

Canal Current

A wave of information for Cape Coral's Canalwatch volunteers

Newsletter: 3rd Quarter 2009

Environmental News

November Social

Please join us on November 4th from 10:30 am to 11:30 am at Rotary Park! Donuts and coffee will be provided. You'll have a chance to socialize with other Canalwatch volunteers and learn from a guest speaker from the Lee County Hyacinth Control District.

If you come to the social, bring your sample. If you cannot make it, take your sample to the normal drop-off location. **Please RSVP at 574-0785 so we know where to leave your fresh sample bottle!**

We are now the Environmental Resources Section

Due to reorganization within the City, our title has changed. We used to be the Environmental Resources Division of the Public Works Department. We are still in Public Works, but now fall under the Stormwater Division. Nothing is changing for us in terms of personnel or our mission; we just have a different name!

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Questions? Comments? Let us know!

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Secchi Disk Water Color

Many of you have asked, "how far down should the Secchi disk be before I note water color?" Well, we haven't found any definitive documentation on a standard procedure, so for consistency it would be best if all volunteers read water color at the same distance that you retrieve your water sample. This would be about elbows length.

Native Plant Profile

Corkystem Passion Flower

Passiflora suberosa

Passion flowers are considered endemic to tropical and subtropical Americas and so most consider *Passiflora suberosa* to be a native of Florida. A climbing vine, corkystem passion flower is often seen trailing up trees, fences and even along the ground given that the fruit of this plant is attractive to birds. Corkystem passion flowers, though less showy than the maypop (*Passiflora incarnate*), still attract butterflies such as the zebra longwing and the gulf fritillary.

Corkystem passion flower can grow in partial shade or full sun and is considered a drought tolerant plant as well.



Environmental Resources Updates

Photo Contest!

It's time to update our Canalwatch brochures and add some new pictures to the website. We want YOUR pictures, so we're having a contest! All submissions will be included on the website, and the "best in show" pictures will be included in the brochure. Each photo will be credited. Here are the categories:

- Scenery/Wildlife
- Sample Equipment
- Sample Collection – including, but not limited to, taking a secchi reading, checking a rain gauge, collecting a water sample, running DO, pH, or salinity tests

Be creative! The deadline for submission is 4:00 pm on Wednesday, November 18th. Winning photos will be on display for the December Canalwatch day. Email submissions to kcressman@capecoral.net or bring them to our office.

Monofilament Recovery and Recycling Program

Stray fishing line that finds its way into the environment can wreak havoc on wildlife and people. Animals can become entangled in stray line, thus losing limbs or becoming trapped and starving to death; or they can ingest it and suffer fatal intestinal blockages. Humans can be affected as well: fishing line entanglement is one of the most common reasons that boat engines need to be repaired, and there are actually documented cases of divers becoming entangled in line, then panicking and drowning.

City staff, from both the Environmental Resources Section and the Planning Division, have been working with Lee County Sea Grant to bring monofilament recycling bins to Cape Coral. We are about to deploy 20 bins at boat ramps and other popular fishing spots! Our hope is that these bins will encourage responsible angling by making fishing line disposal easier and by educating anglers about the importance of this issue. Please search 'monofilament' on www.capecoral.net for more information.

Water Quality Reports Online

The Environmental Resources Section (formerly Division) publishes quarterly reports of water quality based on staff sampling of 33 sites throughout the City. These reports are now online! You can access them from the Environmental Resources Section page on the City's website.

