

Canal Current

A wave of information for Cape Coral's Canalwatch volunteers

Newsletter: 4th Quarter 2011

Environmental News

Native Plant Profile

Manatees

Manatees are often seen in Cape Coral's canals, so please heed "idle speed" and "no wake" zones throughout the canals and surrounding waterways. Any water way within a quarter mile of the shoreline is "idle speed, no wake".

With the weather turning cooler over the coming months, manatees will seek warmer water. The warm water near the Florida Power & Light (FPL) power plant is a popular spot for this marine mammal. Manatee Park is located directly across from the FPL plant on Palm Beach Blvd. in Fort Myers, and provides a great opportunity to see manatees in the cooler weather. Manatee Park is now offering a free half hour program about the Florida Manatee any day of the week through March. Appropriate for all ages, this program is a look into the biological and ecological aspects of this threatened marine mammal. If you have visitors from out of town, or if you're looking for something to do with the kids or grandkids, Manatee Park is a local attraction not to be missed.

For more information, please visit leeparks.org or call 239-690-5030.

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Questions? Comments? Let us know!

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Beggar Ticks

Bidens Alba



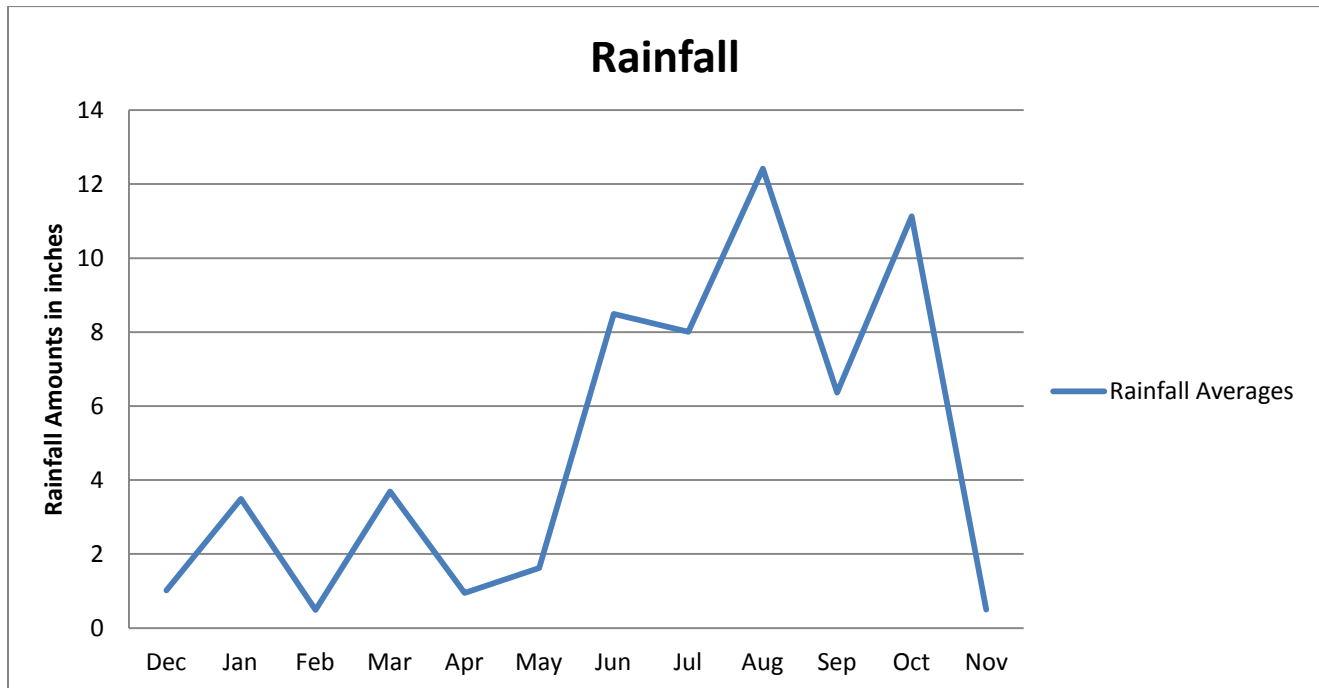
Beggar Ticks (sometimes referred to Spanish Needle) can be an unwelcome weed to most homeowners. However, groupings of these delicate white flowers are very attractive to butterflies and bees. The seeds have two "clasps" at one end of the pod that can cling on to passers-by, thereby spreading this plant to other areas. A little maintenance to remove the seed heads will prevent the prolific spreading of Beggar Ticks.

