Surface Water Inflows, Outflows, Gains, and Losses

- **Objectives:**
- **Quantify the volume of streamflow entering and leaving New Mexico at selected stream gages at or near State borders and at Interstate Compact gages and**
- **Quantify streamflow gains and losses between selected gages in New Mexico.**

Results to Date

- An initial selection of candidate streams has been done.
- Gages along the candidate streams have been identified.
- Initial streamflow data for analyses has been obtained.
- Screening of candidate streams is done.
- Screening of gages is done.
- Downloaded streamflow data for selected gages.
- Loaded streamflow data into GIS files.
- Currently exploring temporal and spatial aspects of streamflow data.
- Best time interval for analyses appears to be annual, but a monthly analysis period may be appropriate where gages are close together and there are few gains or losses between the gages.
- Computing differences in streamflow for gages and stream reaches is done for the Gila, San Francisco, San Juan, Cimarron, and Canadian Rivers.
- Gaining and losing stream reaches are being identified as we go.

Results to Date, continued

- Working on ARCGIS animation where by gaging station symbol size varies according to magnitude of annual flows and river reach color and line width vary according to gain or loss and volume of gain or loss, respectively.
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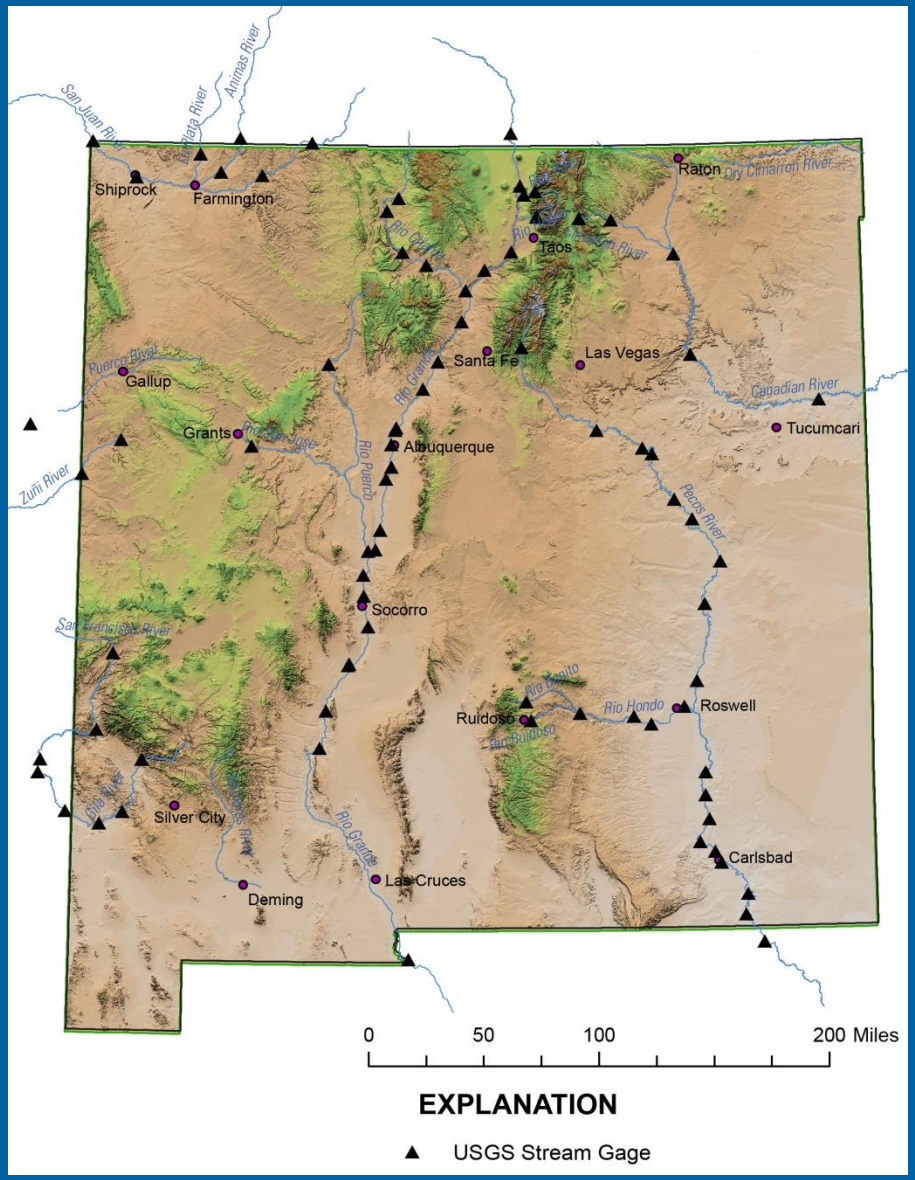
Work Remaining

- Explore temporal and spatial aspects of streamflow data. This element probably will be completed during report writing.
- Finish GIS work on remaining rivers.
- Finish ARCGIS animation setup.
- Document digital data sets (metadata).
- Write report.

USGS

Major Streams and USGS Stream Gages

- Rio Grande
- Pecos River
- Canadian River
- San Juan River
- Gila River



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