# Blue Impact Series **Teacher Guide**



Learning Level Intermediate – Advanced

#### Subject Areas

Science; English Language Arts

**Duration of Lesson** 45 minutes

#### Lesson Standards Common Core (ELA)

- Writing
- Speaking and Listening
- Language
- Science and **Technical Subjects**

#### **MA Frameworks and Next Generation Science** Standards (NGSS)

- Life Science
- Physical Science
- Earth and Space Science
- Technology and Engineering / Engineering, Technology and Applications of Science

# Blue Impact Series Overview

These videos were originally developed as a tour for visitors to the New England Aguarium to point out impacts of climate change. This new Blue Impact series will allow people near and far to understand some impacts of climate change on the oceans. The focus of the series is mainly on how our planet is warming and how this affects ocean life and the physical makeup of the ocean. We provide resources at the end on how to further your knowledge on climate change and how to draw connections between climate change and changes in the ocean. Most importantly we provide ideas for you, your family and school on how to take positive actions to maintain a healthy ocean and planet.

# **Classroom Use**

The Blue Impact series features seven short science videos as well as three short videos describing certain steps that you can take to help reduce your carbon footprint.

Teachers can use these videos individually or as a series to enhance the following topics:

Classification

Food Webs

- Density/Current
- Global Change
- Life Cycles Migration
- Earth and Environmental Science Engineering Solutions
- Natural Selection
- Symbiosis

Students can use the guided viewing sheets below during and after the video. These sheets can enhance classroom discussion and serve as a starting point forgroup projects and community action to reduce the impacts of global climate change while supplementing your curriculum.

# **Objectives**

Students will be able to explain how human actions, specifically our use of fossil fuels, can impact the planet with an emphasis on the ocean. They will also be able to explain solutions that can alleviate these impacts.

# Skills

- Communication
- Group work
- Literacy
- Observation
- Problem solving

### Vocabulary

Glossary provided

### **Materials**

- Computer with audio
- Projector
- Internet connection (to watch or download videos)
- Student sheets
- Student access to Internet (optional)