
2008 Volunteer Salmon Watcher Program

**Lake Washington Watershed,
Puget Sound WRIA 8 Streams,
and Vashon Island**

March 2009



King County

Department of Natural Resources and Parks
Water and Land Resources Division

Science Section

King Street Center, KSC-NR-0600
201 South Jackson Street, Suite 600
Seattle, WA 98104
dnr.metrokc.gov/wlr

2008 Volunteer Salmon Watcher Program

Lake Washington Watershed, Puget Sound WRIA 8 Streams,
and Vashon Island

King County Water and Land Resources Division, in cooperation with:
Lake Washington/Cedar/Sammamish Watershed (WRIA 8) Forum
Bellevue Stream Team
Cities of Bothell, Kirkland, Redmond, Renton, Seattle, and Woodinville
Snohomish County Surface Water Management
Vashon-Maury Island Land Trust
With support from King Conservation District

Alternate Formats Available

206-296-7380 TTY Relay: 711



King County

Department of
Natural Resources and Parks

Water and Land Resources Division

201 South Jackson Street, Suite 600
Seattle, WA 98104

Summary

The purpose of the Salmon Watcher Program is to document the distribution of spawning adult salmon throughout the basin via an active public outreach and education program and subsequently consolidate all the information into a single resource (this report). These data can be used by policy makers and the public to improve how aquatic resources are managed, to protect salmon and trout species, and to enhance their habitat.

For the 2008 program, 109 volunteers surveyed 122 sites on 50 streams throughout the Lake Washington Watershed, other WRIA 8 streams in Central Puget Sound, and Vashon Island streams from August 23, 2008 to January 24, 2009. Because volunteers collect the data in this program, the agencies are able to obtain more information from far more locations than would otherwise be possible. However, data in this report should be used with the following factors in mind:

- (1) All volunteers have been trained, but volunteer expertise in locating and identifying fish species varied from very high to very low;
- (2) Coverage of streams by volunteers was by no means complete;
- (3) Volunteers view stream sites for relatively brief periods of time during the spawning season;
- (4) Determination of survey sites was based on volunteer availability and site accessibility (and many survey locations change from year to year, even on the same creek);
- (5) Adult fish can be difficult to see and therefore may have passed through reaches undetected; and
- (6) Volunteer data indicate only where minimum fish distributions extend to, but do not indicate reaches where fish are definitively absent (in other words, the data confirms fish presence, but does not confirm absence).

Volunteers observed the following species: sockeye, kokanee, coho, chinook, and chum salmon, as well as trout. The following results were compiled from volunteer observations: (1) Sockeye had the widest distribution throughout the survey area—they were seen in 6 Lake Washington Watershed basins. They were also seen in the greatest numbers (1,664 enumerated). 2008 is the first year since the program began when coho were not the most widely observed species; (2) Coho were seen in 5 Lake Washington Watershed basins including WRIA 8 Puget Sound streams, and they were also reported on Vashon; (3) Chinook were observed in 5 Lake Washington basins; (4) Kokanee observations were observed in 2 Lake Washington basins; and (5) chum were observed in one Vashon stream and one stream in WRIA 8 that drains to Puget Sound.

This report is published on the Internet and can be found using the hyperlinks on this web page:

<http://www.kingcounty.gov/environment/animalsAndPlants/salmon-and-trout/salmon-watchers/reports.aspx>.

Maps included in this report have been published on the Internet and can be found using the hyperlinks on this web page: <http://www.kingcounty.gov/environment/animalsAndPlants/salmon-and-trout/salmon-watchers/maps.aspx>.

The home page for the Salmon Watcher Program web site is here:

<http://www.kingcounty.gov/environment/animalsandplants/salmon-and-trout/salmon-watchers.aspx>.

Acknowledgements

Many thanks to all the dedicated volunteers for spending many hours in what is often cold and wet weather to collect the information for this report—some for the tenth year in a row, and sometimes without ever seeing a single fish. Without the volunteers there would be no data, no maps, and no report. They help make a positive difference here in the Northwest, not only by reporting fish species, but by acting as the eyes and ears of the streams, reporting stream blockages as well as illegal and other suspect activities. They are the stewards of resources that make the Pacific Northwest so special. A *huge* Thank You to all our great volunteers!

We also want to acknowledge the various individuals from the cooperating jurisdictions. Every year these folks meet and plan the program, organize and stage the training sessions, and invest lots of time attending to the questions of the volunteers. Thanks (in no particular order) to Laurie Devereaux, Sarah McCarthy, Holly McCracken, Debra Crawford, Peter Holte, Janet Geer, Betsy Adams, Micah Bonkowski, Gary Fink, Kollin Higgins, Hans Berge, Judy Blanco, Kit Paulsen, Wendy Collins, Suzi Wong-Swint, and Karren Gratt.

Jennifer Vanderhoof is the program's technical lead and also writes these annual reports.

Finally, we would like to thank those who partially sponsored our funding: Lake Washington/Cedar/Sammamish Watershed (WRIA 8) Forum through a King Conservation District grant.

Table of Contents

Summary	i
Acknowledgements	ii
Table of Contents	iii
List of Tables	iv
List of Figures	v
Introduction	1
Methods	3
Volunteer Training.....	3
Data Collection.....	4
Quality Assurance/Quality Control.....	5
Results and Discussion	6
Basin Summary	7
Big Bear Creek Basin.....	8
Cedar River Basin.....	11
East Lake Washington Basin.....	13
West Lake Sammamish Basin.....	15
Issaquah Creek Basin.....	16
North Lake Washington Tributaries	17
Sammamish River Tributaries.....	19
Vashon Island	21
Central Puget Sound.....	23
Volunteer Activity	25
Contact with Citizens	26
Time Spent by Volunteers.....	26
Limitations of Volunteer Data.....	26
Species Summary	28
Marked Fish and Juvenile Fish	29
Chinook Salmon.....	29
Sockeye Salmon	29
Coho Salmon	31
Kokanee	31
Chum.....	31
Trout and Unidentified Species.....	31
References	32
Appendix A	33
Data Collection Form used in 2008	33
Appendix B	35
Fautleroy Creek Salmon Watch 2008 Summary	35

List of Tables

Table 1. Volunteer observers for the 2008 Salmon Watcher Program.....	3
Table 2. Number of surveys per month during 2008 Salmon Watcher season.....	4
Table 3. Numbers of streams, sites, and volunteers involved in the 2008 spawning season.....	6
Table 4. Species enumerated within surveyed basins during the 2008 Salmon Watcher season.....	7
Table 5. Stream number, site ID, site location (listed in river miles, RM), survey dates, total number of surveys, number of volunteers, and years the sites were watched for each stream surveyed in the Big Bear Creek Basin for the 2008 spawning season.....	8
Table 6. Site ID, RM, and fish counts (live and dead) with dates seen at each stream surveyed in the Big Bear Creek Basin for the 2008 spawning season.	8
Table 7. Stream number, site ID, site location (listed in river miles, RM), survey dates, total number of surveys, number of volunteers, and years the sites were watched for each stream surveyed in the Cedar River Basin for the 2008 spawning season.	11
Table 8. Site ID, RM, and fish counts (live and dead) with dates seen at each stream surveyed in the Cedar River Basin for the 2008 spawning season.....	12
Table 9. Stream number, site ID, site location (listed in river miles, RM), survey dates, total number of surveys, number of volunteers, and years the sites were watched for each stream surveyed in the East Lake Washington Basin for the 2008 spawning season.	13
Table 10. Site ID, RM, and fish counts (live and dead) with dates seen at each stream surveyed in the East Lake Washington Basin for the 2008 spawning season.....	14
Table 11. Stream number, site ID, site location (listed in river miles, RM), survey dates, total number of surveys, number of volunteers, and years the sites were watched for each stream surveyed in the West Lake Sammamish Basin for the 2008 spawning season.	15
Table 12. Site ID, RM, and fish counts (live and dead) with dates seen at each stream surveyed in the West Lake Sammamish Basin for the 2008 spawning season.....	15
Table 13. Stream number, site ID, site location (listed in river miles, RM), survey dates, total number of surveys, number of volunteers, and years the sites were watched for each stream surveyed in the Issaquah Creek Basin for the 2008 spawning season.	16
Table 14. Site ID, RM, and fish counts (live and dead) with dates seen at each stream surveyed in the Issaquah Creek Basin for the 2008 spawning season.....	16
Table 15. Stream number, site ID, site location (listed in river miles, RM), survey dates, total number of surveys, number of volunteers, and years the sites were watched for each stream surveyed in the North Lake Washington Tributaries for the 2008 spawning season.	17
Table 16. Site ID, RM, and fish counts (live and dead) with dates seen at each stream surveyed in the North Lake Washington Tributaries for the 2008 spawning season.	18
Table 17. Stream number, site ID, site location (listed in river miles, RM), survey dates, total number of surveys, number of volunteers, and years the sites were watched for each stream surveyed in the Sammamish River Tributaries for the 2008 spawning season.....	19
Table 18. Site ID, RM, and fish counts (live and dead) with dates seen at each stream surveyed in the Sammamish River Tributaries for the 2008 spawning season.	20
Table 19. Stream number, site ID, site location (listed in river miles, RM), survey dates, total number of surveys, number of volunteers, and years the sites were watched for each stream surveyed on Vashon Island for the 2008 spawning season.	21
Table 20. Site ID, RM, and fish counts (live and dead) with dates seen at each stream surveyed on Vashon Island for the 2008 spawning season.	21
Table 21. Stream number, site ID, site location (listed in river miles, RM), survey dates, total number of surveys, number of volunteers, and years the sites were watched for each stream surveyed in the Central Puget Sound for the 2008 spawning season.....	23
Table 22. Site ID, RM, and fish counts (live and dead) with dates seen at each stream surveyed in Central Puget Sound for the 2008 spawning season.....	23

Table 23. Number of citizen contacts made by all Salmon Watcher volunteers in each of the surveyed basins.	26
Table 24. Number of hours spent by Salmon Watcher volunteers in each of the surveyed basins.	26
Table 25. Number of adipose fin clips as reported by volunteer Salmon Watchers. Streams are listed in order of number of adipose-clipped fish reported.	29
Table 26. Number of sockeye observed in Bear Creek and Cedar River basins from 1999 to 2008.	30

List of Figures

Figure 1. Basins surveyed for the 2008 Salmon Watcher Program	1
Figure 2. Sites surveyed by Salmon Watcher volunteers in 2008	4
Figure 3. Total number of new and returning volunteers for each year of the Salmon Watcher Program. .	6
Figure 4. Observations of salmonids in the Big Bear Creek Basin	9
Figure 5. Observations of salmonids in the Cedar River Basin	12
Figure 6. Observations of salmonids in the East Lake Washington and West Lake Sammamish Basins	14
Figure 7. Observations of salmonids in the Issaquah Creek Basin	16
Figure 8. Observations of salmonids in the North Lake Washington Tributaries	18
Figure 9. Observations of salmonids in the Sammamish River Tributaries.....	20
Figure 10. Observations of salmonids on Vashon Island	21
Figure 11. Observations of salmonids in Puget Sound Basins	23
Figure 12. Number of volunteers (defined as an individual, pair, or group) watching in the Lake Washington Watershed from 1997-2008.	25
Figure 13. Percentage of total fish observed in 2008 by volunteers in (a) the Lake Washington Watershed, (b) other WRIA 8 streams, and (c) Vashon Island.....	28
Figure 14. Distribution of chinook salmon in the program area based on Salmon Watcher observations .	29
Figure 15. Distribution of sockeye salmon in the program area based on Salmon Watcher observations	30
Figure 16. Distribution of coho salmon in the program area based on Salmon Watcher observations . . .	31
Figure 17. Distribution of kokanee in the program area based on Salmon Watcher observations	31

This page left intentionally blank.

