

\* [THIS LESSON] may advance the following

## **NEXT GENERATION HIGH SCHOOL SCIENCE STANDARDS**

### **INETERDEPENDENT RELATIONSHIPS IN ECOSYSTEMS**

Students who demonstrate understanding can:

**HS-LS2-7.** Design, evaluate, and refine a solution for reducing the impacts of human activities on the environment and biodiversity.

### **HUMAN SUSTAINABILITY**

Students who demonstrate understanding can:

**HS-ESS3-2.** Evaluate competing design solutions for developing, managing, and utilizing energy and mineral resources based on cost-benefit ratios.

**HS-ESS3-4.** Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.

### **ENGINEERING DESIGN**

Students who demonstrate understanding can:

**HS-ETS1-1.** Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants.

**HS-ETS1-2.** Design a solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering.

**HS-ETS1-3.** Evaluate a solution to a complex real-world problem based on prioritized criteria and tradeoffs that account for a range of constraints, including cost, safety, reliability, and aesthetics, as well as possible social, cultural, and environmental impacts.