1.   John Lovelace the USGS gave a progress report on "Development and maintenance of a computer model to simulate groundwater flow and saltwater encroachment in the Baton Rouge Sands, Louisiana."

a.   PROGRESS AND SIGNIFICANT FINDINGS:

i.   Responded to supervisor's review and colleague reviews of the report: "Simulation of Groundwater Flow and Chloride Transport in the "1,500-Foot", "2,400-Foot", and "2,800- Foot" Sands of the Baton Rouge Area, Louisiana." Text, tables, and figures were revised accordingly.

ii.   Modified the finite-difference model grid to exclude some unnecessary area in Mississippi and Avoyelles and St. Landry Parishes.

iii.   Revised the model grid layers for the next model iteration, which emphasizes accurate simulation of flow in the "400-ft," "600-ft," "800-ft," and "1,000-ft" sands, and saltwater encroachment in the "600-ft" and "1,000-ft" sands.

iv.   Constructed RIVER Package to simulate groundwater interaction with Mississippi River

v.   using MODFLOW and SEAWAT. Mississippi River stages for each model cell were interpolated between historical average stages at four gaging stations.

vi.   Revised the water-level observation model dataset to enable calibration with the revised model layering.

b.   PLANS FOR NEXT QUARTER:

i.   Submit the draft report to the Enterprise Publishing Network (EPN) for editorial review and preliminary preparation for publication.

ii.   Submit the draft report for USGS approval.

iii.   Submit latest groundwater model archive for approval.

iv.   Compile historic groundwater withdrawal from the 400-ft sand, and update the model specified withdrawals through 2017.