

Welcome

**Rule Development Workshop #4
for Kissimmee Water Reservations**
June 9, 2020

Agenda

1. Welcome
2. Water Reservation Process
3. Recap of the April 17, 2020 Public Workshop
4. Summary of Public Comments
5. Revisions to the Draft Technical Document and Rules
6. Public Comments
7. Next Steps

Zoom Format for Public Engagement

- Please use the “Q & A” (Question and Answer) feature on the Zoom tool bar to submit questions throughout the workshop
- The Q & A feature is the only means for the public to engage with us during the workshop
- Questions from the public will be addressed during the “Public Comments” portion of the agenda
- Questions from the public will be read out loud, and live answers will be provided for all to hear

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Water Reservation Process

Toni Edwards
Applied Sciences Bureau

Water Reservations

Authority: Section 373.223(4), F.S.

Functions and Considerations

- Reserve water for the protection of fish and wildlife or public health and safety
- Prevent consumptive uses of reserved water
- Required for CERP projects by WRDA 2000
- May be used as part of an MFL recovery or prevention strategy



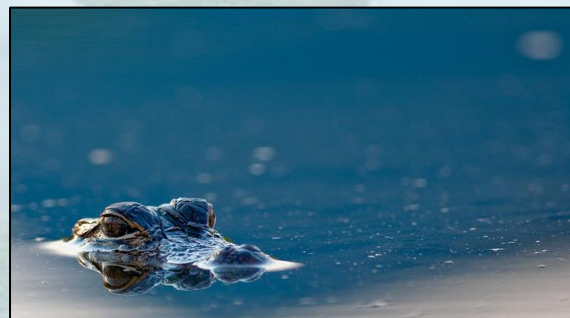
Osprey (*Pandion haliaetus*) with bass (*Micropterus* sp.) on Merritt's Mill Pond. Source: <http://nykography.weebly.com>

Water Reservations Do Not...

- Prevent use of unreserved water or water allocated under consumptive use permits
- Establish an operating regime
- Drought-proof the natural system
- Ensure wildlife proliferation
- Improve water quality



Lake Okeechobee under drought conditions
Source: SFWMD



American Alligator (*Alligator mississippiensis*)
Source: <http://www.photodrom.com>

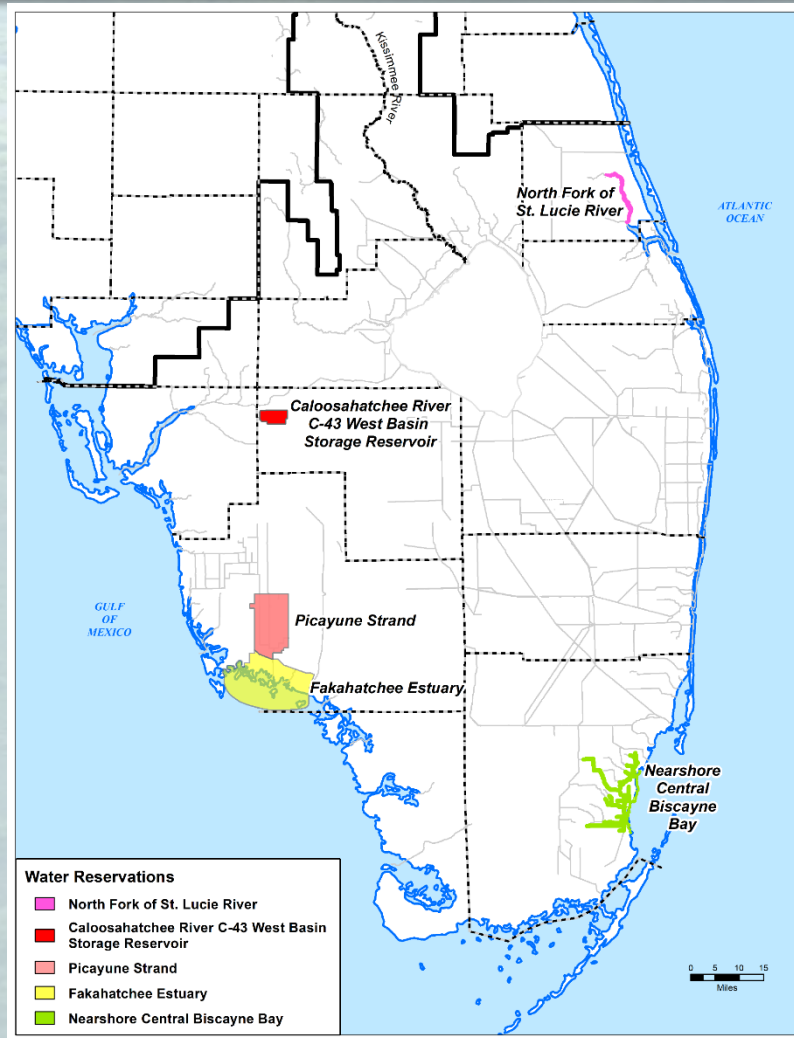


S-67 water control structure (replaced G-85 structure)
Source: SFWMD

Defining Water to be Reserved

- Identify the reservation waterbody
- Characterize the hydrology of the reservation waterbody
- Identify fish and wildlife to be protected
- Establish linkages between hydrology and fish and wildlife
- Define and quantify the water needed to protect the identified fish and wildlife

Water Reservations Adopted in SFWMD



- Fakahatchee Estuary
- Picayune Strand
- North Fork of the St. Lucie River
- Nearshore Central Biscayne Bay
- Caloosahatchee River C-43 West Basin Storage Reservoir

Cover 172,074 acres Districtwide

Kissimmee Water Reservations

Chapter 40E-10, F.A.C. and Applicant's Handbook For the Protection of Fish and Wildlife

Nationally recognized
largemouth bass fishery



Largemouth Bass (*Micropterus salmoides*)
Source: Engbretson Underwater Photography
<https://www.underwaterfishphotos.com>

