#### Rappahannock high at Kelly's Ford and afterwards

June 22-23, 2018



Elio Londero, June 2018

#### Rapp. @ Remington historic highs

#### Top Ten Highest Historical Crests: Rappahannock River at Remington

Period of Record: 1889-Present Longitude: -77.814 Latitude: 38.531 Flood Stage: 15 Last Flood: 9/30/2015 Total Number of Floods: 78

| Date of Flood | Crest (ft) | Streamflow (cfs) | Wx Comm  | ents                                      |  |  |
|---------------|------------|------------------|--|---|--|--|
| 10/16/1942    | 30.00      | 90,000           | The remnants of the eighth tropical storm of the year produced torrential rains and causes worst river flooding in the history of Virginia.  |   |  |  |
| 4/26/1937     | 29.20      | -9,999           | Heavy rains caused widespread flooding across mo<br>hit the hardest, but the Potomac River at Wisconsi<br>and total damages were well over \$1.5 million.  |   |  |  |
| 6/2/1889      | 26.70      | -9,999           | A mesoscale convective complex caused 9 inches of occurring in 8 hours. Most of Williamsport, Lock Howere submerged.   |   |  |  |
| 6/22/1972     | 24.82      | 52,900           | Hurricane Agnes made landfall again over southeastern New York on June 22 and mo-<br>westward into Pennsylvania. Rainfall totals from June 20-25 range from 2-3 inches in<br>Potomac to 18 inches near Shamokin, Pennsylvania. |   |  |  |
| 9/7/1996      | 24.04      | 35,300           | Hurricane Fran produced up to 16 inches of rain in the western part of Virginia and inches in the Juniata Basin in Pennsylvania. Fran was the worst flood even to hit Ma Hurricane Hazel and the January 1996 Flood.           |   |  |  |
| 8/18/1955     | 23.52      | 45,100           | Hurricane Diane made landfall 5 days after Hurrica<br>inches of rain with locally heavier amounts of 10 to   | 2.0                                       |  |  |
| 10/10/1976    | 21.97      | 36,800           | A low pressure system and its slow moving front p locations through the Mid-Atlantic Region.   | roduced 2 to 5 inches of rainfall at most |  |  |
| 3/5/1993      | 21.96      | 36,600           | A slow-moving low pressure system dumped 1 to 4 lower elevations and up to 12" of snow in higher e   |   |  |  |
| 2/15/1984     | 21.21      | 33,000           | A strong closed low pressure system moved through secondary low pressure system. Rainfall from both flooding was reported in 5 states.   |   |  |  |

Drainage Area: 619 sq mi Gage Datum: 251.6 ft MSL

Created 8/12/2016 12:16:48 PM















County of Gage: Fauguier precast Point: Fauquier

#### In the top 10 flows at Kelly's Ford?: estimated at 41,900 cfs!

Previous highest record was in 1984 with 30.0 ft. and 90,000 cfs (?!).

Third highest was in 1955 with 21.2ft and 45.100 cfs.

This one is currently estimated at no less than 41,900! The gauge stopped on the 22<sup>nd</sup> and resumed 17 hours later with 26,500 cfs/21.3ft and going down.

| 06/22/2018 12:30 EDT | 7,880 <sup>P e</sup>  | 10.14 <sup>P</sup> |
|----------------------|-----------------------|--------------------|
|                      |                       |                    |
| 06/22/2018 14:30 EDT | 9,730 <sup>P e</sup>  | 14.05 <sup>P</sup> |
|                      |                       |                    |
| 06/22/2018 16:30 EDT | 15,500 <sup>P e</sup> | 14.05 <sup>P</sup> |
|                      |                       |                    |
| 06/22/2018 18:30 EDT | 24,100 <sup>P e</sup> | n.a.               |
|                      |                       |                    |
| 06/22/2018 20:30 EDT | 31,800 <sup>P e</sup> | n.a.               |
|                      |                       |                    |
| 06/22/2018 22:30 EDT | 39,500 <sup>P e</sup> | n.a.               |
|                      |                       |                    |
| 06/23/2018 00:30 EDT | 41,900 <sup>Pe</sup>  | n.a.               |
|                      | D.a                   |                    |
| 06/23/2018 02:30 EDT | 41,700 <sup>P e</sup> | n.a.               |
|                      | Ре                    |                    |
| 06/23/2018 04:30 EDT | 39,800 <sup>P e</sup> | n.a.               |
|                      |                       |                    |
| 06/23/2018 06:30 EDT | 35,400 <sup>P e</sup> | n.a.               |
|                      |                       |                    |
| 06/23/2018 08:30 EDT | 31,000 <sup>P e</sup> | n.a.               |
|                      |                       |                    |

