

Mid Columbia Spring Chinook SMU

ESA Designation:
Not Warranted 1998

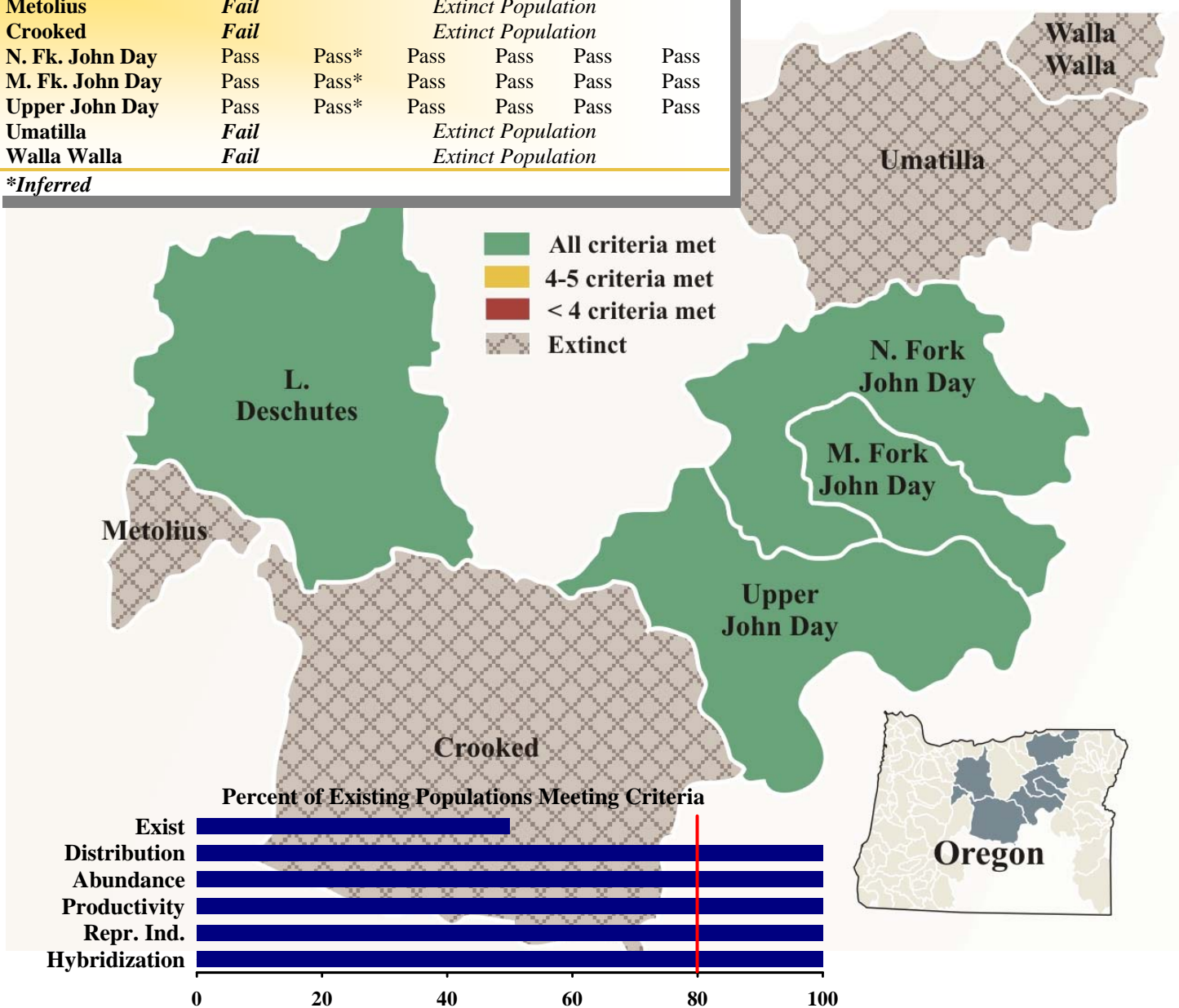
State Status:
Not Listed

Interim Assessment:
Potentially at Risk

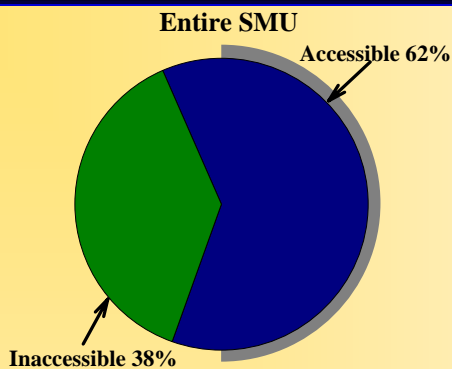
This SMU includes eight populations in tributaries between The Dalles Dam and the Snake River. The Deschutes population and all three John Day populations met each of the interim criteria. However, extinction of 4 of 8 historical populations causes the near-term sustainability of the SMU to be potentially at risk. The Umatilla and Walla Walla populations became extinct in the early 1900s due to extensive irrigation development. Construction of the Pelton-Round Butte complex eliminated access to the Metolius and Crooked populations in 1958. 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
Lower Deschutes	Pass	Pass*	Pass	Pass	Pass	Pass
Metolius	<i>Fail</i>		<i>Extinct Population</i>			
Crooked	<i>Fail</i>		<i>Extinct Population</i>			
N. Fk. John Day	Pass	Pass*	Pass	Pass	Pass	Pass
M. Fk. John Day	Pass	Pass*	Pass	Pass	Pass	Pass
Upper John Day	Pass	Pass*	Pass	Pass	Pass	Pass
Umatilla	<i>Fail</i>		<i>Extinct Population</i>			
Walla Walla	<i>Fail</i>		<i>Extinct Population</i>			

