

## Use of the Watershed Through Time

**Essential Question:** How have humans used the river and watershed over time?

**Objective:** At the end of the lesson, students will summarize the benefits of the river and 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.RI.3.7

Integrate information presented in different media or formats (e.g., visually, quantitatively) as well as in words to develop a coherent understanding of a topic or issue.

LAFS.6.W.2.4

Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience

**Materials:**

- Pen or Pencil
- Discussion web – outline (Use this web to outline information gathered from the **Use of the Watershed Through Time** reading).
- 2 pieces of notebook paper (loose leaf).
- Student page: **Use of the Watershed Through Time**

**Setup/Prep time:** 10-15 minutes

**Lesson Duration:** 50 minutes/one class period

**Directions:**

1. Provide each student with a copy of the passage “**Use of the Watershed Through Time**” and allow him or her ample time to review. (25 min)
2. Students will then gather their thoughts by using a discussion web to write down questions, comments, points of interest, vocabulary, etc. that will be discussed as a class with the teacher. (15 min)
3. As an assessment, students will complete a summary writing assignment addressing humans and their use of the river and watershed. (10 min) **Note: the discussion web will guide this writing piece.**

**Assessment:** Students will create summary writing assignments addressing humans and their use of the river and watershed.

**Alternative Strategies:**

- Main Idea-Detail Notes (Two Column)
- Concept Map

## Use of the Watershed Through Time

### The Origins of the Watershed

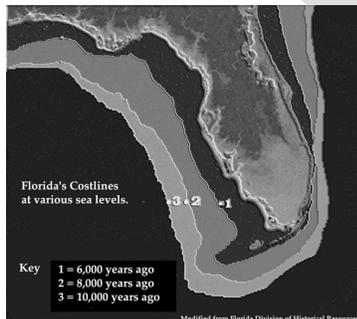
Throughout time, river valleys have given rise to civilizations. The river we know as the Hillsborough existed before the first people came to its shores. Its **geology** indicates that it once flowed from springs in west central Florida southward, eventually emptying into the Gulf of Mexico. During the ice ages, the river came and went with changes in sea level. Sometimes it was a dry valley containing a few water holes. At other times, it was much greater than the river we see today.

### The First People

During the last ice age, the ocean’s waters were frozen in huge mountains of ice called **glaciers**. Sea level was much lower than it is today. While a narrow land bridge was exposed, the first people came into North America from Siberia following herds of ice age mammoths, mastodons and other great mammals. The people moved across the continent. As the glaciers advanced, Florida provided a haven with a mild climate for both the people and the animals they hunted.



Today, the distance from Clearwater to Cocoa Beach is about 145 miles. During **Paleo Indian** times the distance from coast to coast



was approximately 280 miles. The Gulf coast was forty to seventy miles further west. The climate was cooler and drier. Wide grassy areas supported large herd animals that the early people hunted. However, it was the sinkholes and waterholes in the ancient river channel that provided life giving water to both the

hunters and the hunted. This water supply and its associated concentrations of game animals drew the people to the valley of the Hillsborough.

### Before You Read

Have you ever seen the Hillsborough River? If not, think about a river that you have seen. How is it used by people?

### What You'll Learn

- how the Hillsborough River has changed over time
- how major physical characteristics, natural resources and climate have influenced human ecology and settlement within the Hillsborough River watershed

### Reading Questions

As you read this selection, write down some questions you may have about this topic. Discuss these questions with your team or in a whole class discussion.

### Questions and Notes

**Questions and Notes**

At the end of the last glacial period, Florida narrowed as the ocean level rose. The climate became warmer and more humid.

The amount of rainfall increased. Swamps developed and the river began to flow again. This flow was at first seasonal, but eventually the river met the rising waters of the Gulf of Mexico in a large bay.

As sea level rose, the people moved with it. They continued to live off of the abundance of seafood found along the shore and the game found in the forests and grasslands. The large animals began to disappear as the grass gave way to trees due to the wetter climate. Mammoths, horses and camels were replaced by deer. **Anthropologists**, scientists who study the human past, have found evidence of early people from the mouth of the Hillsborough River in downtown Tampa to Crystal Springs near its **headwaters**.

Today we often find the remains of these early people and their food supply through the **excavations** for construction. Almost one-third of the known **prehistoric** sites in Hillsborough County are directly associated with lakes, rivers, and creeks. These provided drinking water, transportation, and **chert** (a flint-like material) for making tools and weapons. The streams and springs drew game to drink, and river crossings provided excellent hunting opportunities for the human populations. Plant communities were richer near these freshwater sources, and the river's clay was a resource from which the people could fashion pottery.

**Cultural Periods**

The history of Florida's native people before the European invasion is discussed as different time periods. The first people to inhabit this area about 12,000 years ago were called Paleo Indians by scientists. They lived in small migratory bands and were a hunting-gathering society.

The Archaic Period began about 8,000 BC and continued until 2,000 BC. These people continued to hunt and gather. They moved seasonally and used all the natural resources of the coastal and interior **riverine** environments.

During the Orange Period, 2,000-1,000 BC, people first began to make pottery. During the Transitional Period of

1000 - 500 BC, a more settled life based on agriculture developed. Regional cultures began to appear.

During the Manasota Cultural Period, 500-800 BC, burial mounds were used. The Weeden Island Culture, 300-1300 AD, saw burial mounds with elaborate grave offerings. Societies were strictly ranked. Shell refuse **middens** are typically found associated with a Weeden Island site.



Artist Herb Roe

During the Safety Harbor Period, 1300-1700 AD, social class was strictly observed. Chiefs, headmen, warriors, ordinary people and slaves belonged to very distinct social classes. Temple mounds, large flat-topped rectangular structures, were built during this time. The Tocobogin society that was in place when the first Spanish explorers came to Tampa Bay were from the Safety Harbor Culture.

