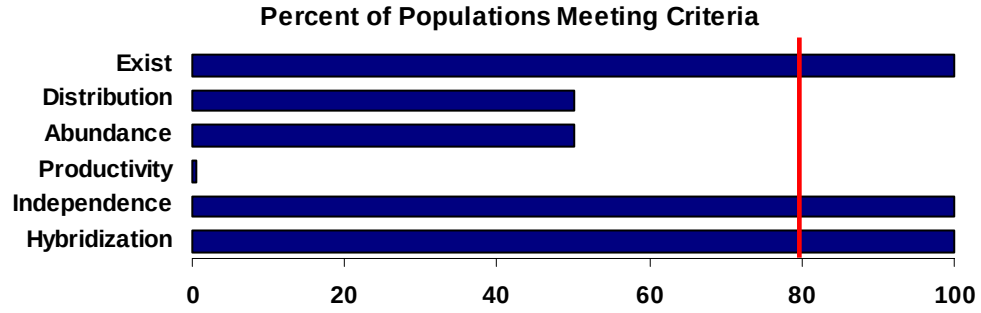
Umatilla Bull Trout SMU

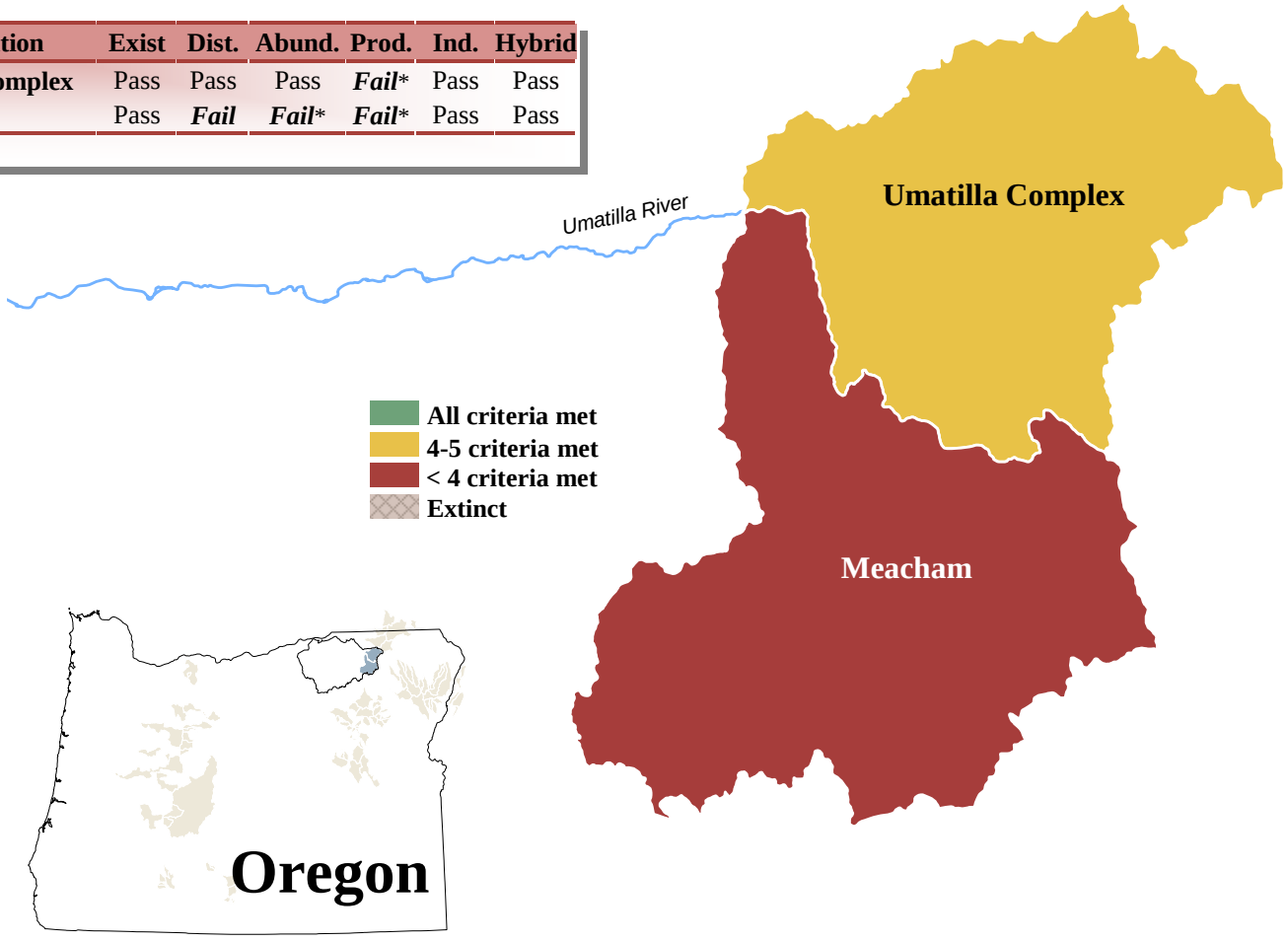
ESA Designation:	State Status:	Interim Assessment:
Threatened 1998	*Critical*	*At Risk*

