

# Coastal Summer Steelhead SMU

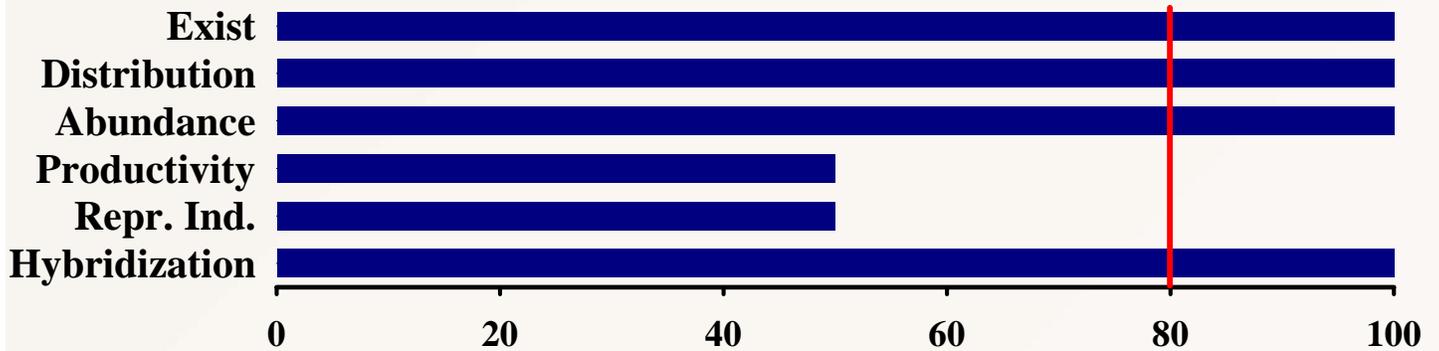
ESA Designation:  
*Candidate 1998*

State Status:  
*Vulnerable*

Interim Assessment:  
*Potentially At Risk*

This SMU includes the North Umpqua and Siletz populations. The lack of reproductive independence by the North Umpqua population and low productivity for the Siletz indicate the near-term sustainability of the SMU is potentially at risk. Roughly 20% of the spawners in the North Umpqua are hatchery fish. Productivity in the Siletz should improve in the future because ODFW has ceased passing hatchery steelhead onto the spawning grounds above Siletz Falls. Suitable data and other information on populations in this SMU provide a moderate level of confidence in the assessment of the interim criteria.

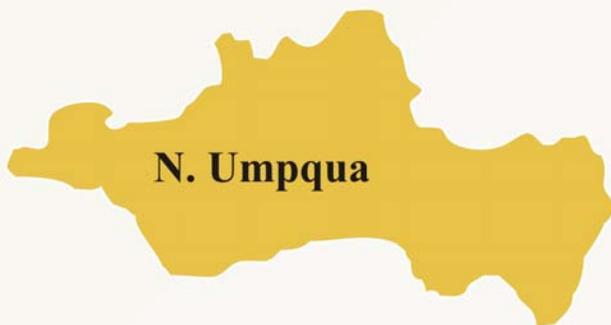
Percent of Existing Populations Meeting Criteria



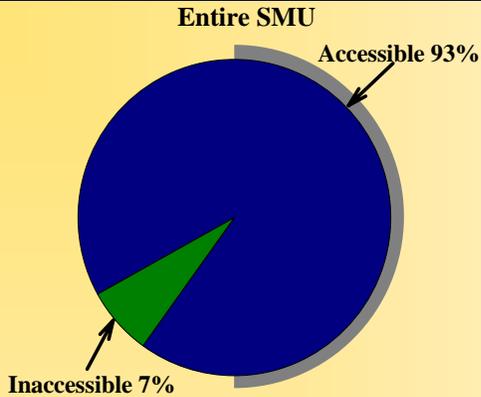
Population	Exist	Dist.	Abund.	Prod.	Ind.	Hybrid
Siletz	Pass	Pass*	Pass	<i>Fail</i>	Pass	Pass
North Umpqua	Pass	Pass*	Pass	Pass	<i>Fail</i>	Pass

