Quarterly Water Test Results

Second Quarter 2022

Windstar

Ponds 3, 5, 7, 9, 11, 16, 20, 22, and 8 (SS-2, SS-3, SS-4, SS-8S)

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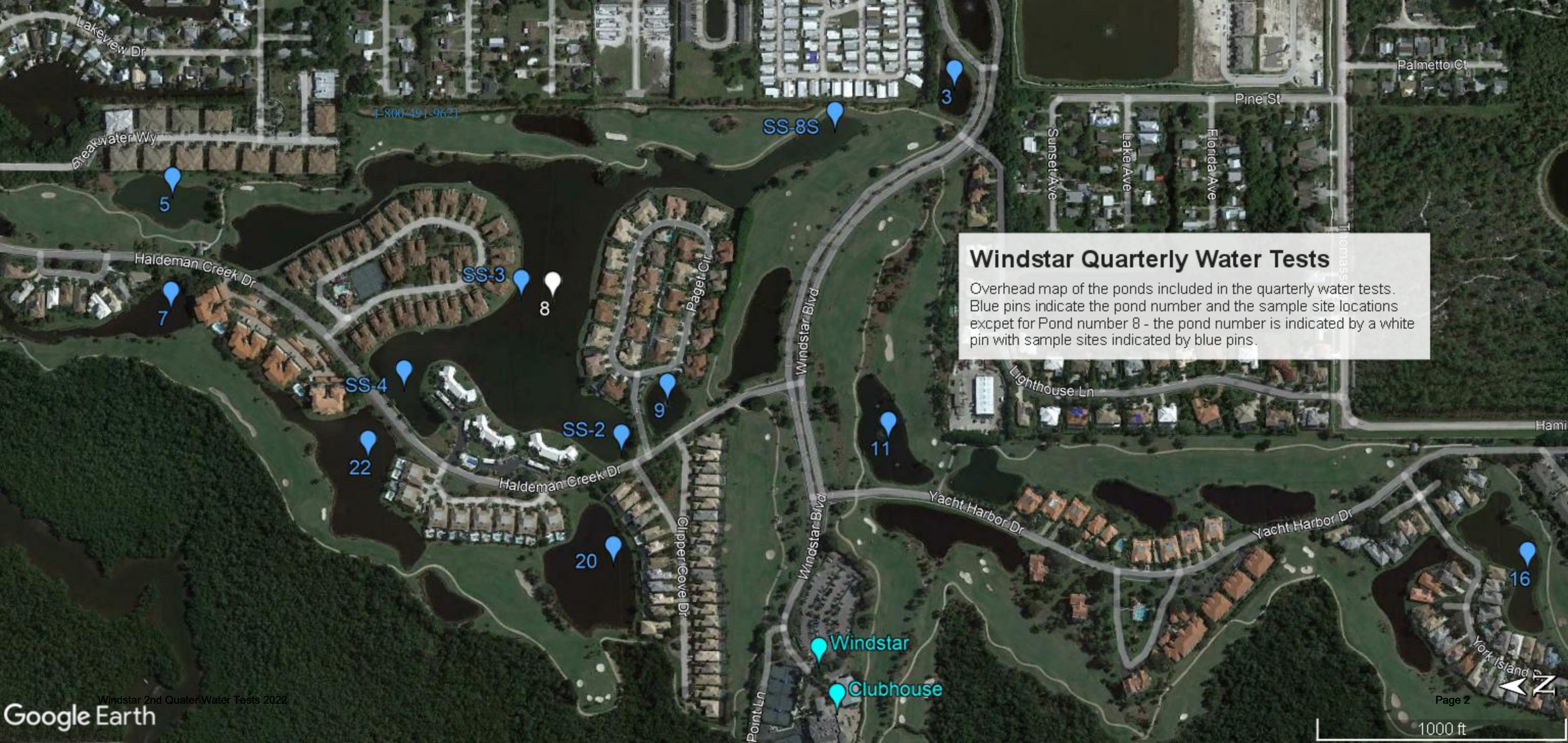
292 S. Military Trail – Deerfield Beach, FL 33442
Locations in: Deerfield Beach, Fort Myers, Port St. Lucie, and Clearwater/Tampa


