

Coastal Chum SMU

ESA Designation:
Not Warranted 1998

State Status:
Critical

Interim Assessment:
At Risk

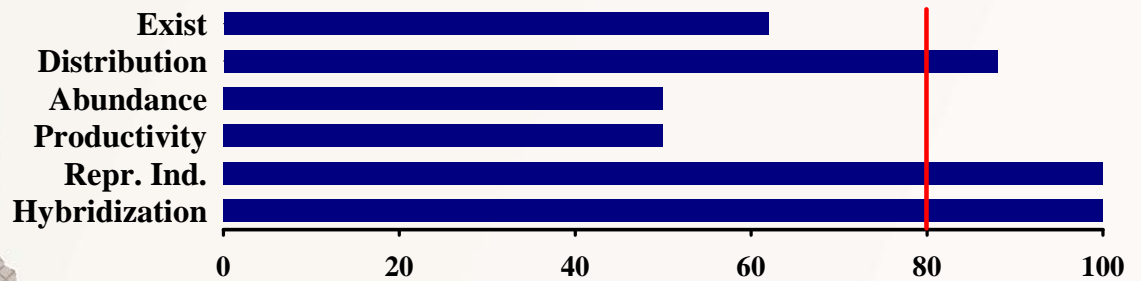
The Coastal Chum SMU is comprised of 13 historical populations. Eight populations continue to exist, two are presumed to be extinct, and three are extinct. The SMU met three of six interim criteria so the near-term sustainability of the SMU is at risk. ODFW speculated in the 1995 Stock Status Review that the historical populations south of the Nestucca were naturally small. 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
Necanicum	Pass	Pass*	Pass	Pass*	Pass*	Pass
Nehalem	Pass	Pass*	Pass	Pass	Pass*	Pass
Tillamook	Pass	Pass*	Pass	Pass	Pass*	Pass
Netarts	Pass	Pass*	<i>Fail</i>	<i>Fail</i>	Pass*	Pass
Nestucca	Pass	<i>Fail</i> *	<i>Fail</i>	<i>Fail</i>	Pass*	Pass
Salmon	Pass	Pass*	<i>Fail</i> *	<i>Fail</i> *	Pass*	Pass
Siletz	Pass	Pass*	<i>Fail</i> *	<i>Fail</i> *	Pass*	Pass
Yaquina	Pass	Pass*	Pass	Pass	Pass*	Pass
Alsea	<i>Fail</i> *		<i>Presumed Extinct</i>			
Siuslaw	<i>Fail</i> *		<i>Extinct Population</i>			
Umpqua	<i>Fail</i> *		<i>Extinct Population</i>			
Coos	<i>Fail</i> *		<i>Presumed Extinct</i>			
Coquille	<i>Fail</i> *		<i>Extinct Population</i>			

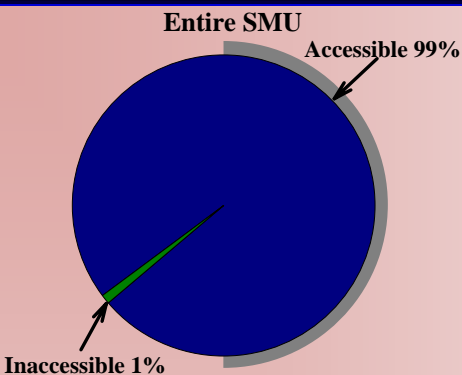
* *Inferred*



Percent of Existing Populations Meeting Criteria

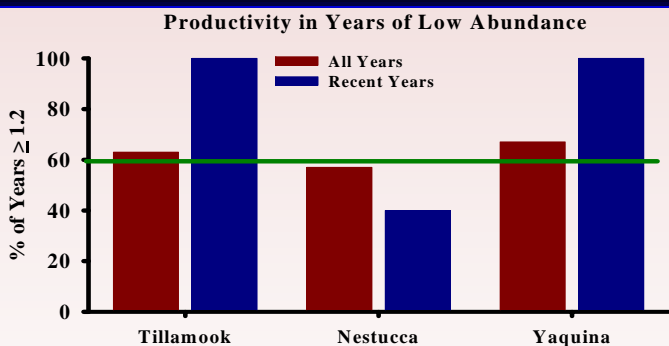


Distribution - Pass



- All of the existing populations passed this criterion except for the Nestucca.
- Nearly all (99%) of the historical habitat within the SMU is still accessible today.
- The Necanicum is the only population to have lost accessible habitat (11% of historic habitat).
- The Nestucca failed the criterion because returns have been so low in recent years to indicate that 50% of historical habitat has not been utilized.

Productivity - Fail

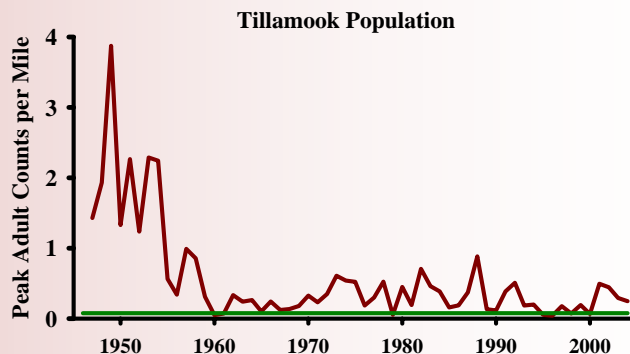


- Four of eight populations passed the criterion.
- Productivity in the Netarts and Nestucca has been very low in recent years. Recruits per spawner could only be estimated in five years in the Netarts, so it is not displayed above.
- The Siletz and Salmon failed the criterion because abundance levels in those populations have been chronically low.

Additional Information

- Chum are occasionally observed in basins with populations that were thought to be extinct. The origins of these fish is uncertain and more work is needed to clarify relationships among Oregon coastal populations.

Abundance - Fail



- Four of eight populations passed this criterion.
- The Tillamook and Nestucca had the longest trend of data. Returns dropped through the 1950s and 1960s and have yet to recover. Recent returns to the Tillamook were high enough to pass the criterion.
- Abundance trends in Yaquina and Nehalem surveys initiated in 1981 and 1990 respectively have not shown a consistent increasing or decreasing trend.
- Returns to the Netarts in the 1990s and early 2000s are far lower than returns in the 1950s and 1960s.
- The Necanicum has had low abundance levels since surveys were initiated in 1991, but recent years have been high enough to pass the criterion.

Independence - Pass

- All of the populations passed the reproductive independence criterion.
- Oregon has never had a significant chum salmon hatchery program, and no programs, public or private, currently exist.
- One private hatchery released chum into the Nehalem between 1981 and 1993, but releases were terminated in 1994.
- Based on the absence of hatchery releases within the SMU, it was presumed that all extant populations passed the reproductive independence criterion.