### **The Spanish Come to the Watershed**

When Spanish explorers arrived in the 1520s, they found a ring of Tocobogin villages around the northern half of Tampa Bay from modern-day Pinellas County to Tampa. Expeditions led by Pánfilo de Narváez and Hernando de Soto landed near Tampa to look for gold and possibly start a colony. Neither conquistador stayed in the region for long once it became clear that the local riches were only abundant fish and shellfish. The native inhabitants, who derived most of their resources from the sea, repulsed any Spanish attempt to establish a permanent settlement or convert them to Catholicism.

### **Questions and Notes**

**Questions and Notes**

The newcomers brought a weapon against which the natives had no defense: infectious disease. Archeological evidence reveals a total collapse of the native cultures of Florida in the years after European contact. The Tampa area was depopulated and ignored for more than 200 years. (Adapted from Wikipedia)

**The Beginnings of Tampa**

Around 1772, the river and the bay received their current names. Florida became an English territory. The bay and the river were mapped and named for the Earl of Hillsborough.

About this time, Native Americans from Georgia, mostly Creeks, began to migrate into the area. These immigrants became known as the Seminoles. War soon broke out between the Seminoles and the United States.

During the Seminole wars, a fort called “Fort Brooke” was built at the mouth of the Hillsborough River. Shortly after, a military road was built from Ft. Brooke to Ft. King in Ocala. A bridge for this road was built across the river near present day Hillsborough River State Park. Another bridge was constructed near the mouth of the river to give access to the western shore.

In 1821 the United States purchased Florida from Spain.

**Blockade Runners Use the River**

During the Civil War, Tampa Bay was blockaded by federal troops hoping to stop the flow of beef, medicine and weapons to the Confederate armies and also to gain an economic stranglehold on the area. Cotton and cattle that were sold to the North or to foreign countries prior to the war were prevented from leaving the river.

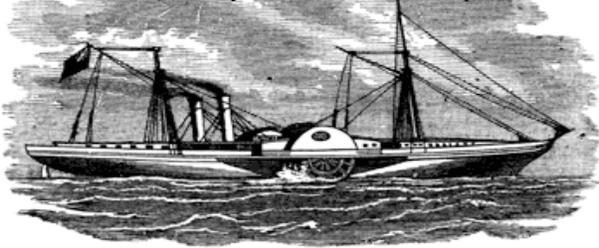
Records show that Captain James McKay of Tampa shipped 4,016 head of cattle to Cuba in 1860 but only 2,000 in 1861 after the beginning of the war. There were no records kept for the remainder of the war. Imported items like medicine and luxury items like cloth, coffee, cigars and white flour became rare and were in high demand in Florida’s small towns.

Cuba's need for cattle and cotton and Floridians' desire for luxury items created a situation of high demand while the naval blockade caused a severe shortage in supply. These two factors drove prices up and created the opportunity for huge profits to be made by anyone who was daring enough to break through the federal blockade.

The records of John T. Leslie of Tampa showed that while he paid \$4 per head of cattle in 1860, with the start of the Civil War in 1861 he paid \$5 per head and by 1863 he was paying \$7 per head.

During the first two years of the war, Jake Summerlin was contracted by the Confederate Army to supply beef at \$8 per head. Ship captains who could make it through the blockade to Havana, Cuba could sell their cattle for \$14 to \$418 per head, (in gold doubloons). They could then return to Tampa with a cargo of luxury items priced sky-high for eager Tampa buyers.

Source: University of South Florida Clip Art



Because only small cargoes were able to slip past the blockade

and because the blockade runners risked imprisonment and total loss of assets, only a few dared try the blockade-running business. But those that did it successfully became some of the wealthiest men in town.

One of Tampa's most famous blockade runners was the adventurous Captain James McKay. With a steamer named the *Scottish Chief* and a sloop, *Kate Dale*, Captain McKay made six successful round trips to Havana through the blockade. After the war, he became mayor of Tampa. During the Late 1800's, first the Plant Railroad and then the Spanish American war brought prosperity to the watershed.

In 1895 the first dam was built across the river. This was promptly blown up by ranchers upstream whose grazing land was flooded. A new concrete one was later built.

### Questions and Notes

## Questions and Notes

**Harvesting the Riches of the Forests**

In the late 1800's, the valley of the Hillsborough River was a land covered by a rich, old-growth forest. Majestic bald cypress trees soared several hundred feet into the air. Some of these trees were more than 3,000 years old.

Lumber companies in north Florida knew that the wood from cypress trees was very valuable. It was highly resistant to rot and decay. Termites that attacked pine and other woods left cypress alone. Cypress is easy to cut into boards and was hand-carved to create decorative moldings for houses.

Over time, the lumber companies perfected a technique to harvest this rich resource. They sent men into the swamps on foot during the dry winter months. These men used axes to cut a groove completely around the trees. This groove caused the trees to die and then dry out. In the early fall, at the end of the summer rainy season, the trees were cut with two-man crosscut saws. The logs were floated out of the swamps and down the river to railroad bridges.

A steam-powered crane called a skidder was used to lift the logs out of the river. The logs were loaded on rail cars and taken to a mill. The valuable cypress wood created a short term economic boom as the lumbermen cut their way through most of the riverine swamps along Florida's west coast rivers.



Source: Florida Photographic

As the trees were cut, some old giants were left behind. These were trees which had damage to their tops or interiors and would not make good lumber. These became the “mother trees” for most of the cypress we see today. As a result of this extensive logging, the ecology of the riverine swamp forest today is quite different from the original that had existed along the Hillsborough for ten to fifteen thousand years.