



Name: _____

Everglades Watershed Worksheet

Directions:

Watch the video, Changes to the Everglades Watershed: https://youtu.be/Wii_vzLir3I. Then answer the following questions as you follow along.

Standards: SC.6.E.6.2, SC.6.N.3.4, SC.912.L.17.16, SC.912.L.17.8

Everglades Literacy Lesson Connections:

Grade 6 Lesson 1: Kissimmee-Lake Okeechobee-Everglades (KOE)

<https://www.evergladesliteracy.org/sixth-grade>

-Students will be able to identify locations and waterways in the Kissimmee-Okeechobee-Everglades (K-O-E) watershed on a map after watching a video and reading a story.

Grade 9-12 Our Watershed Lesson 1: The Heart of a Watershed

<https://www.evergladesliteracy.org/9th-12th-our-watershed>

-In small groups, students build a landscape model to illustrate the uniqueness of the Kissimmee-Lake Okeechobee-Everglades (K-O-E) watershed, and then modify the model to demonstrate how alterations have affected the K-O-E watershed.

1. How many gallons of water are consumed per day in Florida? _____

2. How many South Florida residents rely on the Everglades for their water? _____

3. Explain what wetlands do in the Everglades and how it connects to our water supply.

4. Define a watershed.

5. Looking at a map of Florida, where is the Everglades watershed located?

6. What does K-O-E stand for?

7. How many miles long is the *River of Grass*? _____

8. What is the name of the aquifer that the Everglades recharges? _____

10. In the altered watershed system, where is the water diverted to?

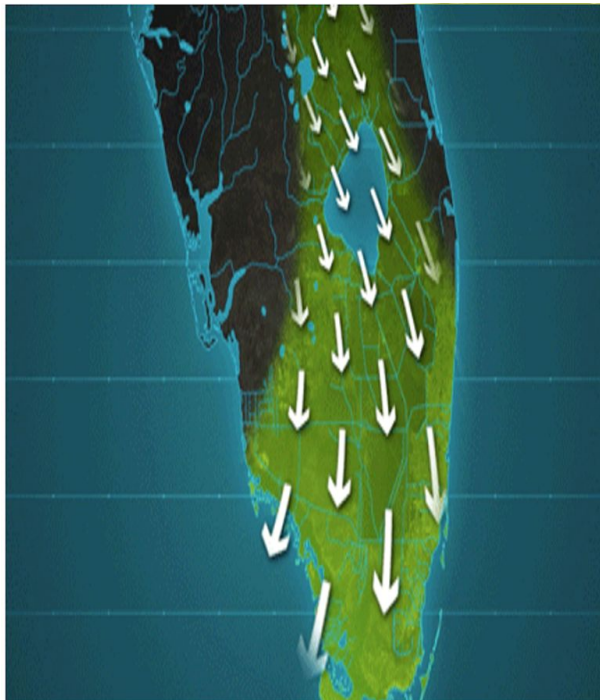
11. What are the effects of having excess nutrients in the water?

12. List 2-3 threats the Everglades is facing.

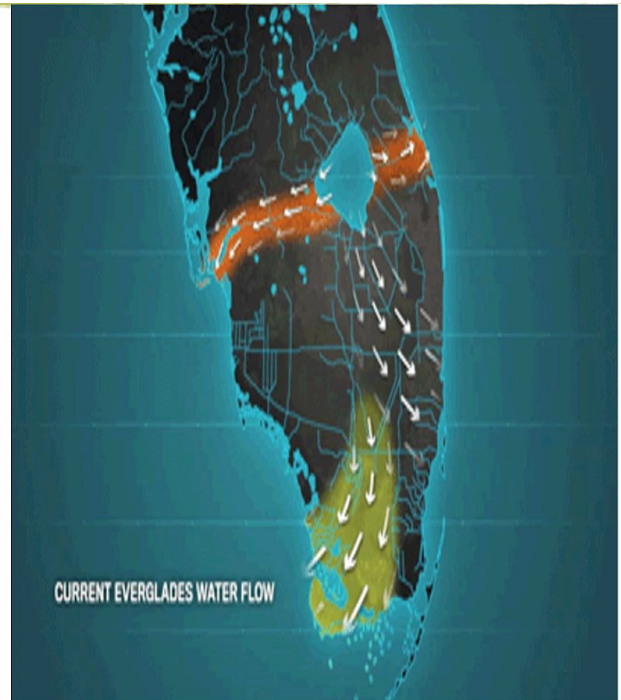
12. Everglades restoration will help flow clean, fresh water to which area of the Everglades watershed? _____