Introduction

The Salmon Watcher Program is a volunteer program that originated in 1996 and whose purpose is to record observations of adult fall-spawning salmonids. Volunteers are recruited and trained to identify and watch for spawning salmon throughout Water Resource Inventory Area 8 (WRIA 8), which includes the Lake Washington Watershed and some streams leading to Puget Sound (Figure 1). Volunteers are also trained to watch on Vashon Island. Regional agencies who participated in the Salmon Watcher Program along with King County during the 2008 season include the Bellevue Stream Team, the cities of Bothell, Kirkland, Redmond, Renton, Seattle, and Woodinville, Snohomish County Surface Water Management, and the Vashon-Maury Island Land Trust.

The Salmon Watcher Program was initiated to expand on current efforts undertaken by resource agencies to document the distribution of spawning salmon in WRIA 8, including the Lake Washington Watershed. Basins that comprise the Lake Washington Watershed include Bear Creek, Cedar River, East Lake Washington, West Lake Sammamish, East Lake Sammamish, West Lake Sammamish, Issaquah Creek, and North Lake Washington (divided into the North Lake Washington tributaries and the Sammamish River tributaries). Other streams in WRIA 8 that were watched included Pipers Creek and Boeing Creek, both of which drain to Puget Sound. Vashon Island streams were observed as part of the Salmon Watcher Program for the eighth year in a row.

Salmon Watcher volunteers annually collect information on the presence of fall-spawning salmonids, including chinook, coho, sockeye, kokanee (resident form of sockeye), and chum salmon, as well as trout species. Data of this type become more important in the region as salmonids, such as Puget Sound chinook, are listed under the Endangered Species Act.

Because volunteers do this work, gathering this volume of data is accomplished with reduced agency resources, and the watersheds' residents can become involved and educated at the same time. Further, interactions with agency personnel foster positive relationships between the public and government agencies. With current budget and time constraints of agency personnel, much of the data collected in this effort would not be collected otherwise.

In addition to summaries of fish observed during the fall season, this 2008 report contains information and some statistics about the volunteers. It should be noted that this report summarizes data collected only by Salmon Watcher volunteers, and it is therefore in no way intended to be an exhaustive report of fish distribution in WRIA 8 or on Vashon. Other fish surveys are conducted annually by county, state, city, and federal agencies and non-profit organizations. For example, surveys have been conducted by volunteers or County staff to look specifically for kokanee and chinook; the results of these surveys are reported separately and are not included here.

Figure 1. Basins surveyed for the 2008 Salmon Watcher Program

(see <http://your.kingcounty.gov/dnrp/library/water-and-land/salmon/salmonwatcher/2008/figure1-surveyed-basins-map.pdf>).

This page left intentionally blank.

Methods

Volunteers were recruited during late summer and early fall of 2008 to observe fish in streams throughout the Lake Washington Watershed¹, other WRIA 8 streams, and streams on Vashon Island. The 108 volunteers who surveyed in the project area, plus 1 individual who observed outside the project area, are listed in Table 1 (totals: 109 individuals, pairs, or groups totaling 126 people).

Table 1. Volunteer observers for the 2008 Salmon Watcher Program.

Ann Aagaard	Matt Foulon	Sarah & Mark Phillips
Eric Adman	Adrienne Fox	Gary Pilawski
Staci Adman	Hon Cheung Fung	Perrilee & Dana Miller Pizzini
Walter & Ruth Albach	Adrian Gan	Blake Powers
Imogene Allen	Emilia & James Gan	Katherine Quinn-Dumovic
Jill & Murray Andrews	Laurie Gogic	Kelly Rau
Deron Artz	Su and Heather Gow	Grace Reamer
Russ Atkins	Doug Greaves	David L. Reitz
Kathleen Auld	Ron Green	Larry Reymann
Frank Backus	Patricia Gustafson	Marian Rice
Neil & Gayle Baldock	Shelly Hall	Amber Riser
Ed and Sheila Barnes	Katie Hart	Emma Rogers
Richard Barrett	Christine Henderson	Kathleen Ryan
Cathleen Barry	Martin Ho	Laura and Jim Shellooe
Judith Barry	Justin Iwen	Patty & Dave Shelton
Keith Bean	Nels Johnson	Henry Shirinyan
Shirley Biccum	Jeremy Jones	Gary Smith
Marilyn & Tom Blue	Barbara Jurgens	Jo-Ellen Smith
Mamie & Chuck Bolender	Pam Kelly	Eric Soshea
Dick Boyce	Tatsu Komada	Thomas Speer
Janet Broadus	Janusz Komorowski	Dan Spuckler
Bernice Carbaugh	Tommy Kraft	Nancy Stafford
Lynne Cardinal	Yvonne Kuperberg	Kirk Stauffer
Bridget & Margaret Cook	Debra Lehrberger	Mike Stults
James & Edna Dam	Lynne Lew	Lloyd & Joan Takasugi
Barbara Dickson	Mark & Jodi Linstead	Ross Taylor
Chuck Dolan	Ginny Lodwig	Kay Tokuda
Phil Doughty	Don Mackey	Terry Trimmingham
Brian Duchaine	Ken Mackey	Laurie Tucker
Amelia Dumovic	Lisa McClary	Mary Vincent
Bridget DuRuz	Jim McRoberts	Leslie Walker
Erin Duvall	Veleda & Jerry Asher Nelson	Mark Wilbert
Willie Elliot	Jane Neubauer	Maggie & Brian Windus
Gary & Bob Emerson	Yoshiko Otonari	Barbara AW Wright
Micheal Ess	Tammy Parise	John Zanatta
Mary Ellen Flanagan	Betty Peltzer	
Gail Fligstein	Connie Peterman	

Volunteer Training

Agency staff held a total of 6 classroom training sessions in 2008. Approximately 80 people attended a training sessions, and of those, 36 were returning volunteers from prior seasons. (Returning volunteers are

¹ In this document, the Lake Washington Watershed means all waters draining through the Ballard Locks, and the subbasins of the Lake Washington Watershed are referred to as basins (e.g., Issaquah Creek Basin).

not required to attend a training every year; they are encouraged to attend a session every other year.) All volunteers were taught to identify adult spawning salmon species with a slide presentation, which was placed on King County’s web site so volunteers could review it any time. During the training sessions, volunteers signed up for one or more sites to survey. They were given salmon identification materials, including color adult salmon identification cards and spawner timing charts. Volunteers were taught how to fill out and return data forms. They were also given phone numbers to call for situations that might arise in the field, including drainage issues, fish kills, and suspicion of pollutants.

Survey locations were prioritized by staff from each cooperating jurisdiction based on the need for information; however, sites were typically surveyed based on volunteer choice and availability. Volunteers were assigned to stream locations near their homes or customary walking places whenever possible. Volunteers were instructed to stay on public property (bridges, parks, etc.) unless they gained permission from the landowners to enter private property or the survey location was on their own property. Figure 2 shows all the sites watched by volunteers during the 2008 fall spawning season.

Figure 2. Sites surveyed by Salmon Watcher volunteers in 2008

See <http://your.kingcounty.gov/dnrp/library/water-and-land/salmon/salmonwatcher/2008/figure2-surveyed-sites-map.pdf>.

Data Collection

Surveys were conducted between August 23, 2008 to January 31, 2009, though most surveys began in September and were concluded in December (Table 2). Volunteers were asked to watch at their survey sites for at least 15 minutes, twice per week, and record any adult salmonids they observed. Actual survey frequency and duration varied greatly among volunteers.

Table 2. Number of surveys per month during 2008 Salmon Watcher season.

Month	Number of Surveys
August	19
September	386
October	1000
November	867
December	329
January	13

Volunteers counted all live and dead adult salmonids they observed. If a volunteer surveyed the same site more than one time on the same day, the highest fish count was used; however, often more than one volunteer surveyed the same site on a single day and their individual observations were used. Volunteers were asked to report only once those dead fish observed on more than one occasion and to note subsequent observations of the same fish in their comments. Juvenile fish were noted if present. Unidentified fish were counted and described when possible.

Volunteers were asked if they could tell whether the fish they saw had an adipose fin. Volunteers were asked to note how many citizens they came into contact with during their streamside duties. They were also asked if they noticed anything at their site that needed to be reported and whether they reported it. All data were recorded onto field data forms (Appendix A), which were mailed to Salmon Watcher staff on a monthly basis.

Volunteers were asked to fill out a “First Fish ID” form. This form had several multiple-choice questions about various key characteristics for identifying fish. Volunteers were asked to fill one of these forms out the first time they saw a new species and to turn the forms in with their data. The purpose of this form is

twofold: (1) to aid volunteers in identification by highlighting key characteristics, and (2) to aid Salmon Watcher staff in quality control.

Quality Assurance/Quality Control

Several means were used to assure that the data collected from volunteers were as accurate and consistent as possible during all phases of the program. Volunteers were provided with training by fish experts: data included in this report were collected either by returning volunteers or new volunteers who attended one of the training sessions for the 2008 season. Volunteers were provided laminated fish identification cards and a packet of training materials that included fish identification information. Duplicate as well as additional fish identification materials were placed on the Internet. Contact persons were made available to volunteers to answer questions and verify species identification when necessary; volunteers were encouraged to call upon these individuals if they were unsure of species identification.

Staff receiving the data sheets screened them for anything requiring immediate attention such as an unusual fish sighting or potential water quality problems. If an unusual fish sighting were noticed on a data form, agency staff contacted the volunteer to further inquire about what characteristics were used to identify the fish. The First Fish ID forms were intended to provide another means by which fish identifications could be checked and verified.

Data were input into a SQL server database housed at King County. The database has been designed to catch anomalies in data entry, such as dates not in the season. The database also poses questions when it detects that a count of a certain species has never been as high at that site in that month in previous years. These and other checks were built into the database software to increase accuracy of input data. Following data entry, the figures were verified at least once by agency staff to ensure accuracy, as well as catch anything that might need addressing. The data reviewers are familiar with the basins and the fish runs typical for the basins.

