

# UD CITIZEN MONITORING PROGRAM



## Water Quality Monitoring on Guinea Creek for 20 Years

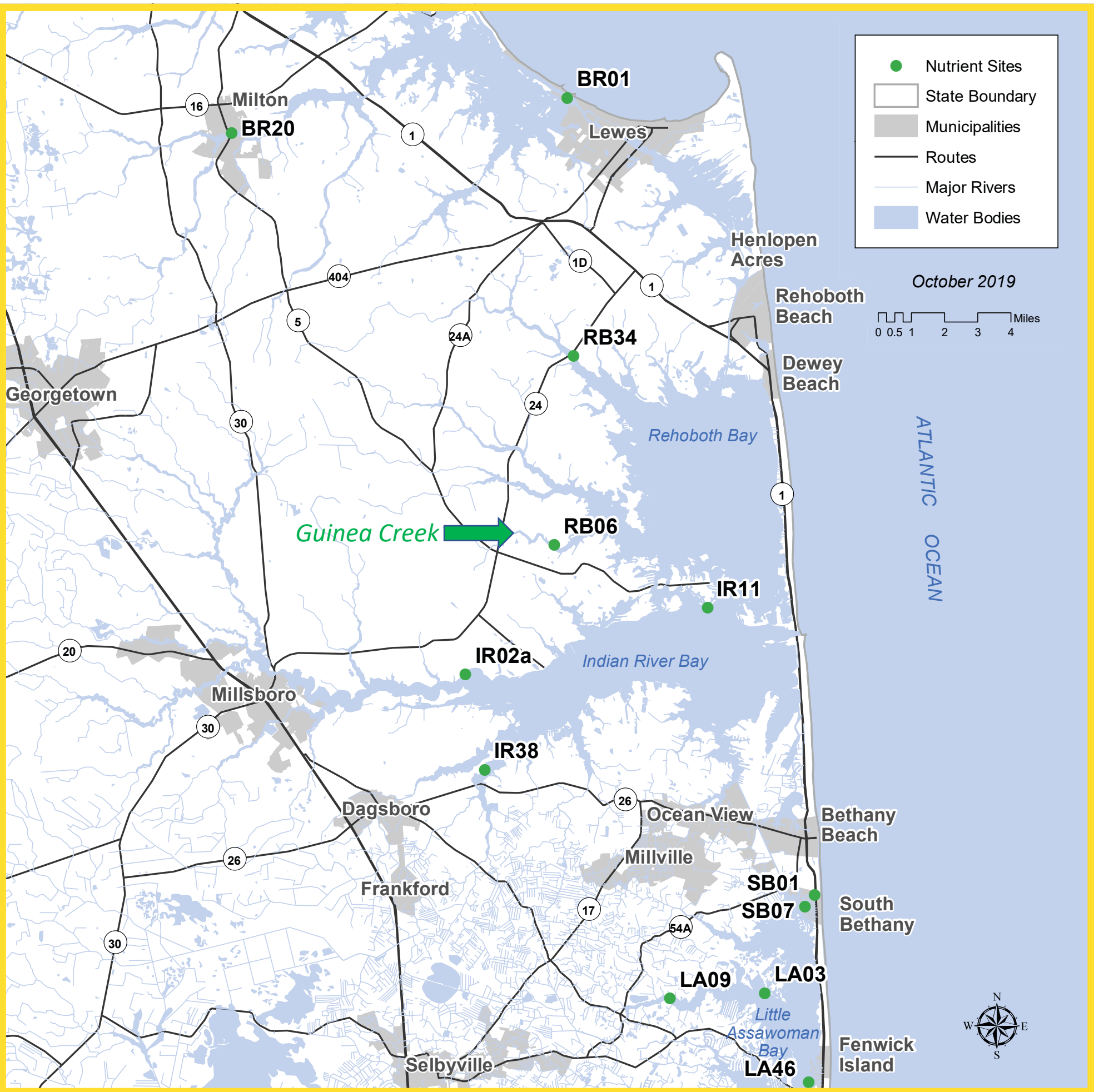
Testing: Dissolved Inorganic Nitrogen and Chlorophyll a | Period of Time: 1998 – 2018

The UD Citizen Monitoring Program measures dissolved nutrients at several long-term sites, including Guinea Creek.

