June Lake Conway Data Analysis

Rainfall / Lake Level

NOAA predicted above average rainfall last month and we got less than average at 6.92 inches. This was 95% of the 7.3" long term average for the month. At the end of the month the lake level was at 86.34 or a stage of 79% (an decrease of 11% from last month). The lake is now on the edge of the "high" range and is about 1.6 feet above the average for the beginning of July. It is now 0.8 feet above last year's level for this date. NOAA is predicting normal rainfall conditions for the next 3 months. July is in the rainy season so we should expect the lake level to increase again this month. We will likely be able to call the lake level "high" this summer.

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

This year's accumulated annual rainfall is 24.59 inches which is 1.48 inches higher than we had at this time last year. Given the current NOAA normal rainfall prediction and the rainy season in play we should expect the lake rise to above the weir again this month.

El Nino / Southern Oscillation (ENSO)

NOAA's July 9th ENSO: Recent Evolution reports an El Nino Advisory which is 90% likely to continue through the end of the year and into spring. This indicates a possibility of increased rainfall which is in conflict with NOAA's 3 month prediction of average rainfall.

http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/enso_advisory/ensodisc.pdf

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

Lake Temperature

The swimmers are out in force. Starting at 83 degrees the lake temperature climbed to a maximum of 89 then stabilized at about 86. The average water temperature was a few degrees higher than the same time last year but is now virtually the same as last year. Let's call it normal. The Amoeba season is in full swing 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

The July 1st report, by the University of Colorado' s Philip J. Klotzbach and William M. Gray, indicates "below-average Atlantic hurricane season" due to the combination of a strong El Niño event "and the tropical Atlantic remains cooler than normal". It predicts the likelihood of hurricane events to be about 50% lower than the long term average.

http://tropical.atmos.colostate.edu/Forecasts/2015/july2015/jul2015.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. Please bear in mind that it takes only one event to wipe out everything so be prepared.

Planting and Weed Control

If you are doing aquatic planting now it should be off shore in 6 to 12" of water. With the lake level at the 79% stage and likely to rise this summer we will assume this is a fairly long term trend. We should still plant high to prevent the plants from being high and dry if 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 are 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 neither expensive nor 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 Vegetation 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 (with discussion):
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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