

Real-time Maps Transform Forecast Data into Pictures of US River Flows



Esri has released a robust collection of web maps that display NOAA forecast streamflow data for the continental United States. The multiscale web map applications allow users to view forecast water flows in real time at high resolution. The maps interweave NOAA's National Water Model data and Esri's ArcGIS functionality to provide interactive views of current and future water system behaviours.

Esri maps the flow of water along 2.7 million stream segments in the US river network. These data-rich maps improve NOAA's ability to meet the needs of emergency responders, reservoir operators, ecosystem professionals, and floodplain managers by providing detailed information that can anticipate flood and drought conditions. National Weather Service data populates the interactive maps with hourly updates and forecasts for

up to 10 days.

Quick and Easy Big Data Access

Esri's new maps enable users to access a large amount of complex data quickly and easily. Although 10-day, midrange forecasts contain more than 200 million records and short-term forecasts require hourly data refresh, Esri maps automatically integrate and synthesize NOAA data so that users have the real-time information they need at the click of a button.

Esri plans to continue its investment in water prediction and analysis by releasing an open-source toolkit later this year that will enable ArcGIS users to analyse data and create custom maps from water model records.

<https://www.hydro-international.com/content/news/real-time-maps-transform-forecast-data-into-pictures-of-us-river-flows>
