



# Canal Current

A wave of information for Cape Coral's Canalwatch volunteers

Newsletter: 4<sup>th</sup> Quarter 2022

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## Environmental News

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### 25<sup>th</sup> Anniversary of the Great American Cleanup.

It's time for spring cleaning on a national level. Keep America Beautiful, a leading not for profit that engages the public in litter awareness and encourages communities to band together to show support for healthy communities and a healthy environment through debris cleanup is celebrating its 25th annual Great American Cleanup.

This annual cleanup event is one of the nation's largest. Its goal is to bring communities throughout the nation together to show their support for beautification and neighborhood improvement.

This area's local affiliate, Keep Lee County Beautiful (KLCB) will be



hosting the Great American Cleanup on April 1st from 8 to 11 am throughout Lee County. For more information on this event, please visit [KLCB.org](http://KLCB.org). Volunteers of all ages are welcome, whether it be an individual, family, neighborhood association, school, place of worship, or business. Please consider joining with KLCB's for the 25th anniversary Great American Cleanup.



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### Questions? Comments? Let us know!

(239) 574-0742

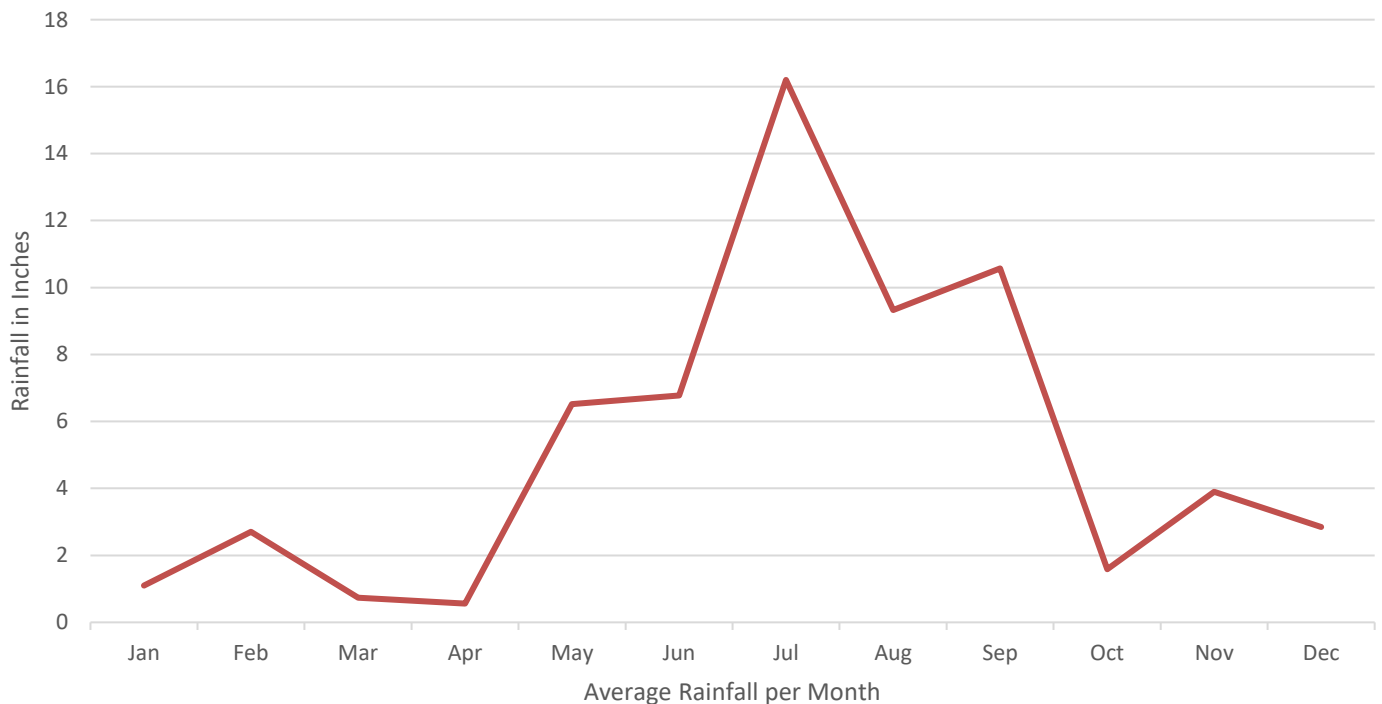
Harry: [hphillips@capecoral.gov](mailto:hphillips@capecoral.gov)

## 2022 Year in Review

- In 2022, we received 302 Canalwatch samples. Thank you for all your hard work and participation!
- Also in 2022, we received 102 Chlorophyll samples in addition to our regular samples.
- We trained 3 new volunteers this year. Welcome!
- There are currently 41 active stations.

