

Why Is The Hillsborough River Watershed Important? – A Practice Timed Writing Exercise

Essential Question: Why is the Hillsborough River Watershed important?

Objective: Students will write an expository essay explaining the importance of the Hillsborough River Watershed.

Standard(s):

LAFS.6.RI.1.1

Cite textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

LAFS.6.W.1.2

Write informative/explanatory text to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content.

Materials:

- Pen or pencil
- 2 pieces of notebook paper (loose leaf)
- Student page: **The Hillsborough River Watershed** reading sheets
- Writing prompt sheet

Setup: display map

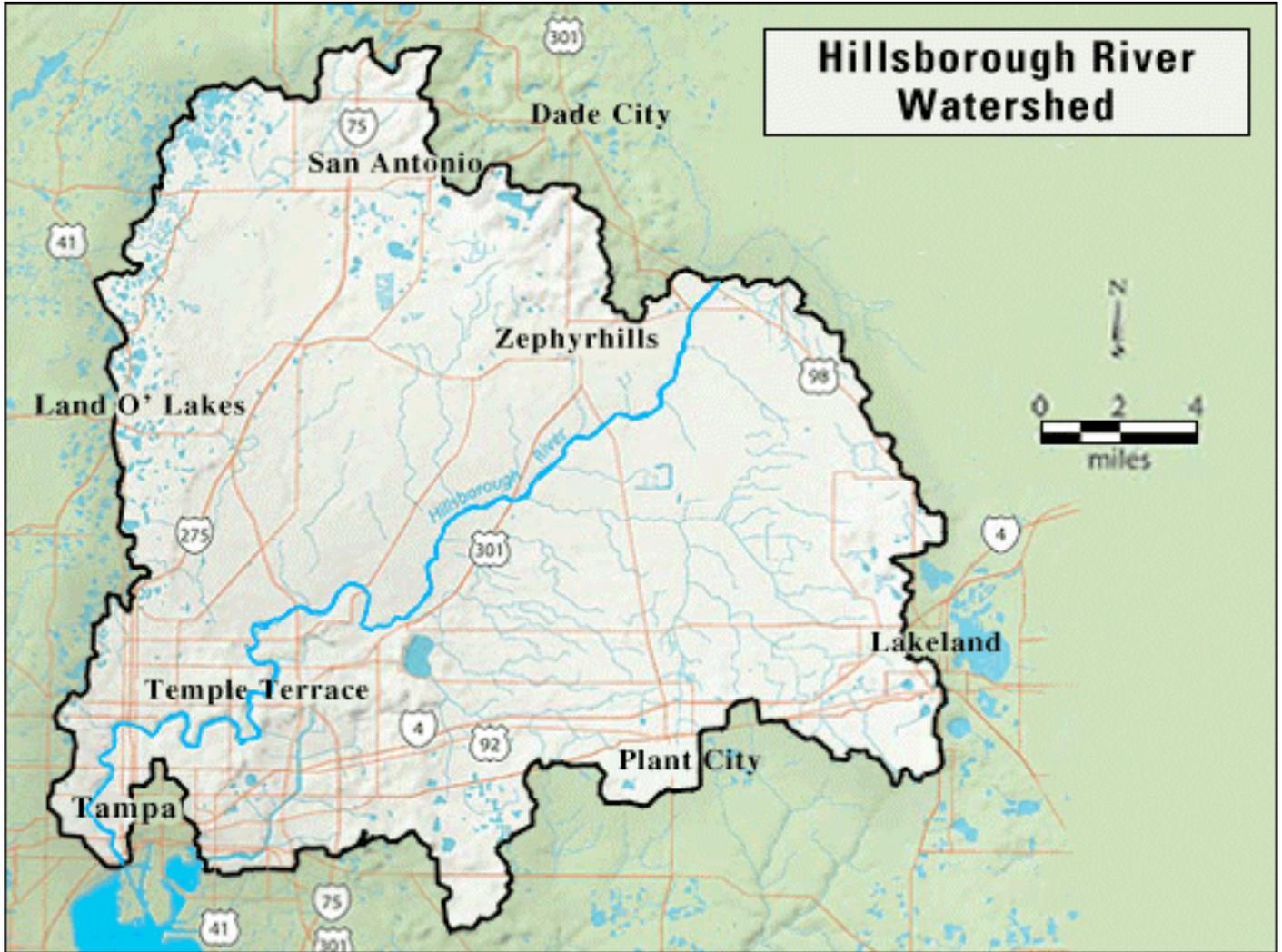
Prep time: 10 - 15 minutes

Lesson Duration: 50 minutes/one class period

Directions:

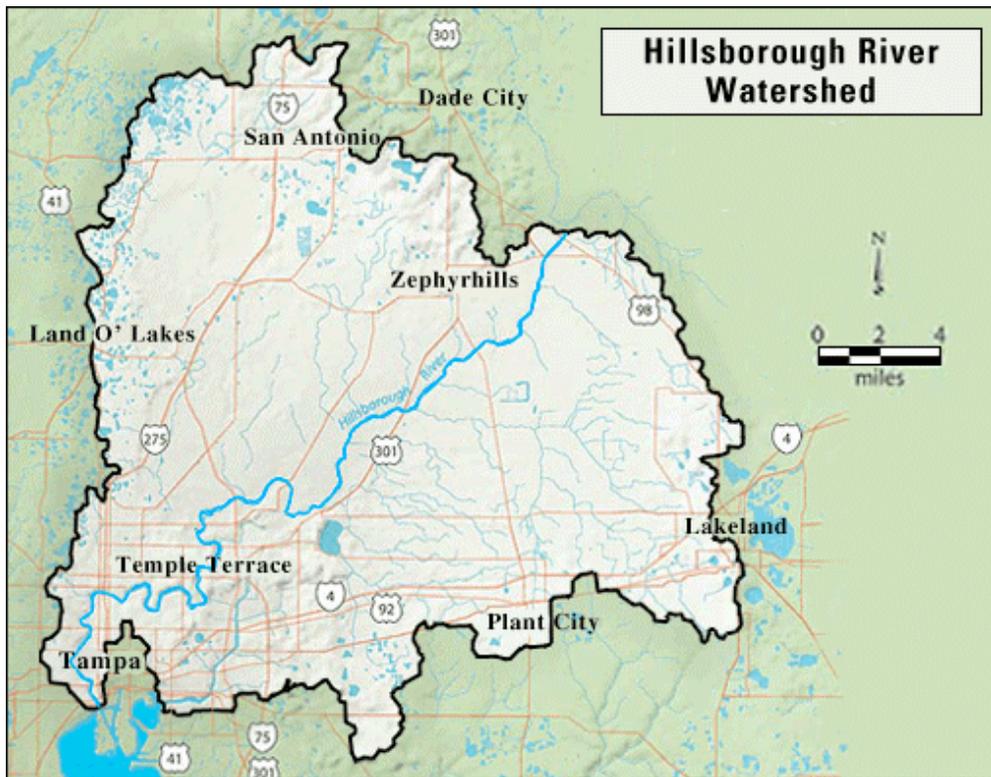
1. Project the watershed map for the students to study.
2. Hand out student page: **The Hillsborough River Watershed** reading sheets.
3. Have the students read the sheets, highlight important ideas and make notes.
4. Have the students individually write an expository essay using the writing prompt.

Assessment: Students will complete their expository essay.



Source: Hillsborough River Watershed Alliance

THE HILLSBOROUGH RIVER WATERSHED



Source:
Hillsborough
River
Watershed
Alliance

system is called a **watershed**. The area that drains into a river is determined by the shape and elevation of the land surface. This is called the **topography**.

In many ways, the

The main channel of the Hillsborough River originates in the area that water managers call the Green Swamp. Just south of CR 39 in Pasco County, the swamp flow of the river is joined by approximately 30 million gallons of water a day which comes out of the **aquifer** at Crystal Springs. The river collects water of lesser quality from a large area through its **tributary** creeks. Blackwater Creek drains the eastern portion of the watershed. Flint Creek collects water, including treated **wastewater**, from Plant City and after passing through Lake Thonotosassa, flows into the river. Trout Creek collects stormwater **runoff** from the fast growing area in the northern portion of the watershed. Human activity, even at the very edges of the watershed, has an impact on the water quality within the river.

All of the area that collects rainfall and drains it into an individual river or stream

watershed of the Hillsborough River resembles a flat shallow pan tilted up on one end. The Green Swamp is the highest part of this watershed or basin, located north and east of the borders of Hillsborough County. The lowest corner of the basin is at the mouth of the river where it empties into Tampa Bay. The southern boundary of this watershed roughly follows State Road 60 east almost to Lakeland. The western boundary roughly follows U.S. 41 north into Pasco County.

In Florida, the concept of a watershed can be confusing because many of our rivers have **ground water** added to their volume by springs. This groundwater may have entered the aquifer beyond the boundary of the surface watershed. In addition, the pattern of surface water flow is often altered to meet human needs.

The construction of ditches, canals and dams can have a dramatic effect on the volume of water reaching a river from its watershed. The volume and flow of water in the Hillsborough River has been altered by all of these human activities. Ditches were first used within the watershed to drain land so that more could be used for grazing cattle and growing crops. Later, several systems of canals were constructed to control the flooding of homes built in the **floodplain** of the lower river.

The dam on the river was first constructed to use the energy of falling water to produce electricity. However, this caused a conflict between cattle ranchers who lost pasture land to the rising water behind the dam and the power company.

Today the dam creates a **reservoir** from which the City of Tampa draws much of its water supply. Tampa's water treatment

plant is located on the reservoir just north of 22nd Street. It treats between 60 and 102 million gallons of river water daily to meet the needs of its citizens.

On average, all the single family homes in the city use approximately 23 million gallons of water per day. Multi-family apartments and condos use approximately 14 million gallons of water per day. Businesses and industries use 22 million gallons per day.

In addition to its importance as a water source, the watershed is home to a wide diversity of wildlife. These animals live both in the river and on large areas of wild land that have been preserved by Hillsborough County, the Southwest Florida Water Management District, and the Florida Parks Service. These lands and the river are used by people for boating, fishing, hiking, photography, bird watching and camping.

Writing Prompt:

Why is the Hillsborough River Watershed important? Write a multi-paragraph essay that answers the question and uses details from “The Hillsborough River Watershed” on pages 3 and 4. Be sure to:

- include an effective structure to organize your ideas (introduction, body paragraphs, conclusion).
- use appropriate grammar, usage, spelling and punctuation.

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