

Severn River Report Card



2021

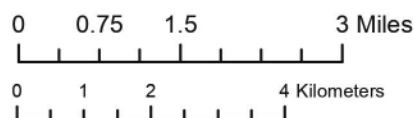
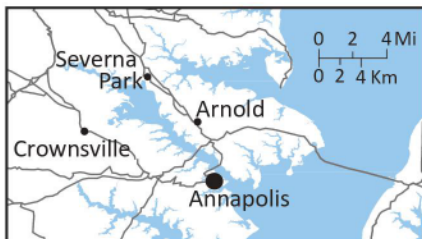
It was a troubling year for water quality in the Severn River in 2021. The overall grade for the Severn fell from a C- in 2020 to a dismal D+ in 2021. This is largely due to a continued decline in acreage for our crucial underwater grasses. Aerial surveys by the Virginia Institute of Marine Sciences calculated a 23% decline in underwater grass acreage, which dropped the river's grade for grasses from a D to a F. This decline more than offset the improvements our Water Quality Monitoring team recorded for oxygen, which improved from a C+ to a B. Clarity was again awful and the grade reflects this, remaining constant at a D+.

D+

- B** Dissolved oxygen
- D+** Water clarity
- F** Underwater grasses

Legend

● 2021 Water Quality Monitoring Stations



Above: The Severn River dead zone extent outlined in red.

Severn River dead zone

Dead zones - areas of water with low oxygen levels - again plagued the Severn River in 2021. We recorded dead zone activity at 40 of the 51 water quality monitoring stations throughout the Severn. A dead zone occurs when dissolved oxygen levels in the water fall below 2.0 mg/liter. Fish and crabs suffocate when oxygen levels fall this low if they can't swim away. Fortunately, these dead zones were not as persistent as they were in 2020. The short-lived nature of the dead zones accounts for the improvement in the river's oxygen grade, which rose from C+ in 2020 to B in 2021.