



# Canal Current

A wave of information for Cape Coral's Canalwatch volunteers

Newsletter: 1<sup>st</sup> Quarter 2018

## Environmental News

### Rain Barrel Workshop

The best way to prevent stormwater runoff is to collect it. An age-old practice for collecting and storing rainwater is through the use of a cistern or rain barrel. The Lee County Extension office will be offering a Rain Barrel Workshop on Saturday, July 28<sup>th</sup>. The class will be held from 9:00 to 11:00 am at the Rotary Park Environmental Center. This course is instructed by the Lee County Master Gardeners and is a complementary course to the Florida Yards and Neighborhoods program. The fee for the course is \$45 dollars, but this includes a 55-gallon rain barrel that is ready to be installed.

Pre-registration is recommended. For more information or to register for the course, please call 239-549-4606.



### Questions? Comments? Let us know!

(239)574-0785

Harry: hphillips@capecoral.net

Katie: kmcbride@capecoral.net

## Native Plant profile

### Silver Buttonwood *Conocarpus erectus*

A common landscape plant in both hedge and as a small multi trunk tree, the silver buttonwood thrives in poor soils, low water and even brackish water environments. If left as a small tree, it can grow to 12 to 15 feet. Despite the name, the “button” is derived from its fruits, as they do resemble buttons. The bark is “scaly” and the wood is dense and hard which adds to its strength during tropical weather. The leaves are of a sage green and do have a silver appearance. There is also a green buttonwood, which is similar in form and requirements, but has green leaves and can grow to 35 to 40 feet. While both trees are useful in the home landscape, the silver buttonwood is more common due to its unique silver appearance.



## Rotary Community Garden Nearing Completion

Community gardens are spreading across the nation to give people alternate locations to grow vegetables or flowers. Many cities have adopted the idea and provide at least one community garden for residents to rent plots. Schools are also a popular location for installing gardens. Children are then able to grow fresh vegetables and give back to the community or provide healthy alternatives for their school cafeteria. It can also be a fun learning experience on where their food comes from.



Similarly, The Rotary Clubs of Cape Coral have been diligently working on creating a true gem in the City; a place for the citizens of Cape Coral to grow their own vegetables through the development of the Rotary Community Garden. The garden is located at the North side of City Hall (SE 10<sup>th</sup> St.).



The Rotary Community Garden is scheduled to open just prior to the rental season, which is October 1 - September 30 the following year. Garden plots are 4 foot by 8 foot, raised beds that include irrigation and organic compost. There will also be a limited number of ADA accessible / handicap beds for wheelchairs or for those that have back or posture concerns. In addition to the garden plots, community garden meetings and gardening programs will take place under a beautiful Seminole chickee hut located at the entrance to the garden. The chickee hut was constructed by a local Seminole Native



American, and will provide a covered area for gardening classes and similar educational opportunities.

Residents can rent a plot annually for \$100. However, due to the popularity and potential demand for the garden plots, all interested parties will be placed into a lottery system. If you are interested in renting a plot or would like more information about the garden, please call Rotary Park (239) 549-4606.



# Canalwatch Extra Field Data

## 1<sup>st</sup> Quarter 2018

90A	Jan	Feb	Mar
DO	5.40	5.20	4.80
pH	7.8	7.8	8.0
Temp	15.0	20.0	22.0
Sal	17	-	25

59D	Jan	Feb	Mar
DO	4.30	6.25	4.10
pH	7.6	4.8	7.6
Temp	27.0	21.0	23.0
Sal	10	8	-

59C	Jan	Feb	Mar
DO	4.95	4.90	4.20
pH	7.6	7.8	7.8
Temp	17.0	21.0	23.0
Sal	20	28	30