Windstar Quarterly Water Tests
Overhead map of the ponds included in the quarterly water tests. Blue pins indicate the pond number and the sample site locations excpet for Pond number 8 - the pond number is indicated by a white pin with sample sites indicated by blue pins.
1-800-491-9621
Lakeview Dr
Breakwater Wy
Haldeman Creek Dr
Pagel Cir
Windstar Blvd
Pine St
Palmetto Ct
Sunset Ave
Lake Ave
Florida Ave
Thomas
Lighthouse Ln
Yacht Harbor Dr
Clipper Cove Dr
Point Ln
York Island Dr
Hami
SS-8S
SS-3
SS-4
SS-2
3
5
7
8
9
11
16
20
22
Windstar
Clubhouse
N
1000 ft
Google Earth

Water test analysis descriptions

Total Phosphorous (TP)

Is the measurement of all forms of phosphorous; inorganic, organic, particulate and dissolved. Excess phosphorous is the prime contributor to eutrophication in most water systems. Measuring the amount of phosphorus indicates how productive and susceptible to algae blooms the pond is.

Total Nitrogen (TN)

An important test indicating the concentration of organic and inorganic forms of nitrogen that are in the water column. Nitrogen is one of the primary nutrients required by plants and algae for growth. At high levels, and in combination with phosphorous, plant and algae growth can excel to undesirable levels.

Chlorophyll-a

Determines the biomass of planktonic algae (phytoplankton) in the waterbody. High concentrations are the direct result of large amounts of nutrients that are available in the water column. An important test to indicate the productivity and trophic status of a pond.

Temperature (°F)

Is a very important measurement and greatly influences the daily chemistry of a pond. The higher the temperature (to a point) the more biological activity and growth. Warmer water temperatures hold less oxygen, and could trigger a fish kill in a nutrient rich pond.

Electrical Conductivity (EC)

Water has the ability to dissolve many substances as it moves across a watershed. This measurement is the number of dissolved solids or salts that have dissolved in a waterbody. This test is a general indicator of the overall health of the pond. Variations from its normal range may indicate an abnormal amount of pollution e.g., phosphorous, nitrogen, etc. that has entered the pond.

