FINAL PROJECT ADMINISTRATIVE REPORT ORIGINS OF JUVENILE CHINOOK IN WRIA 6 NEARSHORE SRFB Project 07-1589 N

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Prepared by Skagit River System Cooperative

The following tasks were completed per the WRIA 6 Origins of juvenile Chinook in WRIA 6 Nearshore study design and work plan:

- 1. We collaborated with existing fish sampling efforts (SRSC, Lummi Nation, Tulalip Tribes, NOAA, and Stillaguamish Tribe) and partnered with volunteer groups (e.g., WSU Beachwatchers) to collect juvenile Chinook tissue samples from areas throughout WRIA 6 in 2008.
- 2. We conducted genetic analysis using DNA collected from over 1,700 different juvenile Chinook salmon in the Whidbey Basin and Admiralty Inlet sides of WRIA 6 to determine their river of origin (or population grouping) by area within WRIA 6 as well as by habitat type: small coastal streams, pocket estuaries, shorelines, offshore. The observation of juvenile Chinook salmon rearing in small non-natal coastal streams was a new finding and we expanded our understanding of this topic by leveraging work with two existing monitoring programs within the Whidbey Basin (see bullet 5).
- 3. As requested by Washington State RCO staff, we presented preliminary findings at RCO Salmon Recovery Conference on April 16, 2009.
- 4. We met with WRIA 6 Technical Advisory Group members on March 24, 2010 to report results of fish use and Chinook origin (appendix 1).
- 5. We leveraged work sponsored by Tulalip Tribes and SRSC's longterm nearshore monitoring to better understand the use of small (often seasonally flowing) coastal streams by fry migrant Chinook in the Whidbey Basin and conducted genetic analysis on fish sampled in 2009 (appendix 2).
- 6. As requested by Washington State RCO staff, we included WRIA 6 results in a presentation of juvenile Chinook origins throughout Northern Puget Sound in order to observe regional differences in the juvenile Chinook using nearshore habitat by 4 regions: San Juans, Bellingham/Samish, Whidbey Basin, and Admiralty Inlet (Appendix 3).