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# **2007 Volunteer Salmon Watcher Program**

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

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May 2008



**King County**

Department of Natural Resources and Parks  
Water and Land Resources Division

**Science Section**

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201 South Jackson Street, Suite 600  
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# 2007 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

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**King County**

Department of  
Natural Resources and Parks

**Water and Land Resources Division**

201 South Jackson Street, Suite 600  
Seattle, WA 98104



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## 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 2007 program, 130 volunteers surveyed 134 sites on 55 streams throughout the Lake Washington Watershed, other WRIA 8 streams in Central Puget Sound, and Vashon Island streams from August 29, 2007 to January 20, 2008. 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) 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) Coho had the widest distribution throughout the survey area—they were seen in 7 Lake Washington Watershed basins including WRIA 8 Puget Sound streams, and they were also reported in Longfellow Creek, which is a WRIA 9 stream leading to Puget Sound; (2) Sockeye were seen in the greatest numbers (3,053 enumerated); (3) Chinook were observed in 6 Lake Washington basins; (4) Kokanee observations were observed in 3 Lake Washington basins; and (5) chum were observed in 2 Vashon streams, 2 streams in WRIA 8 that drain to Puget Sound, as well as 1 stream within the Lake Washington Watershed.

This report is published on the Internet and can be found using the hyperlinks on this web page: <http://dnr.metrokc.gov/wlr/waterres/salmon/reports.htm>.

Maps included in this report have been published on the Internet and can be found using the hyperlinks on this web page: <http://dnr.metrokc.gov/wlr/waterres/salmon/maps.htm>.

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## 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, Bob Spencer, Debra Crawford, Peter Holte, Andy Loch, Betsy Adams, Patrick Robinson, Ruth Famurewa, Micah Bonkowski, Gary Fink, Kollin Higgins, 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.

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## 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 2007 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 fifth 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 2007 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 2007 Salmon Watcher Program**

(see <http://dnr.metrokc.gov/wlr/waterres/salmon/2007map.html>).

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## Methods

Volunteers were recruited during late summer and early fall of 2007 to observe fish in streams throughout the Lake Washington Watershed<sup>1</sup>, other WRIA 8 streams, and streams on Vashon Island. The 127 volunteers who surveyed in the project area, plus 3 individuals who observed outside the project area, are listed in Table 1 (totals: 130 individuals, pairs, or groups totaling 151 people).

**Table 1. Volunteer observers for the 2007 Salmon Watcher Program.**

Ann Aagaard	Gary & Bob Emerson	Stacey Mullins-Jensen
Staci Adman	Micheal Ess	Andrew Neang
Walter & Ruth Albach	Ruth Famurewa	Matt Novack
Imogene Allen	Jacob and Bob Farris	Yoshiko Otonari
Jill & Murray Andrews	Mary Ellen Flanagan	Tammy Parise
Angelina Artero	Gail Fligstein	Betty Peltzer
Deron Artz	Matt Foulon	Connie Peterman
Russ Atkins	Adrienne Fox	Eric Peterson
Kathleen Auld	Stefanie Frybarger	Gary Pilawski
Frank Backus	Laurie Gogic	Katherine Quinn-Dumovic
Neil & Gayle Baldock	Craig & Morgan Gowdey	Kelly Rau
Ed and Sheila Barnes	Doug Greaves	Grace Reamer
Richard Barrett	Ron Green	David L. Reitz
Dave Barrow	Patricia Gustafson	Larry Reymann
Cathleen Barry	Erica Hall	Adrienne Ross
Judith Barry	Katie Hart	Ann Ross
Heidi Bartos	Christine Henderson	Kathleen Ryan
John and Morgan Beaumier	Geoff Holm	Jessica Saavedra
Terri Benson	Nels Johnson	Tia Scarce
Miles Berkey	Peg Jones	Ed Schein
Shirley Biccum	Barbara Jurgens	Jenny Schmitt
Chris Black	Jennifer Kaufman	Carrie & Drew Schwitters
Marilyn & Tom Blue	Pam Kelly	Gary Smith
Dick Boyce	Gary Kelsberg	Jenny Smith
Bob and Diane Brenno	Tatsu Komada	Julie Smith
Janet Broadus	Janusz Komorowski	Maria Sorsby
Laura Brock	Richard Konieczka	Eric Soshea
Barb Brown	Tommy Kraft	Dan Spuckler
John Capers	Yvonne Kuperberg	Kirk Stauffer
Nancy Daar	William Kvasnidoff	Mike Stults
Dawn & Isabelle Dailidenas	Debra Lehrberger	Ross Taylor
Maki Dalzell	Mark & Jodi Linstead	International HS Titan Robotics Club
Jake Dammrose	Ginny Lodwig	Kay Tokuda
Sarah Dammrose & Joshua Lowell	Barbara Lynum	Mary Trimmingham
Jan De Felice	Don Mackey	Terry Trimmingham
Alyse & Dennis DeKraker	Ken Mackey	Laurie Tucker
Barbara Dickson	Michelle and Jesse Marr	Mary Vincent
Chuck Dolan	Amy McCarthy	Patricia Wangen
Jim Doyle	Julie McLaughlin	Christine Wertheimer
Amelia Dumovic	Jim McRoberts	Maggie & Brian Windus
Bridget DuRuz	Helen Meeker	Barbara AW Wright
Erin Duvall	Joe Meeker	John Zanatta
Mike Dziuk	Jeff Mendenhall	
Willie Elliot	Bill Morse	

<sup>1</sup> 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).

## Volunteer Training

Agency staff held a total of five classroom training sessions in 2007. Approximately 110 people attended a training sessions, and of those, 32 were returning volunteers from prior seasons. 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 2007 fall spawning season.

### Figure 2. Sites surveyed by Salmon Watcher volunteers in 2007

See <http://dnr.metrokc.gov/wlr/waterres/salmon/2007map.html>

## Data Collection

Surveys were conducted between August 29, 2007 to January 20, 2008, 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 2007 Salmon Watcher season.**

Month	Number of Surveys
August	3
September	503
October	1247
November	940
December	378
January	15

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 B), 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 2007 season. Volunteers were provided laminated fish identification cards and a packet of training materials with fish identification information in it. 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 26) 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

