

## **The Tide of the Heron Video Questions**

1. What is an estuary? (A place where salt water and fresh water meet and mix)
2. Why are estuaries important? (They serve as a nursery for many young marine animals. They filter water as it goes to the sea. They act as a home to many wildlife species.)
3. Where do lichens get their food? (The air)
4. What four natural communities are found at South Slough? (uplands, marsh, mudflat, and open channel)
5. What causes the salinity in the estuary to change on a daily basis?(The tide going in and out)
6. In which season is the average salinity of the estuary the highest? Why?(summer because there isn't as much rainfall and its warmer so the fresh water evaporates more readily)
7. Name three animals that get their food from the mudflats. (Humans, Heron, Raccoons, Otter)
8. What can we do to preserve and restore the estuary? (Remove dikes, channel water in a natural way, remove invasive plants, replace native plants)
9. Historically, how have humans used the estuary? (as farm land)
10. How do the changing tides affect the plants and animals of the estuary? (these organisms must be able to adapt to the change in water temperature, depth, and salinity, or be able to move away from it as it comes in. They must be able to know when and how to find food during the different tides)
11. Why is education, research, and stewardship important to the health of estuaries? Education- to teach people about the estuaries and make them become more aware of what they do. Research- to try to improve our understanding of estuaries. Stewardship- to help maintain and restore the estuary back to an improved state.)

### **True or False**

1. Sediment is produced by erosion. (T)
2. Estuaries provide a buffer for flood waters and waves. (T)
3. South Slough is the only estuary in the National Estuarine Research Reserve system. (F)
4. Estuaries can contain only salty or fresh water. (F)
5. South Slough is part of the Coos watershed. (T)

## **Vocabulary**

**Estuary** – a place where salt water and fresh water meet and mix

**Salinity** – how much salt is in the water, measured in parts per thousand (ppt)

**Estes** – the Latin word from which estuary comes from, meaning tide

**Tide** – the rise and fall of the water in the estuary, twice a day

**Tide flats** – the area below the marsh where plants are scarce and small animals live under the mud

**Salt marsh** – the area below the upland forest where smaller plants and animals live

**Slough** – a quiet upper arm of a larger body of water

**Detritus** – the decaying bits of plants or animals

**Plankton** – microscopic plants or animals that are free floating