Wood stork and snail
kite nesting colonies



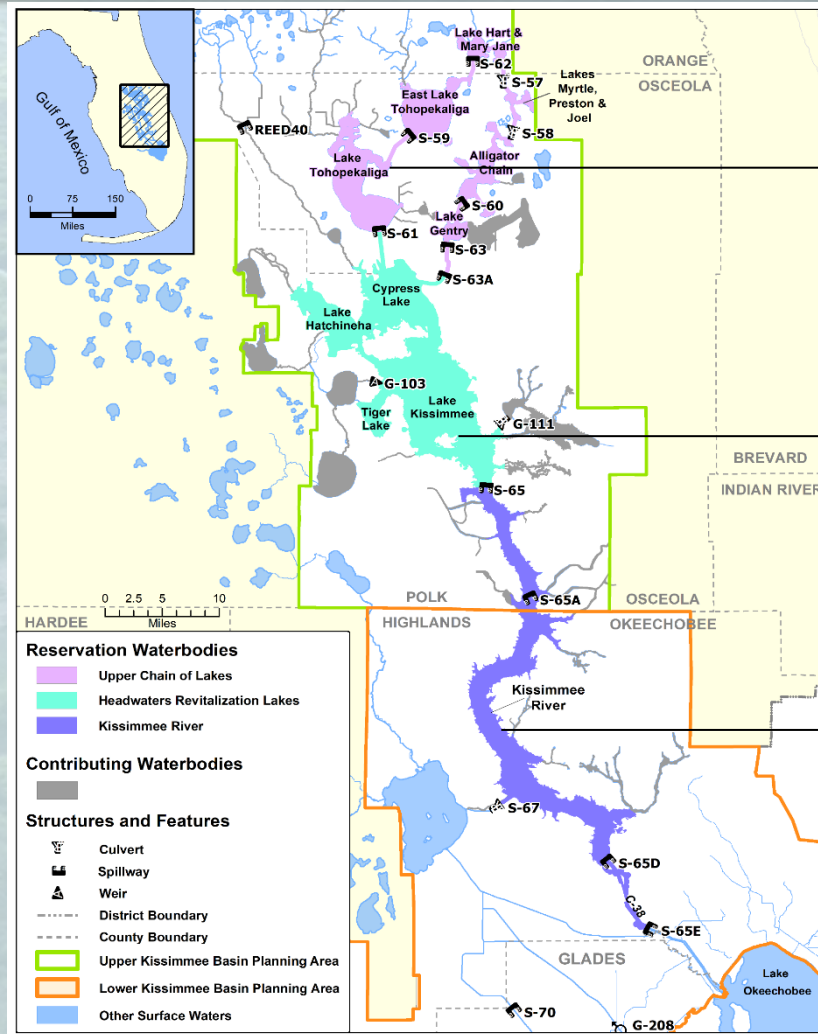
Snail Kite (*Rostrhamus sociabilis*)
Source: <https://de.wikipedia.org>

One of the largest
concentrations of nesting
bald eagles in the U.S.



Bald Eagle (*Haliaeetus leucocephalus*)
Source: Audubon.org

Kissimmee Reservation Waterbodies



Upper Chain of Lakes

Lakes Hart-Mary Jane, Lakes Myrtle-Preston-Joel, Alligator Chain of Lakes, Lake Gentry, Lake Tohopekalliga, East Lake Tohopekalliga, and associated canals

Headwaters Revitalization Lakes

Lakes Kissimmee, Cypress, Hatchineha, and Tiger, and associated canals

Kissimmee River and Floodplain

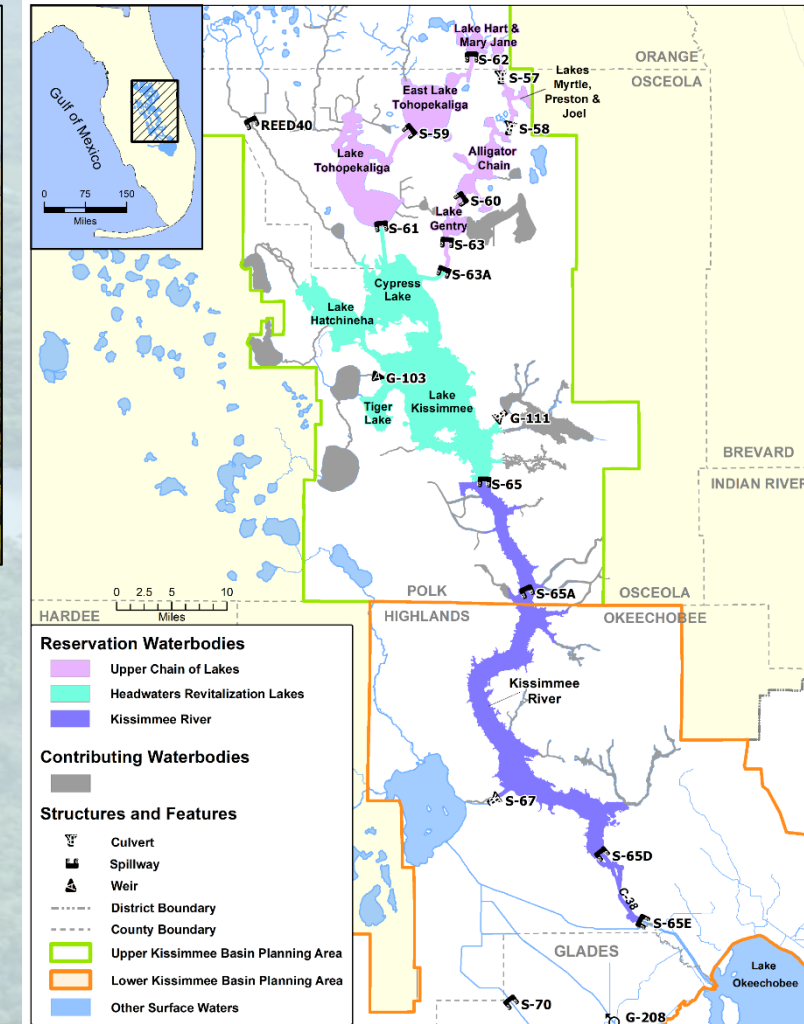
To S-65E structure north of Lake Okeechobee; includes Istokpoga Canal and floodplain, C-38 Canal, and remnant river channels from S-65 to S-65E

Kissimmee Water Reservations

- 172,500 acres, spanning portions of UKB (CFWI) and LKB Planning Areas
- Upper Chain and Headwaters Lakes – primary sources of water for the Kissimmee River
- Reservations support Kissimmee River Restoration Project (~\$800 million public investment)



