	<10	<10	<10	<10	40	20	<10	20	10
		ENT	68	8	6	6	10	8	10	6	10	2	10	2	36	4	10	32	10	<2	10
BNB23	Rocky Point Beach	TC	<10	30	10	60	>10	70	20	20	80	10	<10	10	10	280	70	20	<10	>790	30
		FC	<10	<10	<10	10	<10	<10	<10	<10	10	<10	<10	<10	<10	20	<10	<10	<10	40	20
		ENT	2	2	<2	<2	<2	22	<2	2	8	<2	4	<2	2	44	4	2	2	190	6

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	11/12	11/13	11/19	11/20	11/25	11/26	12/3	12/4	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
Location/Tide																														RAIN	RAIN							RAIN	RAIN
Bolsa Chica	TC	17		<17		17		17		<17		17		<17		<17		17		270		<17		<17		<17		33		130		17		50		<17		270	
Beach	FC	17		<17		17		<17		<17		<17		<17		<17		<17		170		<17		<17		<17		67		<17		<17		33		33		<17	
39N	ENT	2		2		<2		<2		<2		2		2		<2		<2		6		<2		<2		4		8		<2		14		<2		4		8	
Bolsa Chica	TC	220		<17		17		17		<17		17		<17		17		17		<17		<17		<17		<17		33		17		50		<17		33		150	
Reserve	FC	130		17		<17		<17		<17		<17		<17		<17		<17		17		<17		<17		<17		17		<17		33		<17		33		<17	
33N	ENT	72		4		4		6		2		8		4		<2		2		2		<2		4		4		34		2		8		2		8		18	
Bluffs	TC	<17		<17		120		<17		33		17		<17		<17		<17		<17		<17		<17		<17		250		50		<17		17		17		83	
27N	FC	<17		<17		83		<17		17		<17		<17		<17		<17		<17		<17		<17		17		200		33		<17		<17		<17		<17	
	ENT	<2		<2		38		2		<2		4		20		<2		12		28		4		2		8		160		6		100		6		118		24	
17th Street	TC	<17		<17		<17		17		33		33		<17		<17		<17		120		<17		<17		<17		83		<17		17		83		33		130	
21N	FC	<17		<17		17		17		67		67		<17		17		<17		50		<17		<17		<17		100		33		33		67		<17		33	
	ENT	2		8		32		<2		<2		8		6		52		36		52		6		24		10		58		4		176		38		18		22	
Jacks Snack	TC	17		67		33		<17		17		50		<17		17		<17		17		17		<17		<17		50		17		17		33		<17		50	
Bar	FC	17		<17		<17		<17		<17		67		<17		<17		<17		50		50		<17		<17		17		33		17		17		<17		17	
15N	ENT	<2		6		2		<2		<2		50		6		4		<2		12		26		12		4		32		4		124		6		6		16	
Beach Blvd.	TC	17		<17		67		33		<17		100		<17		17		<17		50		<17		<17		17		83		<17		<17		<17		17		200	
12N	FC	<17		<17		50		<17		<17		17		<17		<17		<17		17		17		<17		<17		33		17		17		17		33		17	
	ENT	<2		22		14		<2		<2		40		2		2		<2		18		<2		2		2		56		6		94		6		10		10	
SCE Plant	TC	<17	33	17	<17	67	67	17	17	17	<17	33	17	<17	180	120	17	<17	17	17	<17	17	<17	<17	<17	<17	<17	100	17	<17	<17	67	<17	<17	17	<17	180	17	33
9N	FC	<17	<17	<17	<17	<17	120	33	<17	<17	<17	33	17	<17	50	33	33	<17	17	33	<17	<17	<17	<17	<17	<17	<17	120	<17	<17	<17	83	<17	<17	83	<17	150	<17	<17
	ENT	2	10	4	4	8	22	2	<2	<2	2	8	12	20	44	22	4	<2	2	14	12	<2	8	8	4	6	6	42	22	4	4	54	4	4	6	20	82	12	18
Magnolia	TC	170	130	<17	<17	180	330	130	33	<17	17	120	200	<17	<17	120	170	<17	<17	17	<17	67	<17	<17	<17	<17	17	33	67	<17	<17	17	<17	370	480	67	250	17	67
Street	FC	17	67	<17	17	200	200	50	<17	<17	<17	120	120	<17	<17	100	170	<17	<17	17	<17	50	<17	<17	<17	17	17	50	17	17	17	83	<17	220	230	33	200	17	17
6N	ENT	10	24	12	4	26	28	40	4	<2	6	94	54	<2	4	52	34	<2	2	10	30	10	<2	6	4	2	2	32	18	6	22	26	4	2	334	64	132	4	12
