USGS Streamgaging Program

Streamgage Operation
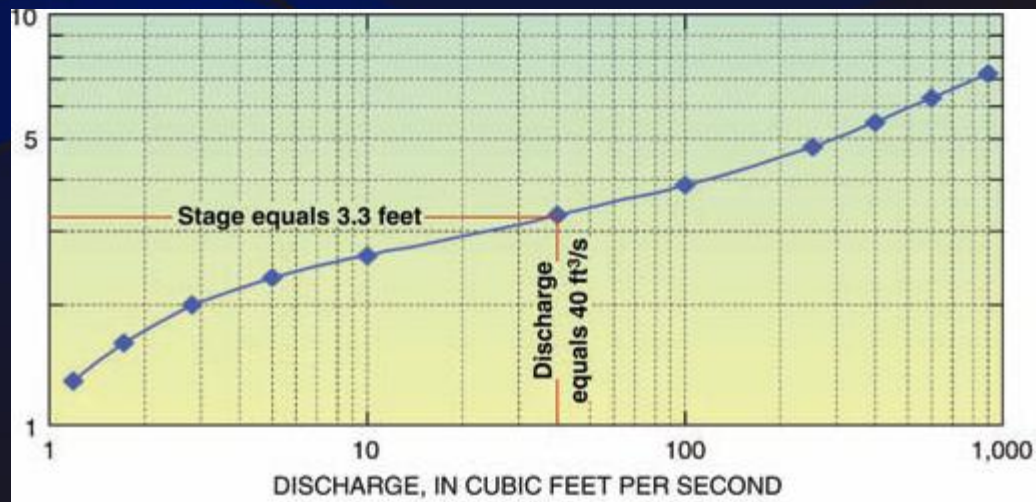

- Gage height (not discharge) is collected every 15 minutes.
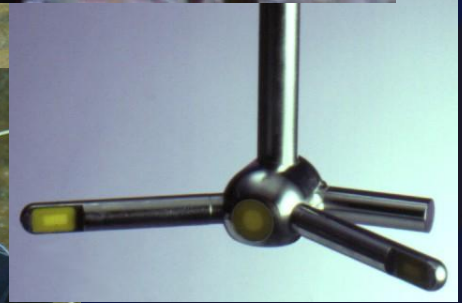- Transmitted once an hour via GOES

USGS

Streamgage Operation

- Sites are measured approximately 9 times per year.
- Use measurements to determine stage-discharge relationship
- Also use measurements to determine "shifts" to the rating
- Measurements are also used to aid in estimating flows.