Kissimmee River Restoration Project (KRRP): Looking north from the south end of the Phase I restoration area. Source: SFWMD



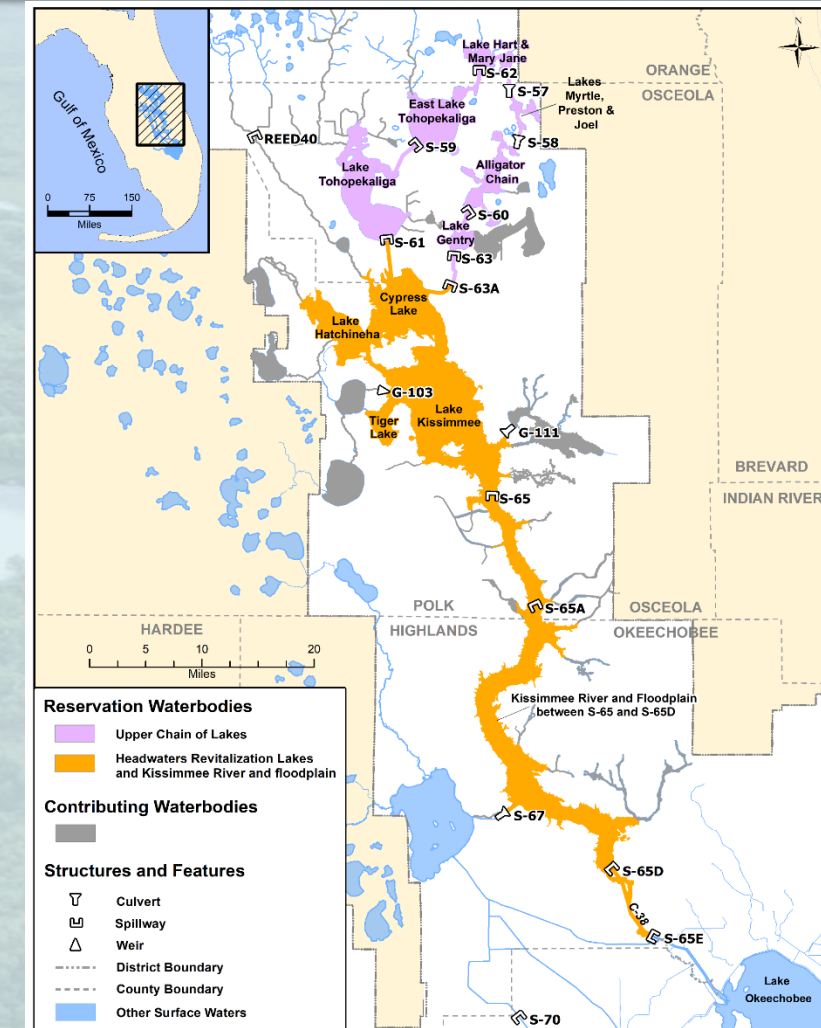
Water Proposed for Reservation from Allocation

Surface Water

- Upper Chain of Lakes
 - All surface water up to specific water reservation stages
- Kissimmee River and Headwaters Revitalization Lakes
 - All surface water
- Contributing Waterbodies (contribute surface water to reservation waterbodies)
 - Quantities required for the protection of fish and wildlife

Groundwater (Surficial Aquifer System)

- Reservation Waterbodies and Contributing Waterbodies
 - Quantities required for the protection of fish and wildlife



