

# 2023 STATE OF THE ANACOSTIA RIVER REPORT CARD



ANACOSTIA  
WATERSHED  
SOCIETY

## THRIVING WILDLIFE, FAILING GRADE

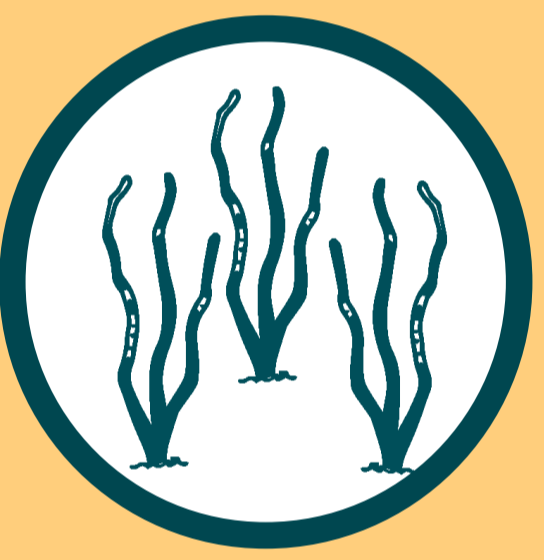
Despite visible signs of an improving river habitat, including the celebrated return of otters, the Anacostia River received a failing grade on the 2023 State of the River Report Card, the third failing grade in six years. Many indicators of water quality continue to improve, but these are outweighed by two significant factors in river health - submerged aquatic vegetation, and the presence of fecal bacteria from human waste. These two critical indicators have continued to worsen and the exact causes remain unclear, though increased storm events as a result of changing climate are a likely factor. We can remain positive that the long-term trends from 1989 indicate steady improvement, but this year's grade is still a rallying cry for DC's Department of Energy and Environment to step up efforts to address barriers to a swimmable, fishable Anacostia River.

2023 ANACOSTIA RIVER REPORT CARD				
		SCORE	GRADE	MULTI-YEAR TREND
Water Quality Indicators (Quantitative)	Dissolved Oxygen	55%	F	⚠
	Fecal Bacteria	53%	F	↑
	Water Clarity	50%	F	↑
	Chlorophyll <i>a</i>	82%	B-	↑
	Submerged Aquatic Vegetation	16%	F	↑
	Stormwater Runoff Volume	34%	F	▬
Remediation Indicators (Qualitative)	Toxics Remediation	62%	D-	↑
	Trash Reduction	66%	D	↑
<b>OVERALL GRADE</b>		<b>52</b>	<b>F</b>	↑

