

Comments Re NOAA Fisheries' December 2004 proposed critical habitat designations for 13 Evolutionarily Significant Units of Pacific salmon and steelhead in Washington, Oregon, and Idaho; Federal Register volume 69, No. 239 74572 (Dec. 14, 2004); Docket Number [030716175-4327-03]; RIN Number [0648-AQ77]

Attn:

Chief, NMFS, Protected Resources Division
525 NE Oregon Street, Suite 500
Portland, OR, 97232-2737
Fax 503/230-5435; critical.habitat.nwr@noaa.gov

Submitted March 14, 2005 by:

Washington Trout
PO Box 402
Duvall, WA 98019

www.washingtontrout.org; wildfish@washingtontrout.org

Prepared by:

Nick Gayeski, Washington Trout

Comments Re NOAA Fisheries' December 2004 proposed critical habitat designations for 13 Evolutionarily Significant Units of Pacific salmon and steelhead in Washington, Oregon, and Idaho; Federal Register volume 69, No. 239 74572 (Dec. 14, 2004); Docket Number [030716175-4327-03]; RIN Number [0648-AQ77]

Attn:
Chief, NMFS, Protected Resources Division
525 NE Oregon Street, Suite 500
Portland, OR, 97232-2737
Fax 503-230-5435; critical.habitat.nwr@noaa.gov

Submitted March 14, 2005 by:
Washington Trout
PO Box 402
Duvall, WA 98019
www.washingtontrout.org; wildfish@washingtontrout.org

Prepared by:
Nick Gayeski, Washington Trout

Introduction

Washington Trout has carefully reviewed the proposed critical habitat designations and the supporting documentation posted on the NOAA Fisheries web site. Washington Trout appreciates the opportunity to provide NOAA Fisheries with input founded on our review, and encourages NOAA Fisheries to remain constructively engaged with the public and its advocates throughout the process of developing and implementing regional salmon-recovery management. However, we respectfully recommend that the proposed critical habitat designations be withdrawn and significantly revised. The proposed designations are fundamentally flawed. They rely on controversial readings of the spirit and/or letter of the Endangered Species Act, and they do not adequately reflect the best available science relevant to the protection and recovery of the listed salmon and steelhead ESUs that are the subjects of the proposed designations.

The proposed rule reflects a view of the purpose of designating critical habitat in conflict with the letter and intent of the Endangered Species Act. The proposed rule assumes that the purpose of designating critical habitat is to only assure the continued survival of the listed species, and not also to facilitate its recovery. The Endangered Species Act defines critical habitat under section 3(5)(A) as:

- (i) the specific areas within the geographical area occupied by the species, at the time it is listed ..., on which are found those physical or biological features (I) essential to the *conservation* of the species and (II) which may require special management considerations or protection; and
- (ii) specific areas outside the geographical area occupied by the species at the time it is listed .. upon determination by the Secretary that such areas are essential for the *conservation* of the species. (emphases added)

Section 3(3) of the Act states:

The terms "conserve", "conserving", "conservation" mean to use and the use of all

methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary.

Conservation, as defined in the Endangered Species Act, clearly includes both the continued survival and existence of the listed species and the recovery of the species to the point at which the species no longer requires to be listed under the Act. Any proposal to designate critical habitat must, therefore, be directed at assuring not only the survival of extant populations or subsets of extant populations of the listed species, but at assuring the recovery of the listed species. Failure to assure or to even consider the recovery requirements of the listed species when designating critical habitat is a clear violation of the critical habitat provision of the Endangered Species Act.

The importance of the conservation standard when designating critical habitat and when evaluating adverse modification pursuant to the Section 7 consultation process has recently been articulated by the United States Court of Appeals for the Ninth Circuit in the Court's decision of August 6, 2004 in the case of Gifford Pinchot Task Force and co-plaintiffs v. United States Fish and Wildlife Service, a copy of which is attached and included as part of these comments (Ninth Circuit 2004). In the words of the Court

Clearly, then, the purpose of establishing "critical habitat" is for the government to carve out territory that is not only necessary for the species' survival but also essential for the species recovery (Ninth Circuit 2004, at 10601).

The proposed rule errs in fundamentally failing to adopt a recovery perspective in its proposal to designate critical habitat. This is especially evident in the discussion of the lateral extent of critical habitat for the listed salmonid species at issue.

Lateral Extent of Critical Habitat

The Notice proposes to define the lateral extent of critical habitat for the fish species at issue as "the width of the stream channel defined by the ordinary high water line as defined by the U.S. Army Corps of Engineers (Corps) in 33 CFR 329.11." FR69, 239 at 74584. The ordinary high water line lies at approximately the height of the 2-year flood recurrence interval for most streams and rivers.

