

REGIONAL SALT AND WATER QUALITY WORKSHOP

Monday, April 1, 2019

Sodium Monitoring Data

Occoquan Watershed Monitoring Lab

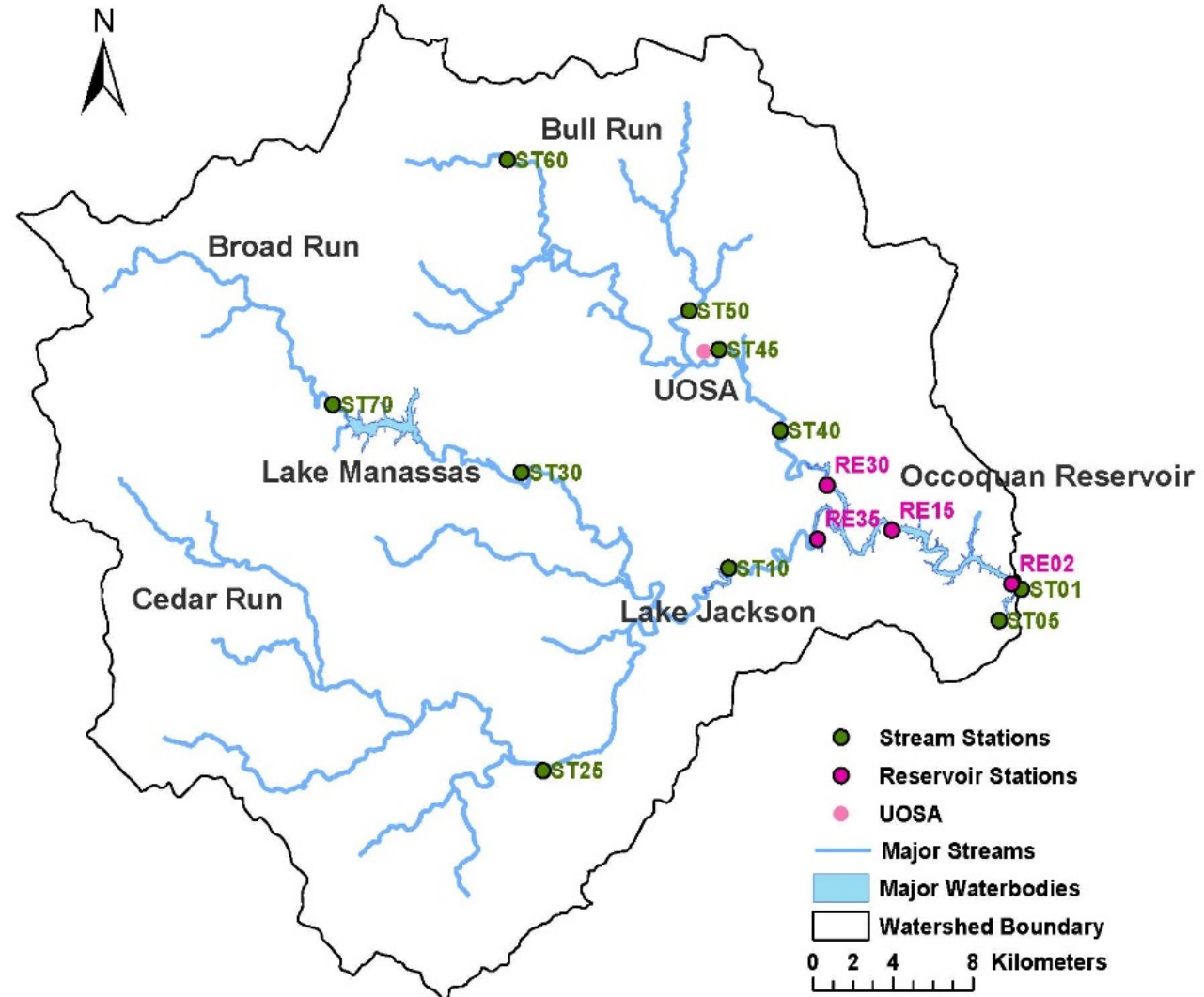
Virginia Tech

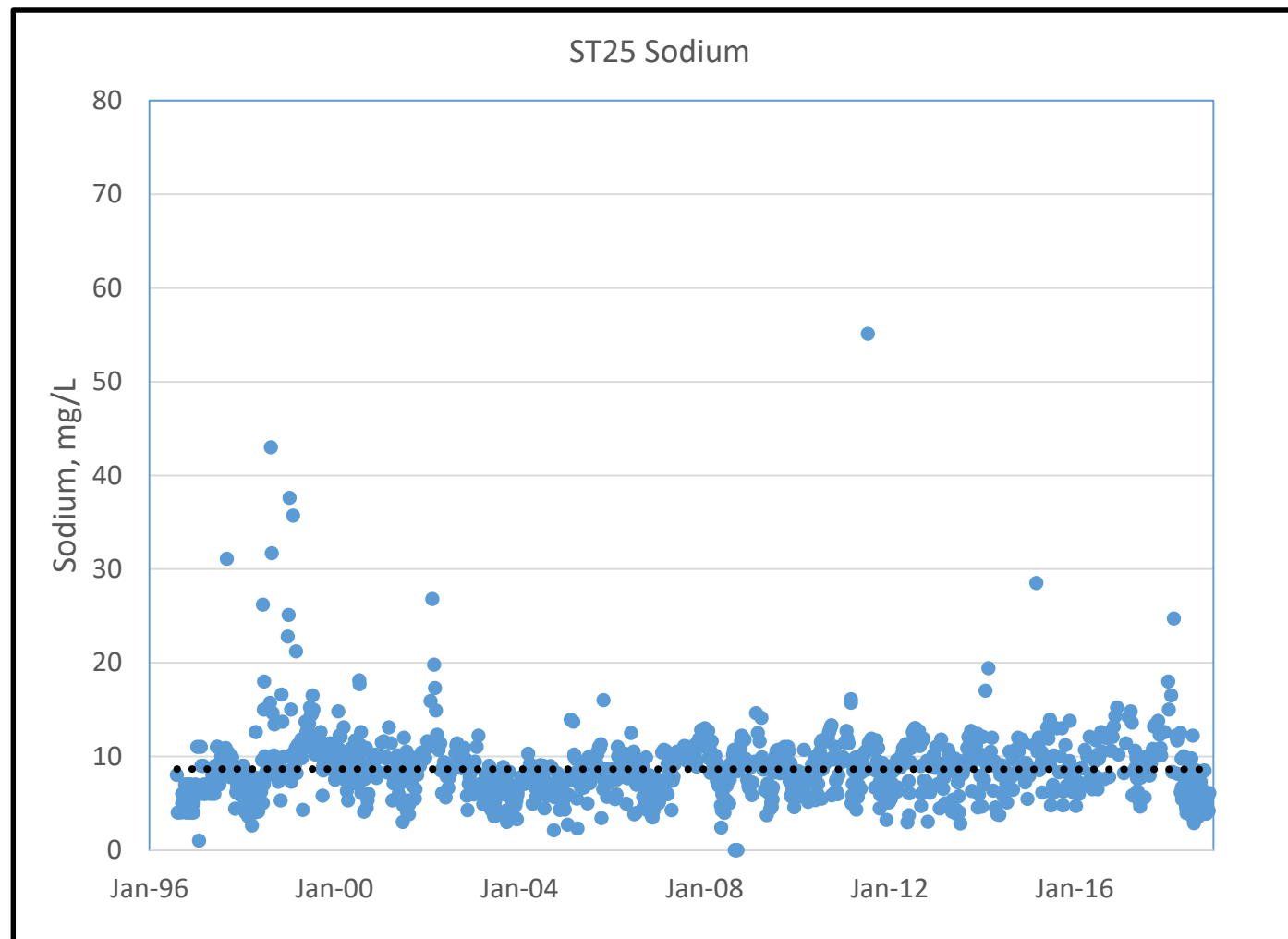


OWML Sodium Monitoring Timeline

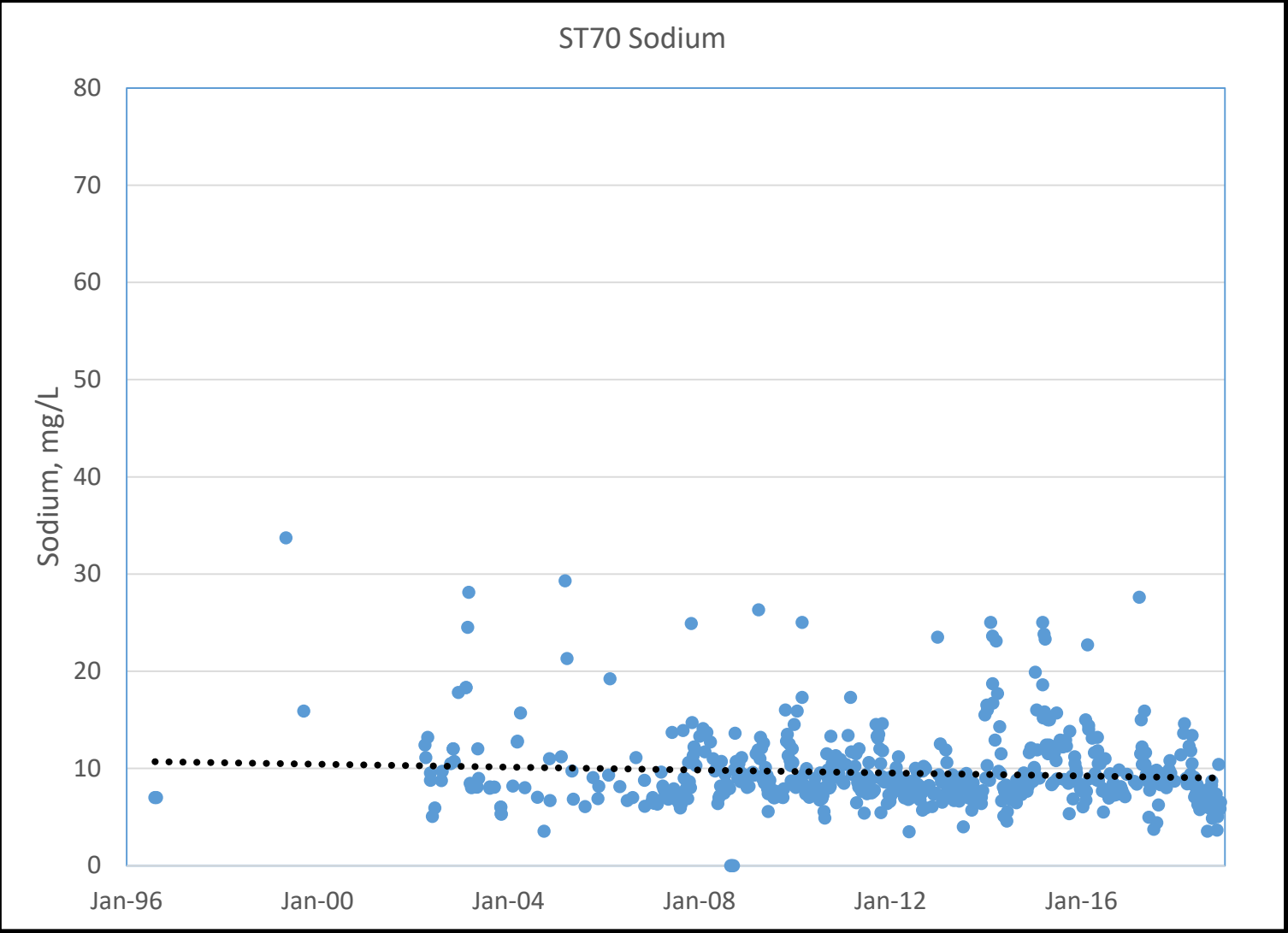
- 1996 – Sodium analyses begin at select streams in the Occoquan Watershed with the planning and construction of Dominion Semiconductor (now Micron) semiconductor plant.
- 2002 - Sodium analyses begin at all Occoquan streams and the Potomac River when the laboratory purchases an ion chromatograph.
- July 2018 – chloride analyses begin on the Potomac River.

