

# BUILDING A WORLD OF DIFFERENCE

## PROJECT UPDATE SUSTAINABLE WATER MANAGEMENT PLAN

STEVE SIMPSON

BLACK & VEATCH

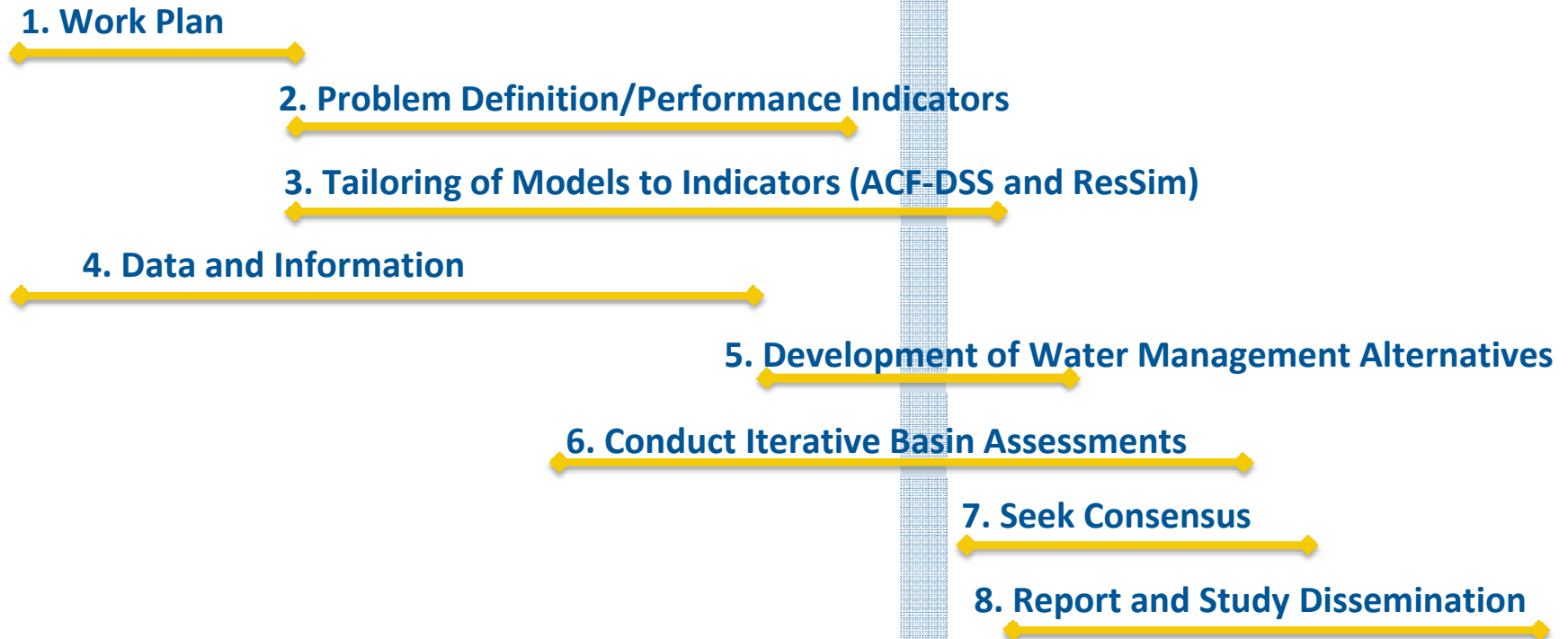
April 2013



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# Where are we now?

## OVERALL SUSTAINABLE WATER MANAGEMENT PLAN TASKS



### Completed

- *Performance metrics*
- *UIF evaluation*
- *Water demands/returns*
- *Baseline model runs*

### In Progress

*Water management alternatives*

# TASK 2 PERFORMANCE METRICS

- Conducted four caucus meetings in November
- Updated Technical Memorandum



Working together to share a common resource.

