

Policy in response to a Governor's Executive Order to review the existing Wild Fish Management Policy. The Oregon Department of Fish and Wildlife also has an active fish-screening program for irrigation diversions in the John Day River drainage and elsewhere. That program began in the 1950s and more than 300 fish screens are now in place and operated during the annual irrigation season. The Oregon Department of Fish and Wildlife also has accomplished several habitat-restoration projects throughout the drainage, funded mainly by the Bonneville Power Administration and Oregon Watershed Enhancement Board.

The U.S. Forest Service has a very active conservation program in place for WCT. Between 1998 and 2002, the U.S. Forest Service, in partnership with the States and others, implemented 324 projects that benefit WCT. The total investment of funds for these projects was approximately \$9,665,000 (McAllister 2002). During the 2002 Fiscal Year, the U.S. Forest Service accomplished 54 on-the-ground restoration projects, inventories, evaluations, and public outreach efforts at a cost of \$1.6 million (Johnston 2003).

The conservation efforts presently being accomplished as part of the routine management objectives of State and Federal agencies, and as part of formal interagency agreements and plans, provide substantial assurance that the WCT subspecies is being conserved. The best information available to us indicates that numerous, ongoing conservation efforts for WCT are being implemented across the subspecies' range. These ongoing conservation efforts are commendable and they contribute to the certainty that WCT can be conserved and protected.

Listing Determinations Made Under the Act

In the context of the Act, the term "threatened species" means any species (or subspecies or, for vertebrates, DPS) that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. The term "endangered species" means any species that is in danger of extinction throughout all or a significant portion of its range. The Act does not indicate threshold levels of historic population size at which, as the population of a species declines, listing as either "threatened" or "endangered" becomes warranted. Instead, the principal considerations in the determination of whether or not a species warrants listing as a threatened or an endangered species under the Act are the threats that now confront the

species and the probability that the species will persist in "the foreseeable future." The Act does not define the term "foreseeable future." However, the WCT interagency conservation team, the group that produced the WCT status update report, considered the "foreseeable future" to be 20 to 30 years (approximately 4 to 10 WCT generations) beyond the present time (Shepard *et al.* 2003), a measure that we believe is both reasonable and appropriate for the present listing determination.

In our initial status review, we provided evidence from the Missouri River basin that indicated a conspicuous decline in the WCT subspecies occurred early in the 20th Century (U.S. Fish and Wildlife Service 1999). We attributed that decline to rapid, abundant colonization of mainstem rivers and their major tributaries by one or more introduced nonnative fish species (*e.g.*, brown trout, rainbow trout, and brook trout) that had adverse effects on WCT. Our analysis also showed that the rate of decline in the WCT subspecies is markedly lower today than it was early in the 20th century. We believe that the evidence from the Missouri River basin provided a model for the historic decline of WCT that was applicable to WCT in many other regions of the subspecies' historic range.

Conclusions

The information that we have summarized in this document, particularly that obtained from the status update report (Shepard *et al.* 2003), indicates even greater abundance of WCT across the subspecies' range than we had estimated during the initial status review (U.S. Fish and Wildlife Service 1999). Today, 563 extant WCT "conservation" populations collectively occupy 39,349 km (24,450 mi) of stream in Idaho, Montana, Oregon, Washington, and Wyoming. Those WCT populations are distributed among 12 major drainages and 62 component watersheds in the Columbia, Missouri, and Saskatchewan River basins, within the international boundaries of the United States. In our initial status review (U.S. Fish and Wildlife Service 1999), we reported that WCT occupied about 37,015 km (23,000 mi) of stream in the United States. In addition, nonintrogressed WCT are now known to inhabit 5,633 km (3,500 mi) of stream and probably inhabit as many as 20,278 km (12,600 mi) of stream in which no potentially hybridizing fishes occur. In our initial status review (U.S. Fish and Wildlife Service 1999), we reported that nonintrogressed WCT were known to occupy 4,237 km (2,633 mi) of stream.

Although the WCT subspecies has been reduced from historic levels and its extant populations face threats in several areas of the historic range, we find that the magnitude and imminence of those threats do not jeopardize the continued existence of the subspecies within the foreseeable future. Many former threats to WCT, such as those posed by excessive harvest by anglers or the widespread stocking of nonnative fishes, are no longer factors that threaten the continued existence of the WCT subspecies. The effects of other extant threats are being effectively countered by the management actions of State and Federal agencies, in conjunction with existing regulatory mechanisms. Nonetheless, hybridization with nonnative rainbow trout or their hybrid progeny and descendants, both of which have established self-sustaining populations in many areas in the range of WCT, remains the greatest threat to WCT. The available empirical evidence and speculations of many fishery scientists indicate that introgression of rainbow trout genes will continue to move upstream into many stream reaches presently inhabited by WCT, although there may be limits to that upstream spread set by environmental factors and the superior fitness of extant WCT populations in their native habitats. The eventual extent that such hybridization moves upstream may be stream-specific and impossible to predict. Nonetheless, the criteria that we provided for inclusion of individual fishes in the WCT subspecies, in response to the Court's order, allow for the limited presence in WCT of genetic material from other fish species, consistent with the intent and purpose of the Act.

The WCT subspecies is widely distributed and there are numerous, robust WCT populations and aggregates of populations throughout the subspecies' historic range. Moreover, numerous nonintrogressed WCT populations are distributed in secure habitats throughout the subspecies' historic range. In addition, despite the frequent occurrence of introgressive hybridization, we find that numerous WCT populations are nonintrogressed or nearly so, and thus retain substantial portions of their genetic ancestry. We consider slightly introgressed WCT populations, with low amounts of genetic introgression detectable only by molecular genetic methods, to be a potentially important and valued component of the overall WCT subspecies.

Finally, the numerous ongoing WCT conservation efforts clearly demonstrate the broad interest in protecting WCT