Because of the limitations of usage of these data (Limitations of Volunteer Data, page 23) and despite quality control measures, the data are intended to be used only to make preliminary evaluations of the distribution of spawning salmonids in the Lake Washington Watershed and Vashon streams.

Results and Discussion

In 2008, a total of 122 sites on 50 streams were surveyed by 109 volunteers (Table 3).

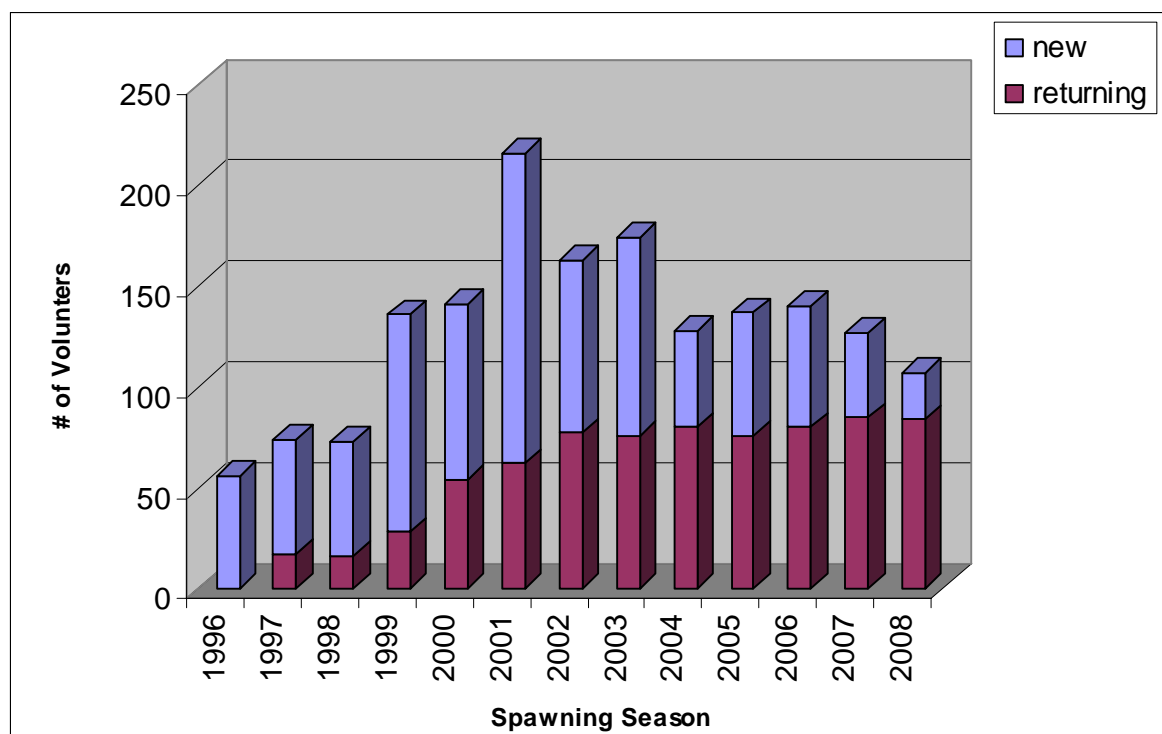
Table 3. Numbers of streams, sites, and volunteers involved in the 2008 spawning season.

Area	# streams	# sites	# volunteers
Lake Washington Watershed	42	110	97
Other WRIA 8 Streams	3	5	6
Vashon Island	3	5	5
Other (outside program area)	2	2	2
Total	50	122	109*

*Total is not 110 because one volunteer watched sites in the Lake Washington Watershed and outside the program area.

In 2008, 84 out of 107 volunteers (78.5 percent) watching in the official program area were returnees (Figure 3). The number of returning volunteers has remained consistent for several years; though because the total number of participants was lower in 2007 and again in 2008, the percentage of returning volunteers has been increasing. Of the 84 returnees, 2 pairs of volunteers have surveyed every year since the program began. Additionally, the 2 volunteers at sites outside the funded program areas were returnees.

Figure 3. Total number of new and returning volunteers for each year of the Salmon Watcher Program².



² Note that volunteers in 2001 were from a larger geographic area. For further discussion, please see "Volunteer Activity" on page 23.

Basin Summary

For the 2008 spawning season, chinook were reported in the greatest numbers in Bear Creek Basin (Table 4). Sockeye were reported in the largest numbers in the Cedar River Basin; however, their numbers continue to decline from observations in past years (see “Species Summary,” below). The most kokanee were observed in Little Bear Creek, one of the Sammamish River tributaries. Coho were seen in the most number of basins, but they were seen in very low numbers compared to previous years.

Table 4. Species enumerated within surveyed basins during the 2008 Salmon Watcher season.

Basin	Chinook	Chum	Coho	Kokanee	Sockeye	Trout	Unid. ¹	Basin Total
Big Bear Creek	83	-	16	-	80	6	29	205
Cedar River	21	-	13	-	796	-	10	840
East Lake Washington	59	-	19	-	350	15	26	469
West Lake Sammamish	-	-	-	20	-	-	-	20
Issaquah Creek	15	-	22	-	9	-	2	48
North Lake Washington Tribs.	-	-	-	-	14	-	6	20
Samm. River Tribs.	25	-	12	136	415	-	19	607
Vashon Island	-	1	2	-	-	-	2	5
Central Puget Sound - WRIA 8	-	26	-	-	-	-	7	33
Other ²	-	-	15	-	-	-	-	15
Species Total	203	27	99	156	1664	21	101	2271

¹ Unidentified species.

² Outside program area.

Detailed results for each basin in the program are presented below in basin groupings. Data include stream name and state stream numbers as assigned in the “stream catalog” by Williams et al. (1975), corresponding stream sites (with Site ID and river mile), dates of surveys, number of surveys, number of surveyors, and number of each species observed. The unique Site ID numbers that correspond with each survey site are used to distinguish the sites. A site, with its unique ID number, will always have the same data associated with it, regardless of refined river mile (RM) designations. River mile designations are generally derived from the stream catalog combined with measurements made using King County’s Geographic Information System. Additionally, a designated site may vary a few feet from year to year: (1) if a volunteer watches on the upstream side of a bridge versus the downstream side, (2) if a new volunteer happens to watch a few yards from where a previous watcher observed, or (3) if a volunteer moves a few feet to observe in an area of better spawning habitat or visibility.

Maps are presented for each basin in the program area and depict observations of sockeye, coho, chinook, kokanee, and chum identified during the survey. The streams surveyed in the Lake Washington Watershed were grouped into the following basins: Big Bear Creek, Cedar River, East Lake Washington, West Lake Sammamish, Issaquah Creek, and North Lake Washington (split into North Lake Washington tributaries and Sammamish River tributaries). Salmonids were observed in all basins surveyed in 2008. Trout and unidentified species were not mapped.

Big Bear Creek Basin

Volunteers surveyed 13 sites in 4 streams in the Big Bear Creek Basin in 2008 (Figure 2). From 1 to 7 sites were watched per stream, and the total number of surveys ranged from 1 to 34 per site (Table 6). Each site was monitored by 1 or 2 volunteers.

Table 5. Stream number, site ID, site location (listed in river miles, RM), survey dates, total number of surveys, number of volunteers³, and years the sites were watched for each stream surveyed in the Big Bear Creek Basin for the 2008 spawning season.

Stream	Stream #	Site ID	RM	Survey Dates	# Surveys	# Vols.	Years Watched
Big Bear Creek	080105	65	2.7	9/8 - 10/25	17	2	1997-2000, 2002-2008
		101	4.9	9/20 - 11/13	15	1	1997-2008
		89	6	8/30 - 12/14	32	1	1998-2008
		136	7.4	9/8 - 12/3	32	2	1998-2008
		529	8.7	10/5 - 11/24	10	1	2002, 2003, 2008
		106	10	10/4 - 11/29	6	1	1998, 2006-2008
		466	11.6	9/9 - 11/29	19	1	2001, 2006-2008
Trib. to Bear	-	90	0.2	11/1 - 12/14	14	1	1998-2008
Cottage Lake Cr.	080122	102	0.6	9/28 - 11/7	10	1	1997, 1998, 2001-2006, 2008
		50	2.2	9/8 - 11/17	34	2	1997, 1999-2008
		395	2.7	9/9 - 11/10	22	2	2002, 2003, 2008
		638	3.2	10/5	1	1	2008
Struve Creek	080131	364	0.3	9/13 - 12/27	17	1	2001-2003, 2008

Salmonids were found in 2 of the 4 streams observed in Big Bear Creek Basin (Table 7): Bear Creek and Cottage Lake Creek. Chinook, coho, and sockeye were all seen in Bear Creek and its primary tributary, Cottage Lake Creek.

Table 6. Site ID, RM, and fish counts (live and dead) with dates seen at each stream surveyed in the Big Bear Creek Basin for the 2008 spawning season.

Stream	Site ID	RM	Chinook	Coho	Kokanee	Sockeye	Unid.
Big Bear Creek	65	2.7	1 (10/8)	-	-	4 (10/8 - 10/14)	-
	101*	4.9	8 (9/28 - 10/22)	-	-	41 (9/28 - 10/25)	2 (10/8)
	89	6	15 (9/14 - 10/26)	5 (11/1 - 11/2)	-	8 (10/5 - 10/26)	-
	136	7.4	1 (9/22)	-	-	2 (10/14)	-
	529	8.7	-	-	-	-	-
	106	10	-	-	-	-	-
	466	11.6	-	10 (11/7 - 11/10)	-	-	-
Trib. to Bear	90	0.2	-	-	-	-	-
Cottage Lake Cr.	102	0.6	-	-	-	9 (9/28 - 10/11)	-
	50*	2.2	30 (9/21 - 10/16)	1 (10/9)	-	13 (9/21 - 11/1)	4 (10/4 - 10/8)
	395	2.7	28 (9/21 - 10/17)	-	-	3 (11/3 - 11/10)	-
	638	3.2	-	-	-	-	-
Struve Creek	364	0.3	-	-	-	-	-

*Trout also observed at this location.

³ "Volunteer," when used in this context, is defined as an individual, pair, or group of people who observed a stream site for adult spawning salmonids at a given time on a given date.

The observations of sockeye, coho, and chinook in the Big Bear Creek Basin determined from volunteer surveys are shown in Figure 4.

Figure 4. Observations of salmonids in the Big Bear Creek Basin

See <http://your.kingcounty.gov/dnrp/library/water-and-land/salmon/salmonwatcher/2008/figure4-big-bear-salmonids-map.pdf>.

This page left intentionally blank.