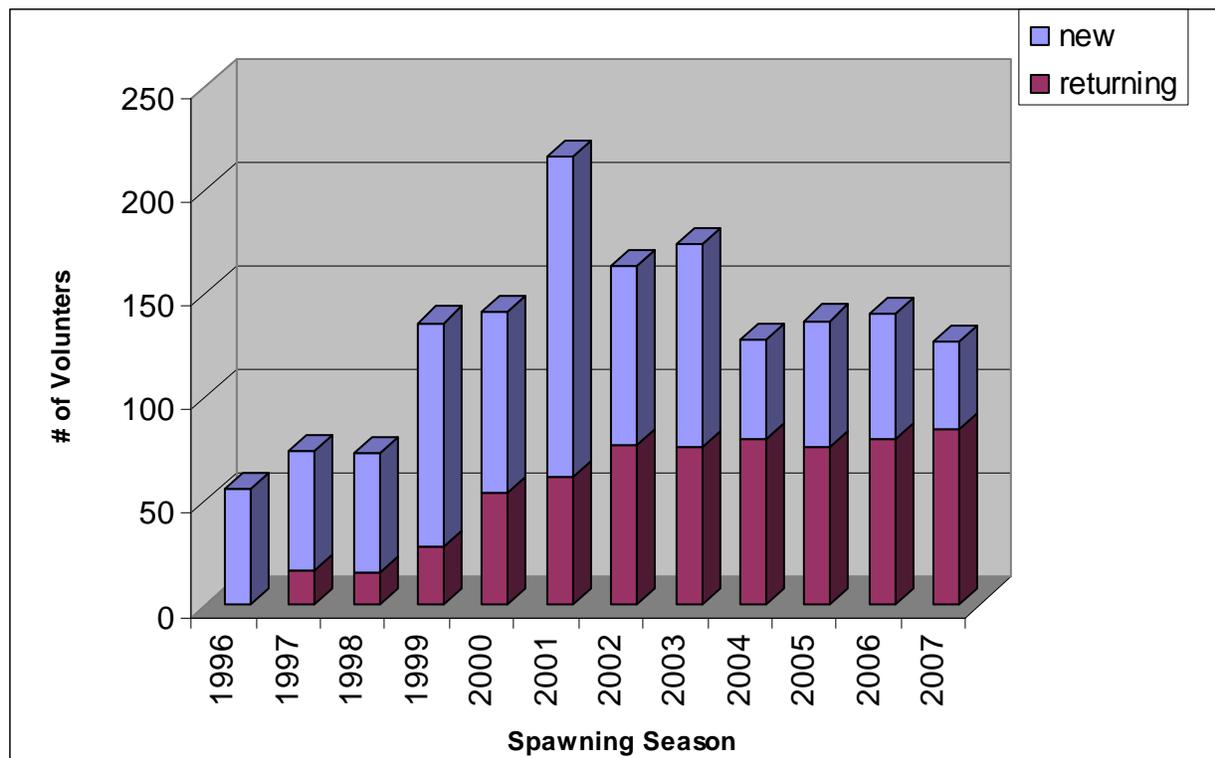
In 2007, a total of 137 sites on 57 streams were surveyed by 144 volunteers (Table 3).

**Table 3. Numbers of streams, sites, and volunteers involved in the 2007 spawning season.**

Area	# streams	# sites	# volunteers
Lake Washington Watershed	46	120	115
Other WRIA 8 Streams	3	5	6
Vashon Island	4	6	6
Other (outside program area)	2	3	3
Total	55	134	130

In 2007, 85 out of 127 volunteers (67 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 slightly lower in 2007, the percentage of returning volunteers was higher than normal. Of the 85 returnees, 2 pairs of volunteers have surveyed every year of the program. Additionally, all 3 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 Program<sup>2</sup>.**



<sup>2</sup> Note that volunteers in 2001 were from a larger geographic area. For further discussion, please see “Volunteer Activity” on page 26.

## Basin Summary

In the 2007 spawning season, chinook were reported in the greatest numbers in Issaquah Creek and East Lake Washington basins (Table 4). The most kokanee were observed in West Lake Sammamish Basin. Sockeye were reported in the largest numbers in the Cedar River Basin; however, their numbers were lower than observations in past years (see “Species Summary,” below). Coho were seen in the most number of basins, but they were not seen in very high numbers. Table 5 shows how many fish were observed per 15-minute watch period in each basin.

**Table 4. Species enumeration within surveyed basins during the 2007 Salmon Watcher season.**

Basin	Chinook	Chum	Coho	Kokanee	Sockeye	Trout	Unid.	Basin Total
Big Bear Creek	36	-	7	-	125	-	9	177
Cedar River	58	-	19	-	2,413	-	49	2,539
East Lake Washington	126	-	15	-	134	1	26	302
East Lake Sammamish	-	-	-	-	-	-	-	-
West Lake Sammamish	-	-	-	24	-	-	-	24
Issaquah Creek	199	-	100	2	2	-	134	437
North Lake Washington Tribs.	23	-	9	-	40	-	4	76
Samm. River Tribs.	18	3	7	4	339	-	30	401
Vashon Island	-	3	-	-	-	-	1	4
Central Puget Sound - WRIA 8	-	503	2	-	-	-	3	508
Other Central Puget Sound*	-	-	12	-	-	-	1	13
Species Total	460	509	171	30	3,053	1	257	4,481

\* Outside program area.

**Table 5. Species observed per 15 minutes of volunteer time watched in each basin during the 2007 Salmon Watcher season.**

*Table Removed – was calculated in errata*

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, East Lake Sammamish, 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 2007 except East Lake Sammamish. Trout and unidentified species were not mapped.

## Big Bear Creek Basin

Volunteers surveyed 12 sites in 4 streams in the Big Bear Creek Basin in 2007 (Figure 2). From 1 to 8 sites were watched per stream, and the total number of surveys ranged from 2 to 50 per site (Table 6). Each site was monitored by from 1 to 3 volunteers.

**Table 6. Stream number, site ID, site location (listed in river miles, RM), survey dates, total number of surveys, number of volunteers<sup>3</sup>, and years the sites were watched for each stream surveyed in the Big Bear Creek Basin for the 2007 spawning season.**

Stream	Stream #	Site ID	RM	Survey Dates	# Surveys	# Vols.	Years Watched
Big Bear Creek	080105	453	0.9	9/22 - 10/5	3	1	2001 - 2007
		65	2.7	9/5 - 12/16	28	2	1997 - 2000, 2002 - 2007
		101	4.9	9/6 - 11/21	44	3	1997 - 2007
		89	6	8/31 - 10/28	18	1	1998 - 2007
		136	7.4	9/10 - 12/30	50	2	1998 - 2007
		503	7.85	9/28 - 12/28	30	1	2002, 2004 - 2007
		106	10	9/16 - 12/23	21	2	1998, 2006, 2007
		466	11.6	9/22 - 12/8	22	1	2001, 2006, 2007
Trib. to Bear	-	90	0.2	8/31 - 10/28	18	1	1998 - 2007
Cottage Lake Cr.	080122	105	1.3	9/17 - 9/24	2	1	1998 - 2005, 2007
		50	2.2	9/10 - 11/5	23	1	1997, 1999 - 2007
Trib. 0127 to Cottage Lk. Cr.	080127	168	0.14	9/20 - 9/23	2	1	1999, 2000, 2002, 2004, 2007

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

**Table 7. Site ID, RM, and fish counts (live and dead) with dates seen at each stream surveyed in the Big Bear Creek Basin for the 2007 spawning season.**

Stream	Site ID	RM	Chinook	Coho	Kokanee	Sockeye	Unid.
Big Bear Creek	453	0.9	-	-	-	1 (9/26)	-
	65	2.7	6 (10/17 - 10/19)	-	-	7 (9/25 - 10/19)	-
	101	4.9	3 (10/1 - 10/3)	2 (9/29 - 10/1)	-	69 (9/29 - 10/27)	2 (10/20 - 10/26)
	89	6	1 (10/7)	-	-	6 (10/6 - 10/21)	-
	136	7.4	-	-	-	22 (10/8 - 10/26)	4 (10/19 - 10/22)
	503	7.9	8 (10/2 - 10/12)	-	-	15 (10/2 - 10/14)	-
	106	10	-	-	-	-	-
	466	12	-	2 (11/18 - 11/23)	-	-	-
Trib. to Bear	90	0.2	-	-	-	-	-
Cottage Lake Cr.	105	1.3	-	-	-	1 (9/17)	-
	50	2.2	18 (9/21 - 10/10)	3 (10/8 - 10/15)	-	4 (10/3 - 11/5)	3 (9/21 - 9/26)
Trib. 0127 to Cottage Lk. Cr.	168	0.1	-	-	-	-	-

<sup>3</sup> "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://dnr.metrokc.gov/wlr/waterres/salmon/2007map.html>

## Cedar River Basin

Volunteers surveyed 18 sites in 7 streams in the Cedar River Basin in 2007 (Figure 2). From 1 to 5 sites were watched per stream, and the total number of surveys ranged from 1 to 63 per site (Table 8). Each site was monitored by 1 or 2 volunteers.