Indeed this plant is useful in butterfly gardens, as it does provide a nectar source. It is also useful on the dinner table! The flowers and tender young leaves of this plant are edible and can be mixed into a salad to accent other greens.

While not for every home landscape, I hope the home gardener takes into consideration the usefulness of this small flowering plant. So the next time you see it popping up in a plant bed or growing alongside a road, take note as to what is buzzing, flying or perched on its bloom.

2011 Year in Review

- In 2011, we received 554 Canalwatch samples. This is a decrease from 633 in 2010. Nevertheless, thank you for all of your hard work and participation this year!
- Also in 2011, we received 126 Chlorophyll samples in addition to our regular samples.
- We trained 8 new volunteers this year. Welcome!
- There are currently 60 active stations.
- Total average rainfall for Cape Coral for the past year was about 58 inches.



Rainfall amounts are from December 2010 to November 2011 and are an average of monthly totals from all volunteers who recorded rainfall data.

Coming Soon in 2012

Canal Clean-up – March 24, 2012

Mark your calendars!!! As part of the Keep America Beautiful Great American Clean-up event, the City of Cape Coral is again partnering with Keep Lee County Beautiful to host the 5th annual Canal Clean-up day. This year's clean-up is on Saturday March 24th from 8 a.m. – noon at the Cape Coral Yacht Club. Please Plan to Join Us!!!