The Occoquan Watershed

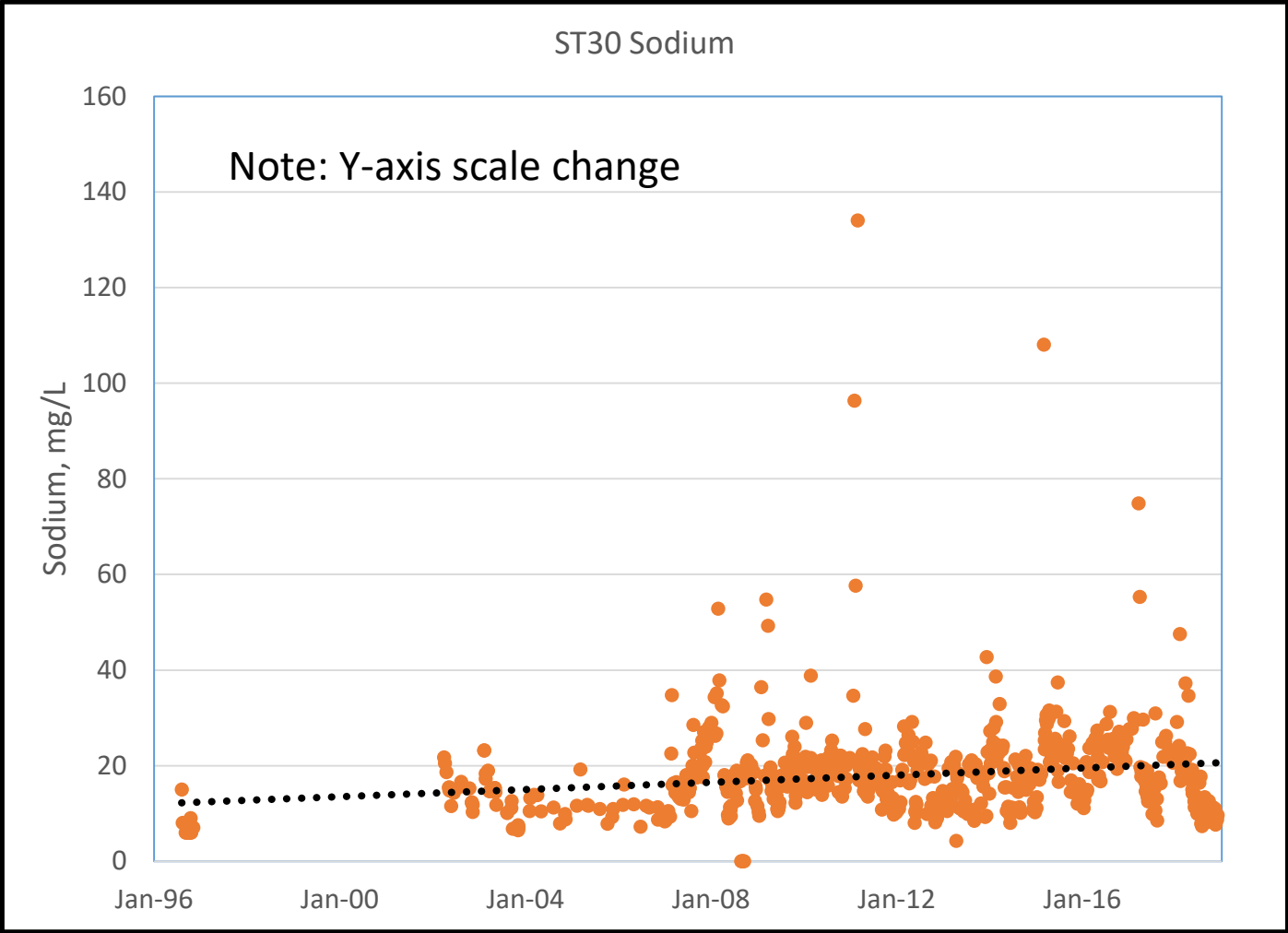




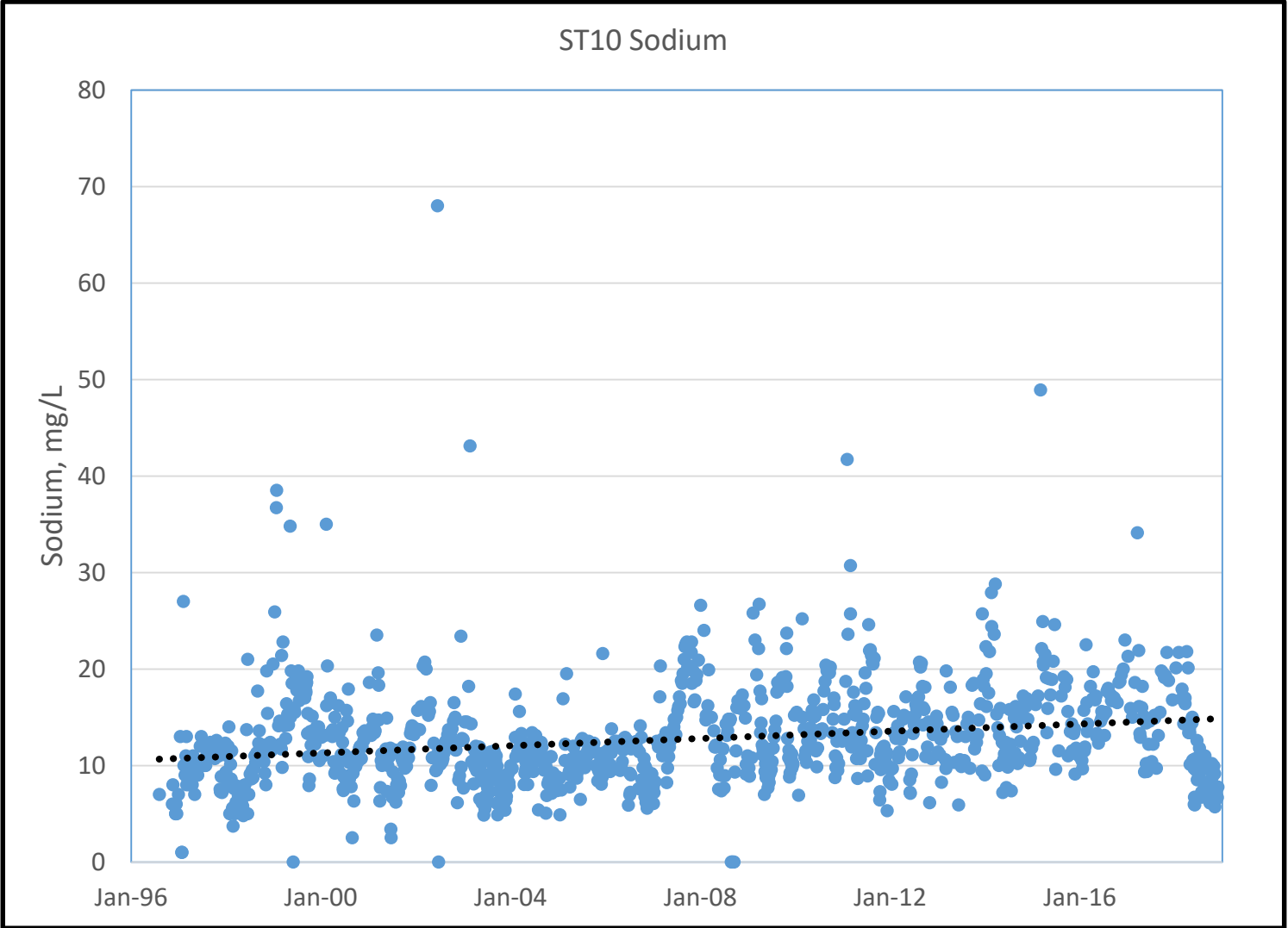
Sodium Trends at station ST25 (Cedar Run Near Aden)



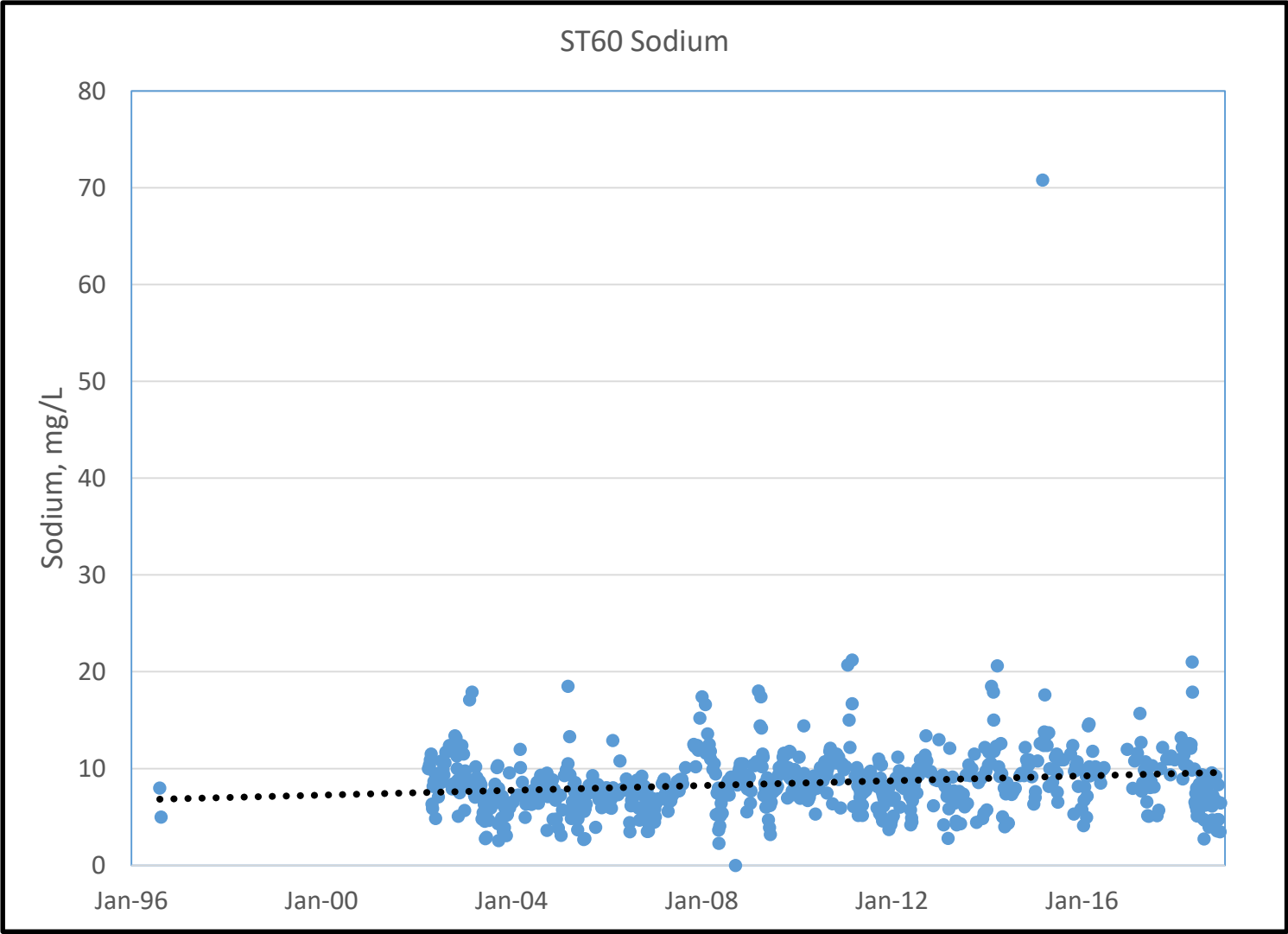
Sodium Trends at ST70 (Broad Run Above Lake Manassas)



