

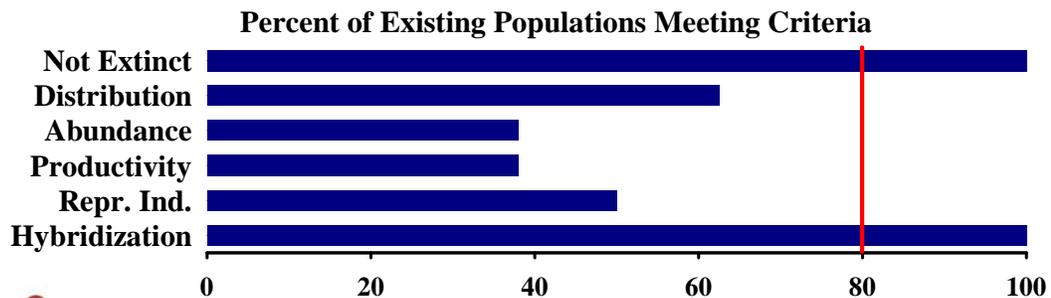
Lower Columbia Coho SMU

ESA Designation:
Threatened 2004

State Status:
Endangered

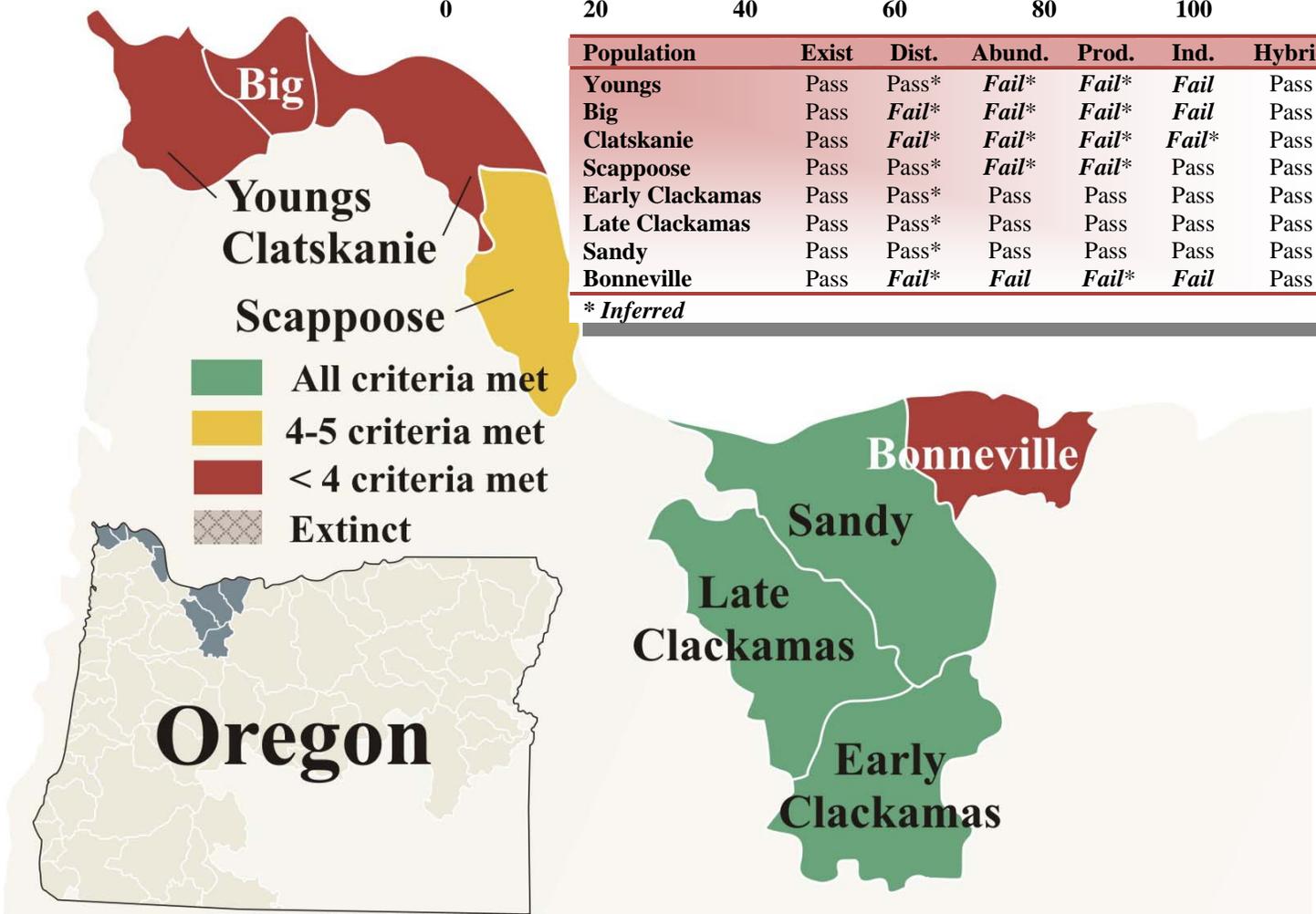
Interim Assessment:
At Risk

This SMU includes eight populations in tributaries from the Columbia River mouth to Fifteenmile Creek upstream of Hood River. Both early and late-run Clackamas coho are also included in this SMU. None of the populations are officially designated as extinct, though several populations are severely depressed and current returns may primarily be offspring of naturally spawning hatchery fish. The SMU failed four of the six criteria so its near-term sustainability is at risk. Suitable data and other information on populations in this SMU provide a moderate level of confidence in the assessment of the interim criteria.

