



A Tidal Rondout Creek Streamgage in Kingston

What is a streamgage?

The U.S. Geological Survey (USGS) operates a national network of 10,000 streamgages. Streamgages (or gauges) measure how high a river is and relate the height of the river to the volume of water flowing at a particular point. Other measurements related to water quantity or quality as well, are also possible.

Why doesn't Kingston have a streamgage?

It used to. From 2011 to 2015, the NYS Department of Environmental Conservation (DEC) funded a streamgage to determine the mass of suspended sediment discharging into the Hudson River. It measured water velocity, water surface elevation and turbidity. Today, the nearest streamgages are in Rosendale on the Rondout and Gardiner on the Wallkill.

Why isn't the Tidal Rondout streamgage in operation now?

No one is paying to operate it. USGS requires a cost-sharing partner to operate streamgages such as this. Local sponsors may include state, county, city, town or other public agencies, or private entities. The estimated cost would range from \$9,600 to \$36,000 per year, depending on the measurements made by the streamgage.

What benefits would a streamgage have if restored?

- **Flooding, sea-level rise and storm-surge:** Streamgages provide essential data for understanding risks from, and communicating warnings about river conditions. These data are particularly to City of Kingston, and the Towns of Esopus and Ulster, where flood-prone areas are only going to be more at risk from extreme weather caused by climate change.
- **Pollution modeling and source track-down:** Streamgage data matched with water quality sampling can define the load of pollution from upstream sources, helping to prioritize pollution reductions necessary to protect public health and the environment. This is particularly important in the Rondout, which is the largest tributary to the tidal Hudson, and which has its confluence with the Hudson near the intakes that supply drinking water to 100,000 Hudson Valley residents, including in the Town of Esopus.