Brookhurst	TC	17	440	17	<17	33	280	<17	67	17	17	67	100	<17	<17	<17	17	17	33	67	620	33	33	<17	170	<17	<17	17	320	1000	300	130	1300	33	120	83	480	300	130
3N	FC	33	170	<17	17	50	130	<17	50	50	33	17	17	<17	17	<17	<17	<17	50	50	420	50	33	<17	150	17	17	33	330	1100	250	100	1800	17	67	83	300	200	67
	ENT	12	174	6	4	18	96	2	16	2	2	18	36	<2	4	6	6	2	14	8	102	4	16	46	64	4	22	28	132	44	40	114	>400	102	48	72	192	60	8
Santa Ana	TC	17	17	<17	<17	50	17	<17	<17	17	100	17	67	100	17	<17	17	<17	<17	180	33	<17	17	<17	<17	<17	380	120	120	350	150	100	33	17	83	17	<17	120	170
River Mouth	FC	<17	17	17	<17	50	50	<17	33	<17	150	<17	17	33	<17	17	<17	50	<17	50	17	<17	17	<17	<17	67	320	150	50	<17	33	67	33	50	50	33	<17	<17	17
0	ENT	2	20	6	<2	8	6	<2	6	<2	6	16	28	6	16	2	<2	4	2	26	24	<2	22	14	14	2	16	124	36	18	16	52	60	6	20	10	4	34	36
Orange	TC		33		17		50		<17		<17		50		<17		<17		<17		17		67		17		67		120		1100		17		50		<17		400
Street	FC		50		17		17		33		<17		33		17		<17		17		17		50		17		<17		50		67		17		120		<17		17
3S	ENT		4		4		22		2		<2		32		<2		<2		4		8		22		6		12		90		26		10		48		4		34
52nd/53rd	TC		120		<17		<17		17		17		33		17		17		17		33		<17		33		17		50		200		17		33		<17		200
Street	FC		100		<17		<17		<17		17		17		17		<17		<17		33		<17		<17		<17		33		33		17		17		<17		<17
6S	ENT		16		2		4		<2		4		24		2		4		10		4		<2		22		8		12		24		20		2		6		84
38th Street	TC		17		<17		17		33		17		17		<17		17		<17		<17		<17		<17		<17		33		17		17		<17		33		50
9S	FC		17		<17		17		<17		<17		17		<17		<17		<17		<17		<17		17		<17		33		83		17		17		17		<17
	ENT		2		4		12		6		<2		2		<2		2		2		6		8		2		6		256		16		8		6		8		50
15th/16th	TC		67		<17		67		67		<17		180		<17		<17		<17		<17		<17		<17		<17		440		<17		<17		17		<17		17
Street	FC		100		<17		50		17		<17		200		<17		<17		<17		<17		<17		33		<17		500		<17		<17		<17		<17		17
15S	ENT		20		4		46		2		2		18		2		4		4		2		2		<2		<2		118		2		6		6		<2		4
Balboa Pier	TC		150		<17		17		<17		150		17		<17		33		50		<17		17		<17		<17		180		17		<17		<17		<17		33
21S	FC		67		<17		17		<17		83		33		17		33		<17		<17		50		<17		<17		220		<17		<17		<17		<17		17
	ENT		18		2		<2		46		<2		12		<2		6		<2		2		2		2		<2		108		8		2		<2		30		8
The Wedge	TC		<17		<17		<17		<17		<17		<17		<17		33		<17		<17		<17		<17		<17		<17		<17		<17		<17		<17		17
27S	FC		<17		<17		<17		<17		<17		100		<17		17		<17		<17		<17		<17		<17		<17		17		<17		<17		<17		33
	ENT		12		<2		2		4		<2		14		<2		24		<2		<2		2		2		2		<2		2		<2		6		4		4
Corona Del	TC		50		17		<17		<17		<17		17		<17		<17		33		<17		2300		17		<17		100		33		<17		<17		150		17
Mar Beach	FC		33		<17		<17		<17		<17		<17		<17		17		<17		17		17		17		17		33		<17		<17		<17		83		<17
29S	ENT		4		2		10		<2		<2		6		<2		4		2		<2		2		<2		<2		26		4		6		<2		54		<2
Crystal Cove	TC		17		<17		17		<17		<17		17		<17		1200		<17		<17		<17		<17		<17		17		<17		17		<17		<17		17
39S	FC		<17		17		<17		<17		<17		33		<17		<17		<17		<17		<17		<17		<17		17		<17		<17		<17		<17		17
	ENT		<2		<2		<2		<2		<2		24		<2		2		2		<2		2		<2		<2		6		<2		2		<2		2		2