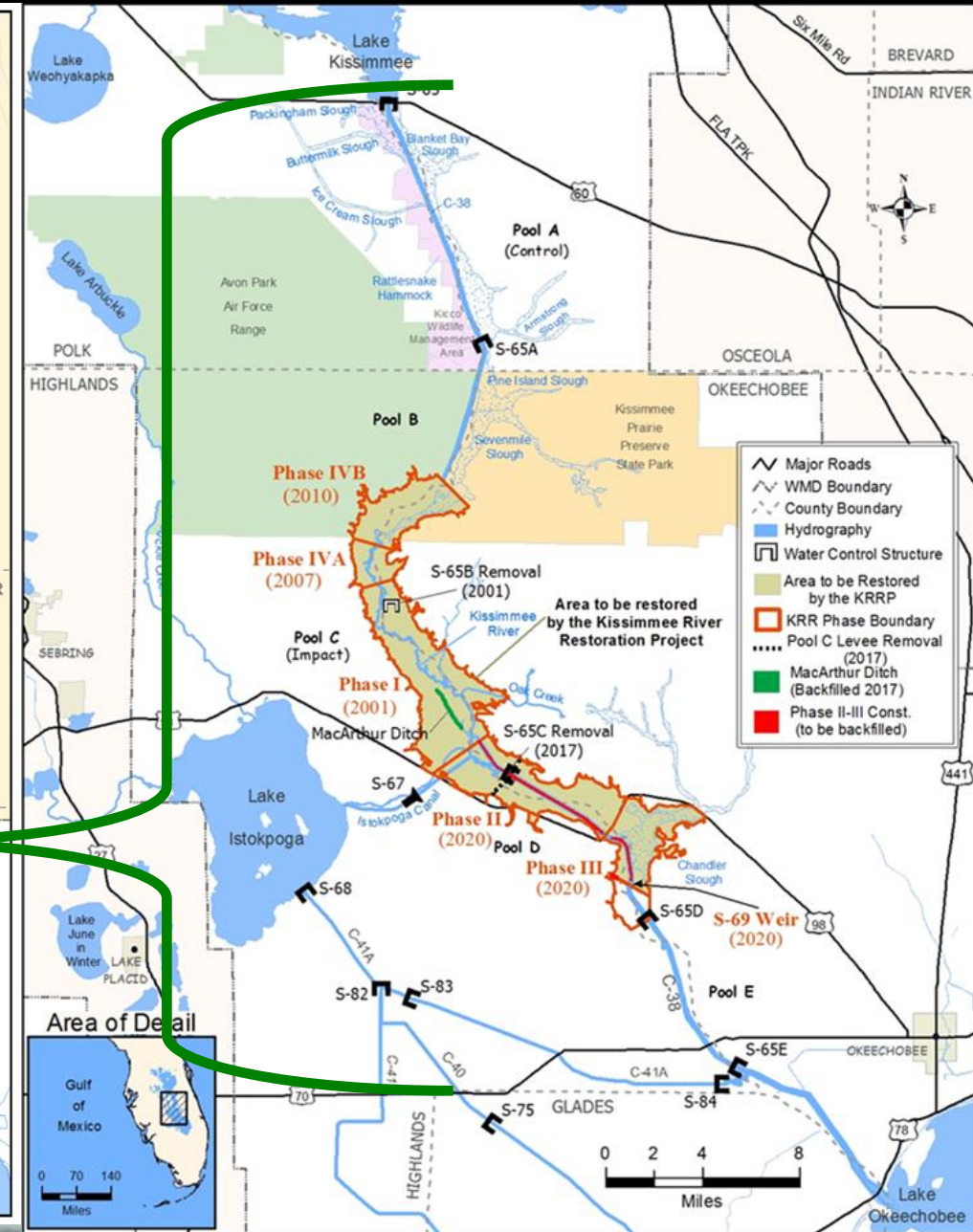
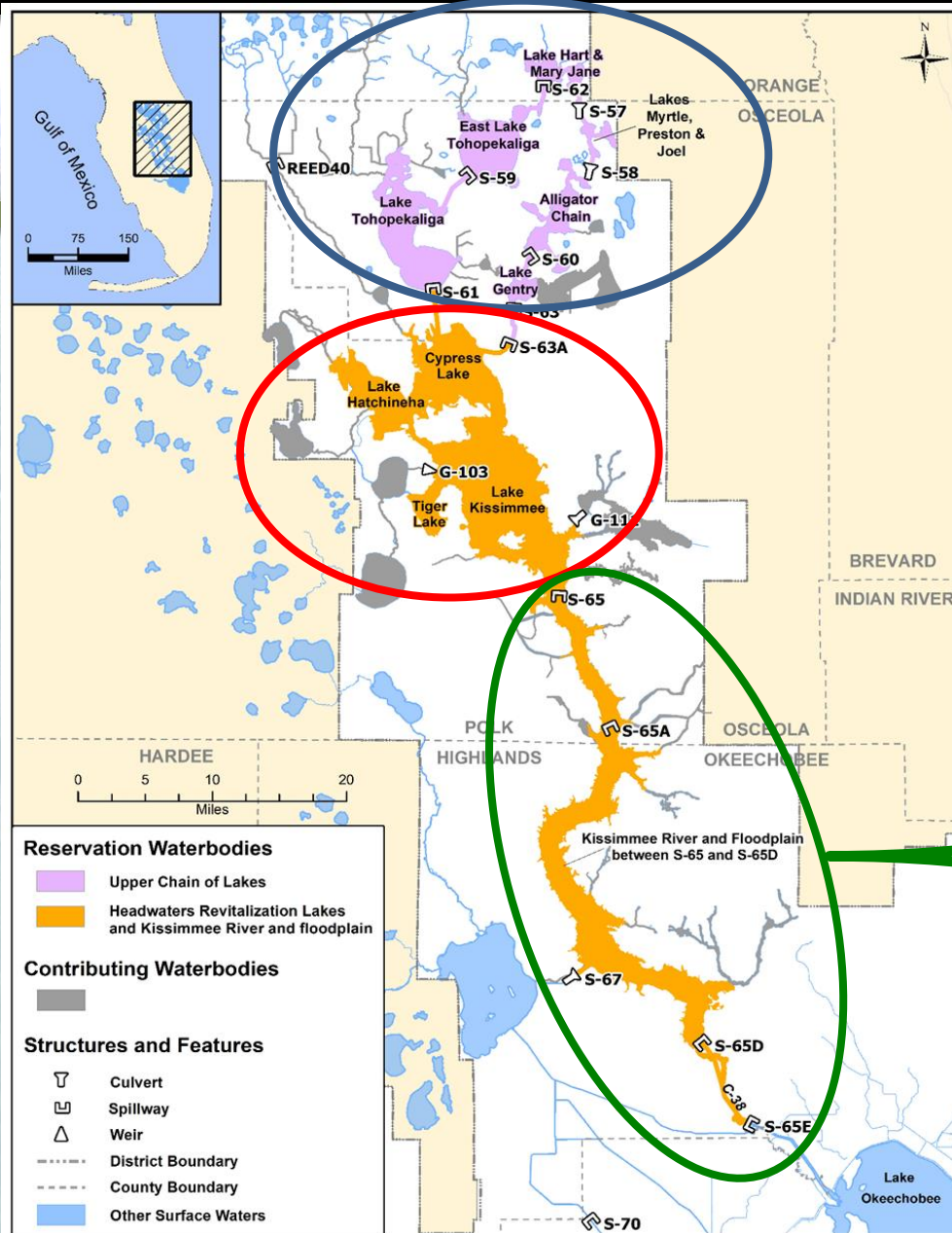
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Recap of the April 17, 2020 Public Workshop

