



## **Skagit County Salmon Habitat Survey Monitoring Program Summary of the 2007 Annual Sites Survey**

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In 2004, following Skagit County Resolutions #R20030210 and #R20040211, Public Works personnel initiated a Salmon Habitat Monitoring project to ensure that Skagit County Code 14.24.120, Ongoing Agriculture, is adequately protecting critical areas near agricultural lands. The project was designed to focus Ag-Natural Resource Lands (Ag-NRL) and Rural Resource – Natural Resource Land (RRc-NRL) zoned lands. Its primary objectives were to establish baseline conditions, determine trends in habitat conditions by continuous monitoring over time and provide a means to differentiate between salmon habitat in Ag-NRL and RRc-NRL zoned lands compared to other lands under Skagit County jurisdiction.

The county selected a protocol designed by the Environmental Protection Agency (EPA) which is able to both record current habitat condition and outline trends over time. The Environmental Monitoring and Assessment Program (EMAP) operates on a five year cycle and is based on a minimum of 60 stream reaches randomly selected the first year. Upon the completion of the first year, 20 of the 60 sites were randomly selected to be monitored annually for the next four years. On the fifth year, all 60 streams are to be re-sampled and the 5 year cycle will begin again. The initial baseline was completed in 2004, designating 2009 as the end of the 5 year cycle.

The *Skagit County Salmon Habitat Monitoring Program – Quality Assurance Project Plan, May 2004* required the 20 annual sites to consist of 10 Agricultural – Natural Resource Land (Ag-NRL) or Rural Resource – Natural Resource Land (RRc-NRL) and 10 sample sites in other zonings within Skagit County. The initial 20 sites were determined in 2004 upon completion of the baseline study and were first surveyed in 2005.

A total of 15 sites were completed in 2007. Surveys were not completed for Colony Creek or Sutter Creek, due to dryness very early in the sampling season. Thomas Creek was not surveyed due to high water levels. A JARPA form was filed in order to remove the beaver dam causing the high water, but was determined to be futile as the rainy season began shortly after receiving approval for removal. Hansen Creek was not sampled because of previous dredging and issues involving the land owner of the sampling site. The tributary to Butler Creek was not sampled because the sample season ended prematurely due to rain.

Staff participating in the 2007 sampling season was Jeff McGowan, Rick Haley, Torey Nelson and Emily Derenne.

### **Sampling Season Highlights:**

- The 2007 monitoring year started on June 29<sup>th</sup> with Sorenson Creek and ended on October 4<sup>th</sup> with Red Cabin Creek.
- Six of the 20 sites have been surveyed each year since 2004, thus having four years of data.
- Red Cabin Creek was sampled on October 4, 2007 and had not been sampled since June 2005.
- 5 Ag-NRL sites, 2 RRc-NRL, 1 Ag/RRC, 1 SF, 2 RRV, 1 SF/RRV, 2 IF zoned sites were completed.

### **Recommendations for the 2008 sampling season:**

- Schedule surveys of known low-flow streams for late May or early June.
- Assess Thomas Creek, and other possible ‘problem’ sites, early in the season to resolve any potential difficulties in sampling.
- Be sure to sample all sites before the weather changes and trees near the streams shed their leaves.
- Create a schedule we adhere to in order to ensure that all streams are sampled, aiming for approximately the same time of year as previous surveys.

Funding for this program comes from the Skagit County’s Clean Water Program.

For more information on the Salmon Habitat Monitoring Program see our website at:

<http://www.skagitcounty.net/Common/Asp/Default.asp?d=PublicWorksSurfaceWaterManagement&c=General&p=salmonmain.htm>

or contact Jeff McGowan at (360) 419-3427.



**Figure 1. Bear Creek sample site**

## Salmon Habitat Monitoring Program – Annual Survey Sites

Zoning	2007 Sample Date	2006 Sample Date	2005 Sample Date	2004 Sample Date	Quad Coordinates	Latitude	Longitude	Stream Name	WRIA ID
A	High water	7/13/06	7/25/2005	8/19/04	T35 R05 S17	48.5208373	-122.1974027	Hansen Creek	3.0267
A	High water	High water	8/25/2005	8/3/04	T35 R04 S18	48.52600951	-122.3381121	Thomas Creek	3.0010
A	9/12/2007	7/26/2006	9/1/2005		T35 R04 S36	48.569066	-122.246213	Samish River	3.0005
A	10/4/2007	Creek Dry	6/14/2005	9/27/04	T35 R06 S15	48.52950194	-122.0240599	Red Cabin Creek	3.0343
RR	7/3/2007	7/14/2006	6/27/2005	9/10/04	T33 R05 S19	48.33811819	-122.2071842	Lake Creek	3.0258
A	8/3/2007	8/9/2006	7/20/2005		T35 R05 S07	48.358406	-122.207039	Lake Creek	3.0258
A	6/29/2007	7/7/2006	8/7/2005		T35 R05 S25	48.496598	-122.109758	Sorenson Creek	3.0291
A	8/8/2007	8/23/2006	7/15/2005		T36 R04 S06	48.631418	-122.356169	Friday Creek	3.0017
A/ RRc	9/20/2007	7/20/2006	8/11/2005		T36 R04 S27	48.582167	-122.279766	Samish River	3.0050
RRc	7/16/2007	8/10/2006	9/28/2005		T33 R 05 S 19	48.426665	-122.207446	Mundt Creek	3.0235
RRV	Creek Dry	8/29/2006	9/15/05		T36 R04 S8	48.62098	-122.325294	Trib to Butler	3.0019
RRV	Creek Dry	Creek Dry	6/29/05	9/2/04	T35 R10 S29	48.49475122	-121.5455474	Sutter Creek	4.1345
SF	8/23/2007	8/2/2006	7/27/05	6/24/04	T34 R09 S11	48.45074279	-121.6055455	Trib to the Sauk	4.0683
RRV	9/6/2007	8/3/2006	7/13/05	7/12/04	T33 R04 S32	48.30070162	-122.3326311	Kennel Creek	3.2952
RRV	7/6/2007	9/7/2006	7/14/05	8/5/04	T36 R03 S01	48.63914755	-122.3600083	Friday Creek	3.0017
SF/ RRV	8/15/2007	6/29/2006	8/8/05		T36 R06 S09	48.536085	-122.045091	Jones Creek	3.0332
IF	8/30/2007	9/14/2006	8/4/05	6/17/04	T36 R03 S14	48.6072138	-122.3947276	Whitehall Creek	N/A
RI	7/20/2007	7/24/2006	9/19/05	9/3/04	T33 R04 S 21	48.337417	-122.298226	Bulson Creek	3.198
RRV	Creek Dry	Creek Dry	8/31/05	8/11/04	T36 R03 S24	48.588341	-122.366923	Colony Creek	1.0648
IF	7/11/2007	8/16/2006	9/5/05		T 36 R 07 S 10	48.620314	-122.749067	Bear Creek	3.0470