SPRING TIDES
NEW DATA
SINGLE SAMPLE STANDARD VIOLATION

N/S	NO SAMPLE / NO DATA
CWOS	CONFULENT GROWTH WITHOUT SHEEN
CWS	CONFULENT GROWTH WITH SHEEN
CWB	CONFULENT GROWTH WITH BLUE (FECAL INDICATOR)

BIG CANYON SELENIUM MITIGATION PROGRAM

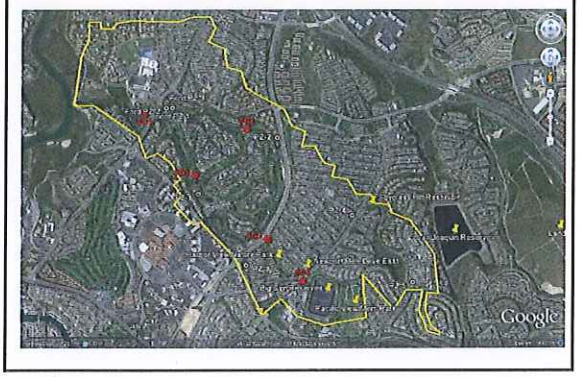
Environmental Section
March 13, 2014

City of Newport Beach

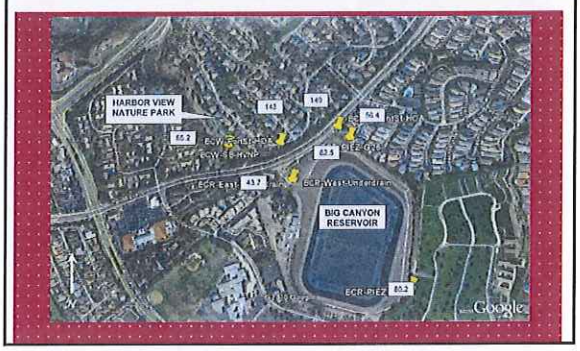
What's the Problem?

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

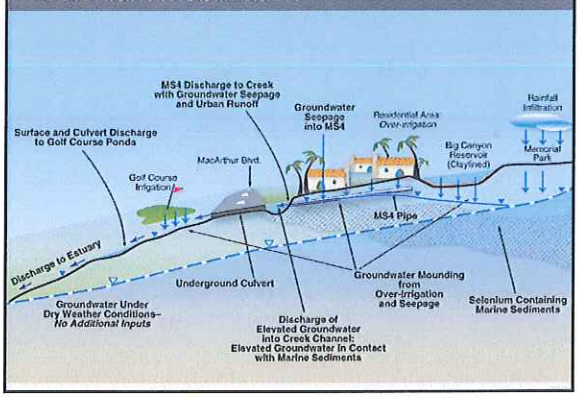
Big Canyon Watershed



Upper Watershed: Selenium in Groundwater



Selenium Mobilization



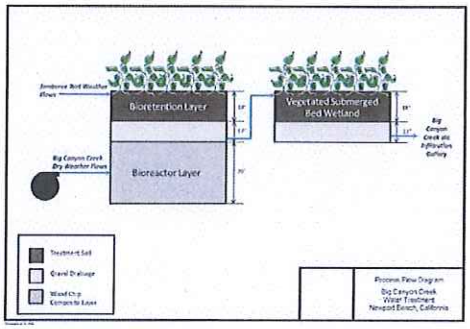
Selenate Conversion to Selenite

Figure 2-11 Big Canyon Country Club golf course surface hydrology showing stream areas and lakes (BCW Middle).

Sample Locations: Inflow, Lake, Riparian, Outflow, Blueline Stream, Storm Drain

Treatment Wetlands

Treatment Wetlands

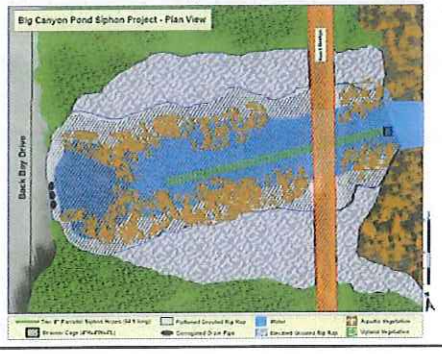


Treatment Wetlands

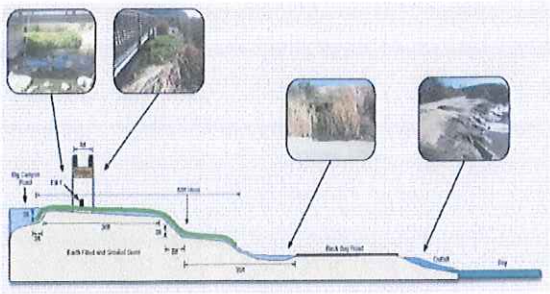
Urban Stream Restoration Grant

Big Canyon Lower Reach - Freshwater Pond

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.