Hydrologic Warning Systems & NWS Flood Warning Services

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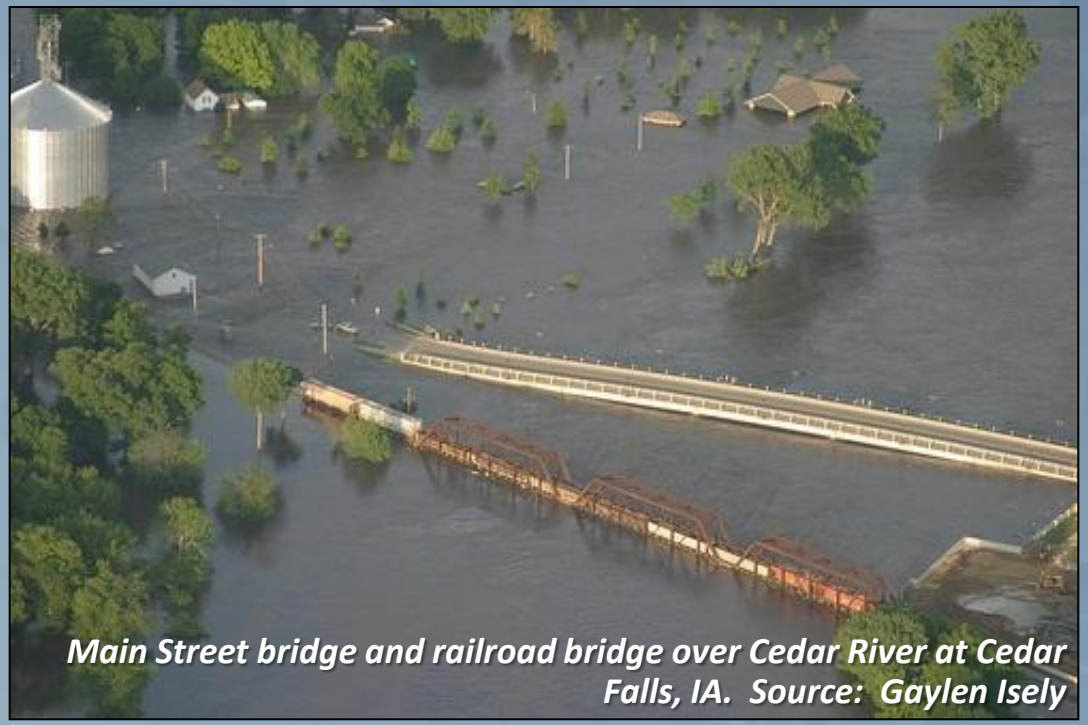
November 5, 2009

Topics

- Data from warning systems
- Internal NWS uses
- External NWS uses

Union Pacific Railroad bridge over Cedar River at Waterloo, IA, 6/10/2008. Source: AP/The Waterloo Courier

Data from warning systems



Main Street bridge and railroad bridge over Cedar River at Cedar Falls, IA. Source: Gaylen Isely

Data from warning systems

- Types
  - *Stage*
  - *Precipitation*
  - *Intervals are important too*
- How NWS offices receive data
  - *Phone (land line & cell phone)*
  - *Radio*
  - *Satellite*
  - *Used in AWIPS (NWS operational computer system)*