Apalachicola-Chattoahoochee-Flint  
Stakeholders

Sustainable Water Management Plan:  
**Metric Development Technical  
Memorandum**

APRIL 5, 2013



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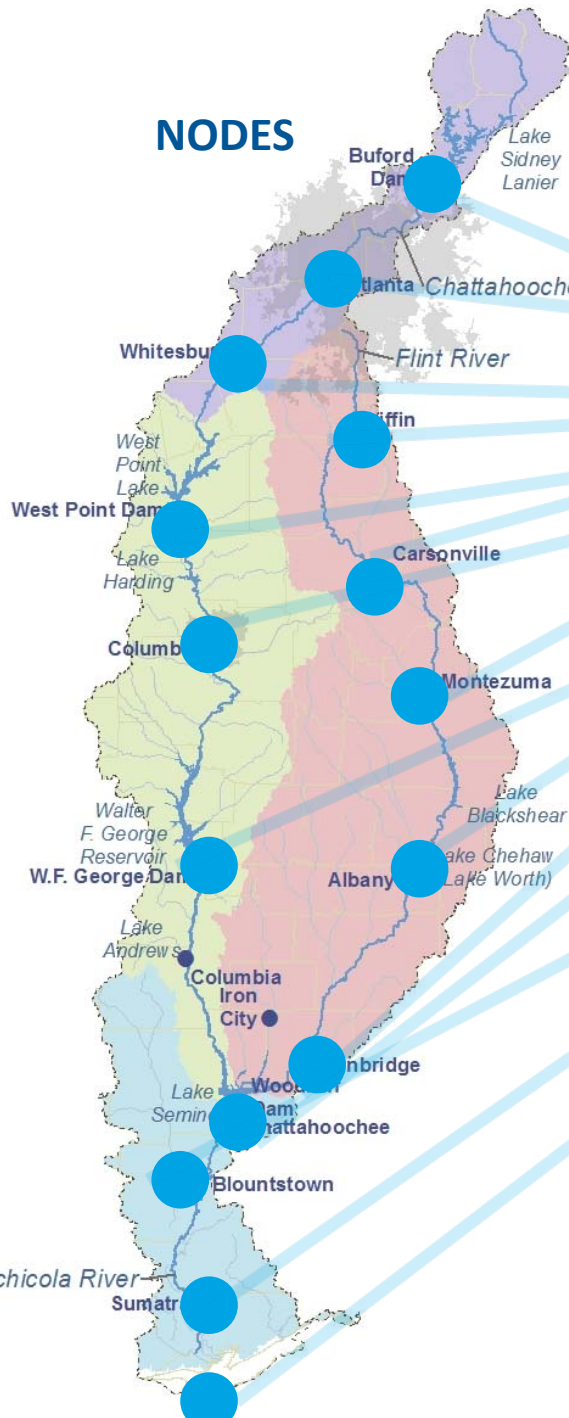