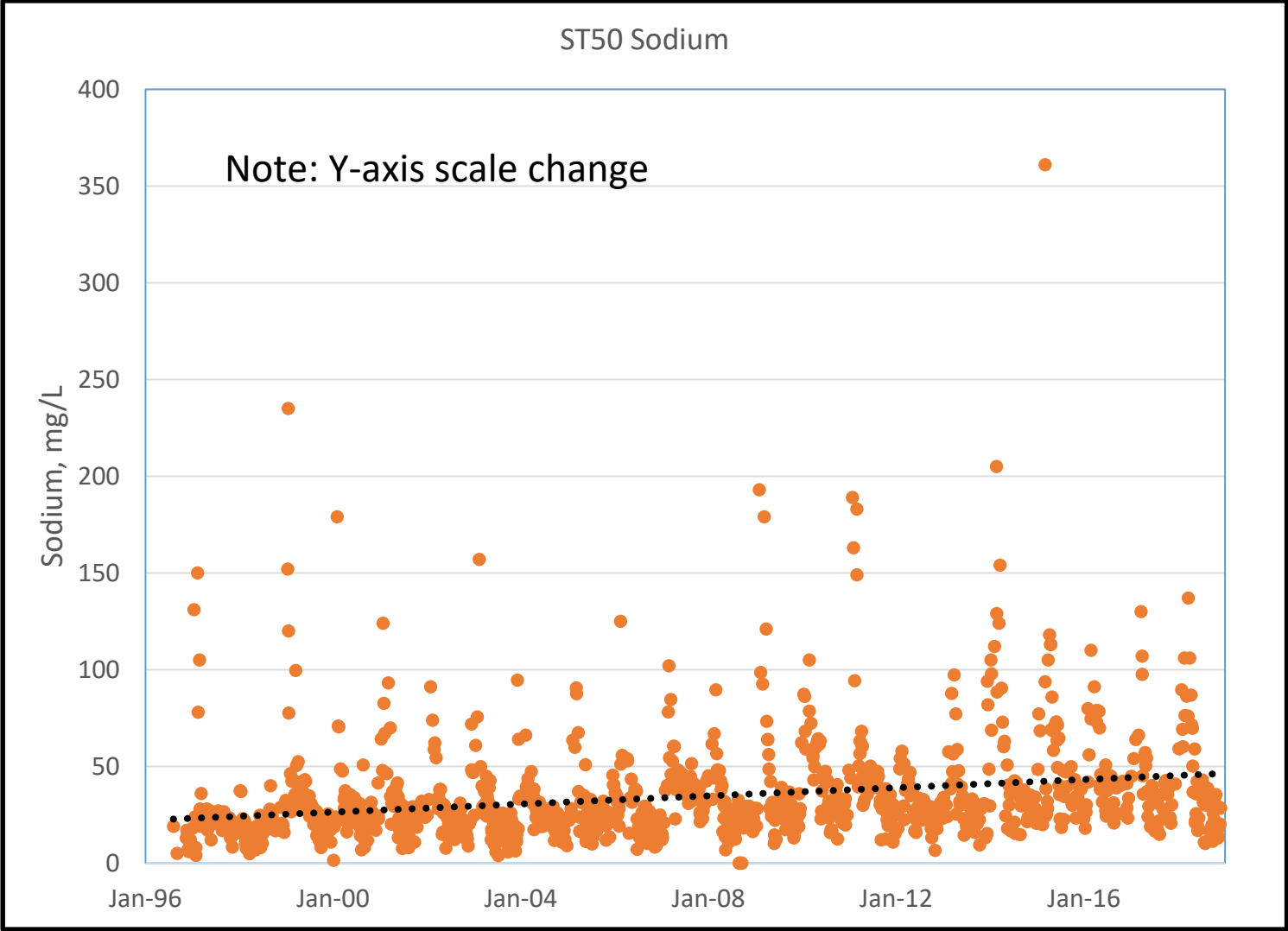
Sodium Trends at ST30 (Broad Run Below Lake Manassas)



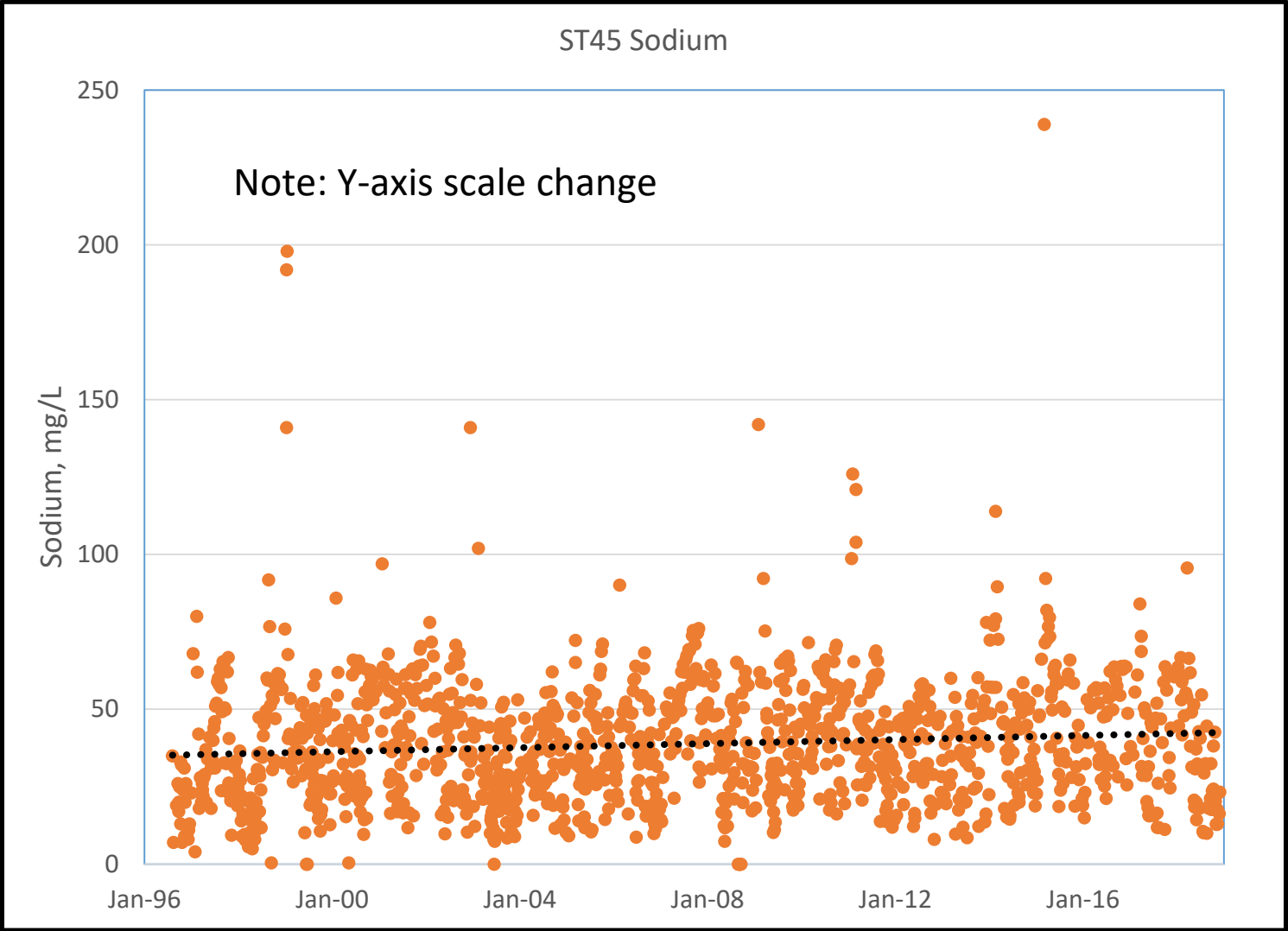
Sodium Trends at ST10 (Occoquan River Below Lake Jackson)



