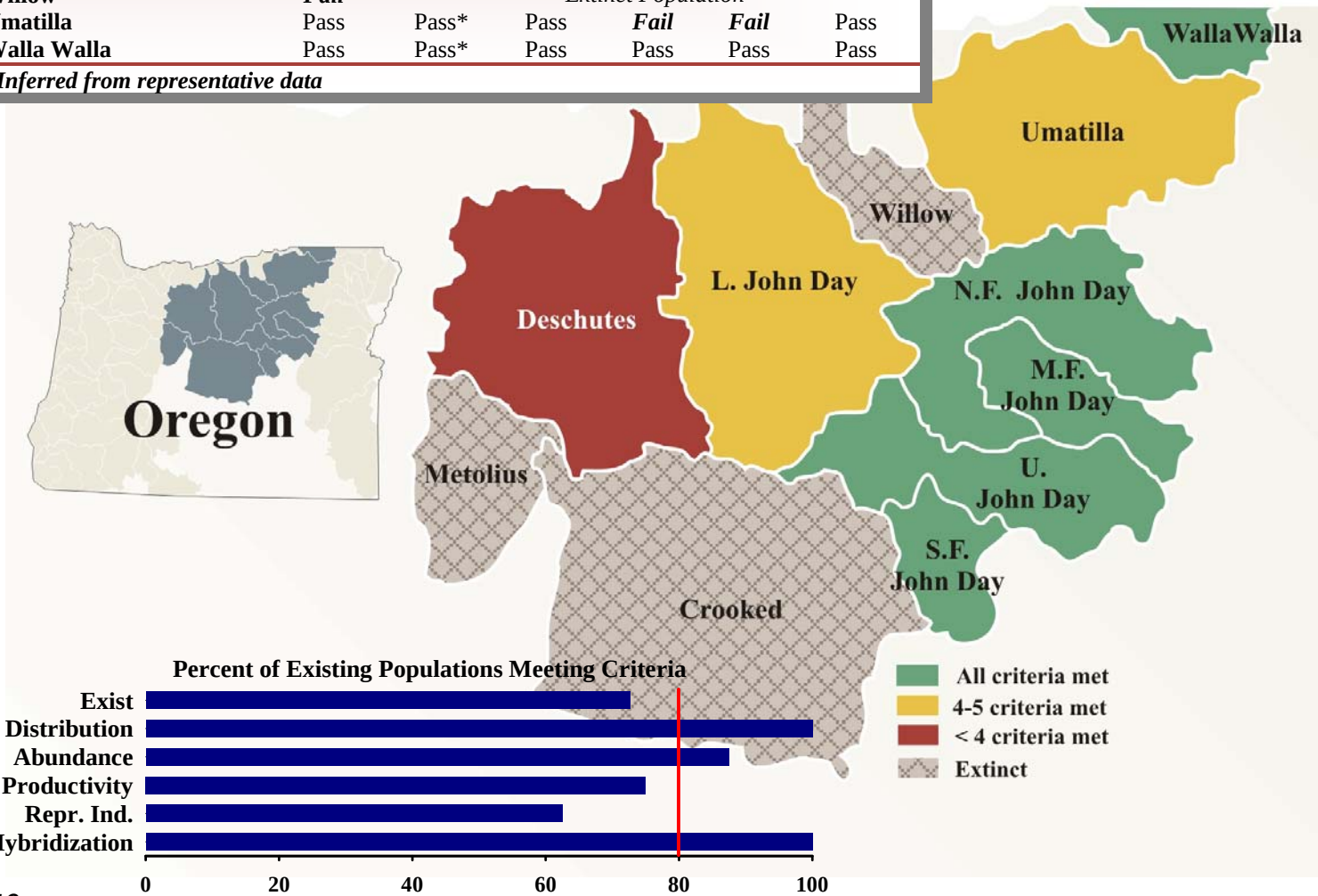
Mid Columbia Summer Steelhead SMU

ESA Designation:	State Status:	Interim Assessment:
Threatened 1999	***Vulnerable***	***At Risk***

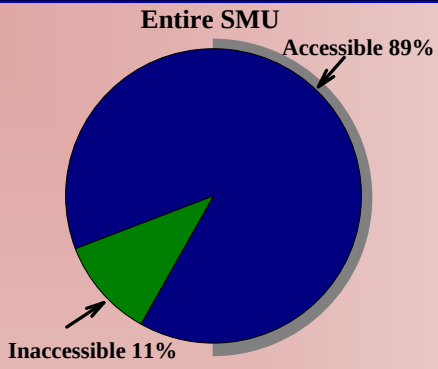
This SMU includes 11 historic populations in Columbia River tributaries between The Dalles Dam and the Snake River. The SMU only met three of the six interim criteria indicating the near-term sustainability is at risk. Four of the five John Day populations and the Walla Walla meet all of the five population-specific interim criteria. The Deschutes and Umatilla populations are constrained by variable productivity. The Deschutes, Lower John Day, and Umatilla are affected by naturally-spawning hatchery fish. Historical populations in the upper Deschutes and Willow Creek are extinct. 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
Deschutes	Pass	Pass*	***Fail***	***Fail***	***Fail***	Pass
Metolius	***Fail***		*Extinct Population*			
Crooked	***Fail***		*Extinct Population*			
Lower John Day	Pass	Pass*	Pass	Pass	***Fail***	Pass
North Fork John Day	Pass	Pass*	Pass	Pass	Pass	Pass
Middle Fork John Day	Pass	Pass*	Pass	Pass	Pass	Pass
South Fork John Day	Pass	Pass*	Pass	Pass	Pass	Pass
Upper John Day	Pass	Pass*	Pass	Pass	Pass	Pass
Willow	***Fail***		*Extinct Population*			
Umatilla	Pass	Pass*	Pass	***Fail***	***Fail***	Pass
Walla Walla	Pass	Pass*	Pass	Pass	Pass	Pass

