

# Water Shortage Planning



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# Water Shortage Planning



- **Water Supply Risk Indicators**
- **Lake Istokpoga & Lake Okeechobee**
  - **Water Shortage Warnings**
- **Standard Operating Procedures**
- **Temporary Forward Pumps**
- **Environmental Enhancement**
- **Coordination Activities**
- **Ongoing Monitoring**

# Water Supply Risk Indicators



## Water Supply Risk Evaluation

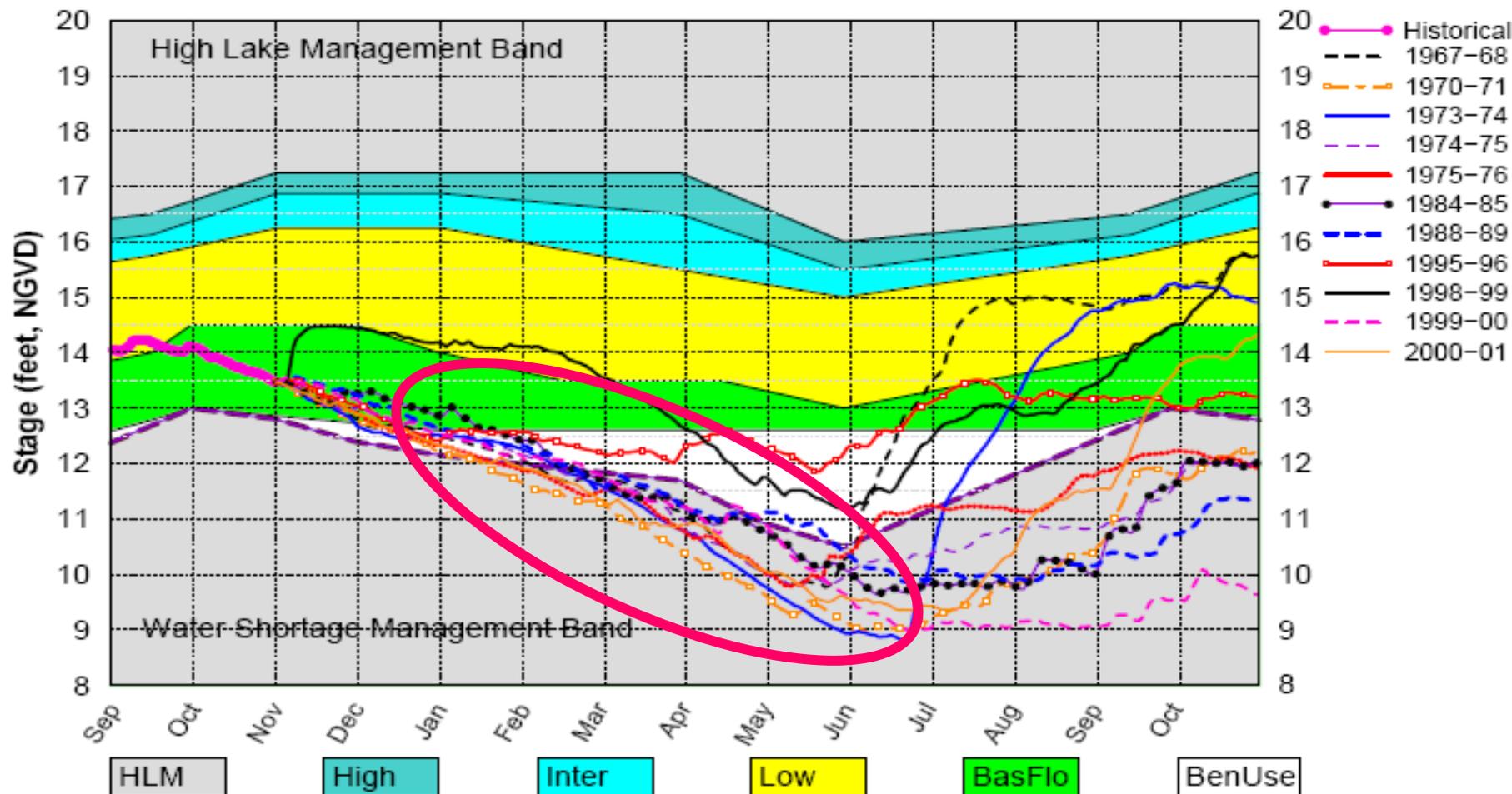
Area	Indicator	Value	Color Coded Scoring Scheme
LOK	Projected LOK Stage for the next two months	Base Flow Sub-Band	M
	Palmer Index for LOK Tributary Conditions	-2.26 (Extremely Dry)	H
	CPC Precipitation Outlook	1 month: Below Normal 3 months: Below Normal	M
	LOK Seasonal Net Inflow Forecast AMO warm/ENSO La Niña	-0.64 ft (Extremely Dry)	H
	LOK Multi-Seasonal Net Inflow Forecast AMO warm/ENSO La Niña	1.82 ft (Normal)	M
WCAs	WCA 1: 3 Station Average (3 Station 1-7, 1-8T, and 1-9 Average)	Above Line 1 (16.75 ft)	L
	WCA 2A: Site 2-17	Above Line 1 (12.84 ft)	L
	WCA-3A: 3 Station Average (3 Station 63, 64, and 65)	Above Line1 (10.09 ft)	L
LEC	Service Area 1	Year-Round Irrigation Rule in effect	L
	Service Area 2	Year-Round Irrigation Rule in effect	L
	Service Area 3	Year-Round Irrigation Rule in effect	L