**Table 8. 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 2007 spawning season.**

Stream	Stream #	Site ID	RM	Survey Dates	# Surveys	# Vols.	Years Watched
Cedar River  (Cavanaugh Pond)	080299	201	1.3	9/16 - 12/31	32	2	2001, 2005, 2007
		205	2.9	9/3 - 10/23	11	1	1999, 2001, 2005 - 2007
		207	5.3	9/8 - 11/30	10	2	1999 - 2003, 2005 - 2007
		139	6.4	11/7 - 1/16/08	29	1	1997 - 2007
		613	19.7	10/9 - 12/8	3	1	2005 - 2007
<b>C.R. Side Channel</b>	-	557	0.15	9/30 - 11/30	14	2	2003, 2005 - 2007
<b>John's Creek</b>	-	591	0	9/5 - 9/27	5	1	2005 - 2007
<b>Kennydale Creek</b>	-	590	0.1	9/9 - 9/30	3	1	2005, 2007
<b>Rock Creek</b>	080338	410	0.2	10/4 - 11/30	58	1	2001 - 2007
		154	0.4	10/4 - 11/30	58	1	1999 - 2007
		49	1.3	10/4 - 11/28	17	1	1998 - 2007
<b>Taylor Creek*</b>	080320	588	0.37	9/30 - 11/30	70	2	2004 - 2007
		596	0.5	10/1 - 11/30	63	2	2004 - 2007
		129	1.2	10/4 - 11/28	17	1	1998 - 2007
		71	1.8	10/4 - 11/28	17	1	1998 - 2007
		126	2.4	10/4 - 11/28	17	1	1998, 2001 - 2007
<b>Walsh Lake Diversion</b>	080341	460	0.1	10/28 - 12/8	3	1	2003, 2005 - 2007
		40	1.1	11/12 - 11/12	1	1	2000, 2003, 2005 - 2007

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 9). Chinook and coho were seen in three of the seven streams watched in the Cedar River Basin in 2007. Sockeye were seen in four of the seven streams surveyed in the basin.

**Table 9. Site ID, RM, and fish counts (live and dead) with dates seen at each stream surveyed in the Cedar River Basin for the 2007 spawning season.**

Stream	Site ID	RM	Chinook	Coho	Sockeye	Unidentified
Cedar River  (Cavanaugh Pond)	201	1.3	6 (10/9 - 10/30)	-	1895 (9/22 - 11/25)	3 (9/22 - 10/6)
	205	2.9	-	-	51 (9/11 - 9/20)	29 (10/9 - 10/23)
	207	5.3	8 (9/25)	-	162 (9/25 - 11/3)	1 (9/25)
	139	6.4	-	-	93 (12/5 - 1/13/08)	-
	613	19.7	1 (10/9)	-	85 (10/9 - 11/12)	-
C. R. Side Channel	557	0.15	-	1 (11/15)	48 (10/21 - 11/19)	8 (10/21 - 11/13)
John's Creek	591	0	-	-	-	-
Kennydale Creek	590	0.1	-	-	-	-
Rock Creek	410	0.2	-	-	23 (10/10 - 11/18)	-
	154	0.4	-	-	-	-
	49	1.3	-	-	-	-
Taylor Creek	588	0.37	5 (9/30 - 10/23)	8 (11/9 - 11/17)	25 (10/4 - 11/17)	1 (9/30)
	596	0.5	37 (10/1 - 10/17)	-	31 (10/8 - 11/17)	-
	129	1.2	-	-	-	-
	71	1.8	-	-	-	-
	126	2.4	-	-	-	-
Walsh Lake Diversion	460	0.1	1 (10/28)	10 (11/12 - 12/8)	-	7 (10/28 - 12/8)
	40	1.1	-	-	-	-

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://dnr.metrokc.gov/wlr/waterres/salmon/2007map.html>

## East Lake Washington Basin

Volunteers surveyed 29 sites in 12 streams and 4 beach sites in the East Lake Washington Basin in 2007 (Figure 2). From 1 to 6 sites were watched per stream, and the total number of surveys ranged from 4 to 94 per site (Table 10). Each site was monitored by 1 to 6 volunteers.

**Table 10. 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 2007 spawning season.**

Stream	Stream #	Site ID	RM	Survey Dates	# Surveys	# Vols.	Years Watched
Coal Creek	080268	441	2	9/14 - 12/31	59	1	2001 - 2007
		442	2.1	9/14 - 12/31	94	3	2001 - 2007
East Creek	-	514	0.2	9/15 - 12/16	19	1	2003, 2005 - 2007
Forbes Creek	080242	100	0.2	9/16 - 12/31	42	2	1998, 2000 - 2002, 2007
Goff Creek	080264	447	0.1	9/6 - 10/12	19	2	2003 - 2007
Kelsey Creek	080259	13	2	9/17 - 1/4/08	38	3	1997 - 2007
		124	2.4	9/6 - 12/14	40	2	1997 - 2007
		120	3	9/14 - 12/2	51	4	1997 - 2007
		216	4.5	10/2 - 11/30	19	1	1999, 2001, 2002, 2004, 2007
		586	4.9	9/6 - 12/13	32	1	2004 - 2007
		45	5	10/5 - 11/29	19	1	1997 - 2000, 2003, 2006, 2007
Lake Wa. Beach	080028	76	30.5	10/7 - 12/13	26	1	1997, 1998, 2003, 2004, 2007
		77	30.8	9/22 - 12/13	36	2	1997, 1998, 2003, 2004, 2006, 2007
		130	32.4	9/24 - 11/15	13	1	1998, 2007
		51	35.9	10/15 - 12/15	44	1	1998, 2007
May Creek	080282	208	0.2	9/5 - 12/29	24	2	2001 - 2007
		432	0.5	9/10 - 12/29	17	1	2000, 2004 - 2007
Mercer Slough	080259	445	1.6	9/5 - 1/4/08	84	6	2001, 2003 - 2007
Richards Creek	080261	75	0.4	9/6 - 12/14	24	1	1998 - 2000, 2007
		27	0.7	9/6 - 12/14	44	2	1997 - 2007
		80	1.6	9/23 - 12/17	18	1	1998, 2002 - 2007
Sears Creek	-	48	0	9/17 - 10/5	4	1	2002 - 2004, 2006, 2007
Sturtevant Creek	080260	117	0.25	9/18 - 12/18	28	2	1997 - 1999, 2001 - 2007
Valley Creek	080266	122	0.1	9/6 - 10/9	10	1	1997 - 2001, 2003 - 2007
		221	0.7	9/18 - 12/21	28	1	1999 - 2007
West Trib. Kelsey Cr.	080264	116	0.25	9/10 - 12/18	56	3	1998, 1999, 2001 - 2007
		325	0.7	9/6 - 12/28	58	1	1997, 2001 - 2007
		506	0.9	9/27 - 12/16	26	2	2002 - 2007
		73	1.1	9/14 - 11/25	26	2	1998, 2000, 2004 - 2007

Salmonids were found in 10 of the 12 streams surveyed in 2007 (Table 11). Chinook were the only species observed in Goff Creek. Chinook were also seen at every watching location in Kelsey Creek, Mercer Slough, West Trib. Kelsey Creek, Sears Creek, as well as sites in Richards and Valley Creek, all of which are part of the same Kelsey Creek system. Chinook were also observed at both sites watched in May Creek. One unidentified fish was observed in Sturtevant Creek; this marks only the second fish ever observed in this stream by Salmon Watcher volunteers. The previous fish was a chinook, which have also been seen in this creek by professional staff. Coho were reported at one Lake Washington Beach site, as were three fish of unidentified species. Aside from the beach, coho were seen in only three streams in low numbers. Sockeye were seen in very low numbers in the Kelsey Creek system, and it relatively much greater numbers in May Creek. No fish were observed in East or Forbes 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. In 2007, professional surveyors observed 3 live coho and 6 carcasses in Kelsey Creek but recorded 220 live and 148 chinook carcasses. Coho's low numbers combined with very skittish behavior makes a volunteer's chances of seeing coho in Kelsey Creek rather slim.