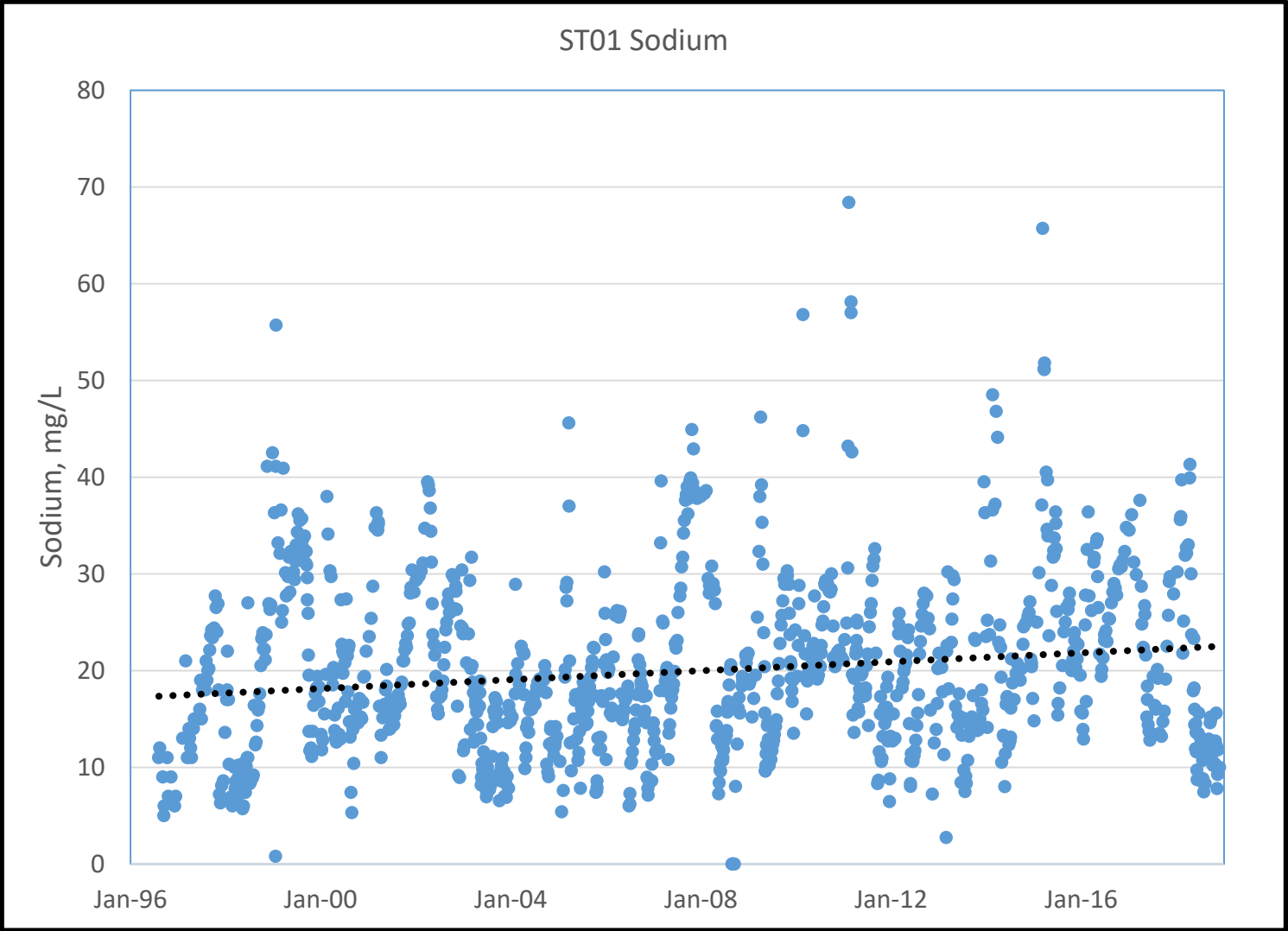
Sodium Trends at ST60 (Bull Run Near Catharpin)



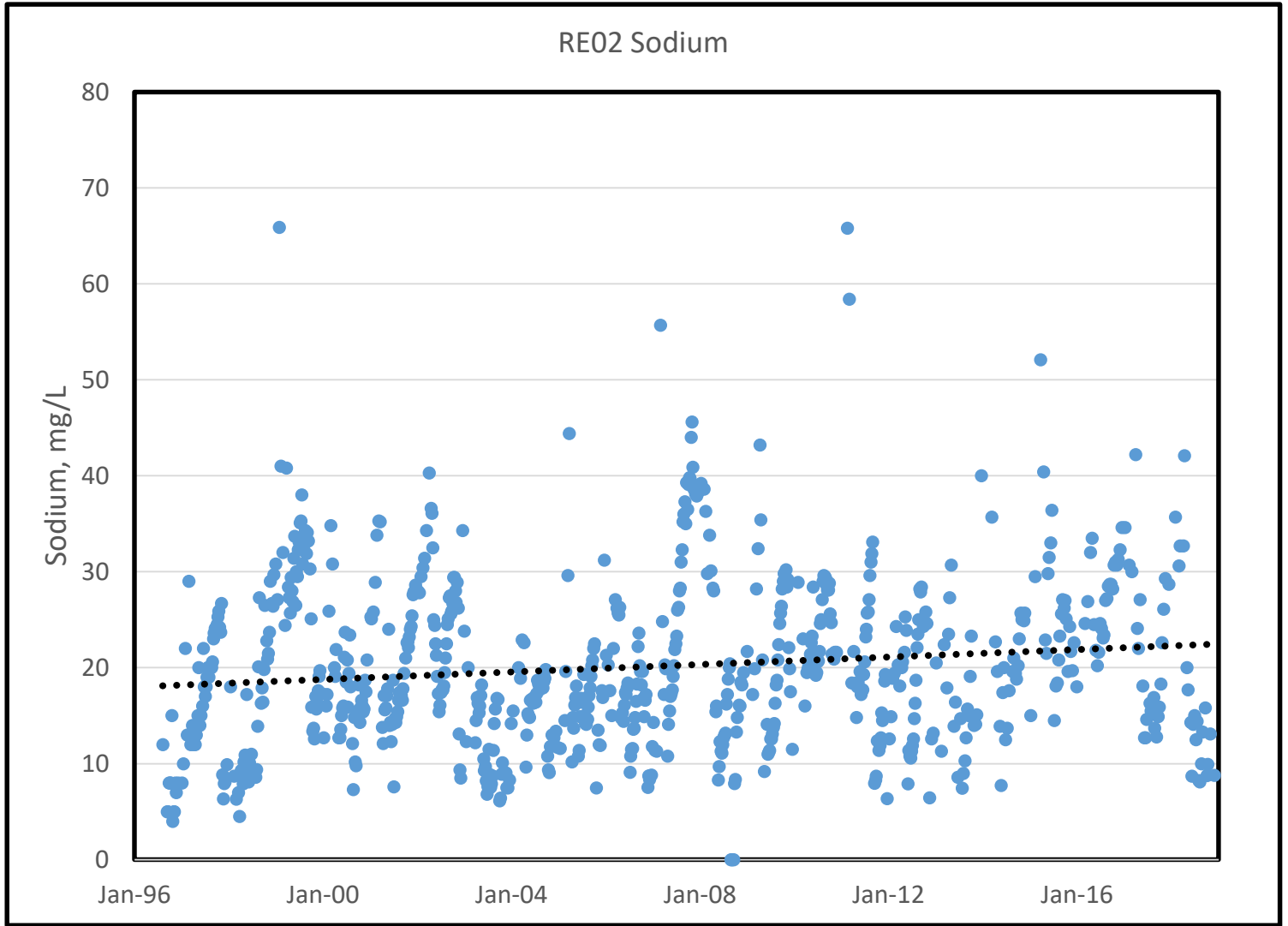
Sodium Trends at ST50 (Cub Run)



