



City of Casselberry & Florida Fish & Wildlife Conservation Commission



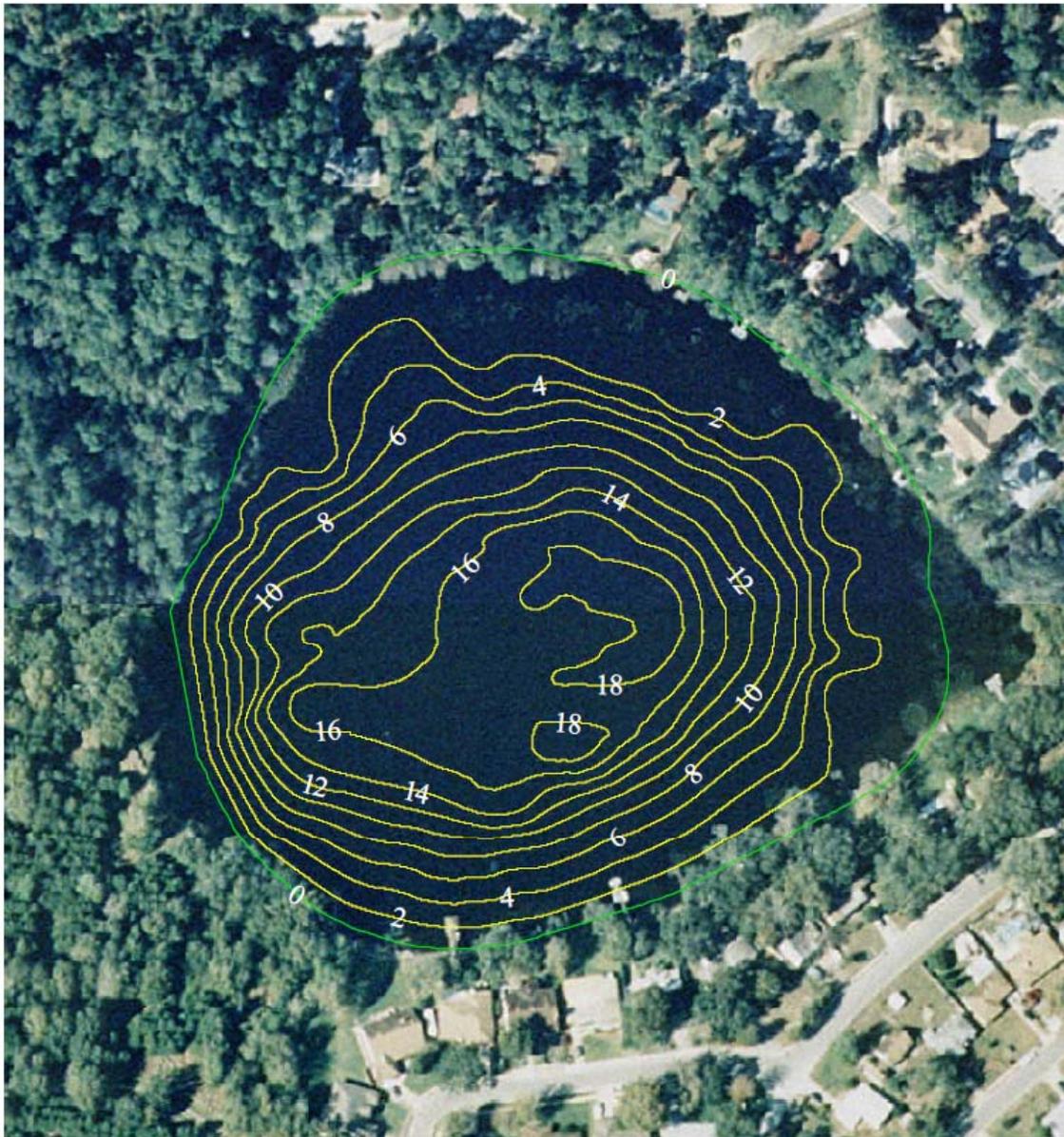
Lake Griffin Workshop



Lake Griffin

Physical Characteristics

- Approximately 14 acres
- Depths up to 18 feet



Lake Griffin

Section - Township - Range
8-21-30



Contour Lines
Expressed in
2-Foot Intervals



Estimated Lake
Perimeter

EXPLANATION:

Assessment Date: July 7, 2002.
Lake water level was **72.378 ft.**
above sea level when the lake was
assessed. Contours are expressed in
absolute depth below this level and
may not exclude the presence of
submersed aquatic vegetation.