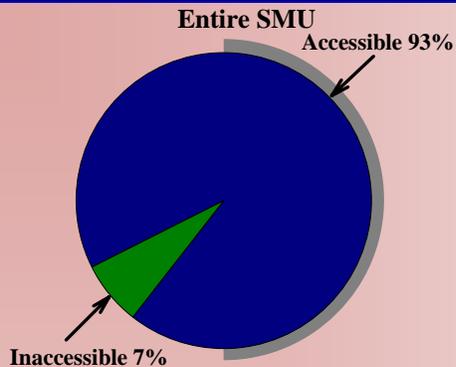


Population	Exist	Dist.	Abund.	Prod.	Ind.	Hybrid
Youngs	Pass	Pass*	Fail*	Fail*	Fail	Pass
Big	Pass	Fail*	Fail*	Fail*	Fail	Pass
Clatskanie	Pass	Fail*	Fail*	Fail*	Fail*	Pass
Scappoose	Pass	Pass*	Fail*	Fail*	Pass	Pass
Early Clackamas	Pass	Pass*	Pass	Pass	Pass	Pass
Late Clackamas	Pass	Pass*	Pass	Pass	Pass	Pass
Sandy	Pass	Pass*	Pass	Pass	Pass	Pass
Bonneville	Pass	Fail*	Fail	Fail*	Fail	Pass

* Inferred

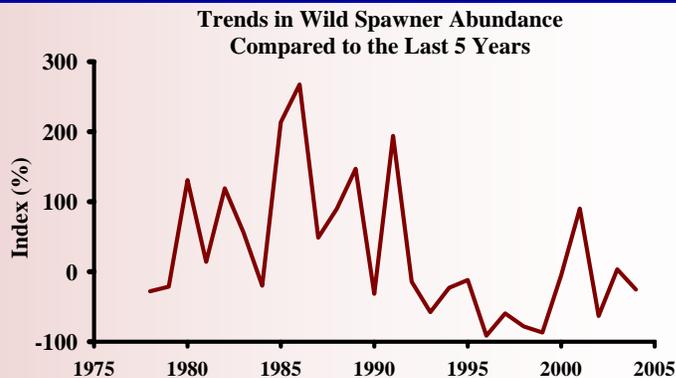


Distribution - Fail



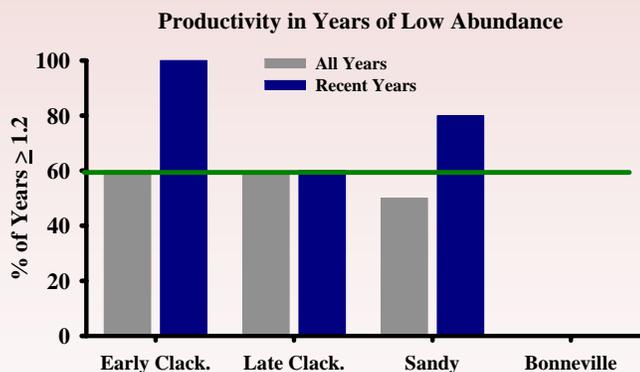
- Five of eight populations passed this criterion.
- The Sandy population has lost the most habitat (19%).
- Beginning in 2000, naturally produced coho were allowed access to habitat above hatchery barriers in Youngs River and Big Creek basins. A hatchery barrier on Gnat Creek (Big) blocks access to four miles of habitat.
- Given the small size of populations in Big, Clatskanie, and Bonneville, it is unlikely that wild spawners are distributing themselves throughout the available habitat in these populations.

Abundance - Fail



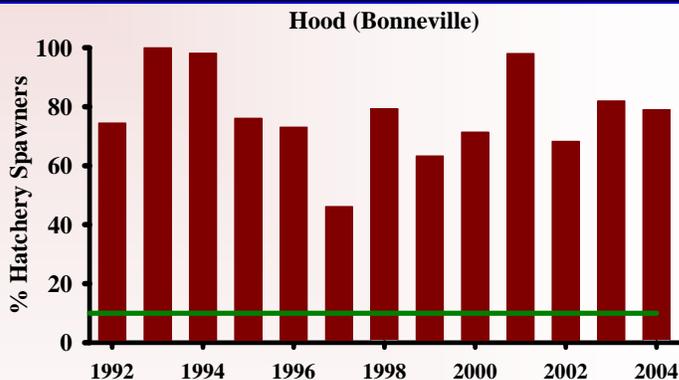
- Only three of eight populations passed this criterion.
- The graph above is an index of returns to the Clackamas (early and late run) and Sandy and reflects relative changes in abundance in those populations. Returns among those populations have declined from levels in the 1980s, but are higher than the depressed returns of the late 1990s.
- Though some spawners have been seen in populations downstream of the Willamette River the past few years, no fish were observed in index reaches for several years in the 1990s.
- Returns to the Hood River (Bonneville population) are consistently low and are primarily hatchery strays.

Productivity – Fail



- Three of eight populations met the criterion.
- Productivity in Youngs, Big, and Clatskanie was assumed to be low because abundance is low and hatchery fractions are high. Data were inconclusive in the Scappoose resulting in a treatment as a criterion failure.
- Clackamas late-run productivity has varied between 0.1 and 14.3 since 1992. Recruits per spawner in the Sandy have exceeded 1.2 for nine of 22 broods since 1978.
- Productivity of the Clackamas early-run population has generally been low over the last three generations, but has been above the interim criterion in recent years.

Independence - Fail



- Four of eight populations passed this criterion.
- Hatchery fish dominate returns to the Youngs River and Big Creek, but are less frequent in the Clatskanie and Scappoose. The Scappoose passed the criterion, but the Clatskanie did not.
- Few hatchery fish return to North Fork Dam (Clackamas) or Marmot Dam (Sandy) and current practices allow hatchery fish to be identified and prevented from passing upstream.
- No coho hatchery fish releases are made in the Hood, but hatchery fish make up more than 50% of annual returns.