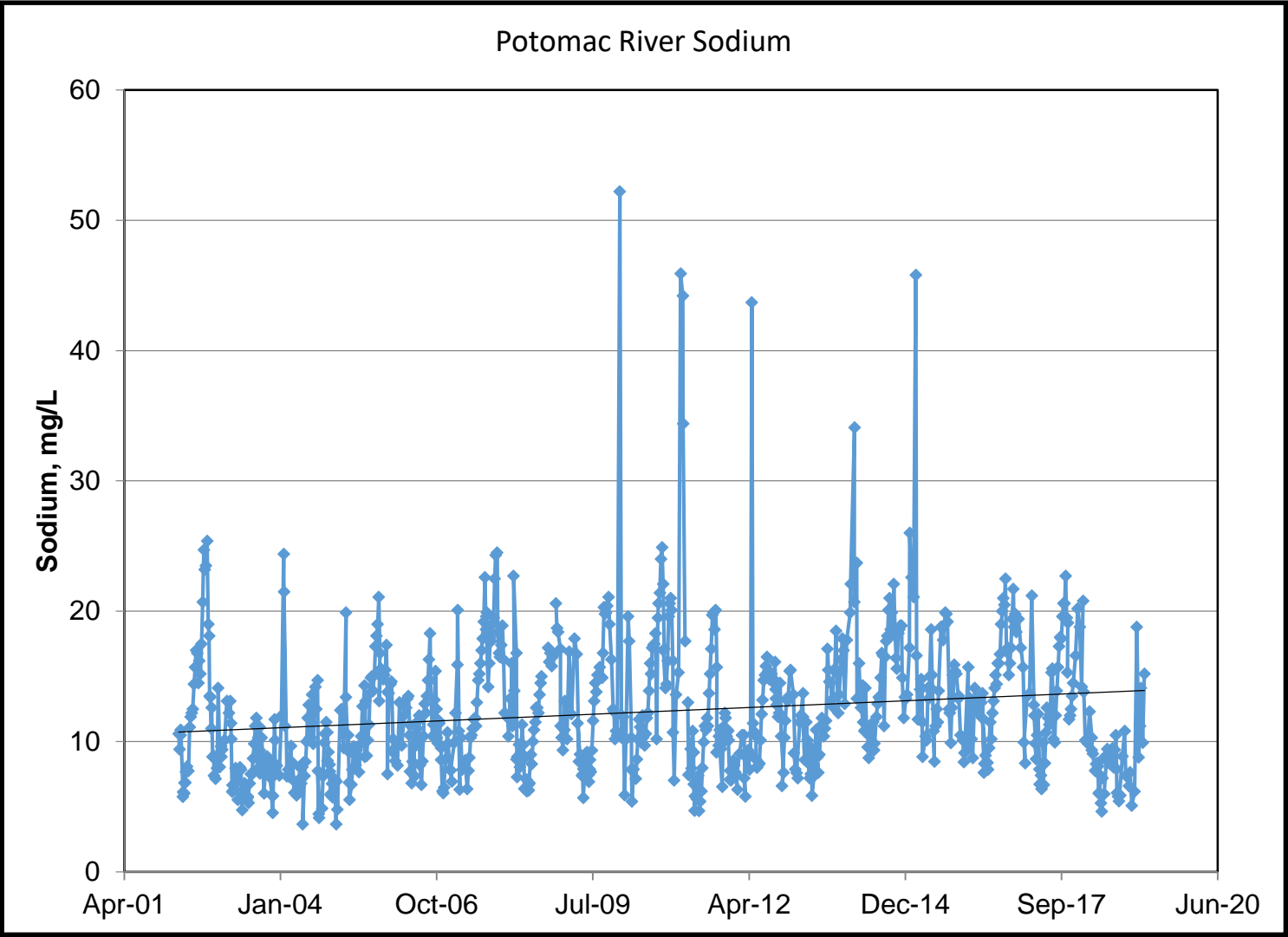
Sodium Trends at ST45 (Bull Run Below UOSA Discharge)



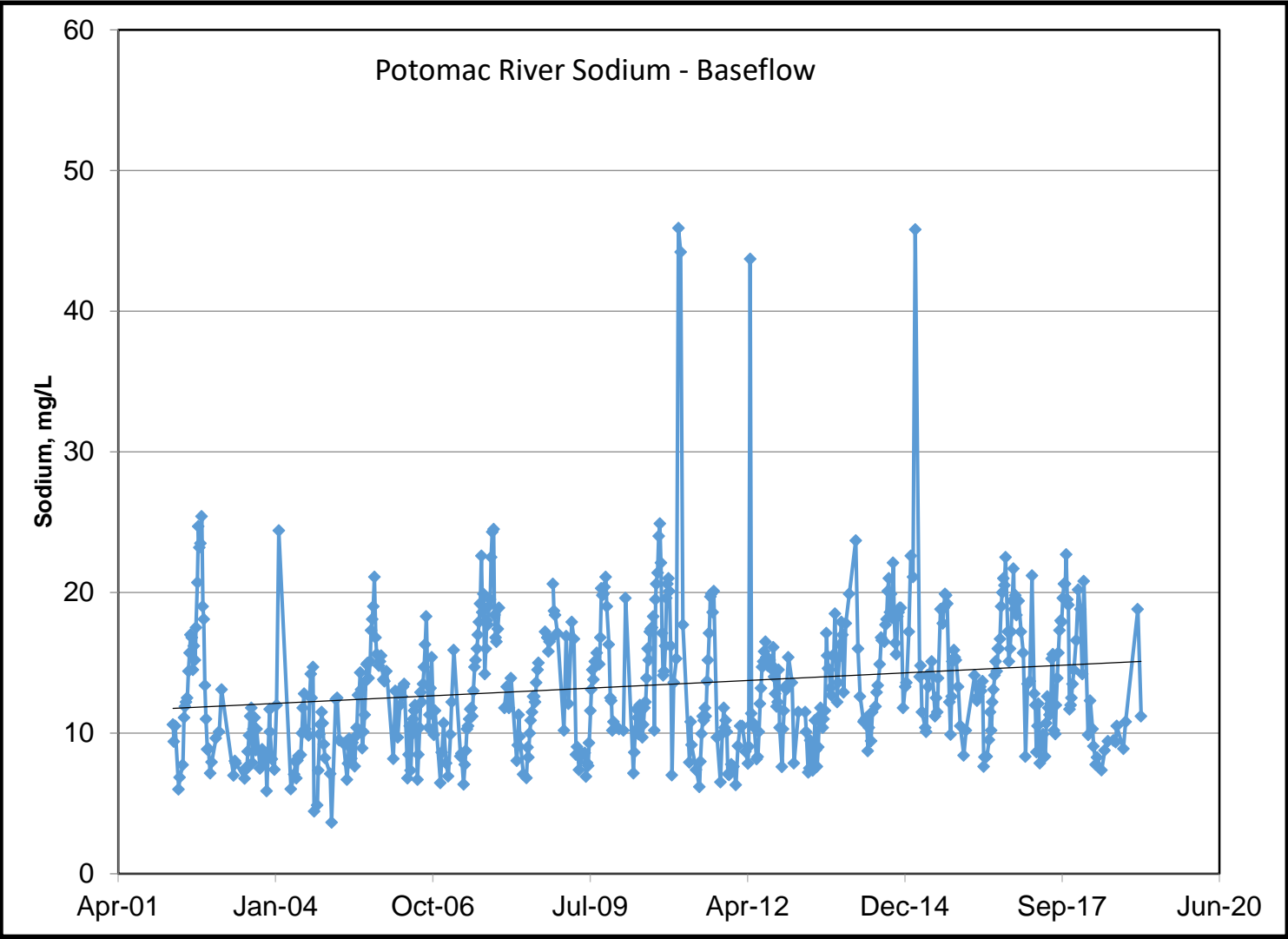
Sodium Trends at ST01 (Occoquan River at Dam)



