

# Teacher's Guide

## *Video: Water Habitats*

Southwest Florida Water Management District

Grades 6-8

This teacher's guide supports the Southwest Florida Water Management District's (SWFWMD) video episode *Water Habitats*, available at [WaterMatters.org/Education](http://WaterMatters.org/Education). This guide includes Florida standards, vocabulary, suggested activities, and links to additional resources. Students will need a computer and internet access for this lesson.

**Lesson Time:** Approximately 60 minutes

**Objective:** Students will become familiar with different water habitats found in west-central Florida. Students will conduct research on a specific water habitat, exploring the common plants and animals that live there and why. Students will identify pollutants and human activities that could impact a water body and engage in discussion on ways we can help to protect water resources.

### Vocabulary

**Aquifer:** A spongelike underground layer of limestone or rocks that can hold and release water

**Biodiversity:** Wide variety of plants and animals within a specific geographic region

**Community:** A group of plants and animals living and interacting with one another in a specific region under relatively similar environmental conditions

**Ecosystem:** A living community of plants and animals and their relationship with the environment around them

### **Ecosystem**

**Services:** Services, or public needs, provided by a working ecosystem

**Estuary:** A partially enclosed body of water formed where fresh water from rivers and streams flows into the ocean, mixing with the salty seawater

**Habitat:** The specific place where living organisms find the things they need to survive, such as food, shelter, water and space

**Headwater:** The water from which a river originates

### **Living**

**organism:** A living plant or animal system

**Rivers:** Created from excess rainwater that flows off the land

**Salinity:** Amount of salt

**Species:** A group of plants or animals that are genetically similar and reproduce with each other

**Springs:** Occur where groundwater, or water stored in underground aquifers, comes to the surface

**Tributary:** A river or stream that flows into and joins a larger body of water

**Wetlands:** Lands that are wet all, or part, of the year (or an area between dry land and open water); sometimes covered with a shallow layer of water, but there are also wetlands that can be dry for part of the year

## Lesson

### **Engage:**

(15 minutes) Prior to watching the video, pose the following essential question to your students: Are all water habitats the same?

Watch the video. Review the vocabulary terms and ask aloud the following questions to activate prior knowledge:

- What are some of the different water habitats found in Florida?
- What factors determine where different plants and animals can live?
- What water habitats have you visited or know that are nearby?

### **Explore/Explain:**

(30 minutes) Assign each student a water habitat type. Ask them to find an example of that habitat and research the water body to learn more about it using the below questions as a guide.

1. What type of water habitat were you assigned?
2. What is the name of the water body you explored to learn more about your assigned habitat?
3. Where is the water body you explored located?
4. Is the water body you explored connected to any other waterways?
5. What are some common plants or animals that live in your water body, and what makes this an ideal habitat for them to live?
6. What type of human activity or pollutants might impact your water body?

### **Extend:**

(15 minutes) Split students up into partners or small groups. In their group, have students take turns sharing what they found about the water body they explored based on the above questions. Next, ask students to discuss why water habitats are important and write down three recommendations for how we can help protect these resources.

If time allows, have a couple students share with the class something interesting or new that they learned from their own research or from one of their classmates, as well as a recommendation they came up with.

### **Evaluate:**

Confirm student understanding by walking around to listen in on student's sharing their findings to their classmates.

### **Additional Lesson Topics**

Students identify possible pollutants to waterways and what actions could reduce impacts from human activities.

Students understand the connection between different water ways and the land that surrounds them.

### **Additional Links**

#### **[WaterMatters.org/Publications](http://WaterMatters.org/Publications)**

- Habitats: Healthy Land Equals Healthy Water (6–8 student booklet and teacher’s guide)
- WaterWeb: Florida’s Wetlands (6–8 student booklet and teacher’s guide)
- Exploring Our Wonderful Wetlands (4–7 student booklet and teacher’s guide)
- Species Poster Series

### **Standards**

#### **Next Generation Sunshine State Standards:**

##### **Science**

- SC.6.E.6.2: Recognize that there are a variety of different landforms on Earth’s surface such as coastlines, dunes, rivers, mountains, glaciers, deltas, and lakes and relate these landforms as they apply to Florida.
- SC.7.L.17.3: Describe and investigate various limiting factors in the local ecosystem and their impact on native populations, including food, shelter, water, space, disease, parasitism, predation, and nesting sites.
- SC.8.N.4: As tomorrow’s citizens, students should be able to identify issues about which society could provide input, formulate scientifically investigable questions about those issues, construct investigations of their questions, collect and evaluate data from their investigations, and develop scientific recommendations based upon their findings.

##### **English Language Arts**

- LAFS.6.W.3.7: Conduct short research projects to answer a question, drawing on several sources and refocusing the inquiry when appropriate.
- LAFS.6.SL.1.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 6 topics, texts, and issues, building on others’ ideas and expressing their own clearly.

LAFS.7.W.3.7: Conduct short research projects to answer a question, drawing on several sources and generating additional related, focused questions for further research and investigation.

LAFS.7.SL.1.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.

LAFS.8.W.3.7: Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.

LAFS.8.SL.1.1: Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 8 topics, texts, and issues, building on others' ideas and expressing their own clearly.

### **English Language Arts (B.E.S.T.)**

ELA.6.C.4.1: Conduct research to answer a question, drawing on multiple reliable and valid sources, and refocusing the inquiry when appropriate.

ELA.7.C.4.1: Conduct research to answer a question, drawing on multiple reliable and valid sources, and generating additional questions for further research.

ELA.8.C.4.1: Conduct research to answer a question, drawing on multiple reliable and valid sources, and generating additional questions for further research.