**AP Environmental Science**

**Everglades Web Activity**

**Directions:** Write your name, today's date, and the class period on the upper right corner of the paper. Write the title "Everglades Web Activity" on the upper left corner of the paper. Answer all of the following questions on loose-leaf paper. You do not need to write the question. However, be sure to number each answer clearly.

<http://www.nps.gov/ever/learn/nature/upload/CERPFSLoResSecure.pdf>

1. What lured northerners to south Florida in the late 1800’s?
2. Why were portions of the Everglades drained?
3. What did the wetlands no longer provide?
4. What caused the public outcry for flood protection and water supply in 1947?
5. What did the Army Corps of Engineers install it what did they do?
6. Describe the environmental problems that this water management system caused.
7. What did the Army Corp of Engineers propose in 1999?
8. Historically, how much water flowed southward into Everglades National Park? How much water flows into the park now?
9. What did this drastic reduction in water flow contribute to?
10. How does the CERP aim to restore these ecosystems?
11. What is expected to compete for this water?
12. What will the decompartmentalization project do?
13. What does the ENP Seepage Management project aim to do?
14. What is the goal of the Biscane Bay Coastal Wetland project?
15. What will filing the southern portion of the C-111 spreader canal restore?

<http://www.everglades.org/water-management/>

1. How have the Florida Everglades been dramatically altered over the last century?
2. How did these profound hydrologic alterations change the communities in the ecosystem?
3. The distribution of water is the core problem that that has caused the declines what species?
4. What are reduced seasonal water flows increasing?

<http://www.everglades.org/phosphorus/>

1. What did the role of phosphorus as a limiting factor determine in the Everglades?
2. How have humans added phosphates to the soil and how do they reach the Everglades ecosystem?
3. What have high levels of phosphorus caused (in regards to cattails, algae, and duck weed)?
4. What has impaired water quality in large portions of the Everglades and been particularly problematic in Lake Okeechobee?

<https://extension.tennessee.edu/publications/Documents/PB1645.pdf>

1. What are vegetative buffer strips and how do they decrease the phosphorus input into surface water?

<http://www.ce.utexas.edu/prof/maidment/grad/dugger/GLADES/glades.html>

1. Explain how artificial wetlands can be used to reduce phosphorus concentrations in surface runoff.

<http://www.nps.gov/ever/learn/nature/cceffectscapesable.htm>

1. How was Cape Sable once characterized?
2. What happened in the early 1900’s when settlers began using the area for agriculture?
3. What are the drainage canals now a pathway for?
4. What has happened to the interior freshwater marsh in recent years?
5. How have the rising seas and increased flooding affected the mangrove trees that live at the water’s edge?

<http://news.nationalgeographic.com/2015/04/150422-everglades-obama-climate-change-florida-environment/>

1. Why is south Florida already in trouble?
2. What do the Everglades protect?
3. As sea level rises, what will happen to drinking water?
4. How big is Everglades National park and what endangered or threatened species is it home to?
5. What does the River of Grass, as it is known, refill and protect? Why is this important?
6. In what two ways does this occur?
7. How does Jayantha Obeysekera explain the connection between fresh water and the drinking water supply?
8. What do the canals operating on gravity do? What is happening now as sea levels rise?
9. How has salt-water intrusion impacted some wells along the coast that supply suburban water systems?
10. How do you think salt-water intrusion could affect ecosystem function and habitats in the Everglades?