# Lake Okeechobee



## Lake Okeechobee SFWMM November 2010 Position Analysis

All La Nina Years Plot PA



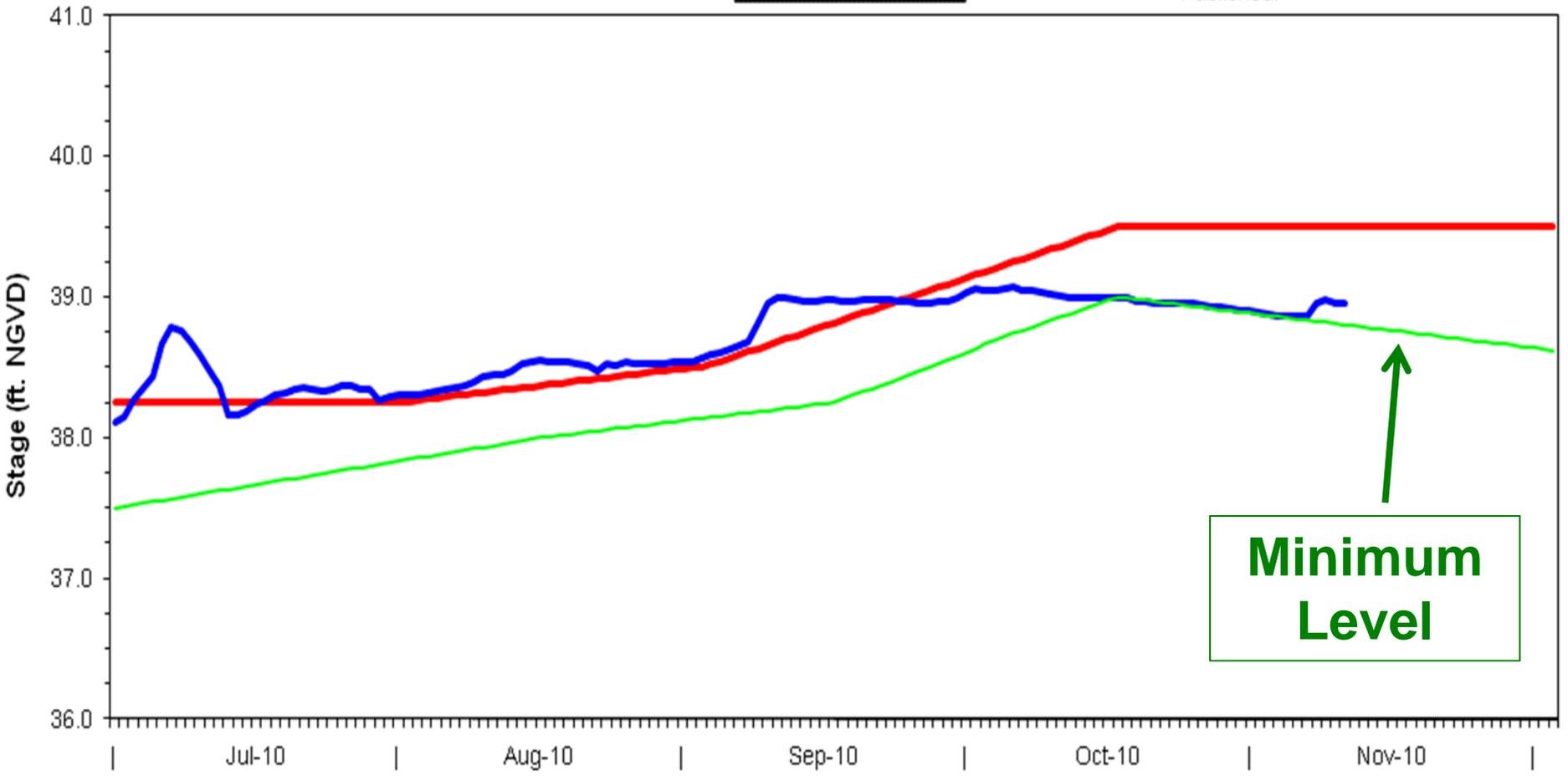
(See assumptions on the Position Analysis Results website)