Stage equals 3.3 feet

Discharge equals 40 ft³/s

DISCHARGE, IN CUBIC FEET PER SECOND

HydroAcoustics
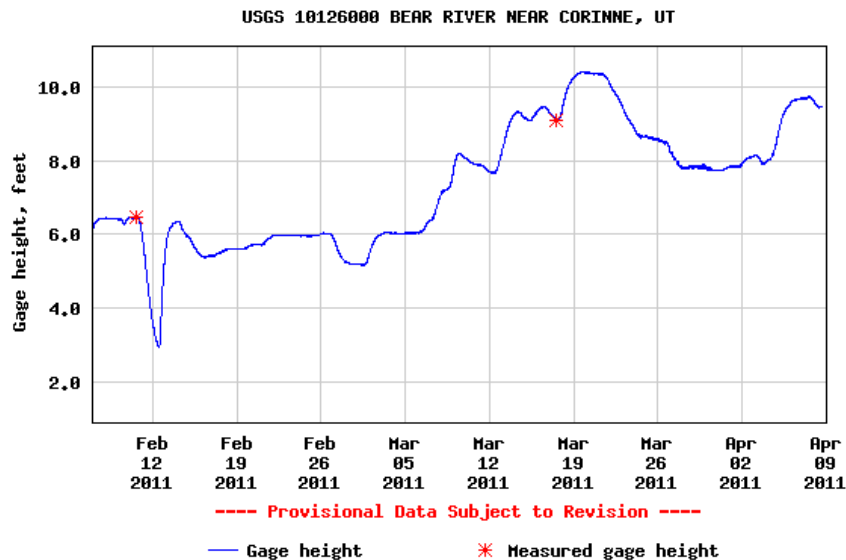## Traditional method:
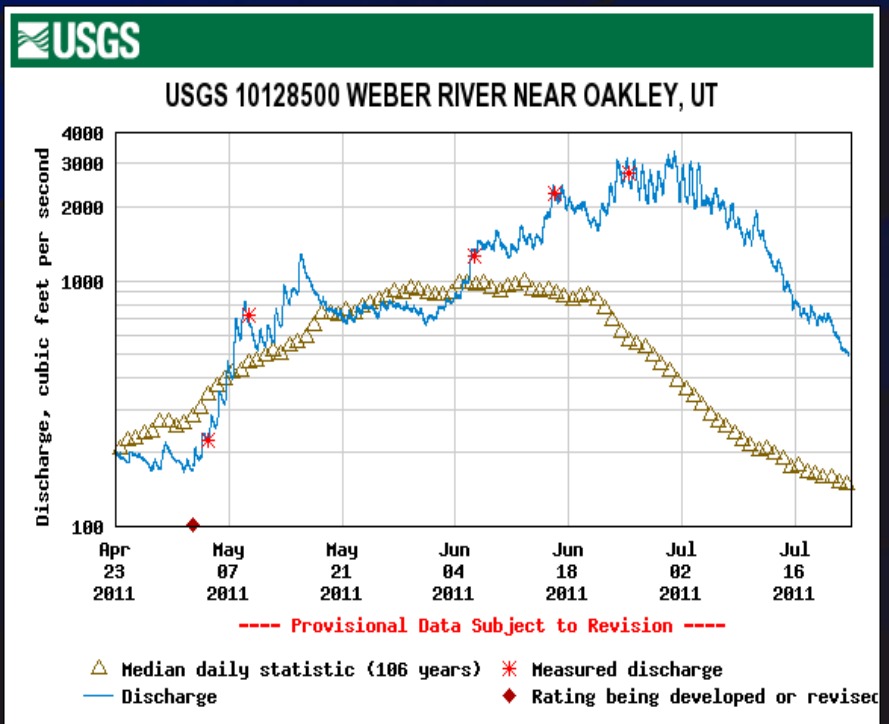## AA and current meters

Streamgage Operation

• Gaging "natural" channels in most cases.

• Subject to change through time – scour, fill, vegetation growth

• Records are given a rating as reviewed and approved (incrementally), excellent (+/- 5% - about 95% of the daily discharges are within 5% of the true value), good (+/- 10%) fair (> 15%), etc.