**Table 11. Site ID, RM, and fish counts (live and dead) with dates seen at each stream surveyed in the East Lake Washington Basin for the 2007 spawning season.**

Stream	Site ID	RM	Chinook	Coho	Sockeye	Unid.
Coal Creek	441	2	-	-	-	-
	442	2.1	-	4 (11/10 - 11/20)	-	-
East Creek	514	0.2	-	-	-	-
Forbes Creek	100	0.2	-	-	-	-
Goff Creek	447	0.1	5 (10/1 - 10/9)	-	-	-
Kelsey Creek	13	2	2 (10/11)	-	1 (11/10)	1 (10/3)
	124	2.4	2 (9/27)	-	-	2 (12/14 - 12/14)
	120	3	10 (9/28 - 10/22)	3 (10/3 - 10/25)	-	6 (9/24 - 11/14)
	216	4.5	7 (10/2 - 10/10)	-	-	-
	586	4.9	7 (10/1 - 10/10)	-	-	2 (10/3 - 10/4)
Lake Wa. Beach	45	5	15 (10/5 - 11/8)	-	-	-
	76	30.5	-	-	-	-
	77	30.8	-	-	-	-
	130	32.4	-	-	-	-
May Creek	51	35.9	-	2 (10/29 - 11/5)	-	3 (11/11 - 11/16)
	208	0.2	4 (10/6 - 10/26)	4 (11/9 - 11/11)	88 (10/14 - 11/24)	4 (10/17 - 11/30)
Mercer Slough	432	0.5	6 (9/30 - 10/17)	2 (11/9 - 11/11)	38 (10/6 - 11/20)	1 (10/17)
	445	1.6	4 (9/17 - 10/1)	-	3 (9/6 - 11/11)	1 (11/24)
Richards Creek	75	0.4	2 (9/17)	-	-	-
	27	0.7	-	-	-	-
	80	1.6	-	-	-	-
Sears Creek	48	0	1 (10/5)	-	-	1 (9/25)
Sturtevant Creek	117	0.25	-	-	-	1 (11/19)
Valley Creek	122	0.1	3 (10/5 - 10/9)	-	-	-
	221	0.7	-	-	-	-
West Trib. Kelsey Cr.	116	0.25	1 (10/1)	-	-	-
	325	0.7	4 (9/28 - 10/1)	-	1 (10/1)	-
	506	0.9	5 (10/2 - 10/13)	-	1 (10/2)	-
	73	1.1	48 (9/27 - 10/12)	-	2 (10/1)	4 (9/24 - 11/1)

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://dnr.metrokc.gov/wlr/waterres/salmon/2007map.html>

## East Lake Sammamish Basin

One volunteers surveyed 1 site 2 times on Laughing Jacobs Creek in the East Lake Sammamish Basin in 2007 (Table 12).

**Table 12. 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 Sammamish Basin for the 2007 spawning season.**

Stream	Stream #	Site ID	RM	Survey Dates	# Surveys	# Vols.	Years Watched
Laughing Jacobs Cr.	080166	406	0	11/15 - 12/28	2	1	2000, 2004 - 2007

No adult spawners were observed during the two site visits in Laughing Jacobs Creek (Table 13).

**Table 13. Site ID, RM, and fish counts (live and dead) with dates seen at each stream surveyed in the East Lake Sammamish Basin for the 2007 spawning season.**

Stream	Site ID	RM	Chum	Coho	Kokanee
Laughing Jacobs Cr.	406	0	-	-	-

## West Lake Sammamish Basin

Volunteers surveyed 4 sites on 2 streams in the West Lake Sammamish Basin in 2007 (Table 14). From 19 to 39 surveys were conducted per site. Each site was monitored by 1 or 2 volunteers.

**Table 14. 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 2007 spawning season.**

Stream	Stream #	Site ID	RM	Survey Dates	# Surveys	# Vols.	Years Watched
Idylwood Cr.	080143	423	0.1	9/5 - 12/30	38	2	2000 - 2007
Lewis Creek	080162	327	0.1	9/23 - 12/16	19	2	1997, 2001 - 2007
		598	0.4	10/21 - 12/30	39	1	2004 - 2007
		283	0.5	10/2 - 12/10	21	2	1999, 2001 - 2007

Kokanee were observed at three sites in Lewis Creek (Table 15). 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 15. Site ID, RM, and fish counts (live and dead) with dates seen at each stream surveyed in the West Lake Sammamish Basin for the 2007 spawning season.**

<b>Stream</b>	<b>Site ID</b>	<b>RM</b>	<b>Kokanee</b>	<b>Unidentified</b>
<b>Idylwood Cr.</b>	423	0.1	-	-
<b>Lewis Creek</b>	327	0.05	2 (12/1)	-
	598	0.37	20 (11/10 - 11/20)	-
	283	0.5	2 (11/10)	-

## Issaquah Creek Basin

Volunteers surveyed 6 sites in 3 streams in Issaquah Creek Basin in 2007 (Figure 2). The total number of surveys ranged from 6 to 25 per site (Table 16). Each site was monitored by 1 volunteer.

**Table 16. 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 2007 spawning season.**

Stream	Stream #	Site ID	RM	Survey Dates	# Surveys	# Vols.	Years Watched
Carey Creek	080218	635	1.7	9/21 - 10/31	31	2	2007
E. Fork Issaquah Creek	080183	637	0.4	9/22 - 11/22	17	1	2007
Issaquah Creek	080178	9	3	9/27 - 12/11	16	1	1999, 2006, 2007
		60	3.4	10/24 - 12/28	4	1	1997, 1998, 2005 - 2007
		615	4.4	9/12 - 12/17	14	1	2006, 2007
		52	5.8	9/6 - 12/8	28	1	1998 - 2000, 2003 - 2007

In 2007, chinook were reported in Carey Creek for the first time by volunteers (Table 17). In previous years, Carey Creek had only been watched by one volunteer at one site in one year (2003), and no fish were observed that year. Chinook and coho were reported in Issaquah Creek and East Fork Issaquah Creek. Sockeye were reported only in Issaquah Creek. Kokanee were reported in East Fork Issaquah Creek for the first time by volunteers. This unusual sighting was a 12 inch- long female digging a redd in about 8 inches of water next to the bank. A male was observed briefly with the female.

**Table 17. Site ID, RM, and fish counts (live and dead) with dates seen at each stream surveyed in the Issaquah Creek Basin for the 2007 spawning season.**

Stream	Site ID	RM	Chinook	Coho	Kokanee	Sockeye	Unid.
Carey Creek	635	1.7	56 (9/21 - 9/29)	-	-	-	-
E. Fork Issaquah Creek	637	0.4	27 (9/22 - 11/4)	2 (11/4 - 11/18)	2 (10/16)	-	1 (11/10)
Issaquah Creek	9	3	109 (9/27 - 11/27)	96 (11/6 - 11/27)	-	2 (10/9 - 10/11)	133 (9/27 - 12/11)
	60	3.4	-	-	-	-	-
	615	4.4	1 (11/3)	-	-	-	-
	52	5.8	6 (9/19 - 10/27)	2 (12/8)	-	-	-

\*Trout were also reported at this site.

The distributions of chinook, coho, kokanee, 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://dnr.metrokc.gov/wlr/waterres/salmon/2007map.html>

## North Lake Washington Tributaries

The North Lake Washington Tributaries are those streams flowing into the north end of Lake Washington (e.g., Denny, McAleer, and Thornton creeks, the Sammamish River). Volunteers surveyed 23 sites in 10 streams in 2007 (Figure 2). From 1 to 6 sites were watched per stream, and the total number of surveys ranged from 2 to 88 per site (Table 18). Each site was monitored by 1 to 3 volunteers.