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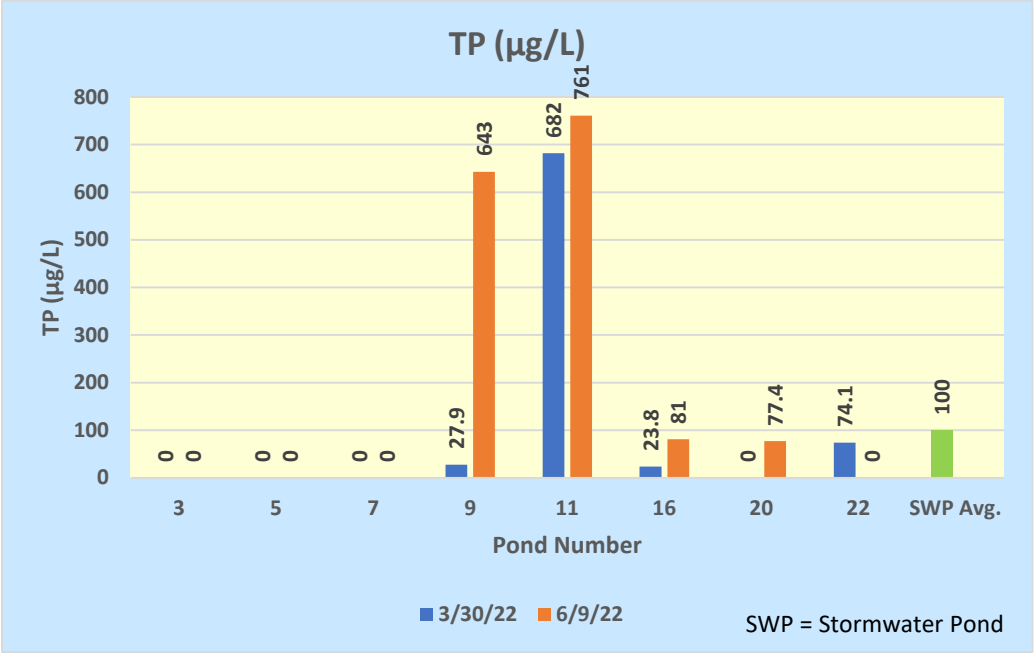
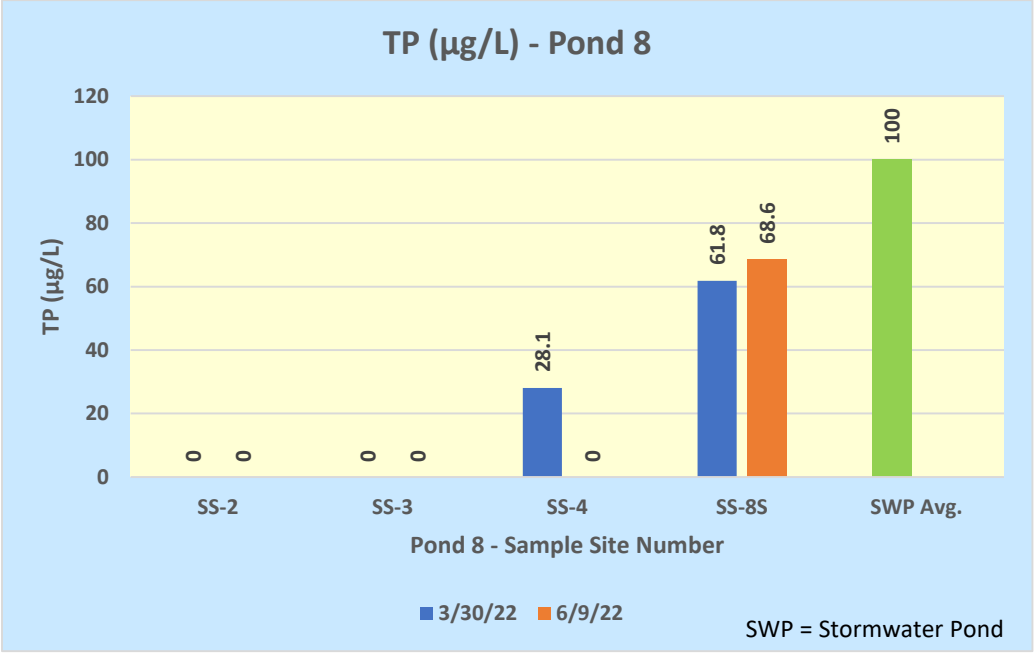


A measurement of both inorganic and organic forms of phosphorous.



