# South River Mercury TMDL – June 2005

- Monitoring Stations
- Stream Flow
- Water Sampling
- Next Steps Plans

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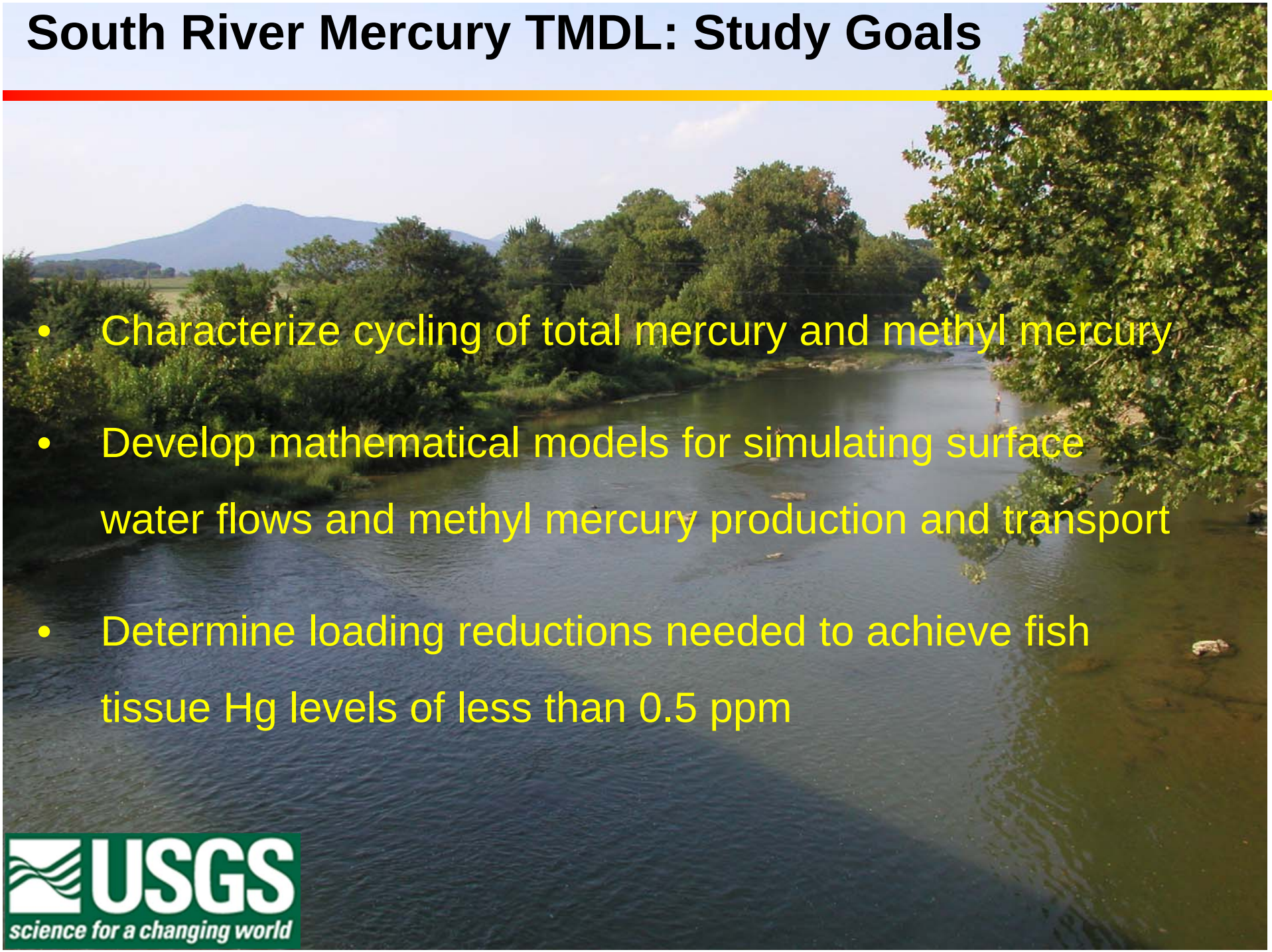
USGS
science for a changing world

# South River Mercury TMDL: Study Goals



- Characterize cycling of total mercury and methyl mercury
- Develop mathematical models for simulating surface water flows and methyl mercury production and transport
- Determine loading reductions needed to achieve fish tissue Hg levels of less than 0.5 ppm

