

## **Skagit Watershed Council 2016 Interim Steelhead Strategy**

**Adopted March 3, 2016**

With this strategy, the Skagit Watershed Council explicitly incorporates steelhead and bull trout into our strategic habitat priorities for habitat planning, protection and restoration, making them eligible for habitat grants and incorporating them into other planning and monitoring activities. The Council has developed this 2016 Interim Steelhead Strategy to meet those goals. Until the broader outlines of a steelhead recovery plan are fully developed by tribal, state, and federal governments in 2016/2017, the Watershed Council can only begin at this time to enhance our focus on these species and their habitats given information currently available.

To develop the interim strategy, the Council's Board of Directors established a Steelhead and Bull Trout (SBT) Subcommittee, reporting to the Technical Work Group (TWG). Deliberations yielded consensus agreement on the basic points that frame an interim approach, including:

- This interim 2016 strategy is steelhead-specific and does not include bull trout given their relatively stable health in the Skagit watershed compared to steelhead and Chinook salmon.
- Interim steelhead and bull trout priorities will augment and not replace existing Chinook salmon priorities.
- Given the early status of steelhead recovery planning at the regional and watershed scales, this initial strategy is temporary and not necessarily precedence-setting. Also, it is simple, conservative, and low risk, building on our well-founded SWC 2015 Strategic Approach.
- This initial effort for 2016 only includes the Skagit watershed and does not include the Samish watershed, based solely at this point on limited time available for planning. This does not necessarily reflect the relative importance of the Samish watershed for steelhead.
- While the likely factors for decline of steelhead are broad and go beyond just habitat, the Watershed Council is most well suited for addressing the freshwater habitat factors for decline. Preliminarily, these freshwater habitat factors appear to include increased peak flows during freshwater juvenile rearing; decreased low flows with associated loss of habitat area and quality; degraded instream and riparian habitats; and isolated tributary habitats.
- Mainstem and tributary habitats will become more of an emphasis for steelhead.
- While critical for Chinook salmon juveniles, the tidal delta, marine nearshore, and pocket estuaries are less critical for steelhead migrants.
- Lack of steelhead-specific knowledge and data limit our certainty for habitat restoration and protection activities.

### **Steelhead Populations, Life History, and Habitats**

Like Chinook salmon, the Skagit River is home to multiple populations of steelhead. The Puget Sound Steelhead Technical Recovery Team identified five populations, including in the Skagit River, Sauk River, Baker River, Nookachamps Creek, and Samish River/Bellingham Bay. Steelhead are distributed from the tidal delta/lower mainstem all the way up the watershed and independent tributaries to the ends of the

anadromous zones. The juveniles are often referred to as being ubiquitous throughout gradient-accessible waterways. The adults spawn in many different locations, including from the lower mainstem near the SR9 bridge upstream to smaller, headwater streams. Unlike Chinook salmon juveniles, steelhead juveniles are less obligated to large floodplains and off-channel habitats given their ability to utilize higher velocity habitats. They are also temporally broader in distribution than Chinook salmon given their complex life history strategies that include multiple years of freshwater dependence.

