General Drainage History of Palm Beach County

Presented to:
Palm Beach County
Water Resource Task Force



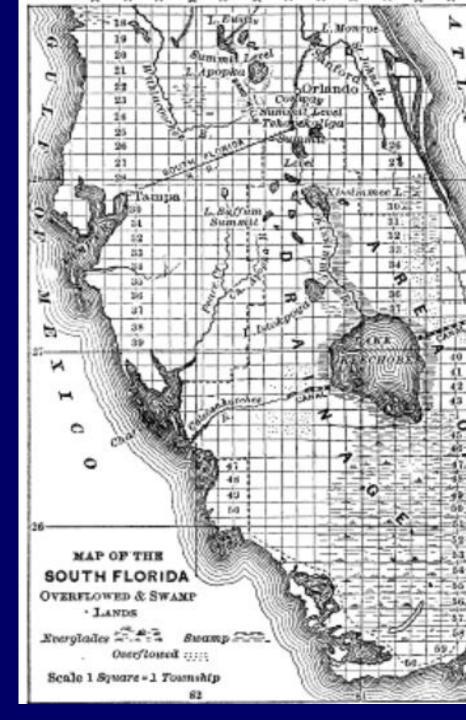
Kenneth S. Todd, Jr., P.E. Water Resource Manager Palm Beach County October 15, 2015

Harper's Magazine, 1884 "The Drainage Of The Everglades"

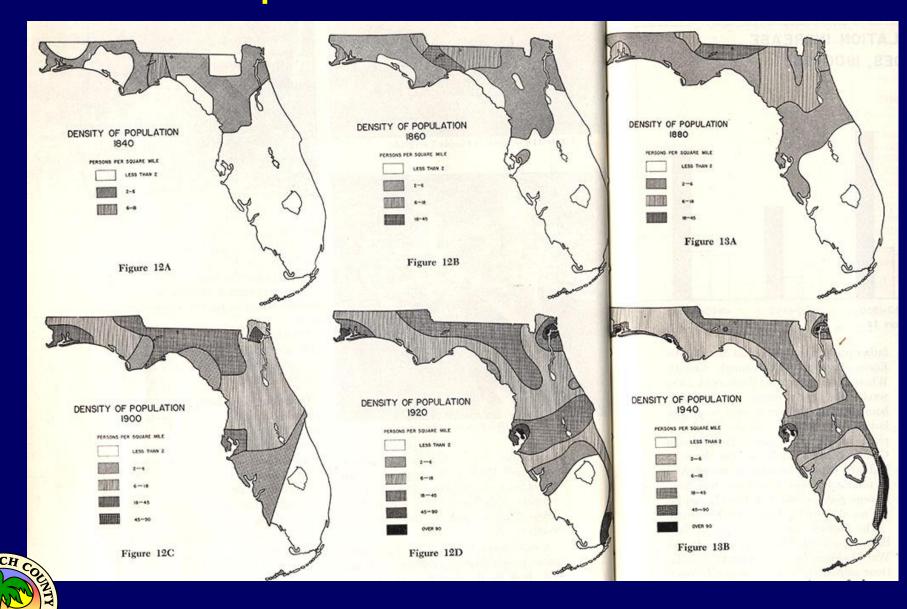
In August 1848, U.S. Congress gave the "swamp and overflowed lands" to the State of Florida with the condition that they be drained

Note: Florida Became a State in 1845





Population Patterns



CORIDA

ICW Dredging - Early 1900s





Dredging Lake Worth Inlet circa 1918





LWDD L-2 Along Future Okeechobee Blvd. in 1918



View looking west along Lateral 2 at Station 102+50. This is the Loxahatchee Slough. The County has driven piling, shown in the picture to the right, for the Okeechobee Road. This station is beginning of McKenzie's work. Machine is shown dimly in the distance. Photo taken April 29, 1918, by J.C. Wagen.

LWDD E-2 along Future Turnpike at Lake Worth Rd. November 1919



View of E-2 looking south from Lake Worth Road. November 21, 1919.