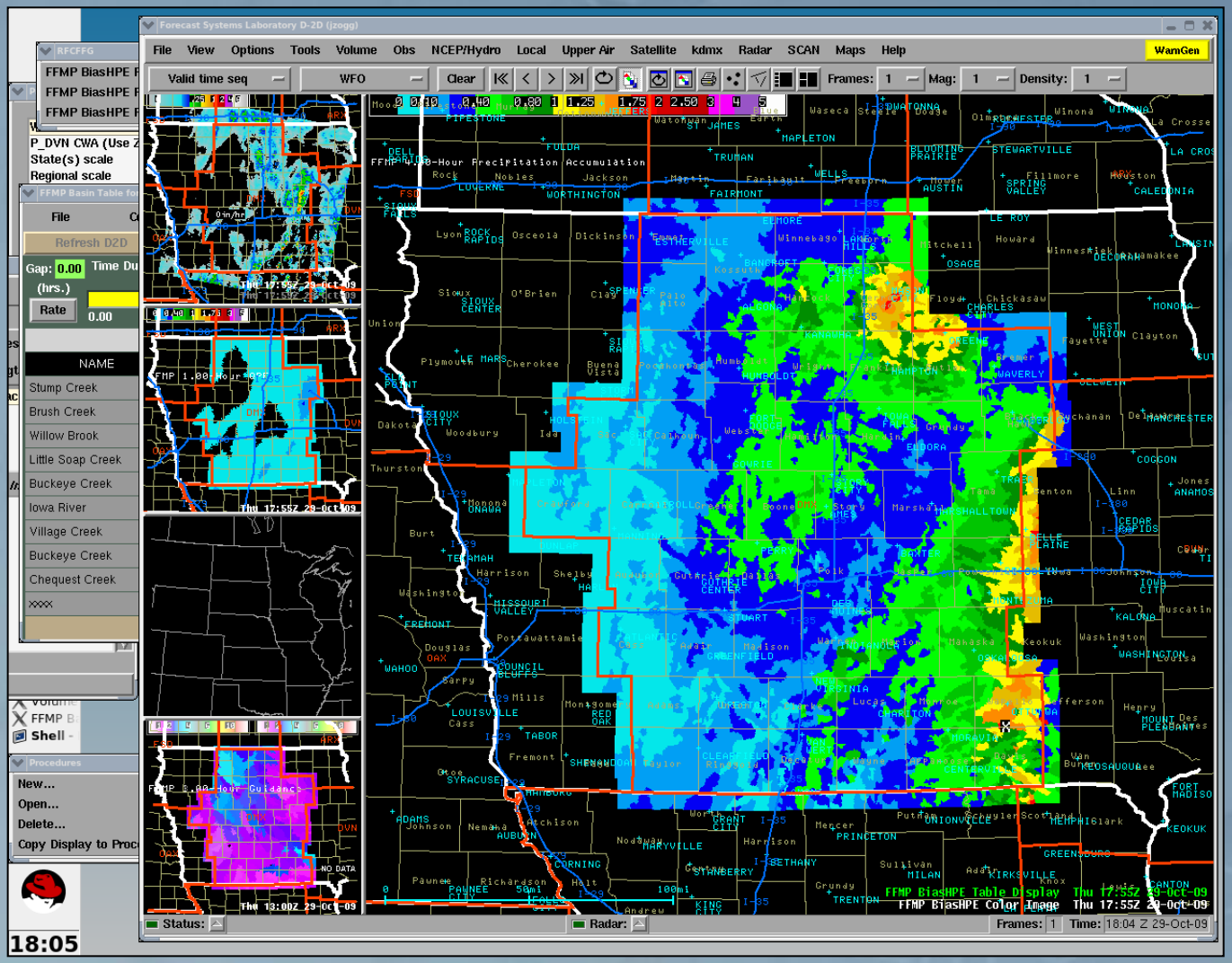
Farm near Oakville, IA

Internal NWS uses

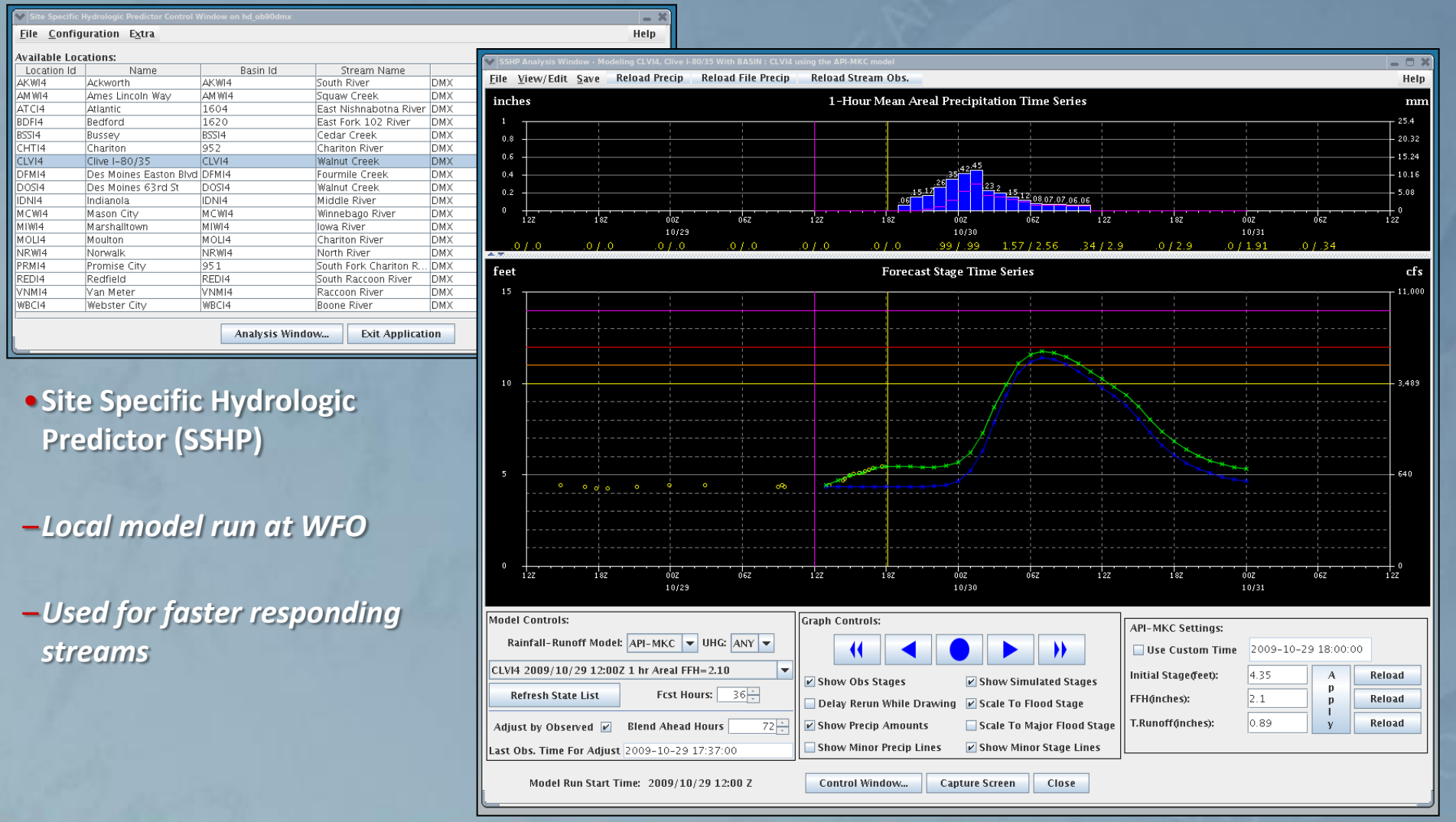
Cedar River—downtown Cedar Rapids, IA

Internal uses—situational awareness

- Flash Flood Monitoring and Prediction (FFMP)
  - *Analyze data on sub-basin level*
  - *Observed and forecast rainfall*
  - *Identify sub-basins at risk*
  - *Place sub-basins in flood and flash flood warnings*



