Canal Current

A wave of information for Cape Coral's Canalwatch volunteers

Newsletter: 2nd Quarter 2019

Environmental News

Construction Continues on the C-43 Reservoir

Construction for the Caloosahatchee River (C-43) West Basin Storage Reservoir Project for the Comprehensive Everglades Restoration Plan, (CERP) continues. Originally planned in 2008, the reservoir is located on 10,700 acres of former farmland west of Labelle in Hendry County. Once completed, it will operate by storing local runoff as well as Lake Okeechobee releases during the wet season, reducing lake discharges reaching the estuary. Additionally, it will help distribute flow to the Caloosahatchee River during the dry season, which provides needed flows for improved salinity balance.
The completion of the reservoir is anticipated to be completed by 2022.
The cost of the project is estimated at over $500 million. Funding for the project is provided by the South Florida Water Management District, Save Our Everglades Trust Fund, and a grant from the Land and Water Conservation Fund.
For more information, please visit;
https://www.sfwmd.gov/our-work/northern-everglades

Questions? Comments? Let us know!
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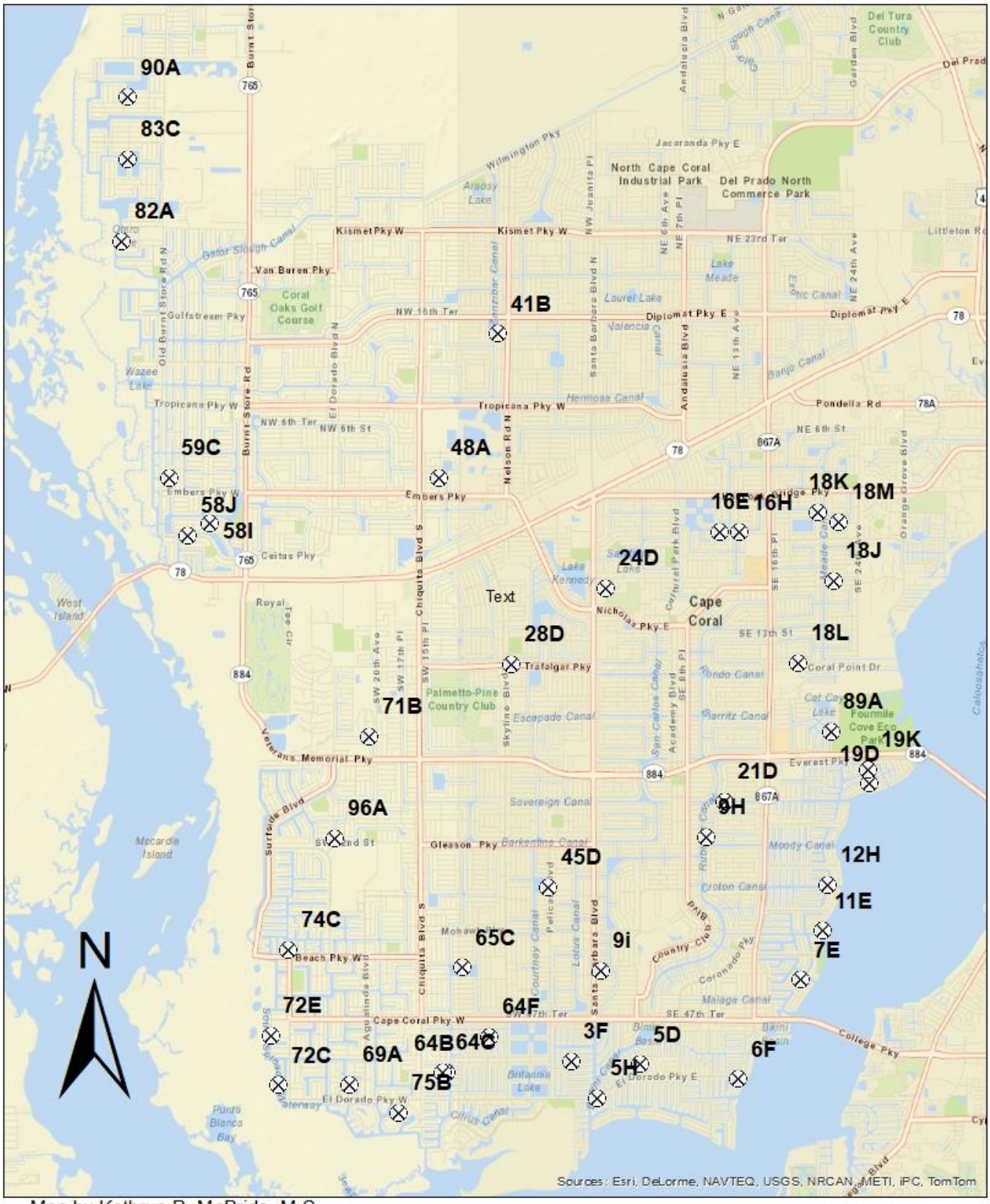
Native Plant profile

