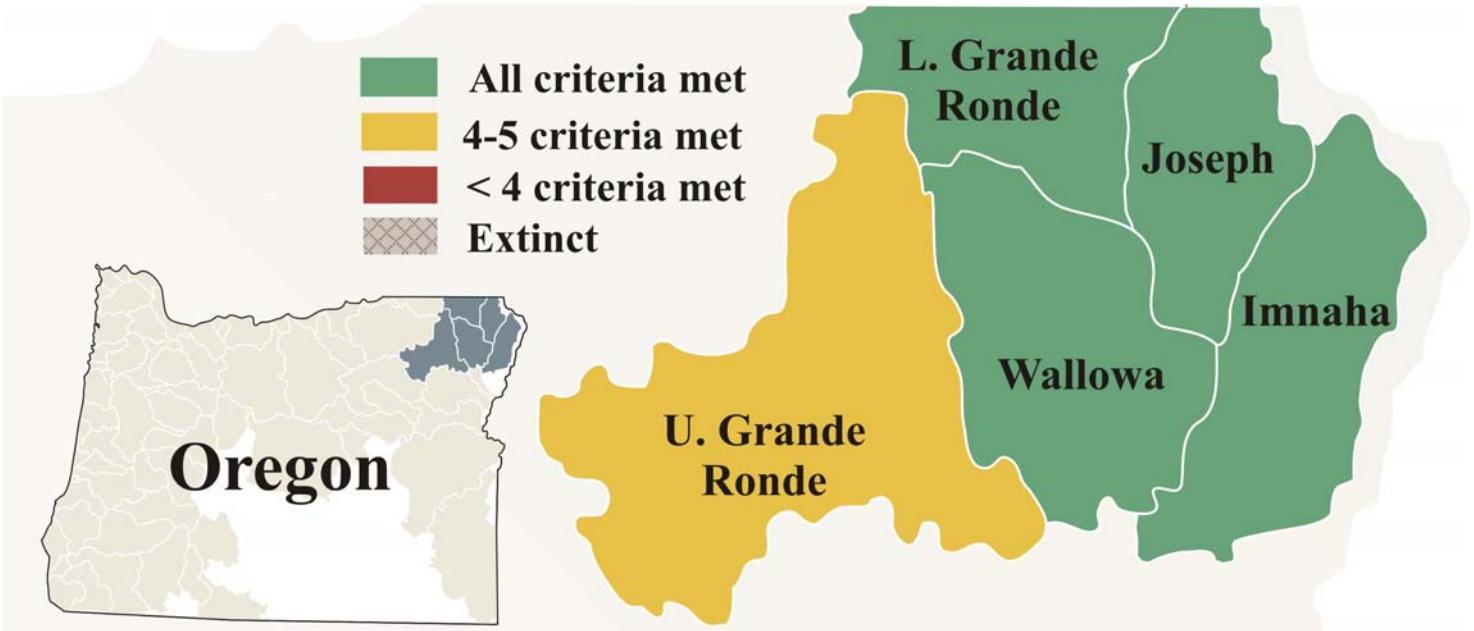
Lower Snake Summer Steelhead SMU

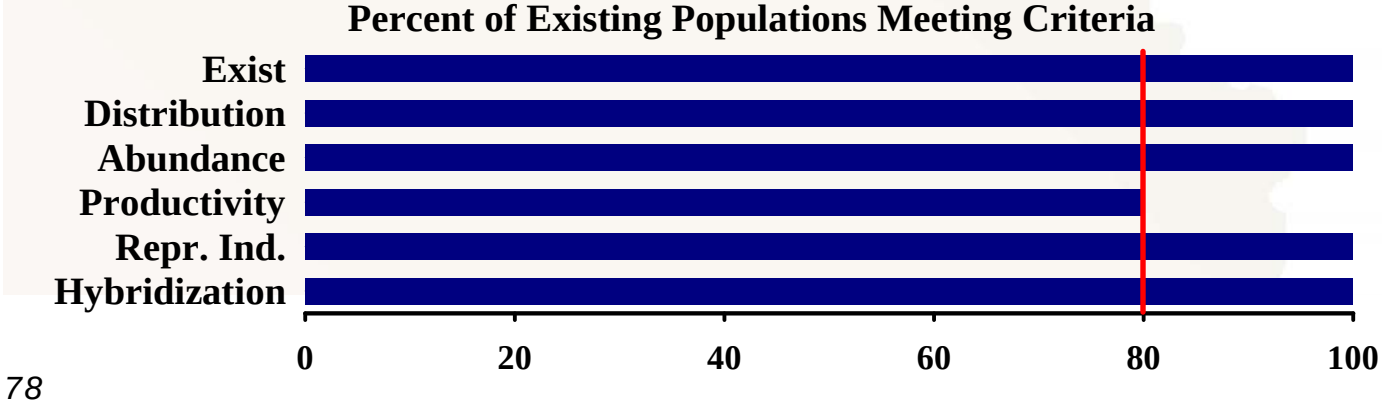
ESA Designation:	State Status:	Interim Assessment:
Threatened 1997	*Vulnerable*	*Not at Risk*

This SMU consists of five populations from tributaries flowing into the Snake River below Hells Canyon Dam. The SMU near-term sustainability of the SMU is not at risk because each of the six interim criteria were met by at least 80% of the populations. All of the populations with the exception of the Upper Grande Ronde passed all of the criteria. The Upper Grande Ronde population did not meet the productivity criterion. Suitable data and other information on populations in this SMU provide a moderate level of confidence in the assessment of the interim criteria.