**Table 18. 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 2007 spawning season.**

Stream	Stream #	Site ID	RM	Survey Dates	# Surveys	# Vols.	Years Watched
Denny Creek	-	5	0.1	9/23 - 1/20/08	31	2	1997, 2000, 2002, 2003, 2005 - 2007
Juanita Creek	080230	389	0	9/28 - 12/31	19	2	2000, 2001, 2004 - 2007
		195	0.7	9/27 - 11/1	8	1	2000, 2003, 2007
		411	0.7	9/2 - 12/3	18	1	2000, 2004 - 2007
McAleer Creek	080049	144	0.3	9/3 - 10/28	8	1	1997, 2001 - 2007
		498	0.8	9/3 - 10/28	9	1	2001 - 2007
		266	0.8	9/3 - 10/28	9	1	1999 - 2007
Peters Creek	080104	452	0.5	9/4 - 12/24	21	1	2002 - 2007
Sammamish River	080087	41	7.3	9/9 - 12/31	88	3	1998, 1999, 2001 - 2003, 2005 - 2007
		271	13	9/14 - 9/21	3	1	1997, 1999, 2001 - 2004, 2007
Trib 0141	080141	352	0.2	10/1 - 12/30	22	1	1999 - 2001, 2004, 2005, 2007
S. Fk. Thornton Cr.	080033	191	0.2	9/28 - 10/1	2	1	1999, 2000, 2006, 2007
		54	0.3	9/27 - 11/29	14	1	1998, 2007
		192	0.7	10/8 - 11/29	13	1	1999 - 2004, 2006, 2007
		527	1.2	8/29 - 12/31	43	2	2002 - 2007
Thornton Creek	080030	183	0.1	9/18 - 12/5	10	1	1997, 2000 - 2007
		184	0.2	9/27 - 12/19	39	2	1999 - 2003, 2006, 2007
		186	0.9	10/7 - 12/21	19	1	1997, 1999 - 2002, 2006, 2007
		386	1.1	9/27 - 11/29	19	2	2002, 2005, 2007
		92	1.7	9/27 - 11/9	5	1	1998, 2007
		528	2.8	9/24 - 12/31	23	1	2002 - 2007
Willow Creek	-	388	0.1	10/7 - 12/21	19	1	2003, 2004, 2006, 2007
Woodin Creek	-	228	0.3	9/29 - 11/17	7	1	1999, 2002, 2003, 2006, 2007

Salmonids were found in 5 of the 10 streams surveyed in the North Lake Washington Tributaries (Table 19). Chinook were seen in Peters Creek and the Sammamish River. Coho were seen in Juanita Creek, McAleer Creek, and the Sammamish River in this basin. Sockeye were only seen in the Sammamish River. The only fish observed in Thornton Creek were unidentified species. No salmonids were seen in Denny Creek, South Fork Thornton Creek, Willow Creek, Woodin Creek, or a tributary to the Sammamish River.

**Table 19. Site ID, RM, and fish counts (live and dead) with dates seen at each stream surveyed in the North Lake Washington Tributaries for the 2007 spawning season.**

Stream	Site ID	RM	Chinook	Coho	Sockeye	Unid.
Denny Creek	5	0.1	-	-	-	-
Juanita Creek	389	0	-	-	-	-
	195	0.65	-	-	-	-
	411	0.7	-	4 (10/12 - 10/24)	-	1 (10/24)
McAleer Creek	144	0.3	-	-	-	-
	498	0.79	-	2 (10/3 - 10/28)	-	-
	266	0.8	-	2 (10/28)	-	-
Peters Creek	452	0.5	7 (9/22 - 9/23)	-	-	-
Sammamish River	41	7.3	16 (10/3 - 10/26)	1 (10/12)	40 (9/13 - 12/1)	1 (10/11)
	271	12.5	-	-	-	1 (9/19)
Trib 0141	352	0.2	-	-	-	-
South Fk. Thornton Creek	191	0.2	-	-	-	-
	54	0.3	-	-	-	-
	192	0.7	-	-	-	-
	527	1.15	-	-	-	-
Thornton Creek	183	0.1	-	-	-	1 (11/19)
	184	0.2	-	-	-	-
	186	0.9	-	-	-	-
	386	1.1	-	-	-	-
	92	1.7	-	-	-	-
	528	2.8	-	-	-	-
Willow Creek	388	0.05	-	-	-	-
Woodin Creek	228	0.3	-	-	-	-

The distribution of chinook, coho, and sockeye in the North Lake Washington Tributaries determined from volunteer observations are shown in Figure 8.

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

See <http://dnr.metrokc.gov/wlr/waterres/salmon/2007map.html>

## 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 27 sites on 6 Sammamish River tributaries in 2007 (Figure 2). From 1 to 16 sites were watched per stream, and the total number of surveys ranged from 2 to 63 per site (Table 20). Each site was monitored by 1 to 3 volunteers, and one site was watched by 4 volunteers.

**Table 20. 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 2007 spawning season.**

Stream	Stream #	Site ID	RM	Survey Dates	# Surveys	# Vols.	Years Watched
Little Bear Creek	080080	114	0	9/20 - 12/28	42	2	1999, 2001, 2002, 2005 - 2007
		67	0.2	9/20 - 11/26	15	1	1997 - 1999, 2001 - 2007
		175	0.3	9/29 - 11/17	7	1	1997, 2000, 2002, 2006, 2007
		176	1.3	9/13 - 11/27	39	3	1997, 2000 - 2007
		14	1.9	9/14 - 9/24	2	1	1999, 2000, 2002 - 2004, 2006, 2007
Little Swamp Creek	080060	505	0.24	9/9 - 11/28	24	1	2002 - 2007
North Creek	080070	112	0.9	9/27 - 11/29	27	3	1998 - 2007
		57*	0.95	9/12 - 12/24	63	4	1998, 2001, 2004 - 2007
		408	1.05	9/27 - 10/24	7	2	2000 - 2007
		483	1.4	10/8 - 10/26	3	1	2002, 2007
		113	1.5	9/12 - 11/25	14	2	1998, 2000, 2001, 2003, 2006, 2007
		625	1.7	9/17 - 11/29	37	1	2007
		255	1.8	9/23 - 12/9	27	2	1999, 2000 - 2004, 2006, 2007
		254	2.8	10/5 - 10/16	2	1	2004, 2007
		253	3	9/23 - 12/22	13	1	1997, 1999 - 2001, 2006, 2007
		23	3.1	10/3 - 10/26	3	1	2007
		636	3.3	10/3 - 10/25	3	1	2007
		142	3.5	10/3 - 10/25	3	1	1997, 2001, 2003, 2005, 2007
		553	3.6	9/23 - 12/22	16	2	2003, 2006, 2007
		548	3.9	10/3 - 10/26	3	1	2007
141	4	10/3 - 10/22	2	1	1997, 1999, 2000, 2003, 2007		
252	4.4	10/3 - 10/22	2	1	2001, 2004, 2005, 2007		
Trib to North Cr.		542	0.1	10/5 - 10/22	2	1	2007
Palm Creek		550	0.2	10/5 - 10/16	2	1	2007
Swamp Creek	080059	34	0.3	9/14 - 11/29	32	2	1997, 1999, 2000, 2002 - 2007
		321	1.7	9/14 - 12/31	38	1	1997, 2001, 2007
		35	2.9	12/3 - 12/21	7	1	1997, 2007

\*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 2 of the 6 streams surveyed (Table 21). Chinook, coho, sockeye, and kokanee were all observed in North Creek. Chinook, kokanee, and sockeye were observed in Little Bear Creek. Three chum were reported in Little Bear Creek. The three chum are actually all the same fish observed on three occasions: initially it was seen courting a sockeye; by the third observation it was alone. Because volunteers are not asked to differentiate between individual live fish – and rather report each live fish as if it were a separate individual – the number of live fish may be over-counted in some instances. Although chum are not expected to be found in the Lake Washington Watershed, occasionally a stray does find its way into a stream. Further, chum have been known to be sighted attempting to court fish of other species

(K. Higgins, pers. obs.). No fish were observed in Swamp or Little Swamp creeks, Palm Creek, or another tributary to North Creek.

