



Skagit County Salmon Habitat Survey Monitoring Program Summary of the 2008 Annual Sites Survey

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In 2004, following Skagit County Resolutions #R20030210 and #R20040211, Public Works personnel initiated a Salmon Habitat Monitoring program to ensure that Skagit County Code 14.24.120, Ongoing Agriculture, is adequately protecting critical areas near agricultural lands. The four objectives of the Habitat Monitoring Program are 1) to establish baseline conditions, 2) conduct additional monitoring to determine trends over time, 3) determine if habitat conditions are improving, degrading or remaining the same in Ag-Natural Resource Lands (NRL) and RRc-NRL zoned lands, and 4) provide a means to differentiate between trends in salmon habitat in Ag-NRL and RRc-NRL zoned lands versus other lands under Skagit County jurisdiction. The county uses the Environmental Monitoring and Assessment Program (EMAP) developed by the Environmental Protection Agency (EPA) to document habitat conditions as well as to track trends over time. EMAP is designed to operate on a minimum of 60 stream reaches, randomly selected the first year, with 20 of those sites to be monitored annually for the next 4 years. On the 5th year, 60 newly selected random streams are to be sampled and the 5 year cycle will begin again. The initial baseline was completed in 2004, designating this year as the end of the 5 year cycle.

The Skagit County Salmon Habitat Monitoring Program – Quality Assurance Project Plan, May 2004 (Program) 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.

2008 sampling season highlights:

- A total of 18 sites were completed in 2008. The monitoring year started on June 9th with Red Cabin Creek and ended on September 29th with one of the Samish River sites.
- Colony Creek was not surveyed because it was dry during the sampling season.
- Thomas Creek was not surveyed due to high water levels.
- Hansen Creek and a tributary to Butler Creek were not surveyed last year but were surveyed this year.
- Sutter Creek was surveyed for the first time since 2005 this year.
- Six of the 20 sites, Lake Creek, a tributary to the Sauk River, Kennel Creek, Friday Creek, Whitehall Creek and Bulson Creek, have been surveyed each year since 2004, thus having five complete years of data.

Changes:

Jeff McGowan, Rick Haley, Emily Derenne, Halli Hemley and Tracy Patton completed the surveys in 2008.

Recommendations for the 2009 sampling season:

- 2009 is a 60 site year. Be prepared with man power, equipment and time.
- Hire and train an intern or two to aid in completing 60 sites.
- Schedule surveys of known or potential low-flow streams for late May or early June.
- Colony Creek and Thomas Creek have a poor record of being suitable for sampling. We should consider replacing them with two sites from the Over Sample. The protocol calls for using the site with the lowest identification number.
- Create a schedule of what days we are going out, rain or shine, so that we might get all 60 sites done.
- Recommend staff review invasive plant species because at least one is present at almost all of the annual sites.

The Skagit County Salmon Habitat Monitoring Program is funded from 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. Jones Creek annual site

Salmon Habitat Monitoring Program Annual Survey Sites

Zoning	2008 Sample Date	2007 Sample Date	2006 sample date	2005 Sample Date	2004 Sample Date	Quad Coordinates	Latitude	Longitude	Stream Name	WRIA ID
A	7/13/2008	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	High water	8/25/2005	8/3/04	T35 R04 S18	48.52600951	-122.3381121	Thomas Creek	3.0010
A	7/31/2008	9/12/2007	7/26/2006	9/1/2005		T35 R04 S36	48.569066	-122.246213	Samish River	3.0005
A	6/9/2008	10/4/2007	Creek Dry	6/14/2005	9/27/04	T35 R06 S15	48.52950194	-122.0240599	Red Cabin Creek	3.0343
RR	6/23/2008	7/3/2007	7/14/2006	6/27/2005	9/10/04	T33 R05 S19	48.33811819	-122.2071842	Lake Creek	3.0258
A	8/6/2008	8/3/2007	8/9/2006	7/20/2005		T35 R05 S07	48.358406	-122.207039	Lake Creek	3.0258
A	7/7/2008	6/29/2007	7/7/2006	8/7/2005		T35 R05 S25	48.496598	-122.109758	Sorenson Creek	3.0291
A	9/10/2008	8/8/2007	8/23/2006	7/15/2005		T36 R04 S06	48.631418	-122.356169	Friday Creek	3.0017
A/ RRc	9/29/2008	9/20/2007	7/20/2006	8/11/2005		T36 R04 S27	48.582167	-122.279766	Samish River	3.0050
RRc	7/14/2008	7/16/2007	8/10/2006	9/28/2005		T33 R 05 S 19	48.426665	-122.207446	Mundt Creek	3.0235
RRV	7/24/2008	Creek Dry	8/29/2006	9/15/05		T36 R04 S8	48.62098	-122.325294	Trib to Butler	3.0019
RRV	6/27/2008	Creek Dry	Creek Dry	6/29/05	9/2/04	T35 R10 S29	48.49475122	-121.5455474	Sutter Creek	4.1345
SF	8/18/2008	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	7/9/2008	9/6/2007	8/3/2006	7/13/05	7/12/04	T33 R04 S32	48.30070162	-122.3326311	Kennel Creek	3.2952
RRV	7/23/2008	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	9/22/2008	8/15/2007	6/29/2006	8/8/05		T36 R06 S09	48.536085	-122.045091	Jones Creek	3.0332
IF	8/29/2008	8/30/2007	9/14/2006	8/4/05	6/17/04	T36 R03 S14	48.6072138	-122.3947276	Whitehall Creek	N/A
RI	7/30/2008	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	Creek Dry	8/31/05	8/11/04	T36 R03 S24	48.588341	-122.366923	Colony Creek	1.0648
IF	8/28/2008	7/11/2007	8/16/2006	9/5/05		T 36 R 07 S 10	48.620314	-122.749067	Bear Creek	3.0470