Teacher(s): Doug Smith

Grade(s): 4th - 5th

Subject(s): Science

Title of Lesson: Map the flow, go with the flow.

Learning Objectives:
Students will be able to map locations and waterways pertinent to the KOE watershed on a map.

Standards Addressed:
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.E.6.6 - Identify the impact that humans have had on Earth, such as... water quality, changing the flow of water.

Lesson Outline:

* Give the students the Old and Current maps of Florida’s Everglades (use Florida Memory)

https://www.floridamemory.com/solr-search/results/?q=(everglades%20maps%20OR%20tt%3Aeverglades%20maps^10)&query=everglades%20maps

* Assess prior knowledge of the Everglades by asking students to share something they already know about the Everglades.

* Explain to the students that to learn more about the Everglades as a system.

* Review the cardinal directions (north, south, east and west). Ask the students to think about:
  • where the water flow begins in the K-O-E watershed
  • which direction it travels and
  • where most of the water ends up
Pass out pans/sheets and modeling clay

Students make two models of Florida

Dig out Lake Okeechobee and show the flow in the clay, pour some water and watch the flow south, FYI-sheet needs tipped with textbook.

Next on new clay maps do the same with Lake O, but add

Tell students water once freely flowed from the southern rim of Lake Okeechobee through the Everglades to Florida Bay and the Gulf of Mexico. Today, the free-flowing Everglades has been altered by a system of canals and levees.

On the clay maps dig out with sticks, pencil leads the Kissessmee river.

Using the Channelization, Historic Flow map, and River Flow visuals, Now make the channels flow to the West and East, stopping the natural flow of the KOE. Plus, the Tamiami trail stopped the water flow as well.

Systems thinking connection (learning habits and/or tools used):
Man’s interacting with the flow of water and changing the flow of the waters the feed the Everglades (river of grass) Understand the water flows from Kissimmee river up by Orlando down South to the Everglades, water flows downhill.

Learning Strategies: hands on, modeling.

Science Concept(s):
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.E.6.6 - Identify the impact that humans have had on Earth, such as...water quality, changing the flow of water.

Humanities Concept(s):
The Everglades and people are inextricably interconnected.
The Everglades is unique and valuable.

Student Assessment Strategies:
1. Completed maps with all components labeled.
2. Completed Anticipation Guide.
3. Have students write a short narrative in their own words about the flow of water in the Kissimmee-Lake Okeechobee-Everglades Watershed.

Benefit to my students: Personal connects to Florida’s valuable natural resource: THE EVERGLADES AND WATERSHED.

Resources and Materials (supplies needed for activities):
Modeling clay
Maps
Popsicle sticks/pencils
Cup of water
Cookie sheets or foil pans

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