



Overview

[Blue carbon](#) is the carbon naturally captured by the ocean and coastal ecosystems, such as seagrass beds, mangroves, salt marshes, and [kelp forests](#). Blue carbon ecosystems can [sequester and store](#) more carbon per unit area than [terrestrial forests](#) and are critically important to climate change mitigation. We are losing blue carbon ecosystems to climate change and environmental degradation caused by human activities. As we lose these ecosystems, stored carbon is released back into the atmosphere, effectively creating an additional source of greenhouse gas emissions. In order to ensure that coastal ecosystems can continue to capture and store carbon, immediate conservation and restoration efforts are needed. At the state level, legislators can enact policies to advance conservation and restoration efforts.

Legislation

- California [AB 1279](#): Would require partnerships between private and nonprofit entities to bring sustainable kelp to the coastal waters of the state and to identify critical knowledge gaps related to kelp forest ecosystems.
- Massachusetts [HD 4379](#): Would establish a “Blue Communities Program” that (1) incentives local action on nutrient pollution and ocean acidification; (2) sets guidelines for communities to qualify as a “Blue Community;” and (3) establishes a fund for the Program.
- Rhode Island [SB 35](#): Establishes the Ocean State Climate Adaptation and Resilience (OSCAR) fund as a long-term source of grant funding to allow coastal cities and towns to implement climate resilience projects.
- Virginia [SB 1374](#): Establishes an intergovernmental taskforce to study and submit a report on how to use state land and marine resources for carbon sequestration.

KEY POINTS

- The US is quickly [losing wetlands](#) to development, drainage, erosion, subsidence and sea-level rise.
- Healthy salt marshes and mangroves can [remove](#) carbon from the atmosphere at a rate 10 times greater than tropical forests.
- The protection and restoration of coastal ecosystems could [prevent](#) approximately one gigaton of carbon dioxide from entering the atmosphere by 2050.
- Healthy coastal ecosystems serve as nursery and spawning grounds for many marine species, including species in commercial and recreational [fisheries](#).
- Healthy coastal ecosystems support [blue economies](#) across the country that altogether contribute \$373 billion to the nation's gross domestic product and support 2.3 million jobs.

Other Resources

- [RAE Infographic](#) on blue carbon and the potential benefits of coastal restoration.
- [UNEP article](#) on the importance of protecting & restoring blue carbon ecosystems.
- [The Blue Carbon Initiative](#) is a global program focused on mitigating climate change through coastal restoration and conservation.

