

# 2016 ANNUAL REPORT

This year, the Fautleroy Watershed Council

- hosted a record 764 students releasing salmon in Fautleroy Park.
- made possible an exceptional year of student research.
- reached the midpoint of a six-year project to restore native vegetation in the Kilbourne ravine, which shapes and provides habitat along the middle reach of Fautleroy Creek



**FAUTLEROY  
WATERSHED  
COUNCIL**

## HABITAT RESTORATION & STEWARDSHIP

**FAUTLEROY PARK.** In the wake of 2015 removal by Seattle Parks of invasive plants in the Bernice Basin, a remote area in the northeast corner of the park, trainees with EarthCorps returned in February for major replanting on steep terrain.



EarthCorps trainees, including Ally Pike from Texas (front) produced hundreds of empty pots to revegetate a very steep slope in Fautleroy Park. Photo courtesy Jammie Kingman

Crewmembers strapped themselves into rappel harnesses to install hundreds of native shrubs and groundcovers.



Members of the Goodwill Green Corps did maintenance work on the Forest Court loop trail in Fautleroy Park.

Photo courtesy Peggy Cummings

Vegetation management of the park continued with a combination of volunteer and staff involvement. In late summer, a Seattle Parks crew treated yellow archangel in the southwest corner of the park. The plan for 2017 includes engaging the adjacent homeowner so that this highly invasive groundcover can be eradicated from the entire area.

In late December, the Seattle Parks natural-area crew returned to install plants in the park interior for erosion control. Finding social shortcutting of the trail, the crew installed temporary fencing and coir logs to protect new plants from damage by foot traffic.

**FOREST STEWARDS.** Steve Hodson and Peggy Cummings each had a productive and rewarding year as forest stewards for this watershed. Coordinated by the Green Seattle Partnership, the program trains and supports volunteers to be the focal point for restoration events and for educational and other public activities in forested parkland.

Steve contributed an estimated 320 hours in Fautleroy Park, clearing invasives and installing native plants supplied by Seattle Parks. Peggy gave nearly 100 hours, with a strong emphasis on public outreach. Her activities included

- reporting needed trail and signage work, downed trees, and other erosion and safety concerns to Seattle Parks.
- helping identify where contracted restoration work would be needed.
- monitoring city proposals that could impact the park, especially draft guidelines about off-leash dogs and homelessness encampments in public spaces.

**KILBOURNE RAVINE.** The six-year Kilbourne Ravine Riparian and Buffer Project reached Year 4 as work continued to (1) improve water quality in the middle reach of Fautleroy Creek by controlling erosion, filtering runoff, and holding rain in a restored conifer canopy, (2) reclaim the ravine as wildlife habitat, (3) stop the spread of invasive plants into the neighborhood, and (4) enlist property owners and the community in keeping invasive plants out of landscapes.



EarthCorps put in three crew days this year, two of which were funded from a King Conservation District grant. The conservation trainees monitored and treated invasive plants threatening to re-establish in the project area and replaced recently installed plants that did not survive. Following November 2015 flooding into the ravine from a blocked culvert under 45th Ave. SW, Seattle Public Utilities paid for EarthCorps to do a third day's worth of work (billed at \$2,275) in the ravine, at no cost to the restoration project.

Revegetation of the wetland is to be part of a six-year project under way to replace the culvert with a fish-passable structure. The city installed a fenced, locked stairway to access the culvert intake area and started survey work.

**FENTON GLEN.** We called on Bob Keller, the specialist with Natural Systems Design who oversaw restoration of this area, to assess stream-bank erosion near the culvert intake. He recommended adding a few large rocks, then a windstorm downed a tree over the channel, requiring another look and a fresh recommendation. In the spring, Steve Richmond did the annual herbiciding of yellow archangel in this riparian habitat.

## OUTREACH

**ANNUAL EVENTS.** Enthusiastic volunteers helped 185 young children decorate salmon hats at the annual Fautleroy Fall Festival in October. The watershed council has been offering this activity since 2004.