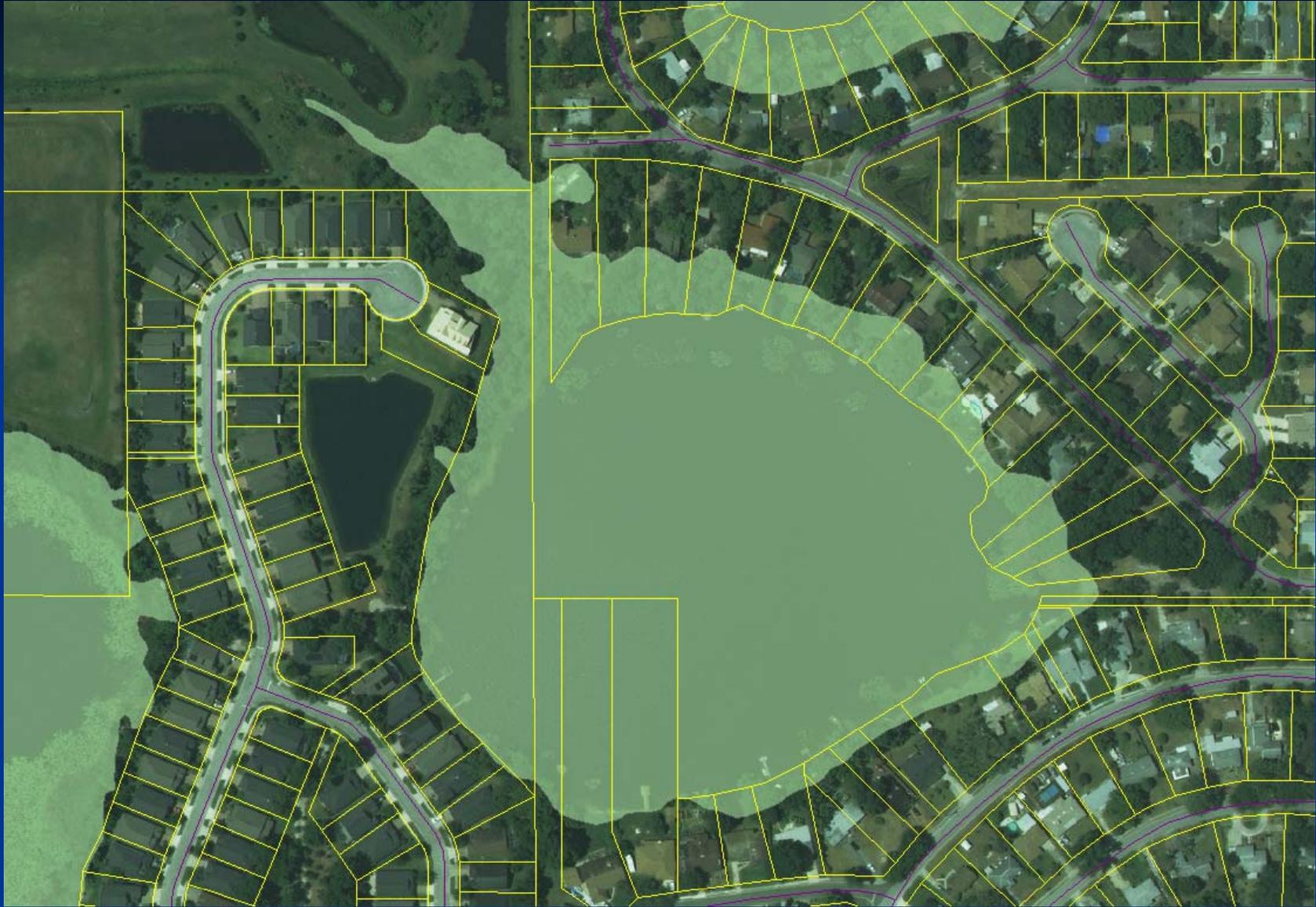
DATA SOURCES:

Seminole County 1999 color aerials
provided by Seminole County Public
Works. All contours generated by
Florida Center for Community Design
and Research based on GPS/Sonar
data provided by the Seminole County
Stormwater Division.



