



## Effect of Urbanization on Wetland Functions

Duration **10:39** (cc)

Produced by [John Bunker Sands Wetland Center](#)

## STEAM Curriculum Lesson Extension:

*Let It Be, Grade 5*

### Goal

Students will learn how wetlands help to maintain balanced ecosystems and how urbanization has disturbed their ability to do so.

### Overview

Educators from the John Bunker Sands Wetland Center, Carol Garrison and Edie Hillborn, discuss the 5 functions of a wetlands that are impaired through urbanization. Using visual images and demonstrations, students will understand how wetlands help with flood control, groundwater recharge, water quality, wildlife habitat and migratory habitat.

### Connections to EarthX STEAM Curriculum Lesson: *Let It Be*

During the lesson, students will discover the many ways urbanization affects the existing ecosystem. The video shows how wetlands can help to mitigate some of these effects, as well as demonstrate how urbanization negatively impacts the ecosystem of the wetland.

### Guiding Questions

1. If a city and a wetland could talk, what would they say to each other?
2. One fact mentioned in the beginning of the video was: More than half of the 220 million acres of wetlands in the US have been destroyed since the American Revolution (circa 1780) due to house, roadway and industrial construction. Describe the impact this has had on the environment.
3. What can you do in your own life to help bring balance into your ecosystem? (How can you minimize the human impact on your "habitat?")

### Vocabulary

- Functions
- Waterfowl
- Urbanization
- Tributary
- Groundwater recharge
- Permeable/Impermeable
- Aquifer
- Groundwater system
- Water quality
- Filtration
- Purification
- Effluent
- Contaminants
- Biologically diverse
- Aquatic
- Migratory
- Flight path

### Standards

#### Next Generation Science Standards

5-LS1-1

5-LS2-1

#### TEKS Science Objectives

3.b.9A

5.b.9A

5.b.9C