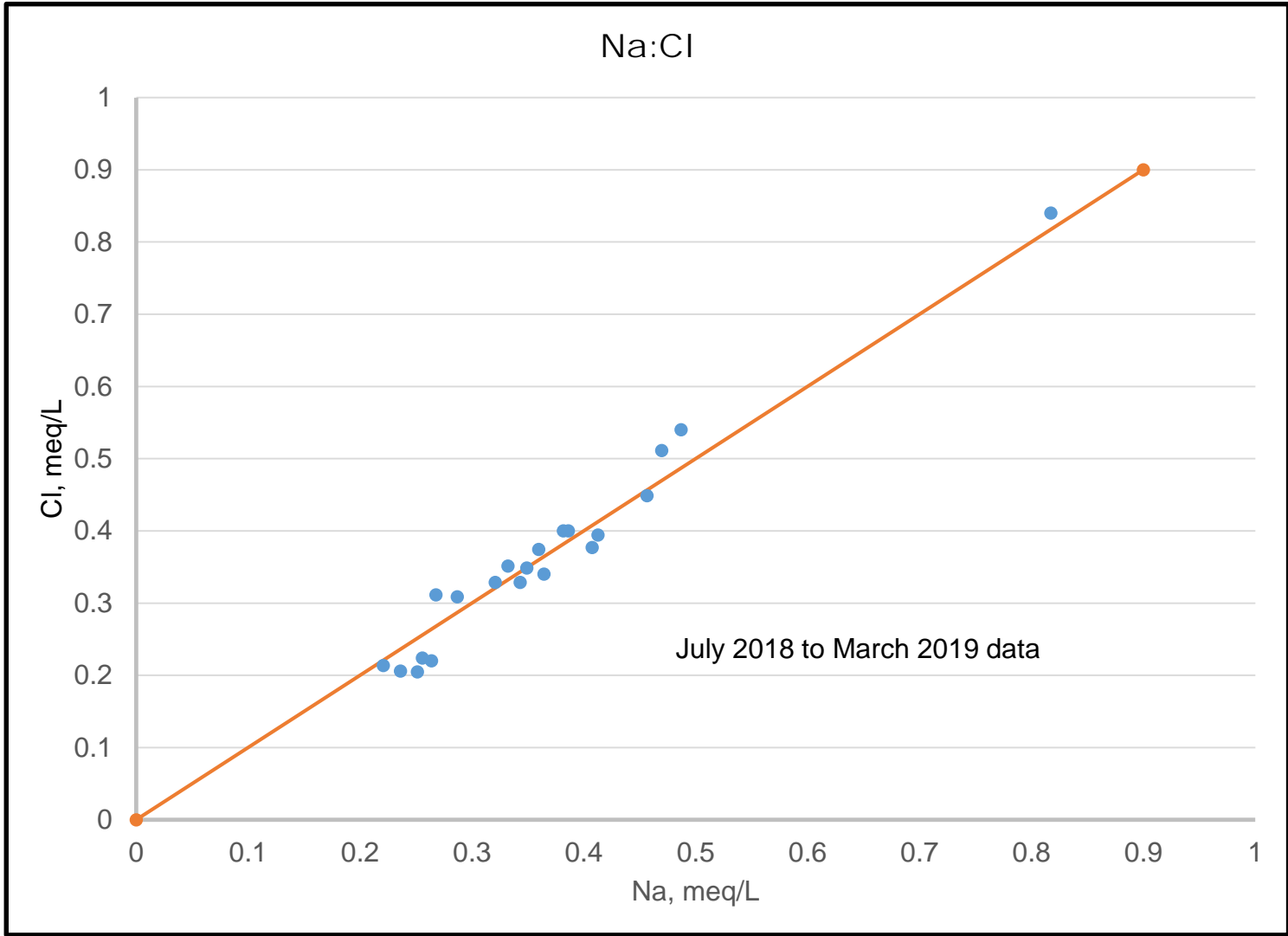
Sodium Trends at RE02 (reservoir station above Occoquan Dam)



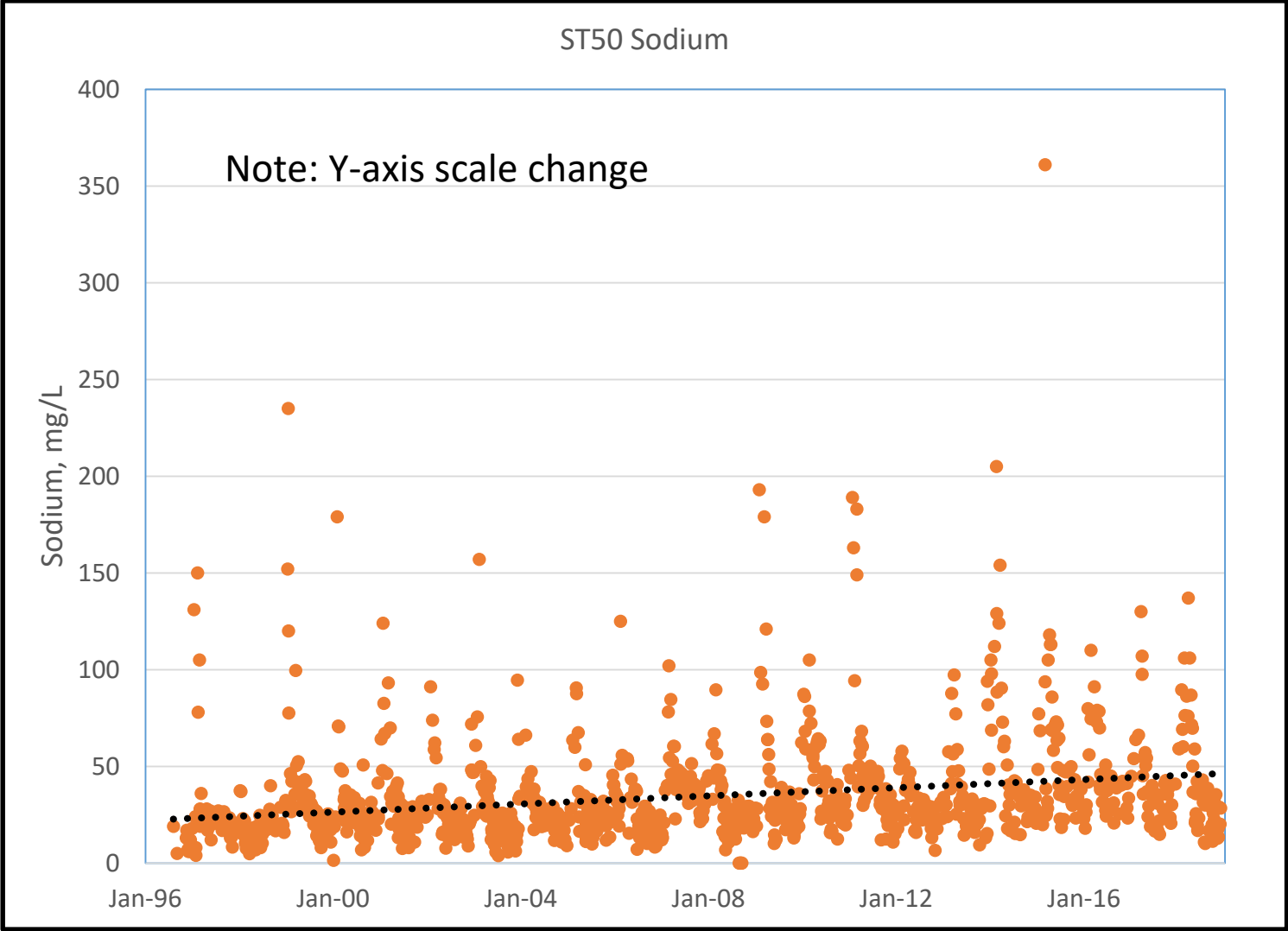
Sodium Trends - Potomac River at Chain Bridge



