

Grande Ronde Bull Trout SMU

ESA Designation:
Threatened 1998

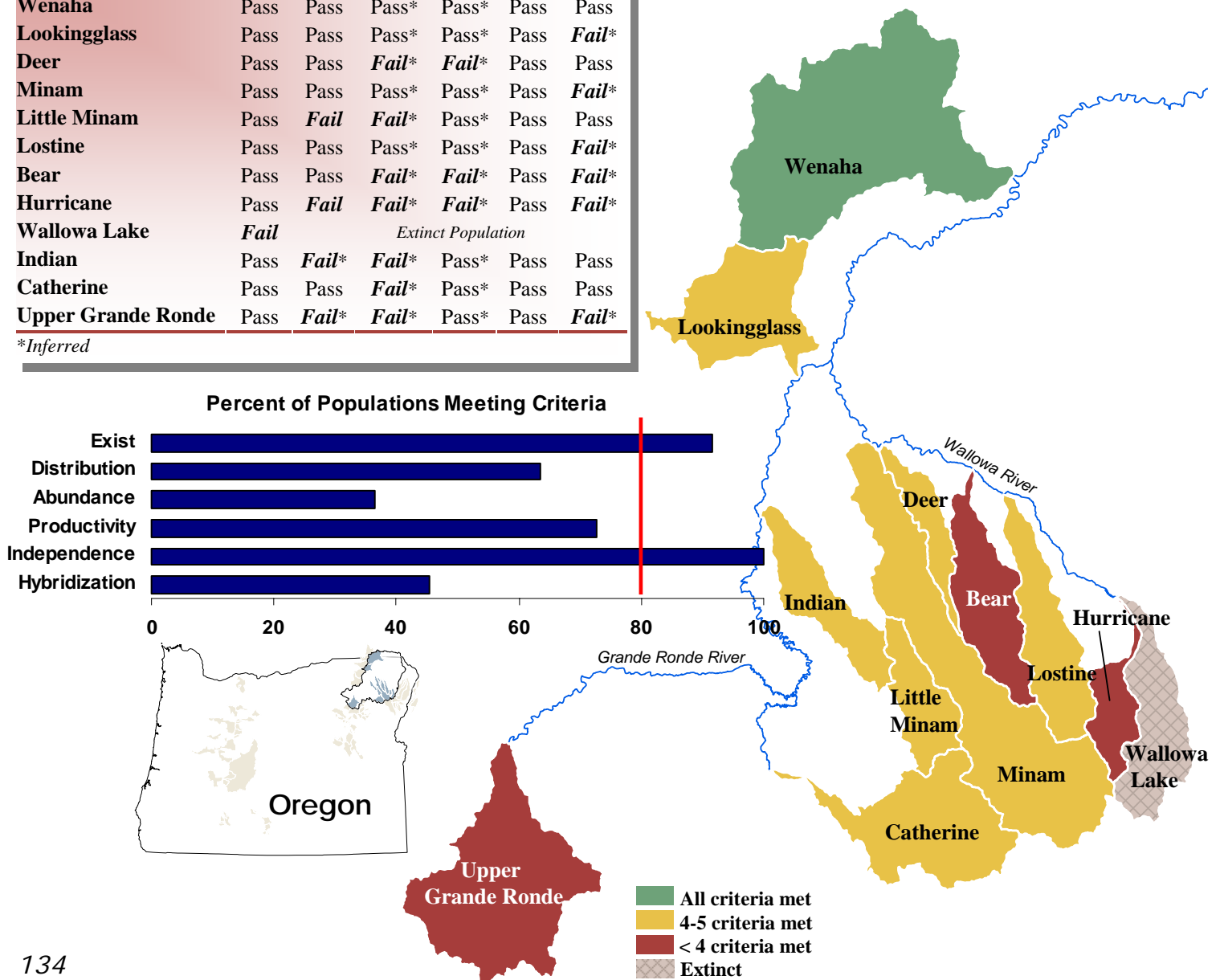
State Status:
Critical

Interim Assessment:
At Risk

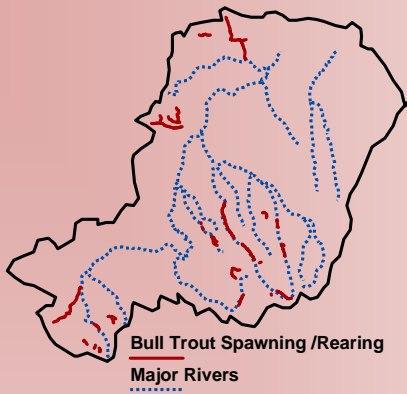
The Grand Ronde Bull trout SMU includes 12 populations, of which over half are concentrated in the Wallowa River basin. The Wallowa Lake population was eliminated by the 1950s and is now considered extinct. The Wenaha River is one of Oregon's most pristine and undisturbed river systems and contains one of the state's healthiest bull trout populations in this SMU. Abundance is considered precariously low in more than half of the populations and hybridization with introduced brook trout has put many populations at risk, particularly in the Wallowa River. The SMU passes two of the six interim criteria and is classified as 'at risk'. Limited data sets and inferences from other information for populations in the SMU provide a qualified level of confidence in the assessment of the interim criteria.

Population	Exist	Dist.	Abund.	Prod.	Ind.	Hybrid
Wenaha	Pass	Pass	Pass*	Pass*	Pass	Pass
Lookingglass	Pass	Pass	Pass*	Pass*	Pass	Fail*
Deer	Pass	Pass	Fail*	Fail*	Pass	Pass
Minam	Pass	Pass	Pass*	Pass*	Pass	Fail*
Little Minam	Pass	Fail	Fail*	Pass*	Pass	Pass
Lostine	Pass	Pass	Pass*	Pass*	Pass	Fail*
Bear	Pass	Pass	Fail*	Fail*	Pass	Fail*
Hurricane	Pass	Fail	Fail*	Fail*	Pass	Fail*
Wallowa Lake	Fail	Extinct Population				
Indian	Pass	Fail*	Fail*	Pass*	Pass	Pass
Catherine	Pass	Pass	Fail*	Pass*	Pass	Pass
Upper Grande Ronde	Pass	Fail*	Fail*	Pass*	Pass	Fail*

*Inferred



Distribution - Pass



- Bull trout are distributed throughout the headwaters of the Grande Ronde and Wallowa River basins.
- Two populations, Little Minam and Hurricane, are isolated above natural and manmade barriers and fail the criterion.
- Indian and Upper Grande Ronde populations fail the criterion due to highly fragmented and restricted spawning distributions.

Productivity - Fail

- Data are not available to quantitatively assess productivity. Populations fail the criterion if they are limited in distribution and abundance, are sympatric with brook trout, or do not express a migratory life history.