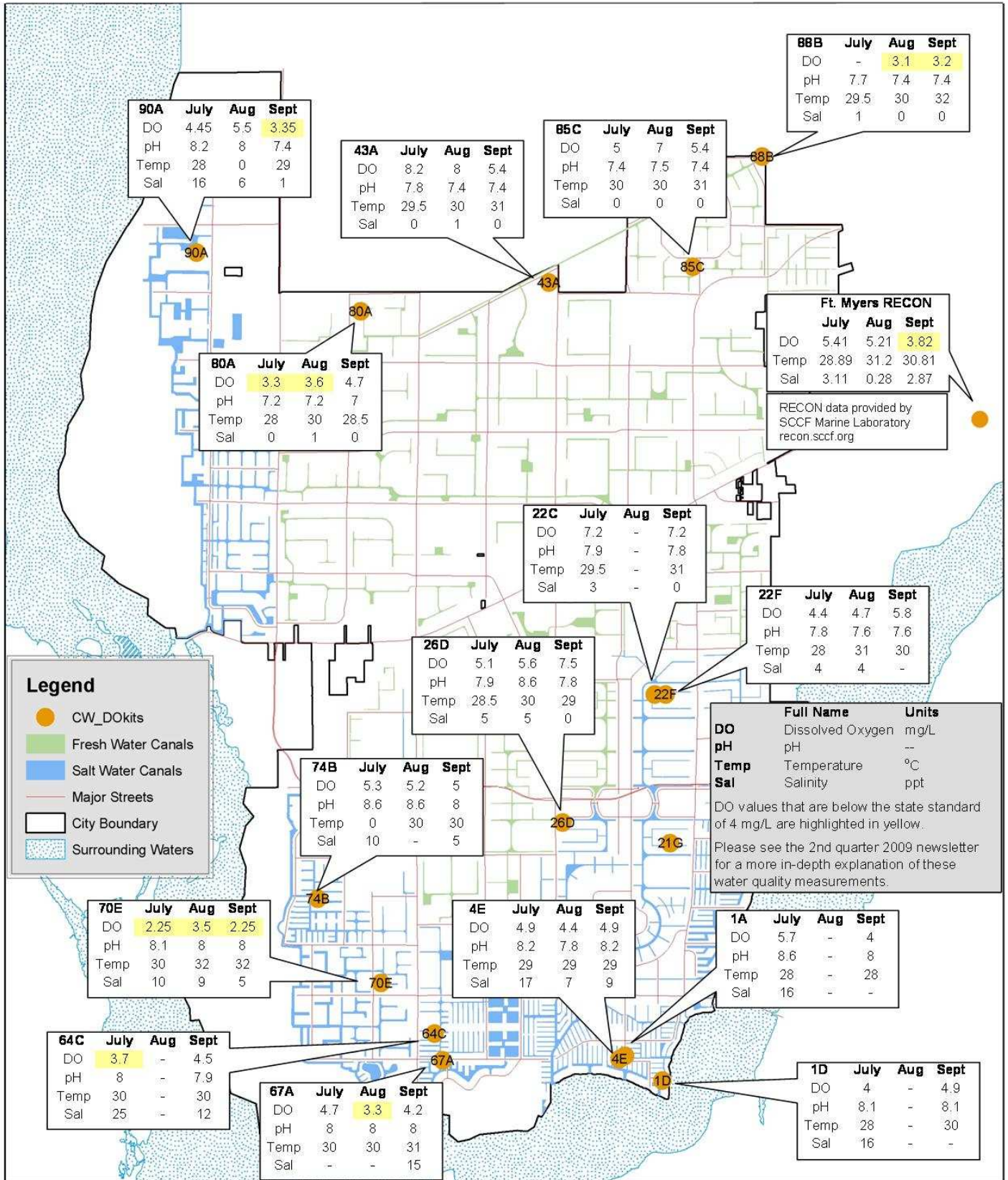
To get to the Environmental Resources page from www.capecoral.net, hover over **City Government** on the left menu bar; then on the menu that comes up, click on **City Departments**. Scroll down to **Public Works** and click on **Environmental Resources**. From our page, you can also access Canalwatch information and archived newsletters, the Canal Owner's Manual, information on Nile monitor lizards, Florida Yards and Neighborhoods, Monofilament Recovery and Recycling, and Environmental FAQs.

Some friendly reminders

- Please **do not** fill your bottle all the way to the top. Lab technicians need to add preservative and have room to mix the sample before analysis, so please leave some air space at the top.
- Get your sample in on time. The lab can't start working on samples until we've received them all, and it is difficult to accommodate latecomers. We *do* want your data and will try to work with you, but please make every effort to bring your sample on the actual sampling day.