Bursera simaruba
Gumbo Limbo

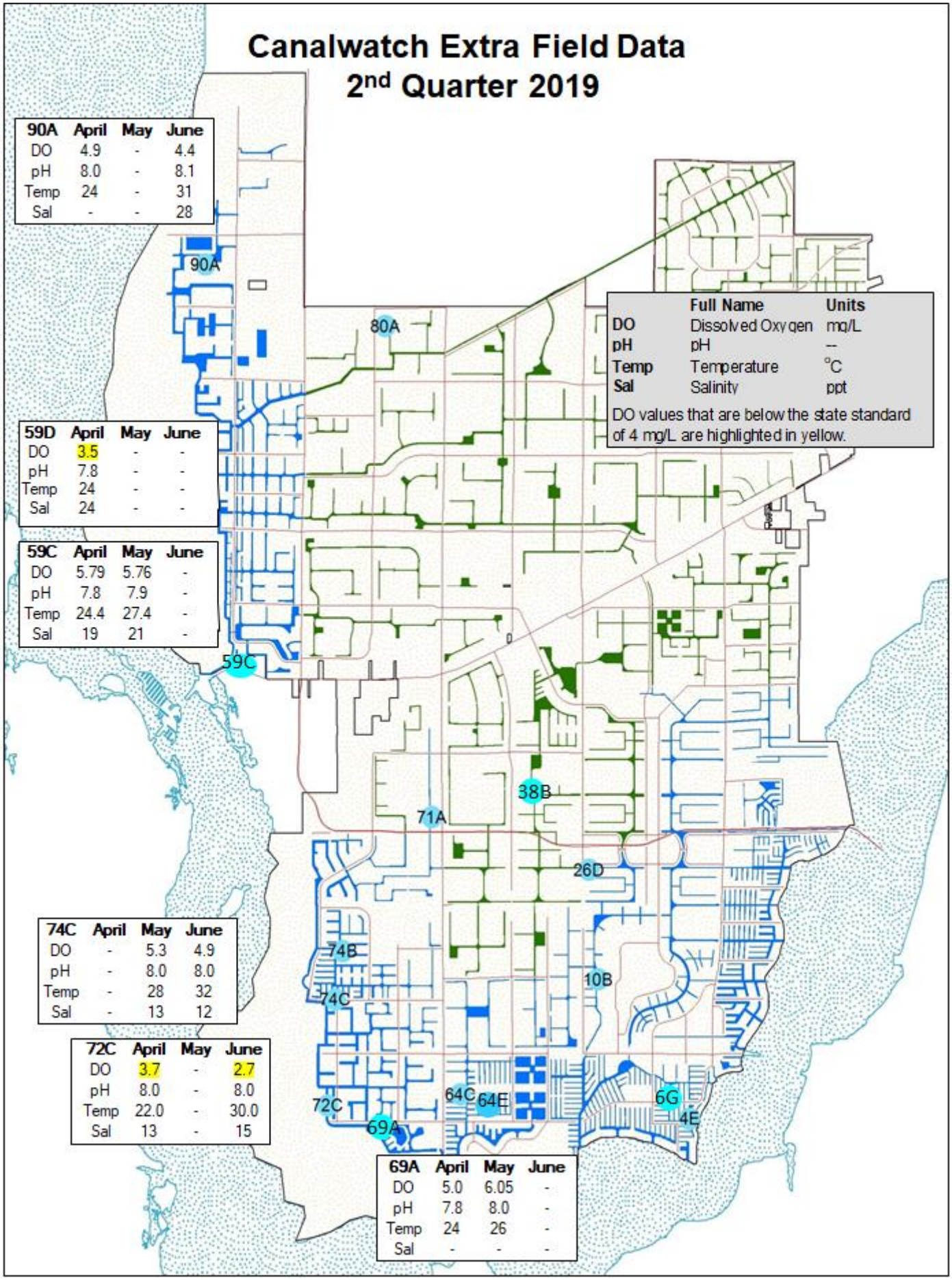
The Gumbo Limbo tree is an easily recognizable tree in the South Florida landscape. It's red pealing bark often lends to its quirky name, the tourist tree. Namely, sunburned tourist.
Found throughout tropical regions in the Americas, this native tree is fast growing, can tolerate dry, sandy soils, and is adaptive to hurricanes and tropical storms.
The Gumbo Limbo is often found on barrier islands (such as our tourists) or maritime forest. Being at the forefront when high winds occur, limbs in the Gumbo Limbo canopy will snap to "self-prune". A beneficial advantage than to trees that topple over during tropical systems. It's better to lose a few branches than to uproot. Those branches can be planted, broken side down, to propagate more Gumbo Limbos.

