

Coastal Coho SMU

ESA Designation:

State Status:

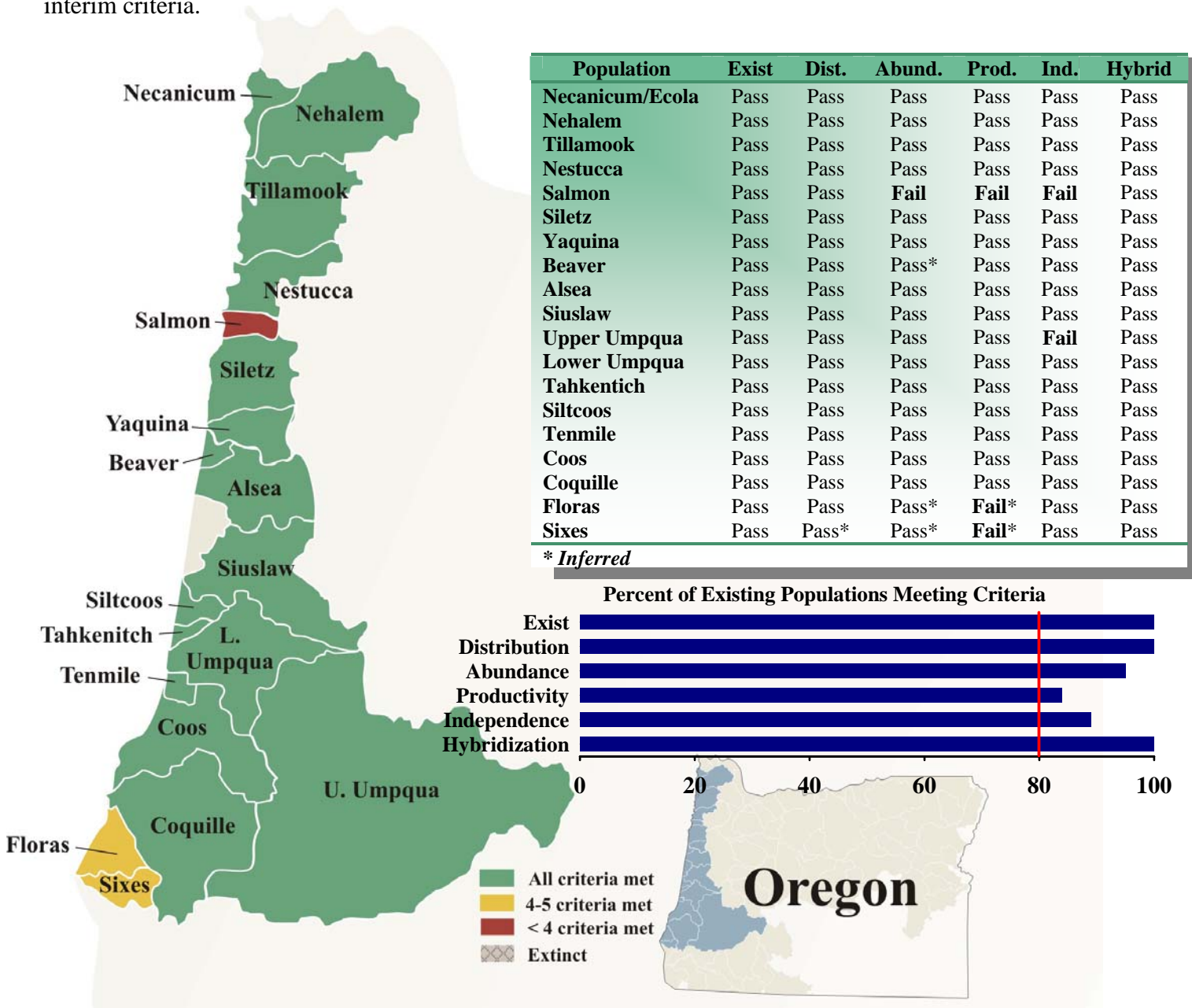
Interim Assessment:

Proposed Threatened 2004

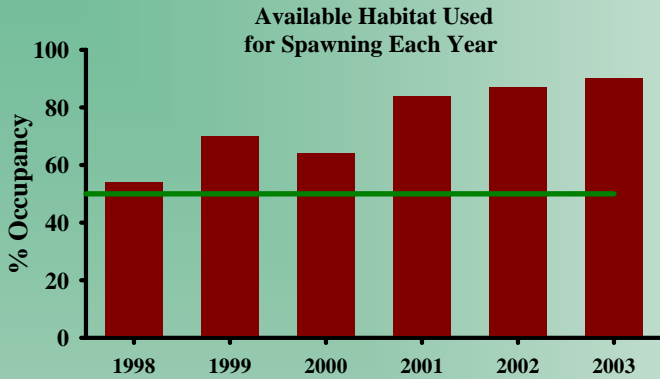
Critical

Not at Risk

This SMU includes 19 populations in ocean tributaries from the Necanicum to the Sixes rivers that were assessed. All of the six interim criteria were met by at least 80% of the populations. Until recently, escapements have been at or near record lows. However, numbers, distributions, and productivity have rebounded for most populations in the last four years following improved ocean productivity. These improvements have eased near-term risks, but it is not clear whether all underlying factors for the recent decline have been addressed or if this is just a temporary response to improved ocean conditions. Extensive and detailed data on populations throughout this SMU provide a high level of confidence in the assessment of interim criteria.

