MEMORANDUM

To:

Pete Kwiatkowski, P.G., SFWMD

Ron Basso, P.G., SWFWMD Tim Desmarais, P.E., SJRWMD

From:

Peter Andersen, P.E., Tera Tech

Mark Stewart, PhD., P.G. Lou Motz, PhD, P.E.

Subject:

Conditional Acceptance of ECFTX Model

Date:

January 11, 2019

The peer review team has been involved with monitoring and providing recommendations on the development of the East Central Florida Transient Expanded (ECFTX) groundwater flow model since September 2016. We have been able to review and comment on the model development at key junctures including conceptual model development, model construction, and steady state calibration. Most recently, we were presented the results of the transient calibration of the model. Over the course of the peer review, we have attended 14 teleconference meetings of approximately three hours duration each and one all-day, in-person meeting in October of 2016. We have viewed and been provided highly technical PowerPoint presentations prepared by the Hydrologic Analysis Team (HAT) summarizing their work. We have commented on the work and the HAT has been responsive to our recommendations. The model development and construction are essentially complete following transient calibration. Our remaining task is to review and comment on the draft model report, which we understand will be available in approximately 2 months (March 2019). We envision that review to be more focused and deliberate than that which we have provided during the teleconference presentations. Two areas of particular interest to the panel regarding the transient calibration include: 1) the magnitude of the baseflow estimates to which the model is calibrated and whether attempting to match these targets may influence other calibrated parameters and 2) the quantitative criteria that are used to evaluate the transient calibration.

Based on our review of materials presented by the HAT, we believe that the ECTFX model has met the professional standards for conceptual model development, model construction, and model calibration. We further believe that the model, as designed and constructed, is capable of being used for the purposes for which it was intended (and described at the outset of the review). Because of our involvement throughout the model development process, we are confident that any additional recommendations that we will offer upon our review of the model documentation and data sets will not change the model significantly from its current state.

This V June

Peter F. Andersen, P.E.

Mark Stewart, Ph.D., P.G.

Louis H. Motz, Ph.D., P.E.