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## NODES

## INTERESTS



Seafood Industry    Navigation

Environment & Conservation

Historic & Cultural    Water Quality

Local Government    Water Supply

Hydro Power    Farm Agriculture

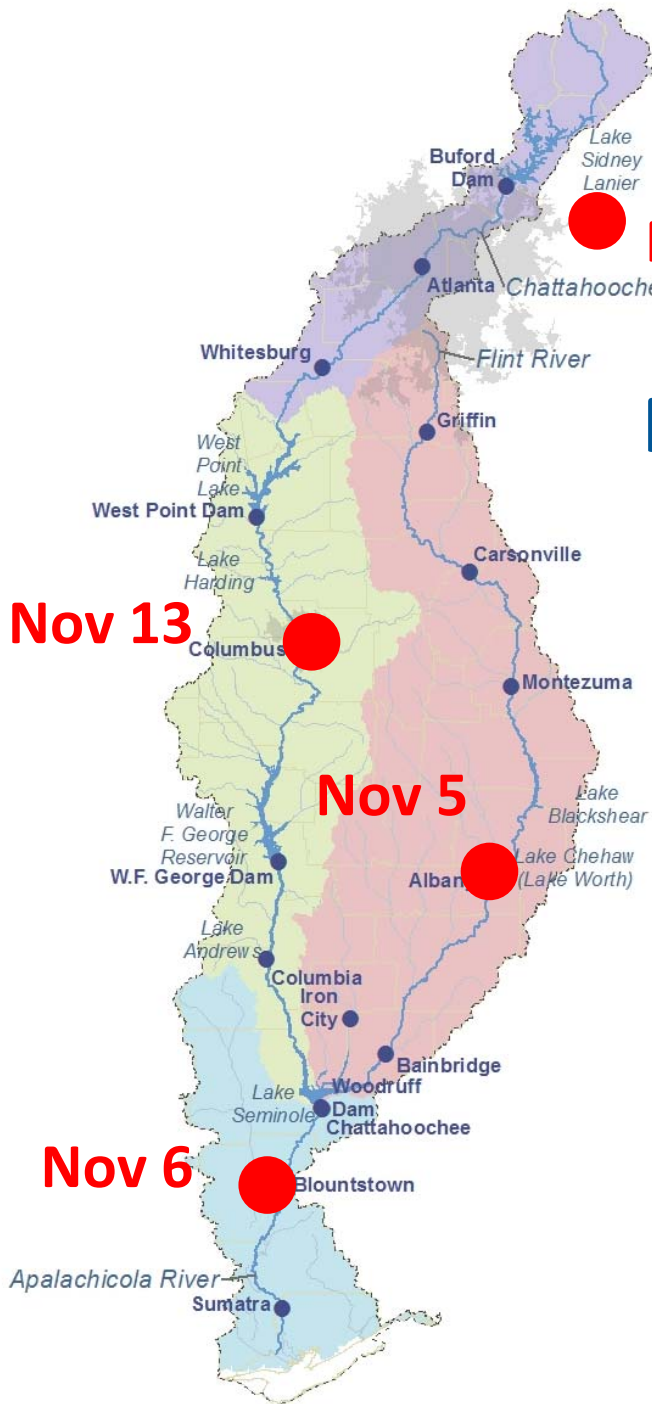
Industry & Manufacturing

Business & Economic Development

Thermal Power    Urban Agricultural

Recreation

1  
Summary  
Table



# PURPOSE OF CAUCUS MEETINGS

- Discuss performance metrics
- Identify informational needs
- Confirm metrics are representative of caucus interests
- Discuss water management alternatives
- Solicit water management ideas

# TASK 4 : WATER DEMANDS AND RETURNS

- Received additional stakeholder comments
- Additional conference calls and analysis
- Updated Technical Memorandum



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Apalachicola-Chattoohochee-Flint  
Stakeholders

Sustainable Water Management Plan:  
**Approach to Water Withdrawals and  
Returns Reporting Technical  
Memorandum - FINAL**