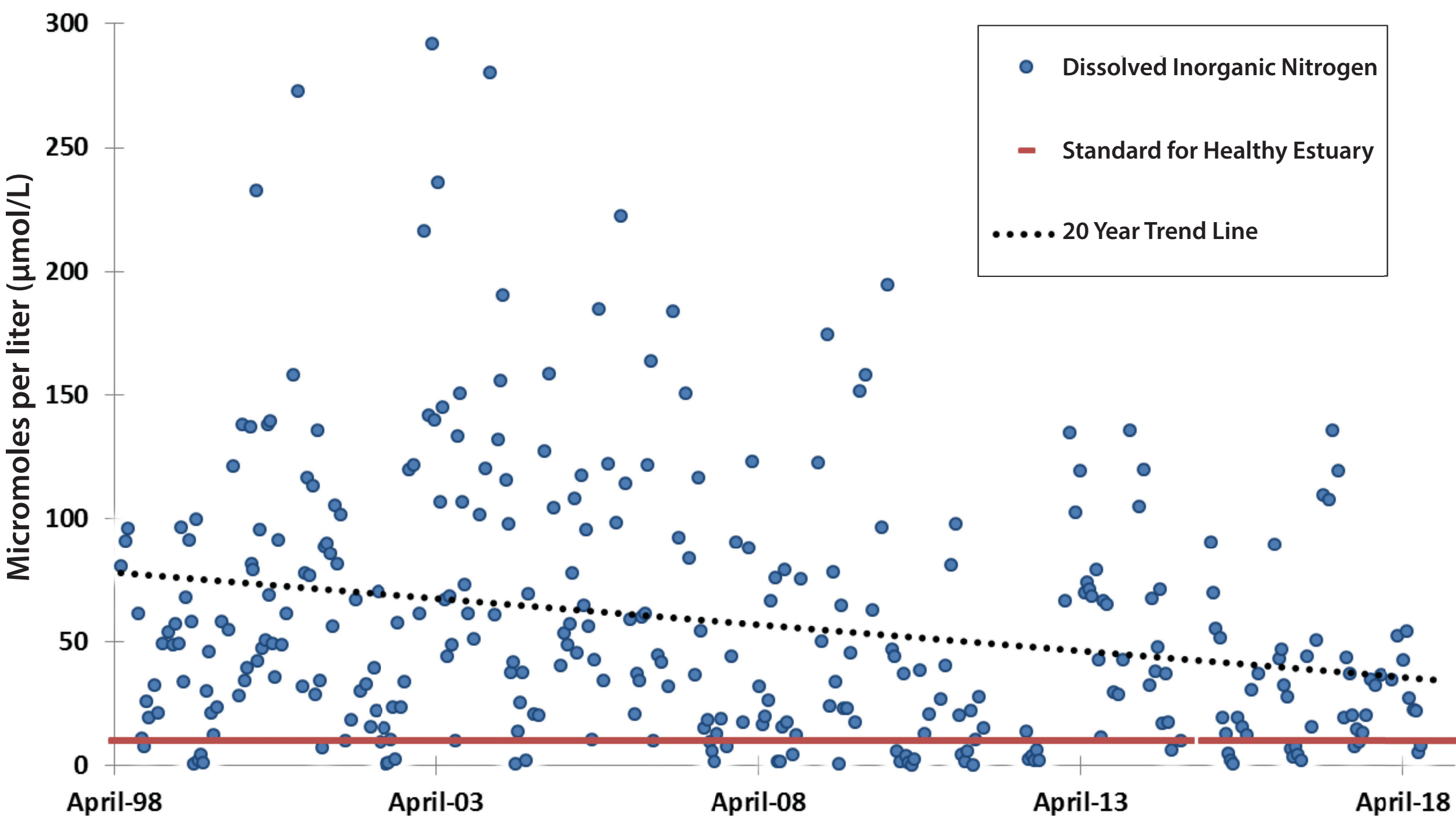
Dissolved Inorganic Nitrogen is composed of Nitrate and Ammonium. These forms of nitrogen can be readily assimilated by plants. A primary symptom of too many nutrients in an estuary is excessive growth of phytoplankton (microscopic algae) that contain Chlorophyll, which is used in photosynthesis. Dense algae blooms decrease the amount of oxygen in the water and cause other problems.

### UD CMP findings in Guinea Creek (site RB06) water sample results from 1998 – 2018:

Over 20 years of monitoring the water, it appears that dissolved nutrient levels are decreasing and that chlorophyll levels may be dropping as well.



### Dissolved Inorganic Nitrogen – Upper Guinea Creek



### Chlorophyll a – Upper Guinea Creek