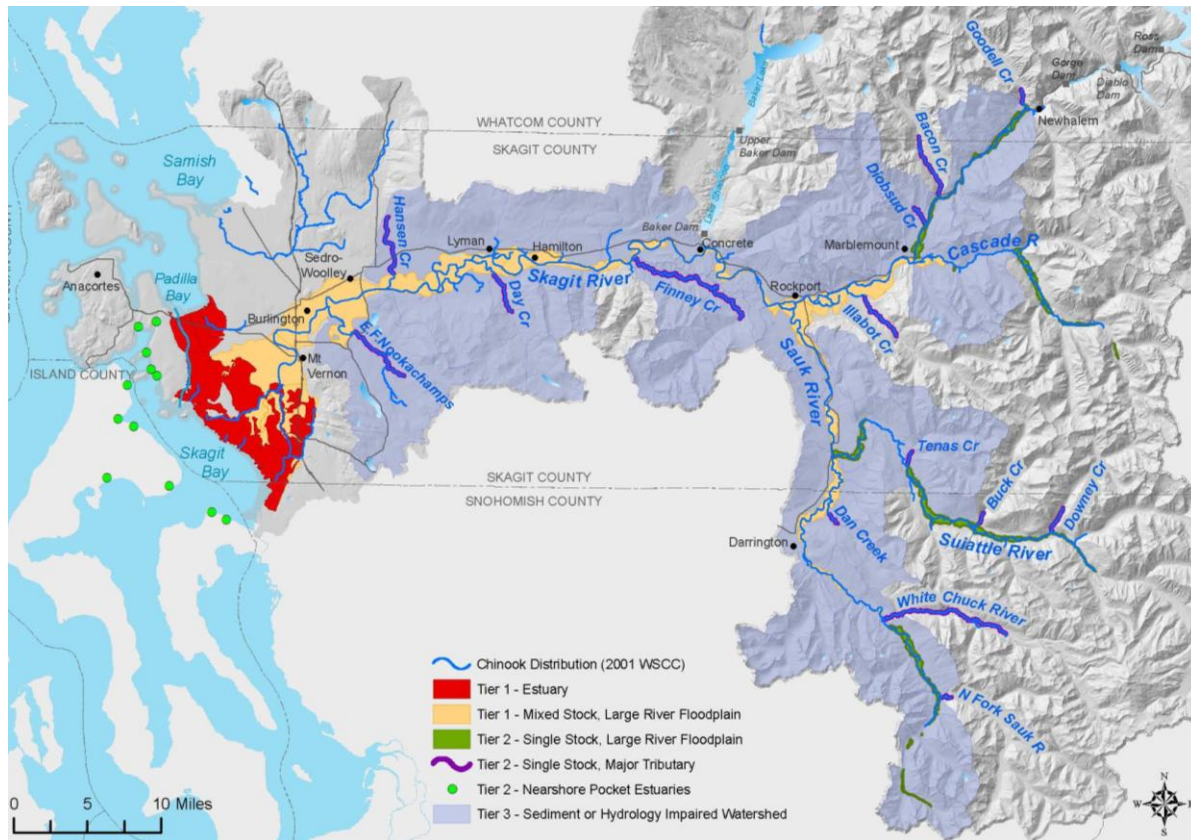
Once a steelhead smolts and begins their journey to the Pacific Ocean, there appears to be limited dependence on the lower river, tidal delta, and nearshore marine domains. Tracking studies show relatively quick emigration to offshore habitats and the Strait of Juan de Fuca. However, there can be plasticity in their behavior.

Even without an exhaustive review of steelhead habitats, it is clear that there is a wide overlap with the SWC 2015 Strategic Approach except for the focus on marine tidal delta and nearshore habitats. And while steelhead push further up the mainstem, main tributaries, and smaller tributaries than our current, Chinook-centric approach, until details are developed in recovery planning, there is uncertainty as to where and how to prioritize them further.

### **Steelhead Target Area**

The SWC 2016 Interim Steelhead Strategy builds upon the SWC 2015 Strategic Approach, which prioritizes target areas for Chinook salmon. The 2015 update of this Chinook-centric document reinforced our strategic focus on rearing habitats, including estuarine, mainstem, and large tributary areas. Further, it specifically expanded from four to fourteen the number of large tributaries eligible for Council operations (grants, assessments, etc.), with tributary target areas defined by confined and moderately confined floodplains within the limits of documented Chinook salmon distribution. Figure 1 depicts these Chinook target areas spatially.

Figure 1. SWC 2015 Strategic Approach - Chinook Target Areas. Maps developed by Skagit River System Cooperative.

