

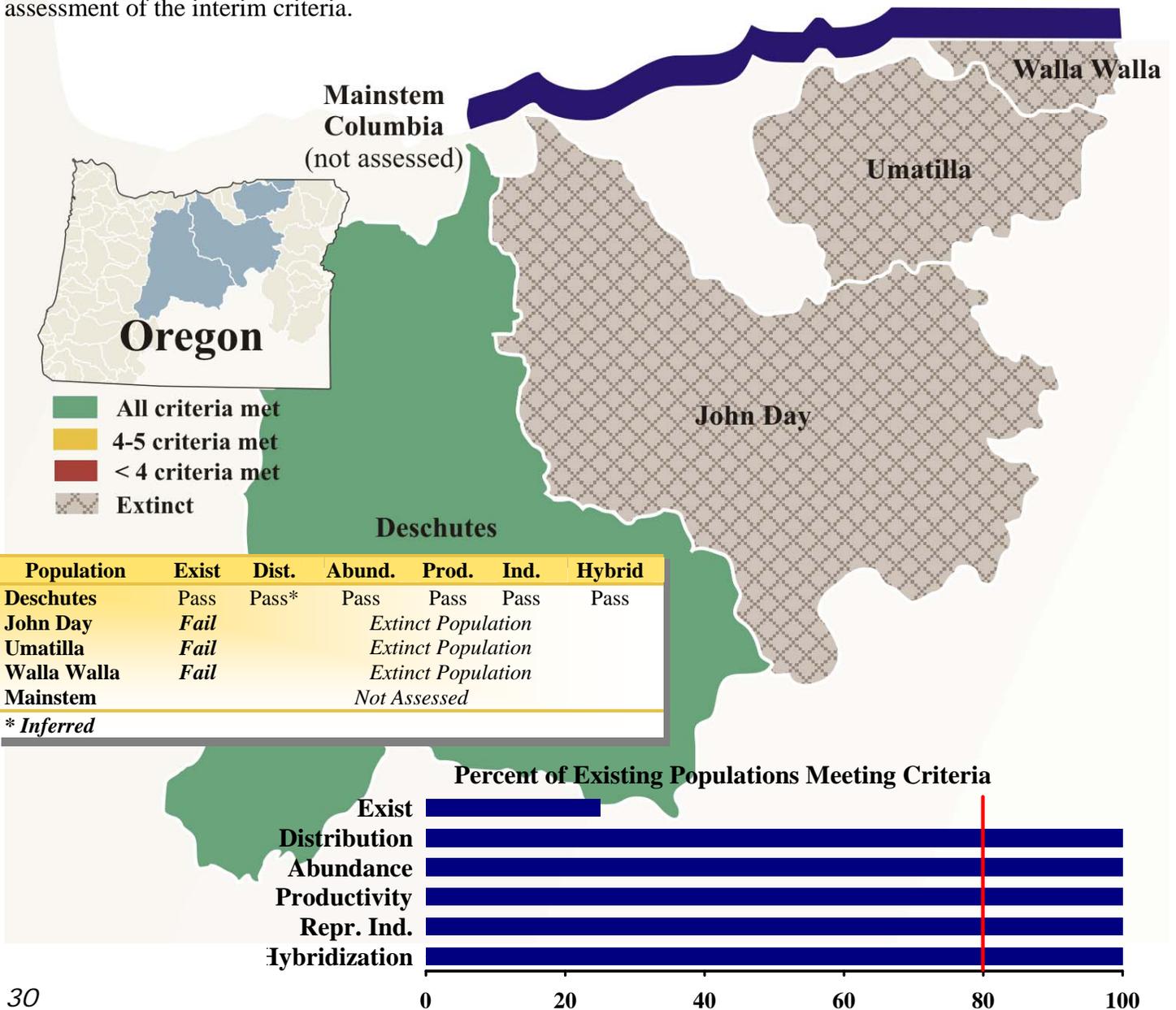
Mid Columbia Fall Chinook SMU

ESA Designation:
Not Warranted

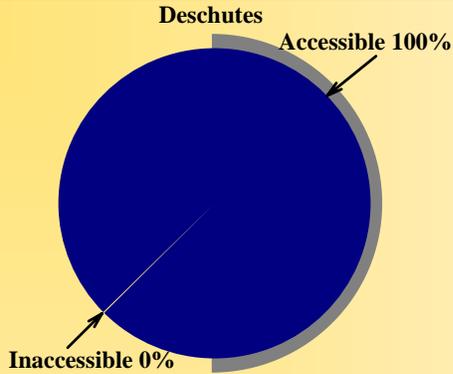
State Status:
Not Listed

Interim Assessment:
Potentially At Risk

This SMU historically included five populations in Oregon tributaries between The Dalles Dam and the Snake River. A mainstem Columbia River population may exist, but it was not assessed under this report because it is poorly understood. Three of the four historical populations in Oregon tributaries are extinct causing the SMU to fail the existence criterion. The Deschutes population still exists and met each of the five population-specific, interim criteria. The SMU met five of the six interim criteria so the near-term sustainability is potentially at risk. The loss or uncertainty in status of four of the five populations reflects the significance of historical habitat impacts but the strength of the remaining population in the Deschutes ameliorates risks of further population losses. The mainstem Columbia population was not considered in the assessment outcome of this SMU because its status and dynamics with tributary populations in both Oregon and Washington are poorly understood. Suitable data and other information on populations in this SMU provide a moderate level of confidence in the assessment of the interim criteria.

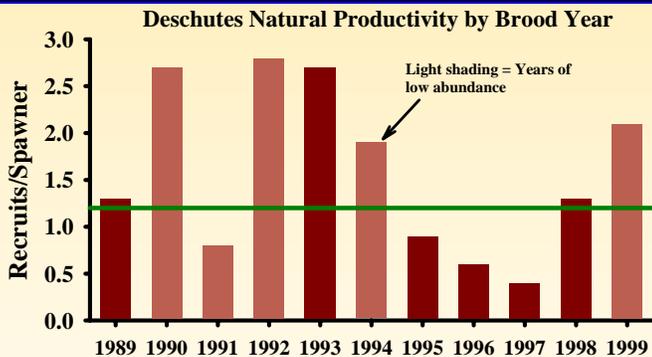


Distribution - Pass



- Deschutes fall Chinook did not historically occur in significant numbers upstream of the current site of Pelton Dam, hence, all of the available habitat in the Deschutes basin is still available today.
- The distribution of fall Chinook in this SMU was drastically reduced by the loss of the John Day, Umatilla, and Walla Walla populations – this effect is reflected in the existence criterion.