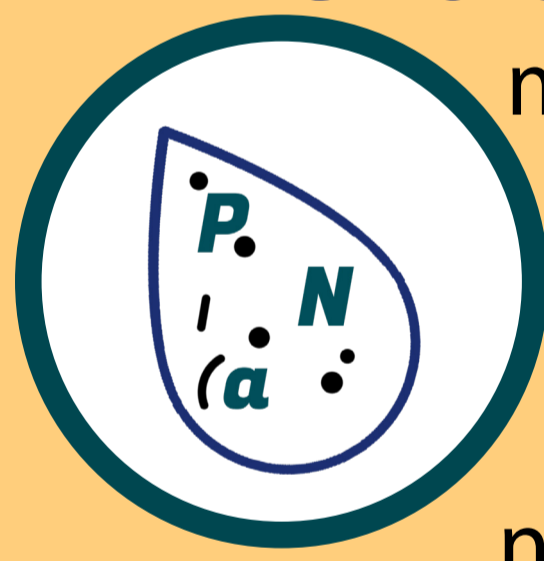
LEGEND

- ↑ IMPROVING
- ⚠ NEEDS ATTENTION
- ▬ STATIC

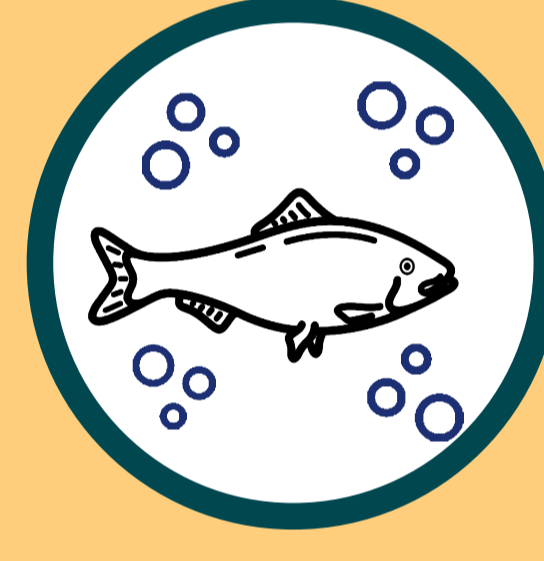
### What We Track



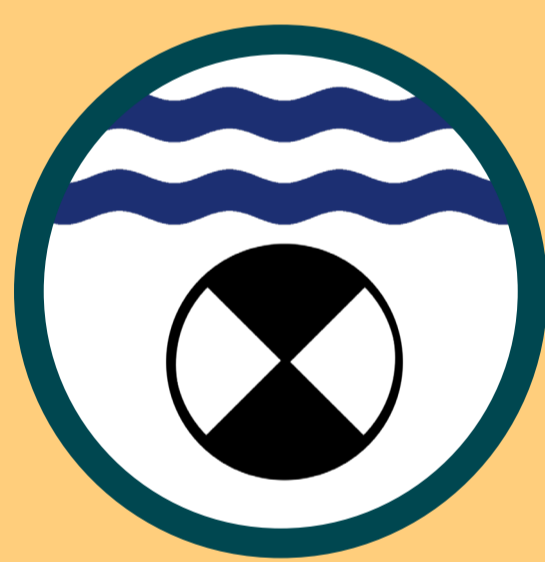
The Anacostia River saw a sharp loss in **Submerged Aquatic Vegetation**, which has driven the river's passing grade in recent years. These plants require light to thrive and are essential habitat for young fish and other aquatic life. A score of 100% means the Anacostia River has at least 20 acres of SAV beds.



**Chlorophyll a** is the measure of microalgae biomass; this can impact water clarity and dissolved oxygen levels, and indicates the amount of nutrients like phosphorus and nitrogen. A score of 100% means that the body of water has only the appropriate amount of microalgae biomass.



**Dissolved Oxygen** is critical for the survival of aquatic life and ecosystem sustainability, a score of 100% means that the water is equal to or more than 5mg/L of oxygen all the time. In 2023, the long term trend indicates that immediate attention is needed.



**Water Clarity** is a measure of light penetrating the water column. This affects the health of aquatic grasses. A score of 100% means that the water is, on average, clear enough to see through at least 4.25 feet.



**Stormwater Runoff** is the fastest growing source of pollution in the Chesapeake Bay and flushes trash and toxics from paved areas and erodes stream banks, filling the river with sediment.

### The Challenges

**Climate Change** can set back decades-long efforts to improve water quality. More frequent and intense rain events and sea level rise can increase pollution levels, reduce aquatic vegetation, and aggravate stormwater run-off.



The score for **Fecal Bacteria** declined slightly to 53% from 55% last year. A score of 100% means that fecal bacteria levels are low enough that the river is safe for swimming at all times. This contamination is caused by sewage discharges and leaks, as well as from pet and wildlife waste. Fecal bacteria levels remain stubbornly high in parts of the Anacostia River, despite the dramatic reduction in sewer overflows with the completion of DC Water's Anacostia River tunnel.

### Next Steps

Conservation and management decisions from the headwaters in Montgomery and Prince George's counties to the mouth of the Anacostia River in DC must aim to make the watershed resilient to the unavoidable effects of climate change. DOEE, DC Water, and WSSC must redouble their efforts to identify and mitigate continuing sources of fecal pollution.