Physical Characteristics

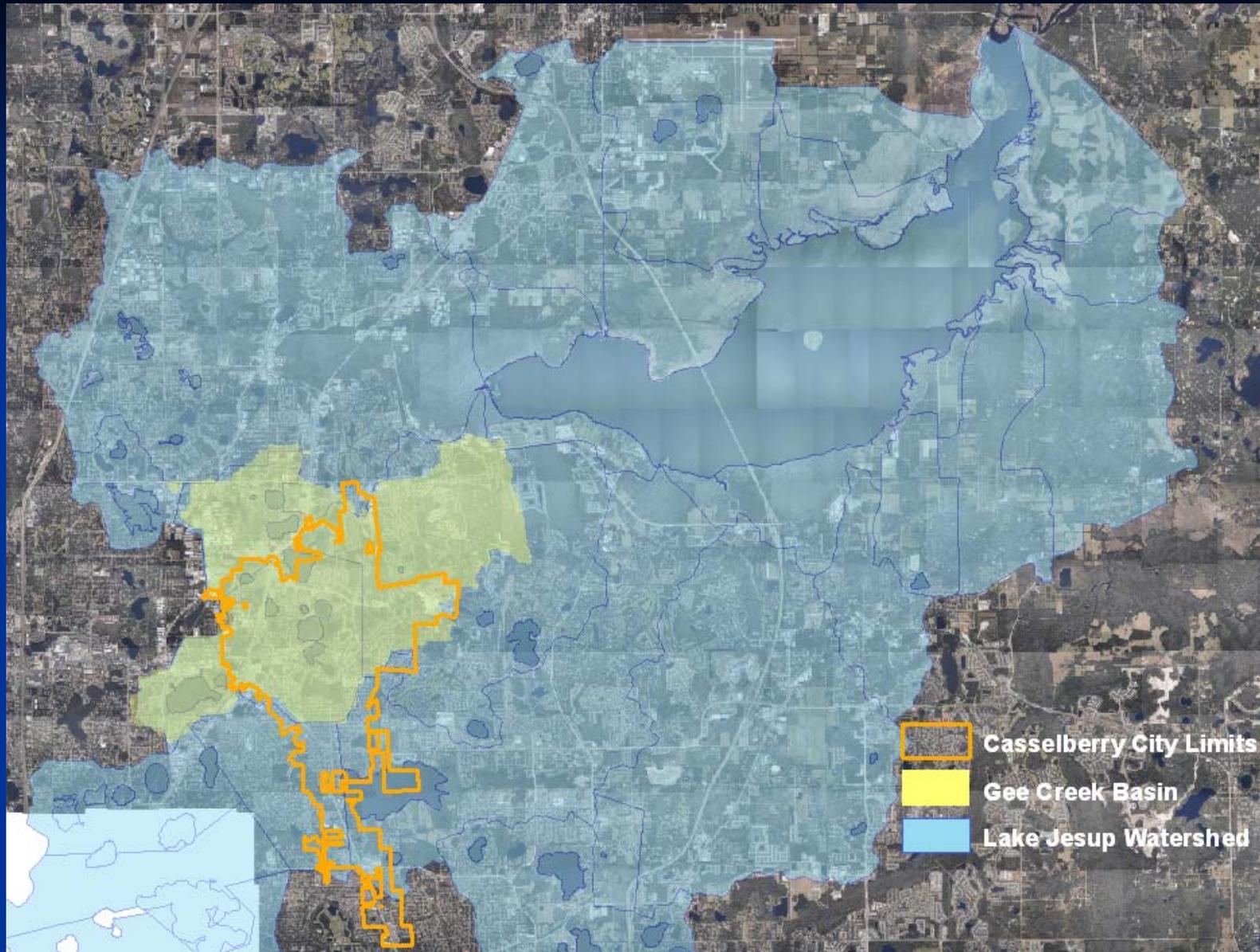
- Approximately 14 acres
- Depths up to 18 feet
- 100 year flood elevation 76.6 ft



100 year floodplain

Physical Characteristics

- Approximately 14 acres
- Depths up to 18 feet
- 100 year flood elevation 76.6 ft
- Part of the Gee Creek Basin (Lake Jesup Watershed)