*\*Inferred*

- All criteria met
- 4-5 criteria met
- < 4 criteria met
- Extinct

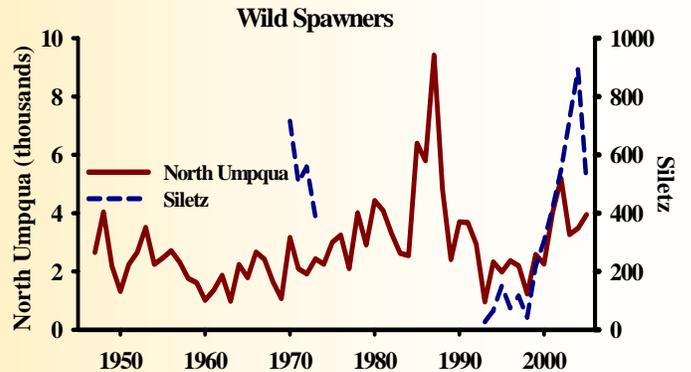


## Distribution – Pass



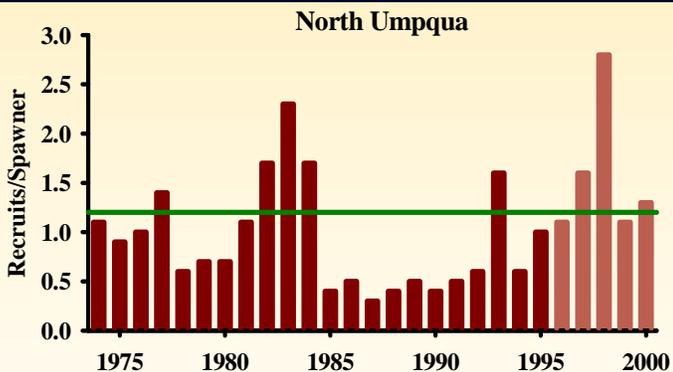
- 93% of the habitat used by spring Chinook in the past remains accessible.
- All of the habitat within the Siletz remains accessible, and 92% of the habitat within the North Umpqua can still be accessed.

## Abundance - Pass



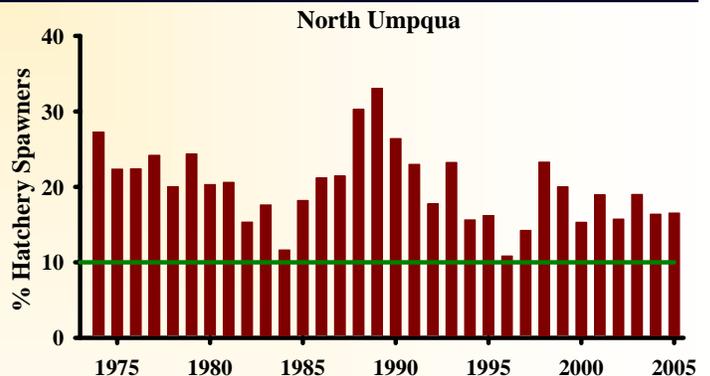
- Both populations exceeded the minimum abundance criterion in each of the last five years.
- Returns to the North Umpqua have been monitored at Winchester Dam since the 1946-47 run year and numbers have only twice fallen below the interim criterion of 849 spawners.
- Wild returns to the Siletz increased for six consecutive years prior to the 2004/2005 run year and have now rebounded to levels observed around 1970.

## Productivity - Fail



- The North Umpqua passed the productivity criterion, but the Siletz did not.
- Productivity in the North Umpqua has been greater than 1.2 in six of 11 years of low abundance including three of the last five.
- Productivity in the Siletz ranged from 0.1 to 1.1 recruits per spawner in the seven years where data were available. High numbers of hatchery spawners pushed abundance levels beyond the average wild abundance in each of those years raising the possibility of density dependence.

## Independence - Fail



- In the North Umpqua, hatchery fractions in natural spawning areas have been 10-35% since 1974.
- Many hatchery fish that spawn naturally in the North Umpqua do not spawn in the same areas as wild fish.
- Between 1992 and 1999, hatchery fish made up 72-97% of the spawning population in the Siletz.
- In the Siletz, adult steelhead are trapped at Siletz Falls, which is below the primary spawning grounds. Beginning in 2000, wild fish were selectively passed at Siletz Falls, and hatchery fish were either recycled downstream into the recreational fishery, or were removed from the system.