Jamie Shilling led an estimated three dozen people during the Oct. 30 annual drumming to call in coho spawners. Photo courtesy West Seattle Blog

### **Comment on *West Seattle Blog*:**

*It was good to be with all of you at the salmon drumming; my son and I enjoyed all the singing/drumming. I wish the coho all the best on their journey back to their spawning habitat. Thanks to all of you that organized and persevered through the rain (a good sign) to make this happen.*

## ADVOCACY

The watershed council closely monitored two proposals about what would be allowed in city parks:

- Feeling the pressure of a growing population on city parks, the Seattle Department of Parks and Recreation wrestled this year with whether or not to increase areas where owners could let their dogs run off leash. Our concerns were for habitat and the safety of other park users. The issue proved so contentious that the department postponed a final report and recommendations until 2017.
- We also followed a City Council proposal that would have allowed camping by persons who are homeless on city property, including in public parks and natural spaces. Disfavor surfaced from many quarters and the measure died in committee. We will assess any related proposals with an eye toward habitat and public safety.

# SALMON

**OUT MIGRATION.** Between March 10 and May 27, volunteer monitors documented a total of 19 coho smolts that survived their year in Fautleroy Creek as fry and fingerlings to migrate to saltwater habitat in central Puget Sound. By casual observation, smolt size appeared to be comparable to past years. Volunteers found 80 release fry that had washed into the traps. All but five of the 19 smolts were trapped in the upper creek, prompting concern that smolts were encountering some sort of blockage. A fallen tree may have impaired fish passage for about two weeks in mid May. Also, our juvenile salmon may have been affected by emergency work in November 2015 to unblock the culvert under 45th Ave. SW; a temporary barrier was to hold fish upstream until the work was completed.

**SALMON IN THE SCHOOLS.** The annual cycle for Salmon in the Schools began in early January when Phil Sweetland and Judy Pickens delivered eyed coho eggs to 11 elementary schools and Jack Lawless delivered to three preschools, for a total of 2,900 eggs to rear for release in Fautleroy Creek. Over the next four-plus months, Phil worked with teachers and tank volunteers to keep tank equipment up and running and water quality optimum for coho juveniles.

Over four weeks, starting in late April, stalwart release volunteers Dennis Hinton, Pete Draughon, and Shannon Ninburg welcomed 764 students, 10 younger siblings, and 132 adults on 19 salmon releases. Dennis dipped fish, Pete looked out for safety, and Shannon directed chaperones and teams of students as they explored habitat in Fautleroy Park. Jack was point person for releases by the Fautleroy Children's Center and Taproot School. Many classes also came to the lower creek to see the fish ladder and engage in a question-and-answer session with volunteers before heading to nearby Lincoln Park to cap their day in the watershed.

Behind the scenes, Judy scheduled and coordinated with teachers, enlisted community volunteers to increase chaperone coverage, and rolled hundreds of posters for students to take home on release day. Jack again reared salmon for schools that lost a lot of fish and for two preschools without their own tanks.

To avoid undue wear and tear on sensitive habitat, we had to limit schools for the first time to no more than one busload of students (70) on release day and require one chaperone for every six students. For the most part, schools honored this request.

Phil and Judy continued to serve on the area-wide Salmon in the Schools steering committee. When the Friends of the Issaquah

Salmon Hatchery board decided to reduce its

involvement, the committee pulled back to serve schools just in Seattle, where Seattle Public Utilities provides support funding. Phil developed the program's logo and helped create the program's first website. Also, during this transition year, he filed for State Fish and Wildlife permits for all participating schools in Seattle/King County.



**Dennis Hinton and Pete Draughon check one of the two smolt traps installed by Steev Ward to monitor out-migration.**  
Photo courtesy Suchang Le



**Preschoolers from The Cove School, their parents, and younger siblings had a warm, dry day to leave their 73 fish in Fautleroy Creek.** Photo courtesy the school



For the first time in memory, the state warned program steering committees across Washington that the 2016 coho return to Puget Sound might be so low that hatcheries would not be able to provide eggs to schools in early 2017. After the committee scrambled over the summer to offer alternatives to schools, coho spawners *did* return in sufficient number to continue the program as usual. Also for the first time, we got adult carcasses from the Soos Creek Hatchery and secured freezer space so volunteer fish biologist Steev Ward could schedule in-class dissections with upper-elementary students at eight area schools. Teachers had the option to make fish prints the day before.