Internal uses—Modeling



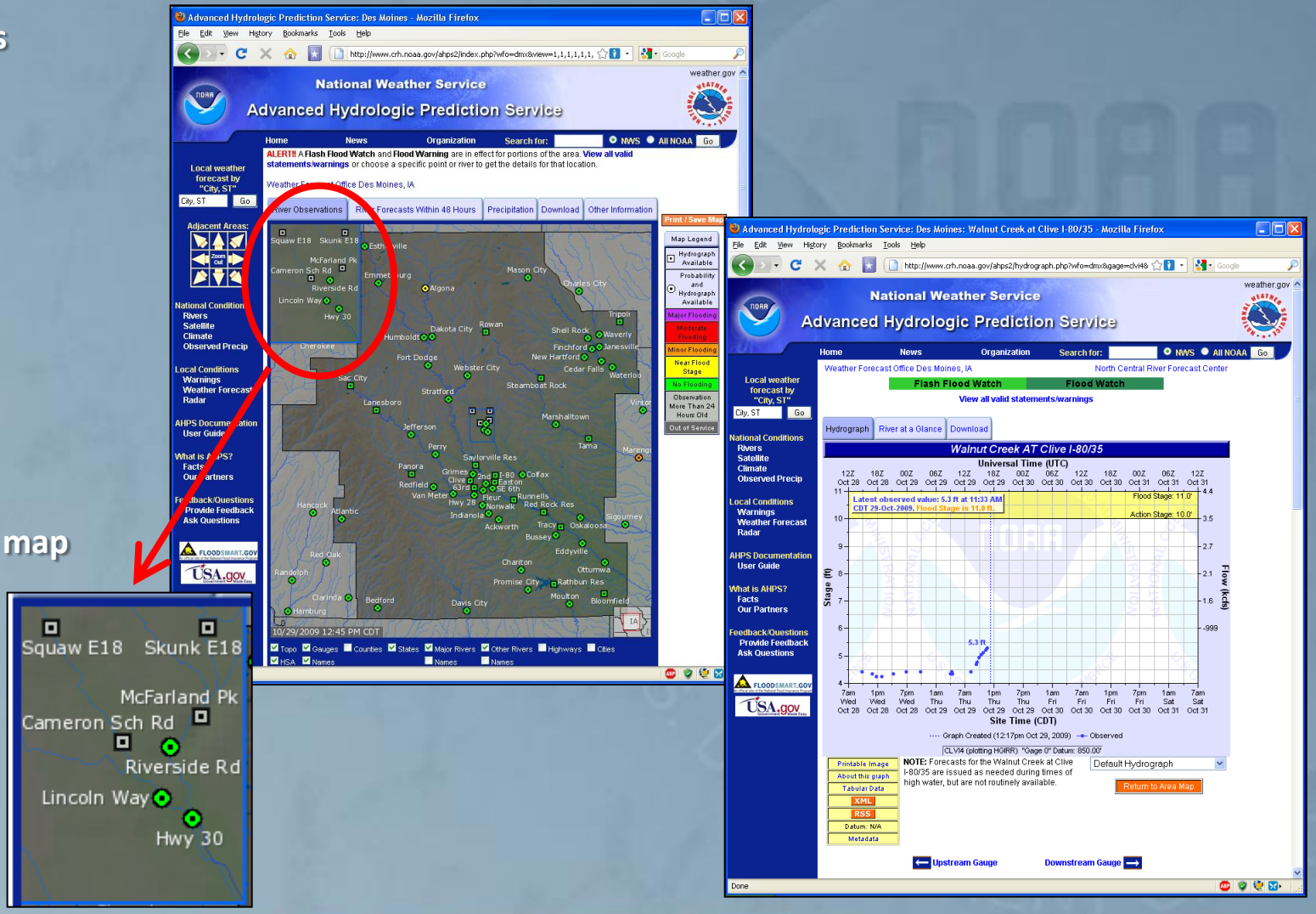
- **Site Specific Hydrologic Predictor (SSHP)**
  - *Local model run at WFO*
  - *Used for faster responding streams*

