

## ***SFRSM Client Expectations***

- Relative to SFWMM
- Model Code Conceptualization
- Client Coordination
- SFRSM Model Components
- SFRSM Application Use
- Regional Model Results Improvement

## **SFRSM Client Expectations**

### **Relative to SFWMM**

- Calibrate for water levels at least as well as the SFWMM (in terms of overall and distribution of Bias,  $R^2$  and RMSE) [Phase 1]
- Improved structure flow calibration [Phase 2]
- Simulate water levels for remainder of LOSA and greater portion of Big Cypress National Preserve (BCNP) Basin [Phase 1]
- Flexible mesh that more closely approximates actual boundaries of the modeling domain [Phase 1]
- Greater mesh resolution in tree island, wetland, and ridge and slough areas [Phase 1]
- Improved hydraulic simulation of canals [Phase 1] & [Phase 2]
- Want to use to conduct basin-scale simulations [Phase 3]

## **SFRSM Client Expectations**

### **Model Code Conceptualization**

- Availability of graphical portrayal of various components of HSE and MSE and their interaction [Phase 1]
- How does SFRSM fit into the big picture of regional modeling at SFWMD [Phase 1]

## SFRSM Client Expectations

### Client Coordination

- Migration strategy from 2x2 and roll out plan be available to other departments [Phase 3]
- Staff from other departments be invited in some technical discussions to ensure concerns are addressed [Phase 1] & [Phase 2] & [Phase 3]
- Representation in sub teams meetings to get regular update of model implementation progress [Phase 1] & [Phase 2]
- Expand user pool and training should include staff from other departments [Phase 3]
- Client base should include all interested parties [Phase 3]
- Both SFRSM and NSRSM should be peer reviewed [Phase 1] & [Phase 2]
- Consistent, "similar look and feel" of GUI portions of Performance Measures [Phase 2]

## **SFRSM Client Expectations**

### **SFRSM Model Components**

- Able to integrate multiple disciplines: hydrology + water quality, ecology, hydraulics, etc. [Phase 2] & [Phase 3]
- Be able to handle small gate openings associated with water supply scenarios. [Phase 2] & [Phase 3]
- Be able to perform more sophisticated water shortage area analysis [Phase 2] & [Phase 3]
- Ability to be used in Position Analysis mode and Operational Planning [Phase 3] and beyond
- Include rainfall (-driven) operations in the Everglades [Phase 3] and beyond

## SFRSM Client Expectations

### SFRSM Application Use

- Ability to readily perform cell-by-cell comparison between SFRSM and NSRSM [Phase 2]
- Water budget at secondary canal level [Phase 2]
- Sensitivity runs be made towards project base runs , e.g., CERP [Phase 3]
- Ability to translate model output to performance measures [Phase 2]
- Increased comfort in using regional modeling to address CUP/CERP issues [Phase 2] to [Phase 3]
- Be able to conduct water reservation studies (**beyond [Phase 3]**)
- Be able to do synthetic weather generation within the model [not planned]
- Be able to address some saltwater intrusion issues [needs better definition]

## **SFRSM Client Expectations**

### **Regional Model Results Improvement**

- Conduct sensitivity and uncertainty analysis [Phase 1] & [Phase 2] & [Phase 3]
- Comparison against other regional models, e.g., MikeShe [not planned]
- Reasonable turnaround times for modeling and analysis [Phase 1] & [Phase 2] & [Phase 3]