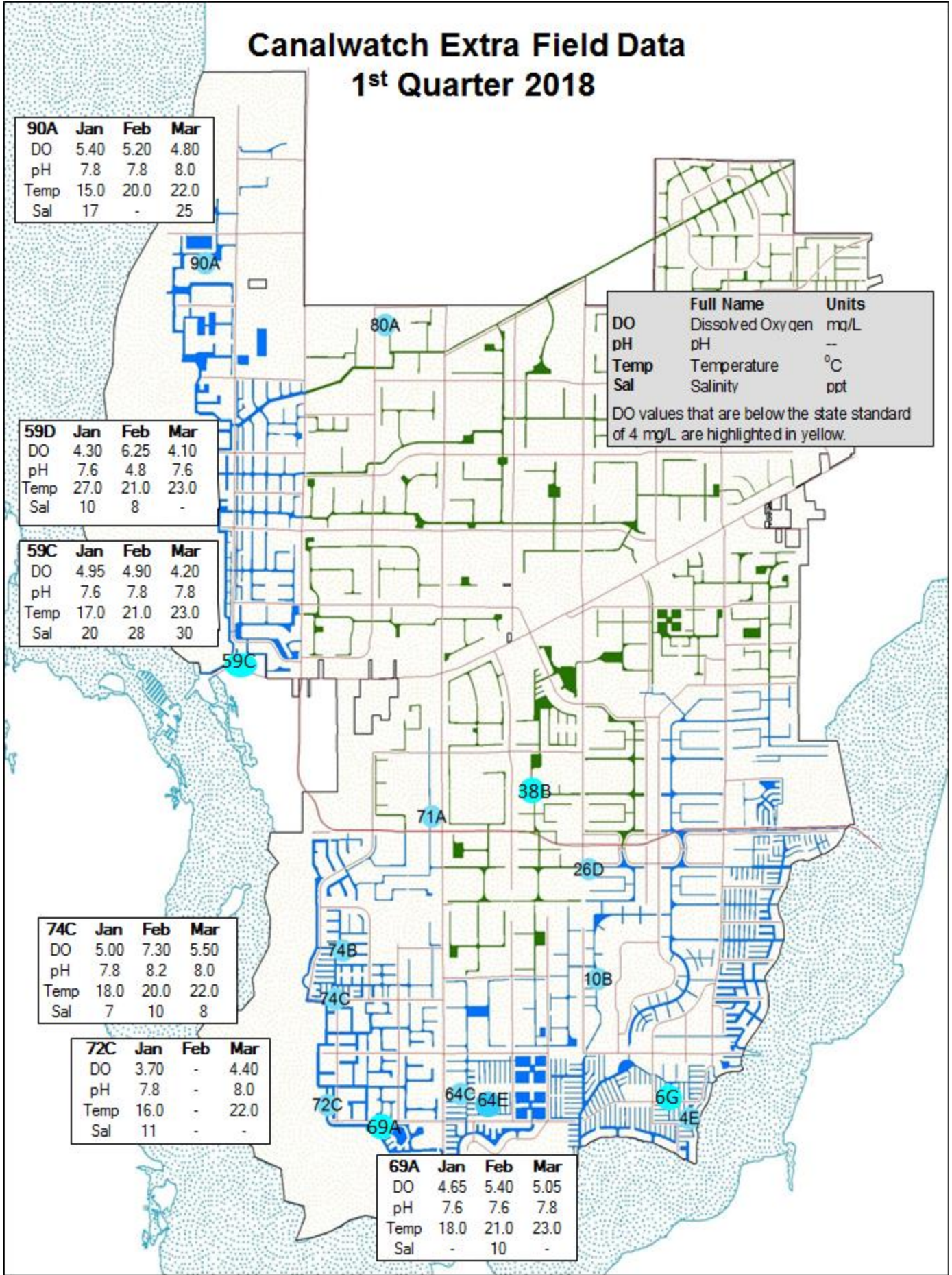
74C	Jan	Feb	Mar
DO	5.00	7.30	5.50
pH	7.8	8.2	8.0
Temp	18.0	20.0	22.0
Sal	7	10	8

72C	Jan	Feb	Mar
DO	3.70	-	4.40
pH	7.8	-	8.0
Temp	16.0	-	22.0
Sal	11	-	-

69A	Jan	Feb	Mar
DO	4.65	5.40	5.05
pH	7.6	7.6	7.8
Temp	18.0	21.0	23.0
Sal	-	10	-

	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.