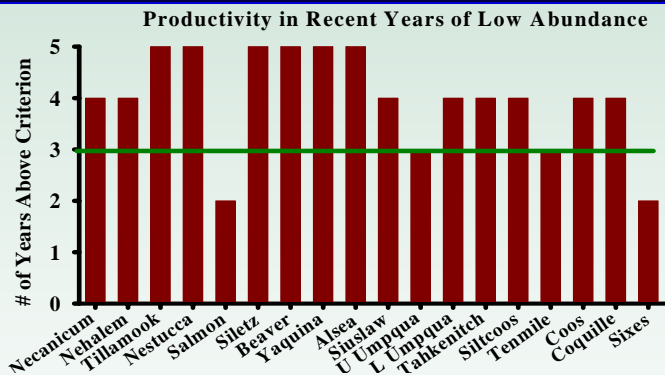


Distribution - Pass



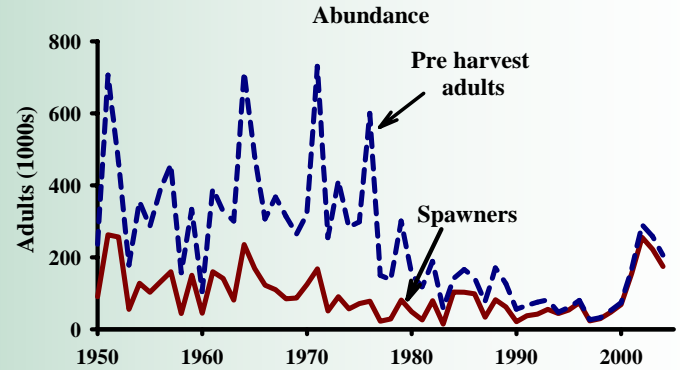
- All of the populations within the SMU passed the criterion.
- Nearly 100% of the historical habitat is still accessible today. Habitat suitability is likely below historic levels at certain stages of the coho life cycle (e.g. over-winter rearing).
- Occupancy has been greater than 50% for all years where data were available.
- Occupancy rates in the SMU have climbed each year since 1998 due to increased returns of naturally-produced fish.
- In the last three years, SMU wide occupancy has exceeded 80%.

Productivity - Pass



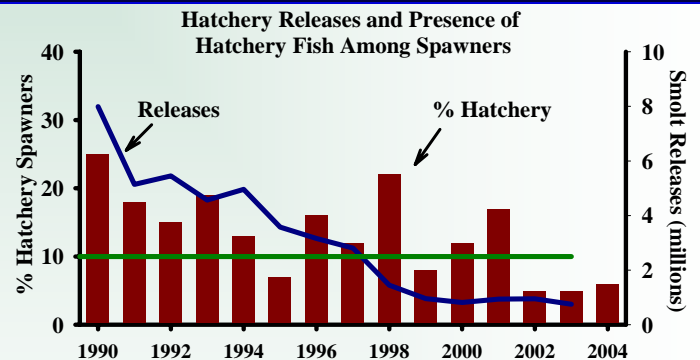
- 16 of 19 populations met the productivity criterion demonstrating the resiliency of the SMU.
- Productivity in the early-to-mid 1990s was at or below replacement in much of the SMU despite adult seeding well below carrying capacity.
- The median productivity for the SMU over the last five broods was 2.8 recruits per spawner.
- Annual productivity estimates for each population between 1990 and 2000 varied widely, but generally ranged between 0.3 and 3.6 recruits per spawner.

Abundance - Pass



- 18 of the 19 populations passed the abundance criterion causing the SMU to pass.
- Implementation of selective fisheries for marked hatchery fish and abundance-based limits on incidental impacts have reduced ocean harvest rates of wild fish from 80% as late as the 1980s to 5-15% today.
- An extended period of poor ocean conditions dropped 1990s numbers to record low levels, despite fisheries reductions.
- Recent spawner numbers in the SMU have rebounded to 30 year highs following improvements in ocean productivity, but pre-harvest abundance remains well below historical levels.

Independence - Pass



- 17 of 19 populations assessed passed the criterion. Only the Salmon and Upper Umpqua populations failed.
- The graph above represents the coast-wide aggregate. Reductions in smolt releases have reduced stray hatchery spawners throughout the SMU.
- Releases of coho smolts into coastal basins have been reduced from eight million per year in the 1990s to one million per year in the early 2000s.
- In 1990, hatchery fish made up 25% of the naturally spawning population within the SMU. By 2002, that level had been reduced to 5%.