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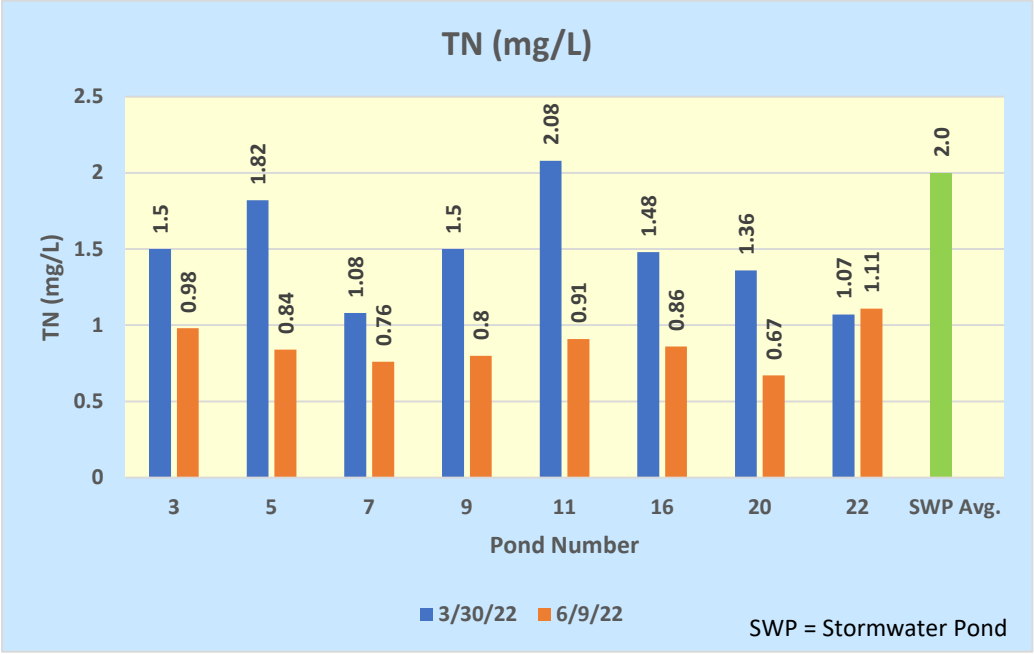
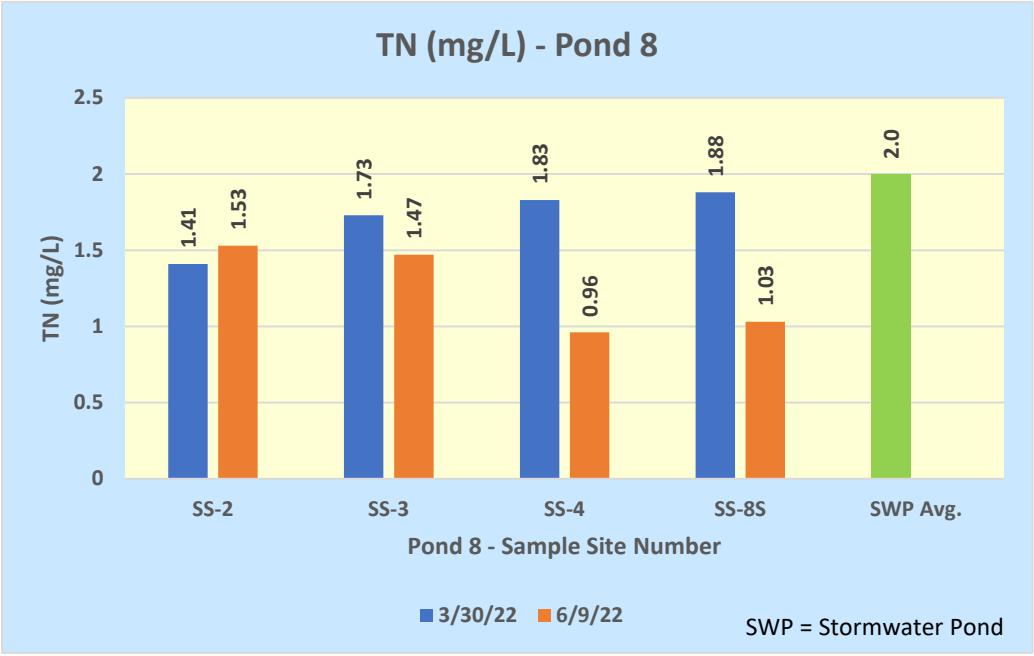


A measurement of both organic and inorganic forms of nitrogen.