≋ USGS

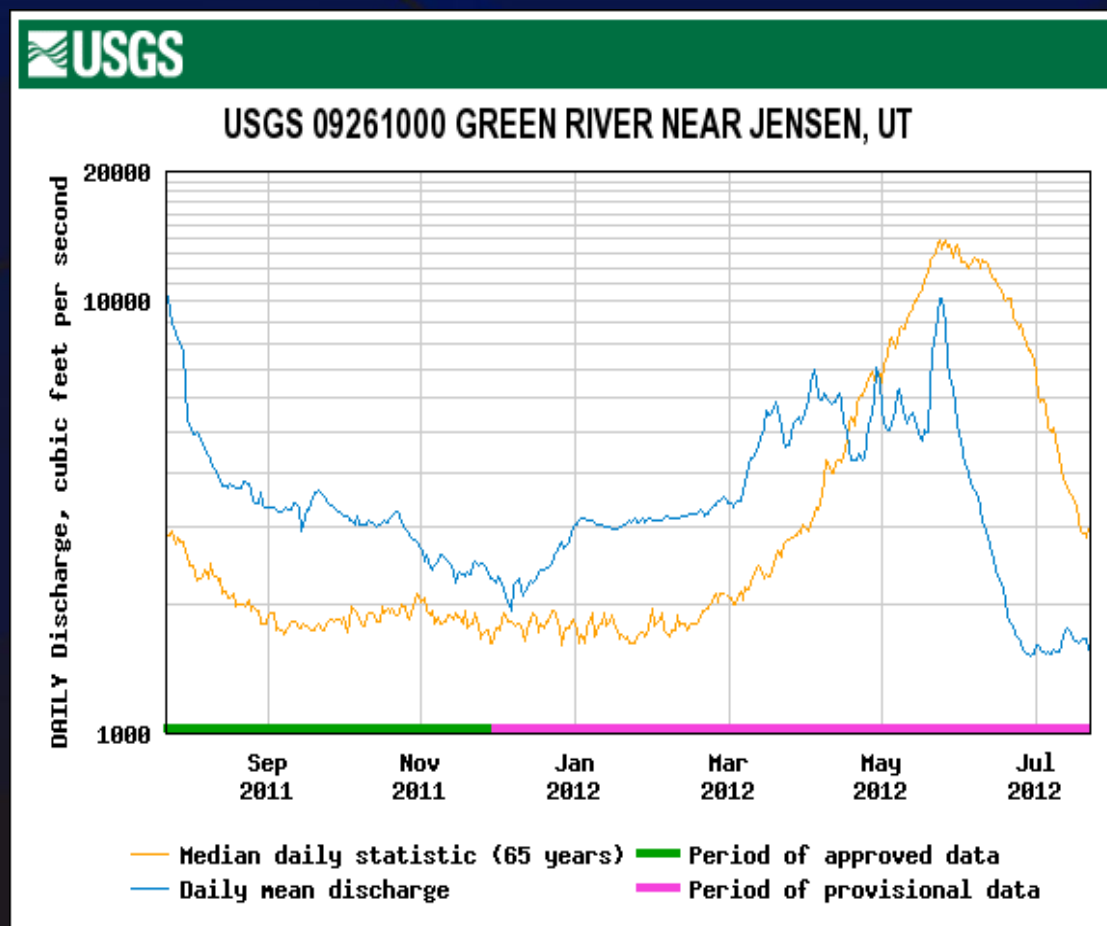# Streamgage Operation

USGS 10126000 BEAR RIVER NEAR CORINNE, UT

• Data is most accurate just before and after measurements.

• Real-time data displayed on the web is provisional and subject to change.

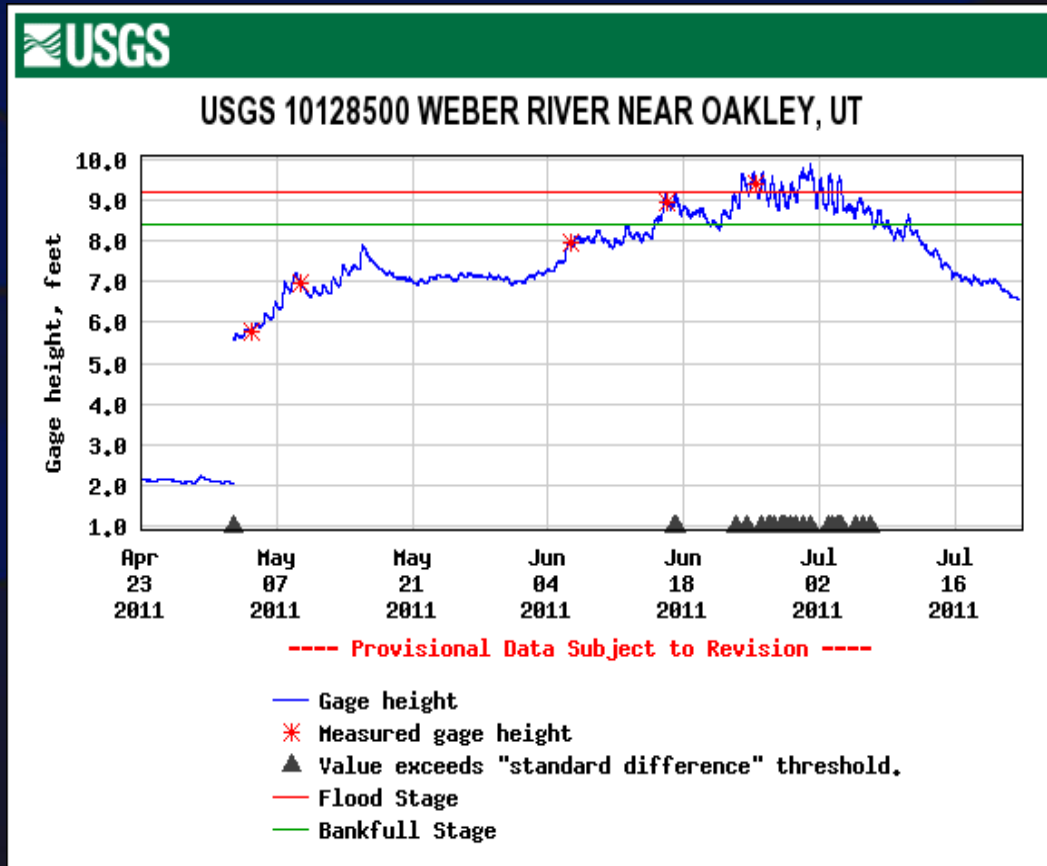USGS 10128500 WEBER RIVER NEAR OAKLEY, UT

