

Students participating in Salmon in the Schools - Seattle (SIS-SEATTLE) rear coho, chum, or chinook salmon from eyed eggs to release as fry in local creeks and Lake Washington. In the process, they learn about life cycles, ecosystems, environmental stewardship, and the importance of salmon to Pacific Northwest culture and commerce. Skill development includes observation, data collection and depiction, and research and reporting.

Teachers and tank volunteers engage students in caring for their fish, monitoring water chemistry, and documenting fish behavior. They link this study to such curriculum emphases as science, math, and social studies, and many schools cultivate a building-wide "salmon climate" that extends learning to multiple grades.

PROGRAM COORDINATION

SIS-SEATTLE is a coalition of agency staff members and environmental advocates who enable educators to use salmon rearing as an effective way to enrich academics in public and private schools throughout the city. The Washington Department of Fish and Wildlife (WDFW) initiated the program in 1991 and, after 20 years, it transitioned to local coordination. WDFW continues to issue permits for eggs and track releases.

This report reflects the second year of SIS-SEATTLE coordination. Individuals and the City of Federal Way coordinated most schools elsewhere in King County, leaving a few to link directly to WDFW.

A technical specialist funded by Seattle Public Utilities and Seattle Parks and Recreation and volunteers work directly with teachers to secure eggs from hatcheries, assist with releasing fry, troubleshoot equipment problems, and help new teachers and school volunteers manage their tanks with confidence.



Discovery of a dead bat along a trail in Fautleroy Park added a memorable feature to Sanislo Elementary's release. SIS-Seattle technician Nancie Hernandez carefully took advantage of the teaching moment.



Public and private schools throughout the city participated in SIS-Seattle this year.

ACCOMPLISHMENTS

During this school year, the SIS-SEATTLE leadership team

- maintained our **website** as a comprehensive resource for salmon teachers in Seattle.
- secured **state permits** for all participating schools.
- updated our **handbook** for teachers and tank volunteers.
- conducted a **workshop** for new teachers, volunteers, and those seeking a "refresher" about tank care and lesson planning.
- made more than 101 **visits to schools** and responded to 1,800 email requests about tank set-up and maintenance.
- **serviced** 15 chillers and **purchased** 6 chillers and 2 tanks.
- did 7 in-class **salmon dissections** at participating West Seattle schools and 29 more during field trips to Piper's Creek.
- supported 54 salmon-release **field trips** - 23 in partnership with the Carkeek Watershed Community Action Project, 14 with the Fautleroy Watershed Council, and 17 elsewhere in the city.
- helped 11 schools with **transportation costs** for release field trips.
- invested dozens of **administrative and volunteer hours** in permitting, training, troubleshooting, and coordinating.

TEACHER FEEDBACK

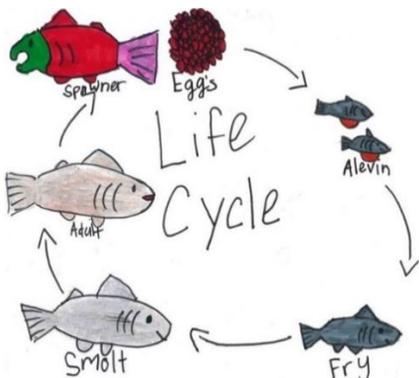
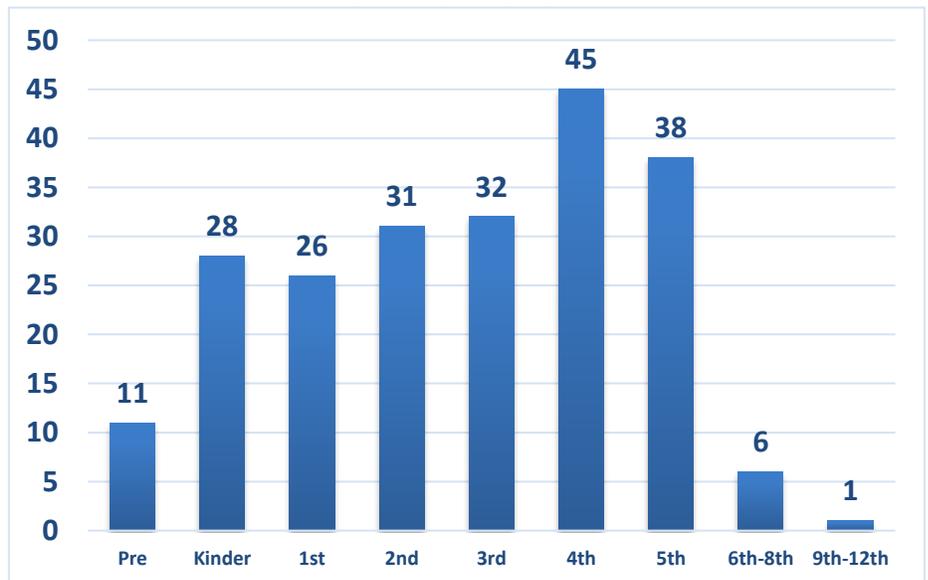
Reports filed by participating schools after releasing their fry provided the SIS-SEATTLE leadership team with valuable feedback about program components, including the following:

A total of 73 public and private schools engaged these grades in salmon-centered learning. Most schools place their tanks in common areas so that multiple classrooms/grades can participate.

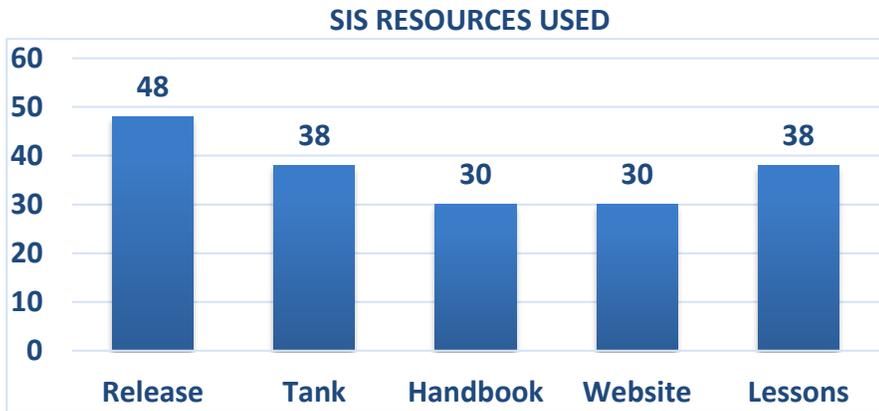
Thank you for letting us have this experience with the salmon!

