



DIVE DEEPER: Blue Carbon Advanced Teacher Lesson Plan

SYNOPSIS

How does climate change affect the ocean and coastal ecosystems such as seagrasses, mangroves, and coastal wetlands? How do scientists use satellite data to study climate change? What is the connection between seagrass loss and carbon sequestration? This course builds upon the main concepts in the *Just Have a Think* video #93: Blue Carbon: An Invisible Time Bomb and goes beyond to include additional scientific and conservation concepts.

TOTAL TIME

One 45-50 min (one class period).

ACTIVITY

Watch the relevant video as a class (10-15 minutes); then have the students work either in small groups or individually online through active student responding (answering questions, receiving hints and feedback for each question). The students should use the hints if they don't know the answer. Optional discussion on connections: What do the students use satellites for (Hint: their cell phones!) Seagrasses help young fish stay safe. Where do they feel safe? The video is embedded in the online course, and also available on YouTube at:

<https://youtu.be/cDuzVrfBRww>

LEARNING OUTCOMES

Modified Bloom's Taxonomy: Definition/Conceptual; Explain/Identify; Apply; Critique/Analyze


- Students will understand **key terms** underlying coastal ecosystems, and Nationally Determined Contributions (NDCs) to the Paris Agreement.
- Students will **explain/identify** the climatic benefits of coastal ecosystems, the impacts of human activity on coastal ecosystems and the ocean, and the use of satellite data by climate scientists.
- Students will **evaluate climate data** over time.

PLANNING

Register your class by emailing: support@behaviordevelopmentsolutions.com

SCIENCE STANDARDS

 NGSS

 Common Core