- Even though many populations are low in abundance, they are considered to exhibit a level of productivity minimally adequate to sustain the population.
- The Bear, Deer, and Hurricane populations fail the productivity criterion due to limited distribution and abundance, degraded habitat quality, and the presence of brook trout.

Additional Information

- Bull trout in the Grande Ronde SMU are native fish sustained by natural production. Stocking or hatchery programs do not currently exist, however, Alaskan Dolly Varden were stocked in Wallowa Lake 1968-1978 as an attempt to reestablish bull trout. The Dolly Varden did not establish a self sustaining population. All populations pass the reproductive independence criterion.
 - Agricultural and grazing practices threaten water quality and bull trout particularly along major migratory corridors.
 - Minam, Little Minam, and Wenaha populations are partially or completely within designated wilderness areas. Impacts to habitat quality are minimal.
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Abundance - Fail

- Few quantitative abundance data are available to assess each population. Assessment of populations were based on a combination of redd counts, trap data and professional judgment of agency biologists.
- The Wenaha, Lookingglass, Lostine, Minam, and Little Minam are the largest populations in the SMU. All except the Little Minam pass the criterion. Even though, the Little Minam was estimated to contain roughly 750 reproductive adults, it is isolated from other populations by a natural barrier and subject to risks associated with genetic drift and stochastic events.
- The remaining populations fail the criterion based on precariously low measures of abundance or field observations of extremely low densities.

Hybridization - Fail

- Historically brook trout were stocked in rivers, streams, and high alpine lakes in the Grande Ronde starting in the early 1900s.
- Brook trout are present in Minam, Lostine, Bear, Lookingglass, Hurricane, and Upper Grande Ronde populations. Data specific to the degree of hybridization in each population are not available. Populations where brook trout are present fail the hybridization criterion until populations can be thoroughly assessed.