The Umatilla Bull Trout SMU consists of two populations, one in each of Meacham Creek and Upper Umatilla River. The abundance of the Meacham population is dangerously low and distribution is severely limited. Habitat degradation significantly impacts both populations, particularly in the lower reaches of the Umatilla River, where adult bull trout rear and overwinter. Movement between populations is possible, but undocumented. The SMU passes three 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.

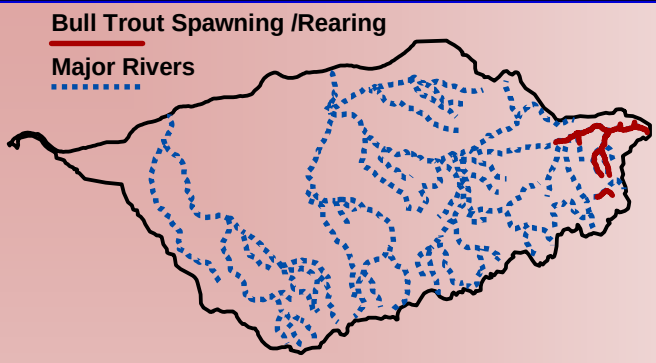


Population	Exist	Dist.	Abund.	Prod.	Ind.	Hybrid
Umatilla Complex	Pass	Pass	Pass	***Fail****	Pass	Pass
Meacham	Pass	***Fail***	***Fail****	***Fail****	Pass	Pass

**Inferred*



Distribution - Fail



- Spawning, juvenile rearing, and resident bull trout distribution is limited to upper Umatilla River and portions of North Fork Meacham Creek. Spawning and rearing distribution in the Meacham population is limited to less than 10 km. This population fails the criterion.
- Connectivity between populations is hindered by seasonal low flows and thermal barriers. Access further downstream, as well as movement to and from the Columbia River, is hampered by poor water quality and six permanent in-stream diversions.

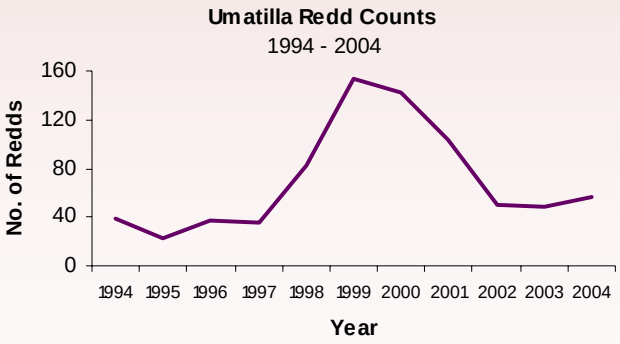
Abundance - Fail

- Few quantitative abundance data are available to assess abundance of each population. Assessments in this review are based on annual redd counts.
- The Umatilla Complex population is estimated to average 259 adults the past five years. The population is large enough to avoid the negative effects of inbreeding depression and passes the abundance criterion.
- Given the extremely low number of redds observed in Meacham Creek annually (<5), the population appears to be precariously small and highly vulnerable. This population fails the abundance criterion.
- The total number of adult bull trout in the SMU is estimated to be fewer than 1,000 fish, thus bull trout are at risk of the deleterious effects of genetic drift.

Hybridization - Pass

- Brook trout are not present in the Umatilla River Basin and not a threat for bull trout.

Productivity - Fail



- The Umatilla Complex shows decreasing trend in abundance over the past five years and is considered to fail the criterion until productivity can be better assessed.
- Productivity in the Meacham population could not be adequately evaluated. Given the extremely low abundance the population fails the criterion.

Additional Information

- Both populations in the Umatilla Bull Trout SMU are native fish sustained by natural production and pass the reproductive independence criterion.
- Angling is closed to direct take of bull trout on non-reservation lands. Tribal members may keep bull trout, however most release those they catch.
- Habitat degradation due to timber harvest and associated road development, agricultural practices, and grazing are considered the most significant threats to bull trout in the Umatilla SMU.