Year	Eggs to Schools	Released Fry	% of Fry From Eggs	Live Smolts Upper	Live Smolts Lower	Smolts to Salt	Spawners
2016	2,900	1,795	62	14	5	19	7
2015	2,700	1,700	63	2	33	35	0
2014	3,450	2,409	70			19	19
2013	2,800	1,987	71			141	3
2012	3,100	2,615	84	145	85	157	274
2011	2,900	2,027	70	147	36	36	14
2010	2,500	2,298	92		24		0
2009		1,936			18		18
2008		1,790			17		2
2007		2,276			24		89
2006		2,033			22		0
2005		1,138			10		48
2004		1,534			11		6
2003		1,254			37		4
2002		1,965					5
2001		1,050					167
2000		800					126



"Wally" waited in vain for a female. Photo courtesy Mark Ahlness

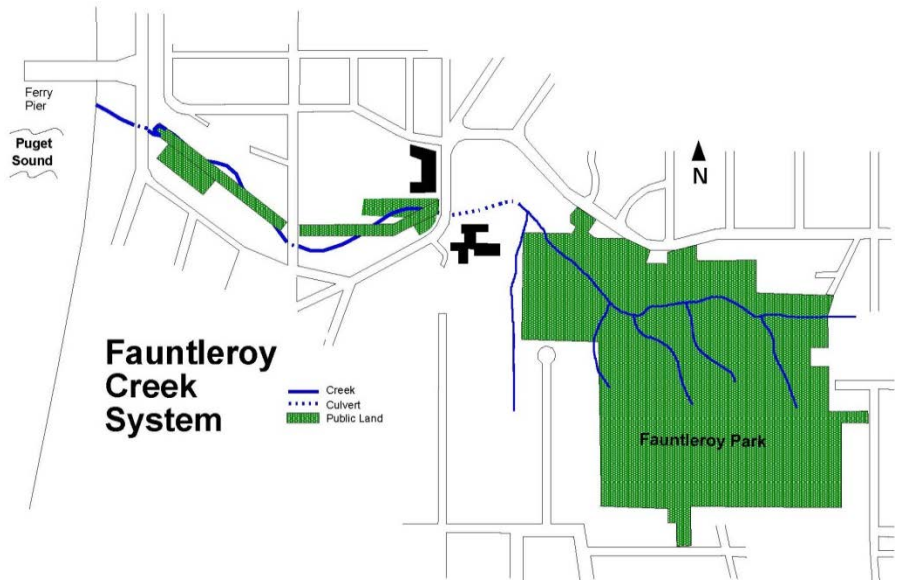
**SALMON WATCH.** The first coho spawner appeared at the mouth of the creek on Oct. 15, two weeks before the official start of this year's watch. Volunteers tallied five the next day due upstream of the fish ladder; any spawning amongst them took place out of watcher view. A gap of nearly three weeks prompted some watchers to get discouraged but two male spawners eventually came in and the latter (dubbed "Wally") lingered for several days, well into mid November. Dennis Hinton and Pete Draughon hosted a Sunday afternoon "open creek" that drew 50 visitors and volunteers tallied another 17 over the course of the watch.

## ABOUT THE WATERSHED

Fautleroy Park, Fautleroy Creek, and Fautleroy Cove are the dominant natural features of the residential community in West Seattle that shares their name.

**Fautleroy Park** is a 28-acre wooded ravine preserved as a natural public park. Its network of well-maintained trails provides access to explore and enjoy a remnant of the coastal forest ecosystem that once blanketed the region.

**Fautleroy Creek** originates in the park and drops 300 feet over its one-mile course to Fautleroy Cove in central Puget Sound. Springs and runoff from a 144-acre watershed sustain flow year round. Prior to installation of the city's storm-drain system, the natural, geologic watershed was approximately 493 acres.



# RESEARCH & EDUCATION



Teams of fifth graders from Arbor Heights Elementary reported during their release field trip about factors they had found affecting coho return to Puget Sound. Photo courtesy West Seattle Blog



Students at Taproot School chart dog-waste deposits as part of their study. Photo courtesy the school



Sixth graders used standard equipment and a simplified protocol to sample for macroinvertebrates. Photo courtesy the school

Students led the way in research again this year, looking to answer current as well as ongoing questions.

**WOE OUR COHO.** The state's prediction for another low year for coho return to Puget Sound prompted Angie Nall's class of fifth graders at Arbor Heights Elementary to explore why. They met with fish biologist Chapin Pier and aquatic ecologist Steve Damm from Seattle Public Utilities to pose their questions, then followed up by emailing more queries. While at the school, the scientists watched students test water quality in their salmon tank and feed the fry bloodworms.