External NWS uses

Des Moines, IA—Des Moines & Raccoon Rivers

External uses

- AHPS Web pages
  - *Forecast points*
  - *Data points*
- Ames "pop out" map



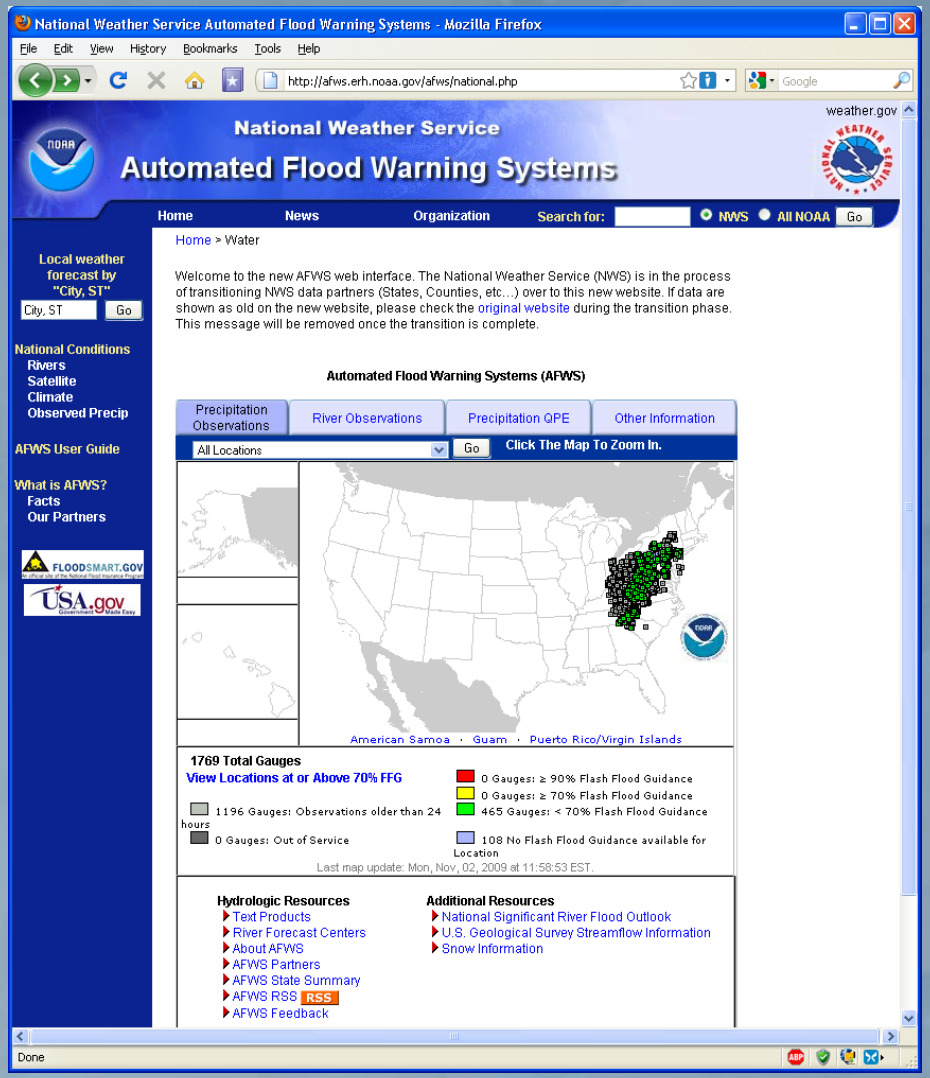
External uses

- Automated Flood Warning Systems (AFWS) Web site

– *http://afws.erh.noaa.gov/afws/*

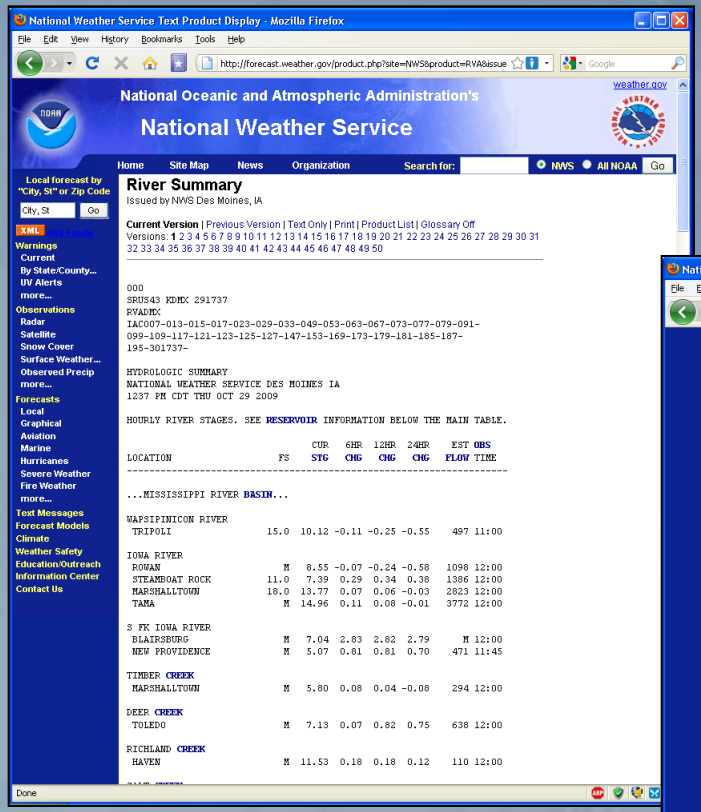
– *Presently only includes data from Integrated Flood Observing and Warning System (IFLOWS)*

