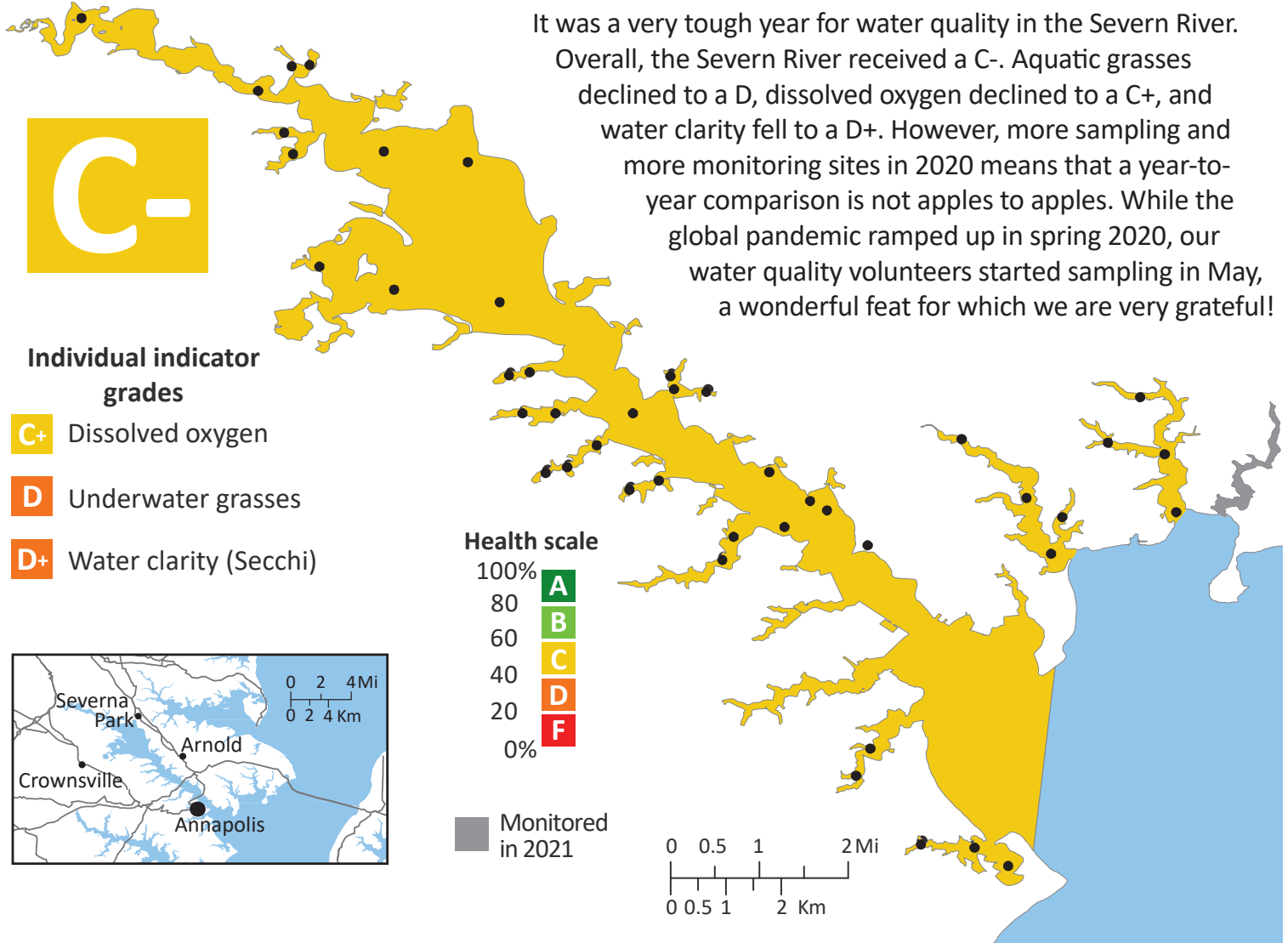


Severn River Report Card



2020



What do the grades mean?

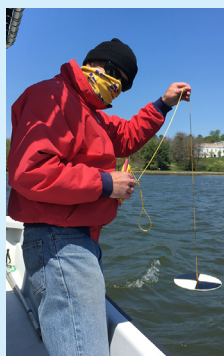
- A** All water quality and biological health indicators meet desired levels, which is very good for fish and shellfish.
- B** Most water quality and biological health indicators meet desired levels, which is good for fish and shellfish.
- C** There is a mix of good and poor water quality and biological health indicators, which is fair for fish and shellfish.
- D** Some or few water quality and biological health indicators meet desired levels, which are poor conditions for fish and shellfish.
- F** Very few or no water quality and biological health indicators meet desired levels, which are very poor conditions for fish and shellfish.

Major decline in underwater grasses

The underwater grasses monitoring and scoring method stayed the same between 2019 and 2020. Therefore, it is safe to say that underwater grasses declined sharply in 2020. The decline was dramatic and disappointing. The grade fell from a B in 2019 to a dismal D in 2020. This decline may be a result of a persistent algae bloom, lasting nearly 8 weeks, which prevented sunlight from reaching the underwater grasses.

Special Thanks To Our Dedicated Water Quality (WQ) Crew!

Despite the challenges posed by the Covid pandemic, our volunteers were undaunted. Whatever the weather, we all donned masks every week to collect our precious WQ data. We even managed to expand coverage in the Severn to track a 44-station, river-wide WQ monitoring network.



Intense algae bloom turns river red

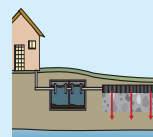
Water clarity and color began to degrade in the springtime when a widespread algae bloom emerged. The bloom was so intense that it gave the Severn River an red-orange color. When the algae died off in mid-summer, its decomposition created persistent and widespread dead zones (areas of low oxygen content) that can suffocate benthic animals and drive fish and crabs out of the area.



What you can do to help our Scenic River!

To ensure that the Severn River remains swimmable and fishable, we all must focus on reducing stormwater runoff, which carries nitrogen and phosphorus pollution and bacteria into the river.

- Plant trees, install rain barrels and rain gardens,
- Pick up pet wastes,
- Maintain your septic system to reduce bacteria pollution, and
- Remove invasive plants and plant native plants that soak up rain.



Acknowledgements

Special thanks to Delaplaine Foundation for their support of our water quality monitoring program. Thanks also to our team of volunteer citizen scientists who staff our weekly tours! They are supported by our volunteer boat captains who host our water quality crew on the river. We'd also like to thank Operation Clearwater, the Eastport Civic Association, and the Port of

Annapolis Marina for their support. The Severn River Association is happy to partner with the Chesapeake Monitoring Cooperative for technical guidance, quality assurance, data upload to the Chesapeake Data Explorer, and report card production through the University of Maryland Center For Environmental Science.