

January Lake Conway Data Analysis

Rainfall / Lake Level

NOAA predicted above average rainfall last month and we got it at 3.62 inches. This was 57% more than the 2.3" long term average for the month. At the end of the month the lake level was at 86.49 or a stage of 85%. The lake nearly full and about 1.4 feet above the average for the beginning of February. The last time we had a sustained high similar to this was in 2006 but that was in the summer. NOAA is now predicting normal rainfall conditions for the next 3 months. We are also in a normal rain season so we should expect the lake level to stay about the same for a few months.

http://www.cpc.ncep.noaa.gov/products/predictions/long_range/lead01/off01_prctp.gif

This year's accumulated annual rainfall is 3.62 inches which is 0.39 inches more than we had at this time last year. Given the current NOAA above average rainfall prediction and winter on its way out we should expect the lake to stay high. There some docks are nearly awash .

El Nino / Southern Oscillation (ENSO)

According to the February 5th ENSO report there is still an El Nino Watch which means there is a reasonable probability of El Nino conditions forming this spring. They are predicting a 50 to 60% chance of El Nino in the April/May time frame with ENSO neutral later this year. This indicates a low possibility of increased rainfall this spring which agrees somewhat with NOAA's prediction of average rainfall.

Lake Temperature

The low has passed. The lake was at its likely lowest temperature of 61.2 on January 31 but is starting to come back up. The average water temperature is virtually the same as last year at this time. It started the month at 67. We are on the upslope so get your wakeboards ready. The Amoeba season expected to begin about April or May but caution is always due. More amoeba information may be found at:

<http://www.doh.state.fl.us/chd/volusia/eh/lab/pdf/amoeba.pdf>

Hurricanes

The December 11th report, by the University of Colorado's Philip J. Klotzbach and William M. Gray, is the last available and indicates this summer will be an 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 anticipated light El Nino condition. Strong THC tends to encourage hurricanes and el Nino tends to discourage hurricanes.

<http://tropical.atmos.colostate.edu/Forecasts/2014/july2014/july2014.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 0.6% 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 10" to 12" of water. With the lake level at the 85% stage and falling we want make sure our plants will not be planted so high as to be high and dry when the lake level drops. 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 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/ArticleVIIILakeshoreProtectionCode.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.

David Woods PE

TEC Engineering, Inc.

Voice 407-859-8737

email DWoodsTEC@cfl.rr.com