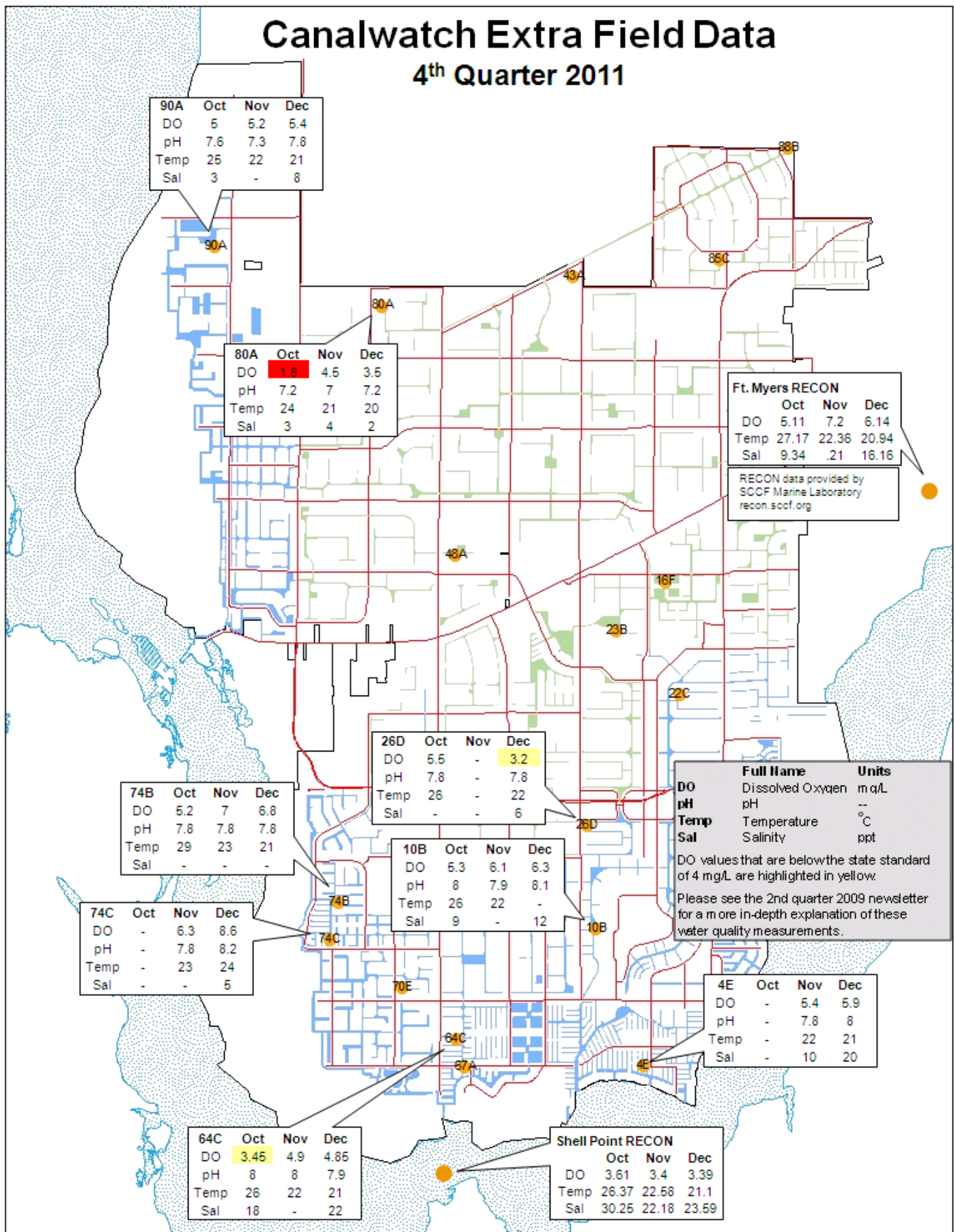
For more information please contact 574-0785 or hphillips@capecoral.net

Canalwatch BBQ – April 4, 2012

Save the date!!! The Canalwatch BBQ to thank our volunteers will be on April 4th at the Cape Coral Yacht Club at 11 a.m. Please R.S.V.P. no later than Friday, March 23rd. Please call 574-0785 to R.S.V.P. Hope to see you there!

Canalwatch Extra Field Data

4th Quarter 2011



90A	Oct	Nov	Dec
DO	5	5.2	5.4
pH	7.6	7.3	7.8
Temp	25	22	21
Sal	3	-	8

80A	Oct	Nov	Dec
DO	1.8	4.5	3.5
pH	7.2	7	7.2
Temp	24	21	20
Sal	3	4	2

Ft. Myers RECON			
	Oct	Nov	Dec
DO	5.11	7.2	6.14
Temp	27.17	22.36	20.94
Sal	9.34	21	16.16

RECON data provided by
SCCF Marine Laboratory
recon.sccf.org

26D	Oct	Nov	Dec
DO	5.5	-	3.2
pH	7.8	-	7.8
Temp	26	-	22
Sal	-	-	6

74B	Oct	Nov	Dec
DO	5.2	7	6.8
pH	7.8	7.8	7.8
Temp	29	23	21
Sal	-	-	-

10B	Oct	Nov	Dec
DO	5.3	6.1	6.3
pH	8	7.9	8.1
Temp	26	22	-
Sal	9	-	12

	Full Name	Units
DO	Dissolved Oxygen	mg/L
pH	pH	-
Temp	Temperature	°C
Sal	Salinity	ppt

DO values that are below the state standard of 4 mg/L are highlighted in yellow.

Please see the 2nd quarter 2009 newsletter for a more in-depth explanation of these water quality measurements.