Cedar River Basin

Volunteers surveyed 19 sites in 7 streams in the Cedar River Basin in 2008 (Figure 2). From 1 to 5 sites were watched per stream, and the total number of surveys ranged from 3 to 60 per site (Table 7). Each site was monitored by 1 or 2 volunteers.

Table 7. Stream number, site ID, site location (listed in river miles, RM), survey dates, total number of surveys, number of volunteers, and years the sites were watched for each stream surveyed in the Cedar River Basin for the 2008 spawning season.

Stream	Stream #	Site ID	RM	Survey Dates	# Surveys	# Vols.	Years Watched
Cedar River (Cavanaugh Pond)	080299	201	1.3	9/7 - 12/7	15	1	2001, 2005, 2007, 2008
		205	2.9	9/10 - 11/29	13	1	1999, 2001, 2005-2008
		555	6.2	9/13 - 9/27	3	1	2008
		139	6.4	10/29 - 1/24/09	23	1	1997-2008
		613	19.7	8/23 - 12/4	21	1	2005-2008
C.R. Side Channel	-	557	0.15	8/23 - 12/12	43	2	2003, 2005- 2008
John's Creek	-	591	0	10/4 - 11/24	6	1	2005-2008
Kennydale Creek	-	590	0.1	10/4 - 11/8	5	1	2005, 2007, 2008
Rock Creek	080338	410	0.2	10/7 - 12/10	42	1	2001-2008
		154	0.4	10/7 - 11/14	11	1	1999-2008
		363	1.2	10/2 - 12/4	9	1	2001, 2002, 2008
		49	1.3	8/27 - 12/4	27	2	1998-2008
		437	1.6	8/27 - 12/4	16	1	2000, 2005, 2006, 2008
Taylor Creek*	080320	588	0.37	9/26 - 12/13	60	2	2004-2008
		596	0.5	10/7 - 12/10	42	1	2004-2008
		129	1.2	10/7 - 11/14	11	1	1998-2008
		71	1.8	8/23 - 12/5	31	2	1998-2008
		126	2.4	10/7 - 11/14	11	1	1998, 2001-2008
Walsh Lake Div.	080341	460	0.1	8/23 - 12/4	22	1	2003, 2005-2008

*Taylor Creek, a tributary to the Cedar River, not to be confused with the Taylor Creek that is a tributary to Lake Washington in the City of Seattle.

Chinook and sockeye were once again observed at the most upstream location watched in the Cedar River: at river mile 19.7, the train trestle at Big Bend Natural Area (Table 8). Walsh Lake Diversion was the only other stream chinook were observed by volunteers in the Cedar Basin, and it was the only location coho were reported. Sockeye were seen in six of the seven streams surveyed in the basin. No adult salmon were reported in Kennydale Creek, which was only observed 5 times during the season.

Table 8. Site ID, RM, and fish counts (live and dead) with dates seen at each stream surveyed in the Cedar River Basin for the 2008 spawning season.

Stream	Site ID	RM	Chinook	Coho	Sockeye	Unidentified
Cedar River (Cavanaugh Pond)	201	1.3	1 (10/18)	-	330 (9/27 - 12/7)	-
	205	2.9	-	-	20 (9/28 - 11/7)	-
	555	6.2	-	-	3 (9/20 - 9/20)	-
	139	6.4	-	-	52 (11/30 - 12/23)	-
	613	19.7	16 (9/21 - 10/16)	-	303 (9/21 - 11/6)	-
C.R. Side Channel	557	0.15	-	-	3 (10/16 - 11/6)	1 (10/17)
John's Creek	591	0	-	-	1 (11/24)	1 (10/15)
Kennydale Creek	590	0.1	-	-	-	-
Rock Creek	410	0.2	-	-	1 (10/7)	-
	154	0.4	-	-	-	-
	363	1.2	-	-	-	-
	49	1.3	-	-	-	-
	437	1.6	-	-	-	-
Taylor Creek	588	0.37	-	-	1 (10/27)	6 (10/17 - 10/17)
	596	0.5	-	-	60 (10/8 - 11/5)	-
	129	1.2	-	-	-	-
	71	1.8	-	-	-	-
	126	2.4	-	-	-	-
Walsh Lake Diversion	460	0.1	4 (10/28 - 11/21)	13 (11/10 - 12/4)	22 (10/16 - 11/10)	2 (11/21 - 12/4)

The observations of sockeye, chinook, and coho in the Cedar River Basin determined from volunteer surveys are shown in Figure 5.

Figure 5. Observations of salmonids in the Cedar River Basin

See <http://your.kingcounty.gov/dnrp/library/water-and-land/salmon/salmonwatcher/2008/figure5-cedar-river-salmonids-map.pdf>.

East Lake Washington Basin

Volunteers surveyed 30 sites in 12 streams and 4 beach sites in the East Lake Washington Basin in 2008 (Figure 2). From 1 to 6 sites were watched per stream, and the total number of surveys ranged from 3 to 130 per site (Table 9). Each site was monitored by 1 to 6 volunteers.

Table 9. Stream number, site ID, site location (listed in river miles, RM), survey dates, total number of surveys, number of volunteers, and years the sites were watched for each stream surveyed in the East Lake Washington Basin for the 2008 spawning season.

Stream	Stream #	Site ID	RM	Survey Dates	# Surveys	# Vols.	Years Watched
Coal Creek	080268	440	0.1	10/1 - 12/8	23	1	2001-2004, 2008
		439	0.6	10/2 - 11/28	18	1	2001-2005, 2008
		46	0.8	10/5 - 12/9	24	1	1997- 2005, 2008
		441	2	10/1 - 12/31	34	1	2001- 2008
		442	2.1	9/16 - 12/31	85	5	2001-2008
Cochran Springs Creek	080253	197	0.15	11/1 - 12/28	16	1	2000, 2005, 2006, 2008
East Creek	-	514	0.2	9/12 - 12/6	22	1	2003, 2005-2008
Forbes Creek	080242	194	0.9	10/1 - 11/26	8	1	2000-2002, 2008
Kelsey Creek	080259	13	2	8/31 - 12/31	40	2	1997- 2008
		124	2.4	8/29 - 12/11	32	2	1997- 2008
		120	3	9/12 - 12/1	25	2	1997- 2008
		216	4.5	9/18 - 10/30	13	1	1999, 2001, 2002, 2004, 2007, 2008
		586	4.9	9/13 - 12/13	23	1	2004-2008
		45	5	9/13 - 11/29	24	1	1997-2000, 2003, 2006-2008
Lake Wa. Beach	080028	76	30.5	9/17 - 9/28	4	1	1997, 1998, 2003, 2004, 2007, 2008
		130	32.4	10/4 - 1/31/09	24	1	1998, 2007, 2008
		51	35.9	9/12 - 12/8	42	1	1998, 2007, 2008
		306	63.6	9/17 - 10/6	3	1	1997, 2008
May Creek	080282	208	0.2	9/6 - 12/17	31	2	2001- 2008
		432	0.5	9/6 - 12/17	24	1	2000, 2004-2008
Mercer Slough	080259	445	1.6	8/31 - 12/31	130	6	2001, 2003-2008
Richards Creek	080261	75	0.4	8/29 - 12/11	26	1	1998-2000, 2007, 2008
		27	0.7	8/29 - 12/11	68	3	1997-2008
		80	1.6	9/17 - 12/9	30	2	1998, 2002-2008
Sears Creek	-	48	0	11/1 - 12/28	16	1	2002-2004, 2006-2008
Sturtevant Creek	080260	117	0.25	10/6 - 12/26	24	1	1997-1999, 2001-2008
Valley Creek	080266	221	0.7	9/15 - 12/17	27	1	1999-2008
West Trib. Kelsey Cr.	080264	116	0.25	9/12 - 12/15	71	5	1998, 1999, 2001-2008
		506	0.9	8/30 - 12/17	30	2	2002-2008
		73	1.1	9/30 - 12/15	11	1	1998, 2000, 2004-2008

Salmonids were found in 6 of the 12 streams surveyed in 2008 and also at one Lake Washington beach (Table 10). Chinook were seen in Kelsey Creek, Mercer Slough, West Trib. Kelsey Creek, and Richards Creek, all of which are part of the same Kelsey Creek system. Chinook were also seen in May Creek. Coho were reported at one Lake Washington Beach site, as were sockeye and fish of unidentified species. Aside from the beach, coho were seen in only two streams in low numbers, and sockeye were seen in only May Creek and Mercer Slough. Coho were the only species observed in Coal Creek. No fish were observed in Cochran Springs, East, Forbes, Sears, Sturtevant, or Valley creeks.

Note that coho can be very difficult to identify. Chinook in Kelsey Creek are often very red in color and the same size as coho therefore easily misidentified as coho. Coho's low numbers in this system combined with their very skittish behavior and tendency to show up in bad weather and late in the season makes a volunteer's chances of seeing coho in Kelsey Creek rather slim.

Table 10. Site ID, RM, and fish counts (live and dead) with dates seen at each stream surveyed in the East Lake Washington Basin for the 2008 spawning season.

Stream	Site ID	RM	Chinook	Coho	Sockeye	Unid.
Coal Creek	440	0.1	-	-	-	-
	439	0.6	-	8 (11/17 - 11/28)	-	-
	46	0.8	-	-	-	-
	441	2	-	-	-	-
	442	2.1	-	3 (11/15 - 11/16)	-	-
Cochran Springs Creek	197	0.15	-	-	-	-
East Creek	514	0.2	-	-	-	-
Forbes Creek	194	0.9	-	-	-	-
Kelsey Creek	13	2	4 (9/21 - 10/8)	-	-	3 (9/21 - 10/21)
	124*	2.4	-	-	-	4 (10/19 - 12/11)
	120	3	5 (9/24 - 10/4)	-	-	-
	216	4.5	-	-	-	-
	586	4.9	-	-	-	-
	45	5	-	-	-	-
Lake Wa. Beach	76	30.5	-	-	-	-
	130	32.4	-	-	-	-
	51	35.9	-	2 (11/7)	3 (11/26 - 11/27)	8 (9/22 - 12/6)
	306	63.6	-	-	-	-
May Creek	208*	0.2	-	2 (10/31 - 11/10)	204 (10/7 - 11/19)	-
	432	0.5	8 (9/22 - 11/6)	4 (10/20 - 10/31)	140 (10/4 - 11/18)	-
Mercer Slough	445	1.6	16 (10/1 - 10/29)	-	3 (10/10 - 10/30)	4 (9/21 - 10/22)
Richards Creek	75	0.4	5 (10/16 - 10/23)	-	-	1 (11/1)
	27*	0.7	-	-	-	-
	80	1.6	-	-	-	-
Sears Creek	48	0	-	-	-	-
Sturtevant Creek	117	0.25	-	-	-	-
Valley Creek	221	0.7	-	-	-	-
West Trib. Kelsey Cr.	116	0.25	21 (9/24 - 10/29)	-	-	6 (9/24 - 11/23)
	506	0.9	-	-	-	-
	73	1.1	-	-	-	-

*Trout also observed at this location.