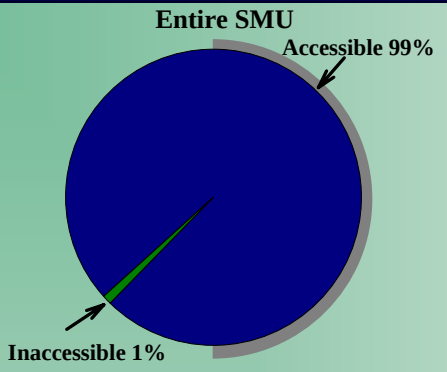


Population	Exist	Dist.	Abund.	Prod.	Ind.	Hybrid
L. Grande Ronde	Pass	Pass*	Pass*	Pass*	Pass	Pass
Joseph	Pass	Pass*	Pass	Pass	Pass	Pass
Wallowa	Pass	Pass*	Pass	Pass	Pass	Pass
U. Grande Ronde	Pass	Pass*	Pass	***Fail***	Pass	Pass
Imnaha	Pass	Pass*	Pass	Pass	Pass	Pass

**** Inferred***

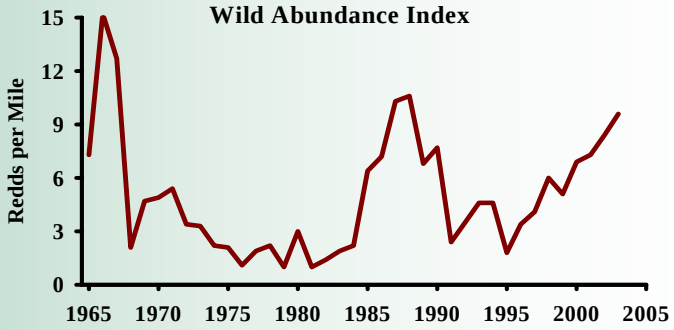


Distribution - Pass



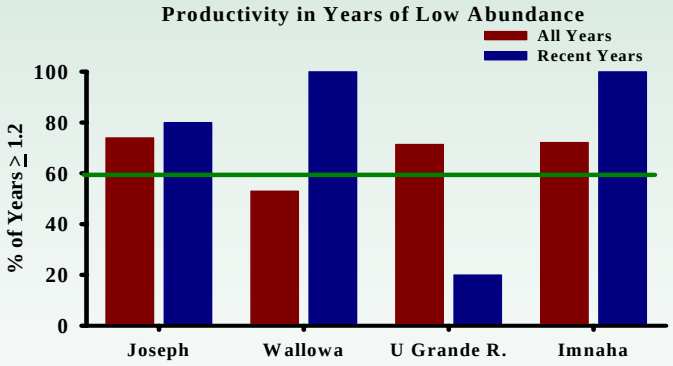
- Each of the five populations passed the distribution criterion.
- Nearly all (99%) of the historically-available habitat of this SMU is still available today. Much of the habitat however is degraded from pre-settlement conditions.

Abundance – Pass



- Each of the populations passed the criterion.
- Beginning in the late 1960s, spawner abundance dropped sharply and remained depressed until the early 1980s. This decline is attributed to effects of lower Snake River dams and an extended period of poor ocean conditions.
- Populations rebounded in the mid-1980s only to fall again in the late 1980s and early 1990s, again reflecting changes in ocean conditions.
- Each of the populations exceeded the minimum criterion in all of the last five years, and in at least 80% of all years with abundance estimates. No data are available for the Lower Grande Ronde, but it was assumed to have performed similar to the Joseph population.

Productivity - Pass



- Four of the five populations passed this criterion.
- In the upper Grande Ronde, low abundance years in the 70s and 80s are associated with high productivity. Resilience was not as strong during low abundance years in the late 90s.
- All populations have shown similar resiliency in years of low abundance over time the long term.
- Resiliency in the Wallowa and Imnaha has been stronger in recent years than in the past. The opposite is true for the upper Grande Ronde.

Independence - Pass

- Hatchery fish made up about 23% of natural spawners in the Upper Grande Ronde between 1988 and 2001, but have been less than 1% since 2002.
- Elimination of acclimated hatchery releases by ODFW in the Upper and Lower Grande Ronde populations has reduced the presence of hatchery fish on the spawning grounds in these populations the last few years.
- Less than 10% of spawning steelhead are hatchery origin in the Joseph and Wallowa populations.
- Hatchery fractions at monitoring weirs on the Imnaha have fluctuated between three and 14% hatchery fish over the past five years. Three of those years have been less than 10% hatchery fish.