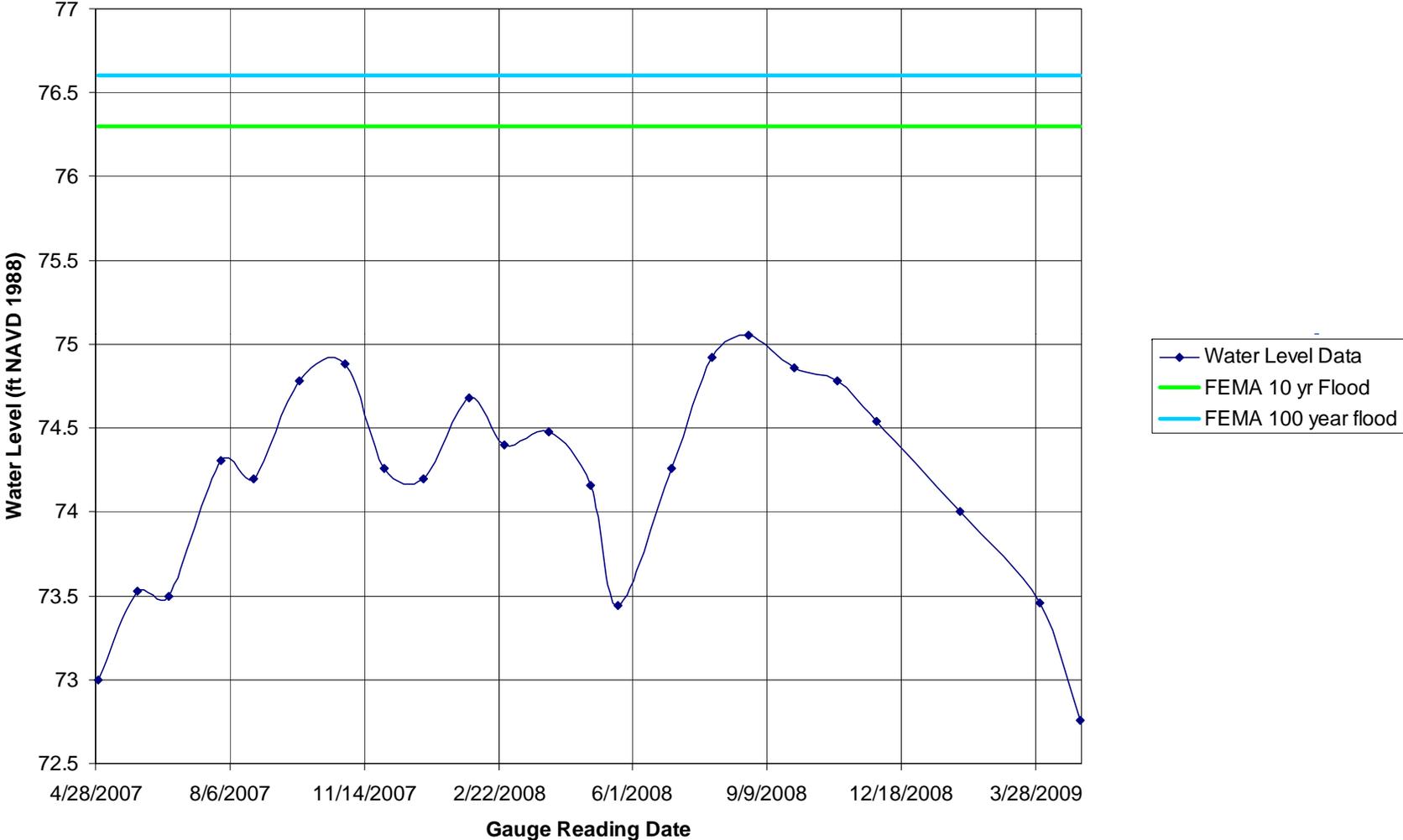


The Big Picture

Physical Characteristics

- Approximately 14 acres
- Depths up to 18 feet
- 100 year flood elevation 76.6 ft
- Part of the Gee Creek Basin (Lake Jesup Watershed)
- Water elevation typically 73-75 ft

Lake Griffin Water Levels



Water surface elevation

Biological Characteristics

- Sample Native species present in Lake Griffin
 - Bald Cypress
 - Spatterdock
 - Cattails*
 - Southern Naiad
- Sample Non-native Invasives present
 - Hydrilla



Spatterdock



Cattails



Southern naiad



Hydrilla

Trophic States: Example Healthy Lakes



diverse assemblage of
native plants

shoreline stabilized
with vegetation

abundant species of
fish and wildlife



Eutrophic/Hypereutrophic Examples

Absence of plants causes nutrients to accumulate in water...leads to algal bloom...