MARCH 27, 2013



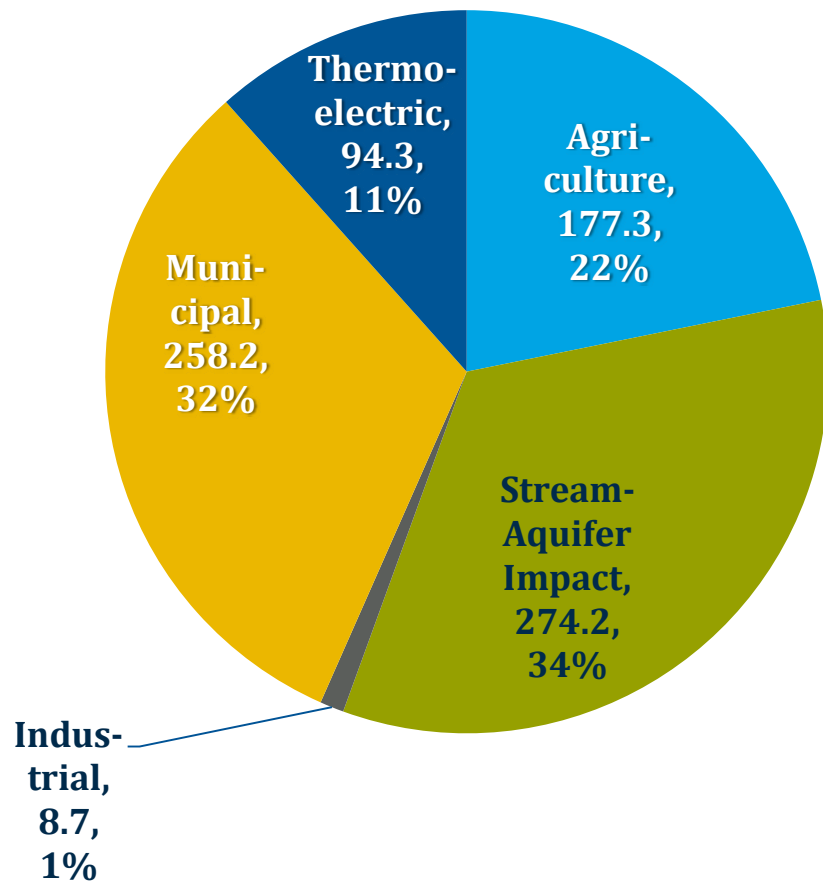
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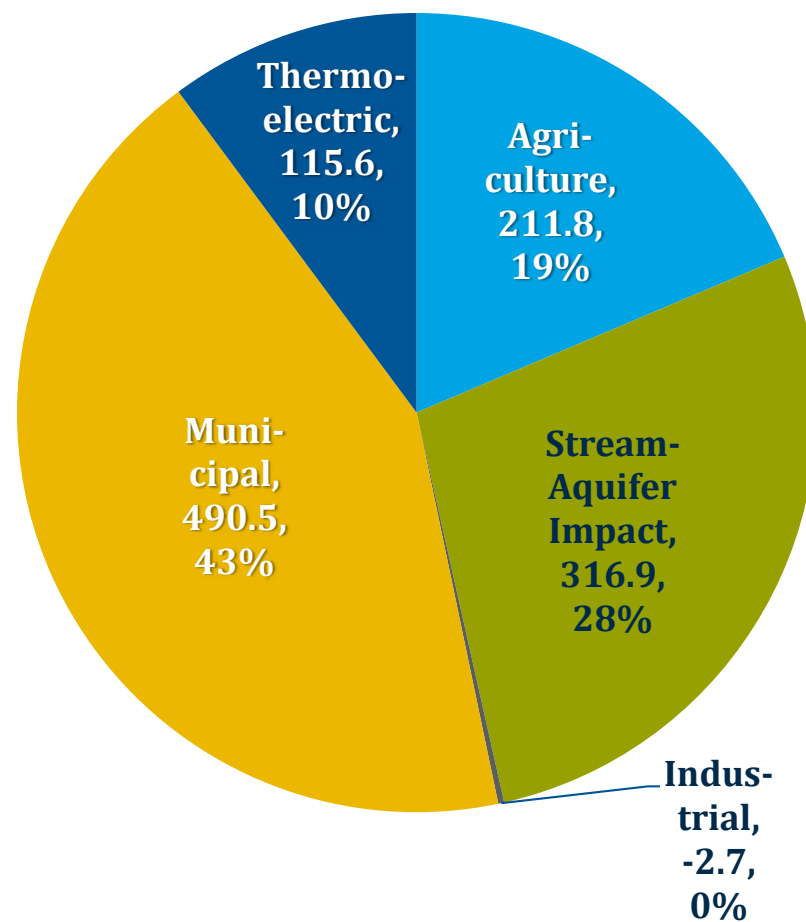
# RESULTS