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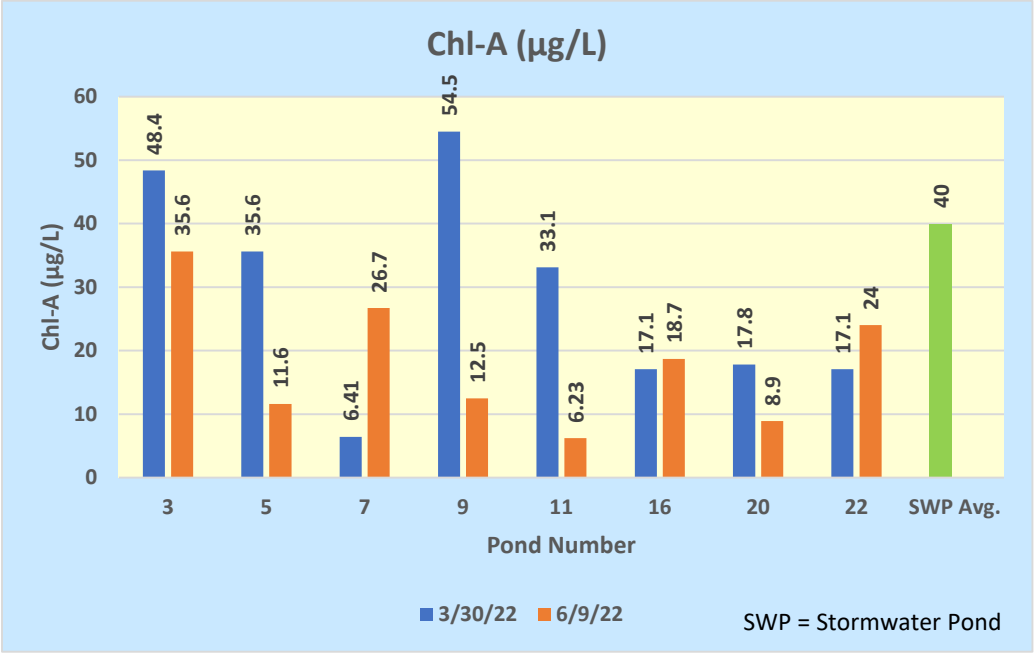
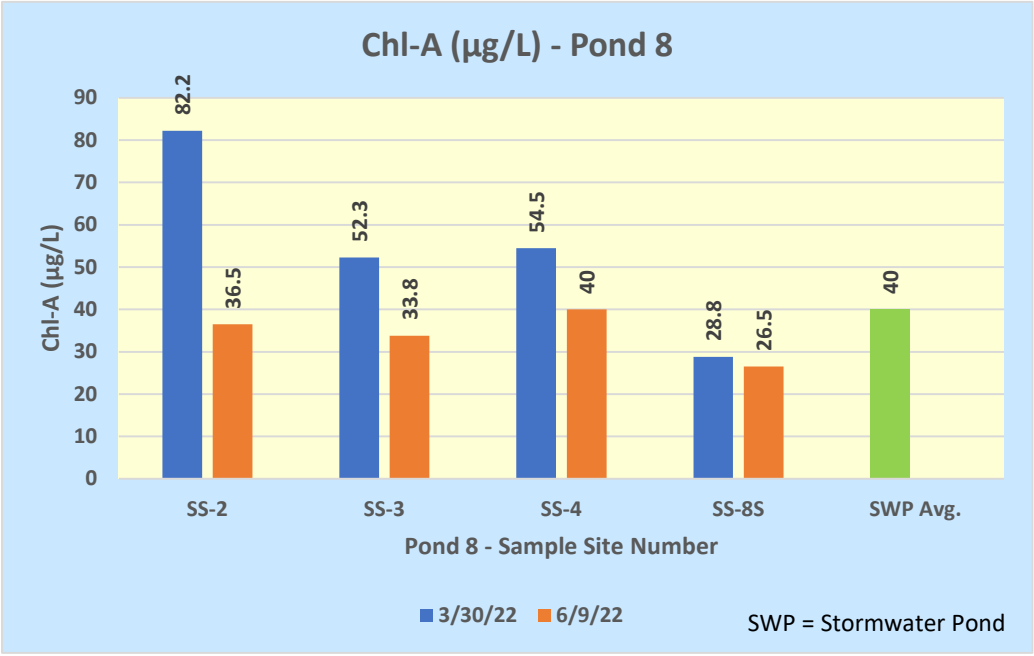


A measurement of the phytoplankton in a waterbody.



