Lake Fact Sheet
Lake Bessie

Lake Location Data
- **Latitude:** 28° 29' 20" N
- **Longitude:** 81° 31' 35" W
- **Northing:** 1,510,866
- **Easting:** 487,068
- **STR:** 17-23-28
- **Major Drainage Basin:** Cypress Creek Drainage Basin
- **Water Management District:** SFWMD
- **Commissioner District:** 1
- **Maintenance District:** West Orange

General Information
- **Contributing Area (ac):** 368.1
- **NHWE (ft NAVD):** 96.47
- **Surface Area @NHWE (ac):** 173.6
- **Datum Conversion (ft):** -1.026
- **Datum Conversion Source:** Orange County Surveyed Benchmark: S1452002
- **Receiving Water Body:** Lake Down
- **Flowpath:** Pump Station to Lake Blanche; also connected to Lake Down via culvert, however drainage basin study indicates a gate is in place - little to no flow.

Correlation of Associated Data IDs
- **Lake Index ID:** 36
- **EPD Lake ID:** CC1
- **Major Basin Model Node:** BESSIE
- **Alias:** N/A

Landuse Distribution Within Contributing Area
- Residential, Low Density: 23%
- Residential, Med. Density: 45%
- Recreational: 7%
- Water: 1%
- Wetlands: 25%
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FEMA Information

1% Chance Flood El. (ft NAVD): 100.6
1% Chance Flood El. Source: FEMA
FEMA Datum Conversion (ft): -0.89
FEMA FIRM Effective Date: 9/25/2009
FEMA FIRM Panel: 12095C0385F

Primary Outfall Data

Outfall Type: Pump Station
Public Works (PW) ID: N/A
EPD ID: N/A
Orlando ID: N/A
Landlocked: No
Outfall Control El. (ft NAVD): 96.27
Major Basin Model Link: BESPUMP1
Source: Cypress Creek Drainage Basin Study

Additional Outfall Structures

<table>
<thead>
<tr>
<th>Type</th>
<th>PW ID</th>
<th>Control Elev (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culvert</td>
<td>N/A</td>
<td>98.36</td>
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</tbody>
</table>

1% Chance Flood El. Source: FEMA

Outfall & Floodplain Map

Primary Lake Outfall
100yr FEMA Floodplains
Additional Outfall Structures

Primary Outfall Structure

Lake Photograph
General Notes:
1. All elevations are referenced to the North American Vertical Datum of 1988 (NAVD 88) unless otherwise noted.
2. Local datum conversion factors represent conversion from NGVD 29 to NAVD 88. Local conversion factors are County-established and are based on conversion factors for local county benchmarks, as recorded by Orange County Survey Department. Where benchmark conversions are not available, datum conversion factors were obtained from NOAA VertCon or USACE Corp on based on the centroid of each lake. Note that the Local Datum Conversion Factor may differ from that used in FEMA FIS Reports and FIRM Maps.
3. Lake Location Data is based on the centroid of the subject lake.
4. "Contributing Area" is based on existing drainage basin delineations from major drainage basin master stormwater models provided by the County.
5. "Surface Area at NHWE" was determined using Orange County terrain data where available. Where “N/A” is indicated, terrain data was not available at the NHWE or appeared suspect.
6. “Receiving Water” and “Flowpath” are estimated based on available lake outfall, aerial, and terrain data.
7. "Lake Index ID" is the ID associated with the County's Lake Index feature class (Feature class field: LINKFIELD).
8. “EPD ID” designates nomenclature used by the Orange County Environmental Protection Division.
10. Land Use designations were assigned by St. Johns River Water Management District (SJRWMD, 2009) and South Florida Water Management District (SFWM, 2008). The Landuse Distribution chart includes the lake feature in the water percentage shown.
11. When FEMA elevations were not provided (i.e. Zone X and Zone A), County or SJRWMD Established 1% Chance Flood Elevations were listed, if available. FEMA Datum Conversion is based off the September 25, 2009 Orange County FIS Report for the given watershed, and represent conversion from NGVD 29 to NAVD 88.
12. Floodplains shown were provided by Orange County and are based on the September 25, 2009 Orange County FIS Report. Floodplains outside of the Orange County limits are based on FEMA Q3 floodplain data dated 1993.
13. Lake Outfall Data is based on existing information obtained from Orange County infrastructure databases, Southeastern Survey and Mapping Corp. (SSMC) survey data, model input data, and/or aerial and terrain data.
14. "Major Basin Model Link" refers to the Link ID of the associated outfall in the watershed master plan stormwater model.
15. Aerial images shown within the Orange County boundary were obtained from the Orange County Property Appraiser (dated 2013). Aerial images shown outside the Orange County boundary were obtained from FDOT (dates range from 2011-2012).

Notes Related to Lake Stage Graphs:
1. “Lake Stage Data Not Available” indicates that the lake stage is not monitored by Orange County.
2. Rainfall data is from Orange County Spring Lake rainfall gage and from the NOAA rainfall gage at Orlando International Airport.
3. Average Monthly Rainfall is the historical average of the total monthly rainfall as recorded by the NOAA Orlando International Airport rainfall gage.
4. Lake stage data is from SFWM and Orange County.
5. Average Annual Lake Stage is the average of periodically recorded stages within a given year.
6. High-Low bars indicate the maximum and minimum stage recorded within a given year.
7. Recorded Stages indicate the measured stage at a given time and may not represent the actual trend between measurements.
8. Historical Average Stage is based on the arithmetic average of past stage data provided by the County from the period of record for each lake. (1960 - 2013)
9. Historical Maximum Stage is the highest recorded stage within the lake, provided by the County.
10. Graphs are current as of August 2013.