



Unit 2 Environmental Awareness & Protection

High School Environmental Science

Unit Length and Description:

6 Instructional Weeks

Students will continue to make claims that a change to Earth's surface can cause changes to other systems and refine a technological solution that reduces impacts of human activity. Students will apply this knowledge to evaluate a solution to limit waterway non-point source pollution introduction, and predict the effects that pollution has on population density.

Science Standards:

- HS-ESS2-2** Analyze geoscience data to make a claim that a change to Earth's surface can create feedback that causes changes to other Earth's systems.
- HS-ESS3-4** Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.
- HS-EVS2-1** Design and evaluate a solution to limit introduction of non-point source pollution into state waterways.
- HS-EVS2-2** Develop a quantitative model to describe the cycling of carbon among the hydrosphere, atmosphere, geosphere, and biosphere.

Enduring Understandings- Unit Anchor Phenomenon:

The largest Gulf of Mexico dead zone measured 22,720 square kilometers on July 24-30, 2017.

Essential Questions- Reflective Summaries:

- Make a claim supported by evidence that eutrophication in the Gulf of Mexico creates feedback that causes changes to its ecosystem.
- Describe how farming and other human activities contribute to the Gulf of Mexico Dead Zone.
- Create a model and use mathematics and computational data to explain that hypoxic conditions impact aquatic organisms in the Gulf of Mexico.
- Design a solution to limit the impact of eutrophication in the Gulf of Mexico.