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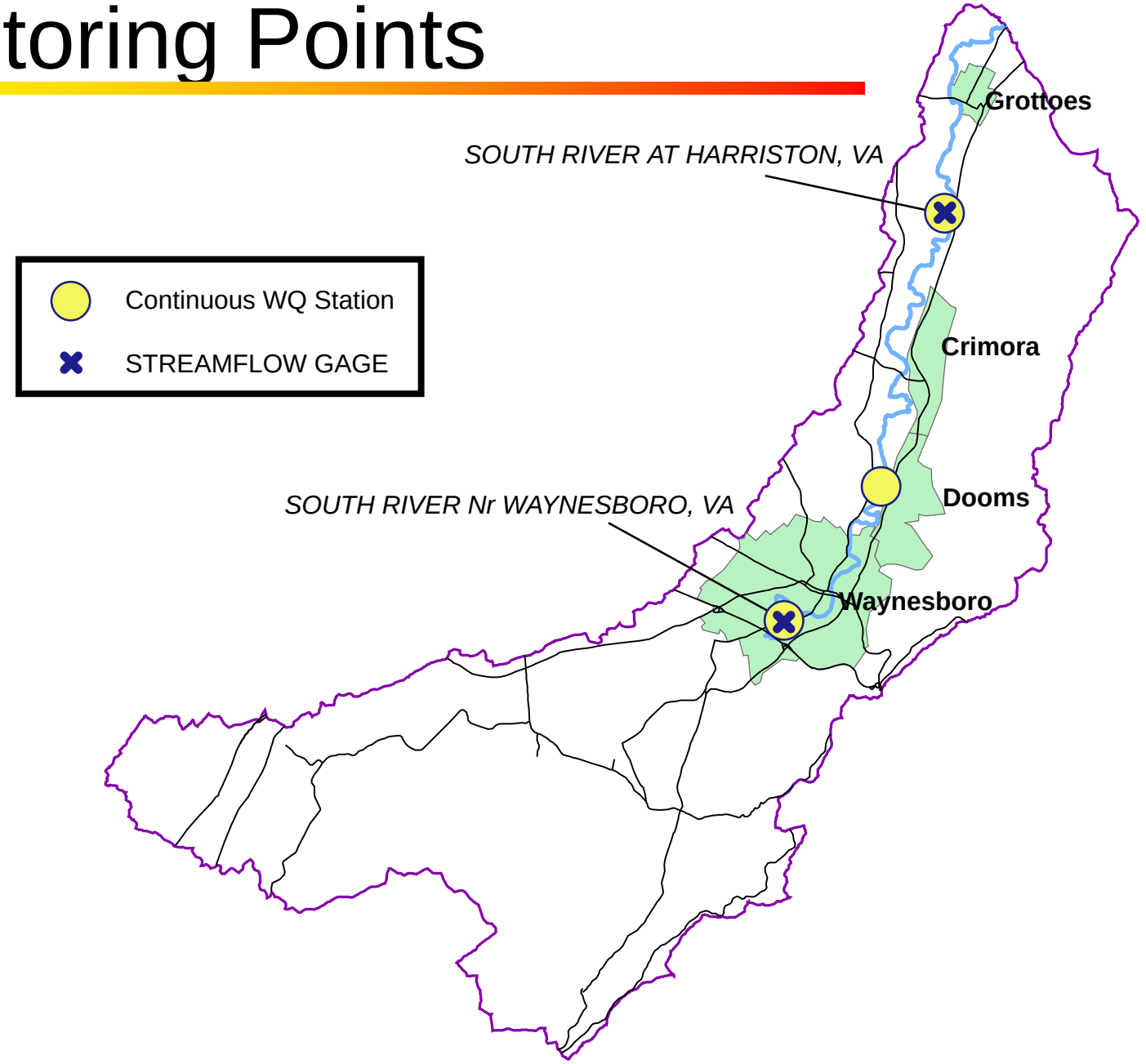
# South River Watershed and WQ Monitoring Points



