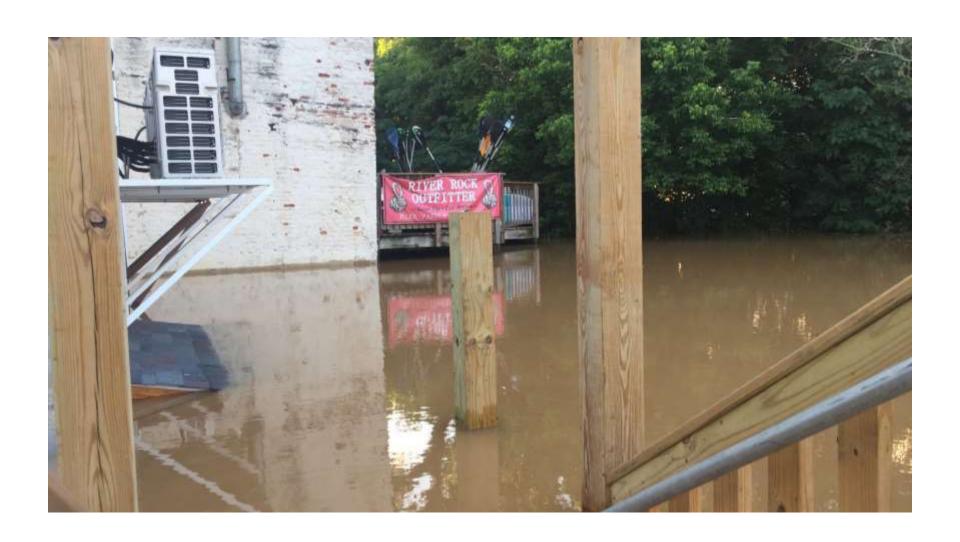
Fredericksburg Flood of June 2018

Old Mill Park Gate



River Rock Deck



Sophia Street Parking Lot

(former elks lodge, future downtown park)



Floodwaters move into a parking lot along Sophia Street on Saturday. The city warned owners to move their cars and eventually closed part of the street.

Railroad Bridge



Debris flows down the Rappahannock River. The flooding was the worst the city has seen since Hurricane Agnes in 1972.

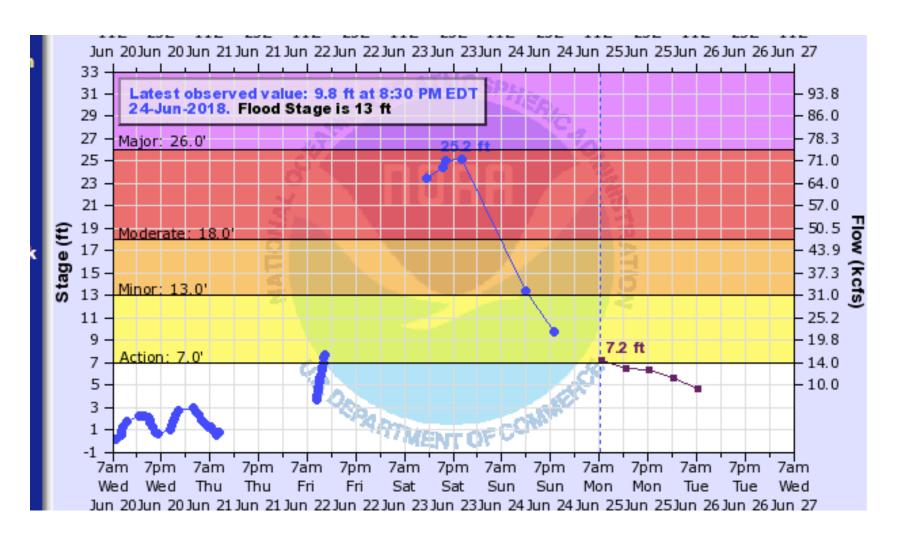
Chatham Bridge





Flood waters rise around homes along River Road in Falmouth on Saturday, June 23, 2018.

Flood Severity



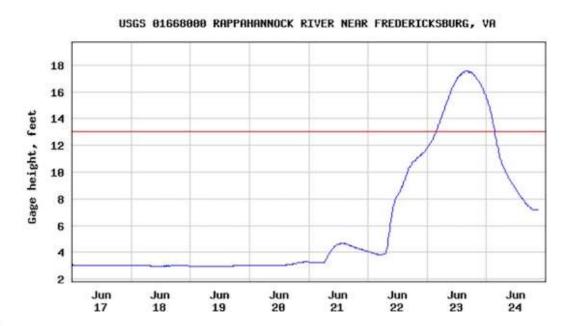
Source: NOAA, NWS, Advanced Hydrolic Prediction Service

