

COASTAL GEORGIA

Ecosystem Report Card 2021

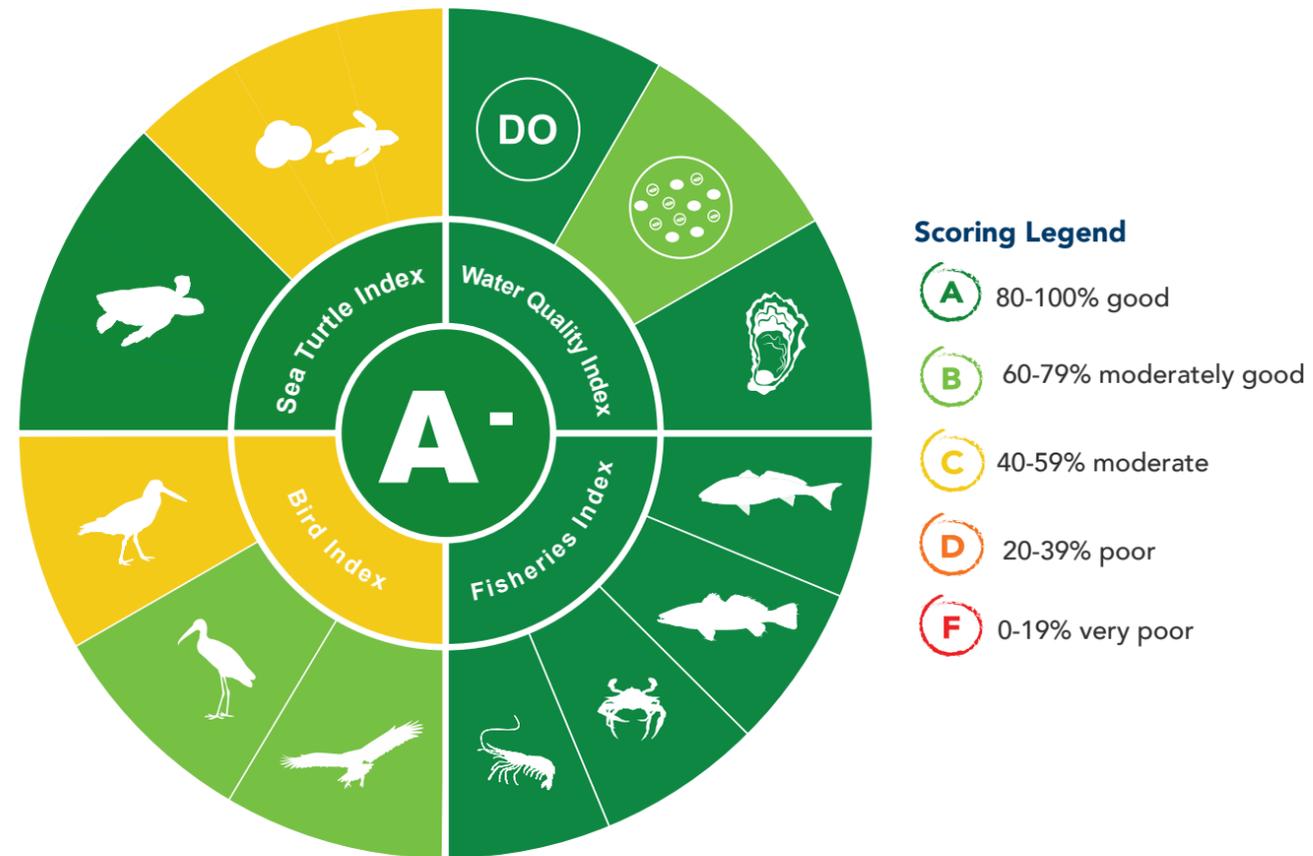


COASTAL RESOURCES DIVISION

Moderately good ecosystem health

Overall health

Overall, Coastal Georgia received an A-, a good score (81%). The highest scoring indicators were shrimp, red drum, blue crabs, spotted seatrout, and sea turtle nesting, and all had perfect scores (100%). The twelve indicators that examine human health, fisheries, and wildlife are used to define Coastal Georgia health.