LWDD E-1 Along Future SR7 circa 1920



E-1 looking north, at Lateral 5.

Flagler Bridge into Palm Beach circa 1920





Boynton Inlet circa 1920





Palm Beach Pier circa 1925





Palm Beach Hotels circa 1930



DISTRICT RAINAGE ОКЕЕСНОВЕЕ

Everglades Drainage District

Original Map Circa 1924

Created by Governor Broward



1926 Hurricane Erosion



Ocean Blvd. – Palm Beach 1926 Hurricane Damage





Bulkhead Construction circa 1927





Groin Construction along Palm Beach circa 1927





Completed Groins circa 1928







Downtown West Palm Beach After 1928 Hurricane



View of Lake Okeechobee in 1913 Lake Harbor



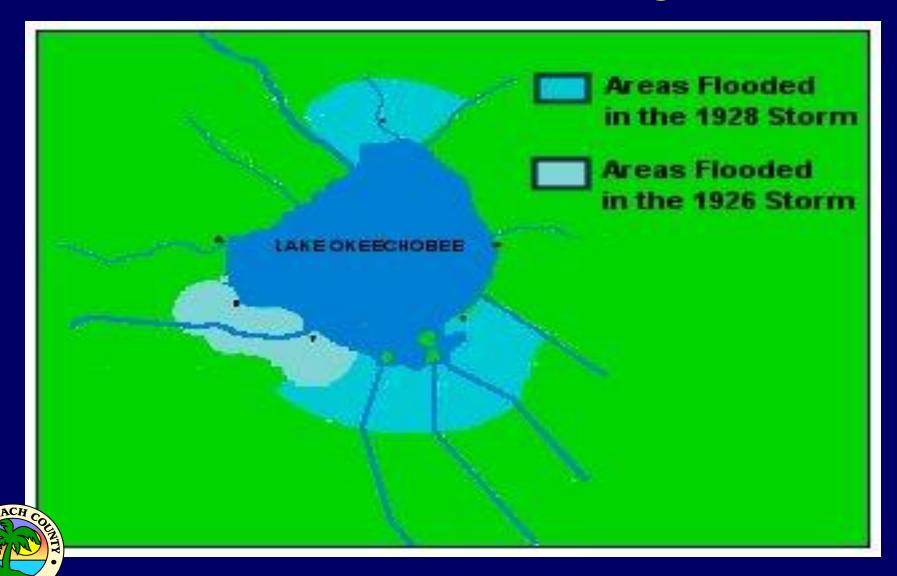




Glades Area After 1928 Hurricane



1928 Hurricane Flooding Limits



Herbert Hoover Dike Construction, 1932





Herbert Hoover Dike Today



1940 Aerial of West Palm Beach



Military Trail North of Okeechobee Blvd. Circa 1946