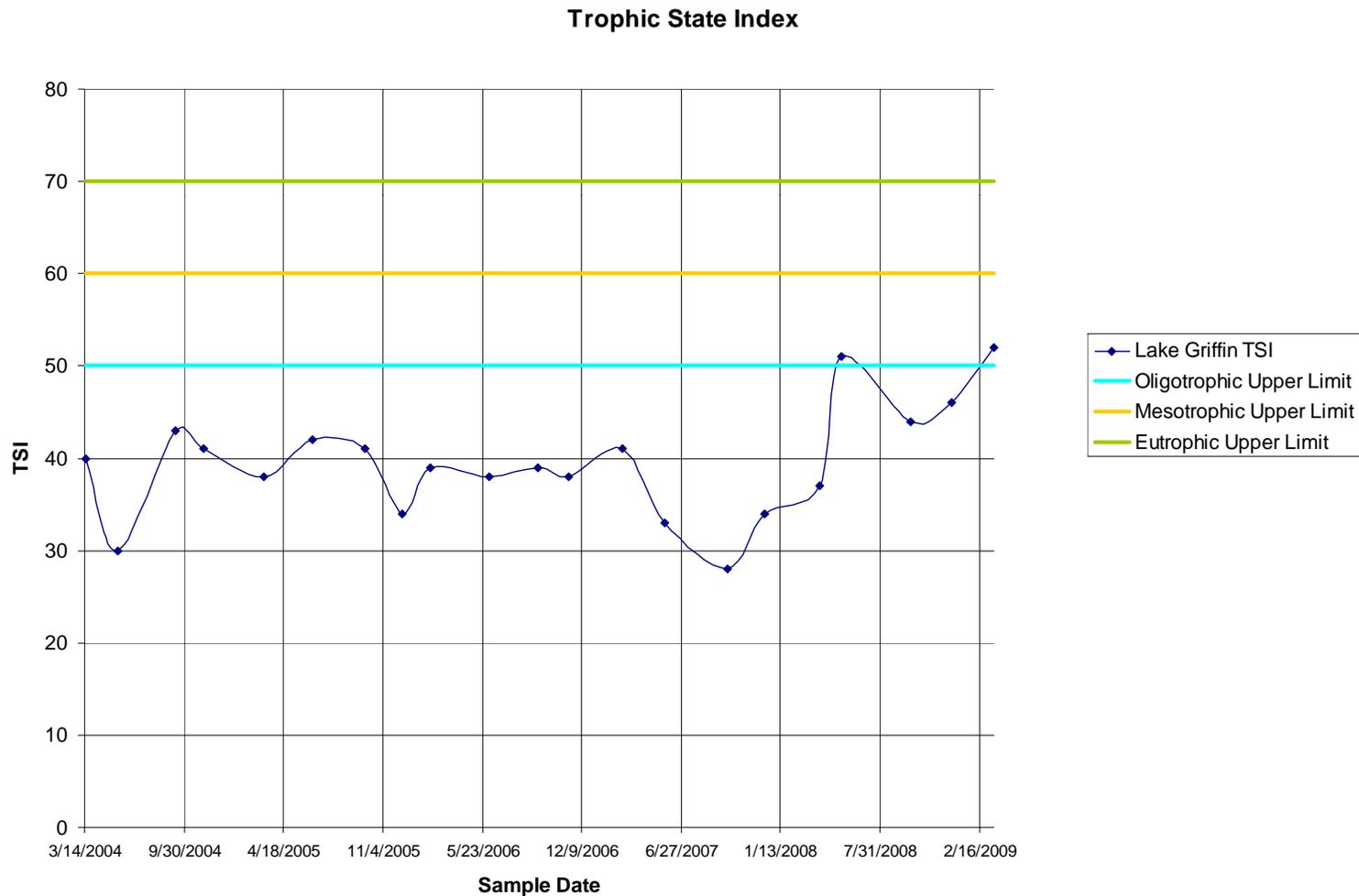
...algal bloom prevents light from reaching bottom

...Fish kill due to lack of oxygen



Water Quality Characteristics

- Trophic State Index typically <50 (excellent!)



