Skagit County Salmon Habitat Survey Monitoring Program
Summary of the 2006 Annual Sites Survey

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In 2004, Skagit County Public Works personnel initiated a Salmon Habitat Monitoring project. This effort is in response to Skagit County Resolutions #R20030210 and #R20040211, which specifies actions the County will take to ensure that Skagit County Code 14.24.120, Ongoing Agriculture, is adequately protecting critical areas on agricultural lands. The four objectives of the project 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. After discussions with State and Federal resource agencies, the County determined that the Environmental Monitoring and Assessment Program (EMAP) developed by Environmental Protection Agency (EPA) would be the best method to document baseline conditions and track trends in habitat conditions. The study design called for a minimum of 60 stream reaches, randomly selected, for inclusion in the 2004 sampling regime. In 2006-2009, 20 selected reaches, established in 2004/2005, will be resurveyed to provide information to be used for trend analyses. In 2009, a minimum of another randomly selected 60 reaches will be surveyed and the five-year data collection cycle will begin again.

After the initial baseline survey of 60 sites was completed, the *Skagit County Salmon Habitat Monitoring Program – Quality Assurance Project Plan, May 2004* (Program) called for a yearly survey of 20 annual sites. The baseline survey was completed in 2005, therefore, the designated 20 annual sites would be sampled in 2006. These 20 annual sites consisted of 10 sample sites in Agriculture – Natural Resource Land (Ag-NRL) or Rural Resource- Natural Resource Land (RRc-NRL) and 10 sample sites in other zonings within Skagit County. Since the goal of the annual survey is to document habitat changes unrelated to agricultural practices and since a limited amount of data is available this early in the Program, no analysis of the sampling data was done.

A total of 16 sites were completed in 2006. Surveys were not completed for Sutter Creek, Colony Creek and Red Cabin Creek which went dry early in the sampling season. June and July were two of the driest months on record. Seattle received only .08 inches of rain in July and .19 inches in August. Thomas Creek was not surveyed because the water level never fell to a stage that it could be safely sampled. It was determined late in the sampling season that a beaver dam was causing the high water levels. WDFW was contacted about issuing a permit for removal of the beaver dam, but adult salmon had already spawned in the Samish and WDFW was concerned that the mobilization of water and sediment would adversely impact eggs in the gravel. See Table 1 for specific information on each of the 20 sites and Figure 1 for the general location of the sites.

Staff that participated in the 2006 sampling season were Jeff McGowan, Meghan Knudson, Chris Kowitz, Rick Haley, and Matt Barrett.

Sampling Season Highlights:

- The 2006 monitoring year started on June 29th with the Jones Creek site and ended on September 14th with Whitehaul Creek.
- For seven of the sites a full three years data is available.
- For 2004 only eleven of the 20 annual sites were surveyed. In 2005, all annual sites were designated and sampled.
- Much of Hansen Creek Site #3 was dredged to an average depth of 3.5 feet; as a result this site is anticipated to be markedly different for the 2007 season.

Recommendations for the 2007 sampling season:

- Schedule surveys of known low-flow streams for June.
- Recon suspected problem sites early in the sampling season.
- Schedule sampling team members' participation and potentially hire two interns.

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

Skagit County Resolution #R20030210 and #R20040211 requires that SCC 14.24.120 be evaluated ever three years to determine if it is adequately protecting critical areas on agricultural lands. This three year evaluation will be conducted in 2007. Later this year, the County will make a public request that any information related to water quality and/or salmon habitat be submitted to the County for evaluation. This request will go to all the natural resources agencies, tribes and the public. The information received, along with data collected by Skagit County, will be evaluated by County staff to determine the adequacy of SCC 14.24.120 to protect water quality and fish habitat. If it is determined, as a result of the County's review of the available data, that SCC 14.24.120 is not protecting the "functions and values" or meeting the "no harm or degradation standard" then County staff may make recommendations for changing SCC 14.24.120 to the Board of County Commissioners.

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.

Table 1 - Salmon Habitat Monitoring Program: Annual Survey Sites

Zoning	2006 sample date	2005Sample Date	2004 Sample Date	Quad Coordinates	Latitude	Longitude	Stream Name	WRIA ID
A	7/13/06	07/25/2005	8/19/04	T35 R05 S17	48.5208373	-122.1974027	Hansen Creek	3.0267
A	High water level	08/25/2005	8/3/04	T35 R04 S18	48.52600951	-122.3381121	Thomas Creek	3.0010
A	07/26/2006	09/01/2005		T35 R04 S36	48.569066	-122.246213	Samish River	3.0005
A	Creek Dry	06/14/2005	9/27/04	T35 R06 S15	48.52950194	-122.0240599	Red Cabin Creek	3.0343
RR	07/14/2006	06/27/2005	9/10/04	T33 R05 S19	48.33811819	-122.2071842	Lake Creek	3.0258
A	08/09/2006	07/20/2005		T35 R05 S07	48.358406	-122.207039	Lake Creek	3.0258
A	07/07/2006	08/07/2005		T35 R05 S25	48.496598	-122.109758	Sorenson Creek	3.0291
A	08/23/2006	07/15/2005		T36 R04 S06	48.631418	-122.356169	Friday Creek	3.0017
A/ RRc	07/20/2006	08/11/2005		T36 R04 S27	48.582167	-122.279766	Samish River	3.0050
RRc	08/10/2006	09/28/2005		T33 R 05 S 19	48.426665	-122.207446	Mundt Creek	3.0235
RRV	08/29/2006	9/15/05		T36 R04 S8	48.62098	-122.325294	Trib to Butler	3.0019
RRV	Creek Dry	6/29/05	9/2/04	T35 R10 S29	48.49475122	-121.5455474	Sutter Creek	4.1345
SF	08/02/2006	7/27/05	6/24/04	T34 R09 S11	48.45074279	-121.6055455	Trib to the Sauk	4.0683
RRV	08/03/2006	7/13/05	7/12/04	T33 R04 S32	48.30070162	-122.3326311	Kennel Creek	3.2952
RRV	09/07/2006	7/14/05	8/5/04	T36 R03 S01	48.63914755	-122.3600083	Friday Creek	3.0017
SF/ RRV	06/29/2006	8/8/05		T36 R06 S09	48.536085	-122.045091	Jones Creek	3.0332
IF	09/14/2006	8/4/05	6/17/04	T36 R03 S14	48.6072138	-122.3947276	Whitehall Creek	N/A
RI	07/24/2006	9/19/05	9/3/04	T33 R04 S 21	48.337417	-122.298226	Bulson Creek	3.198
RRV	Creek Dry	8/31/05	8/11/04	T36 R03 S24	48.588341	-122.366923	Colony Creek	1.0648
IF	08/16/2006	9/5/05		T 36 R 07 S 10	48.620314	-122.749067	Bear Creek	3.0470