**Inferred*

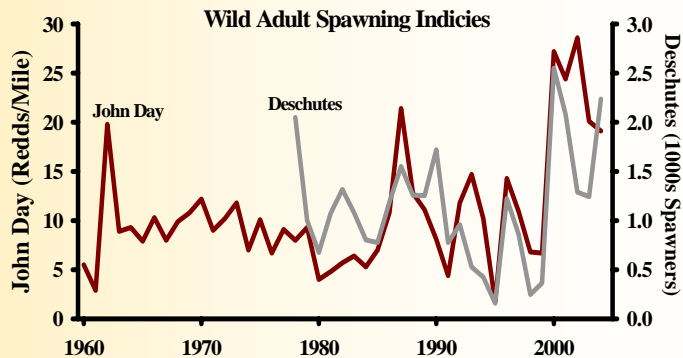


Distribution – Pass



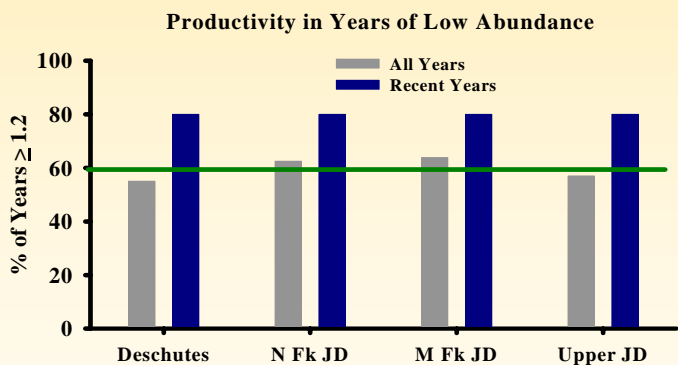
- The distribution of spring Chinook in this SMU was drastically reduced by the loss of Metolius, Crooked, Umatilla, and Walla Walla populations.
- Approximately 99% of historical habitat is still accessible within the existing populations.
- Habitat availability at certain life stages has probably been reduced by high stream temperatures and low flows in the John Day River.

Abundance - Pass



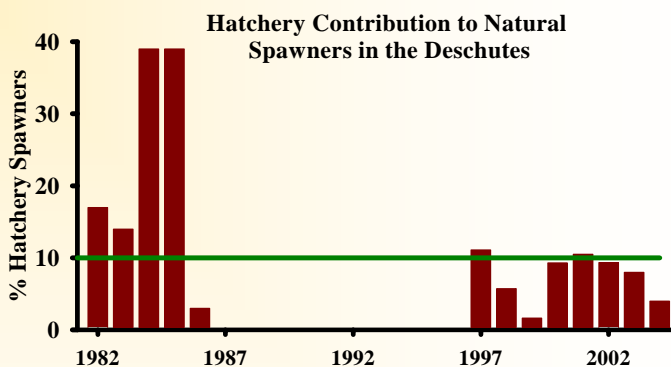
- Each of the four existing populations passed the abundance criterion.
- Good ocean conditions recently produced strong returns in both the Deschutes and John Day rivers which closely follow low numbers in the late 1990s.
- Recent returns to the John Day were the largest in 40 years.
- Deschutes returns have been variable and have not shown a clear increasing or decreasing trend.

Productivity - Pass



- Each of the four remaining populations met the criterion of 1.2 in at four of the last five years of below- average abundance.
- Productivity in the Deschutes and John Day have rebounded in recent years following a long period when spawners frequently failed to replace themselves.
- In years of low parent abundance over the long-term, productivity has been similar among each of the four existing populations. In 55-65% of those years, recruits per spawner exceed 1.2.

Independence - Pass



- Each of the four existing populations passed the reproductive independence criterion.
- A weir at Warm Springs National Fish Hatchery on the Warm Springs River limits numbers of hatchery fish among natural spawners in the lower Deschutes population.
- The John Day Basin is managed as a wild fish basin and stray hatchery fish comprise <2% of the spawners.

Additional Information

- A feasibility study is currently underway in the Deschutes to assess the potential of re-establishing spring Chinook, summer steelhead, and sockeye passage through the Pelton-Round Butte Dam Complex. If successful, this would restore salmon and steelhead access to historical habitat in the Crooked and Metolius rivers.