

So What? Seagrass Distribution

Seagrasses are a highly sensitive part of the ocean ecosystem. These habitats are important for so much more than just being the front lawns of the ocean. Seagrass habitat is vital to providing oxygen to the ocean as well as removing carbon dioxide and therefore can act as a natural carbon sink. Seagrasses also buffer wave energy, bind sediment in the root matrix, contribute vital nutrients to the ecosystem, act as habitat and food for a variety of species, and provide indirect [economic value](#). In addition, they are protected under a number of state and federal statutes.

So why should ocean planners pay attention to seagrass data?

1. **Seagrasses are protected by the Clean Water Act.** Seagrasses are considered a wetland under Section 404 of the Clean Water Act (CWA) and thus protected from [fill activities](#), stormwater runoff, and other water quality issues. Digging into the seagrass beds for burying cables, dredging, and other seafloor activities will require federal and possible state permits.
2. **HAPCs and essential fish habitats include seagrasses.** Both the essential fish habitat (EFH) and the Habitat Area of Particular Concern (HAPC) designations take into account where seagrass beds are when protecting an area. Therefore, tread carefully, because seagrass presence could mean a HAPC or EFH is nearby, too. Similarly, marine sanctuaries help to protect seagrass beds under the [mini 312 program](#) (same program that protects coral reefs). This includes protecting seagrass beds from propeller scarring, boat groundings, or ship strikes, as well as digging and dredging within a sanctuary.
3. **No seagrass beds means reduced fish for commercial and recreational fisheries.** Seagrass beds are one of the most productive natural resources in the world and serve as perfect nurseries for many juvenile fish species. Seagrass beds are also great places for smaller organisms to hide from predators. Healthy seagrass beds [can produce over 10 tons of leaves per year](#). This biomass contributes to these juveniles' food source and nursery habitat. A single acre of seagrass may even be able to support as many as 40,000 fish and 50 million small invertebrates.

Quick caveats. Seagrass habitat management is broken down into smaller units than a state-by-state basis. It is typically mapped and managed by specific organizations within states that have seagrass. (Out of all of the 28 coastal states, only two do not have seagrass—South Carolina and Georgia). So far, no one has worked to standardize seagrass monitoring and measurement among all of these organizations, so there will be different methodologies between states but also within states. The data set available in

MarineCadastre.gov is a snapshot in time assembled from many sources. Most states update their data sets every five to 10 years, with some states updating their data sets every one or two years. If you are looking at a specific state or area for seagrass data, it is best to search for the data directly from that state. Additional sources on seagrass data in the states: [Virginia Institute of Marine Science, Chesapeake Bay Program](#) and [Florida Fish and Wildlife Conservation Commission](#).

Data-Source Experts

Jud Kenworthy, Retired, National Oceanic and Atmospheric Administration

Jim Simons, Associate Research Scientist, Texas A&M University Corpus Christi

For questions, please contact nos.csc.mmc@noaa.gov.