The observations of sockeye, chinook, and coho in the East Lake Washington Basin determined from volunteer surveys are shown in Figure 6.

Figure 6. Observations of salmonids in the East Lake Washington and West Lake Sammamish Basins

See <http://your.kingcounty.gov/dnr/library/water-and-land/salmon/salmonwatcher/2008/figure6-e-lk-washington-sammamish-map.pdf>.

West Lake Sammamish Basin

Volunteers surveyed 5 sites on 2 streams in the West Lake Sammamish Basin in 2008 (Table 11). From 7 to 30 surveys were conducted per site. Each site was monitored by 1 volunteer.

Table 11. Stream number, site ID, site location (listed in river miles, RM), survey dates, total number of surveys, number of volunteers, and years the sites were watched for each stream surveyed in the West Lake Sammamish Basin for the 2008 spawning season.

Stream	Stream #	Site ID	RM	Survey Dates	# Surveys	# Vols.	Years Watched
Idylwood Cr.	080143	423	0.1	10/8 - 12/4	13	1	2000-2008
		599	0.2	10/1 - 11/22	10	1	2006, 2008
Lewis Creek	080162	327	0.1	9/15 - 12/2	18	1	1997, 2001-2008
		598	0.4	11/7 - 12/31	30	1	2004-2008
		283	0.5	11/7 - 11/29	7	1	1999, 2001-2008

Kokanee were observed at one site in Lewis Creek (Table 12). No fish were observed in Idylwood Creek. Observations of kokanee in the West Lake Sammamish Basin determined from volunteer surveys are shown above in Figure 6, “Observations of Salmonids in the East Lake Washington and West Lake Sammamish Basins.”

Table 12. Site ID, RM, and fish counts (live and dead) with dates seen at each stream surveyed in the West Lake Sammamish Basin for the 2008 spawning season.

Stream	Site ID	RM	Kokanee	Unidentified
Idylwood Cr.	423	0.1	-	-
	599	0.2	-	-
Lewis Creek	327	0.1	-	-
	598	0.4	20 (11/9 - 11/24)	-
	283	0.5	-	-

Issaquah Creek Basin

Volunteers surveyed 5 sites in 4 streams in Issaquah Creek Basin in 2008 (Figure 2). The total number of surveys ranged from 7 to 42 per site (Table 13). Each site was monitored by 1 or 2 volunteers.

Table 13. Stream number, site ID, site location (listed in river miles, RM), survey dates, total number of surveys, number of volunteers, and years the sites were watched for each stream surveyed in the Issaquah Creek Basin for the 2008 spawning season.

Stream	Stream #	Site ID	RM	Survey Dates	# Surveys	# Vols.	Years Watched
Carey Creek	080218	635	1.7	10/16 - 12/24	42	2	2007, 2008
E. Fork Issaquah Creek	080183	637	0.4	9/23 - 12/7	16	1	2007, 2008
		6	3.2	10/2 - 12/15	7	1	1997, 1999-2002, 2006, 2008
Issaquah Creek	080178	52	5.8	9/12 - 12/8	21	1	1998-2000, 2003-2008
Tibbetts Creek	080169	108	0.3	9/15 - 12/2	18	1	1998, 1999, 2000, 2004, 2008

In 2008, coho were reported in Carey Creek for the first time by volunteers since 1996 (Table 14). Chinook were the only species reported in Issaquah Creek, and these were seen well upstream of the hatchery. Chinook, coho, and sockeye were reported in East Fork Issaquah Creek. No adult salmon were reported in Tibbetts Creek.

Table 14. Site ID, RM, and fish counts (live and dead) with dates seen at each stream surveyed in the Issaquah Creek Basin for the 2008 spawning season.

Stream	Site ID	RM	Chinook	Coho	Sockeye	Unid.
Carey Creek	635	1.7	-	10 (11/11 - 11/30)	-	-
E. Fork Issaquah Creek	637	0.4	12 (9/30 - 10/15)	12 (11/1 - 11/27)	9 (10/12 - 11/11)	2 (10/7)
	6	3.2	-	-	-	-
Issaquah Creek	52	5.8	3 (10/3 - 10/10)	-	-	-
Tibbetts Creek	108	0.3	-	-	-	-

The distributions of chinook, coho, and sockeye in the Issaquah Creek Basin determined from volunteer observations are shown in Figure 7.

Figure 7. Observations of salmonids in the Issaquah Creek Basin

See <http://your.kingcounty.gov/dnrp/library/water-and-land/salmon/salmonwatcher/2008/figure7-issaquah-creek-salmonids.pdf>.

North Lake Washington Tributaries

The North Lake Washington Tributaries are those streams flowing into the north end of Lake Washington (e.g., McAleer, and Thornton creeks, the Sammamish River). Volunteers surveyed 20 sites in 8 streams in 2008 (Figure 2). From 1 to 6 sites were watched per stream, and the total number of surveys ranged from 4 to 30 per site (Table 15). Each site was monitored by 1 or 2 volunteers.

Table 15. Stream number, site ID, site location (listed in river miles, RM), survey dates, total number of surveys, number of volunteers, and years the sites were watched for each stream surveyed in the North Lake Washington Tributaries for the 2008 spawning season.

Stream	Stream #	Site ID	RM	Survey Dates	# Surveys	# Vols.	Years Watched
Juanita Creek	080230	411	0.7	10/7 - 11/30	7	1	2000, 2004-2008
		196	1.4	10/2 - 12/22	27	1	2000-2002, 2008
Lyon Creek	-	427	0	9/1 - 10/27	7	1	2000, 2003-2005, 2008
McAleer Creek	080049	144	0.3	9/28 - 11/30	4	1	1997, 2001-2008
		498	0.8	10/7 - 11/30	7	1	2001-2008
		266	0.8	10/4 - 11/30	10	2	1999- 2008
		56	1.1	9/21 - 11/30	12	2	1997-2006, 2008
		314	1.6	9/21 - 11/30	8	2	1997, 2000- 2006, 2008
		315	2.1	9/21 - 11/30	7	1	1997, 2001- 2006, 2008
Peters Creek	080104	452	0.5	10/4 - 12/13	15	1	2002- 2008
S. Fk. Thornton Cr.	080033	192	0.7	10/5 - 11/30	11	1	1999-2004, 2006-2008
		527	1.2	9/22 - 12/22	30	2	2002-2008
Thornton Creek	080030	183	0.1	9/22 - 12/23	28	2	1997, 2000-2008
		184	0.2	10/4 - 11/15	9	1	1999-2003, 2006-2008
		91	0.3	10/3 - 11/30	14	1	1998-2000, 2003, 2008
		186	0.9	10/2 - 11/26	13	1	1997, 1999-2002, 2006-2008
		386	1.1	9/25 - 12/20	19	1	2002, 2005, 2007, 2008
		528	2.8	9/24 - 12/22	27	1	2002- 2008
Trib 0141 to Sammamish River	080141	352	0.2	9/20 - 12/6	22	1	1999-2001, 2004, 2005, 2007, 2008
Woodin Creek	-	228	0.3	9/21 - 12/13	10	1	1999, 2002, 2003, 2006-2008

Salmonids were found in 3 of the 8 streams surveyed in the North Lake Washington Tributaries (Table 16). No chinook or coho were observed in any creek in this basin. Sockeye were observed in McAleer Creek. A single fish each was reported in Juanita Creek and Thornton Creek, and neither were identified to species. No salmonids were seen in Peters Creek, South Fork Thornton Creek, Woodin Creek, or a tributary to the Sammamish River.

Table 16. Site ID, RM, and fish counts (live and dead) with dates seen at each stream surveyed in the North Lake Washington Tributaries for the 2008 spawning season.

Stream	Site ID	RM	Chinook	Coho	Sockeye	Unid.
Juanita Creek	411	0.7	-	-	-	-
	196	1.4	-	-	-	1 (11/1)
Lyon Creek	427	0	-	-	-	-
McAleer Creek	144	0.3	-	-	-	1 (11/2)
	498	0.8	-	-	14 (11/2 - 11/9)	3 (10/26)
	266	0.8	-	-	-	-
	56	1.1	-	-	-	-
	314	1.6	-	-	-	-
	315	2.1	-	-	-	-
Peters Creek	452	0.5	-	-	-	-
South Fk. Thornton Creek	192	0.7	-	-	-	-
	527	1.2	-	-	-	-
Thornton Creek	183	0.1	-	-	-	1 (10/23)
	184	0.2	-	-	-	-
	91	0.3	-	-	-	-
	186	0.9	-	-	-	-
	386	1.1	-	-	-	-
	528	2.8	-	-	-	-
Trib 0141 to Sammamish River	352	0.2	-	-	-	-
Woodin Creek	228	0.3	-	-	-	-

The distribution of sockeye in the North Lake Washington Tributaries determined from volunteer observations is shown in Figure 8.

Figure 8. Observations of salmonids in the North Lake Washington Tributaries

See <http://your.kingcounty.gov/dnrp/library/water-and-land/salmon/salmonwatcher/2008/figure8-n-lk-washington-salmonids-map.pdf>.

Sammamish River Tributaries

The Sammamish River Tributaries are those streams flowing into the Sammamish River from waters originating in Snohomish County (Little Bear, North, and Swamp creeks; Big Bear Creek is discussed separately above). Volunteers surveyed 18 sites on 4 Sammamish River tributaries in 2008 (Figure 2). From 1 to 10 sites were watched per stream, and the total number of surveys ranged from 2 to 40 per site (Table 17). Each site was monitored by 1 or 2 volunteers.

Table 17. Stream number, site ID, site location (listed in river miles, RM), survey dates, total number of surveys, number of volunteers, and years the sites were watched for each stream surveyed in the Sammamish River Tributaries for the 2008 spawning season.