Streamgage Operation

- Daily data approved incrementally during the year.
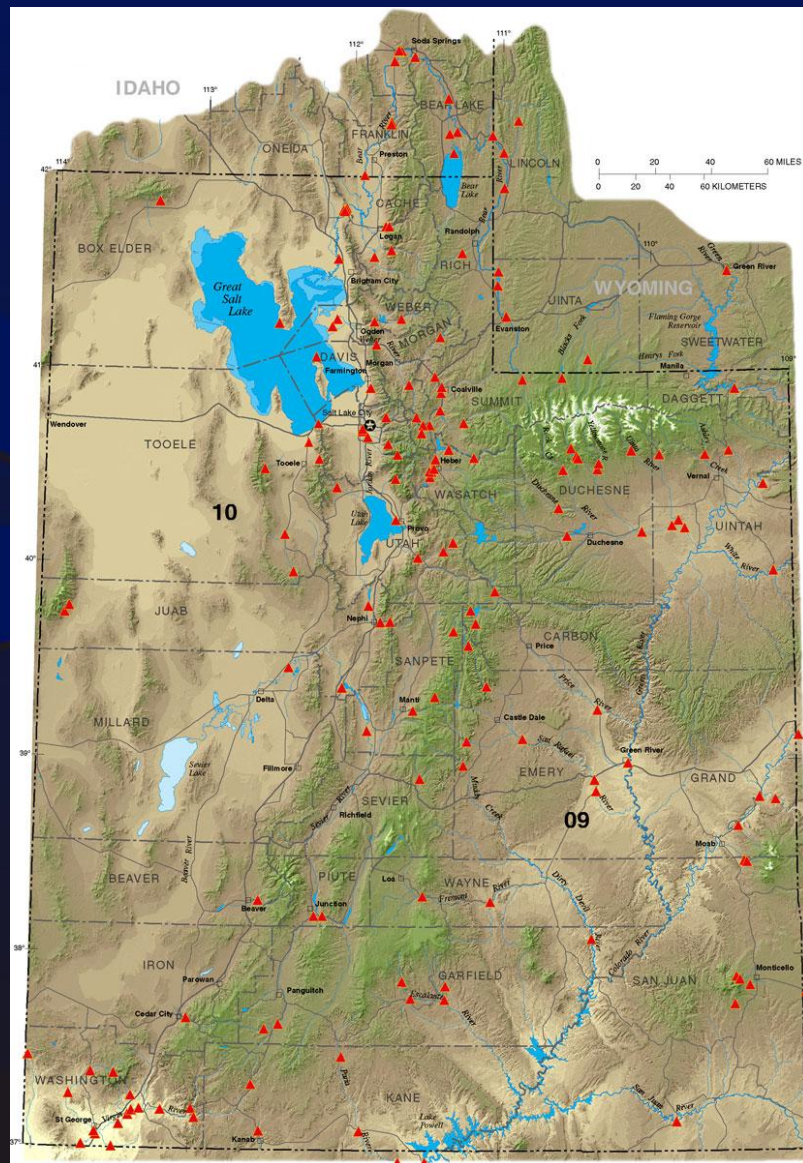
- Published after end of WY.

WaterAlert

• Threshold notification system.

•Subscribe on station page.

• Sends email or text.

• Hourly or daily.

• Works for:

- • Stage
- • Discharge
- • QW parameters

USGS 10128500 WEBER RIVER NEAR OAKLEY, UT

Utah Data Network

• Began in late 1800's (1889 – Weber R. at Gateway)

• 153 Active streamgages

• 618 Historic streamgages

Cooperators

- Utah Department of Natural Resources
  - Division of Water Rights
  - Division of Water Resources
- Utah DEQ
- Central Utah Water Conservancy District
- Bear River Commission
- NSIP
- U.S. Bureau of Reclamation
- BLM
- 13 Local entities

Questions?