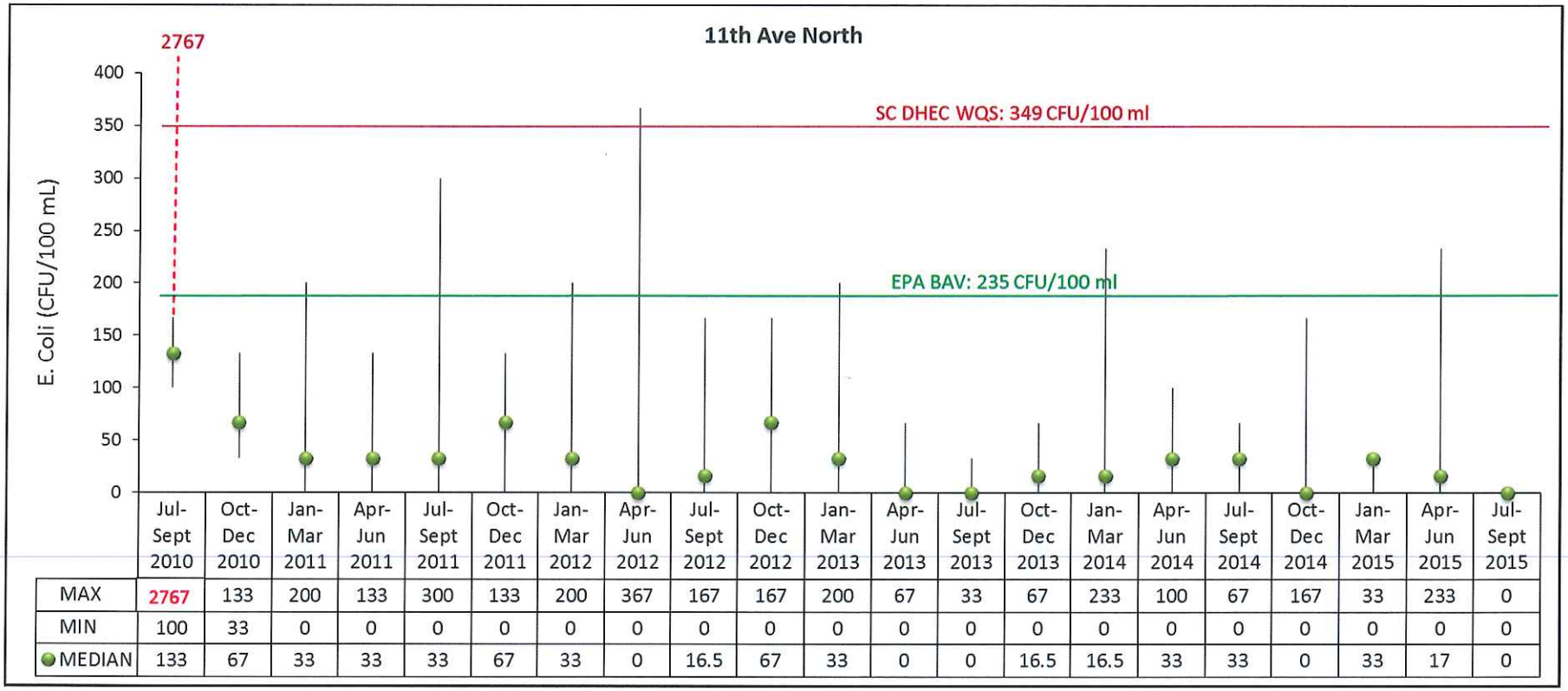
Surfside Volunteer Monitoring Summary Report