Grading scale

Rounded to the nearest whole number

- A** 80-100%
 All water quality, fisheries, bird, and sea turtle indicators meet desired levels. Indicators in these locations tend to be very good, most often leading to preferred habitat conditions.
- B** 60-79%
 Most water quality, fisheries, bird, and sea turtle indicators meet desired levels. Indicators in these locations tend to be good, often leading to acceptable habitat conditions.
- C** 40-59%
 There is a mix of good and poor levels of water quality, fisheries, bird, and sea turtle indicators. Indicators in these locations tend to be fair, leading to sufficient habitat conditions.
- D** 20-39%
 Few water quality, fisheries, bird, and sea turtle indicators meet desired levels. Indicators in these locations tend to be poor, often leading to degraded habitat conditions.
- F** 0-19%
 Very few or no water quality, fisheries, bird, and sea turtle indicators meet desired levels. Indicators in these locations tend to be very poor, most often leading to unacceptable habitat conditions.



Indexes highlights

Fisheries index

The **fisheries index** scored 100% in 2021. All four fisheries indicators scored 100%, which means that sustainable fishing practices are used, and the coastal environment is able to support most commercial and recreational species.



Water quality index

The **water quality index** scored 86%, an A, in 2021. Overall, water quality indicators are good, meaning it is generally safe to swim and eat local shellfish, and oxygen levels support fish and other species. Dissolved oxygen and fecal coliform had good scores, while enterococcus had a moderately good score.



