Tacoma Public Schools Virtual Education Program Proposal – Explore the Salish Sea

April 15 2021- May 15 2021

Summary: Foss Waterway Seaport science educators will teach a month long live and asynchronous salmon program to a maximum of 12 schools as part of the "Salish Sea Heroes" project. Our activities will support the Salish Sea Heroes curriculum "Migration" unit, and includes an activity, research project, and the heroes project. Each live lesson is designed to be student driven and interactive. For asynchronous lessons, students are provided with materials ahead of time to perform experiments in their own homes or in their local community with parent support.

Deliverables:

Water quality testing strips for up to (12) schools or maximum 1000 students (Activity)

Two live lessons per school (24 live lessons) (Heroes Project)

- (4) Lessons including videos, supporting materials, and formative assessment in Schoology (Research Project)
- (4) FlipGrid topics and staff support

Background:

Since late 2019, the education team at the Foss Waterway Seaport has been piloting live streams and transitioning some of our time-tested curriculum into viable online content. After teaching thousands of students over the last year, including a virtual salmon program last spring, we have experienced staff and leadership ready to take on our next cohort of engaged remote learners.

- Classes are designed to be easily accessible to students and teachers using TPS approved platforms.
- Every program reinforces timely, grade appropriate assigned science standards.
- Each week has a hands-on portion for the students to complete at home, with kits supplied by FWS.

Week 1: Introduction

Live: Meet the Salmon! Introduction to the program

Nearpod 1: Salmon hatchery videos

Nearpod 2: Hatchery Tagging Trailers

Flipgrid Prompt: Draw a salmon and tell us what stage it is at in the life cycle. Is it a wild salmon, or a hatchery raised salmon? How can you tell?

Week 2: Activity: Strips at home

Nearpod 3: Nitrogen Cycle

Nearpod 4: Demonstration of Water Testing Strips, and How to Log Data

Nearpod 5: Dream Stream Art Activity

FlipGrid Question: Make a video of yourself testing water. It can be water from a puddle, tap water, stream water, or even water from your tap.

Week 3: Research

Nearpod 6: Site Selection (story map)

Live Meeting: Sharing Site Selection + Art, release info and wrap up

Flipgrid: Share the page from your journal where do you drew the map, and figured out the site. Why did you choose that one?

Flipgrid: Share you dream or nightmare stream- your video will be put into a compilation to be shared publicly! Please make sure your parent signs the media release (on website)

Virtual Salmon Release

May 8th at 10:30am, join us for our live virtual salmon release! We will be releasing our Coho Salmon in the site that the students decide is the best option.

Late May: Recorded Student Public Presentations via Stream Yard onto Social Media (Sherman and any other schools who choose to do the PLB culmination project)

Live Meeting 1:

Salmon Migration 2021 Intro Live Meeting Outline

30 minutes

- 1. Introduce educators in the meeting and land acknowledgment
- 2. Show them the salmon on the live cam. Link: https://fosswaterwayseaport.org/seaport-salmon/
- 3. Watch SeaDoc's intro video, if they have not: https://www.youtube.com/watch?v=10gcp47-yVs
- 4. Program Overview we will be talking about these things
 - a. Learn about salmon
 - b. What makes a healthy stream for salmon
 - c. Using data we collect at the stream to help us decide where to release our Seaport salmon
- 5. Testing water at home Quick demonstration of home kit
- 6. Introduce Nearpods on website & Flipgrids

- 7. Salmon Release and date
- 8. Summary slide:

Complete Weekly Tasks: Flipgrid responses & Complete Nearpods **Projects:** Water quality testing & Dream Stream

9. Questions

Live Meeting 2:

- 1. Check-in with Salmon
- 2. Choose salmon release site (show them the story map), if students have not already completed this task.
- 3. Students share artwork.
- 4. Reminder of salmon release date, May 8th at 10:30am