bd = below detection		benchmark numbers: Marked data are in the highest 20% of values found by Hand et. al, 1988.																	
	January 2018						February 2018						March 2018						Avg TSI
	NO2 <1.0	NO3 <1.0	NH3 none set	TKN 0.8	T-N <2.0	T-PO4 <0.46	NO2 <1.0	NO3 <1.0	NH3 none set	TKN 0.8	T-N <2.0	T-PO4 <0.46	NO2 <1.0	NO3 <1.0	NH3 none set	TKN 0.8	T-N <2.0	T-PO4 <0.46	
3F	bd	bd	<0.1u	0.8	0.8	0.09	bd	bd	<0.1u	0.5	0.5	0.04							47.86
3I							bd	bd	<0.1u	0.4	0.4	0.06	bd	bd	<0.1	0.4	0.4	0.06	41.60
5D	bd	bd	<0.1	0.8	0.8	0.11	bd	bd	<0.1u	0.6	0.6	0.06	bd	bd	<0.1	0.4	0.4	0.05	48.38
6F	bd	bd	<0.1u	0.8	0.8	0.11	bd	bd	<0.1u	0.7	0.7	0.05	bd	bd	<0.1u	0.7	0.7	0.11	52.15
7E	bd	bd	<0.1u	0.7	0.7	0.07	bd	bd	<0.1u	0.7	0.7	0.07	bd	bd	<0.1u	0.6	0.6	0.46	45.08
10C	bd	bd	<0.1u	0.6	0.6	0.13	bd	bd	<0.1u	0.5	0.5	0.04	bd	bd	<0.1u	0.6	0.6	0.14	46.44
11E	bd	bd	<0.1u	0.7	0.7	0.16	bd	bd	<0.1u	0.8	0.8	0.05	bd	bd	<0.1	0.8	0.8	0.06	52.94
12H							bd	0.12	<0.1u	0.8	0.8	0.06	bd	bd	<0.1u	0.7	0.7	0.05	46.06
16E	bd	bd	<0.1u	0.7	0.7	0.02	bd	bd	<0.1u	0.6	0.6	0.02	bd	bd	<0.1u	0.5	0.5	0.09	40.40
16H							bd	bd	<0.1u	0.6	0.6	0.03							
18J	bd	bd	<0.1u	0.6	0.6	0.04	bd	bd	<0.1u	0.5	0.5	0.02	bd	bd	<0.1u	0.7	0.7	0.03	55.46
18K	bd	bd	<0.1u	0.7	0.7	0.13	bd	bd	<0.1u	0.9	0.9	0.05	bd	bd	<0.1u	0.8	0.8	0.03	61.29
18L							bd	bd	<0.1u	0.7	0.7	0.07	bd	bd	<0.1u	0.6	0.6	0.08	53.16
18M	bd	bd	<0.1u	0.6	0.6	0.04	bd	bd	<0.1u	0.7	0.7	0.07	bd	bd	<0.1u	0.8	0.8	0.05	53.03
19D	bd	bd	<0.1u	0.7	0.7	0.12	bd	bd	<0.1u	0.7	0.7	0.05	bd	bd	<0.1u	0.7	0.7	0.07	55.76
19K	bd	bd	<0.1u	0.7	0.7	0.14	bd	bd	<0.1u	0.6	0.6	0.06							58.01
21D	bd	bd	<0.1u	0.8	0.8	0.11	bd	bd	<0.1u	0.6	0.6	0.10	bd	bd	<0.1u	0.6	0.6	0.06	49.93
28D	bd	bd	<0.1u	0.7	0.7	0.03	bd	bd	<0.1u	1.0	1.0	0.02							47.49
38B	bd	bd	<0.1u	0.8	0.8	0.06	bd	bd	<0.1u	0.7	0.7	0.03							58.30
41A	bd	bd	<0.1u	0.6	0.6	0.32	bd	bd	<0.1u	0.6	0.6	0.03	bd	bd	<0.1u	0.6	0.6	0.02	38.56
41B	bd	bd	<0.1u	0.6	0.6	0.69	bd	bd	<0.1u	0.7	0.7	0.03	bd	bd	<0.1u	0.7	0.7	0.02	39.07
45D	bd	bd	<0.1u	0.5	0.5	0.03	bd	bd	<0.1u	0.5	0.5	0.02							39.43
48A	bd	bd	0.1	0.6	0.6	0.03							bd	bd	<0.1u	0.5	0.5	0.02	52.55
52B	bd	bd	<0.1u	0.6	0.6	0.05	bd	bd	<0.1u	0.6	0.6	0.02	bd	bd	<0.1u	0.7	0.7	0.02	42.63
58B	bd	bd	0.1	2.9	2.9	0.11	bd	bd	<0.1u	0.5	0.5	0.05	bd	bd	<0.1u	0.9	0.9	0.03	52.68
58I	bd	bd	0.2	1.0	1.0	0.16	bd	bd	<0.1u	0.5	0.5	0.05	bd	bd	<0.1u	0.4	0.4	0.04	51.06
58J	bd	bd	0.2	2.9	2.9	0.13	bd	bd	<0.1u	0.5	0.5	0.05	bd	bd	<0.1u	0.6	0.6	0.03	55.81
59C	bd	bd	0.1	0.7	0.7	0.11	bd	bd	<0.1u	0.4	0.4	0.04	bd	bd	<0.1u	0.7	0.7	0.02	47.20