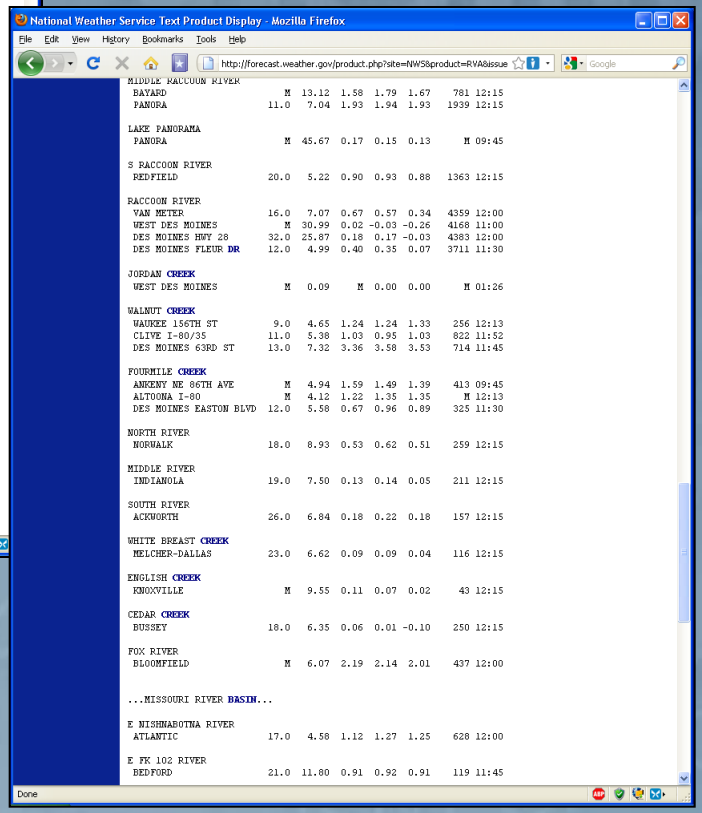
– *Let your local WFO know if you would like to your data to appear here*



External uses

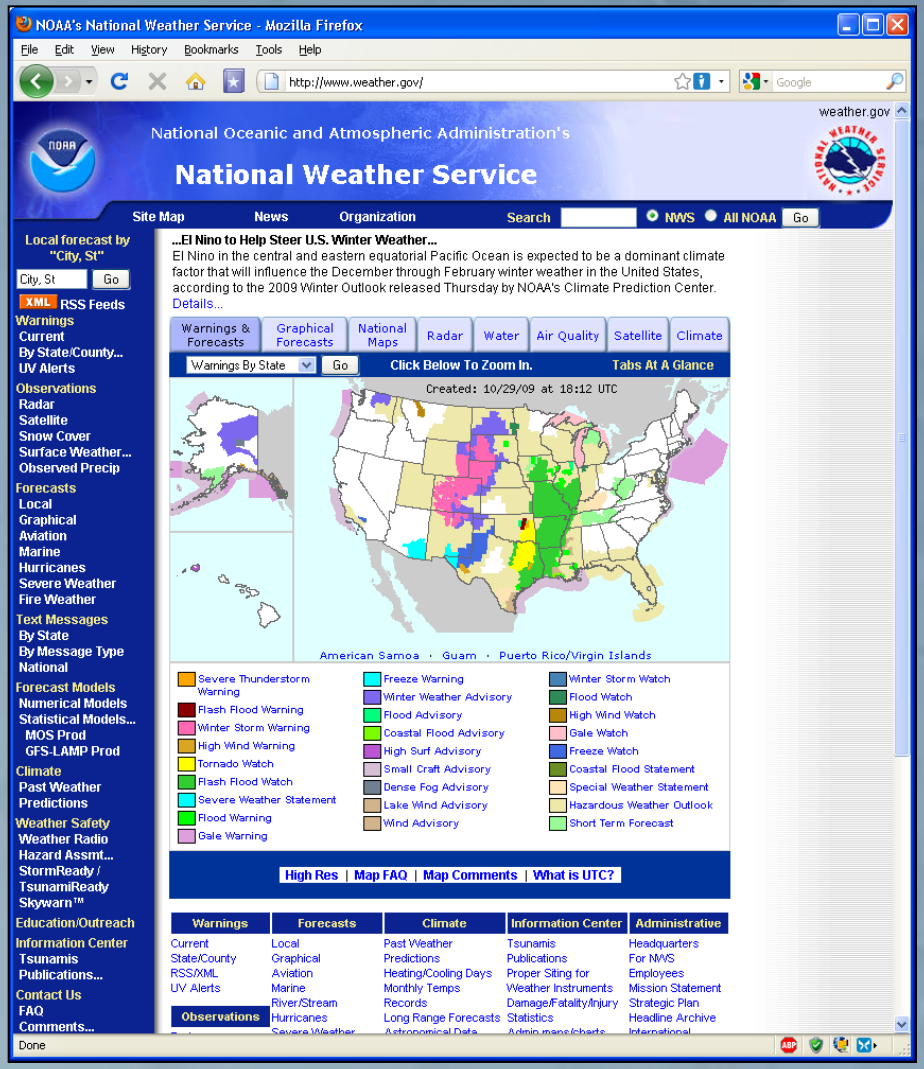
- River stage information





Thank you

http://www.weather.gov/



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