**Table 21. Site ID, RM, and fish counts (live and dead) with dates seen at each stream surveyed in the Sammamish River Tributaries for the 2007 spawning season.**

Stream	Site ID	RM	Chinook	Coho	Kokanee	Sockeye	Unid.
Little Bear Creek	114	0	3 (10/1 - 11/10)	-	-	168 (9/20 - 11/10)	1 (9/22)
	67	0.2	-	-	-	15 (10/3 - 11/4)	4 (11/4 - 11/26)
	175	0.3	-	-	-	17 (9/29 - 10/21)	-
	176*	1.3	9 (10/3 - 10/13)	-	1 (10/8)	63 (9/28 - 11/15)	9 (9/28 - 10/31)
	14	1.9	-	-	-	-	-
Little Swamp Creek	505	0.24	-	-	-	-	-
North Creek	112	0.9	-	-	-	-	1 (11/23)
	57	0.95	-	-	-	5 (10/5 - 10/17)	2 (9/16 - 10/18)
	408	1.05	-	-	-	-	-
	483	1.4	-	-	-	-	-
	113	1.5	-	2 (11/6 - 11/18)	-	4 (11/6 - 11/25)	2 (11/6 - 11/25)
	625	1.7	-	-	3 (10/1 - 10/2)	7 (10/2 - 10/22)	2 (10/1 - 10/2)
	255	1.8	3 (10/30 - 11/7)	2 (10/20 - 11/10)	-	3 (10/30 - 11/1)	8 (10/1 - 10/29)
	254	2.8	-	-	-	-	-
	253	3	-	1 (10/1)	-	7 (10/1 - 10/14)	-
	23	3.1	-	-	-	-	-
	636	3.3	1 (10/3)	-	-	3 (10/3)	-
	142	3.5	1 (10/3)	-	-	3 (10/3)	-
	553	3.6	1 (10/11)	2 (10/14 - 11/11)	-	14 (9/28 - 10/14)	1 (10/14)
	548	3.9	-	-	-	20 (10/3 - 10/26)	-
	141	4	-	-	-	3 (10/3)	-
252	4.4	-	-	-	7 (10/3)	-	
Trib to North Cr.	542	0.3	-	-	-	-	-
Palm Creek	550	0.3	-	-	-	-	-
Swamp Creek	34	0.3	-	-	-	-	-
	321	1.7	-	-	-	-	-
	35	2.9	-	-	-	-	-

\*Chum were also reported at this site.

The distributions of chinook, coho, sockeye, kokanee, and chum 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://dnr.metrokc.gov/wlr/waterres/salmon/2007map.html>

## Vashon Island

Volunteers surveyed 6 sites in 4 streams on Vashon Island in 2007 (Figure 2). From 1 to 3 sites were watched per stream, and the total number of surveys ranged from 1 to 23 per site (Table 22). All sites were monitored by 1 volunteer each.

**Table 22. 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 2007 spawning season.**

Stream	Stream #	Site ID	RM	Survey Dates	# Surveys	# Vols.	Years Watched
Fisher Creek	-	485	0.1	12/5	1	1	2001 - 2003, 2005, 2007
Judd Creek	150129	490	0.9	11/15 - 11/25	5	1	2001, 2003, 2004, 2006, 2007
		494	1	10/12 - 1/4/08	23	1	2007
		493	1.8	11/1 - 11/27	7	1	2001 - 2007
Judd Cr. Tributary	-	534	0	10/29 - 11/30	7	1	2002 - 2007
Shinglemill Creek	150159	146	0	10/27 - 12/30	15	1	1998, 2001 - 2007

Salmonids were found in very low numbers in 3 of the 4 streams surveyed (Table 23). Chum were observed in Shinglemill and Fisher creeks on one occasion each. The only fish reported in Judd Creek was a single unidentified species. No fish were observed in the tributary to Judd Creek.

**Table 23. Site ID, RM, and fish counts (live and dead) with dates seen at each stream surveyed on Vashon Island for the 2007 spawning season.**

Stream	Site ID	RM	Chum	Coho	Unid.
Fisher Creek	485	0.1	2 (12/5)	-	-
Judd Creek	490	0.9	-	-	1 (11/25)
	494	1	-	-	-
	493	1.8	-	-	-
Judd Cr. Tributary	534	0	-	-	-
Shinglemill Creek	146	0	1 (11/15)	-	-

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

### Figure 10. Observations of salmonids on Vashon Island

See <http://dnr.metrokc.gov/wlr/waterres/salmon/2007map.html>

## Central Puget Sound

Streams draining to Puget Sound that were surveyed during the 2007 Salmon Watcher season are both inside and outside WRIA 8 (Table 24). Those streams within WRIA 8 include Boeing Creek, Pipers Creek, and Venema Creek. Longfellow Creek, watched annually, is part of WRIA 9<sup>4</sup>. A total of 7 sites in 4 streams draining to Puget Sound were watched in 2007. Except one site along Pipers Creek, all sites were monitored by a single volunteer.

**Table 24. 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 2007 spawning season.**

Stream	Stream #	Site ID	RM	Survey Dates	# Surveys	# Vols.	Years Watched
Boeing Creek*	080017	436	0.1	10/9 - 12/6	8	1	2000 - 2007
Longfellow Creek	090360	177	0.6	10/6 - 11/30	15	1	1999 - 2007
		179	0.8	10/26 - 12/27	16	1	1998 - 2007
Pipers Creek*	080023	70	0	10/5 - 12/30	24	1	1999 - 2005, 2007
		181	0.2	9/22 - 12/30	42	3	1999 - 2002, 2004 - 2007
		98	0.4	9/30 - 10/21	7	1	1998 - 2002, 2007
Venema Creek*	-	383	0.02	10/1 - 11/26	16	1	2000, 2001, 2004 - 2007

\*Streams within WRIA 8.

Adult salmon were seen in all streams observed that drain to Puget Sound (Table 25) (this discussion does not include Vashon streams; for discussion of Vashon Island streams, see section above). Chum and coho were observed in Boeing Creek and Pipers Creek. Coho were also seen in Longfellow Creek. Chum were also observed in Venema Creek.

**Table 25. Site ID, RM, and fish counts (live and dead) with dates seen at each stream surveyed in Central Puget Sound for the 2007 spawning season.**

Stream	Site ID	RM	Chum	Coho	Unidentified
Boeing Creek*	436	0.1	2 (11/16)	1 (11/16)	-
Longfellow Creek	177	0.6	-	-	-
	179	0.8	-	12 (11/9 - 11/27)	1 (12/16)
Pipers Creek*	70	0	25 (11/10 - 12/16)	-	2 (11/3)
	181	0.2	392 (10/24 - 12/29)	1 (11/17)	1 (10/25)
	98	0.4	-	-	-
Venema Creek*	383	0.02	84 (10/27 - 11/26)	-	-

\*Streams within WRIA 8.

The observation of chum and coho in the Central Puget Sound streams determined from volunteer surveys shown in Figure 11.