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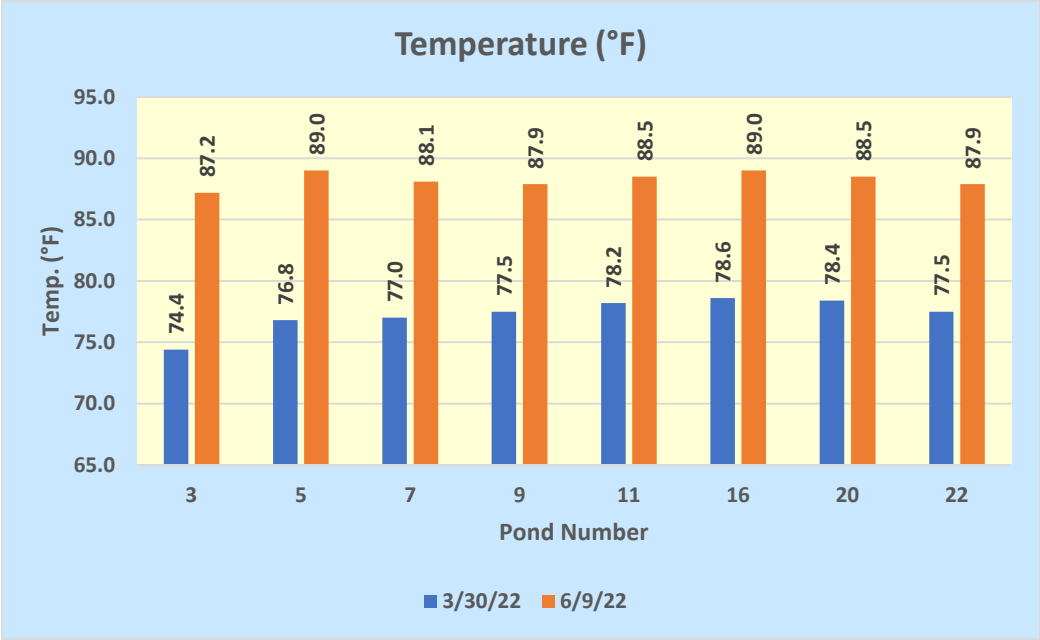
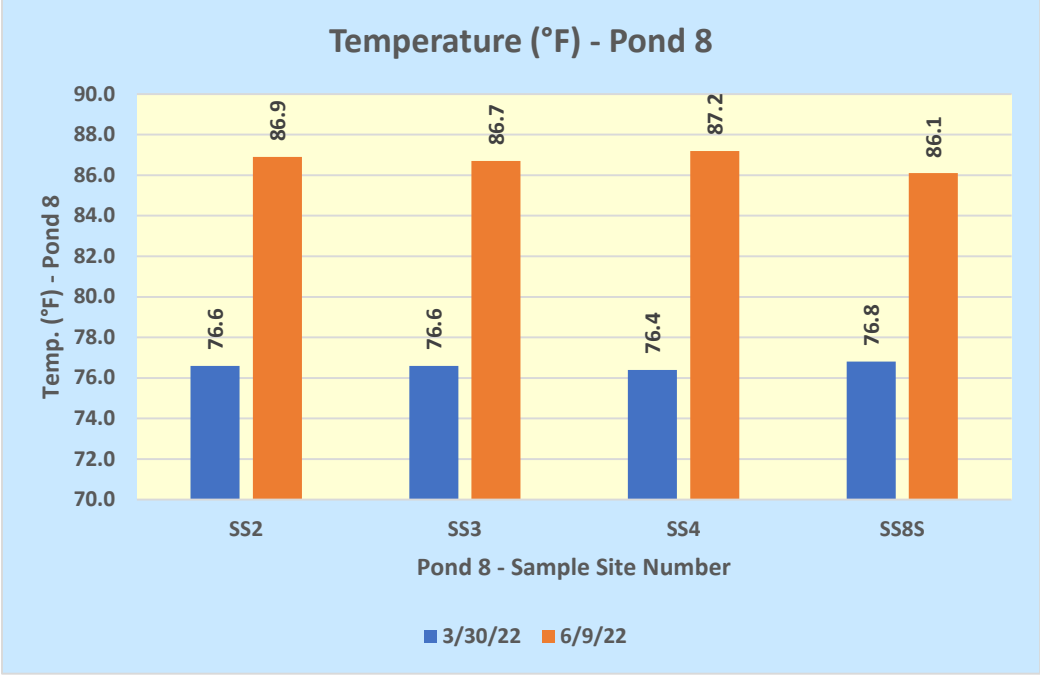


A measurement of the surface temperature.