p, estimated subject to revision; e estimated

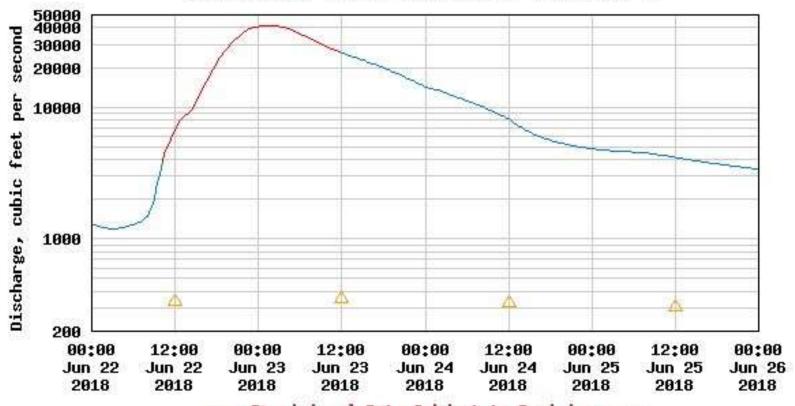
#### The broader picture

#### Discharge, cubic feet per second

Most recent instantaneous value: 3150 09-25-2018 01:15 EDT

#### USGS 01664000 RAPPAHANNOCK RIVER AT REMINGTON, VA

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---- Provisional Data Subject to Revision ----

Median daily statistic (75 years) — Estimated discharge Discharge

#### Kelly's Ford Aerial View (low flow)



#### From the bridge upstream

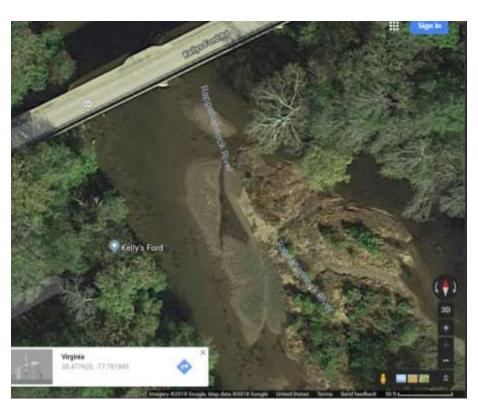
(all pics taken on **June 24**, 9:00-9:45, river about 9,500 cfs)



## From the bridge downstream (1)



# From the bridge downstream (2)





# Upstream the bridge



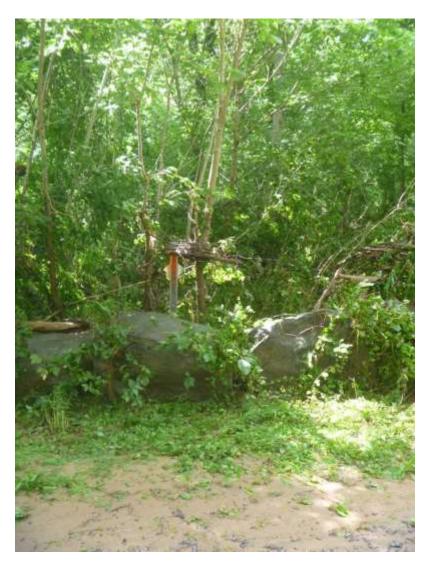
# At the boat launch (1)