74C	Oct	Nov	Dec
DO	-	6.3	8.6
pH	-	7.8	8.2
Temp	-	23	24
Sal	-	-	5

4E	Oct	Nov	Dec
DO	-	5.4	5.9
pH	-	7.8	8
Temp	-	22	21
Sal	-	10	20

64C	Oct	Nov	Dec
DO	3.45	4.9	4.85
pH	8	8	7.9
Temp	26	22	21
Sal	18	-	22

Shell Point RECON			
	Oct	Nov	Dec
DO	3.61	3.4	3.39
Temp	26.37	22.58	21.1
Sal	30.25	22.18	23.59

bd = below detection

benchmark numbers: Marked data are in the highest 20% of values found by Hand et. al, 1988.

	October 2011						November 2011						December 2011						Avg TSI
	NO2	NO3	NH3	TKN	T-N	T-PO4	NO2	NO3	NH3	TKN	T-N	T-PO4	NO2	NO3	NH3	TKN	T-N	T-PO4	
	<1.0	<1.0	none set	<2.0	<0.46	<1.0	<1.0	none set	<2.0	<0.46	<1.0	<1.0	none set	<2.0	<0.46				
3F	bd	0.07	bd	0.7	0.77	0.08	bd	0.12	bd	0.5	0.62	0.06	bd	0.08	0.1	0.8	0.88	0.05	51.09
4E							bd	0.24	bd	0.7	0.94	0.11	bd	0.05	0.2	0.9	0.95	0.05	55.54
6F	bd	bd	bd	1.1	1.1	0.11	bd	0.27	bd	0.7	0.97	0.13	bd	bd		0.9	0.9	0.06	56.07
7B	bd	0.18	bd	0.9	1.08	0.13	bd	0.22	bd	0.6	0.82	0.12	bd	0.07	bd	0.9	0.97	0.05	52.35
7C	bd	0.20	bd	1	1.2	0.14	bd	0.22	bd	0.6	0.82	0.12							58.31
7D	bd	0.14	bd	1	1.14	0.12	bd	0.23	bd	0.7	0.93	0.20	bd	bd		0.9	0.9	0.05	59.58
9E	bd	bd	bd	1	1.0	0.12	bd	0.17	bd	0.6	0.77	0.09	bd	0.09		1.1	1.19	0.07	58.99
10B	bd	0.08	bd	0.9	0.98	0.08	bd	0.10	bd	0.3	0.4	0.05	bd	bd	bd	0.7	0.7	0.03	48.06
11D							bd	0.26	bd	0.6	0.86	0.22	bd	0.07	bd	0.9	0.97	0.06	56.14
15D	bd	bd	bd	0.8	0.8	0.07	bd	0.16	bd	1.2	1.36	0.07	bd	0.08	bd	0.9	0.98	0.04	56.53
15E	bd	bd	bd	0.9	0.9	0.08	bd	0.22	bd	0.8	1.02	0.07	bd	0.08	0.2	1.0	1.08	0.05	58.71
16E	bd	bd	bd	0.7	0.7	0.04	bd	bd	bd	1.9	1.9	0.04	bd	bd	bd	1.0	1.0	0.02	48.03
16G	bd	bd	bd	0.6	0.6	0.05	bd	bd	bd	0.8	0.8	0.04							54.89
17B							bd	bd	bd	0.5	0.55	0.04							53.54
19D	bd	bd	0.1	1.2	1.2	0.17	bd	0.29	bd	0.6	0.89	0.13	bd	0.05	bd	1.0	1.05	0.05	58.20
21D	bd	bd	bd	1.0	1.0	0.09	bd	0.20	0.3	0.4	0.6	0.07	bd	0.06	bd	0.9	0.96	0.05	53.46
26D	bd	bd	bd	1.4	1.4	0.05							bd	0.08	0.2	1.8	1.88	0.02	49.39
26F							bd	0.10	bd	0.5	0.6	0.09	bd	bd	0.1	0.8	0.8	0.02	37.20
28D	bd	bd	bd	1.0	1.0	0.03	bd	bd	bd	0.8	0.8	0.04	bd	bd	bd	1.0	1.0	0.02	57.30
30C	bd	bd	bd	0.8	0.8	0.03	bd	bd	bd	0.4	0.45	0.03	bd	bd	bd	0.8	0.8	0.03	46.32
35A	bd	bd	bd	0.7	0.7	0.06	bd	0.16	bd	0.5	0.66	0.02	bd	0.05	bd	0.6	0.65	0.02	38.37
41A	bd	bd	bd	0.4	0.4	0.07	bd	0.12	bd	0.2	0.32	0.01	bd	bd		0.5	0.5	0.02	28.91
45D	bd	bd	bd	0.7	0.7	0.06	bd	bd	bd	0.7	0.7	0.03	bd	bd	bd	0.9	0.9	0.02	55.72
48A	bd	bd	bd	0.05	0.1	0.03							bd	0.09	0.1	0.9	0.99	0.02	42.83
52B	bd	bd	bd	0.5	0.5	0.03	bd	0.12	bd	0.2	0.32	0.01	bd	bd		0.6	0.6	0.02	30.81
58B													bd	0.05	bd	0.9	0.95	0.03	44.86
58E													bd	0.05	bd	1.1	1.15	0.03	44.86
58F	bd	bd	0.1	1	1.0	0.04	bd	bd	bd	0.6	0.6	0.03							49.24
58G	bd	bd	bd	0.8	0.8	0.03	bd	0.06	bd	0.5	0.56	0.03	bd	0.06	0.3	1.1	1.16	0.05	49.85
58I	bd	bd	bd	0.8	0.8	0.03	bd	0.07	bd	0.6	0.67	0.03	bd	bd	0.3	1.3	1.3	0.06	46.93