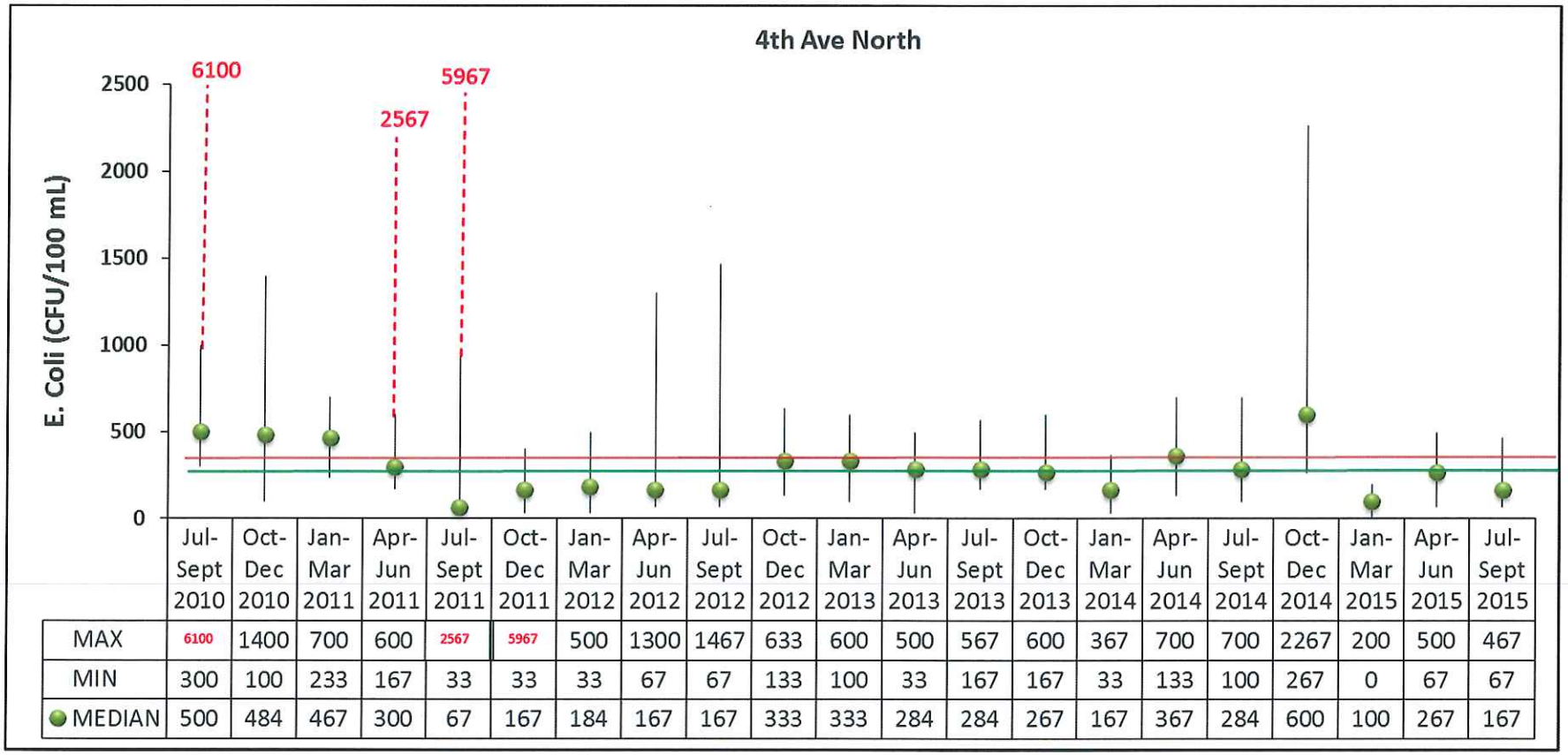
10/19/15

E. coli bacteria Lake Dogwood



	Jul-Sept 2010	Oct-Dec 2010	Jan-Mar 2011	Apr-Jun 2011	Jul-Sept 2011	Oct-Dec 2011	Jan-Mar 2012	Apr-Jun 2012	Jul-Sept 2012	Oct-Dec 2012	Jan-Mar 2013	Apr-Jun 2013	Jul-Sept 2013	Oct-Dec 2013	Jan-Mar 2014	Apr-Jun 2014	Jul-Sept 2014	Oct-Dec 2014	Jan-Mar 2015	Apr-Jun 2015	Jul-Sept 2015
MAX	2767	133	200	133	300	133	200	367	167	167	200	67	33	67	233	100	67	167	33	233	0
MIN	100	33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MEDIAN	133	67	33	33	33	67	33	0	16.5	67	33	0	0	16.5	16.5	33	33	0	33	17	0