Inferred from representative data

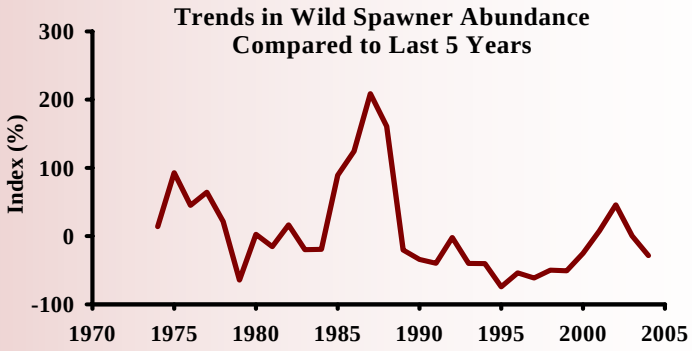


Distribution – Pass



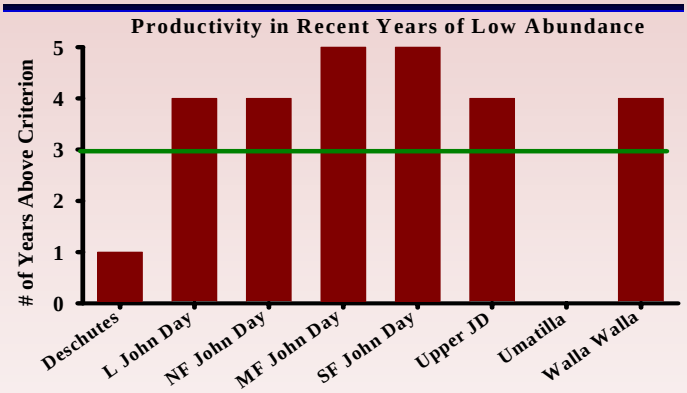
- Roughly 265 miles of habitat in the Metolius and Crooked rivers was blocked in 1958 by construction of the Pelton and Round Butte dams in the Deschutes.
- 99% of habitat within existing populations remains accessible.
- Each of the existing populations passed the criterion.

Abundance– Pass



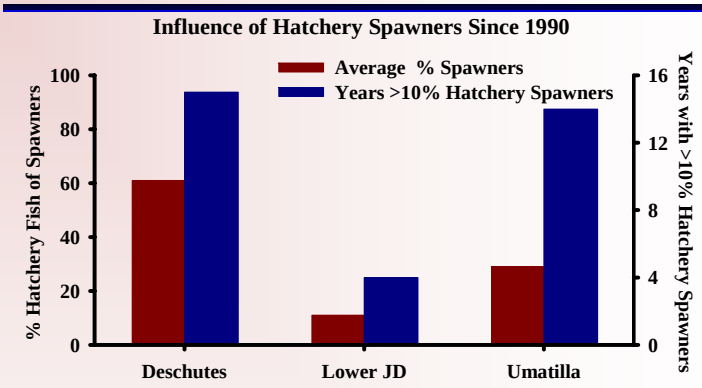
- Seven of the eight existing populations passed the criterion.
- Abundance has fluctuated since monitoring began but the long term trend has been slightly down. The graph above reflects relative changes in abundance relative to the last five years for all populations combined.
- Record low numbers were observed during the 1990s.
- Increased escapements in the late 1980s and early 2000s followed years of better-than-average ocean conditions.

Productivity – Fail



- Only six of eight existing populations met the interim criterion.
- Productivity was consistently above the interim criterion from the late 1970s through the early 1980s.
- The mid 1980s to mid 1990s were a period of low productivity, but have been followed by three strong broods in the mid 1990s.

Independence - Fail



- Only five of eight existing populations passed the criterion.
- The graph above includes only populations that failed the criterion.
- The Deschutes and Umatilla exceeded 10% naturally spawning hatchery fish each of the last five years.
- Very few hatchery fish are observed in the Walla Walla and in the John Day outside of the lower John Day.
- A hatchery supplementation program is currently operated in the Umatilla basin, incorporating wild broodstock into the hatchery and releasing hatchery fish into the wild.

Additional Information

- Hatchery summer steelhead have comprised 60% of the spawners in the Deschutes population over the last four generations. This suggests that abundance has been driven by hatchery fish rather than wild fish. For this reason, the Deschutes failed the abundance criterion despite numbers of naturally produced fish above the criterion for the last five years.