Drought Trigger Levels in the Barton Springs Edwards Aquifer Conservation District: Project Update
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Data:
- Series of MODFLOW models based on the Groundwater Availability Model (GAM) already developed by the Barton Springs Edwards Aquifer Conservation District. Series includes a base case and several thousand model runs changing pumping parameters in eleven conductivity zones defined within the GAM. These files include the changes in pumping parameters in each zone, springflow, total pumping, and water levels, for each model run.
- Shapefile (vector) with the cells of the model and the active cells within the model
- Spreadsheet with zone information for each active cell, including elevation
- Aquifer shapefile with recharge zones

Progress:
- Joined active cell spreadsheet to active cell shapefile to delineate the eleven conductivity zones
- Determined top ten model runs to display, but would ideally like to use a list of about 80 runs. What I want to look at is how various pumping scenarios affect springflow at Barton Springs, water level within the Lovelady well, and overall storage.

Challenges/To Do:
- Extract the eleven zones to one layer so that I can then link my model runs to the zone layer
- I need a systematic way to import, transpose, and link my individual model runs into the extracted conductivity zone layer. My model-run file looks something like this:
If I only choose ten runs I could do this by hand, but if I choose more, it would be nice to create a program to do this for me.

- For the final display, I would like to show various scenarios (animated as if it were a time series) and effects on spring flow and water level (shown as graduated symbols).