

***UPPER VENTURA RIVER  
GROUNDWATER AGENCY  
BOARD MEETING  
FEBRUARY 11, 2021***



***ITEM 10D  
GROUNDWATER MODEL UPDATE***

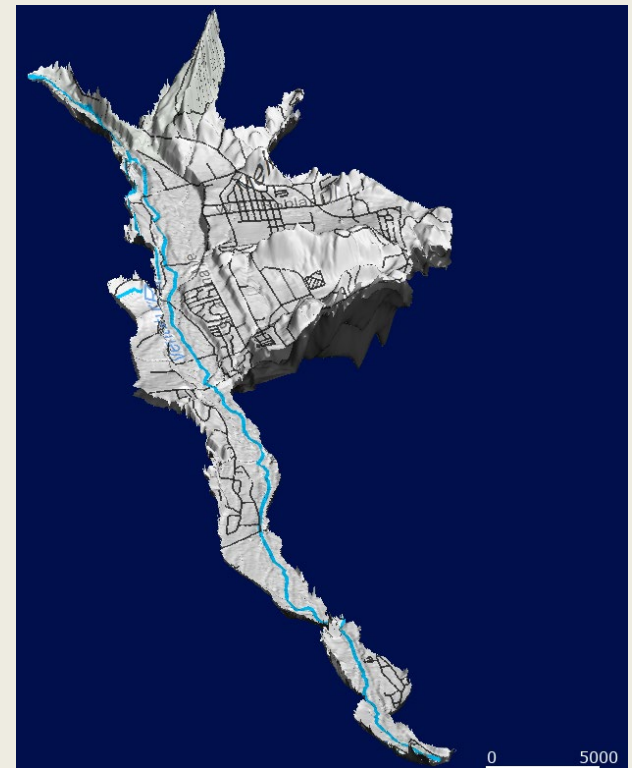


# ITEM PURPOSE

- 1. Explain what models are and how they support planning**
- 2. Describe UVRGA model construction and calibration results**
- 3. Describe next steps for modeling to support GSP development**

# WHAT IS A NUMERICAL FLOW MODEL?

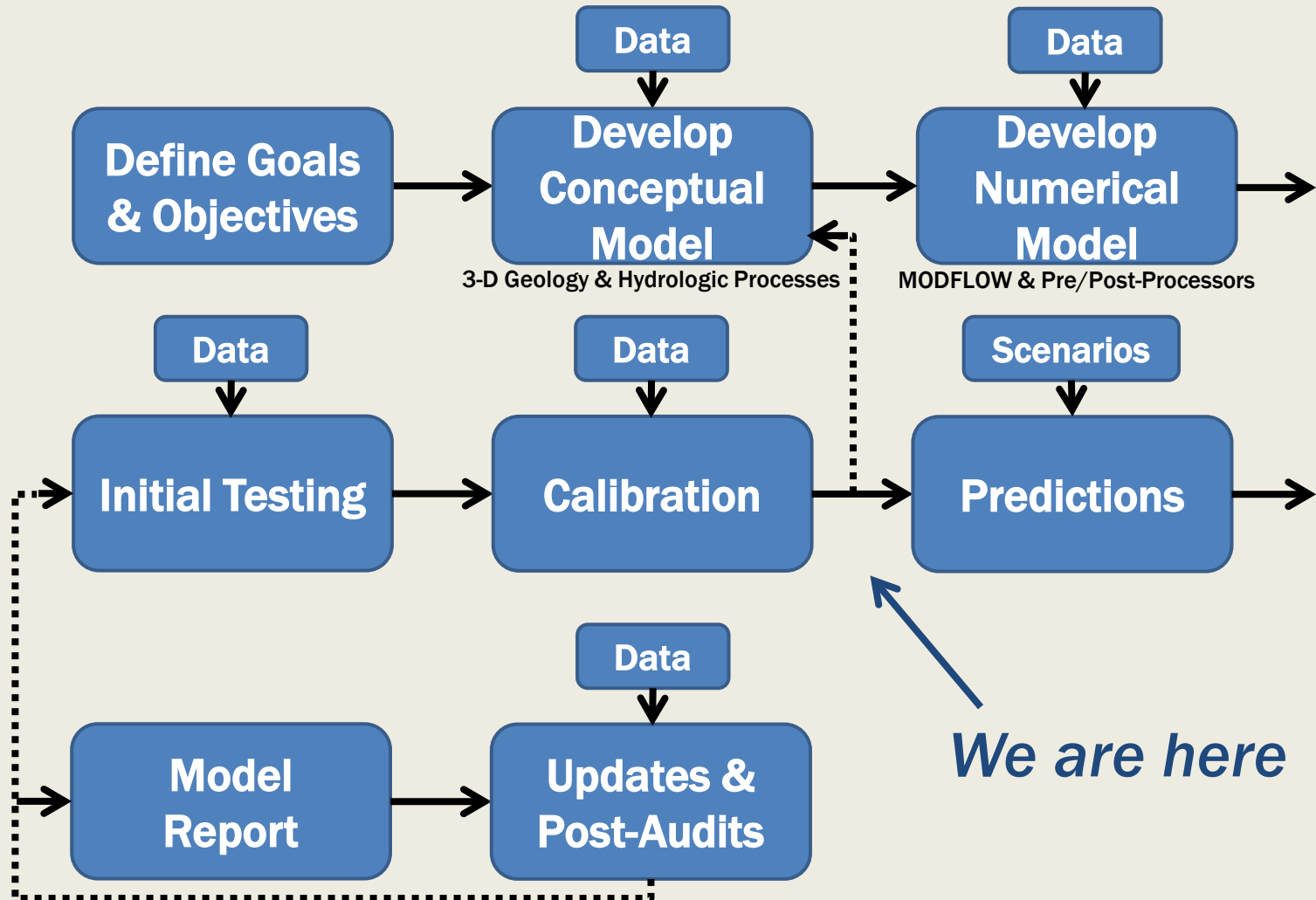
- Mathematical representation of the groundwater (GW) and surface water (SW) flow system
- Solves groundwater flow equation (GW level) and computes flows throughout the SW and GW systems
- A model is an approximation of the real system – only as good as the data upon which the model is based on



# WHY DEVELOP A NUMERICAL FLOW MODEL?

- To make predictions and test unknowns:
  - Develop estimates of future groundwater conditions based on different assumptions
  - Estimate benefits of different projects or management actions (if needed)
  - Test hypotheses in areas with limited or no data
- To comply with SGMA
  - SGMA requires model or “equally effective tool” for:
    - Water budgets
    - Quantification of interconnected surface water depletion

# GENERAL MODEL DEVELOPMENT PROCESS





# NUMERICAL FLOW MODEL PRESENTATION



# NEXT STEPS



March April May June July Aug. Sept. Oct. Nov. Dec. Jan

# QUESTIONS?

