

**INITIAL THOUGHTS: BEGINNING OF LESSON (5 min)**

1. WHAT HAVE YOU ALREADY LEARNED ABOUT SALMON?
  
  
  
  
  
  
  
  
  
  
2. WHAT IS THE DIFFERENCE BETWEEN A HUMAN IMPACT AND A NATURAL IMPACT?
  
  
  
  
  
  
  
  
  
  
3. WHAT DOES “SURVIVAL and ADAPTATIONS” MEAN TO A SCIENTIST?
  
  
  
  
  
  
  
  
  
  
4. WHAT IS A WATERSHED?

**STATION 1: “Human Improvements OR Human Disasters?”**

Q1. How many years ago was 1906? (Do the math) \_\_\_\_\_ yrs

Q2: How are the 2 graphics different? (EVALUATE the graphics and compare/contrast).

Q3: What happened in 1900? (Look at the timeline on page 3)

Q4: What happened in 1909?

Q5: What happened in 1913?

Q6: What happened in 1916?

Q7: What happened in 1963?

Q8: How was life different in 1906 compared to now? (SUMMARIZE)

Q9: Look at the quote on page 3-4. (Green box), What is the problem? (PREDICT)

Q10: What should we investigate to better understand this problem? (REFLECTION)

## **STATION 2: "Following the River's Path"**

Q1: What is significant about the Upper Green River?

Q2: How is the Upper Green River related to the lower Green River?

Q3: Describe how the Middle Green River and Lower Green River are different?

Q4: Why is the Duwamish River SO polluted compared to the Lower Green River (Where they connect. See picture on page 3-11)?

Q5: What is important about the "Nearshore" Region of the Duwamish River? (See picture on page 3-12)

Q6: Which part of the Green River is in Kent? (See pictures on pages 3-8 & 3-10). \_\_\_\_\_

Q7: What are 2 "Factors of Decline" you care about? (See table on page 3-6)

Q8: Since you live in Kent, how important is this problem for your life? (REFLECTION)

## **STATION 3: "Impacts of Urbanization Over Time"**

Q1: Is flooding good or bad? (PREDICT)

Q2: How does flooding help/hurt a community and its economy? (DISCUSS & WRITE)

Q3: What do you notice about the changes between these maps over time? (DESCRIBE)

Q4: Is this Human Impact of "Urbanization" good or bad? (DISCUSS & PREDICT)

Q5: What year was a "Manmade Lake" (Caused by a dam), added?

Q6: How did the dam change the map?

Q7: When do you notice the most drastic changes to the community? Why?

Q8: How might all of the changes impact the environment?

Q9: What might the map for 2020-2030 look like in the future?

## **STATION 4: "Our River Story"**

Q1: Why did you put the story in this order?

Q3: Where does rain go when it falls on the surface?

Q4: Why does water collect in rivers, streams, ponds and lakes?

Q5: Why do humans build roads, train tracks, farms, factories and cities next to water sources?

Q6: What scientific law causes water to move in the direction it flows?

## **STATION 5: "One River 4 All"**

Q1: What does "One River 4 All" mean? Why did we give this title to the photo essay?

Q2: Why did you put the story in the order you did?

Q3: How did you and your team make choices to organize the photos respectfully with consensus?

Q4: What do you think this photo essay is trying to tell the viewers?

Q6: How can we use photo essays to communicate important stories and information?

## **STATION 6: "Flooding: Good or bad?" (NEED LAPTOP TO USE SUSTAINABILITY AMBASSADORS VIDEOS)**

Q1: How do people cause flooding?

Q2: What causes flooding?

Q3: Are floods good or bad? Support your answer with reasoning.

Q4: Why do all watersheds follow the same patterns?

## **STATION 7: “What is a Watershed?” (NEED LAPTOP TO USE SUSTAINABILITY AMBASSADORS VIDEOS)**

Q1: Why are watersheds important?

Q2: What types of human choices impact the watershed?

Q3: What types of natural phenomenon impact the watershed?

Q4: Describe how watersheds function or work.

### **REVISED THOUGHTS: END OF LESSON (5 min)**

- 1. WHAT WAS SURPRISING?**
- 2. WHAT DID YOU ALREADY KNOW BUT SEE IN A NEW WAY?**
- 3. WHAT DO YOU STILL NEED HELP WITH? OR WHAT NEW QUESTIONS DO YOU HAVE ABOUT THESE TOPICS?**

### **SUCCESS SURVEY: (5 min)**

- 1. WHAT WAS YOUR FAVORITE STATION? WHY?**
- 2. WHAT LEARNING ACTIVITY WAS THE MOST CHALLENGING? WHY?**
- 3. HOW WILL YOU HELP YOURSELF BE MORE SUCCESSFUL NEXT TIME?**