

# TECHNICAL NOTES

February 23, 2009

ENG TECHNICAL NOTE UT210-09-01  
210-VI

SUBJECT: USGS Stream Gage Data by Location (GIS application)

Purpose. To provide USGS stream gage proximity in a GIS format. A GIS shapefile is hyperlink to internet for each stream gage identified in the GagesUSGS shapefile. Located in the GagesUSGS shapefile is general information about each USGS gage in Utah as follows:

- hyperlink text
- station name
- latitude/longitude
- datum
- altitude
- drainage area (square miles)
- beginning peak flow
- ending peak flow
- years in service
- and whether the stream flow data is real time or has peak flow data.

Effective Date. Upon receipt.

Contents of Technical Note. Some familiarity is assumed with this application. To activate the

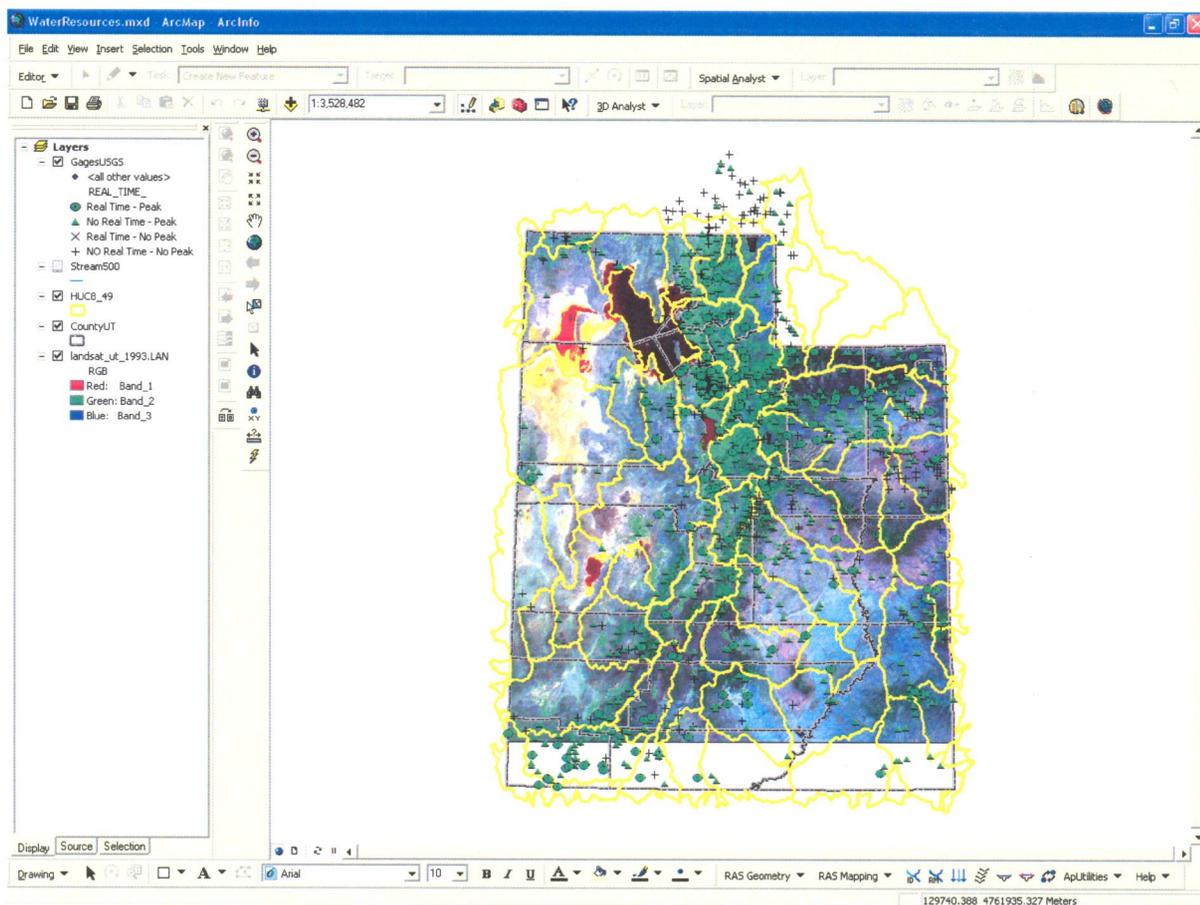
hyperlink for a selected USGS stream gage use the Hyperlink button  in the Tools toolbar if the above tools are not visible select the Tools pull down menu, select Customize and check Tools. This will bring up the Tools toolbar.

Below is a screen of the ArcGIS ArcMap project, WaterResources.mxd.

Below is the list of the themes and definitions of each theme in the ArcMap Project.

- GagesUSGS – USGS Stream Gage data with hyperlink for Utah
- Stream500 – a dendritic system of streams to identify watershed boundaries
- HUC8\_49 – Eight digit Hydrologic Unit Codes for Utah
- County UT – County boundaries for Utah
- Landsat\_ut\_1993.LAN – Landsat imagery to reference topography of Utah





Note: The project has been saved to store data relative to path names. Also that HUC and Streams will only be visible if at or below a 1:1,000,000 scale. If the user has ArcGIS ArcMap 9.2 the WaterResources.mxd can be opened to view all the contents.

Distribution. The shapefiles and ArcGIS ArcMap project file can be downloaded from the NRCS Share Point Sites > West > Utah > State Office Engineering share point site (<https://nrcs.sc.egov.usda.gov/west/ut/engineering/default.aspx>). The WaterResources folder is located in the Hydrology and Hydraulics section in AdvancedGIS folder. Copy entire folder and place in hard drive. When downloading file it is recommended to use the **Shared Document** option (left side of screen). When in **Shared Document** the users will notice the following pull downs: *New*, *Upload*, *Actions* and *Settings*. Using the Actions pull down menu, select **Open with Windows Explore** option. This will allow the users to download in a Window Explore. Copy and paste the WaterResources folder on to a drive.

Filing Instructions. File in the Technical Notes notebook under ENG - General.

Contact. For more information about this data contact Nathaniel Todea, Hydraulic Engineer, at (801) 524-4573 or [Nathaniel.Todea@ut.usda.gov](mailto:Nathaniel.Todea@ut.usda.gov).

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