59D	bd	bd	0.4	0.9	0.9	0.14	bd	bd	<0.1u	0.4	0.4	0.06	bd	bd	0.09	0.7	0.7	0.78	46.90
64B	bd	bd	<0.1u	0.6	0.6	0.10													45.42
65C	bd	bd	<0.1u	0.6	0.6	0.10	bd	bd	<0.1u	0.6	0.6	0.05							48.01
65E	bd	bd	<0.1u	0.6	0.6	0.09	bd	bd	0.1	0.8	0.8	0.03	bd	bd	0.5	1.2	1.2	0.05	46.64
66D	bd	bd	<0.1u	0.7	0.7	0.06	bd	bd	<0.1u	0.8	0.8	0.02	bd	bd	0.7	0.6	0.6	0.02	39.79
69A	bd	bd	<0.1u	0.7	0.7	0.13	bd	bd	<0.1	1.0	1.0	0.08	bd	bd	0.8	0.8	0.8	0.08	56.56
69D	bd	bd	<0.1	0.6	0.6	0.15	bd	bd	<0.1u	0.7	0.7	0.09	bd	bd	0.6	0.7	0.7	0.09	50.41
71B	bd	bd	<0.1	0.6	0.6	0.08	bd	bd	<0.1u	0.7	0.7	0.04	bd	bd	0.5	0.7	0.7	0.06	49.61
72C	bd	bd	<0.1u	0.7	0.7	0.09							bd	bd	0.8	0.6	0.6	0.04	51.76
72E							bd	bd	<0.1u	0.6	0.6	0.04	bd	bd	0.7	0.6	0.6	0.04	48.05
74C	bd	bd	<0.1u	0.7	0.7	0.11	bd	bd	<0.1u	0.6	0.6	0.02	bd	bd	0.7	1.1	1.1	0.06	46.68
82A							bd	bd	<0.1u	0.6	0.6	0.02	bd	bd	0.5	0.8	0.8	0.24	52.20
83C							bd	bd	<0.1u	0.6	0.6	0.16	bd	bd	0.6	0.7	0.7	0.48	48.10
89A	bd	bd	0.1	0.8	0.8	0.14	bd	bd	<0.1u	1.0	1.0	0.02	bd	bd	0.5	0.8	0.8	0.07	56.70
90A	bd	bd	<0.1u	0.7	0.7	0.04	bd	bd	0.1	0.6	0.6	0.05	bd	bd	0.6	1.0	1.0	0.06	52.14
<b>Median</b>	<b>bd</b>	<b>0.10</b>	<b>0.70</b>	<b>0.70</b>	<b>0.11</b>	<b>bd</b>	<b>0.10</b>	<b>0.60</b>	<b>0.60</b>	<b>0.05</b>	<b>bd</b>	<b>0.60</b>	<b>0.70</b>	<b>0.70</b>	<b>0.06</b>	<b>48.99</b>			
<b>Max</b>	<b>0.00</b>	<b>0.40</b>	<b>2.90</b>	<b>2.90</b>	<b>0.69</b>	<b>0.12</b>	<b>0.10</b>	<b>1.00</b>	<b>1.00</b>	<b>0.16</b>	<b>0.00</b>	<b>0.80</b>	<b>1.20</b>	<b>1.20</b>	<b>0.78</b>	<b>61.29</b>			

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. TSI = Trophic State Index, a quick indicator of canal health. 42 sites this quarter scored as GOOD (<60). one sites scored FAIR (60-70), and zero scored POOR (>70). first quarter 2018 water quality ended with a deluge just before the beginning of the dry season. Hurricane Irma gave the area ample rainfall. The dry season had sporadic rain events and at the time of this reporting this lack of stormwater has created low water levels, once again, in many of the freshwater basin areas. Watering restrictions are still effect during these dryer months, but the month of May usually signifies a return to the wetter summertime pattern.

## Eco-Adventure Nature Camp

Rotary Park Environmental Center offers a nature based camp for children ages 7-12. Through the camp, children are involved in fun and educational experiences while learning about nature. Introducing nature and ecological concepts to young children gets them connected to the environment at an early age and promotes nature stewardship throughout their life. Some of the themes and topics discussed in the Eco-Adventure Nature Camp includes Nature Explore, Shark Week, and Going Green. Rotary Park Environmental Center is keen on making kids green!



**Reminder: July's sample collection will be on Thursday, July 5<sup>th</sup> due to the 4<sup>th</sup> Holiday. Have a happy and safe, Independence Day.**

---

City of Cape Coral  
Environmental Resources  
P.O. BOX 150027