59B	bd	bd	bd	0.7	0.7	0.02	bd	0.07	bd	0.4	0.47	0.02	bd	0.05	0.2	1.1	1.15	0.03	45.34
64B							bd	0.21	bd	0.5	0.71	0.09	bd	0.07	0.2	0.7	0.77	0.05	48.37
64C	bd	0.13	bd	0.8	0.93	0.09	bd	0.21	bd	0.7	0.91	0.09	bd	0.09	0.2	0.8	0.89	0.06	51.82
65B	bd	bd	bd	0.7	0.7	0.07	bd	0.18	bd	0.6	0.78	0.08	bd	0.11	0.2	0.8	0.91	0.06	51.99
67C	bd	0.10	bd	0.8	0.9	0.11	bd	0.19	bd	0.6	0.79	0.09	bd	0.09	0.4	0.9	0.99	0.19	50.35
69A							bd	0.07	bd	1.1	1.17	0.13	bd	bd	bd	1.0	1.0	0.07	60.48
70F	bd	bd	bd	0.8	0.8	0.05	bd	0.06	bd	0.6	0.66	0.05	bd	bd	0.2	0.7	0.7	0.20	52.50
71A	bd	0.20	bd	0.6	0.8	0.03	bd	0.25	bd	0.5	0.75	0.04	bd	0.15	0.2	0.6	0.75	0.03	48.68
72A							bd	bd	bd	0.6	0.6	0.09	bd	bd	bd	0.8	0.8	0.04	49.88
72C	bd	bd	bd	0.9	0.9	0.05							bd	bd	bd	0.8	0.8	0.03	57.84
74B							bd	bd	bd	0.9	0.9	0.05	bd	bd	bd	1.0	1.0	0.04	55.95
74C							bd	bd	bd	0.5	0.5	0.05	bd	bd	bd	0.8	0.8	0.03	49.27
74F							bd	bd	bd	0.7	0.75	0.05	bd	bd	bd	0.8	0.8	0.02	51.51
80A	bd	bd	bd	0.8	0.8	0.01	bd	bd	bd	0.6	0.6	0.01	bd	bd	bd	0.2	0.2	0.02	31.20
81A							bd	0.07	0.3	2.2	2.27	1.32							72.23
81B													bd	bd	0.1	0.9	0.9	0.02	37.32
82A	bd	bd	bd	0.9	0.9	0.02	bd	bd	bd	1.0	1.0	0.01	bd	bd	0.1	0.9	0.9	0.02	46.63
83A	bd	bd	bd	0.8	0.8	0.02	bd	bd	bd	1.0	1.0	0.01	bd	0.10	0.2	1.0	1.10	0.02	42.98
89A	bd	0.10	bd	0.8	0.9	0.15	bd	0.25	bd	1.0	1.25	0.13	bd	0.09	0.1	0.9	0.99	0.09	59.52
90A	bd	bd	0.1	1.4	1.4	0.05	bd	bd	bd	1.4	1.4	0.01	bd	0.06	0.2	1.5	1.56	0.02	48.90
91A	bd	bd	0.1	1.0	1.0	0.02	bd	bd	bd	0.7	0.7	0.02	bd	0.08	0.1	0.6	0.68	0.02	40.32
93B	bd	bd	0.1	1.0	1.0	0.07	bd	bd	bd	0.8	0.8	0.07	bd	bd	bd	0.8	0.8	0.03	59.79
97A	bd	bd	bd	0.7	0.7	0.02	bd	0.08	bd	0.6	0.68	0.02	bd	bd	bd	0.6	0.6	0.02	41.75
Median		0.13	0.10	0.80	0.90	0.05		0.18	0.30	0.60	0.77	0.05		0.08	0.20	0.90	0.91	0.03	50.35
Max		0.20	0.10	1.40	1.40	0.17		0.29	0.30	2.20	2.27	1.32		0.15	0.40	1.80	1.88	0.20	72.23

