



Salmon Fry Education Contract

1. **Purpose:**

The purpose of the statewide Salmon in the Schools program is to work with Washington State schools, educators, and students in currently unserved high-poverty elementary schools to secure salmon eggs, offer learning opportunities aligned to the Washington State Science Learning Standards as the fry develop, and assist when students release their fry into local creeks and lakes.

2. **Description of services provided:**

The Hood Canal Salmon Enhancement Group (HCSEG), along with 14 other nonprofit subcontractors across Washington State, work as a partner collaborative created for this proviso contract to deliver a Salmon in the Schools (SITS) program to currently unserved elementary schools designated as high poverty (LAP). Over this fiscal year, the partners conducted outreach to qualifying elementary schools to enroll them in a SITS program, consulted with Washington Department of Fish and Wildlife and local hatcheries to obtain eggs and develop a plan for a salmon release site, installed salmon aquariums in all participating schools, implemented in-class and virtual learning opportunities throughout the program, assisted educators and students on release day events (providing rotation learning activities on these days), planned and implemented all program activities, and provided assessments and evaluations designed for before, during and after program implementation. Partners also designed, developed and provided a program support plan for all participating teachers. This included instruction manuals, videos, in-class support, and regular virtual meetings. Teachers were also provided support in establishing and maintaining a healthy environment for their SITS aquarium habitat. Several partners also engaged with families and communities through coordinated activities which included: virtual SITS related reading events among schools, students and parents; release day community stewardship activities; maintaining aquariums in public spaces; and public art exhibits created by SITS students. HCSEG implemented a regular communications plan with OSPI staff to share SITS activities throughout the duration of the program.

3. Criteria for receiving services and/or grants:

The proviso language designates that funding may only be used for new programs located in elementary schools that are eligible for high-poverty allocations from the learning assistance program (LAP).

Beneficiaries in 2021-22 School Year:

Number of School Districts:	59
Number of Schools:	81
Number of Students:	5,359
Number of Educators:	186
Other:	N/A

Number of OSPI staff associated with this funding (FTEs): .17

Number of contractors/other staff associated with this funding: 1

FY22 Funding:	State Appropriation:	\$500,000
	Federal Appropriation:	\$0
	Other Fund Sources:	\$0
	TOTAL (FY22)	\$500,000

4. Are federal or other funds contingent on state funding?

No

5. State funding history:

Fiscal Year	Amount Funded	Actual Expenditures
2022	\$500,000	\$491,909

6. Number of beneficiaries (e.g., school districts, schools, students, educators, other) history:

Fiscal Year	Number of Schools
2022	59 districts/81 schools/5,359 students/186 educators

7. Programmatic changes since inception (if any):

Since inception, an additional partner joined the initial Salmon in the Schools Collaborative, FOSS Waterway Seaport, allowing for the inclusion of the Tacoma School District in the list of districts being provided for by the program.

The Salmon in the Schools program schedule needed to vary by region depending on the natural timeline of local salmon egg development and species needs, but generally aquariums were installed in schools between November-January.

Throughout the school year partners needed to flexibly adapt their programs to changing Washington State COVID-19 safety regulations as needed. Whenever possible, program staff provided services in-person. When needed due to Covid restrictions, the partners adapted by providing virtual lessons in lieu of in-person, focusing more on release day events rather than in-classroom visits, and supporting teachers to implement class learning rather than staff providing the programming in-person.

8. Evaluations of program/major findings:

- State Representative Stephen Bergquist attended Renton Conservation District's largest student salmon release field trip event called "Salmon Summit." Over 3,000 students attended the Salmon Summit. Each student personally released a salmon into the Columbia River, then attended a series of learning stations led by volunteers and entities including tribal, federal, state, regional, county municipal, corporate and nonprofit organizations.
- Pacific Northwest National Laboratory (PNNL) partnered with Benton Conservation District to tag a portion of the salmon released during the Salmon Summit student event. Students were paired with an individual fish, following it through the process, which scientists explained each step. The first name of the student releasing each fish was added to the data file associated with each fish tag. Scientists provided weekly updates of the salmon tag detections as the fish migrated downstream in the Columbia River to the Pacific Ocean. In addition to this spectacular in-person STEM opportunity, PNNL hosted a simultaneous live streaming of the process, reaching an additional 3,600 students from across the state. Photos, videos and more information about the in-person and live streaming salmon tagging is available here: <https://www.pnnl.gov/events/salmon-summit>
- With 15 organizations working together to implement this program, we were able to not only reach schools in almost every region in Washington state, but also provide growth and mentorship to each other to enhance our SITS programs for teachers, students and local communities.
- Many partners were able to grow and establish new relationships with local tribes to integrate Indigenous culture and knowledge into its SITS program.
- Through formal assessments and evaluations, students universally showed an increased knowledge of salmon life cycle, salmon anatomy and physiology, what makes a good salmon habitat, and how to identify good salmon habitat in their local region.