Current Cape Coral Canalwatch Stations



Map by Kathryn R. McBride, M.S.
Enivronmental Resources Division of
Public Works, City of Cape Coral

0 0.425 0.85 1.7 2.55 3.4
Miles


Canalwatch Extra Field Data
2nd Quarter 2019
90A April May June
DO 4.9 - 4.4
pH 8.0 - 8.1
Temp 24 - 31
Sal - - 28
90A
80A
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.
59D April May June
DO 3.5 - -
pH 7.8 - -
Temp 24 - -
Sal 24 - -
59C April May June
DO 5.79 5.76 -
pH 7.8 7.9 -
Temp 24.4 27.4 -
Sal 19 21 -
59C
38B
71A
26D
74C April May June
DO - 5.3 4.9
pH - 8.0 8.0
Temp - 28 32
Sal - 13 12
74B
74C
10B
72C April May June
DO 3.7 - 2.7
pH 8.0 - 8.0
Temp 22.0 - 30.0
Sal 13 - 15
72C
64C
64E
6G
4E
69A
69A April May June
DO 5.0 6.05 -
pH 7.8 8.0 -
Temp 24 26 -
Sal - - -

	bd = below detection				benchmark numbers: Marked data are in the highest 20% of values found by Hand et. al, 1988.													
	April 2019						May 2019						June 2019					
	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	0.03	0.03	0.05	1.1	1.1	0.04	0.03	0.03	0.05	0.4	0.4	0.06						
5D	0.03	0.03	0.05	0.7	0.7	0.04	0.03	0.03	0.05	0.7	0.7	0.10	0.03	0.03	0.1	0.6	0.6	0.12
5H	0.03	0.03	0.05	0.5	0.5	0.04												
6F	0.03	0.03	0.05	0.5	0.5	0.05	0.03	0.03	0.05	0.6	0.6	0.14	0.03	0.03	0.05	0.7	0.7	0.19
7E	0.03	0.03	0.05	0.6	0.6	0.06	0.03	0.03	0.05	0.6	0.6	0.17						
9I													0.03	0.03	0.05	0.7	0.7	0.21
11E	0.03	0.03	0.05	0.6	0.6	0.07							0.03	0.03	0.05	0.7	0.7	0.23
12H	0.03	0.03	0.05	0.6	0.6	0.06	0.03	0.03	0.05	0.5	0.5	0.17						