**PET-WASTE STUDY.** K-5 students at Taproot School conducted the third "poop" study in Fauntleroy Park along a segment of main trail established when the study was first done in 2004 and used again in 2008. They counted and collected pet waste three times, finding a total of 37 specimens (15 in April, 17 in October, and 5 in July). A key finding: More people may be turning their dogs loose near the Barton entrance in wet weather than in nice weather, thus failing to scoop after their pets. The students also made new milk-jug dispensers for used plastic bags and designed and installed new "Bag it!" signs at each park entrance.

**ANNUAL MACRO RESEARCH.** In October, sixth-grade science students from Our Lady of Guadalupe School sampled the creek for macroinvertebrates and returned in May to collect data on stonefly exoskeletons in the lower creek.

Students sampled for macroinvertebrates in the upper and lower creek, finding only 1 and 7 respectively, compared with 3 and 35 in 2015. All were aquatic worms (able to live in healthy or polluted water) so students could not reach a conclusion about water quality. Because of a downed tree at one sampling site, they elected to sample farther upstream, which may have contributed to reduced abundance and diversity, as might recent heavy rain. Members of the watershed council and Jonathan Frodge, a limnologist with Seattle Public Utilities, heard the students' report at school.

Guadalupe students found just seven exoskeletons in the study area, a record low. Having no spawners in the lower creek in fall 2015 meant fewer nutrients would have been available to aquatic larva in the area. A key recommendation was to do the count earlier as stoneflies are now known to start leaving the creek in April. Science teacher Michael Stein-Ross expressed strong interest in using Fauntleroy Creek even more for problem-based science education to enhance student understanding of ecosystems and increase the school's positive impact on the community.

**CONDUCTIVITY STUDY.** Seattle Public Utilities returned to the creek this year with data loggers, installed at upper and lower sites to record water temperature and electrical conductivity 24/7. Led by Jonathan, this study will document any presence of dissolved solids, indicating sewage in the water.

# COMMUNICATION

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**IN THE MEDIA.** Watershed coverage on the *West Seattle Blog* included (in May) delivery of salmon eggs to the schools (January), salmon releases and vandalism of the upper smolt trap, (in September) replacement of stolen fish sculptures at the fish-ladder viewpoint, and (in October) the securing of coho eggs for another year of Salmon in the Schools and the annual salmon drumming. In September, the *Blog* also published an extensive article on threats to nearshore habitat.

Coverage in *Neighbors*, the Fauntleroy Community Association's quarterly newsletter, included (in March) combined-sewer overflow news and availability of the watershed annual report, (in June) Fauntleroy Park revegetation project, (in September) replacement of the creek culvert under 45th Ave. SW, and (in December) reports about the pet-waste study and fall spawning.

**WEBSITE.** Webmaster Chris Nack rebuilt the site after a menu failure, giving it a more modern look. Last year, it drew 1,500 visits; 16% were repeats, 77% were from desktops, and 19% from mobile devices. Most visitors were from Washington, including 555 from Seattle. Lesson plans and the Fauntleroy Park map were the most popular pages, followed by "about" pages for the park and creek.

# HONORABLE MENTION

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Many hands contributed to the work summarized in this report. We especially acknowledge

**Steve Winter**, volunteer hydrologist, for timely help to maintain proper flow at the salmon-release site.

**Phil Sweetland** for funding and replacing safety fences in the lower creek and for managing our grant monies over his many years as Fauntleroy Community Association treasurer.

**Sheryl Shapiro** for being our point of contact when we needed it with Seattle Public Utilities.

# COUNCIL BUSINESS

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According to council treasurer Dennis Hinton, we opened the year with \$1,505.47 in our money-market account at Washington Federal and closed it with \$1,545.75. This amount includes an individual donation of \$100, plus \$1.55 in interest income. We had expenses totaling \$61.17 for paper, photocopies, and laminating.

According to outgoing Fauntleroy Community Association treasurer Phil Sweetland, we received grant reimbursements during 2016 totaling \$4,513.67 for the Kilbourne Ravine Riparian and Buffer Project and by year's end had spent \$39,203.31 of our \$70,023 grant from the King Conservation District.

The council met on the second Thursday in January, March, May, September, and November. All meetings were open to any interested watershed resident. Members of the executive committee planned council meetings and took care of business between meetings. They were

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