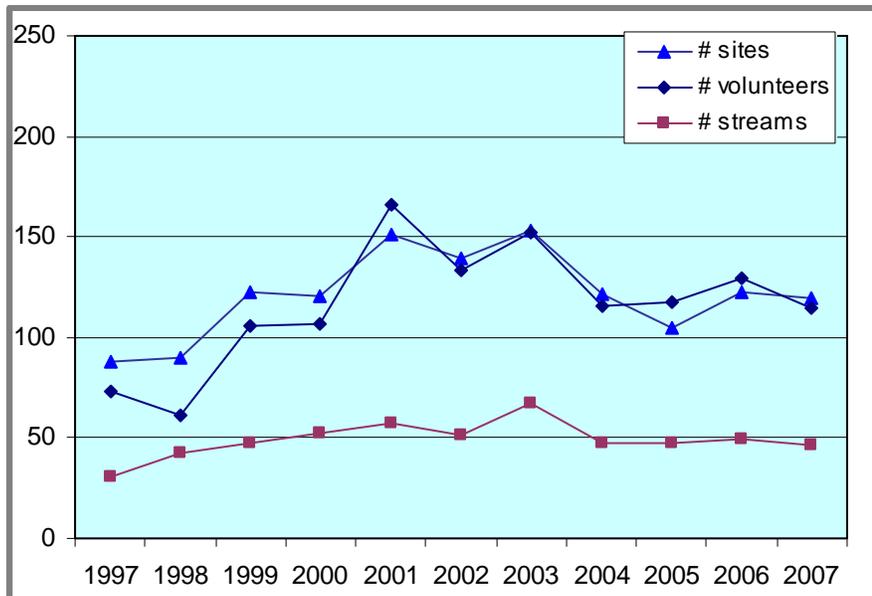
### Figure 11. Observations of salmonids in Puget Sound Basins (see insert).

<sup>4</sup> 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.

## Volunteer Activity

The trend in the number of volunteers participating in the Salmon Watcher Program has varied over the 12 years of the program (Figure 12). The last 4 years have been relatively consistent in terms of numbers of volunteers, sites, and streams in the program. It should be noted that many volunteers watch more than one site, and many sites have more than one volunteer watching at it.

**Figure 12. Number of volunteers (defined as an individual, pair, or group) watching in the Lake Washington Watershed from 1997<sup>5</sup>-2007.**



## 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 939 citizens during the 2007 spawning season. Table 26 details the numbers of citizens who interacted with volunteers.

**Table 26. Number of citizen contacts made by all Salmon Watcher volunteers in each of the surveyed basins.**

Basin	Big Bear Creek	Cedar River	E. Lake Wash.	E. Lake Samm.	W. Lake Samm.	Issaquah Creek	N. Lake Wash.	Samm. River Tribs.	Vashon Island	Central Puget Sound*
Number of contacts	195	78	202	0	14	61	81	128	10	170

\*Includes streams both inside (146 citizens) and outside (24 citizens) funded program area.

<sup>5</sup> See previous Salmon Watcher annual reports for details on yearly participation.

## 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. Time underestimates notwithstanding, Table 27 illustrates the approximate amount of time spent by volunteers in each basin. More than 1,126 hours were volunteered during the 2007 Salmon Watcher season.

**Table 27. Number of hours spent by Salmon Watcher volunteers in each of the surveyed basins.**

Big Bear Creek	Cedar River	E. Lake Wash.	E. Lake Samm.	W. Lake Samm.	Issaquah Creek	N. Lake Wash.	Samm. River Tribs.	Vashon	Central Puget Sound <sup>1</sup>
84	188	408	1	24	40	171	133	23	54

<sup>1</sup> Includes streams both inside (43 hours) and outside (11 hours) funded program area.

## 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 2007, 67 percent of Lake Washington Watershed volunteers were returnees (see the beginning of the Results and Discussion section above). The variation in numbers of new versus returning volunteers has remained somewhat consistent for the past 4 years (in fact, the number of returning volunteers has increased slightly in the past 2 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 and benefits 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 2007, comparisons of raw data likely would not yield valid information about changes in populations. Therefore, the best use for the data is in determining presence of fish and mapping fish distribution.

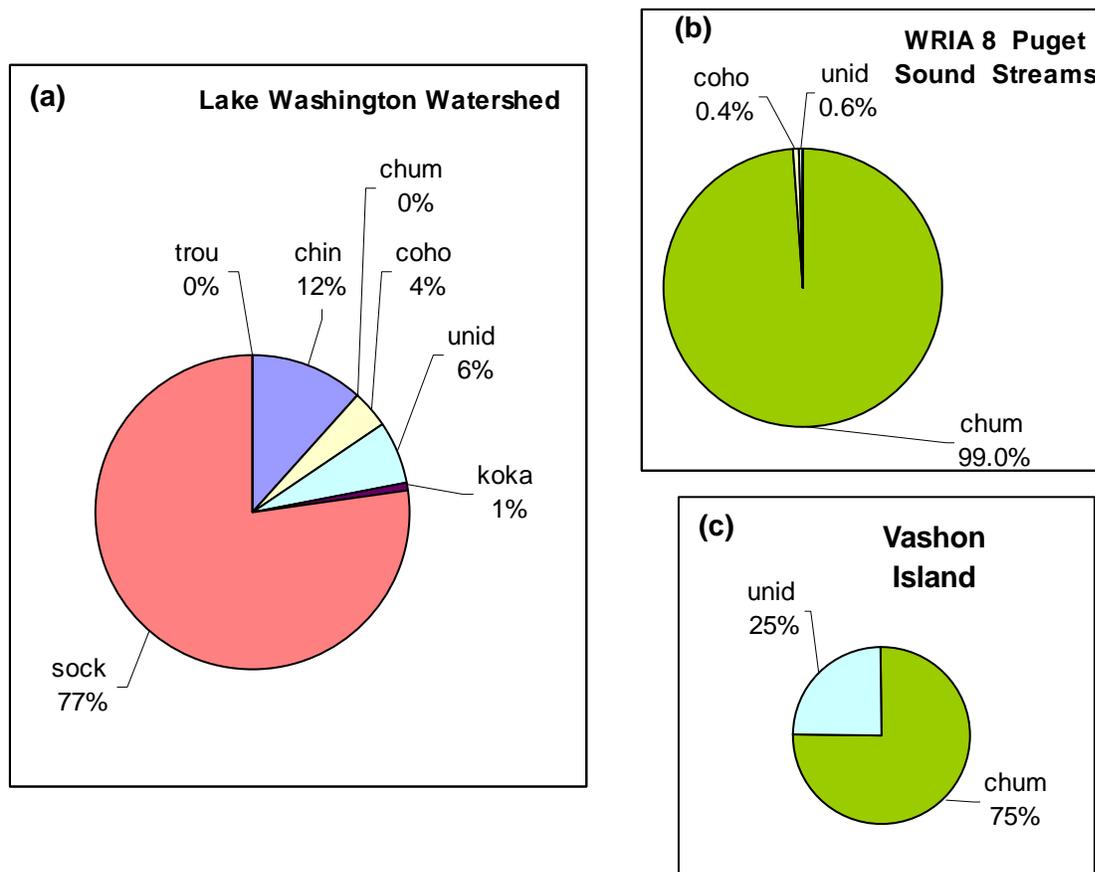
## Species Summary

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 54 streams in the study area surveyed in 2007, sockeye were found in 14 streams. Coho were found in 18 streams, chinook in 20 streams, kokanee were reported in 4 streams, and a single trout was reported in 1 stream. Sockeye was the most abundant species counted by volunteers in the Lake Washington Watershed, followed by chinook then coho. Chum were observed in a total of 6 streams in the study area, including 2 on Vashon Island and 1 in Little Bear Creek in the Lake Washington Watershed.

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 4,468 total adult fish observed in the Lake Washington Watershed, Vashon Island, and other WRIA 8 streams in 2007, 256 were tallied as unidentified (5.7 percent). Unidentified adult salmonids were counted in 21 streams in the study area.