Stream	Stream #	Site ID	RM	Survey Dates	# Surveys	# Vols.	Years Watched
Little Bear Creek	080080	114	0	9/10 - 12/19	31	2	1999, 2001, 2002, 2005-2008
		640	0.1	10/14 - 12/3	10	1	2008
		67	0.2	10/14 - 12/3	10	1	1997-1999, 2001- 2008
		175	0.3	9/21 - 12/13	10	1	1997, 2000, 2002, 2006-2008
		14	1.9	9/22 - 10/30	15	1	1999, 2000, 2002-2004, 2006-2008
Little Swamp Creek	080060	505	0.24	9/9 - 11/30	24	1	2002-2008
North Creek	080070	438	0.01	9/16 - 11/4	3	1	2000, 2003, 2004, 2006, 2008
		112	0.9	9/28 - 11/1	7	1	1998- 2008
		57*	0.95	9/23 - 12/20	40	2	1998, 2001, 2004- 2008
		408	1.05	9/29 - 11/1	7	1	2000-2008
		483	1.4	9/10 - 10/27	18	1	2002, 2007, 2008
		113	1.5	9/23 - 12/17	18	1	1998, 2000, 2001, 2003, 2006- 2008
		625	1.7	10/7 - 12/17	22	1	2007, 2008
		425	2.6	9/10 - 12/17	21	1	2006, 2008
		253	3	9/16 - 12/13	17	1	1997, 1999, 2000, 2001, 2006-2008
Swamp Creek	080059	34	0.3	9/9 - 11/30	35	2	1997, 1999, 2000, 2002-2008
		321	1.7	10/1 - 12/20	32	1	1997, 2001, 2007, 2008

*In 2004, site 408 was remapped; however, the river mile designations were not corrected. As a result, sites 57 and 408 have been numerically reversed since then. These numbers have now been corrected.

Salmonids were found in 3 of the 4 streams surveyed (Table 18). Chinook, coho, and sockeye were all observed in North Creek. Chinook, kokanee, and sockeye were reported in Little Bear Creek, as in 2007. However, professional surveyors found residual sockeye but no kokanee in Little Bear Creek, so it is very likely the kokanee reported by volunteers in Little Bear Creek were in many or most cases actually residual sockeye (for more information, see the sections on Sockeye and Kokanee below). The only fish reported in Swamp Creek was a single fish not identified to species; this was the first adult salmon observed in Swamp Creek by volunteer Salmon Watchers since 2003. No fish were observed in Little Swamp Creek.

Table 18. Site ID, RM, and fish counts (live and dead) with dates seen at each stream surveyed in the Sammamish River Tributaries for the 2008 spawning season.

Stream	Site ID	RM	Chinook	Coho	Kokanee	Sockeye	Unid.
Little Bear Creek	114	0	-	-	77 (10/30 - 11/9)	5 (10/30 - 11/1)	-
	640	0.1	-	-	43 (10/14 - 11/17)	14 (10/14 - 10/24)	-
	67	0.2	-	-	16 (10/14 - 11/9)	7 (10/14 - 11/1)	-
	175	0.3	-	-	-	2 (10/19 - 10/25)	2 (10/12 - 10/19)
	14	1.9	20 (9/22 - 10/17)	-	-	-	-
Little Swamp Creek	505	0.24	-	-	-	-	-
North Creek	438	0.01	-	-	-	-	-
	112	0.9	-	-	-	22 (10/5 - 10/21)	1 (11/1)
	57*	0.95	-	9 (10/13 - 11/3)	-	187 (10/6 - 11/17)	5 (10/4 - 11/15)
	408	1.05	2 (9/29)	2 (11/1)	-	25 (10/15 - 11/1)	-
	483	1.4	-	-	-	17 (10/16 - 10/27)	1 (10/19)
	113	1.5	-	1 (11/25)	-	20 (10/14 - 10/27)	6 (10/14 - 10/15)
	625	1.7	-	-	-	-	-
	425	2.6	-	-	-	116 (10/16 - 11/27)	3 (9/13 - 10/17)
	253	3	3 (9/28)	-	-	-	-
	553	3.6	-	-	-	-	-
Swamp Creek	34	0.3	-	-	-	-	-
	321	1.7	-	-	-	-	1 (11/19)

The distributions of chinook, coho, sockeye, and kokanee in the Sammamish River Tributaries determined from volunteer observations are shown in Figure 9.

Figure 9. Observations of salmonids in the Sammamish River Tributaries

See <http://your.kingcounty.gov/dnrp/library/water-and-land/salmon/salmonwatcher/2008/figure9-sammamish-river-salmonids-map.pdf>.

Vashon Island

Volunteers surveyed 6 sites in 4 streams on Vashon Island in 2008 (Figure 2). From 1 to 3 sites were watched per stream, and the total number of surveys ranged from 1 to 20 per site (Table 19). All sites were monitored by 1 or 2 volunteers each.

Table 19. Stream number, site ID, site location (listed in river miles, RM), survey dates, total number of surveys, number of volunteers, and years the sites were watched for each stream surveyed on Vashon Island for the 2008 spawning season.

Stream	Stream #	Site ID	RM	Survey Dates	# Surveys	# Vols.	Years Watched
Fisher Creek	-	485	0.1	11/18	1	1	2001-2003, 2005, 2007, 2008
Judd Creek	150129	492	0.25	11/9 - 1/10/09	21	1	2001-2003, 2005, 2006, 2008
Shinglemill Creek	150159	146	0	10/20 - 12/12	20	2	1998, 2001-2008
		147	0.2	10/20 - 12/12	20	2	1998, 2001-2004, 2008
		148	0.5	10/12 - 1/24/09	8	1	1998, 2001-2003, 2005, 2006, 2008

Salmonids were found in extremely low numbers in 2 of the 3 streams surveyed (Table 20). A single chum was observed in Fisher Creek. Two coho and two unidentified species were reported in Judd Creek. No fish were observed in Shinglemill Creek.

Table 20. Site ID, RM, and fish counts (live and dead) with dates seen at each stream surveyed on Vashon Island for the 2008 spawning season.

Stream	Site ID	RM	Chum	Coho	Unid.
Fisher Creek	485	0.1	1 (11/18)	-	-
Judd Creek	492	0.25	-	2 (11/9)	2 (11/25)
Shinglemill Creek	146	0	-	-	-
	147	0.2	-	-	-
	148	0.5	-	-	-

The distribution of chum and coho on Vashon Island determined from volunteer observations is shown in Figure 10.

Figure 10. Observations of salmonids on Vashon Island

See <http://your.kingcounty.gov/dnrp/library/water-and-land/salmon/salmonwatcher/2008/figure10-vashon-salmonids-map.pdf>.

This page left intentionally blank.

Central Puget Sound

Streams draining to Puget Sound that were surveyed during the 2008 Salmon Watcher season are both inside and outside WRIA 8 (Table 21). Those streams within WRIA 8 include Boeing Creek, Pipers Creek, and Venema Creek. Longfellow Creek, watched annually, is part of WRIA 9⁴. A total of 7 sites in 4 streams draining to Puget Sound were watched in 2008. All sites were monitored by a single volunteer.

Table 21. Stream number, site ID, site location (listed in river miles, RM), survey dates, total number of surveys, number of volunteers, and years the sites were watched for each stream surveyed in the Central Puget Sound for the 2008 spawning season.

Stream	Stream #	Site ID	RM	Survey Dates	# Surveys	# Vols.	Years Watched
Boeing Creek*	080017	436	0.1	10/16 - 12/11	6	1	2000-2008
Longfellow Creek	090360	179	0.8	10/26 - 12/7	6	1	1998-2008
Pipers Creek*	080023	70	0	10/4 - 12/12	15	1	1999-2005, 2007, 2008
		181	0.2	10/4 - 12/7	12	1	1999-2002, 2004-2008
		98	0.4	11/22	1	1	1998-2002, 2007, 2008
		99	0.53	10/9 - 12/16	19	1	1999, 2002-2004, 2008
Venema Creek*	-	383	0.02	10/4 - 12/29	18	1	2000, 2001, 2004-2008

*Streams within WRIA 8.

Adult salmon were seen in Pipers and Venema Creek (Table 22) (this discussion does not include Vashon streams; for discussion of Vashon Island streams, see section above). For the first time since 1998, no adult fish were seen in Longfellow Creek by volunteers. And for the first time since our Boeing Creek volunteer began reporting in 2000, no fish were seen in that creek either. Chum were observed at all but the most-upstream site in Pipers Creek. The only fish observed in Venema Creek was not identified to species. The observations of chum in the Central Puget Sound streams determined from volunteer surveys is shown in Figure 11.

Table 22. Site ID, RM, and fish counts (live and dead) with dates seen at each stream surveyed in Central Puget Sound for the 2008 spawning season.

Stream	Site ID	RM	Chum	Coho	Unidentified
Boeing Creek*	436	0.1	-	-	-
Longfellow Creek	179	0.8	-	-	-
Pipers Creek*	70	0	9 (11/16 - 12/6)	-	1 (11/23)
	181	0.2	12 (11/29 - 12/6)	-	5 (11/8 - 11/23)
	98	0.4	5 (11/22)	-	-
	99	0.53	-	-	-
Venema Creek*	383	0.02	-	-	1 (11/22)

*Streams within WRIA 8.

Figure 11. Observations of salmonids in Puget Sound basins.

See: <http://your.kingcounty.gov/dnrp/library/water-and-land/salmon/salmonwatcher/2008/figure11-puget-sound-tribs-salmonid-map.pdf>.

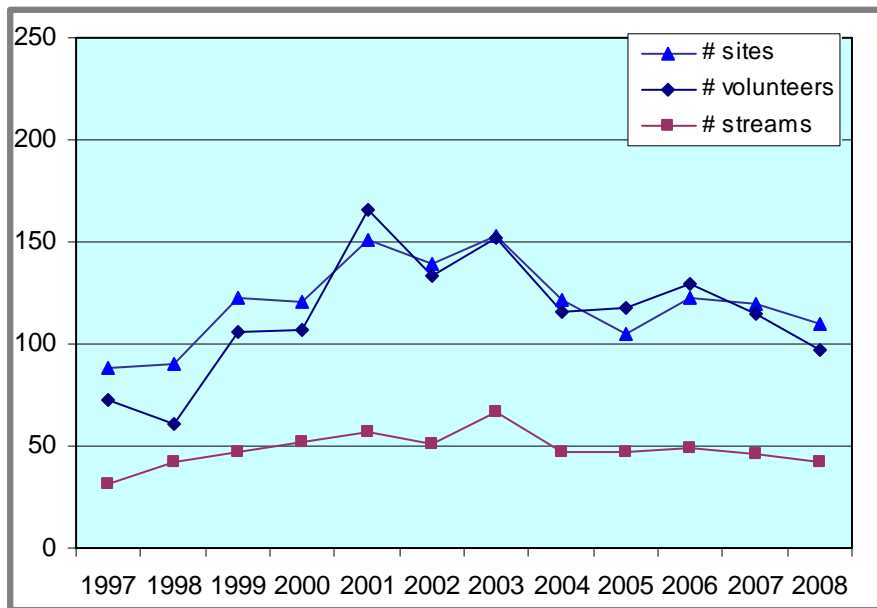
⁴ Fauntleroy Creek, a WRIA 9 stream that drains to Puget Sound, is also watched by volunteers; however, survey methods are different from those of this program. See Appendix B for a summary of salmonid observations at Fauntleroy Creek in 2007.

This page left intentionally blank.