E. coli bacteria Myrtle Lake



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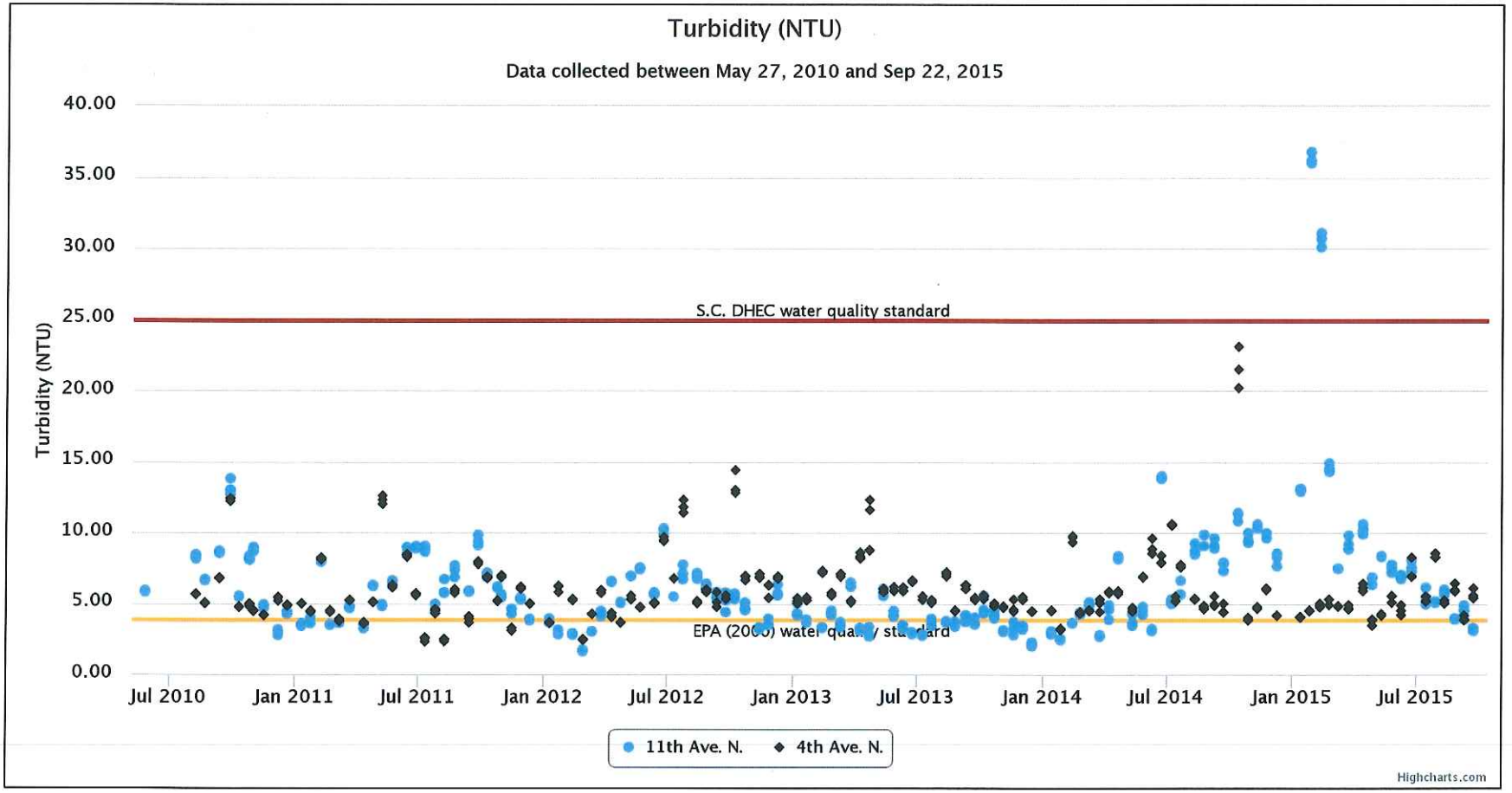
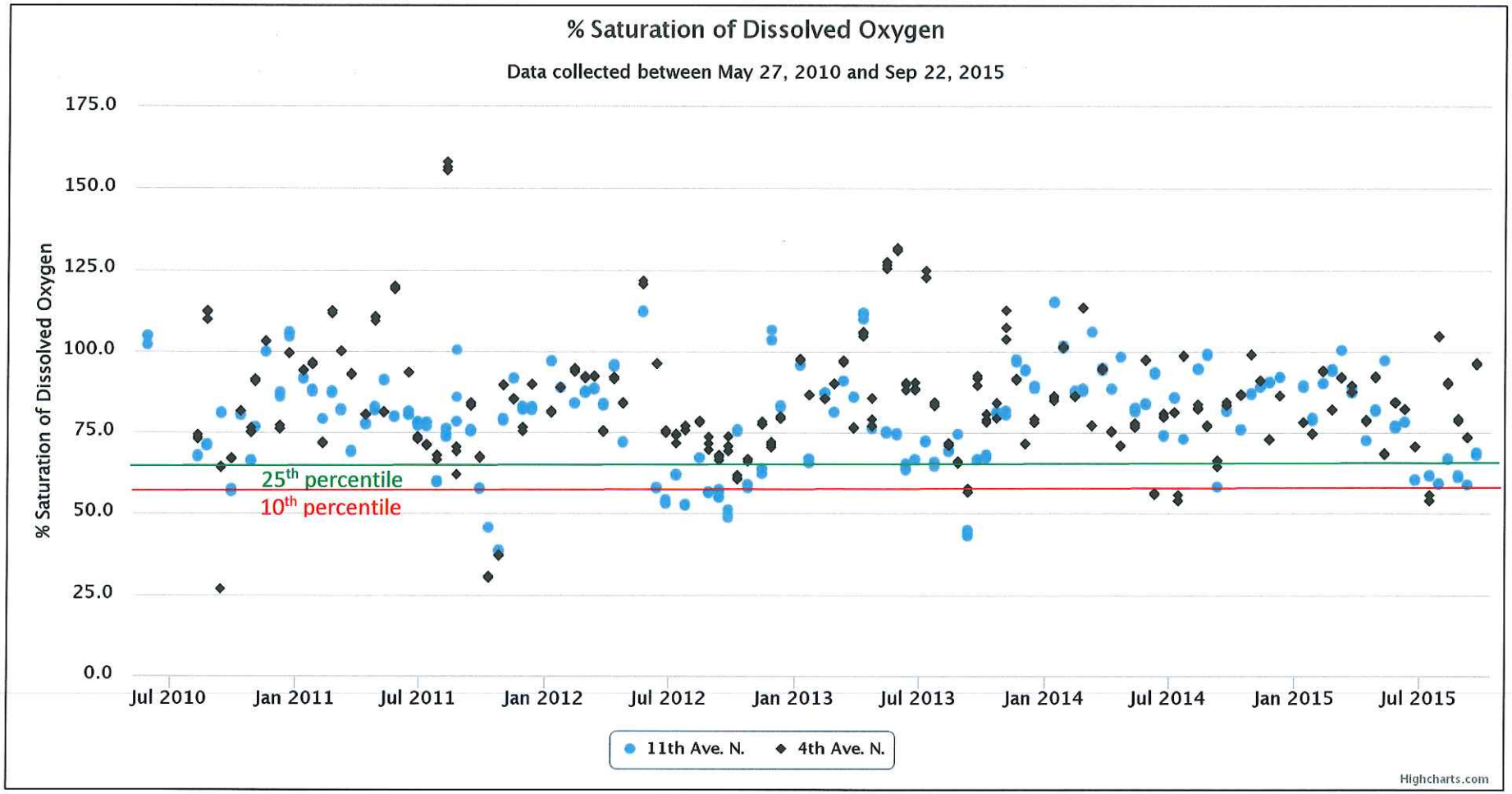
MAX	6100	1400	700	600	2567	5967	500	1300	1467	633	600	500	567	600	367	700	700	2267	200	500	467
MIN	300	100	233	167	33	33	33	67	67	133	100	33	167	167	33	133	100	267	0	67	67
MEDIAN	500	484	467	300	67	167	184	167	167	333	333	284	284	267	167	367	284	600	100	267	167