13. What is the percentage of visitors who engaged in an Everglades related activity? _____

14. View these maps of the lower half of Florida depicting the flow of water in the historic Everglades versus the current Everglades. What's the difference? The orange flows indicate water that is polluted. What do you think happened? How will Everglades restoration fix this?



Historic Water Flow



Altered Water Flow

Name: _____

13. List daily activities that require the use of freshwater.

14. Write a summary paragraph that describes and compares and contrasts the historic flow of water through the greater Everglades ecosystem with the altered, present day flow. Be sure to include impacts to water, wildlife, tourism, and the economy.

15. Draw diagrams of both the historic and altered models and label the components of each model.

Everglades Watershed Worksheet Answer Key

1. How many gallons of water are consumed per day in Florida? 1.3 billion gallons
2. How many South Florida residents rely on the Everglades for their water? 8.7 million residents.
3. Explain what wetlands do in the Everglades and how it connects to our water supply. When it rains in the Everglades, the wetlands act as an enormous sponge. Water seeps through a porous aquifer, which acts like an underground river. Florida cities connect to the aquifer via a series of pipes for their water supply.
4. Define a watershed. A watershed is a region that drains into a river, a lake, river system, or other body of water.
5. Looking at a map of Florida, where is the Everglades watershed located? The Everglades watershed spans from Orange County in the north, to Monroe County in the south, and from Collier County on the west, to Miami-Dade, Broward, and Palm Beach Counties on the east
6. What does K-O-E stand for? Kissimmee-Lake Okeechobee-Everglades
7. How many miles long is the River of Grass? 100 square miles.
8. What is the name of the aquifer that the Everglades recharges? Biscayne Aquifer.
10. In the altered watershed system, where is the water diverted to? Floodgates are opened from Lake Okeechobee, and water that's contaminated with stormwater runoff, and excess nutrients that would normally be filtered out through the wetlands, are diverted east through the St. Lucie river, and west through the Caloosahatchee river.
11. What are the effects of having excess nutrients in the water? This leads to toxic algae blooms that impact our environment, wildlife, our pets, and even our health.
12. List 2-3 threats the Everglades is facing. Answers may vary. By depriving the Everglades of this water, it often dries up and is vulnerable to wildfires. We also got excess salinity conditions in Florida Bay and saltwater intrusion into our aquifer, that means less fresh water, and less drinking water for Florida. Not to mention weather patterns, like droughts and hurricanes can make these problems even worse.

12. Everglades restoration will help flow clean, fresh water to which area of the Everglades watershed? South to the Everglades.

13. What is the percentage of visitors who engaged in an Everglades related activity? 41%

14. View these maps of the lower half of Florida depicting the flow of water in the historic Everglades versus the current Everglades. What's the difference? The orange flows indicate water that is polluted. What do you think happened? How will Everglades restoration fix this?



Historic Water Flow

Altered Water Flow

Answers may vary. In the Historic flow, more water is flowing from north of Lake Okeechobee into the Everglades watershed, where in the Current flow polluted water is being pushed east and west to the ocean and gulf of Mexico, and less water is making its way down to Florida bay.

13. List daily activities that require the use of freshwater. Answers may vary. Swimming, showering, drinking water, brushing teeth, dishes, watering plants, etc.

14. Write a summary paragraph that describes and compares and contrasts the historic flow of water through the greater Everglades ecosystem with the altered, present day flow. Be sure to include impacts to water, wildlife, tourism, and the economy. Answers may vary.

15. Draw diagrams of both the historic and altered models and label the components of each model.