

**SJRWMD MFLs**  
**Peer Reviewer**  
**Selection for**  
**Lake Apshawa and**  
**Sylvan HSPF Models**

**Andrew Sutherland, Ph.D.**  
Bureau of Water Supply Planning  
St. Johns River Water Management District

# Lake Apshawa and Sylvan Lake HSPF Model Peer Review

## *Agenda*

- 1. Introductions**
- 2. CFWI Peer Review Guidelines**
- 3. Apshawa and Sylvan HSPF Peer Reviewer Selection**
- 4. Public Comments**



# CFWI Peer Review Guidelines

- **Process approved by CFWI Steering Committee in 2012**
- **Voluntary peer review**
  - **Reviewers selected by the District**
  - **With input from stakeholders**



# CFWI Peer Review Approach

- **Peer reviewers must have expertise in the material being reviewed**
  - Select one or more reviewers for modeling and hydrological analyses
  - Select one or more reviewer for environmental analyses and MFLs report
- **Three or more reviewers recommended, depending on:**
  - Budgetary constraints
  - Individual [system-specific] peer review needs



## Contractors under consideration

- Seven firms approved for independent scientific peer review under our **2018 Engineering and Environmental Services Contract**

## General Criteria - Surface Water Modeling

- Free of conflicts of interest.
- Not a member of the model or MFLs development team or have participated in production the of the work product
- Well qualified by virtue of education and work experience; background in engineering, geology, hydrology, or other related earth science
- Responsive and able to meet deadlines



## **Specific Criteria - Surface Water Modeling**

- Experience in the development, calibration and application of surface water models with extensive knowledge of specific model under review
- Familiar with SJRWMD MFL methodology including the use of surface water models to determine and assess MFLs

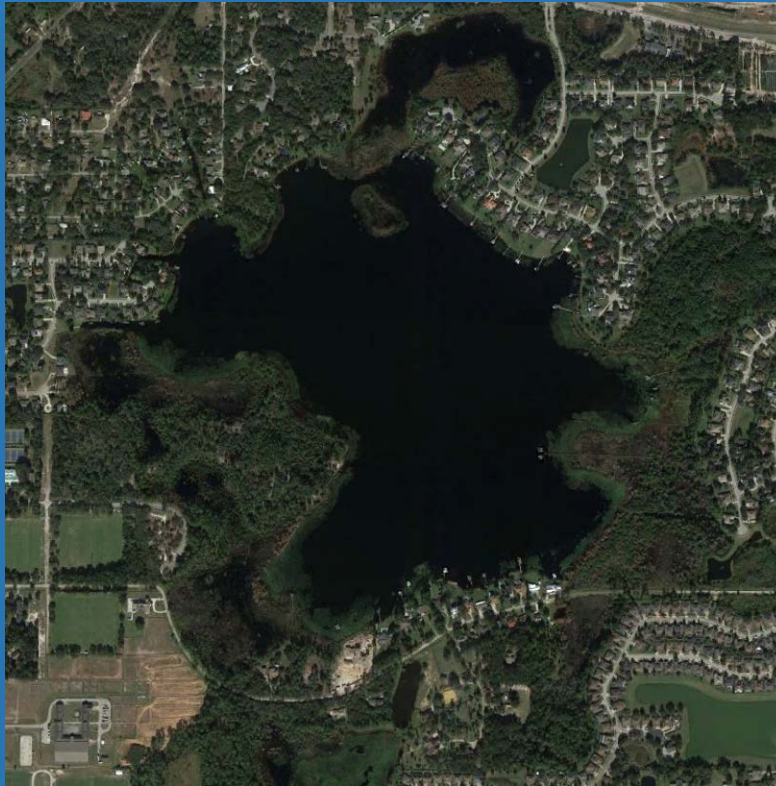
## **Additional beneficial skills / experience**

- Analysis or modeling of near-surface hydrological processes
- Experience with hydrologic analysis of surface-water/groundwater interactions
- Experience in statistical analysis of hydrologic data





# Apshawa and Sylvan HSPF Model Review



**Sylvan Lake (Seminole Co.)**



**Lake Apshawa (Lake Co.)**





# Apshawa and Sylvan HSPF Model Review

## Short list:

### 1. Intera

- Patrick Tara, PE
- Renee Murch, PE

### 2. Dynamic Solutions

- Silong Lu, PhD., P.E., D.WRE

### 3. HSW

- Steve Melching, PH.D., P.E., F.ASCE, D.WRE, BCEE

### 4. ATM

- Robert W. Burleson, PE.



# Apshawa and Sylvan HSPF Model Review

## Next Steps:

- Finalize peer reviewer selection and execute work orders ..... **Aug – 2019**
- Set up website ..... **Aug – 2019**
- Peer review kick-off meeting / site visit ..... **Sept – 2019**
- Public workshop – initial peer reviewer comments and discussion with stakeholders ..... **Oct – 2019**
- Draft peer review report ..... **Nov – 2019**
  - Stakeholder comments – **3 to 4 weeks**
- Final peer review report ..... **Dec – 2019**



# Questions?

Send comments by noon

August 19<sup>th</sup>

to

*Andrew Sutherland*  
*[asutherl@sjrwmd.com](mailto:asutherl@sjrwmd.com)*



# St. Johns River Water Management District

	Dynamic Solutions, LLC / Arcadis	Applied Technology / Janicki, Jones Edmunds	Louis H. Motz	Greenman-Pedersen, Inc. / Applied Ecology, Aquascitech, Normandeau Assoc, Sci Env App, SE Soil & Env Svcs	Intera, Inc. / Dunn Salsano Vergara	HSW Engineering, Inc. / Collective, WaterCube, Quest Eco, KCI Tech	Cardno, Inc. / BC, Water Science
<b>General Criteria</b>							
Free of conflicts of interest.	Apshawa South model was developed by DSLLC	X	X	X	X	X	X
Not a member of the model/MFLs development team or have participated in production the of the work product.		X	X	X	X	X	X
Well qualified by virtue of education and work experience; background in engineering, geology, hydrology, or other related earth science.	X	X	Expertise is specific to GW models	No SW modeling	X	X	X
Responsive and able to meet deadlines.	X	X	X	X	X	X	X
Volume of work received	X	X	X	X		X	X
<b>Specific Criteria</b>							
Experience in the development, calibration and application of surface water models with extensive knowledge of specific model under review.	Extensive HSPF model experience	X			Extensive HSPF model experience	HSW's sub has limited experience with Florida hydrology	Cardno's sub (BC) has limited experience with HSPF
Familiar with St Johns River Water Management district MFL methodology including the use of surface water models to determine and assess MFLs.	Limited experience	X			X	X	Cardno's sub (BC) has limited experience
<b>Specialized expertise or experience in one or more of the following is beneficial</b>							
Analysis or modeling of near-surface hydrological processes	X	X			X	X	X
Experience with hydrologic analysis of surface-water/groundwater interactions.	X	X			X	X	X
Experience in statistical analysis of hydrologic data	X	X			X	X	X