16E	0.03	0.03	0.05	0.4	0.4	0.01	0.03	0.03	0.05	0.5	0.5	0.01	0.03	0.03	0.05	0.6	0.6	0.01
16H													0.03	0.03	0.05	0.6	0.6	0.02
18J	0.03	0.03	0.05	0.5	0.5	0.03	0.03	0.03	0.05	0.6	0.6	0.03	0.03	0.03	0.05	0.7	0.7	0.03
18K	0.03	0.03	0.05	0.8	0.8	0.02												
18L	0.03	0.03	0.05	0.7	0.7	0.82	0.03	0.03	0.05	0.7	0.7	0.26	0.03	0.03	0.05	0.8	0.8	0.33
18M	0.03	0.03	0.05	0.8	0.8	0.03							0.03	0.03	0.05	0.7	0.7	0.11
19D	0.03	0.03	0.05	0.6	0.6	0.07	0.03	0.03	0.05	0.7	0.7	0.20	0.03	0.03	0.05	0.7	0.7	0.28
19K	0.03	0.03	0.05	0.6	0.6	0.07	0.03	0.03	0.05	0.7	0.7	0.22	0.03	0.03	0.05	0.7	0.7	0.28
21D	0.03	0.03	0.05	0.6	0.6	0.04	0.03	0.03	0.05	0.6	0.6	0.16	0.03	0.03	0.05	3.2	3.2	0.26
24D							0.03	0.03	0.05	0.6	0.6	0.08	0.03	0.03	0.05	0.6	0.6	0.03
28D	0.03	0.03	0.05	0.4	0.4	0.01	0.03	0.03	0.05	0.7	0.7	0.04	0.03	0.05	0.05	0.7	0.7	0.04
41B							0.03	0.03	0.05	0.5	0.5	0.01	0.03	0.03	0.05	0.6	0.6	0.01
45D	0.03	0.03	0.05	0.4	0.4	0.01	0.03	0.03	0.05	0.5	0.5	0.02						
48A	0.03	0.03	0.05	0.5	0.5	0.02												
58I	0.03	0.03	0.05	0.5	0.5	0.04	0.03	0.03	0.05	0.5	0.5	0.03	0.03	0.03	0.05	0.8	0.8	0.02
58J	0.03	0.03	0.05	0.6	0.6	0.04							0.03	0.03	0.05	1.3	1.3	0.03
59C	0.03	0.03	0.05	0.5	0.5	0.01	0.03	0.03	0.05	0.4	0.4	0.16						

	Avg TSI
3F	54.05
5D	48.78
5H	46.24
6F	47.98
7E	44.67
9I	48.94
11E	49.46
12H	47.05
16E	24.43
16H	41.60
18J	53.47
18K	37.32
18L	52.38
18M	48.58
19D	50.96
19K	48.74
21D	58.66
24D	45.63
28D	48.98
41B	24.43
45D	36.95
48A	46.62
58I	43.76
58J	44.38
59C	34.18