Canalwatch Extra Field Data

3rd Quarter 2009



Lab Data for Canalwatch 3rd Quarter 2009

bd = below detection

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

	July 2009						August 2009						September 2009						Avg TSI
	NO2 <1.0	NO3 <1.0	NH3 none set	TKN 0.6	T-N <2.0	T-PO4 <0.46	NO2 <1.0	NO3 <1.0	NH3 none set	TKN 0.6	T-N <2.0	T-PO4 <0.46	NO2 <1.0	NO3 <1.0	NH3 none set	TKN 0.6	T-N <2.0	T-PO4 <0.46	
1A	bd	bd	bd	0.6	0.60	0.14							bd	0.14	0.1	0.8	0.94	0.15	50.33
1D	bd	bd	0.1	0.6	0.60	0.13							bd	0.12	bd	0.6	0.72	0.12	49.61
3F							bd	0.22	0.1	0.8	1.02	0.18	bd	bd	bd	0.5	0.50	0.07	49.25
4E	bd	bd	0.1	0.3	0.30	0.13	bd	0.28	0.1	1	1.28	0.18	bd	0.10	bd	0.9	1.00	0.12	52.83
6F	bd	bd	0.1	0.4	0.40	0.14	bd	0.26	bd	1	1.26	0.22	bd	0.13	0.1	0.9	1.03	0.20	53.01
6G	bd	bd	0.2	0.6	0.60	0.17	bd	0.26	bd	1	1.26	0.23							62.85
7B	bd	bd	0.1	0.8	0.80	0.16	bd	0.12	bd	0.6	0.72	0.16	bd	0.05	bd	0.7	0.75	0.11	56.04
10B	bd	bd	0.1	0.5	0.50	0.05													49.99
11D	bd	bd	0.1	0.7	0.70	0.16	bd	0.12	bd	0.9	1.02	0.17	bd	bd	bd	1	1.00	0.14	53.78
13A	bd	bd	0.1	0.6	0.60	0.12	bd	bd	bd	0.9	0.90	0.14	bd	bd	bd	0.9	0.90	0.10	58.19
15D	bd	bd	0.1	0.7	0.70	0.05	bd	bd	bd	0.8	0.80	0.10	bd	bd	bd	0.8	0.80	0.08	53.69
15E													bd	0.08	bd	0.7	0.78	0.07	59.48
17B	bd	bd	bd	0.4	0.40	bd													39.66
18G	bd	bd	bd	0.4	0.40	0.05	bd	bd	bd	1.1	1.10	0.05	bd	bd	bd	1.2	1.20	0.05	53.40
18H	bd	bd	bd	1	1.00	bd	bd	bd	bd	1.5	1.50	bd	bd	bd	bd	2.2	2.20	bd	54.62
19D	bd	bd	0.1	0.8	0.80	0.21	bd	0.18	0.1	1.2	1.38	0.20	bd	0.07	bd	1	1.07	0.16	61.02
19G	bd	bd	bd	0.4	0.40	0.18	bd	0.21	0.1	0.9	1.11	0.22							55.48
19H	bd	bd	bd	0.9	0.90	0.16	bd	0.19	bd	0.9	1.09	0.20	bd	bd	bd	1.1	1.10	0.13	58.56
21D	bd	bd	bd	0.5	0.50	0.12	bd	bd	bd	0.8	0.80	0.13	bd	bd	bd	0.6	0.60	0.09	56.59
21F	bd	bd	bd	0.7	0.70	0.12	bd	0.07	bd	0.8	0.87	0.15	bd	bd	bd	0.8	0.80	0.10	58.55
22C	bd	bd	bd	1.6	1.60	0.11	bd	bd	bd	2.1	2.10	0.10	bd	bd	bd	1.3	1.30	0.08	66.47
22F	bd	bd	bd	1	1.00	0.20	bd	bd	bd	0.7	0.70	0.07	bd	0.07	bd	0.9	0.97	0.07	60.45
23B													bd	bd	bd	1.5	1.50	bd	41.47
26C	bd	bd	bd	0.9	0.90	0.06							bd	bd	bd	0.6	0.60	bd	59.92
26D	bd	bd	bd	0.4	0.40	bd	bd	0.05	bd	1.3	1.35	0.06	bd	bd	bd	1.2	1.20	0.06	57.49
28D	bd	bd	bd	0.7	0.70	bd	bd	bd	bd	0.7	0.70	bd	bd	bd	bd	0.7	0.70	bd	45.20
30A							bd	0.05	bd	0.6	0.65	0.06	bd	bd	bd	0.5	0.50	0.05	48.22
35A	bd	bd	bd	0.5	0.50	bd							bd	bd	0.1	0.4	0.40	bd	40.77
41A	bd	bd	bd	0.2	0.20	bd	bd	bd	bd	0.5	0.50	bd	bd	bd	0.1	0.3	0.30	bd	34.27
43A	bd	bd	bd	0.7	0.70	bd	bd	bd	bd	0.9	0.90	bd	bd	bd	0.2	1.2	1.20	bd	42.71
48A							bd	bd	bd	0.6	0.60	bd	bd	bd	0.2	0.5	0.50	bd	43.21