**Current Estimated Consumptive Demand by Sector for the ACF Basin**



**CURRENT TOTAL = 813 cfs**

**2050 Projected Consumptive Demand by Sector for the ACF Basin**

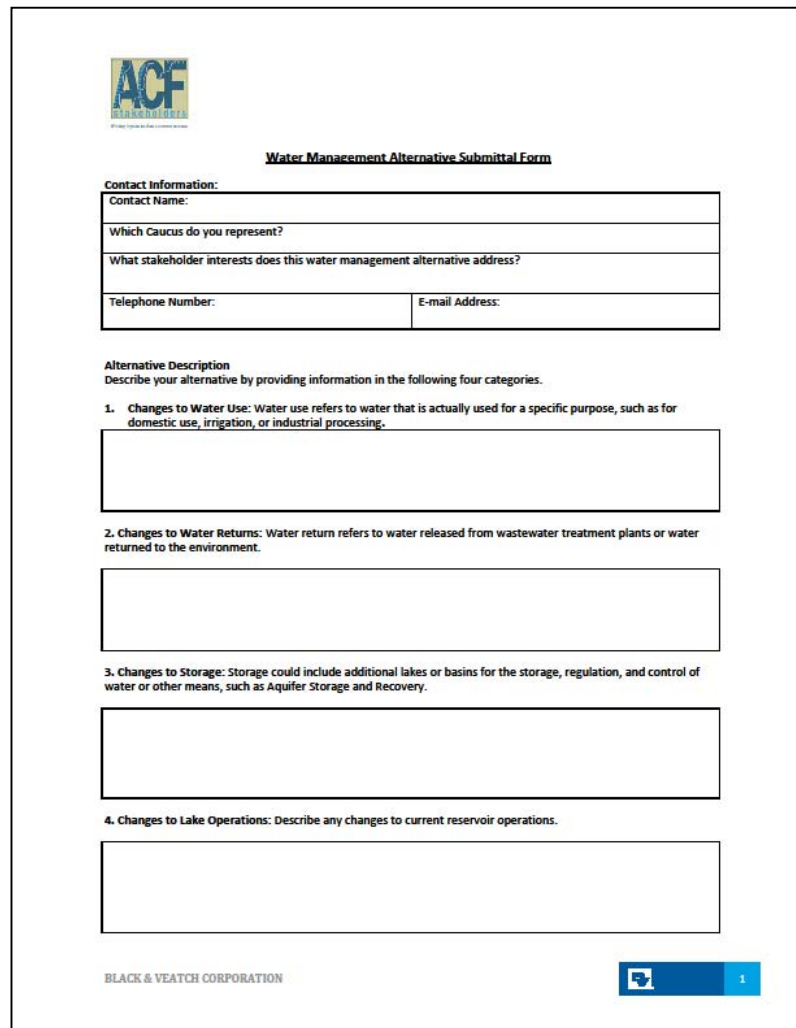


**2050 TOTAL = 1,132 cfs**

**All values in annual average cubic feet per second**

# TASK 5 : WATER MANAGEMENT ALTERNATIVES

- Template created in hard copy and electronic format
- Description of specific combinations of changes to:
  - Water demands
  - Water Returns
  - Storage
  - Reservoir release operations



The image shows a form titled "Water Management Alternative Submittal Form" with the ACF logo at the top left. The form is divided into several sections: "Contact Information" with fields for Contact Name, Which Caucus do you represent?, What stakeholder interests does this water management alternative address?, Telephone Number, and E-mail Address; "Alternative Description" with a sub-section "Describe your alternative by providing information in the following four categories." and four numbered items: 1. Changes to Water Use, 2. Changes to Water Returns, 3. Changes to Storage, and 4. Changes to Lake Operations. Each item has a corresponding empty text box for input. At the bottom left, it says "BLACK & VEATCH CORPORATION" and at the bottom right, there is a blue button with a white icon and the number "1".

**ACF**  
ALABAMA CAUCUS FORUM

**Water Management Alternative Submittal Form**

Contact Information:

Contact Name: \_\_\_\_\_

Which Caucus do you represent? \_\_\_\_\_

What stakeholder interests does this water management alternative address? \_\_\_\_\_

Telephone Number: \_\_\_\_\_ E-mail Address: \_\_\_\_\_

Alternative Description  
Describe your alternative by providing information in the following four categories.