NO2 = Nitrite (inorganic)	TKN = Total Kjeldahl Nitrogen (organic + NH4)	High levels of nutrients in our canals can indicate the presence of fertilizer runoff or effluent from wastewater or septic systems. Excessive nutrients can lead to nuisance plant growth and algal blooms.
NO3 = Nitrate (inorganic)	TN = Total Nitrogen (inorganic + organic)	
NH3 = Ammonia (inorganic)	TP04 = Total Phosphate	

All nutrient concentrations shown in mg/L

TSI = Trophic State Index, a quick indicator of canal health. 51 sites this quarter scored as GOOD (<60), one site scored FAIR (60-70), and one was POOR (>70). Water quality has improved this quarter over last quarter. It is roughly the same as 4th Quarter 2010. Secchi measurements should continue to improve for many of you and you may find that it is visible on the bottom more often.

January

4th Canalwatch

4th Sunset Celebration
Yacht Club Pier 4-7 pm

10th Friends of Wildlife
Meeting at Rotary Park
7 – 9 PM
ccfriendsofwildlife.org

20th Florida Yards and
Neighborhoods Intro Class
Rotary Park
1 – 4 pm
Info: 549-4606

20th Mangrove Gathering
Environmental Club 7-10 pm
Rotary Park
Info: 549-4606

21st Butterfly Gardening Class
10:30 - 12:30
Rotary Park
Info: 549-4606

February

1st Canalwatch

1st Sunset Celebration
Yacht Club Pier 4-7 pm

14th Friends of Wildlife
Meeting at Rotary Park
7 – 9 pm
ccfriendsofwildlife.org

25th The 10th Annual Burrowing
Owl Festival at Rotary Park
10:00 – 4:00
Info: 549-4606

March

7th Canalwatch

7th Sunset Celebration
Yacht Club Pier 4-7 pm

10th Florida Yards and
Neighborhoods
Yard Tours 9 – 12
Tour begins at Rotary Park
Info: 549-4606

13th Friends of Wildlife
Meeting at Rotary Park
7 – 9 pm
ccfriendsofwildlife.org

24th The 5th Annual
Canal Clean-up

24th Butterfly Gardening Class
10:30 - 12:30
Rotary Park
Info: 549-4606

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Environmental Resources
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