Volunteer Activity

The trend in the number of volunteers participating in the Salmon Watcher Program has varied over the 13 years of the program (Figure 12; data for 1996 not cataloged). Many volunteers watch more than one site, and many sites have more than one volunteer watching at it. The last 5 years have been relatively consistent in terms of numbers of volunteers, sites, and streams in the program. However, the trend since 2006 has been decreased volunteer participation, mostly with new recruits. Reasons for this trend are unknown; however, as a result, recruitment efforts, which have gone unchanged since at least 2005, will be changed and increased for the 2009 season. Program partners have anecdotally reported drops in volunteer participation in other programs as well, so it may be that volunteerism is down as a whole.

Figure 12. Number of volunteers (defined as an individual, pair, or group) watching in the Lake Washington Watershed from 1997⁵-2008.



⁵ See previous Salmon Watcher annual reports for details on yearly participation.

Contact with Citizens

Volunteers were asked to keep track of how many citizens they came into contact with during their time by the streams. Salmon Watcher volunteers spoke with at least 671 citizens during the 2008 spawning season. Table 23 details the numbers of citizens who interacted with volunteers.

Table 23. Number of citizen contacts made by all Salmon Watcher volunteers in each of the surveyed basins.

Big Bear Creek	Cedar River	E. Lake Wash.	W. Lake Samm.	Issaquah Creek	N. Lake Wash.	Samm. River Tribs.	Vashon Island	Puget Sound
100	94	206	2	10	61	92	32	73

Time Spent by Volunteers

Salmon Watcher volunteers are asked to record the start and end times of each site visit. Those times are used to calculate the amount of time volunteers spend watching stream-side. Occasionally, some volunteers do not fill in that part of the data sheet. Additionally, some volunteers watched twice a day, and only one time period is included in these calculations. Time underestimates notwithstanding, Table 24 illustrates the approximate amount of time spent by volunteers in each basin. More than 860 hours were volunteered during the 2008 Salmon Watcher season.

Table 24. Number of hours spent by Salmon Watcher volunteers in each of the surveyed basins.

Big Bear Creek	Cedar River	E. Lake Wash.	W. Lake Samm.	Issaquah Creek	N. Lake Wash.	Samm. River Tribs.	Vashon	Puget Sound
76.72	176.43	315.58	15	30.05	99.12	94.93	23.02	27.98

Limitations of Volunteer Data

Individuals, citizen groups, non-profit organizations, and government agencies all use data from the Salmon Watcher Program for various reasons (for an extensive list of reasons, please see the report from the 2000 Salmon Watcher season, Vanderhoof 2001). However, several qualifications must be kept in mind when reviewing the data in this report and especially when using the data for any purpose other than describing fish presence. The level of expertise of the volunteers varies widely: some volunteers have past experience identifying fish through professional or school training, recreational fishing, or personal interest. Other volunteers learned to identify salmon for the first time from the Salmon Watcher training session. For additional discussion on the limitations of volunteer data, please see previous reports (e.g., King County 2004).

Every year volunteers from previous years return and new volunteers enter the program who must learn to identify the different species of salmonids they might encounter in their assigned streams. In 2008, 78 percent of Lake Washington Watershed volunteers were returnees (see the beginning of the Results and

Discussion section above). The number of returning volunteers has remained somewhat consistent for the past 5 years; therefore, the level of accuracy has likely been relatively consistent during this time period.

Although training sessions are thorough, identification materials are provided, and technical experts are available for help with identification, some misidentifications will occur.

It is important to keep in mind that the absence of spawner sightings in a stream does not mean that spawning salmonids are not accessing that location. It does mean that fish were not seen by the volunteer at the site at the time of survey. Because of this important distinction and the other mentioned limitations of this type of survey, data in this report should be used only to indicate the presence of adult salmon at specific locations (species distribution). All other uses derived from the compilation of this data should be used cautiously and with the specific limitations of the data in mind. With very few exceptions, because most or all of these parameters are different for every stream surveyed from 1996 through 2008, comparisons of raw data likely would not yield valid information about changes in populations. Therefore, the best use for the fish data is in determining presence of fish and mapping fish distribution.

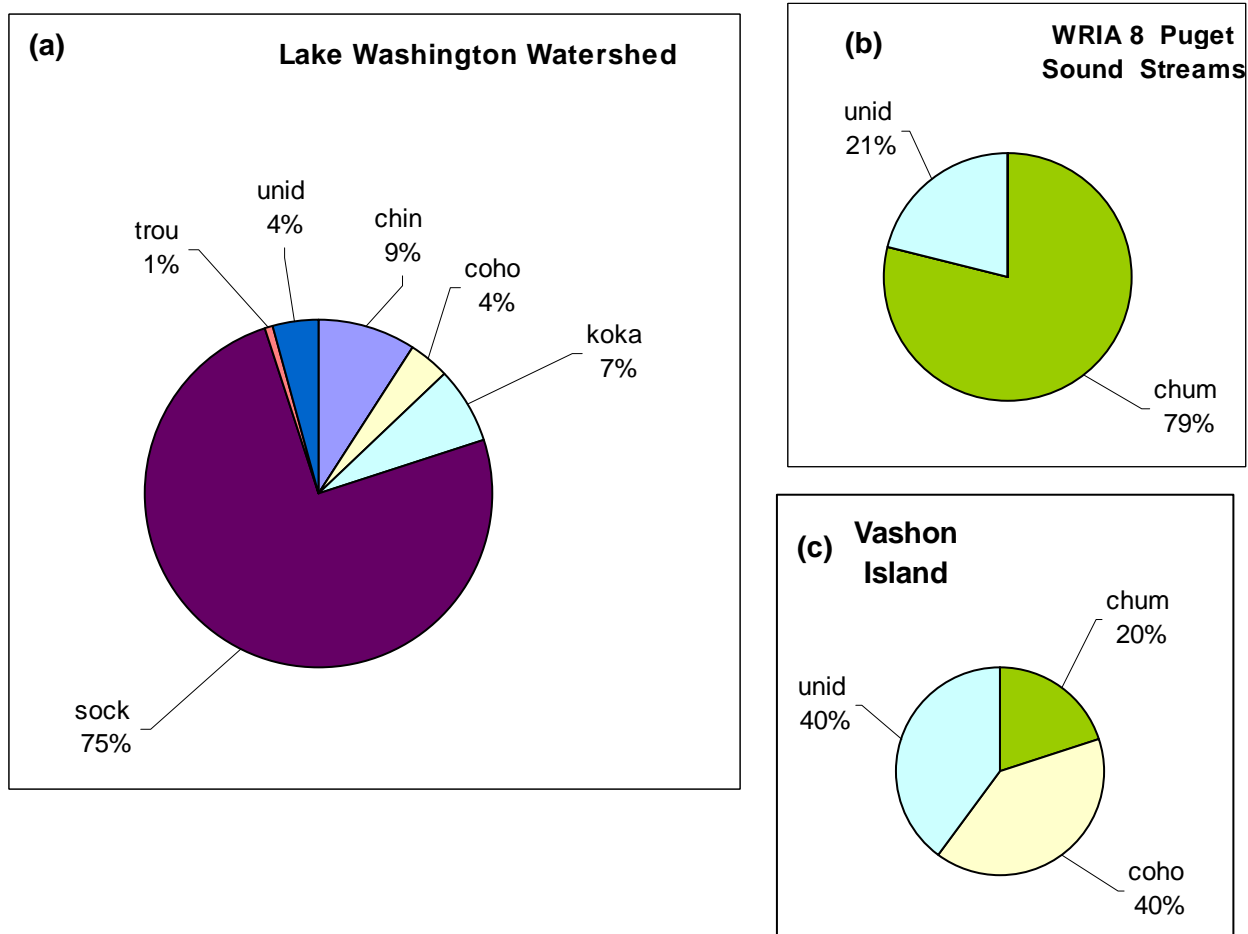
Species Summary

Salmon Watcher Program volunteers recorded observations of all salmonid fish located during their stationary surveys, including chinook, coho, chum, and sockeye salmon, kokanee, and trout (which may have been cutthroat or rainbow trout). The ratios of all fish observed, including unidentified fish, is depicted in Figure 13a for the Lake Washington Watershed, 13b for WRIA 8 streams that drain to Puget Sound, and 13c for Vashon Island.

Of the 48 streams in the study area surveyed in 2008, sockeye were found in 13 streams and at one Lake Washington beach. Coho were found in 10 streams and one beach site, chinook in 13 streams, kokanee were reported in 2 streams, and trout were reported in 5 streams. Sockeye was the most abundant species counted by volunteers in the Lake Washington Watershed, followed by chinook then kokanee (however, see discussion below, as some kokanee may have been residual sockeye). Chum were observed in 2 streams, including 1 on Vashon Island and 1 in Pipers Creek.

If a volunteer was unable to positively identify what species a fish was, the fish was tallied as “unidentified” (reporting a fish as unidentified was preferable to falsely identifying a species). Of the 2,256 total adult fish observed in the Lake Washington Watershed, Vashon Island, and other WRIA 8 streams in 2008, 101 were tallied as unidentified (4.5 percent). Unidentified adult salmonids were counted in 20 streams and one Lake Washington beach.

Figure 13. Percentage of total fish observed in 2008 by volunteers in (a) the Lake Washington Watershed, (b) other WRIA 8 streams, and (c) Vashon Island.



Marked Fish and Juvenile Fish

On the data forms, one column asked the volunteers to note the “# of fish without adipose.” Hatcheries in the Lake Washington Watershed remove the adipose fins of chinook and coho before they are released into the stream. Volunteers were instructed to focus on species identification first and foremost and only try to report on adipose fin clips when possible. Most volunteers did not fill in this column, or sometimes they noted they could not tell. Generally, water clarity must be excellent and the fish must be close and somewhat still in order to determine the presence of an adipose fin on a live fish.

No sockeye from hatcheries in the Lake Washington Watershed had their adipose fins clipped. However, volunteers reported 3 sockeye without adipose fins (Table 25). Because sockeye are too small to have their adipose fins clipped when they are released from hatcheries, their adipose fins remain intact. Therefore, if sockeye are reported with missing adipose fins, either the fish are sockeye with adipose fins that were difficult to see in the stream, or the fish were another species such as coho who were missing their adipose fins. The number of sockeye reported as being clipped in 2008 was very low (0.18 percent of all sockeye).

In some years, certain species of salmon are tagged for scientific research when they enter the Ballard Locks. Volunteers are asked to record when they see tagged fish, and they are asked to notify a staff member. In 2008, no fish were tagged, and no tagged fish were reported.

Volunteers made note of fry and/or juvenile fish in a total of 24 streams in 7 basins.

Table 25. Number of adipose fin clips as reported by volunteer Salmon Watchers. Streams are listed in order of number of adipose-clipped fish reported.