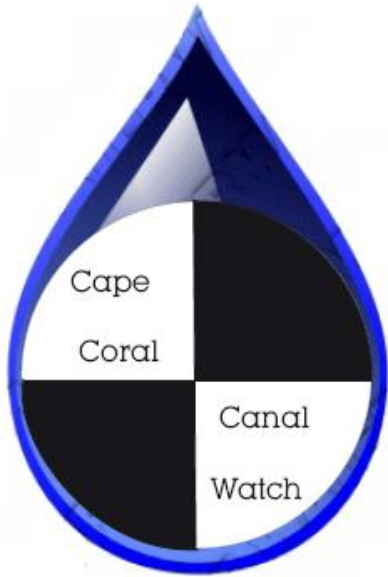
**Total average rainfall for Cape Coral for the past year was about 61.25 inches**

Canalwatch Rainfall Averages by Month



*Rainfall data is an average of each reporting Canalwatch site per month. October data includes totals from NOAA due to lack of Canalwatch data collection in Hurricane Ian's aftermath.*

Why is rainfall data important to water quality? Stormwater runoff produced by rain flows over impervious surfaces, such as streets, parking lots, sidewalks, rooftops, and does not permeate into the ground. Runoff can pick up pollutants like trash, sediment, fertilizers, and other chemicals and transport it into receiving waterbodies. In the urban environment, these pollutants are ever present. Stormwater structures such as swales, ditches and catch basins can collect and lessen the impact of pollution from illegal dump sites, construction sites, and lawns, but it's best to prevent pollution at its source. In effect, pollution prevention is key to good water quality.



## Please join us for the 20<sup>th</sup> annual Canalwatch Luncheon

April 5th, 2023

10 am - 1:00 pm

At Rotary Park

Environmental Center (inside)

5505 Rose Garden Rd.

- Water sample drop-off. Meet and greet other volunteers near you and throughout Cape Coral
- BBQ Lunch will be provided
- The following Special Speakers will present on water quality topics, with discussion to follow:

***Prof. Mike Parsons and his team, Florida Gulf Coast University Harmful Algal Blooms***

***Eric Milbrandt, PhD, Sanibel Captiva Conservation Foundation Oyster Restoration in Southwest Florida***

- Environmental Resources will present some of the city's water quality initiatives and setup a Rain barrel Raffle
- Please RSVP to Harry Phillips, 239-574-0742 or [hphillips@capecoral.gov](mailto:hphillips@capecoral.gov) by March 22<sup>nd</sup>.

*Kindly let us know if you will be joining us at Rotary Park or if your bottle for May should be at the usual drop off location.*

WE HOPE YOU CAN JOIN US!

	bd = below detection		benchmark numbers: Marked data are in the highest 20% of values found by Hand et. al, 1988.																
	October (Due to Hurricane Ian, no data)						November 2022						December 2022						
	NO2	NO3	NH3	TKN	T-N	T-PO4	NO2	NO3	NH3	TKN	T-N	T-PO4	NO2	NO3	NH3	TKN	T-N	T-PO4	Avg
	<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		TSI
4-2A							0.1	0.08	0.63	1.11	1.2	0.31	0.1	0.19	0.1	1.0	1.19	0.2	59.53
7E							0.1	0.2	0.17	0.89	1.1	0.14	0.1	0.22	0.1	0.5	0.72	0.1	54.74
9H							0.1	0.2	0.24	0.98	1.2	0.18	0.1	0.15	0.1	0.4	0.55	0.2	51.99
12H							0.1	0.08	0.05	1.03	1.1	0.06	0.1	0.21	0.1	0.5	0.71	0.1	51.91
15G													0.1	0.1	0.2	0.1	0.2	0.1	24.13
16E													0.1	0.01	0.1	0.4	0.41	0.1	38.35
16I							0.1	0.01	0.07	0.98	1.0	0.08	0.1	0.01	0.1	0.2	0.21	0.2	42.32
18K													0.1	0.02	0.1	0.7	0.7	0.1	55.28
18L													0.1	0.18	0.1	0.9	1.1	0.1	59.87
18M							0.1	0.02	0.07	1.05	1.1	0.06	0.1	0.05	0.1	0.3	0.4	0.1	46.23
19D							0.1	0.2	0.1	1.30	1.5	0.21	0.1	0.24	0.1	0.5	0.74	0.1	53.12
21D							0.1	0.1	0.1	1.00	1.0	0.32	0.1	0.11	0.1	0.6	0.71	0.1	52.61
21I							0.1	0.05	0.1	0.87	0.9	0.02	0.1	0.02	0.1	0.6	0.6	0.1	46.11
24D							0.1	0.01	0.016	0.96	1.0	0.07	0.1	0.01	0.1	0.1	0.11	0.1	48.56
30D							0.1	0.02	0.06	1.14	1.2	0.02	0.1	0.03	0.1	0.1	0.13	0.1	26.46
30E							0.1	0.03	0.06	1.06	1.1	0.02	0.1	0.05	0.1	0.1	0.2	1.0	31.18
44A							0.1	0.01	0.04	0.97	1.0	0.02							43.38
44B													0.1	0.07	0.1	0.7	0.8	1.0	50.82
45D													0.1	0.03	0.1	0.1	0.13	0.1	34.67
48A													0.1	0.02	0.1	0.1	0.1	0.1	37.54