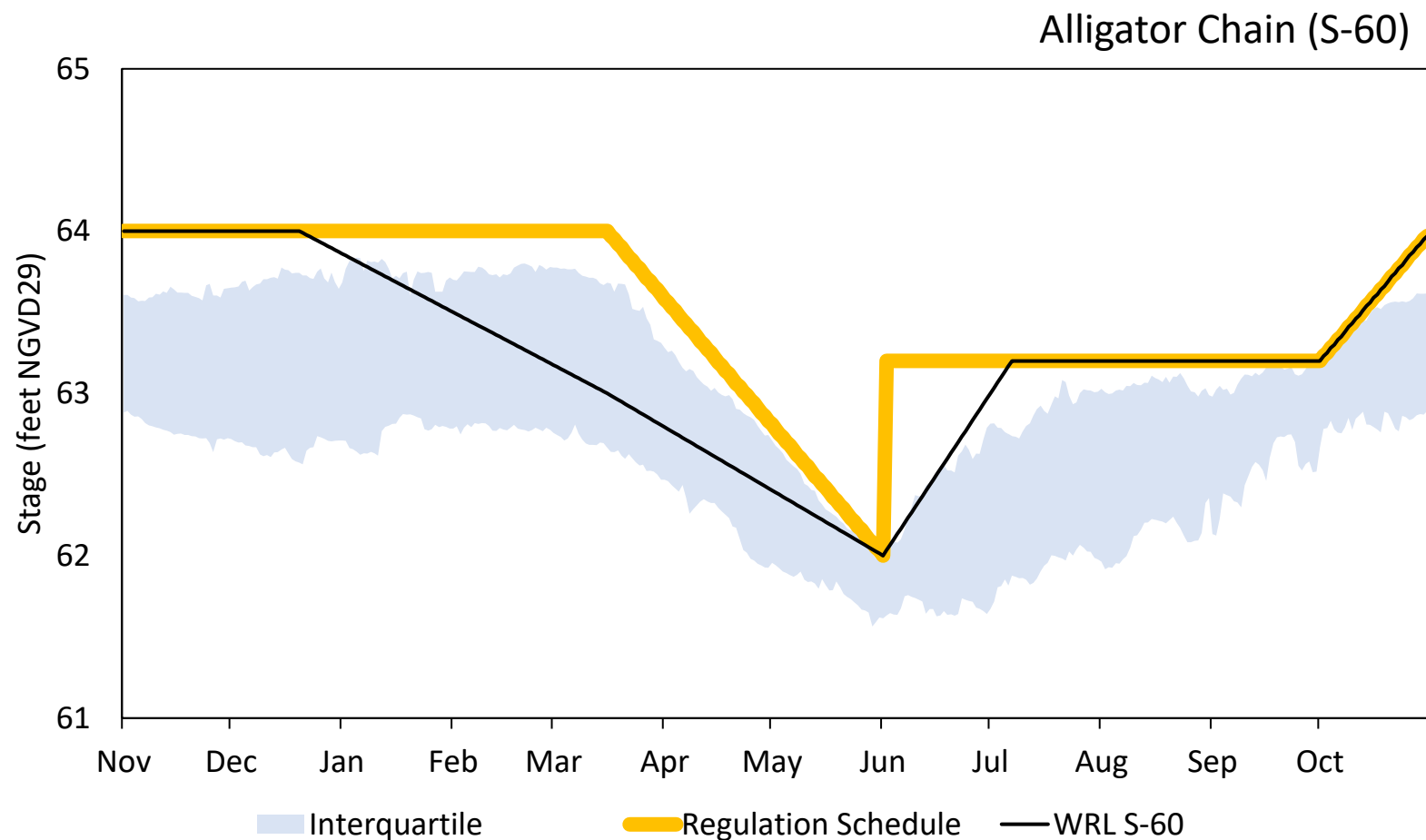
Don Medellin
Applied Sciences Bureau

Recap from the April 17, 2020 Workshop

- Water reservation process
- Kissimmee River Restoration Project and underpinnings for Water Reservations (3 presentations)
 - Kissimmee River and Kissimmee River Restoration Project
 - Downstream check at S-65 structure
 - Upper Chain of Lakes
- Overview of technical document
- Changes to draft Water Reservation rule and permitting criteria
- UK-OPS modeling and evaluation tool



Water Reservation Lines and Historical Stages



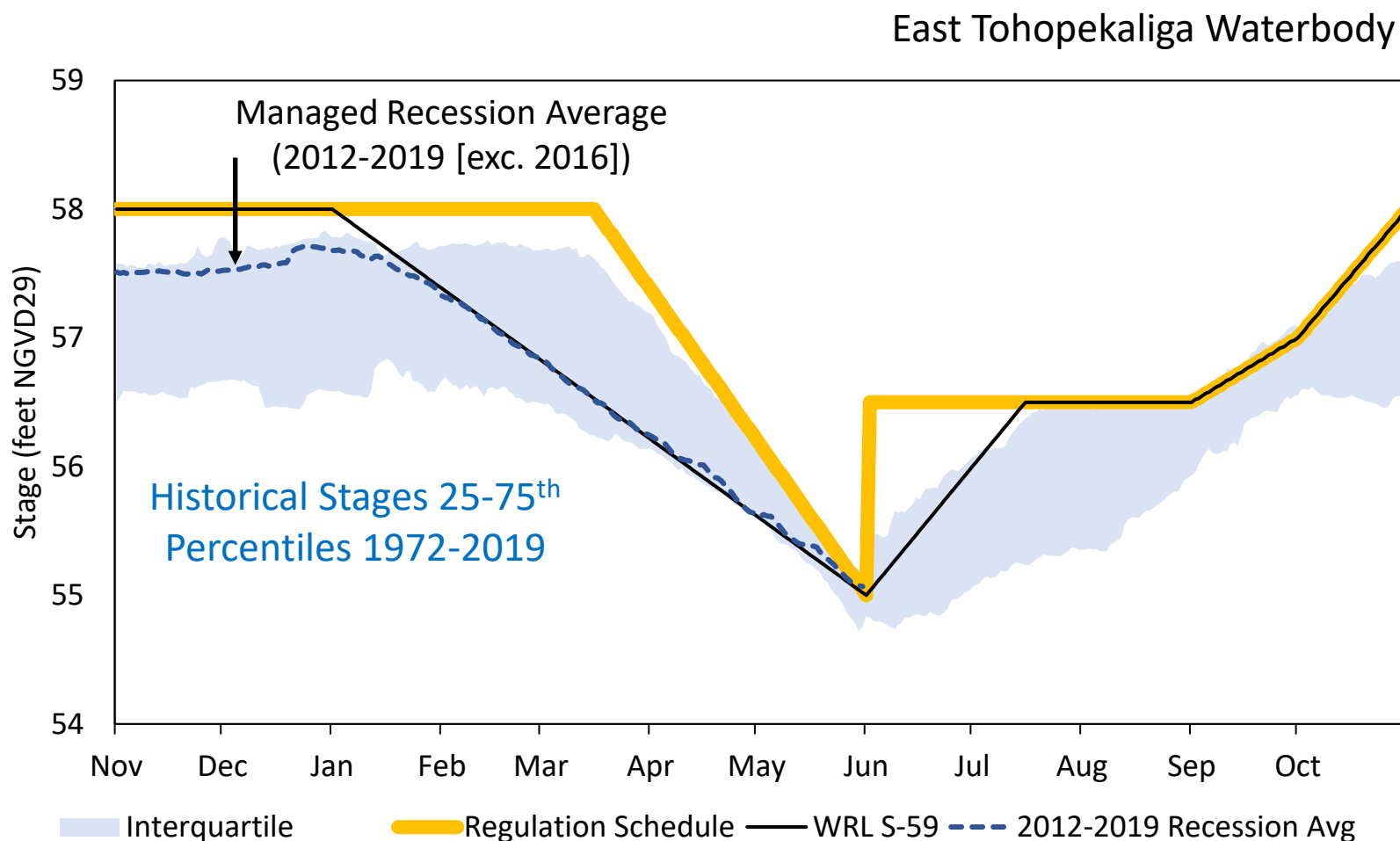
Protecting maximum lake stages and durations