# Lake Istokpoga



Lake Istokpoga

Published: 11/8/2010



Minimum Level

Legend:

- Maximum
- Lake Level
- Zone C Pump Operation

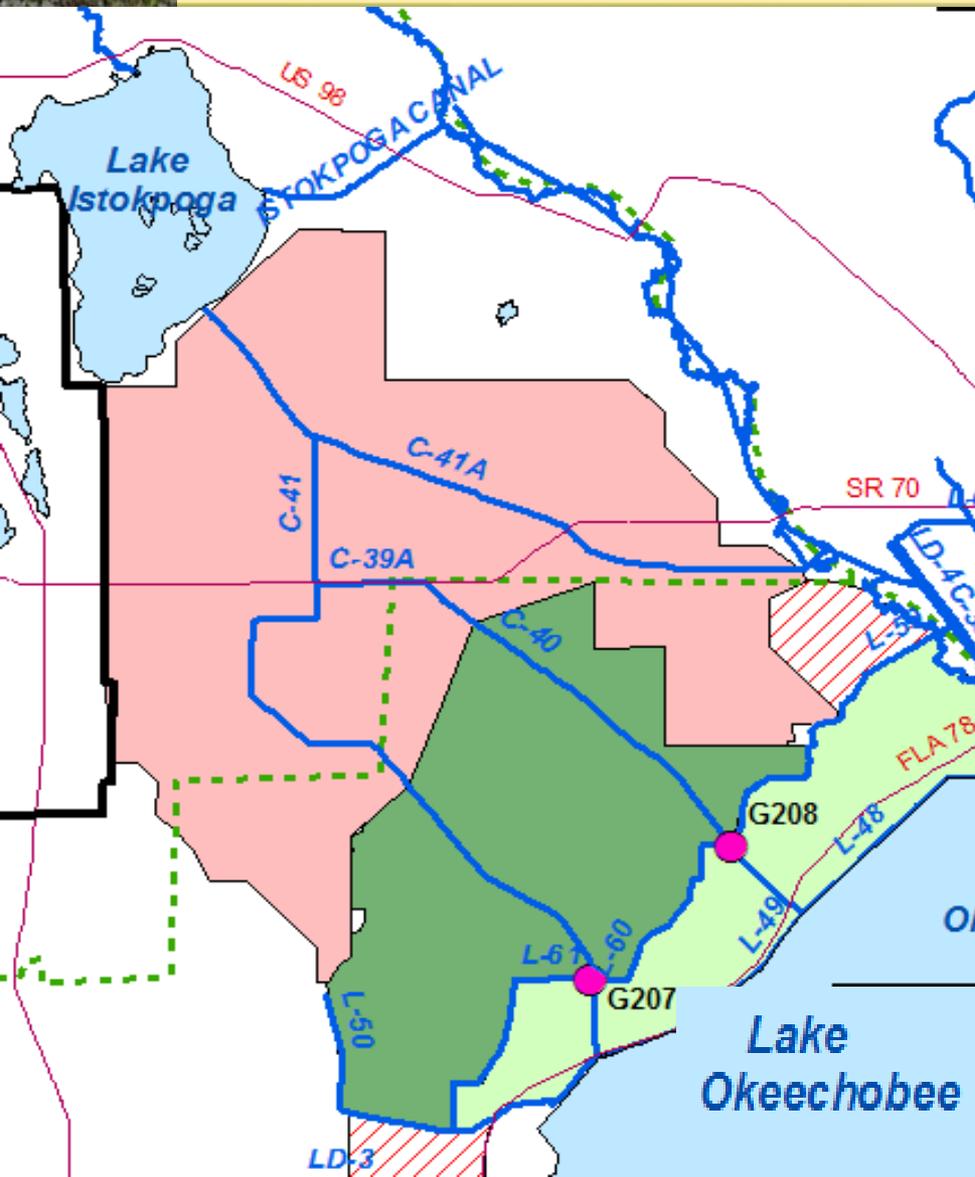
38.95

# Water Shortage Warning



- Warning triggers under new Adaptive Protocols have not yet been reached
- However, current water conditions, in conjunction with La Nina forecast, indicates the need for pro-active issuance of a Water Shortage Warning for:
  - Lake Istokpoga
  - Indian Prairie Basins
  - Lake Okeechobee Basin