- Cleome and Zoe
Pathfinder K-8
Seattle Public Schools

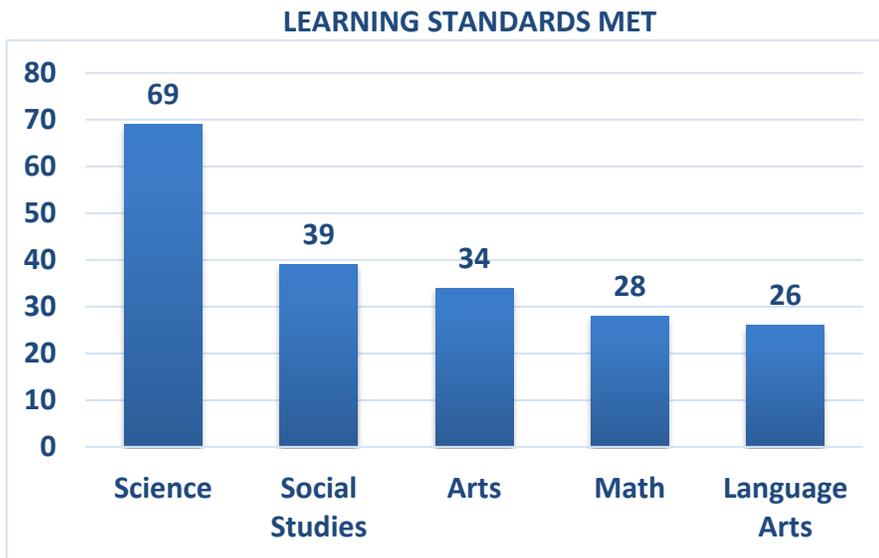
GRADES ENGAGED



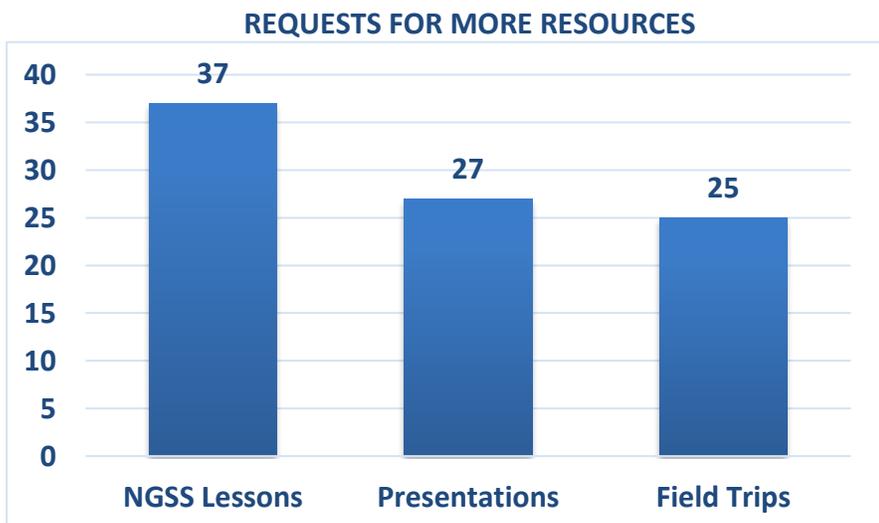
SIS-SEATTLE offers many **resources** to support teachers. Those they called on most frequently this year were as follows:



The top five ways teachers incorporated salmon-related study to meet **learning standards** this year were as follows:



Top teacher requests for **more program resources** were



Be'er Sheva Park on Lake Washington was a perfect spot on a perfect day for Kimball Elementary students to release 59 coho fry.



Regular testing enables students to monitor water chemistry as their fish develop and sound the alarm if it gets out of balance.



Students at Concord International School created bilingual posters to address the question, "How can we help our salmon survive to spawn?"



Kindergarten students at Arbor Heights Elementary culminated their study of Native American culture by dancing in full regalia to send off the coho fry reared by fourth-grade students.



Students from Pacific Crest School brought 183 Chinook fry to Magnuson Park for release into Lake Washington.

A total of 19 teachers offered to **mentor** colleagues new to the program, ranging from preschool through middle school.

SIS-SEATTLE partnered with three **hatcheries** this year for salmon eggs:

Hatchery	No. of Schools
Issaquah WDFW hatchery	36
Soos Creek WDFW hatchery	14
Grovers Creek Suquamish tribal hatchery	23

WHAT'S AHEAD

During the 2018-19 program year, we plan to

- align more lesson plans with next-generation science standards and state common-core standards.
- continue to work with schools to upgrade equipment.

We will retain program capacity at 75 schools and focus recruitment on

- upper elementary grades
- under-served schools
- schools able to enlist assistance with tank maintenance.

LEADERSHIP TEAM

Administrative time and on-the-ground expertise sustained and improved this program in 2017-18, including from these members of the leadership team:

Beth Miller, program manager, K-12 Stormwater Education Programs, Strategic Outreach and Communications, Seattle Public Utilities;
beth.miller@seattle.gov; 206-386-4621

Nancie Hernandez, technical support and area coordinator for Piper's Creek and Lake Washington
seasis.tech@outlook.com; 206-218-9738

Phil Sweetland, database and technical support volunteer
phil_sweetland@msn.com; 206-938-4203

Rick Henry, Carkeek Watershed Community Action Project volunteer;
RickHenry@carkeekwatershed.org; 206-235-7431

Judy Pickens, volunteer area coordinator for Fauntleroy Creek
judy_pickens@msn.com; 206-938-4203