Top Eleven Rappahannock River Crests

- 42.6 feet: Oct 16, 1942
- 39.1 feet: June 22, 1972, Hurricane Agnes
- 39.1 feet: April 26, 1937
- 32.2 feet: June 1 1889
- 27.2 feet: May 23, 1901
- 26.9 feet: Aug19, 1955, Hurricane Connie
- 26.9 feet: Sept 8, 1996, Hurricane Fran
- 25.2 feet: June 23, 2018
- 25.1 feet: May 13, 1924
- 25.1 feet: June 29, 1995
- 22.8 feet: Oct 1 1924

River Gage



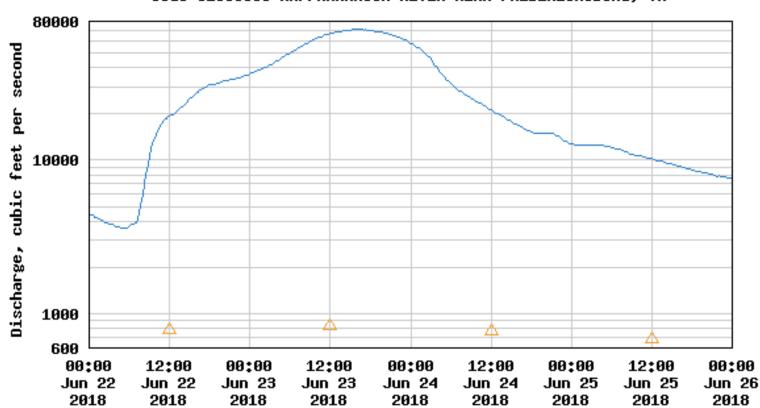


Latitude/Longitude Disclaimer: The gauge location shown in the above map is the approximate location based on the latitude/longitude coordinates provided to the NWS by the gauge owner.

River Gage (cont'd)

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USGS 01668000 RAPPAHANNOCK RIVER NEAR FREDERICKSBURG, VA

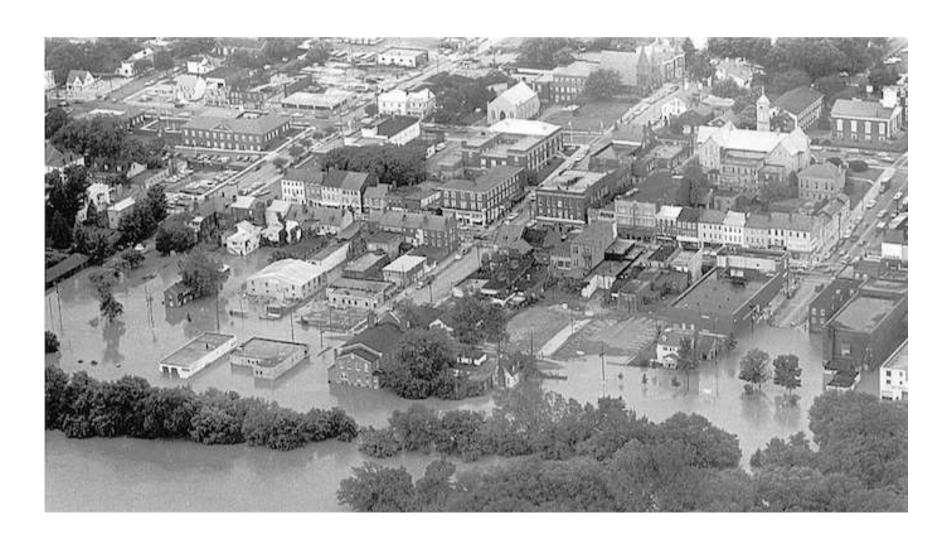


1942



HISTORIC FREDERICKSBURG FOUNDATION INC

1972 - Agnus



River Rock







Three views of Sophia Street Hurricane Agnes 1972



What's Happening in the River?

- Increased velocity and flow
- Increased debris and sediment
- River reaches bankfull or tops banks into the flood plain



A Little River Physics

- Slower along edges, bottom, and other "rough" areas
- During storms:
 - Potential loss/gain in habitat
 - Connections with side channels/braids
 - Change in bottom substrate



Starting at the Bottom

- Benthic macroinvertebrates
 - Live on the bottom
 - Rocks, wood debris, sand
 - Food!
 - Susceptible to flood



www.epa.gov



www.fws.gov







https://aquaticinsectsofcentralvirginia.blogspot.com

Flooding and Fish

- Fish move into areas of low flow
 - Behind rocks, log jams
 - In new channels, backwater
 - Floodplain
- Food sources for fish
 - Old sources gone or move
 - New sources temporarily



Fishing During the Flood

- Find slow, calm water
- Find clear water
- Use bright flies that cause a lot of disturbance
- Stay home or fish lakes!



Starexponent.com



Pat Cohen

Fishing After Floods

- Initially slow?
- Then pretty good?
- Thoughts?



Theminnowbucket.net



Riverfriends.org