- Students and teachers expressed enthusiasm and gratitude for the SITS program, and schools communicated to program partners that they are excited to continue the program the following year.
- The Foss Waterway Seaport public “Salmon Sendoff” release day event was attended by over 100 members of the public and continued to build their relationship with the Puyallup Tribe through including a native speaker/singer. Approximately 600 Tacoma Public School students participated in the raising and releasing of about 1,000 salmon into Swan Creek.
- Mid Sound Fisheries Enhancement Group had a participating school, Ilalko Elementary School, present the program at their School Board including student speakers, video and writing samples. They also had a school share their sustainable salmon art with Foss Waterway Seaport’s Maritime June OceanFest.
- The Hood Canal Salmon Enhancement Group worked with children’s author, Mary Boone, to assist in her newest book that will discuss SITS. Mary Boone attended the Sand Hill release day event at the Mary E. Theler Center in Belfair, Washington.
- The Hood Canal Salmon Enhancement Group’s SITS program included an art competition where two participating schools painted their winning design a side of the giant “Soul Salmon,” a salmon statue that is now on public display at the Salmon Center in Belfair, Washington.
- Partners were able to observe high level student emotion about releasing their salmon fry and engagement in lessons and activities during the release days, which was a positive indicator of student connections to their salmon and care for nature, one of the goals for program success.

9. Major challenges faced by the program:

COVID-19 safety regulations, mandates and quarantine procedures required canceling some in-class lessons, field trips and release day events. However, partners found ways to be flexible and adapt their programs to this obstacle by providing teachers and students with virtual lessons and program support, as well as videos for a virtual release day experience.

- Teachers were often overwhelmed due to the changing regulations of COVID-19 and their classroom schedule and were sometimes inconsistent with administering program assessments. Some also found that taking care of the tanks was difficult at times due to their other teaching duties. Partners addressed this obstacle by providing additional support and communication to teachers, and by physically supporting them with tank care. For next year’s programs, all partners plan to proactively provide additional support for all schools and teachers, as well as additional in-person professional development for new and returning teachers to ensure they feel better prepared for tank care and all aspects of the program.

- Some aquariums experienced unusually high egg mortality rates which was discouraging to both teachers and partners. Partners investigated instances of high mortality rates and learned that the sponsor hatcheries reported similar high egg mortality in all of that species of egg that year. Partners addressed this obstacle by providing this information from hatcheries, additional reassurance and encouragement, as well as additional tank cleaning and water quality monitoring to teachers.
- Due to COVID-19 related supply chain issues, it was difficult to secure SITS aquariums and equipment for the 2021-2022 program year. However, HCSEG was able to find a supplier to deliver an order of SITS equipment in time and now has an established relationship with this supplier for future years. Due to the early contract renewal with OSPI for the 2022-2023 school year, HCSEG and partners were able to order supplies months in advance and avoid this issue.
- Some partners were in need of more translated SITS materials for bilingual/dual immersion teachers. HCSEG and partners are addressing this by working to develop translated SITS materials for these teachers for the 2022-2023 program year.
- Due to the inflating cost of materials and gas last year, the high number of eligible schools that wanted to participate in SITS, and the extra level of support high poverty schools require due to capacity and resources, many program partners needed to redirect funds earmarked for other work so that they could provide the SITS program.

10. **Future opportunities:**

The SITS program partners have reached capacity with the number of schools that can be served with the current funding of 500K and have received many more requests to participate in the program. If additional funding is provided, the partners estimate they can increase the current number of schools being served from 81 to 258 over the next four years.

11. **Statutory and/or budget language:**

ESSB 5693, Sec. 522(23) - \$500,000 of the general fund—state appropriation for fiscal year 2022 and \$500,000 of the general fund—state appropriation for fiscal year 2023 are provided solely for the office to contract with an organization that works with educators to secure salmon eggs, offer learning opportunities as the fry develop, and assist when students release their fry into local creeks and lakes. Funding may only be used for new programs located in elementary schools that are eligible for high-poverty allocations from the learning assistance program. Of the amounts provided in this subsection, the office may use no more than \$35,000 each fiscal year for office administration costs related to the contract.

12. Other relevant information:

State Fish Enhancement Group partners in the collaborative formed by this contract are as follows: Hood Canal Salmon Enhancement Group, Cascade Fisheries, Foss Waterway Seaport, Tri-State Steelheaders, Mid Sound Fisheries Enhancement Group, Skagit Fisheries Enhancement Group, Chehalis Basin Fisheries Task Force, South Puget Sound Salmon Enhancement Group, Sound Salmon Solutions, Benton Conservation District, Yakima Basin Environmental Education Program, Nooksack Salmon Enhancement Association, Columbia Springs Environmental Education Center, Mid- Columbia Fisheries Enhancement group, North Olympic Salmon Coalition.

13. Schools/districts receiving assistance:

See [OSPI's grantee list](#).

14. Program Contact Information:

Name: Kimberley Astle
Title: Associate Director of Elementary Science
Phone: 350-688-1059
Email: Kimberly.Astle@k12.wa.us