#### At the boat launch (2), DS side



#### Going up to the parking area, DS side (1)





#### Going up to the parking area, DS side (2)

Mirta standing at the lowest end of the parking area



# At the paved area, DS side





# At the top end of the parking (1)



## At the top end of the parking (2)

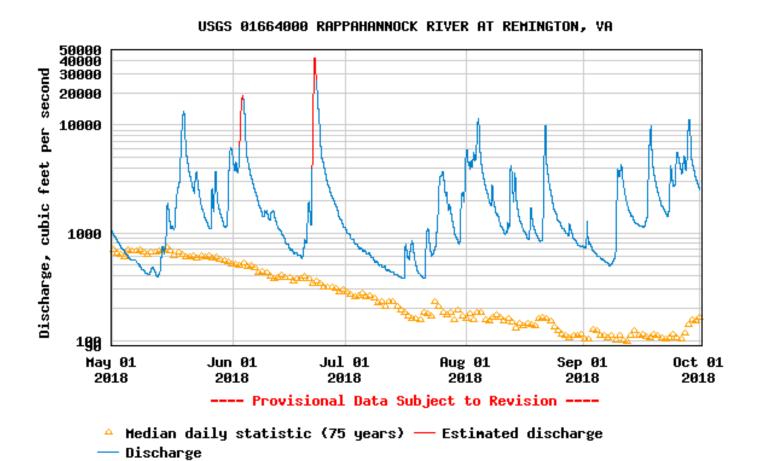


## At the top end of the parking (3)



# A Broader Look at the 2018 Fishing Season

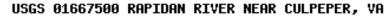
#### Rappahannock at Remington, discharge, cfs, May 1 to Oct 1, 2018

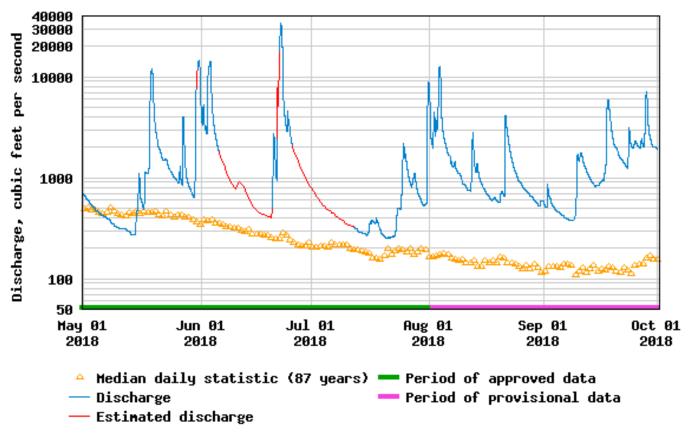


| Daily discharge, cubic feet per second statistics for Oct 1 based on 76 years of record more |
|--|
|--|

| Min<br>(1955) | 25th<br>percen-<br>tile | Median | 75th<br>percen-<br>tile | Mean | Most Recent<br>Instantaneous<br>Value Oct 1 | Max<br>(2000) |
|---------------|-------------------------|--------|-------------------------|------|---|---------------|
| 6.20          | 63                      | 164    | 407                     | 521  | 2520  | 7910          |

#### Rapidan at Culpeper, discharge, cfs, May 1 to Oct 1, 2018

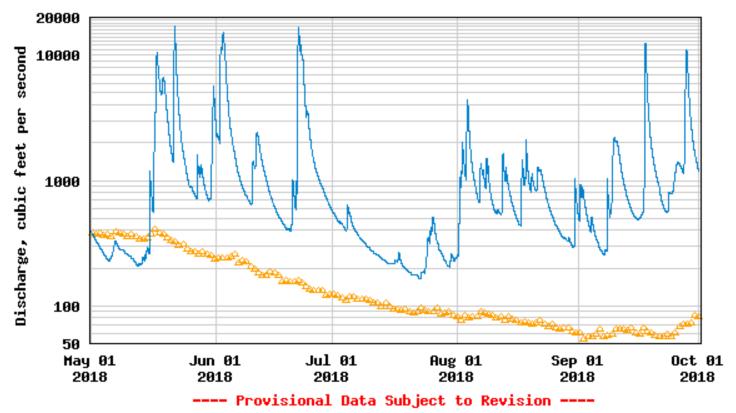




| Daily discharge, cubic feet per second statistics for Oct 1 based on 88 years of record more |                         |        |                         |      |   |               |
|--|-------------------------|--------|-------------------------|------|---|---------------|
| Min<br>(1955)  | 25th<br>percen-<br>tile | Median | 75th<br>percen-<br>tile | Mean | Most Recent<br>Instantaneous<br>Value Oct 1 | Max<br>(2000) |
| 8.80   | 60                      | 155    | 399                     | 405  | 1900  | 4210          |

#### NF of the Shenandoah at Mt Jackson, discharge, cfs, May 1 to Oct 1, 2018





Median daily statistic (74 years) — Discharge

| Daily discharge, cubic feet per second statistics for Oct 1 based on 75 years of record more |                    |        |                    |      |   |               |
|--|--------------------|--------|--------------------|------|---|---------------|
| Min<br>(2018)  | 25th<br>percentile | Median | 75th<br>percentile | Mean | Most Recent<br>Instantaneous<br>Value Oct 1 | Max<br>(1960) |
| 18.9   | 37                 | 80     | 185                | 253  | 1180  | 5150          |

## The End