



## What's the Catch? - Engineering Solutions

Produced by [EarthEcho International](http://www.earthecho.org)

Duration **6:13**  
(cc) ENG/SP

**STEAM Curriculum Lesson Extension:**  
*Locally Grown*, 5th Grade

### Goal

Students will learn about innovative solutions that are being implemented in order to help fish thrive and be abundant enough to support a growing world population.

### Overview

Phillippe Cousteau hears from Dr. Louise Firth, Dr. Daniel Merrifield and Justin Ruscombe-King about innovative work being done to help fish populations stay healthy in order to feed a growing global population. Shown are an engineered coastal habitat and an aquaculture Farm.

### Connections to EarthX STEAM Curriculum Lesson: *Locally Grown*

Native plants on land have adaptations suitable to their environment just as native fish have theirs. As human population growth increases along the coasts, people must make adjustments to their coastal environments in a way that will create ecosystems favorable to the aquatic life living there. In addition, native species of fish should be encouraged to be raised for human consumption in a manner that keeps in mind the best use of natural resources.

### Guiding Questions

- Which coastal environmental solution do you think will produce the least amount of human impact on aquatic life sharing the ecosystem?
- Mr. Cousteau states that long term sustainable seafood needs to cater to local fish species. How can aquaculture assist in that goal?
- What would happen if fish were no longer available to your community as a source of protein?

### Vocabulary

- Fishery
- Sustainable
- Eco-engineer
- Bio blocks
- Water retention
- Urbanization
- Aquaculture
- Contaminants
- Ecosystems
- Food deficit
- Terrestrial

### Standards

#### Next Generation Science

- 3-KS4-3
- 3-LS2-1
- 5-LS2-1
- 5-ESS3-1
- MS-LS2-5
- MS-ESS3-4
- TEKS Science

### Objectives

- 3.b.9a
- 4.b.9b
- 5.b.9a
- 5.b.9b
- 5.b.9c
- 7.b.10b
- 8.b.11c