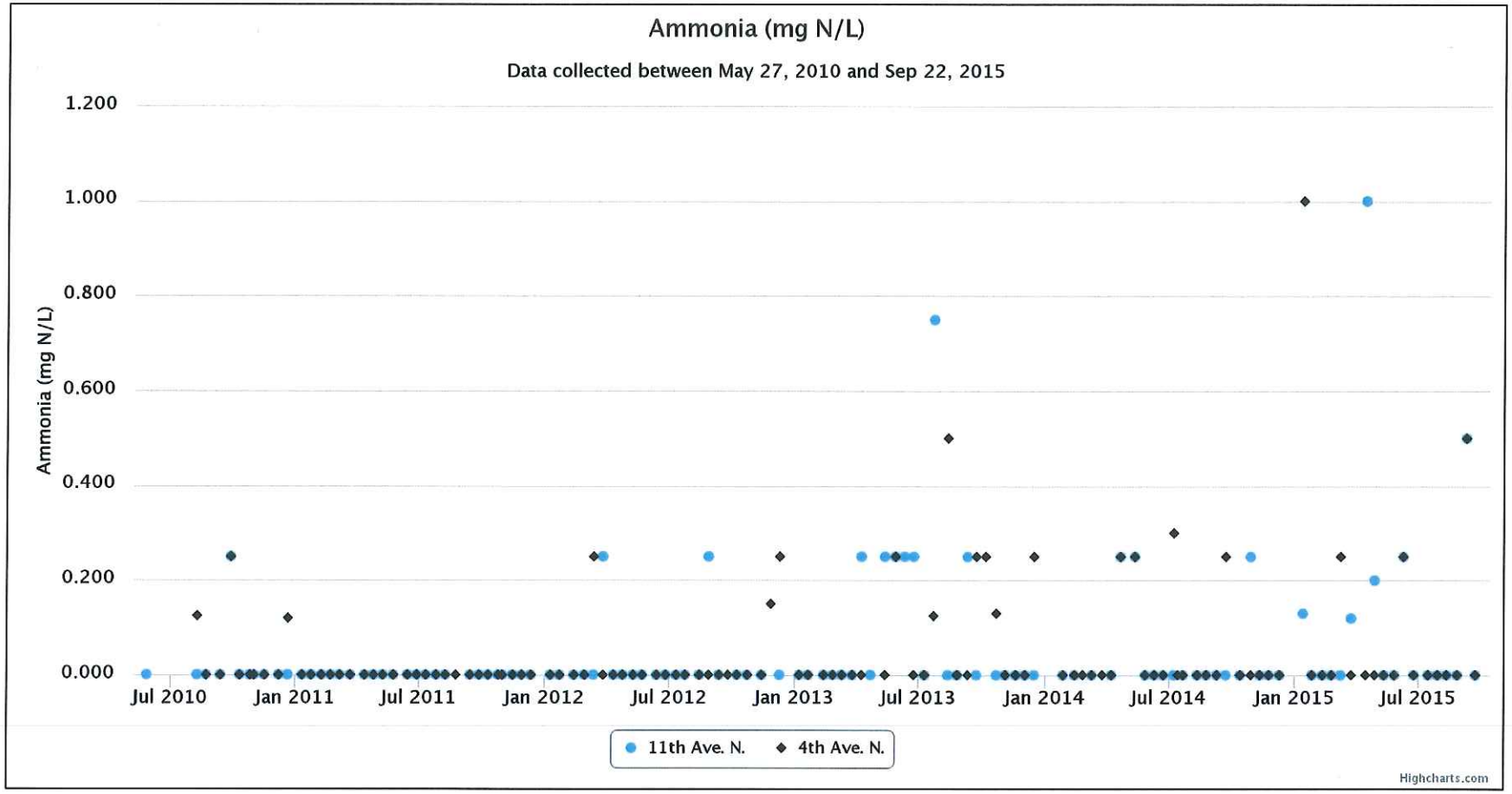
Site Name	# Samples	Mean	S.D.	Median	Max	Min	10th	25th	75th	90th
11th Ave. N.	123	6.25	4.38	5.30	36.80	1.60	3.06	3.68	7.52	9.81
4th Ave. N.	123	5.88	2.43	5.26	23.10	2.30	4.00	4.55	6.32	8.39