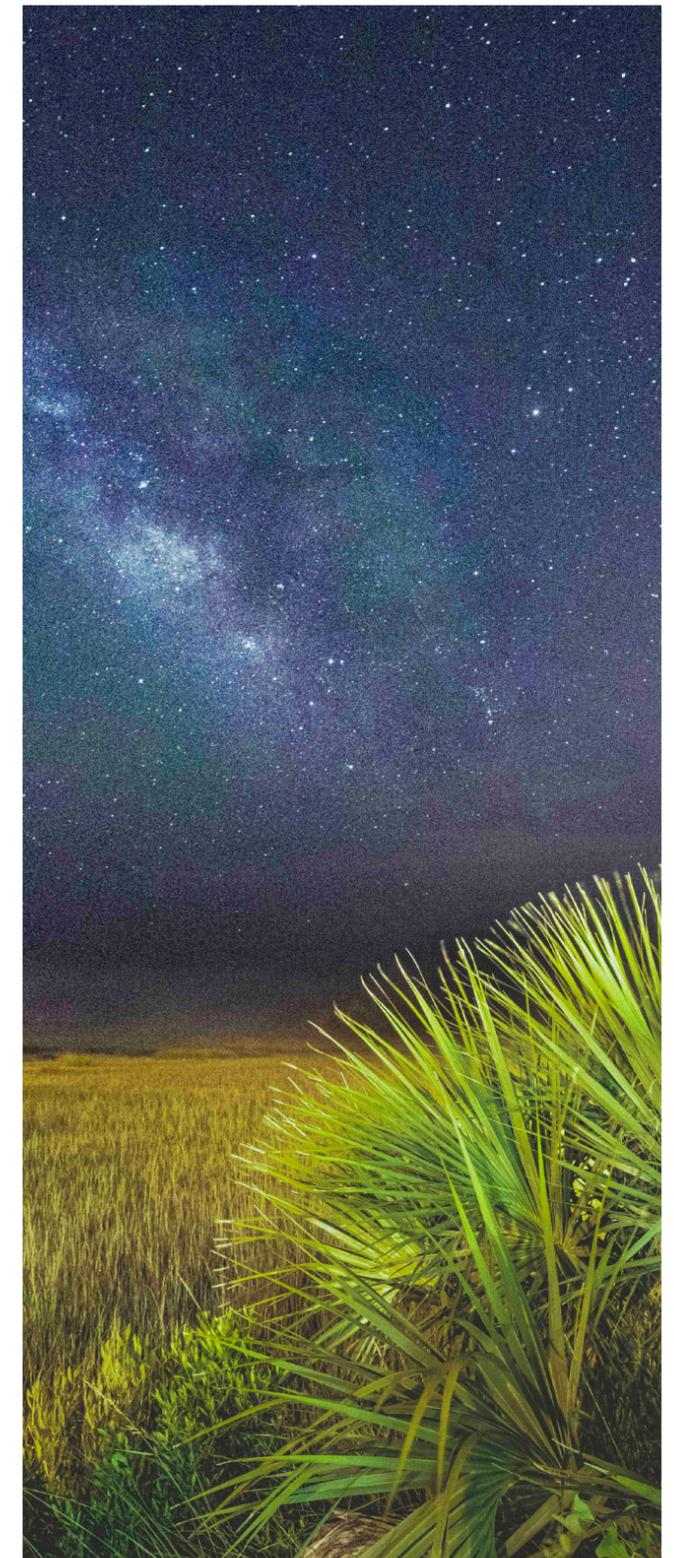
Sea turtle index

The **sea turtle index** scored 80%, an A-, in 2021. Overall, sea turtle indicators are good. Sea turtle nesting had a good score, while sea turtle hatching had a moderate score. Sea turtle management is supporting populations and maintaining excellent nesting.



Bird index

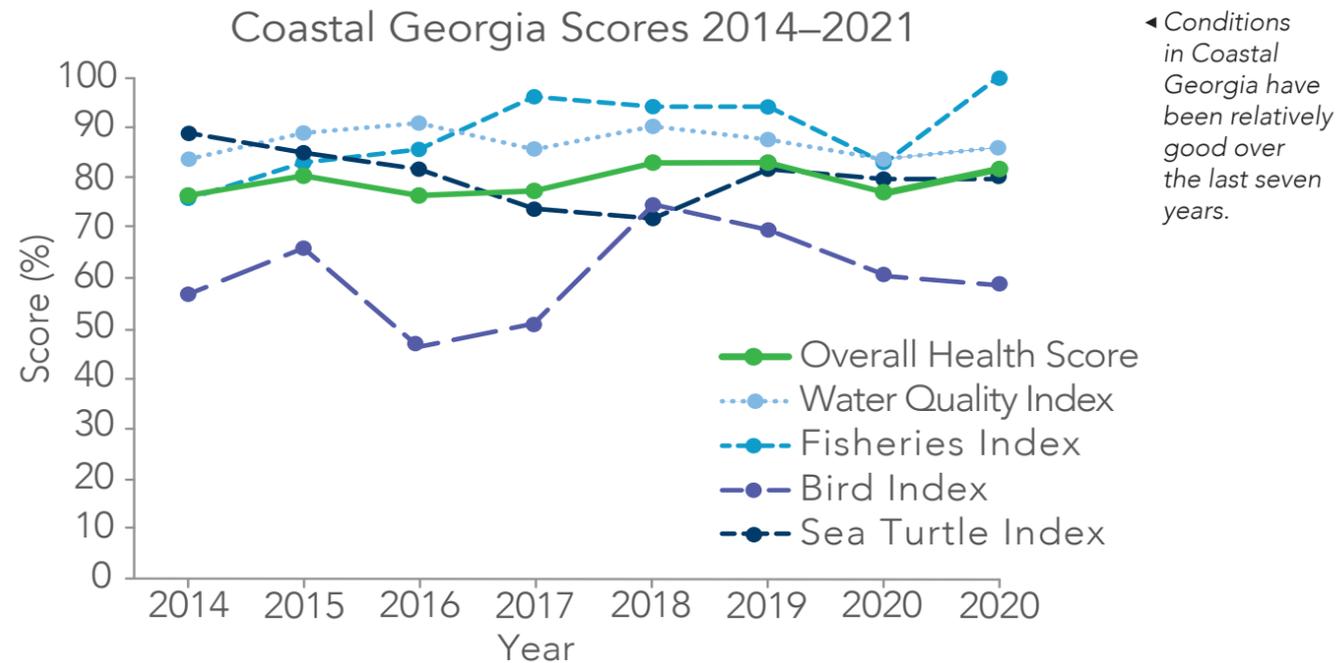
The **bird index** scored 59%, a C+, in 2021. Overall, bird indicators are moderate. Bald eagles and wood storks had moderately good scores. American oystercatchers had a moderate score. The lower oystercatcher score was most likely due to increased predation and overwash events.



Many of Coastal Georgia remote barrier islands continue to provide safe havens for a variety of species. DNR photo.