# Installation of Monitoring Stations

Waynesboro

*In Progress*

Dooms

*Complete*

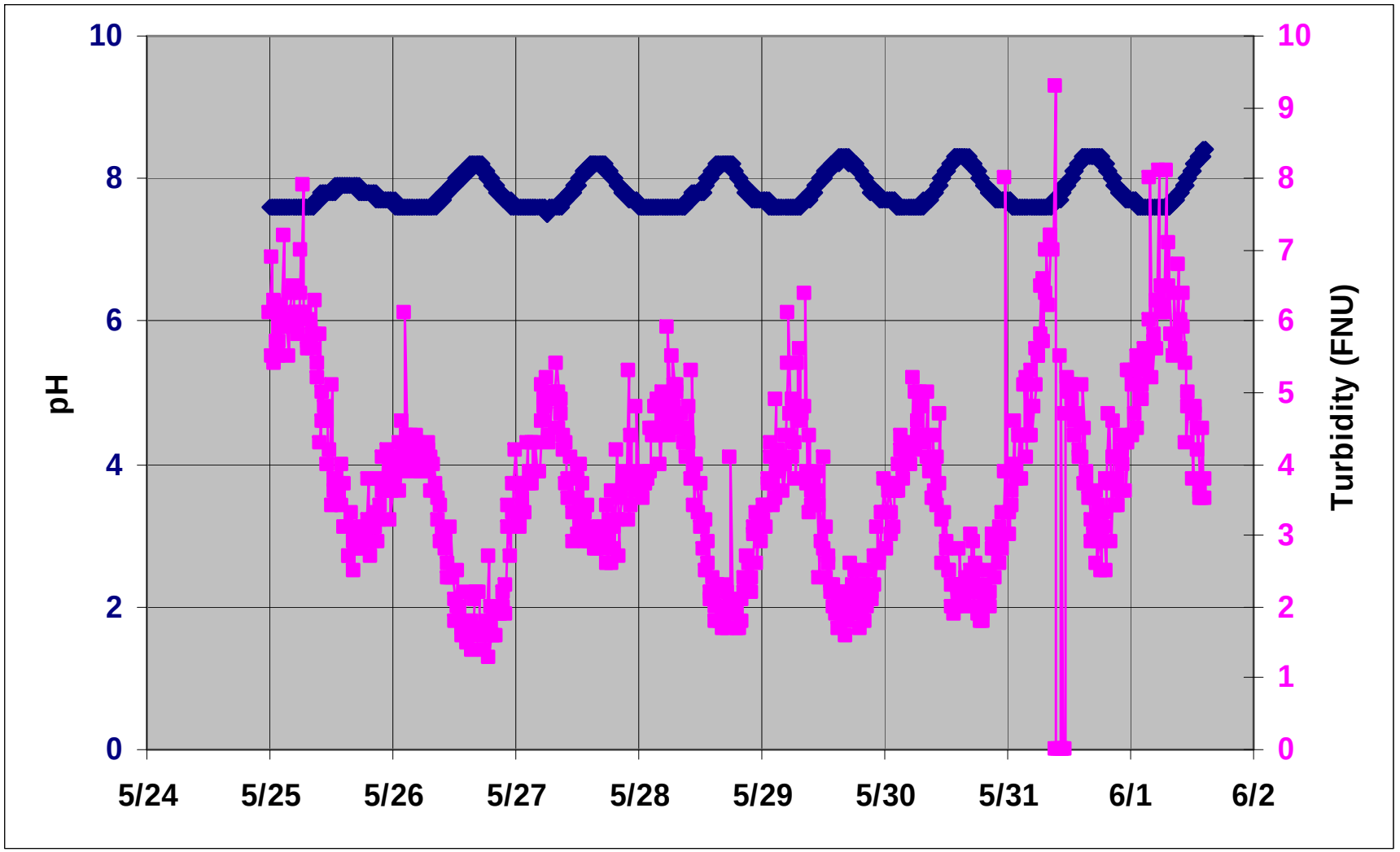
Harriston

*Complete*

# Data on the Web

| |
|---|
| **01626000 SOUTH RIVER NEAR WAYNESBORO, VA**<br>http://waterdata.usgs.gov/nwis/uv?site_no=01626000 |
| **01626920 SOUTH RIVER, OLD RT 611 AT DOOMS, Va.**<br>http://waterdata.usgs.gov/nwis/uv?site_no=01626920 |
| **01627500 SOUTH RIVER AT HARRISTON, VA**<br>http://waterdata.usgs.gov/nwis/uv?site_no=01627500 |