51A	bd	bd	bd	0.5	0.50	bd												41.87	
52B	bd	bd	bd	0.4	0.40	bd	bd	bd	bd	0.4	0.40	bd	bd	bd	0.2	0.4	0.40	bd	39.66
55B	bd	bd	bd	0.9	0.90	0.06													63.57
58E	bd	bd	bd	0.4	0.40	bd	bd	bd	bd	0.7	0.70	bd	bd	bd	0.2	0.6	0.60	bd	44.92
58F	bd	bd	bd	0.1	0.10	bd	bd	bd	bd	0.6	0.60	bd	bd	bd	0.1	0.5	0.50	bd	39.11
58G	bd	bd	bd	0.2	0.20	bd	bd	bd	bd	0.6	0.60	bd	bd	bd	bd	0.5	0.50	bd	43.58
59B							bd	bd	bd	0.5	0.50	bd	bd	bd	bd	0.4	0.40	bd	45.01
60B	bd	bd	bd	0.1	0.10	bd	bd	bd	bd	0.4	0.40	bd	bd	bd	bd	0.5	0.50	bd	36.61
64B	bd	bd	bd	0.4	0.40	0.09							bd	bd	bd	0.4	0.40	0.11	36.71
64C	bd	bd	bd	0.4	0.40	0.92							bd	bd	bd	0.6	0.6	0.12	41.58
66A	bd	bd	bd	0.8	0.80	0.11	bd	bd	bd	1.1	1.10	bd							50.31
67A	bd	bd	bd	1.6	1.60	1.03	bd	0.18	bd	1.4	1.58	0.15	bd	bd	bd	1.5	1.50	0.10	56.49
67C	bd	bd	bd	0.1	0.10	0.44													30.75
70E	bd	bd	bd	0.6	0.60	0.35	bd	bd	bd	0.8	0.80	bd	bd	bd	bd	0.6	0.60	bd	43.85
72A	bd	bd	bd	0.5	0.50	0.17	bd	bd	bd	0.8	0.80	bd	bd	bd	bd	0.6	0.60	0.06	43.48
74B	bd	bd	bd	0.5	0.50	0.29	bd	bd	bd	0.7	0.70	bd	bd	bd	bd	0.8	0.80	0.05	47.83
74C	bd	bd	0.1	0.7	0.70	0.20	bd	bd	bd	0.8	0.80	bd							46.80
80A	bd	bd	bd	1	1.00	0.17	bd	bd	bd	1.1	1.10	bd	bd	bd	bd	0.9	0.90	bd	48.38
82A	bd	bd	bd	0.8	0.80	0.26	bd	bd	bd	0.6	0.60	bd	bd	bd	bd	0.6	0.60	bd	50.30
83A	bd	bd	bd	0.4	0.40	0.19	bd	bd	bd	0.5	0.50	bd	bd	bd	bd	0.7	0.70	bd	47.12
85C	bd	bd	0.1	1.2	1.20	0.08	bd	bd	bd	1.3	1.30	bd	bd	bd	bd	1.3	1.30	bd	45.29
88B	bd	bd	bd	2.1	2.10	1.85	bd	bd	bd	1.4	1.40	bd	bd	0.05	bd	1	1.05	bd	49.61
90A	bd	bd	bd	0.5	0.50	0.12	bd	bd	bd	0.8	0.80	bd	bd	bd	bd	1	1.00	bd	49.52
Median				0.10	0.60	0.60	0.16	0.18	0.10	0.80	0.80	0.15	0.08	0.10	0.70	0.78	0.1	49.57	
Max				0.20	2.10	2.10	1.85	0.28	0.10	2.10	2.10	0.23	0.14	0.20	2.20	2.20	0.2	66.47	

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)	TPO4 = Total Phosphate	

All nutrient concentrations shown in mg/L

TSI = Trophic State Index, a quick indicator of canal health. 49 sites this quarter scored as GOOD (<60). 5 sites scored FAIR (60-70), and none were POOR (>70). This is an improvement over last quarter and last year.

October

7th Canalwatch

15th State of the Region
Conference
www.swfrpc.org

18th – 24th Ding Darling Days
@ Wildlife Refuge
www.dingdarlingdays.com

23rd – 1st Calusa Blueway
Paddling Festival
www.calusabluewaypaddlingfestival.com

25th Monofilament Madness
www.klcb.org

November

4th Canalwatch
Social at Rotary Park

6th Florida Yards &
Neighborhoods Intro Class @
Rotary Park
549-4606

20th SWFL Water Resources
Conference @ Royal Palm
Yacht Club
awra.caloosahatchee.org

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21st Charlotte Harbor Nature
Festival @ Charlotte Sports
Park in Port Charlotte
www.chnep.org

December

2nd Canalwatch

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