1. Changes to Water Use: Water use refers to water that is actually used for a specific purpose, such as for domestic use, irrigation, or industrial processing.

\_\_\_\_\_

2. Changes to Water Returns: Water return refers to water released from wastewater treatment plants or water returned to the environment.

\_\_\_\_\_

3. Changes to Storage: Storage could include additional lakes or basins for the storage, regulation, and control of water or other means, such as Aquifer Storage and Recovery.

\_\_\_\_\_

4. Changes to Lake Operations: Describe any changes to current reservoir operations.

\_\_\_\_\_

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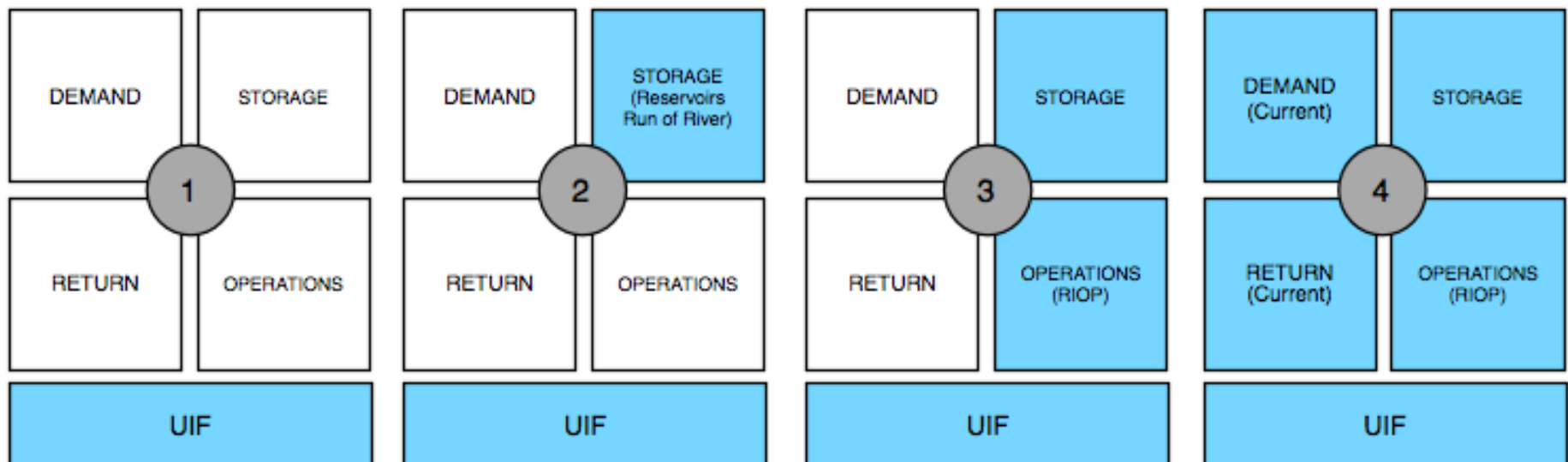
# TASK 5 : WATER MANAGEMENT ALTERNATIVES

- Water management alternatives discussed at November Caucus meetings
- Water Management Alternatives Memo drafted and delivered in February
- WMA Memo updated in March
- Next steps:
  - Receive more submissions
  - Work with TOCWG to identify scenarios for first modeling iteration



# TASK 6 : PROGRESSIVE COMPARISON TO EXISTING CONDITIONS

- Objective to build understanding of magnitude of various effects on flows and levels in the system
- Model output tailoring to calculate performance metrics
- Multiple runs performed for comparison
- Model results provided at March 28 all-day TOCWG Workshop in Columbus



# FUTURE PROGRESS MILESTONES

- **Additional Water Management Alternatives Submitted**
- **TOCWG identifies Water Management Alternatives to model**
- **Alternatives modeling in iterations**
- **TOCWG discusses potential recommendations for inclusion in the Sustainable Water Management Plan**