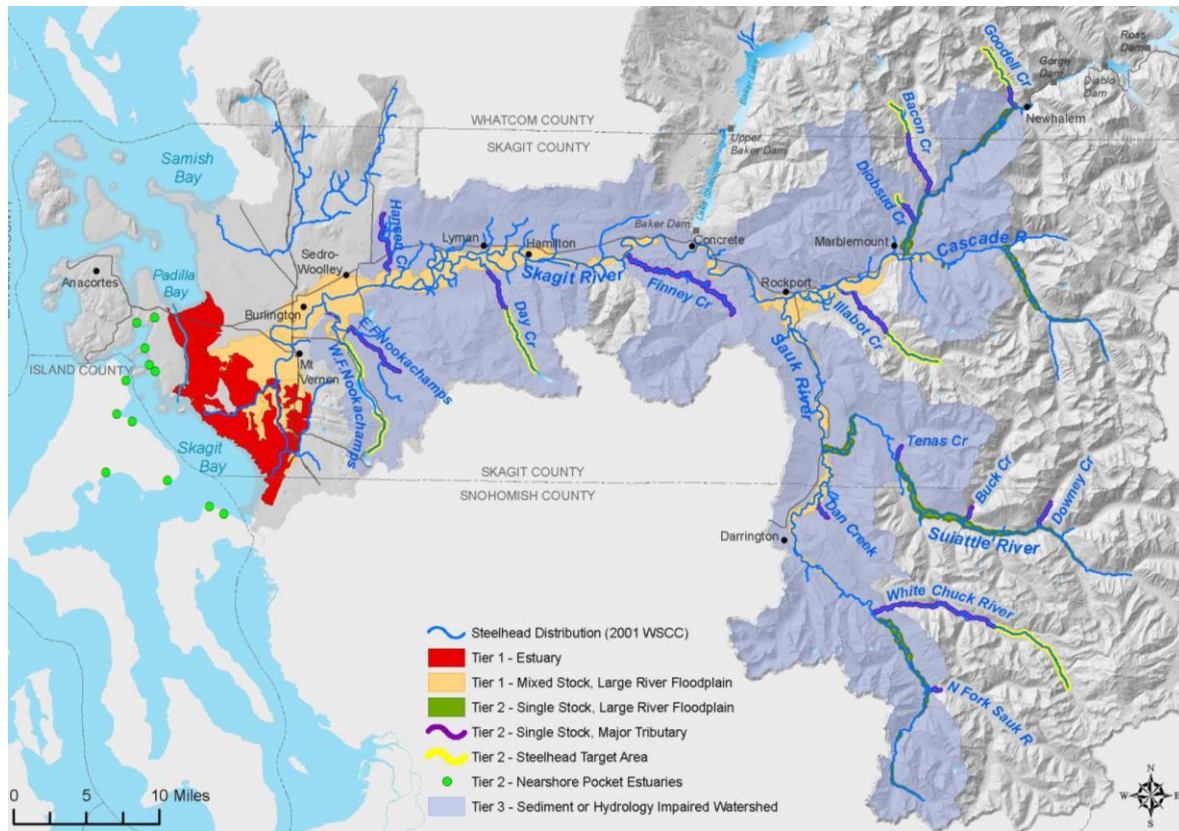


As noted above, a side-by-side comparison of Chinook salmon and steelhead needs yields the recognition that much of our focus on Chinook target areas directly overlaps steelhead habitats, but with less emphasis on saltwater and more emphasis on tributaries and low flow conditions. Thus, this SWC 2016 Interim Steelhead Strategy adopts the same target areas as the SWC 2015 Strategic Approach, but expands the eligible area upstream in the same mainstems and tributaries to include steelhead presence. This “expanded geographic box” includes the floodplain areas (unconfined and moderately confined, as defined by Pleus and Schuett-Hames 1998) above documented Chinook distribution but inclusive only of documented and presumed steelhead distribution in the mainstems and tributary mainstems (Figure 2).

Additionally, the SWC 2016 Interim Steelhead Strategy recognizes the need to collect and analyze updated information for developing priority steelhead culvert replacement projects in the Skagit Watershed. Potential culvert barriers within the full spatial range of steelhead distribution in the watershed are included in this expanded geographic box. Data collection and analysis, as well as conceptualizing priority projects, is eligible for funding consideration.

It should be noted that these maps represent planning-level information and should be secondary to the target area criteria presented herein and in the SWC 2015 Strategic Approach. It is the responsibility of the project sponsor to provide evidence of eligibility during the grant application process where needed, though technical support is available from SWC and partner staff.

Figure 2. SWC 2015 Interim Steelhead Strategy Target Areas. Maps developed by Skagit River System Cooperative.



## Steelhead Scoring

For this unique area of steelhead distribution above Chinook salmon distribution in the Tier 2 target areas, this interim strategy provides a target area total score of 8 points (2 points with a weight of 4 equals 8 points). This is less than the downstream Tier 1 and 2 target areas of 20 and 12, respectively. This makes steelhead-only projects eligible, but requires a relatively strong project to compete with multiple species projects downstream.