Productivity - Pass

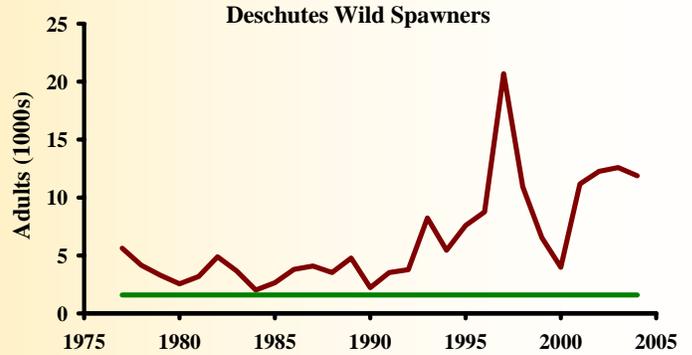


- Productivity of the Deschutes population exceeded 1.2 in seven of 11 brood years that estimates are available, including most years when spawner numbers were low.
- Recent low production rates likely resulted from large returns causing density-dependent factors to limit juvenile survival.

Additional Information

- The John Day, Umatilla, and Walla Walla populations became extinct in the early 1900s due to degradation of their lower mainstem habitats. Primary impacts included reduced flows, increased temperatures, and increased sedimentation, primarily as a result of water diversion and land use.
- While the Deschutes fall Chinook population passed all of the interim criteria, there is concern that the SMU has only one population still in existence. The persistence of an SMU is more secure if it contains several healthy populations.
- Reintroduction efforts for fall Chinook have been underway in the Umatilla since 1982. Data are not currently available to determine if these efforts are being successful in restoring a self-sustaining natural population.
- Mid Columbia fall Chinook must navigate from two to four Columbia River dams that have increased juvenile and adult mortality beyond pre-development conditions. Passage improvement efforts are ongoing.

Abundance- Pass



- Recent Deschutes spawner numbers are substantially greater than the 26-year average, the interim criterion threshold.
- The 2003 Deschutes run was the second highest since monitoring began in 1977.

Independence - Pass

- No hatchery fall Chinook have ever been released in the Deschutes basin.
- Hatchery strays from other basins made up less than 1% of the Deschutes fall Chinook observed at Sherars Falls in years of available data (1998-2002).