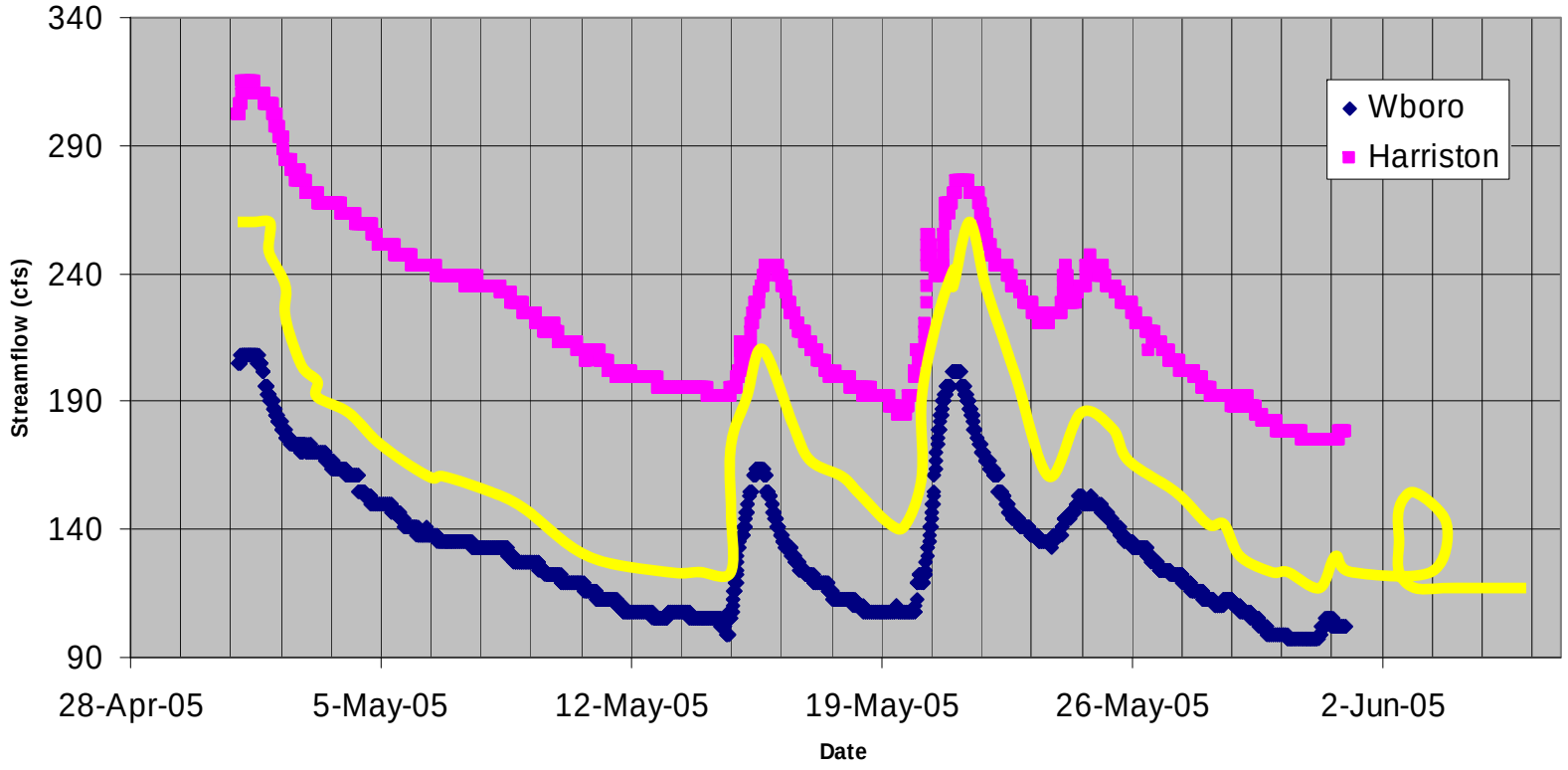
# Continuous Monitoring Results - Dooms

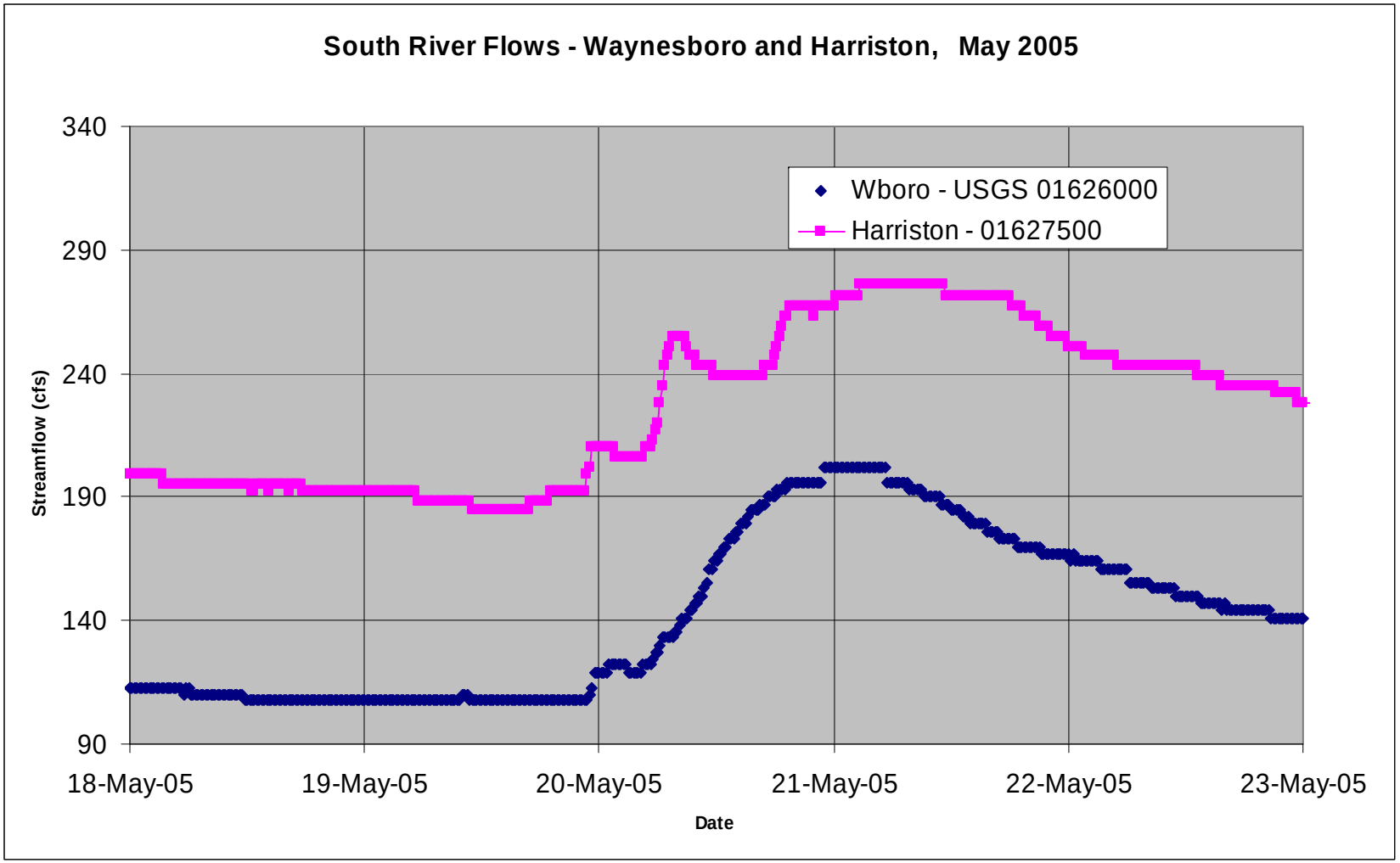


# Analysis of Surface Water

- First sampling May 2 (results not back yet)
- Regular sampling on a monthly schedule
- Stormwater sampling when possible
- Hg and MeHg, both filtered and unfiltered will continue to be analyzed for now
- Sulfate, DOC, Chloride, Sediment conc. are also analyzed

# South River Flows - Waynesboro and Harriston, May 2005




South River Flows - Waynesboro and Harriston, May 2005
340
290
240
190
140
90
Streamflow (cfs)
Wboro - USGS 01626000
Harriston - 01627500
18-May-05
19-May-05
20-May-05
21-May-05
22-May-05
23-May-05
Date

# Upcoming Work

- Finish equipment installation at Waynesboro station
- Expand monthly sampling to all stations
- QA/QC on analytical procedures/results
- Finalize data processing steps for continuous QW data
- Start storm sampling