

December Lake Conway Data Analysis

Rainfall / Lake Level

NOAA predicted well below average rainfall last month and we only got 0.63 inches. This was way below the 2.3" average for the month. At the end of the month the lake level was at 85.50 or a stage of 48% (a 10% decrease from last month). The lake is just below average and about two inches above the average for the beginning of January. NOAA is, predicting well below normal rainfall conditions for the next 3 months again and we are now in the dry season so we can expect the lake level to continue its plummet for a few months. We can expect the lake to be six inches lower in two months.

http://www.cpc.ncep.noaa.gov/products/predictions/long_range/lead01/off01_prpcp.gif

Last year's accumulated annual rainfall was 49.12 inches which is 7.75 inches higher than we had the previous year. Given the current NOAA well below average rainfall prediction we can expect the lake to continue dropping off this winter.

El Nino / Southern Oscillation (ENSO)

According to the December 5th ENSO report NOAA is still expecting ENSO neutral conditions into next summer but there could be a trend toward el Nino later in the summer. This indicates normal rainfall but the NOAA rainfall prediction is predicting less than normal rainfall for the next few months.

Lake Temperature

The lake is stabilizing. The average water temperature is still 67, a few degrees above last year at this time. It started the month at 67. The slightly warmer temperature can be attributed to the small amount of rain last month. The water is quite refreshing on a sunny day. Swimming is for the hardy now. The Amoeba season has passed but caution is still due. More information may be found at <http://www.doh.state.fl.us/chd/volusia/eh/lab/pdf/amoeba.pdf>

Hurricanes

Hurricane season is officially over. It looks like we have dodged the bullet this year with no significant Central Florida hurricane event. The December 10th report, by the University of Colorado's Philip J. Klotzbach and William M. Gray, says the activity was about 30% of 1981 to 2010. This report indicates they will be using a different process to make their forecasts. It involves the 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 el Nino condition. Strong THC tends to encourage hurricanes and el Nino tends to discourage hurricanes. Since it is expected the THC will remain strong much is riding on whether el Nino develops this summer.

<http://tropical.atmos.colostate.edu/Forecasts/2013/dec2013/dec2013.pdf>

The forecasts are in jeopardy since the funding for these forecasts runs out in April 2014. They are looking for new funding sources. 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 1.1% chance of a named storm entering Orange County this year.

Planting and Weed Control

If you are doing aquatic planting now it should be at the shore line or in shallow water. With the lake level at the 48% stage and falling we want make sure our plants will not be planted so high as to be high and dry in the spring. If planted too far out in the water they will be too deep to survive next summer's high water. When planting near the shore 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.

The falling lake level might inspire you to attack some of that torpedo grass with a weed wacker. **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 wacking 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 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:
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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