Report card scores from 2014-2021

In Coastal Georgia, report card scores vary from year-to-year. By tracking health over time, we can evaluate changes in the environment and prioritize management and restoration. For example, DNR actively manages wood stork and American oystercatcher populations by considering habitat creation, predator management and nesting area closures to prevent disturbances.



Indicator	2014	2015	2016	2017	2018	2019	2020	2021
fecal coliform	92%	92%	92%	80%	90%	98%	90%	95%
enterococcus	82%	91%	94%	94%	96%	78%	72%	78%
dissolved oxygen	79%	85%	87%	84%	84%	87%	90%	85%
shrimp	100%	100%	96%	84%	84%	75%	92%	100%
red drum	83%	69%	100%	100%	91%	100%	40%	100%
blue crabs	22%	62%	47%	100%	100%	100%	100%	100%
spotted seatrout	99%	100%	100%	100%	100%	100%	100%	100%
American oystercatchers	47%	61%	28%	13%	78%	78%	66%	47%
wood storks	67%	70%	64%	84%	81%	78%	59%	68%
bald eagles	NA	66%	46%	57%	62%	51%	57%	62%
sea turtle hatching	77%	69%	64%	47%	44%	64%	60%	59%
sea turtle nesting	100%	100%	100%	100%	100%	100%	100%	100%

Importance of a report card

Environmental report cards are powerful tools used around the world to describe ecosystem status, increase public awareness, and inform and influence decision makers to act to improve the health of a watershed. Developing rigorous, quantitative assessments provides accountability that is beneficial to support environmental protection efforts. A five-step process is used to develop report cards.

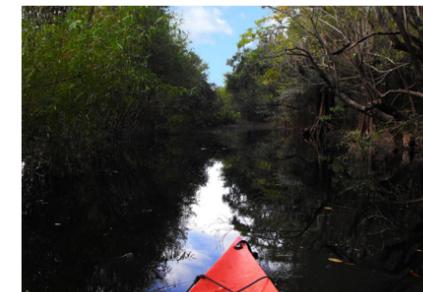


Coastal Georgia is a gem of biodiversity and natural wonders

Marshes, wetlands, and barrier islands make up the diverse habitats of Coastal Georgia. The region is rich in abundant wildlife like sea turtles, fishes, shellfish, birds, and mammals. Recreational opportunities abound, such as boating, fishing, bird watching, kayaking, and swimming. Protecting the ecosystems and their inhabitants helps support not only recreational opportunities, but also the local economy, seafood industry and tourism.



Coastal wetlands, like salt marshes, filter pollutants as water runs downstream, which improves water quality for species in the estuary, like marine mammals. DNR photo by Cason Kinstle.



Maintaining a healthy coastal ecosystem is an important way to support recreational uses, such as kayaking, and commercial uses, like fishing and ecotourism. DNR photos.

Report card highlights in 2021



American Oystercatchers depend on healthy estuaries for reproduction and habitat for productivity and health. DNR photo by Tim Keyes.

American Oystercatcher

American oystercatchers received a moderate score of 47% in 2021. While populations fluctuate annually, increased predation and overwash events at nesting sites can influence their rate of success.

Marine fisheries

Each of the fisheries indicators scored a 100% in 2021. This was the first time the fisheries index had a perfect score since the inception of the Coastal Georgia Report Card in 2014.



A shrimp boat sits at anchor in the St. Simons Sound. You can help protect the coast for future generations using the tips below, which may positively impact the indicators used in this report card. DNR photo.

You can help protect the coast



Septic maintenance

Maintaining your septic system prevents bacteria from entering waterways and can help reduce beach advisories and shellfish harvest closures.



Lighting rules

Preventing sea turtles from becoming disoriented by artificial light is the law, and beach lighting ordinances occur during nesting and hatching seasons.



No litter

Taking trash with you after visiting recreation areas will help keep waterways and parks free of debris that could harm wildlife.



Purchase licenses

Buying a Georgia hunting or fishing license supports research and conservation of coastal species and habitats.



Catch limits

Following recreational fishing catch-and-size regulations help sustain a healthy community of fish species.



Citizen science

Participating in monitoring and clean-up activities in local waterways can help alert managers to potential issues.

Acknowledgments

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