Baseflow Sodium Trends - Potomac River at Chain Bridge

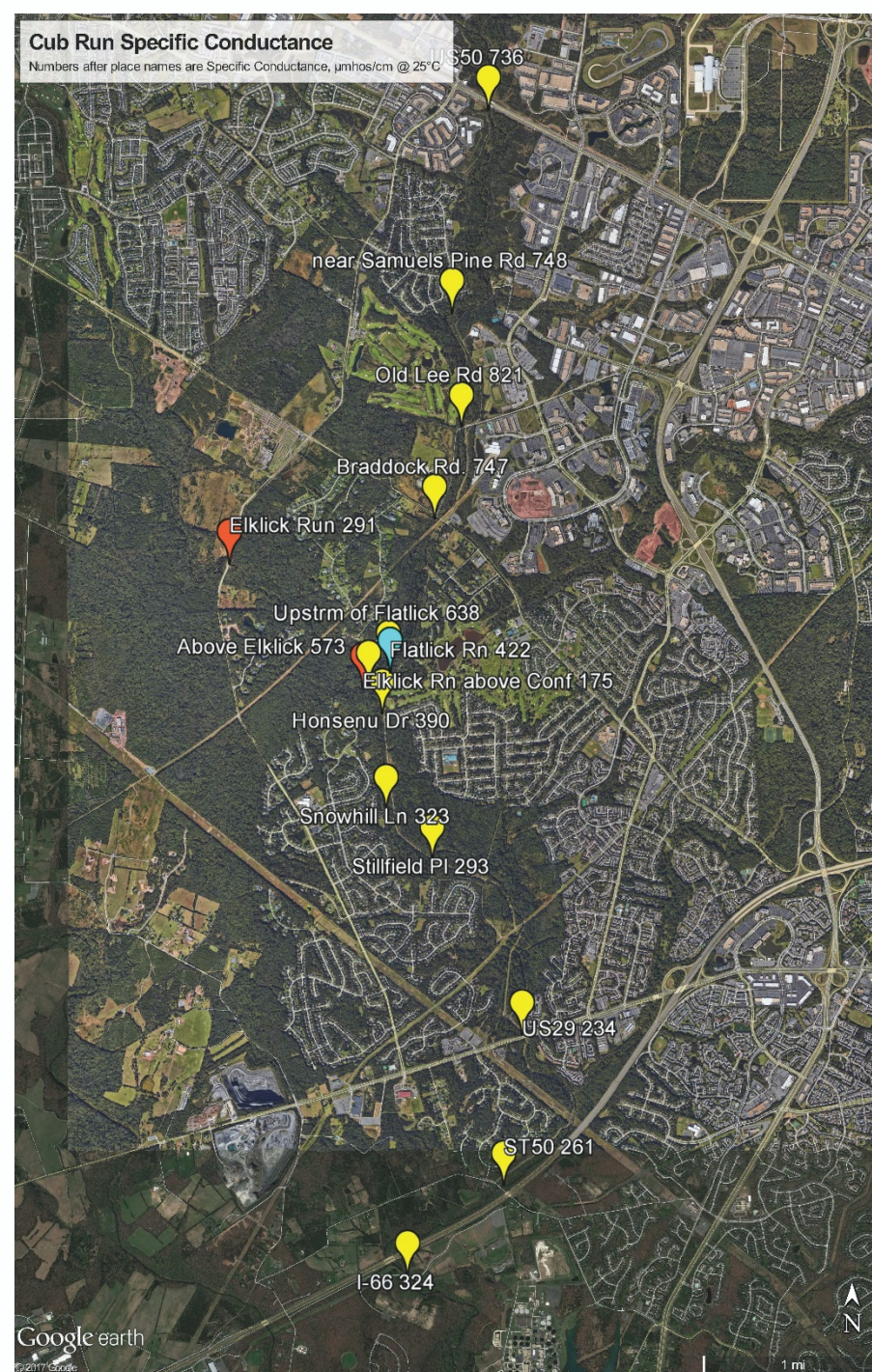


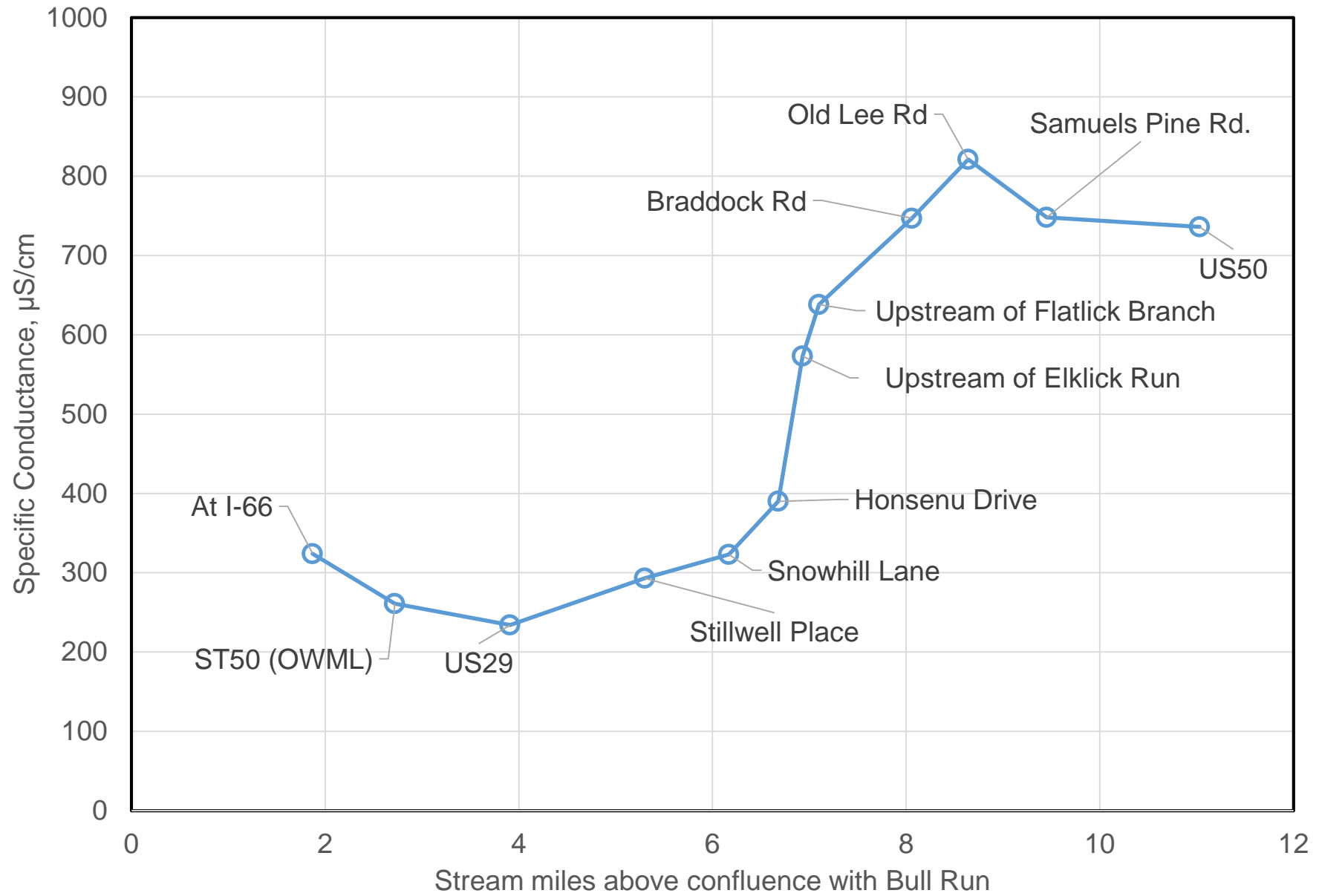
Sodium to Chloride Ratio – Chain Bridge



Sodium Trends at ST50 (Cub Run)

Cub Run Specific Conductance Measurements June 8, 2017





Specific Conductance profile in Cub Run mainstem on 06/08/17