✓ Turbidity in Lake Dogwood has declined to normal levels by mid July.

Blue dots = Dogwood Lake



- ✓ Percentiles shown are for summertime %DO for Lake Dogwood through Feb 2015.
- ✓ Looking at the saturation levels eliminates any effect of temperature on oxygen solubility.
- ✓ In 2015, summertime oxygen saturation levels in Lake Dogwood were lower than normal.
- ✓ Lowest dissolved oxygen level was 4.5 mg/L.
- ✓ 2012 had even more occurrences of low dissolved oxygen.



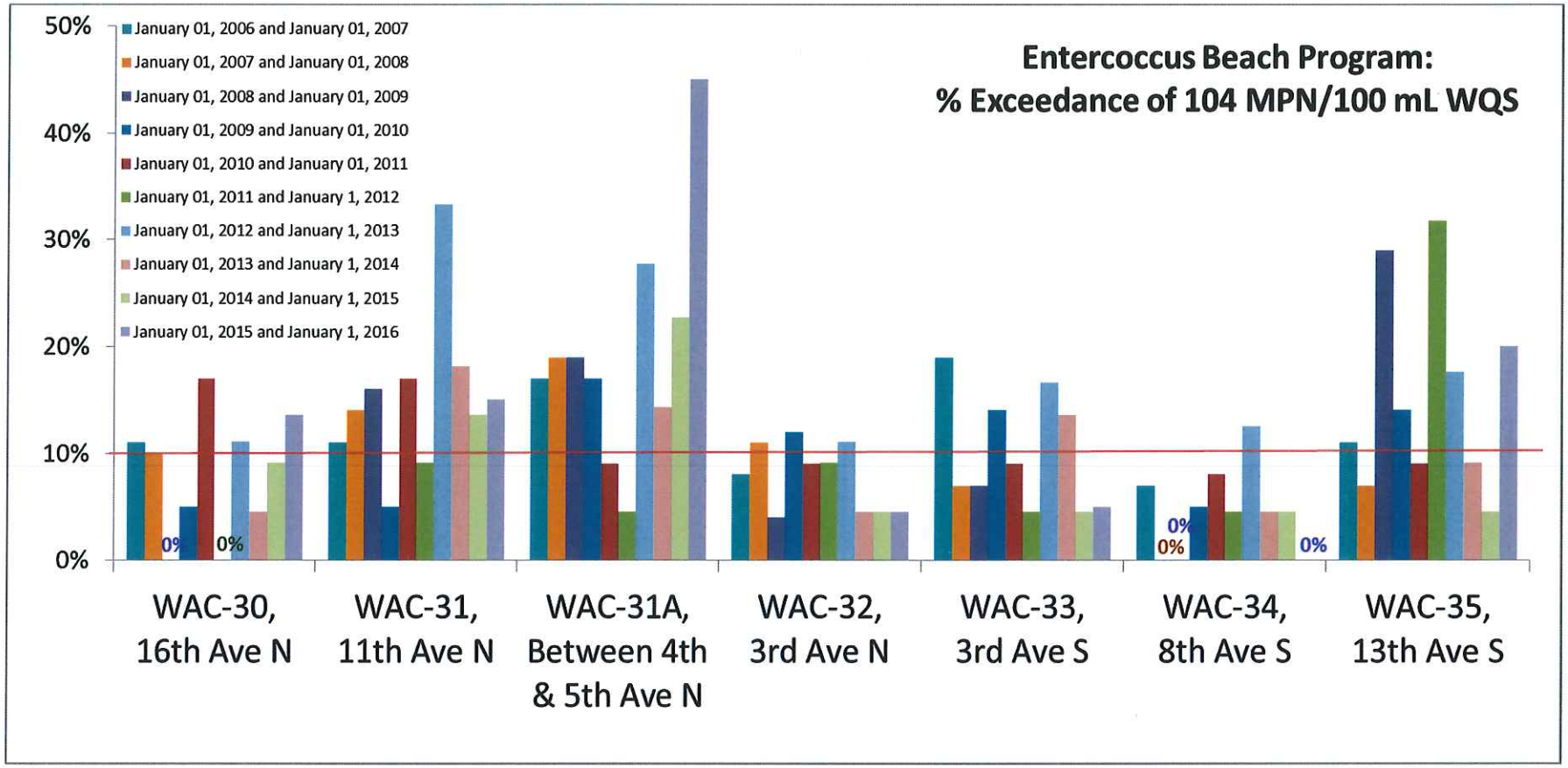
✓ Ammonia continues to be infrequently detected at both sites. Nitrate or nitrite has not been detected since October 2013.

