SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT
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TELEPHONE: 352-796-7211

November 20, 2023

RFP 23-4227 – SWUCA SALTWATER INTRUSION MODEL

ADDENDUM #2
(Acknowledgment is Required)

The Respondent shall acknowledge its review and receipt of this Addendum by signing below and including a signed copy of this Addendum with its bid submittal. Failure to do so could result in disqualification of the bid.

Please note that double underlined information (*example*) is added wording and stricken information (~~*example*~~) is deleted wording.

I. QUESTIONS AND ANSWERS

1. **Question:** **Section 3.1 Project Background: Did the 2022 model update include a recalibration?**

   Answer: The 2022 model update only included calibration of the saltwater movement. Just as in this effort, parameters from the ECFTX and DWRM models were used to help define the flow patterns. There were only small, isolated areas that would have required adjustment/recalibration as far as flow is concerned.

2. **Question:** **Section 3.1 Project Background: Is there a documentation of the 2022 modeling analysis that will be provided to the selected consultant?**

   Answer: Yes, there is documentation of the 2022 modeling analysis and will be provided to the selected consultant.

3. **Question:** **Section 3.1 Project Background: What prompted the change in modeling platform from MODHMS to SEAWAT?**

   Answer: It was determined that MODHMS did not offer any particular advantages over SEAWAT for this application. SEAWAT was the better choice for the District's needs.

4. **Question:** **Section 3.1 Project Background: If grid modification is required, will SWFWMD consider using an unstructured grid or will the consultant be restricted to modifying the existing rectilinear finite difference grid?**

   Answer: Yes, the model is to be switched from SEAWAT to MODLFOW-USG-Transport in part for the unstructured grid capability.

5. **Question:** **Section 3.2 Work Objectives: Why does the model simulation stop in 2016 if post-2016 data are available?**

   Answer: The model will primarily use East Central Florida Transient Model Expanded (ECFTX) output as input at the lateral boundaries. Currently, ECFTX only runs through 2016.

6. **Question:** **Section 3.2 Work Objectives: Are there any post-2016 hydrologic, hydrogeologic, chemistry, or climatic data relevant to this project?**

   Answer: Yes, post 2016 data is available, however this data is not applicable to this solicitation as the model will only be updated utilizing data through 2016. Please refer to Section 3.2, Work Objectives.

7. **Question:** **Section 3.3 Description of Work: What is the motivation to change the SWUCA modeling platform from SEAWAT to MODFLOW-USG-Transport?**

   Answer: The primary reason is the unstructured grid capability. We will use this model to run scenarios that have more of a local interest, and the ability to develop a refined grid in particular areas will be helpful for that. Additionally, MODFLOW-USG-Transport reportedly has some minor improvements in solver efficiencies and in the way it handles actual vs. equivalent freshwater heads that may help reduce run times.

8. **Question:** **Section 3.3 Description of Work: Is SWFWMD amenable to the consultant conducting select Task 3 work (e.g., researching boundary conditions and aquifer property data) in parallel with Tasks 1 and 2.**

   Answer: The approval of earlier tasks is in place to help protect from moving forward on additional tasks with an incorrect model set-up or incorrect data. The District will do its best to review data and the model set-up prior to the official completion of Tasks 1 and 2, however the technical memorandum will require approval.

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Ari Horowitz
Procurement Specialist
cc: Project Manager

ACKNOWLEDGEMENT OF ADDENDUM #2

BY: _____
DATE

_____
(TYPE/PRINT NAME AND TITLE)

_____
COMPANY NAME

End of Addendum #2 for RFP 23-4227

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