April Lake Conway Data Analysis

Rainfall / Lake Level

NOAA predicted average rainfall last month and we got way more at 6.16 inches. This was only over 3 times the 1.8" long term average for the month. At the end of the month the lake level was at 86.50 or a stage of 85% (an increase of 6% over last month). The lake can now be considered high and about 1.4 feet above the average for the beginning of May. The level still appears to be tracking last year's level but about a foot higher. NOAA is again predicting well above average rainfall conditions for the next 3 months. We are in our dry season though so we should expect the lake level to remain about the same or increase before it starts coming up in July.

http://www.cpc.ncep.noaa.gov/products/predictions/long_range/lead01/off01_prcp.gif

This year's accumulated annual rainfall is 15.25 inches which is 1.23 inches more than we had at this time last year. Given the current NOAA high rainfall prediction and the spring dry season ahead we should expect the lake remain steady or gain a little.

El Nino / Southern Oscillation (ENSO)

Unfortunately, NOAA has changed their ENSO report date to the second Thursday of the month so we will be operating a month behind with this data. They do have a weekly report with lots of pretty charts but little discussion which we can draw on though. That indicates we are in El Nino conditions now.

http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/lanina/enso_evolution-status-fcsts-web.pdf

According to the April 9th ENSO report there is an El Nino Advisory which means there is good probability of El Nino conditions forming this spring and holding through summer. They are predicting a 70% chance El Nino will continue through summer. This indicates a possibility of increased rainfall this spring which agrees with NOAA's prediction of above average rainfall.

Lake Temperature

The swimmers are out in force. Starting at 72 degrees the lake temperature shot up to 80 and stayed. The average water temperature was several degrees higher than the same time last year. The Amoeba season has begun so caution is due. More amoeba information may be found at:
http://www.doh.state.fl.us/chd/volusia/eh/lab/pdf/amoeba.pdf

Hurricanes

There has been no update to the April 9th report, by the University of Colorado's Philip J. Klotzbach and William M. Gray, which indicates this summer will be a well below average hurricane season. This due to the higher temperature THC (ThermoHaline Circulation - [temperature-salt circulation] That is the circulation of the salt concentration in the Atlantic ocean caused by cooling at the poles and heating near the equator.) and the full El Nino condition. Strong THC tends to encourage hurricanes and el Nino tends to discourage hurricanes. http://tropical.atmos.colostate.edu/Forecasts/2015/apr2015/apr2015.pdf
If you would like to see an estimate of the probability of tropical storms hitting where you live check out this site. It is also produced by William Gray of the Colorado State University.
http://landfalldisplay.geolabvirtualmaps.com/ It is showing 0.4% chance of a named storm entering Orange County this year.

Planting and Weed Control

If you are doing aquatic planting now it should be off shore in 12" of water. With the lake level at the 85% stage and not likely to drop before it rises this summer we do not want to assume this is a long term trend and plant so high as to leave the plants high and dry when the lake level drops next year. If planted too far out in the water they will not root well and could be washed out by wave action. When planting in the water it helps to have an offshore barrier of some sort to break up the waves to prevent them from being washed out by wave action before they root. Duck potato in less than 10" of water is easy meals for ducks. Yes, ducks do like duck potato for breakfast, lunch, and dinner.

To help us all enjoy a clear lake make sure you have maximized the number of aquatic plants on your shoreline. These plants help consume nutrients which run off from your yard and they provide habitat and food for fish and fowl. A sandy beach = a cloudy lake.

You might be inspired to attack some of that torpedo grass with a weed whacker. **DON'T DO IT!** That is about the worst way to control the weeds on your beach. It does not kill them. If you are doing any lakeshore cleaning, please capture **all** of your cuttings. Sprigs of torpedo grass are very hardy and easily survive an excursion across the lake while growing a new set of roots. Once on the beach they immediately start to take over and choke out the beneficial plants. A single sprig will take root and in three months it will be a circle of healthy torpedo grass 10 feet in diameter. Considering it is likely over a hundred of these sprigs could float away from a weed whacking job, your efforts could easily seed another 1000 square feet of torpedo grass all around the lake. Respect your neighbors and capture weed bits.

[As an example on the weekend of 8/3/13 someone on the west to south west side of the middle lake wacked their torpedo grass and on 8/5 I fished out nearly a bushel of torpedo grass sprigs which had just floated in. Probably a half mile of shoreline is now planted with new torpedo grass. These get caught in our good weeds so we cannot see them then choke out the good plants in about a year. As long as people do not collect their trimmings it will be impossible to control torpedo grass.]

The best approach for controlling torpedo grass is with lake friendly herbicides. These may only be applied with the proper permit from Orange County Environmental Protection Division 407-836-1400 and Florida Fish and Wildlife Conservation Commission 407-858-6170. These permits are not expensive or difficult to obtain. The County allowed weed free area on any lot is a maximum of 30' and there is no " grandfathering" of larger cleared areas. In any event make sure you collect any and all weeds you remove from your beach.

Orange County Lakeshore Vegitation Removal Permit:
http://www.orangecountyfl.net/PermitsLicenses/Permits/LakeshoreVegetationRemovalPermit.aspx

County Lakefront Clearing Regulations:
Orange County Code of Ordinances - Section 15-251 through Section 15-256
http://www.orangecountyfl.net/Portals/0/Library/Permitting-Licensing/docs/ArticleVIILakeshoreProtectionCode.pdf

Florida Fish and Wildlife Conservation Commission Permit page including links to the permit and regulations: http://myfwc.com/license/aquatic-plants/

NOAA current La Nina - El Nino Synopsis:
http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/enso_advisory/ensodisc.pdf

Orlando Weather Averages by month http://countrystudies.us/united-states/weather/florida/orlando.htm

Live weather data on the north shore of the middle lake, updated by the minute, can be viewed at:
http://www.wunderground.com/swf/Rapid_Fire.swf?units=english&station=KFLORLAN51

Thank you for your help maintaining our lakes.

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