Protecting breeding season stages

Protecting minimum lake stages

Protecting transition from minimum to maximum and lake refill capacity

Water Reservation Lines and Historical Stages



Protecting maximum lake stages and durations

Protecting breeding season stages and recession rates

Protecting minimum lake stages

Protecting transition from minimum to maximum and lake refill capacity

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Summary of Public Comments

Don Medellin
Applied Sciences Bureau

Public Comments – Stakeholder Letters

➤ Utilities

- Toho Water Authority
- City of St. Cloud, Toho Water Authority, Orange County Utilities, Polk County Utilities, and Reedy Creek Improvement District (STOPR Group)
- Orlando Utility Commission

➤ Agriculture

- Florida Department of Agriculture and Consumer Services (Office of Water Policy)
- Farmland Reserve

➤ Environmental

- Everglades Coalition
- Audubon of Florida

➤ Seminole Tribe of Florida

General Comments Received

- Allowing withdrawals in the early part of the wet season may compromise water levels later in the season
- Concerned that impacts in the Central Florida Water Initiative region may be adversely affecting groundwater seepage within the Kissimmee Basin
- Reservation needs to protect flows during dry conditions ensure to Minimum Flow and Level for Lake Okeechobee is met and not decreasing the water made available for the Lake Okeechobee Service Area, stormwater treatment areas, and natural areas

General Comments Received

- More information about the approval process for permittees to request withdrawals during environmental releases
- Adequate water is vitally important to protect proper hydrology to reach full restoration potential and this reservation is essential
- In order to protect the public's \$800M investment, the District must adopt this rule to set aside water for the protection of fish and wildlife
- Support the District's effort to reserve all of the water in the lower basin, water reservation lines in the Upper Chain of Lakes, and the downstream check in Lake Okeechobee

Public Comments – 40E-10 Rule

- Lake Tohopekaliga and East Lake Tohopekaliga water levels will be managed close to the Water Reservation Lines, limiting availability of water (future withdrawals) to an existing permitted user
- Contributing waterbodies:
 - Definition is inconsistent
 - Extent of each waterbody should be rule
 - Other contributing waterbodies were not included

Public Comments – Applicant's Handbook

- Request more clarity on withdrawals from the Floridan aquifer system and potential influences on the surficial aquifer system (conflict with indirect)
- Suggest analyzing the cumulative effects that dispersed water management projects may have on flows into Lake Okeechobee, from the Kissimmee watershed, and the potential water uses at risk
- Request more clarity on uses that do not withdraw reserved water, including uses that qualify for general permits
- Consider adding temporary dewatering activities to list of uses that do not withdraw reserved water
- Request more clarity on rule - terms “supplemental” and “primary” supply limits operational flexibility of a utility and is unnecessarily constraining

Public Comments – Applicant's Handbook

- The approach used for determining the allocation of water should be based on a “whichever is less criteria”
 - Reasonable-beneficial demand of the use class and the rated capacity of the withdrawal facility
- Do not specify the model version for the UK-OPS Model; allow applicants to propose site-specific changes base on local conditions
- Request more clarity on how regulatory releases to the estuaries are determined

Public Comments – Technical Document

- Clarify that existing legal uses were considered when determining the proposed Water Reservation Lines
- More recent data and information should be considered for establishing the Water Reservation Line in Lakes Myrtle, Preston, and Joel
- Consider other contributing waterbodies and connections to the Lake Colin and Econlochatchee River basins

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Revisions to the Draft Technical Document and Rules