59D	0.03	0.03	0.05	1.0	1.0	0.03													46.46
64B							0.03	0.03	0.05	0.3	0.3	0.01							28.29
65C	0.03	0.03	0.05	0.5	0.5	0.04	0.03	0.03	0.05	0.6	0.6	0.08	0.03	0.03	0.05	0.9	0.9	0.16	32.31
69A	0.03	0.03	0.05	0.7	0.7	0.08	0.03	0.03	0.05	0.9	0.9	0.10							52.11
71B	0.03	0.03	0.05	0.6	0.6	0.02	0.03	0.03	0.05	0.6	0.6	0.12	0.03	0.03	0.05	0.8	0.8	0.05	51.65
72C	0.03	0.03	0.05	0.5	0.5	0.05							0.03	0.03	0.05	0.7	0.7	0.06	48.62
72E	0.03	0.03	0.05	0.5	0.5	0.04													42.31
74C							0.03	0.03	0.05	0.4	0.4	0.03	0.03	0.03	0.05	0.7	0.7	0.11	45.15
75B													0.03	0.03	0.05	0.6	0.6	0.05	39.09
82A	0.03	0.03	0.05	0.5	0.5	0.01	0.03	0.03	0.05	0.8	0.8	0.11	0.03	0.03	0.05	0.8	0.8	0.02	49.32
83C	0.03	0.03	0.05	0.4	0.4	0.01	0.03	0.03	0.05	0.6	0.6	0.02	0.03	0.03	0.05	0.9	0.9	0.02	55.64
89A	0.03	0.03	0.05	0.8	0.8	0.12	0.03	0.03	0.05	0.9	0.9	0.05	0.03	0.03	0.05	0.8	0.8	0.31	57.78
90A	0.03	0.03	0.05	0.7	0.7	0.02							0.03	0.03	0.1	1.2	1.2	0.01	39.53
96A	0.03	0.03	0.05	0.8	0.8	0.03	0.03	0.03	0.05	0.2	0.2	0.27	0.03	0.03	0.05	0.7	0.7	0.08	40.43
Median		**bd**	**0.05**	**0.60**	**0.60**	**0.04**		**bd**	**0.05**	**0.60**	**0.60**	**0.09**		**bd**	**0.05**	**0.70**	**0.70**	**0.06**	**46.62**
Max		**0.03**	**0.05**	**1.10**	**1.10**	**0.82**		**0.03**	**0.05**	**0.90**	**0.90**	**0.27**		**0.05**	**0.10**	**3.20**	**3.20**	**0.33**	**58.66**

NO2 = Nitrite (inorganic)	TKN = Total Kjeldahl Nitrogen (organic + NH4)
NO3 = Nitrate (inorganic)	TN = Total Nitrogen (inorganic + organic)
NH3 = Ammonia (inorganic)	TPO4 = Total Phosphate

All nutrient concentrations shown in mg/L

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.

TSI = Trophic State Index, a quick indicator of canal health.TSI = Trophic State Index, a quick indicator of canal health.
39 sites this quarter scored as GOOD (<60). zero sites scored FAIR (60-70), and zero scored POOR (>70).
Second quarter 2019 water quality maintained an improving trend well into the dry season. The Caloosahatchee River continued its recover from the previous summer's blue green algae crisis. Cape Coral's canal waterways also saw benefits with continued water clarity and ideal saline conditions for the tidaly influenced canals. The above TSI values for all sites reflects that many sites recorded ideal Secchi disk values for the first half of 2019.

Upcoming Events

Free Gardening Series
Offered by the Lee County Master Gardeners

Landscape Planning Tips	February 14th
Color in the Native Garden	March 20th
Composting and Mulching	April 24th

All programs held on Fridays (on selected dates) from 9:00 am to 10:30 am at Rotary Park Environmental Center. 5505 Rose Garden Rd. Please register in advance by calling 239-549-4606 or
Emailing at rotaryparkinfo@capecoral.net.

Florida Friendly Landscaping

Upcoming Introductory Classes
at Rotary Park Environmental Center

Wednesday February 26th 1:00 pm to 3:00 pm
Saturday March 21st 10:00 am to 12:00 pm
Saturday April 11th 1:00 pm to 3:00 pm

Please register in advance by calling 239-549-4606 or
Emailing at rotaryparkinfo@capecoral.net.

City of Cape Coral
Environmental Resources Division
C/O Canalwatch Volunteer Program
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Cape Coral, FL 33915