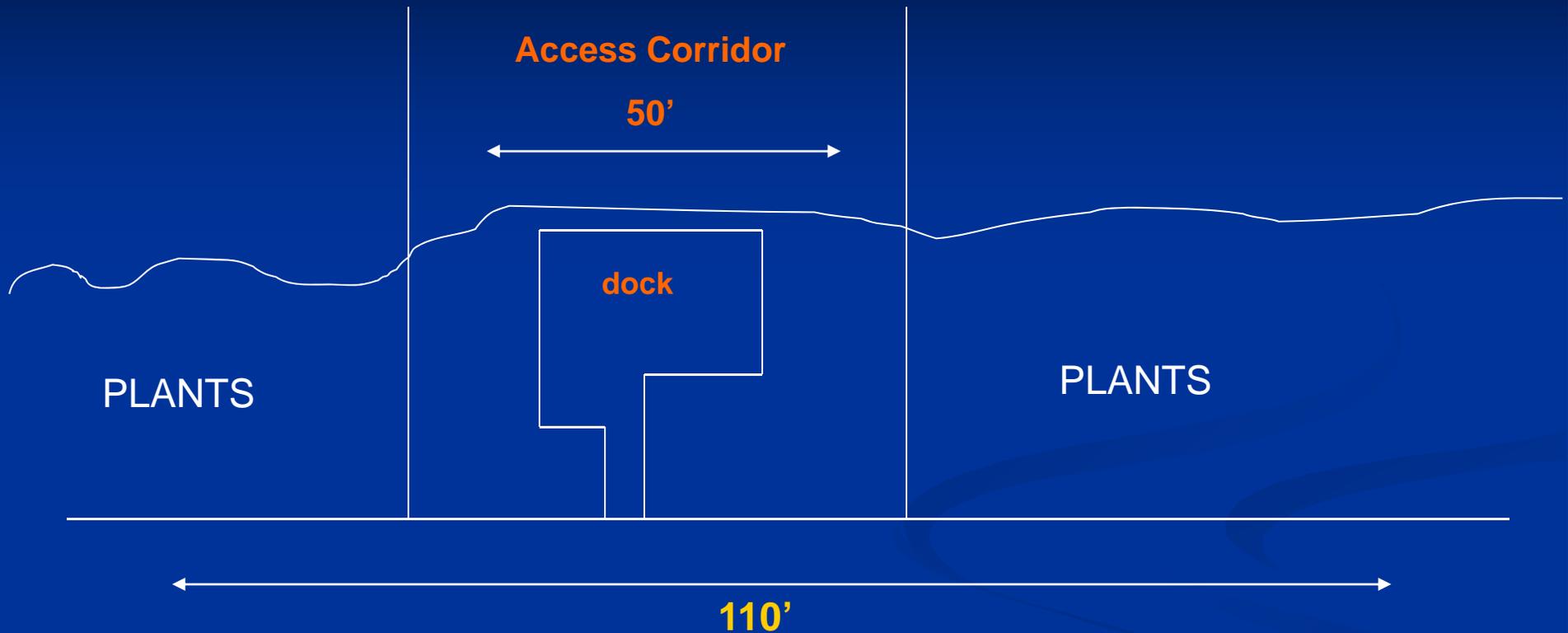


What Revegetation Can Look Like

FWC Aquatic Plant Management Permit

- No fee
- Lakes larger than 10 acres in size, multiple owners
- Required for:
 - use of **ANY** herbicide
 - removal of exotic plants outside access corridor
- Provides:
 - navigational/recreational access to open water
 - shoreline vegetation
 - appropriate removal methods
- Valid for 3 years

FWC Aquatic Plant Management Permit



- Can clear 50', or 50%, whichever is less
- Rest of lakefront **MUST** be vegetated with submersed and emergent plants
- Either plant native aquatic plants, or let what was there regrow (“something is better than nothing”)

Other Permits

- Consult the City before:
 - Clearing
 - Filling (including sand)
 - Dock or seawall construction (also FDEP)
- Public Works
 - (407) 262-7725 x 1235
 - www.casselberry.org/lakes

What does the City do for Lake Griffin?

- Quarterly water quality sampling
- Monthly chemical (herbicide) aquatic treatment
 - Targeted species
 - “As needed” only
- Maintain outfall control structure
 - Flood control
 - Screen to contain grass carp
- Public Education

How can residents help protect Lake Griffin?

- Re-vegetate shorelines with natives when needed
- Reduce fertilizer use; provide a fertilizer free buffer near lake edge
- Inspect boat equipment for invasives
- Report suspected illicit discharge to Seminole Watershed Atlas (via www.casselberry.org/lakes)
- Volunteer for Lakewatch
- Partipate in Florida Yards & Neighborhoods workshops for “greener” landscaping

Questions / Comments / Issues