What is Electrical Conductivity and why do we measure it?

Electrical Conductivity (EC)

Electrical conductivity is the total dissolved salts, measured as ions, in the water. These salts separate into positively and negatively charged ions (kind of like electrolytes in your sports drink). Some negative ions you may have heard of include bicarbonate, carbonate, chloride, sulfate, phosphates, and nitrates; four positive ions you may have heard of include calcium, magnesium, sodium, potassium, and ammonium. Ions in the water affect the quality of water for drinking or irrigation. The concentration of ions also influences what microorganisms will prosper in the water based on their desired salinity range. Conductivity will vary based on where the water source comes from and can be a good indicator of groundwater seepage or a sewage leak. Waters that have been heavily impacted by industry can fall into the high conductivity range which is bordering on saline conditions, and is not suitable for some fish or plants.

For reference:

- *0-300 µS = Excellent water quality. Can be consumed by humans. Can be used for irrigation.*
- *300-800 µS = Good drinking water for humans as long as organic material has been filtered out. Generally good for irrigation, although above 300 µS may start to cause leaves to scorch on sensitive plants.*
- *800-2500 µS = Can be consumed by humans, although it would be preferred to have an EC value on the lower end of this scale (800-1650 µS). Requires special management when used for irrigation – consider suitability of soil, good drainage, and salt tolerance of plants.*
- *2500-10,000 µS = Not recommended for human consumption. Not normally suitable for irrigation although 6000 µS can be used for extremely salt tolerant crops with special management.*
- *10,000+ µS = not suitable for human consumption or irrigation.*

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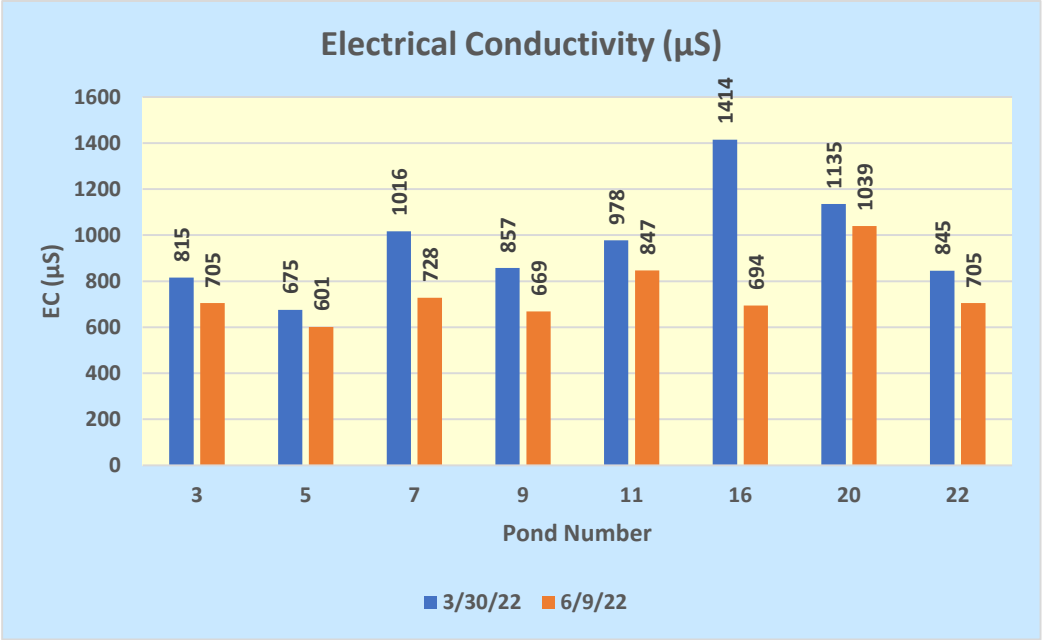

A measurement of the number of dissolved ions in the water.