Surfside SC DHEC Ocean Monitoring 2015 (as of 10/15/15)

Swimming Advisories permanently posted at all sites. Values <10 are represented numerically as "9".

Date	3-d prior rain accumulation (in)	WAC-30, 16th Ave N	WAC-31, 11th Ave N	WAC-31A, 4/5th Ave N	WAC-32, 3rd Ave N	WAC-33, 3rd Ave S	WAC-34, 8th Ave S	2014 303(d) list: WAC-35, 13th Ave S	2014 303(d) list: Number > 104
5/5/15		9	9	10	10	41	9	10	0
5/12/15	1.7	74	10	171	10	9	9	9	1
5/19/15		1541	12033	331	20	41	9	20	3
5/26/15		9	9	171	20	10	9	20	1
6/2/15	1.4	269	10	279	173	20	85	9	3
6/3/15		10			10				
6/9/15	0.1	10	9	9	9	9	9	9	0
6/16/15		10	20	9	9	9	9	10	0
6/23/15	0.1	9	9	9	9	10	10	10	0
6/30/15	0.1	74	9	161	9	52	9	122	2
7/7/15		41	9	9	10	9	9	9	0
7/14/15	1.4	9	9	9	10	9	9	9	0
7/21/15		9	9	9	9	9	9	9	0
7/28/15	1.44 (4/5 days)	9	9	122	9	9	10	9	1
8/4/15	3.96	134	538	1455	74	75	52	738	4
8/5/15	3.98	10			41		9		
8/11/15	0.43 (4/5 days)	9	9	20	10	9	9	9	0
8/18/15	0.00	9	9	9	9	9	9	1014	1
8/25/15	0.02	9	9	10	9	9	9	9	0
9/1/15	4.00	41	408	1305	30	602	9	203	4
9/8/15	1.06	NR	NR	NR	NR	NR	NR	NR	0
9/15/15	0.02	NR	NR	NR	NR	NR	NR	NR	0
9/22/15	0.00	9	10	10	9	9	10	9	0
9/29/15	0.08	98	9	337	84	10	52	10	
Geomean		22	21	43	14	17	11	22	
Median		10	9	10	10	9	9	9	
>60		6	3	9	3	2	1	4	
> 104		3	3	9	1	1	0	4	
> 501		1	2	2	0	1	0	2	
Count		22	20	20	22	20	21	20	
%>60		27%	15%	45%	14%	10%	5%	20%	
%>104		14%	15%	45%	5%	5%	0%	20%	
%>501		5%	10%	10%	0%	5%	0%	10%	
MAX		1541	12033	1455	173	602	85	1014	
MIN		9	9	9	9	9	9	9	

red = water quality exceeded

Time trends in ENTERO levels at Surfside Beach SC DHEC beach monitoring stations.

Data from 9/8/15 and 9/15/15 is likely missing.