50B							0.1	0.04	0.09	1.36	1.4	0.08	0.1	0.03	0.1	0.1	0.13	0.1	31.12
64H							0.1	0.01	0.55	1.19	1.2	0.07	0.1	0.08	0.1	0.1	0.18	0.2	57.72
70H							0.1	0.1	0.2	0.94	1.0	0.11	0.1	0.01	0.1	0.1	0.11	0.1	35.87
72C							0.1	0.08	0.16	0.96	1.0	0.19	0.1	0.09	0.1	0.1	0.19	0.1	44.94
74C													0.1	0.01	0.1	0.1	0.11	0.1	26.99
74G							0.1	0.02	0.06	0.73	0.8	0.22							49.72
82A							0.1	0.01	0.05	0.96	1.0	0.08	0.1	0.01	0.1	0.1	0.11	0.1	50.4
94C							0.1	0.03	0.1	4.11	4.1	0.02	0.1	0.01	0.1	0.3	0.31	1.0	35.07
Median		####	####	####	####	####		0.04	0.10	0.99	1.10	0.08		0.04	0.10	0.25	0.26	0.10	46.17
Max		0.00	0.00	0.00	0.00	0.00		0.20	0.63	4.11	4.10	0.32		0.24	0.20	1.00	1.19	1.00	59.87

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)	TPD4 = Total Phosphate	

All nutrient concentrations shown in mg/L

TSI = Trophic State Index, a quick indicator of canal health. 28 sites this quarter scored as GOOD (<60). Zero site scored FAIR (60-70), and zero scored POOR (>70). 4th quarter 2022 water quality continued to maintain good standing despite the stormwater influence from Hurricane Ian. However, if data collection would have occurred in October, it may have shown significantly different results. Even in November and December some spikes in Nitrogen and Phosphorus were evident at a few sites. Hurricane Ian dumped plenty of rainfall just before the end of the wet season. However, the lack of stormwater since then has lead to low water levels in many of the freshwater basin areas. Watering restrictions are in effect during the spring.

For up-to-date City of Cape Environmental Resources Division water quality data visit  
[https://www.capecoral.net/departments/public\\_works/quarterly\\_water\\_quality\\_reports.php](https://www.capecoral.net/departments/public_works/quarterly_water_quality_reports.php)



**Canalwatch April Luncheon (see attached flyer)**  
**Wednesday, April 1<sup>st</sup> 10am to 1pm**

**Florida Native Plant Sale  
And Rain Barrel Workshop  
Saturday, April 22<sup>nd</sup> 9am to 2 pm**

Earth Day Plant Sale on Saturday, April 22nd at Rotary Park (5505 Rose Garden Road). Shop from a variety of native trees, shrubs, flowers, grasses, butterfly plants, and tropical edibles, too.

Plant experts will be on hand to answer questions and help you choose the right plant for the right place. Come early for the best selection.

For more information, call Rotary Park at 239-549-4606

Rain barrels are a great way to reduce stormwater runoff and save water for a dry season. In this workshop led by Lee County Master Gardeners, you will learn how to make and install a rain barrel to use at home. The class fee includes a pre-assembled rain barrel and is held on the same day as the native plant sale. Advance registration and payment are required as a limited number of barrels are available.

For more information, call Rotary Park at 239-549-4606



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