# Lake Istokpoga & Indian Prairie Water Use Basins

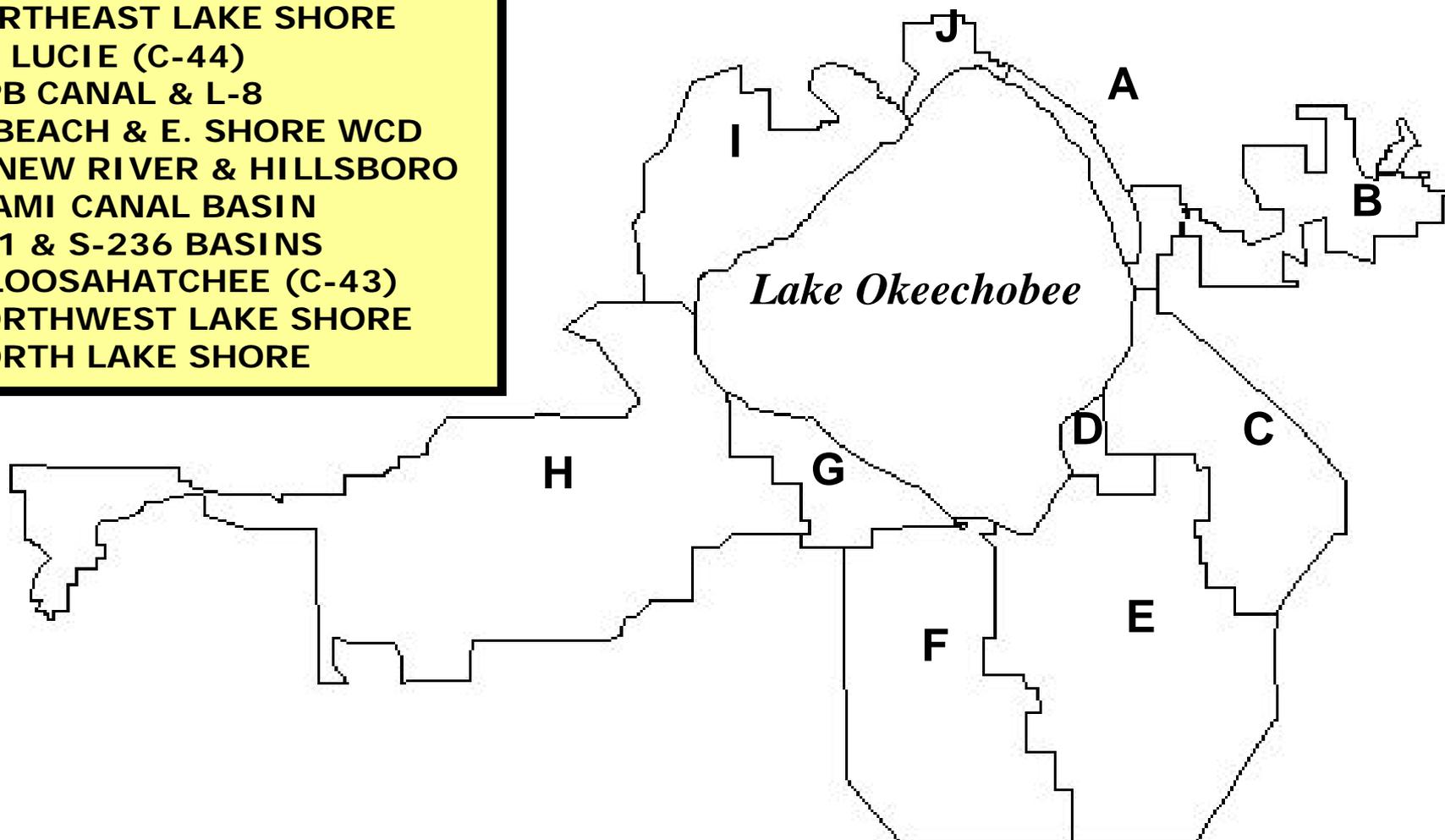


- Pumping operations have commenced at G-207 & G-208 from Lake Okeechobee to assist in meeting demands of Southern Indian Prairie Basin and Seminole Tribe's Brighton Reservation

# Lake Okeechobee Basin Sub-Boundaries



- A: NORTHEAST LAKE SHORE
- B: ST. LUCIE (C-44)
- C: WPB CANAL & L-8
- D: E. BEACH & E. SHORE WCD
- E: N. NEW RIVER & HILLSBORO
- F: MIAMI CANAL BASIN
- G: C-21 & S-236 BASINS
- H: CALOOSAHAATCHEE (C-43)
- I: NORTHWEST LAKE SHORE
- J: NORTH LAKE SHORE



# Water Shortage Warning



- Encourage voluntary water conservation by all users
- With water shortage warning in effect, no BMP replacement water deliveries will be made to the Water Conservation Areas
- Increased communication with water users, local governments & public
- Coordination meeting with water users will be held in Okeechobee on November 15, 2010

# Standard Operating Procedures

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

2009  
Water Shortage  
Suggested Operating Procedures

August 2009

- Updated August 2009
- Activating water shortage teams to respond to current and projected conditions
- 2010 Team Leader: Peter Kwiatkowski, Director of Resource Evaluation Division

# Temporary Forward Pumps



**14 temporary  
100-cfs forward  
pumps**



**Deliver water  
south (ag, STAs)  
when Lake O is  
less than 10.5 ft  
NGVD**



# Temporary Forward Pumps



- **Installation/Removal Contract**
  - **Contact existing contractor**
  - **Verify advance notice needed**
- **Inspect existing electronics, conduct pump maintenance, repair equipment (e.g., manatee gates)**
- **Coordinate with ACOE, permitting agencies, and users**

# Environmental Enhancement Opportunities



# Coordination Activities

- **Public Information/Media Communications Plan**
- **Outreach Strategy – Service Center Directors**
- **Legislative Affairs**
- **Inter-agency Coordination**
- **Ongoing Water Level Monitoring**



# The Power of Positive Thinking...