**Figure 13. Percentage of total fish observed in 2007 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 wild. 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 sockeye without adipose fins in 5 streams (Table 28). 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. Likely, the reports of sockeye with fin clips results from a combination of both of these reasons. The number of sockeye reported as being clipped in 2007 was very low (0.46 percent of all sockeye) compared to previous years. The report of one kokanee with a fin clip was likely an error due to one of the above reasons as well; kokanee are not raised in hatcheries and therefore would not be fin-clipped.

Volunteers made note of fry and/or juvenile fish in a total of 23 streams in 5 basins.

**Table 28. 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*	kokanee	chum	unid.	total
Issaquah Creek	38	54				18	110
West Trib. Kelsey Creek	32		3				35
East Fork Issaquah Creek	26	2				1	29
Carey Creek	22						22
Pipers Creek					6	2	8
Peters Creek	7						7
May Creek	6						6
Goff Creek	4						4
Little Bear Creek			4				4
North Creek			4				4
Kelsey Creek	3						3
Big Bear Creek			2				2
Cottage Lake Creek	2						2
Boeing Creek		1					1
Cedar River	1						1
Lewis Creek				1			1
Mercer Slough			1				1
Valley Creek	1						1
<b>Total</b>	<b>142</b>	<b>57</b>	<b>14</b>	<b>1</b>	<b>6</b>	<b>21</b>	<b>241</b>

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

## Chinook Salmon

Chinook were observed in 6 basins in the study area during the 2007 surveys (Figure 14). A total of 382 live fish and 78 carcasses were found in 20 streams throughout the Lake Washington Watershed. Streams in which chinook were reported include (in order of most to least fish seen): Issaquah Creek (116), West

Trib. Kelsey Creek (58), Carey Creek (56), Kelsey Creek (43), Taylor Creek (42), East Fork Issaquah Creek (27), Big Bear Creek (18), Cottage Lake Creek (18), Sammamish River (16), Cedar River (15), Little Bear Creek (12), May Creek (10), Peters Creek (7), North Creek (6), Goff Creek (5), Mercer Slough (4), Valley Creek (3), Richards Creek (2), Sears Creek (1), and Walsh Lake Diversion (1).

Chinook were reported by volunteers for the first time in Carey Creek, which is a tributary to Issaquah Creek; they were observed on private property between State Route 18 and 276<sup>th</sup> Ave. SE at approximately river mile 1.7. This observation marks an expansion of the known distribution of chinook as reported by Salmon Watcher volunteers.

**Figure 14. Distribution of chinook salmon in the program area based on Salmon Watcher observations (see insert).**

## Sockeye Salmon

Sockeye were by far the most numerous fish counted by volunteers. Sockeye were observed in 6 basins (Figure 15). A total of 2,932 live fish and 121 carcasses were observed in 14 streams (in order of most to least fish seen): Cedar River (2,286), Little Bear Creek (263), May Creek (126), Big Bear Creek (120), North Creek (76), Taylor Creek (56), Cedar River Side Channel at Dorre Don (48), Sammamish River (40), Rock Creek (23), Cottage Lake Creek (5), West Trib. Kelsey Creek (4), Mercer Slough (3), Issaquah Creek (2), and Kelsey Creek (1).

A very low number of sockeye were observed in 2007. The largest numbers of sockeye in the Lake Washington Watershed are typically in the Cedar River Basin and the Bear Creek Basin. Table 29 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 any sort of statistically valid comparisons of returns or population trends, because too many variables are not controlled. Variables that change from year to year include what locations are watched (e.g., some locations are not expected to have spawning fish, and if more time was spent at those sites, the observation data would be affected). Variable watching conditions notwithstanding, Cavanaugh Pond, along the Cedar River, is separated out in Table 29 because it has been watched consistently by the same volunteers since the Salmon Watcher Program began, and in 2007 those volunteers recorded an unmistakably dramatic decline in sockeye numbers at that location.

**Table 29. Number of sockeye observed in Bear Creek and Cedar River basins from 1999 to 2007.**

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

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

See <http://dnr.metrokc.gov/wlr/waterres/salmon/2007map.html>

## **Coho Salmon**

Coho were observed in 7 Lake Washington Watershed basins including WRIA 8 Puget Sound streams (Figure 16). They were also reported in Longfellow Creek. A total of 141 live coho and 30 carcasses were reported in 15 streams in the Lake Washington Watershed, 2 streams in WRIA 8 waters leading to Puget Sound, and 1 stream in WRIA 9 waters leading to Puget sound (in order of most to least fish seen): Issaquah Creek (98), Longfellow Creek (12), Walsh Lake Diversion (10), Taylor Creek (8), North Creek (7), May Creek (6), Big Bear Creek (4), Coal Creek (4), Juanita Creek (4), McAleer Creek (4), Kelsey Creek (3), Cottage Lake Creek (3), East Fork Issaquah Creek (2), Lake Washington Beach (2), Boeing Creek (1), Cedar River Side Channel at Dorre Don (1), Sammamish River (1), and Pipers Creek (1),.

## **Figure 16. Distribution of coho salmon in the program area based on Salmon Watcher observations (see insert).**

## **Kokanee**

Kokanee were observed in 4 basins (Figure 17). A total of 28 live fish and 2 carcasses were counted in 4 streams (in order of most to least fish seen): Lewis Creek (24), North Creek (3), East Fork Issaquah Creek (2), and Little Bear Creek (1).

## **Figure 17. Distribution of kokanee in the program area based on Salmon Watcher observations (see insert).**

## **Chum**

Chum were observed in very low numbers in all streams where they are typically seen annually except for Pipers Creek. In Pipers Creek, 257 live and 160 dead chum were reported. A total of 288 live fish and 221 carcasses were counted in 6 streams (in order of most to least fish seen): Pipers Creek (417), Venema Creek (84), Little Bear Creek (3), Boeing Creek (2), Fisher Creek (2), and Shinglemill Creek (1).

Although chum do not typically swim through large lakes to get to their spawning areas, they do occasionally stray. The three chum reported in Little Bear Creek were the same fish. Because volunteers are not asked to differentiate between individual live fish – and rather report each live fish as if it were a separate individual – the number of live fish may be over-counted in some instances, such as this one. For additional discussion about this sighting, see the Sammamish River Tributaries section above.

## **Trout and Unidentified Species**

Only a single trout was reported in 2007; it was reported in Mercer Slough.

Fish of unidentified species were observed in 21 streams and 1 Lake Washington Beach in 7 basins in the Lake Washington Watershed including WRIA 8 Puget Sound streams: 204 live fish and 51 carcasses were unidentifiable. Additionally, a single unidentified dead fish was observed in Longfellow Creek, and a single unidentified live fish was observed in Judd Creek on Vashon.

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## References

- Higgins, K., 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.

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**Appendix A**

**Data Collection Form used in 2007**

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**Appendix B**

**Fauntleroy Creek Salmon Watch 2007 Summary**

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## **2005 FAUNTLEROY SALMON WATCH<sup>6</sup>**

### **From the Fautleroy Community Association**

Eighteen Salmon Watch 2007 volunteers were rewarded in spades when they witnessed 89 coho spawners and one cutthroat trout in the creek. The fish held off until the second week of November and then poured in over a 10-day period. They were all in the 18"-22" range and were vigorous. A high percentage had clipped fins, indicating hatchery origin.

To augment weekly checks by surveyors from Wild Fish Conservancy, volunteer biologist Steev Ward came daily to check carcasses for prespawn mortality. Several redds were marked and, despite heavy flows in December, enough eggs survived to produce a home hatch; as of the writing of this report, we had not yet estimated its size.

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<sup>6</sup> 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.