

## Milestone #2

On 4/22, be prepared to discuss progress on the following:

- 1) Near-final versions of products associated with Milestone #1 posted to your Wiki.
- 2) Add drain cells to the model anywhere that low-k material is at land surface. Set the drain elevation equal to land surface. Look through the literature to find an appropriate conductance for the drain cells (later to be adjusted during calibration).
- 3) Zone recharge based on hydraulic conductivity such that higher recharge is associated with higher hydraulic conductivity. Look through the literature to find an appropriate recharge rate to assign to your different zones.
- 4) Assign IWIP well pumpage (provided for milestone #1) to the groundwater flow model (make sure to remove any wells that are too deep to be included in your model). Recommended years (to ensure one good year for model calibration):
  - a. Green River Lowlands: 2019
  - b. American Bottoms: 1995
  - c. Will County: 2002
- 5) Adjust model k-zones until the model cross-sections match (as best possible) the well cross-sections you developed for Milestone 1.
- 6) Specific tasks for each group:
  - a. Green River Lowlands: From the centroid of center pivots, estimate irrigation during the summer of 2019 to apply to the model.
  - b. Will County: Calculate variable transmissivity estimated from the map developed by Roadcap et al. (1993)
  - c. American Bottoms: Investigate methodology to model a flood condition (impact on boundary conditions, etc.).