Nicholas Vitani, P.G.
Water Use Bureau

Revisions to Technical Document

1 Table 5-2. Surface water pumps near the reservation waterbodies.

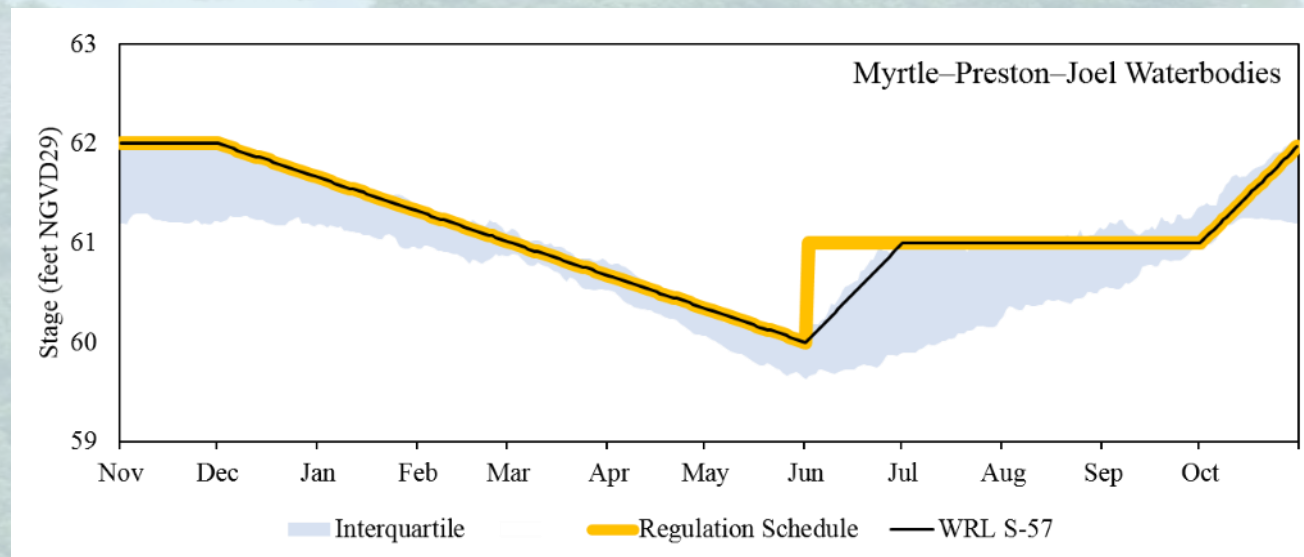
Permit Number	Project Name	Land Use	Source	Average Daily Allocation (mgd)
28-00130-W	Wild Island Ranch	Agriculture	Lake Istokpoga/Indian Prairie Canal System	22.84
28-00146-W	Fort Basinger Grove	Agriculture	Istokpoga Canal and C-41A Canal	0.29
28-00116-W	Smith-Okeechobee Farms	Agriculture	SFWMD-C 41A Canal	5.123
28-00357-W	River Grove	Agriculture	C-38 Canal	5.71
49-00051-W	Lakeside Groves, Inc.	Agriculture	Live Oak Lake	0.23
49-00077-W	Number 4 Grove	Agriculture	Pearl Lake	0.50
49-00097-W	Turkey Hammock	Agriculture	Lake Kissimmee	3.23
49-00150-W	Macy Island Citrus	Agriculture	Lake Tohopekaliga	0.15
49-00776-W	Adams Ranch	Agriculture	Lake Marian	13.75
49-00938-W	Heart Bar Ranch Seed and Sod	Agriculture	On-site canal (drains to the C-34 Canal)	0.78
49-01409-W	Shingle Creek Stormwater Reuse	Public Water Supply	Shingle Creek	6.00
49-01960-W	Lakeshore Stormwater Augmentation	Public Water Supply	Lake Tohopekaliga	2.00
49-02330-W	Bexley Ranch/Lake Marian	Agriculture	Lake Marian	1.28
53-00031-W	Grove Number 91	Agriculture	Lake Pierce	0.42
53-00032-W	Chastain Block	Agriculture	Lake Pierce	0.18
49-02549-W	Lake Toho Restoration/AWS	Public Water Supply	East City Ditch/Mill Slough	8.22
Total				70.703 42.45

2 mgd = million gallons per day.

Revisions to Technical Document

5.3.4 Transition Between Seasonal High and Low Stages

“... In order to protect these varying historical patterns, scientists selected the average daily stage on March 15 and drew recession lines between the seasonal high and seasonal low targets. This wasn't necessary on Lakes Myrtle, Preston, Joel since the average stage on March 15 was essentially the same as the regulation schedule, due to its shape.”



Revisions to Applicant's Handbook

3.11.5.A.3 Uses That Do Not Use Reserved Water

A permit modification or renewal involving a direct withdrawal of surface water or an indirect withdrawal of groundwater that does not change the source, increase the allocation, or change the withdrawal location (e.g., replacement of an existing well or surface water pump with similar construction and at a similar location); **that includes crop changes that do not change the allocation; or that results in a decrease in permit allocation.**

Revisions to Applicant's Handbook

3.11.5.A.4 Uses That Do Not Use Reserved Water

Re-allocation or transfer of a water use permit involving a direct withdrawal of surface water or an indirect withdrawal of groundwater issued a) before [rule effective date] if the previous permittee demonstrated such use complied with the criteria in Section 3.1 through 3.10 of the Applicant's Handbook; or b) after [rule effective date] if the previous permittee demonstrated compliance with the criteria in Subsection 3.11.5 of the Applicant's Handbook.

Revisions to Applicant's Handbook

3.11.5.B Additional Criteria for *Issuance of Permits* from Upper Chain of Lakes Reservation or Contributing Waterbodies

Withdrawals from reservation and contributing waterbodies are subject to the following additional criteria and applicable special conditions in Subsection 5.2.2.K.9 of the Applicant's Handbook. **Water** from contributing waterbodies and Upper Chain of Lakes reservation waterbodies may not always be available for use. Allocations from these sources do not have the 1-in-10 year level of certainty afforded to other water use permit allocations. Applicants must consider the purpose of their proposed use, the variability of the source, the suitability of the source for the proposed use, and the rights of existing legal users.

Revisions to Applicant's Handbook

3.11.5.B.2.a.i. Additional Criteria for *Issuance of Permits* from Upper Chain of Lakes Reservation or Contributing Waterbodies

- a. Suitability of the Source for the Use: The applicant must consider the variable nature of the supply in demonstrating that this source is suitable for the intended use. This may be accomplished by:
- i. Demonstrating the proposed withdrawals **in combination with other sources of water and storage** meet the reasonable-beneficial needs of the use. Operational plans that describe how both sources will be used to meet the reasonable-beneficial needs shall be submitted in the application and incorporated as a permit condition;

Revisions to 40E-10, F.A.C.

40E-10.071(1)(c) Water Reservation Areas: Upper and Lower Kissimmee Basin Planning Areas

2. Groundwater: Surficial aquifer system groundwater contributing to East Lake Tohopekaliga **or its contributing waterbodies** that is required for the protection of fish and wildlife is reserved from allocation in accordance with Subsection 3.11.5 of the Applicant's Handbook.
3. Contributing Waterbodies: **Surface water** that is required for the protection of fish and wildlife is reserved from allocation in accordance with Subsection 3.11.5 of the Applicant's Handbook.

Revisions to 40E-10, F.A.C.