Stream	chinook	coho	sockeye*	unid.	total
Carey Creek		5			5
Cedar River	3				3
Cottage Lake Creek	10			1	11
East Fork Issaquah Creek	7	7	1	0	15
Issaquah Creek	3				3
Kelsey Creek	2				2
May Creek	3	1			4
Mercer Slough	9		2		11
Walsh Lake Diversion		5			5
West Trib. Kelsey Creek	1				1
Total	38	18	3	1	60

*See text for discussion about sockeye reported with adipose clips.

Chinook Salmon

Chinook were observed in 5 basins in the study area during the 2008 surveys (Figure 14). A total of 171 live fish and 32 carcasses were found in 13 streams throughout the Lake Washington Watershed. Streams in which chinook were reported include (in order of most to least fish seen): Cottage Lake Creek (58), Big Bear Creek (25), West Trib. Kelsey Creek (21), Little Bear Creek (20), Cedar River (17), Mercer Slough (16), East Fork Issaquah Creek (12), Kelsey Creek (9), May Creek (8), North Creek (5), Richards Creek (5), Walsh Lake Diversion (4), and Issaquah Creek (3).

Figure 14. Distribution of chinook salmon in the program area based on Salmon Watcher observations.

See: <http://your.kingcounty.gov/dnrp/library/water-and-land/salmon/salmonwatcher/2008/figure14-chinook-salmon-distribution-map.pdf>.

Sockeye Salmon

Sockeye were by far the most numerous fish counted by volunteers. Sockeye were observed in 6 basins (Figure 15). A total of 1,556 live fish and 108 carcasses were observed in 14 streams and one Lake Washington beach (in order of most to least fish seen): Cedar River (708), North Creek (387), May Creek (344), Taylor Creek (61), Big Bear Creek (55), Little Bear Creek (28), Cottage Lake Creek (25), Walsh Lake Diversion (22), McAleer Creek (14), East Fork Issaquah Creek (9), Cedar River Side Channel at Dorre Don (3), Lake Washington Beach (3), Mercer Slough (3), John's Creek (1), and Rock Creek (1).

“Residual sockeye” are those sockeye whose parents were sockeye, but during out-migration chose to remain in Lake Washington for some reason. When they return to their natal stream to spawn, they are smaller than normal ocean-going sockeye, and as such can be mistaken for kokanee. Four spawning seasons ago there was a near-record number of sockeye fry that were rearing in Lake Washington (Berge, H., pers. comm.). However, the ocean was not favorable for the fish that left the lake, and in 2008 the return of sockeye to Lake Washington was one of the worst on record. Sockeye that remained in Lake Washington fared much better than the ocean-migrants. Therefore, the absolute number of residual sockeye was much higher in 2008 than in other years. Professional fish biologists observed a large number of residual sockeye in North Creek and Little Bear Creek, as well as some in Bear Creek, Cottage Lake Creek, and May Creek. The kokanee reported in Little Bear Creek were in all likelihood actually residual sockeye (see Kokanee section below).

A very low number of sockeye were observed in 2007 and 2008. The largest numbers of sockeye in the Lake Washington Watershed are typically in the Cedar River Basin and the Bear Creek Basin. Table 26 presents sockeye numbers observed by volunteers back through 1999. These numbers should be viewed with caution: they are only presented to provide a general comparison of what has been seen by volunteers in this program. The numbers are not useful for making statistically valid comparisons of returns or population trends, because too many variables are not controlled. Variable watching conditions notwithstanding, Cavanaugh Pond, along the Cedar River, is separated out in Table 26 because it has been watched consistently by the same volunteers since the Salmon Watcher Program began, and in both 2007 and 2008 those volunteers recorded an unmistakably lower number of sockeye at that location.

Table 26. Number of sockeye observed in Bear Creek and Cedar River basins from 1999 to 2008.

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Bear Creek Basin fish	269	4,559	1,837	10,625	441	278	507	3,007	125	214
Bear Creek Basin hours	126.1	112.1	178.9	227.4	162.3	140.7	97.9	108.3	83.7	76.7
Bear Cr. Basin fish/hour	2.1	40.7	10.3	46.7	2.7	2.0	5.2	27.8	1.5	2.8
Cedar River Basin fish	3,952	12,713	7,827	13,254	5,675	5,298	3,734	4,381	2,413	840
Cedar River Basin hours	139.2	257.0	270.2	266.4	208.4	310.7	300.9	295.1	188.4	176.4
Cedar River fish/hour	28.4	49.5	29.0	49.8	27.2	17.1	12.4	14.8	12.8	4.8
Cavanaugh Pond fish/hour	50.0	167.5	29.1	84.8	37.9	28.8	13.7	16.8	2.4	2.2

Figure 15. Distribution of sockeye salmon in the program area based on Salmon Watcher observations

See <http://your.kingcounty.gov/dnrp/library/water-and-land/salmon/salmonwatcher/2008/figure15-sockeye-salmon-distribution-map.pdf>.

Coho Salmon

Coho were observed in 5 Lake Washington Watershed basins and on Vashon (Figure 16). A total of 89 live coho and 10 carcasses were reported in 8 streams and at one Lake Washington beach in the Lake Washington Watershed and in 1 stream on Vashon (in order of most to least fish seen): Big Bear Creek (15), trib 070272 to Tuck Creek (15), Walsh Lake Diversion (13), East Fork Issaquah Creek (12), North Creek (12), Coal Creek (11), Carey Creek (10), May Creek (6), Judd Creek (2), Lake Washington Beach (2), and Cottage Lake Creek (1).

Figure 16. Distribution of coho salmon in the program area based on Salmon Watcher observations.

See <http://your.kingcounty.gov/dnrp/library/water-and-land/salmon/salmonwatcher/2008/figure16-coho-salmon-distribution-map.pdf>.

Kokanee

Kokanee were observed in 2 basins (Figure 17). A total of 154 live fish and 2 carcasses were counted in 2 streams: Little Bear Creek (136) and Lewis Creek (20). 2008 saw a large number of residual sockeye in some of the creeks in the Sammamish River Tributaries (see Sockeye section above). Professional fish biologists who surveyed these streams found kokanee only in the Sammamish River. It is very likely that many or all of the fish that were reported as kokanee in Little Bear Creek were actually residual sockeye.

Figure 17. Distribution of kokanee in the program area based on Salmon Watcher observations.

See <http://your.kingcounty.gov/dnrp/library/water-and-land/salmon/salmonwatcher/2008/figure17-kokanee-distribution-map.pdf>.

Chum

Chum were observed in very low numbers in 2 streams. In Pipers Creek, 25 live and 1 dead chum were reported. A single coho carcass was reported in Fisher Creek on Vashon.

Trout and Unidentified Species

Twenty live and 1 dead trout were reported in 5 creeks in the Lake Washington Watershed in 2008.

Fish of unidentified species were observed in 19 streams and 1 Lake Washington Beach in 7 basins in the Lake Washington Watershed including WRIA 8 Puget Sound streams: 88 live fish and 11 carcasses were unidentifiable. Additionally, 2 unidentified dead fish were observed in Judd Creek on Vashon.

References

- Berge, H., Ecologist, King County Water and Land Resources Division, Department of Natural Resources and Parks, Seattle, WA. 2008. Personal communication.
- King County. 2004. 2003 Volunteer Salmon Watcher Program: Lake Washington Watershed and Vashon Island. 48pp. {Vanderhoof author}
- Vanderhoof, J. 2001. 2000 volunteer salmon watcher program in the Lake Washington Watershed. King County Department of Natural Resources, Seattle, WA.
- Williams, R.W., R.M. Laramie, and J.J. Ames. 1975. A Catalog of Washington Streams and Salmon Utilization, Volume 1, Puget Sound. Washington Department of Fisheries, Olympia, WA.

Appendix A

Data Collection Form used in 2008

Data form looks like this:

Salmon Watcher - Monthly Data Collection Form Month/Year: _____

Location Observed/Site ID#: _____ Stream Name: _____

Name: _____ Email/phone: _____

AFFIX LABEL HERE

1. Fill out this form in pencil as your observations are made. **EVEN IF YOU DON'T SEE ANY FISH**, record your observation date and time and record 0 fish seen.
2. If you observe more than once a day, record all your observations under the same date, on a different line and the different times.
3. Identify any live or dead salmon you see. When you are reasonably certain of your identification (more than 75% sure), record it on this form. If you can't identify it, write UNID and describe it as best you can. (Especially note size, color, spots on back, spots on tail - upper or lower part.)
4. Record observations such as spawning activity, other wildlife, a neighbor's comment, and sounds of splashing from non-visible areas in the Comments column.

Date	Start Time	End Time	1" - 6" Juvenile Fish? (Y or N)	Species Name* <small>Only write here if you see adult salmon</small>	# Live Adult <small>Fish per species</small>	# Dead Adult <small>Fish per species</small>	Total Adult Fish Count <small>(live and dead)</small>	# Fish without Adipose Fin	# Citizens Talked With	Did you encounter anything requiring attention? <small>If so, did you notify anyone?</small>	Comments (water clarity, redds present, mussels) Tags? (can use back of paper for notes)

*Key: COHO-Coho, CHIN-Chinook, SOCK-Sockeye, CHUM-Chum, KOKA-Kokanee, TROU-Rainbow, steelhead or cutthroat trout, UNID-Unidentified

Please return form during the first week of the following month.
 If you have any questions, call **Katie Sauter Messick** at **206-263-5086** or **Jennifer Vanderhoof** at **206-263-6533**. Thank you so much!
 This project is sponsored by the Cedar/Sammamish/Lake Washington Watershed Forum through the King Conservation District, King County Water and Land Resources Division, and the Cities of Bellevue, Bothell, Issaquah, Kirkland, Redmond, Renton, Seattle, and Woodinville.

Please do not write below this line

Data entered on: _____ Initial: _____ First data check on: _____ Initial: _____ Second data check on: _____ Initial: _____ Datasheet #: _____

Appendix B

Fauntleroy Creek Salmon Watch 2008 Summary

This page left intentionally blank.

2008 FAUNTLEROY SALMON WATCH⁶

From the Fautleroy Community Association

We closed Salmon Watch 2008 November 24 with a grand total of one coho spawner, who appeared on Nov. 8 in the fish ladder and waited in vain for a mate.

During this return season, fishers reported seeing a few coho in the cove but also sea lions and seals, plus tribal purse seiners along the West Seattle peninsula. Creek conditions were excellent (at least .7' of water at the gauge), and rains were periodic and generous.

Our watch ran Oct. 27 to Nov. 24 and involved 16 volunteers. They recorded some 35 visitors at the fish-ladder viewpoint or creekside.

-Judy Pickens

⁶ Fautleroy Creek is located in Seattle in the Central Puget Sound basin of WRIA 9. The results of their annual survey are included here as an appendix to the Salmon Watcher report as a way to further share information collected by other volunteer salmon watching groups in the region.