Military Trail North of Okeechobee Blvd. Circa 1946





Military Trail and Lake Worth Road circa 1940





Military Trail in Boynton circa 1945







Lantana Airport 1946





Drainage Ditch into Lake Osborne 1946





North of Lantana Airport 1946



"Western" Palm Beach County 1946





Dredging Lake Osborne 1946



Kissimmee River 1947 Hurricane





1947 Hurricane Glades Flooding







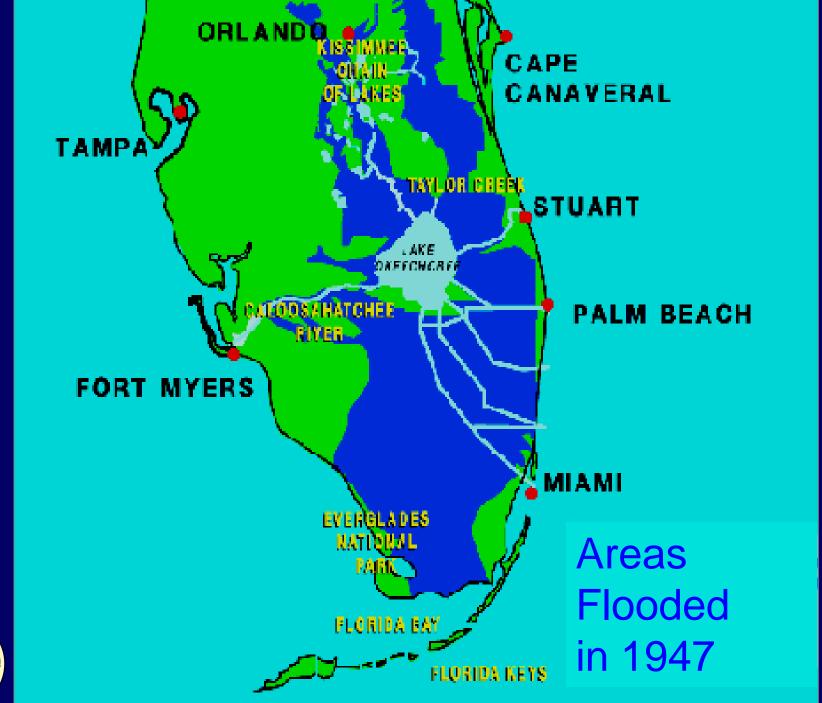


1947 Hurricane Flooding

- Andrews Avenue after 1947 hurricane hit Fort Lauderdale
- Sept. 18, 1947
- At one point,
 12 inches of rain fell in a 30 minute period.









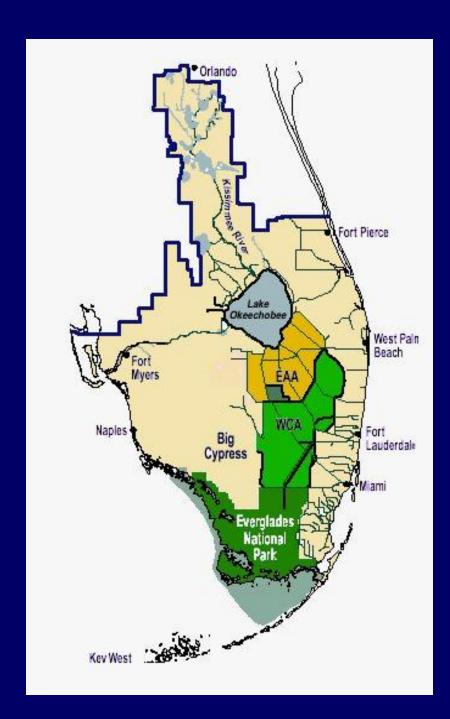
The Central and Southern Florida Project

"Central and Southern Florida Project for Flood Control and Other Purposes"

> Authorized in 1948 Constructed in 1950's thru 1970's

Operated in accordance with USACOE criteria by:

USACOE & SFWMD



Wooden Bridge Deterioration circa 1947





ICW Bridge Pile Caps circa 1950





ICW Bridge Railing circa 1950



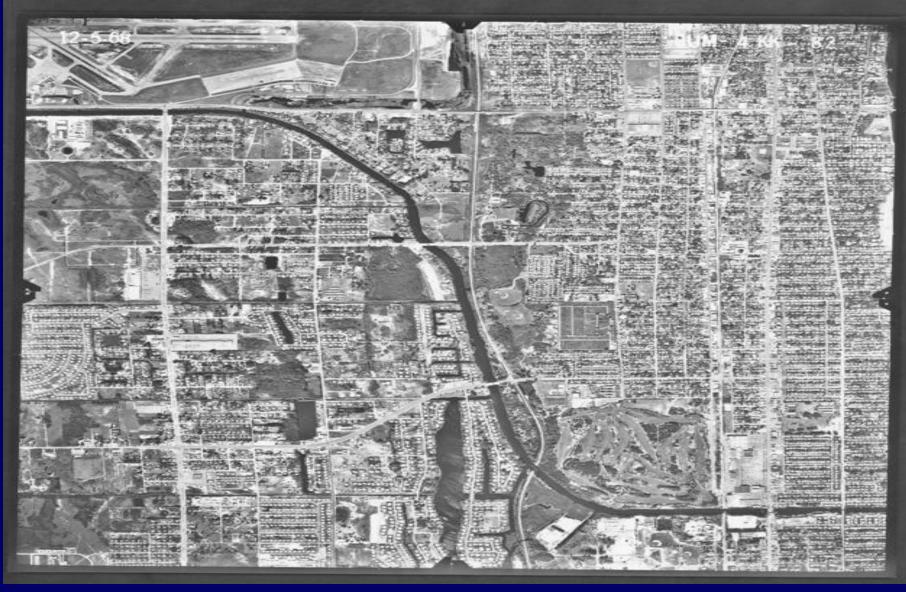


"Westward Expansion" December 1968





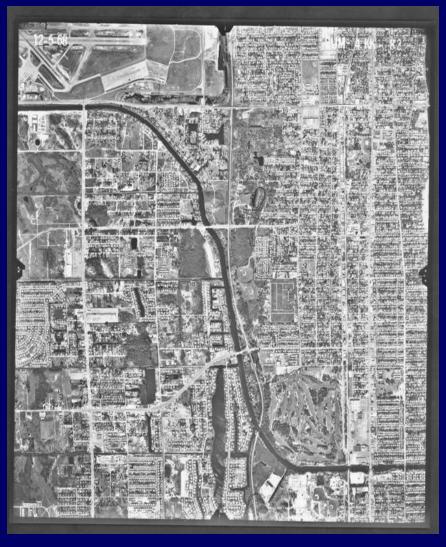
Lake Clarke Shores December 1968

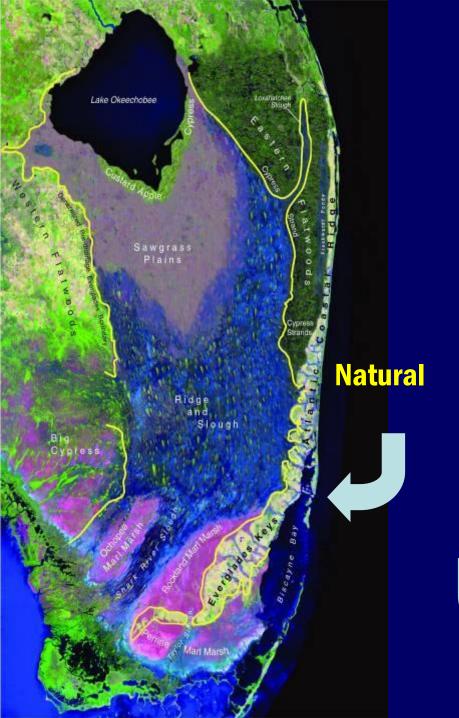




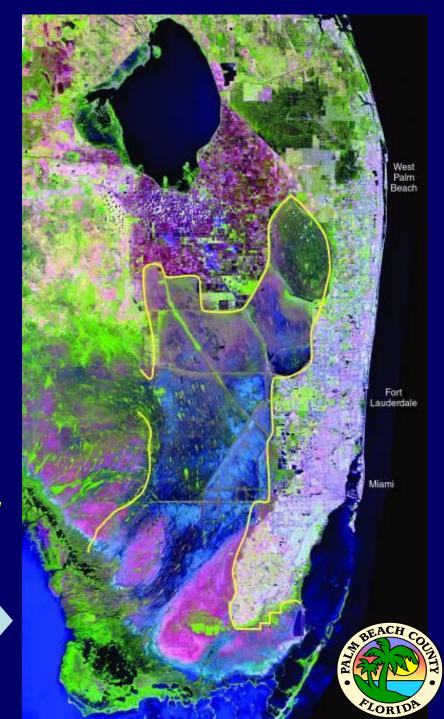
PBIA Area







Now



Our Challenges For The Future

Continued Growth

Higher Potable Water Demand

Sea Level Rise

Salt water Intrusion



Stormwater Storage and Discharges

Possible Ways to Address These Issues

- Use of Low Impact Development designs to lessen discharges from new development
- Retrofit existing stormwater systems as needed
- Create more water storage areas in existing developed areas
- Create more interconnects between watersheds

Continue to encourage conservation

Questions?