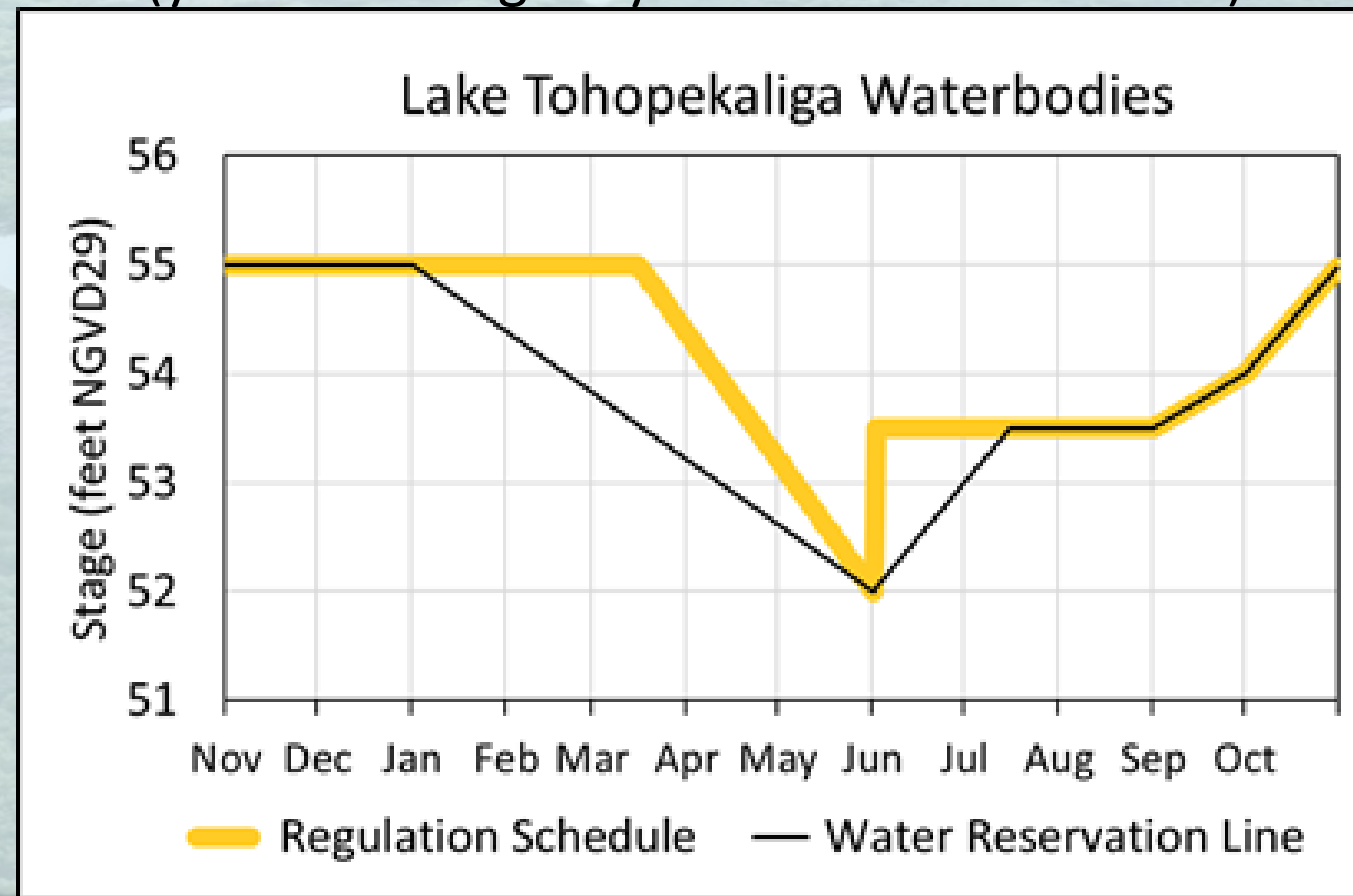
Similar Changes to the Following Subsections:

40E-10.071(1) (d), (e) Water Reservation Areas: Upper and Lower Kissimmee Basin Planning Areas

40E-10.071 (2), (3) Water Reservation Areas: Upper and Lower Kissimmee Basin Planning Areas

Revisions to 40E-10, F.A.C.

Appendix 4 Graphs
(y-axis labeling only whole number values)



Process for Requesting Special Withdrawals

Process for Requesting a Special Withdrawal From a Reservation Waterbody



Process for Requesting Special Withdrawals



South Florida Water Management District Temporary Request and Authorization of Withdrawal Facility Operation



Submit request to wucompliance@sfwmd.gov

WATER USE PERMIT NUMBER: _____ OWNER (PERMITTEE) NAME: _____

PROJECT NAME: _____ PHONE/CELL NUMBER: _____

EMAIL ADDRESS: _____

SURFACE WATER: YES ☐ NO ☐ (If yes, please provide name below)

NAME OF RESERVATION OR CONTRIBUTING WATERBODY: _____

INDIRECT WITHDRAWAL OR GROUNDWATER: YES ☐ NO ☐ (If yes, please provide name below)

NAME OF RESERVATION OR CONTRIBUTING WATERBODY: _____

REQUESTED AUTHORIZATION: _____

DATE OF REQUEST: _____ NAME OF REQUESTOR: _____

PHONE/CELL NUMBER: _____ EMAIL ADDRESS: _____

OWNER SIGNATURE: _____

DISTRICT AUTHORIZATION INFORMATION

The Permittee's temporary withdrawals shall comply with the conditions listed below.

1. Start date for Withdrawal: _____ 2. End date for Withdrawal: _____
3. Each morning by 10 a.m., the Permittee shall monitor (insert monitoring station name) and determine if the water level is above _____ ft. NGVD. If the water level is above _____ ft. NGVD, the permittee may withdraw water. If the water level reaches or falls below _____ ft. NGVD, the permittee shall cease all withdrawals.
4. Withdrawals made under this authorization shall be monitored and reported on Form No. _____.
5. Other SFWMD Conditions: _____

Signed: _____ Print Name: _____ Date: _____

Form 1393 (2020-xx)

Incorporated by reference in Rule 40E-10 (F.A.C.), and Section 3.11.5 of the Applicant's Handbook for Water Use Permits

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Public Comments

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Next Steps

Don Medellin
Applied Sciences Bureau

Next Steps

- Public comments due Tuesday, June 23, 2020
- Comments can be submitted to Toni Edwards at tedwards@sfwmd.gov
- Workshop presentations will be posted to the water reservations webpage under the Kissimmee tab
- **Next rulemaking workshop: August/September 2020**
(Location to be determined)

Additional Information

- Water reservations webpage (under Kissimmee tab)
www.sfwmd.gov/reservations
- SFWMD web board (under SFWMD MFL and Water Reservation Categories)
<http://sfwmd.websitetoolbox.com/>
- SFWMD rules webpage
www.sfwmd.gov/rules

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Thank You!