Such a definition fails to recognize the critical biological and geomorphological interactions between the current active stream channel, the riparian zone, flood plain, and stream valley, and the hydrologic connectivity between surface waters of the open stream channel and hyporheic groundwater circulating beneath the flood plain. The interactions among these components of stream channel/floodplain systems occur on several spatial and temporal scales, the net result of which is the dynamic creation and maintenance of stream habitats essential for the survival and recovery of salmonid species and populations. Prominent among these interactions is the complex process of channel migration that results in the interchange of riparian/floodplain surfaces and stream channels (Poole 2002, Ward et al. 2002, Wiens 2002, Dahm et al. 1998, Ward et al 1998, Tabacchi et al 1998, Huggenberger et al 1998, Wissmar and Beschta 1998).

Numerous scientific studies have documented the fundamental biological and physical fact that rivers consist of more than just the main surface water channel or channels. Functionally and biologically, rivers extend laterally under the floodplain to the upland valley wall (terrace). The

dynamic interaction between the river (surface) channel and its floodplain and riparian zone is fundamental to the biological functioning of the surface channel habitats in and through which salmon and steelhead spawn, rear, shelter, and migrate.

Defining the lateral extent of critical habitat for the listed salmon and steelhead ESUs at issue as the ordinary high water line fails to recognize the current state of science in this regard and will result in a failure to protect habitat that is critically important to the survival and the recovery of the species.

The proposed rule implies that riparian habitats important to the listed species will be adequately protected even though critical habitat is designated only within the ordinary high water mark by virtue of Section 7 no-jeopardy and no-adverse modification requirements. This is unconvincing. Failure to directly designate as critical habitat those floodplain and upland habitats that are functionally related to stream channel habitats essential to salmon and steelhead ignores the central importance of the multiple physical and biological processes that interact across floodplains to create and maintain a dynamic array of complex habitats essential for the survival and recovery of listed salmonid species.

Failure to directly designate such floodplain and upland habitats as critical habitat places the burden of proof on those federal and private parties who are concerned that federal actions may result in adverse modification of stream channel habitats, rather than placing on those parties who plan or propose to initiate such actions the burden to demonstrate that such actions are unlikely to jeopardize or result in adverse modification. This defeats and contravenes the basic purpose of designating critical habitat under the Endangered Species Act.

Moreover, actions such as drilling of domestic use wells, clearing of vegetation on or adjacent to floodplains/riparian zones, and bank hardening near the ordinary high water mark are often likely to have no immediate observable impact on stream channel condition and are likely to have observable impacts only cumulatively and in concert with similar activities over time and space. Determining that jeopardy or adverse modification is likely to ensue as a result of a singular action of one of these types requires application of a cumulative effects analysis. At best such analyses are difficult and costly in the short-term; more commonly, the proper methodology for conducting a cumulative effects analysis appropriate to the kinds of impacts (adverse modification) likely to result from the kinds of activities in question is not established. The net effect in either case is that the listed resource bears the burden of proof and the risk.

The current science of river/floodplain processes supports the conclusion that activities of the kind listed here are likely to impair proper functioning of current stream/floodplain habitat critical to the listed species and to have a cumulative and lasting negative impact on this habitat. The burden of proving the contrary on a case-by-case basis should be placed on those who would propose to conduct such activities. Failure to establish this burden will result in failure to adequately protect the listed species and the ecosystems on which they depend.

Inadequacy of the CHART Process

The proposed critical habitat designations are based in significant part on initial assessments of habitats occupied by the 13 listed Pacific salmon and *O. mykiss* ESUs made by Critical Habitat Analytic Review Teams (CHART). Much of the value of the preliminary assessments made by these teams is seriously compromised by the CHARTs having been restricted to consider only stream channels and associated bankfull widths as potential critical habitats. This pre-empted the expertise of CHART members to evaluate potential critical habitat that extended beyond the bankfull width of the present stream channel in all HUC5s for which they were provided data.

This, in turn, pre-empted the CHART's from properly considering the recovery needs of the listed ESUs, as required by the conservation standard of critical habitat designations under the ESA. Consequently, for this reason alone the CHART delineations are biased and scientifically compromised.

Failure of the CHART Process to Reflect the Role of the TRTs

The CHART teams proceeded to describe and assess critical habitat for the listed ESUs independent of the recent and ongoing work of the Regional Technical Recovery Teams (TRTs) that have been charged with developing recovery plans for the listed ESUs. The TRTs have been empanelled for over three years and have been engaged in describing and delineating habitats that are essential for the recovery of the listed ESUs. The TRTs are required to adopt a recovery perspective in delineating habitat that may be essential for recovery.

The public should reasonably presume that the TRTs have acquired the relevant spatial information necessary for identifying critical habitats. Yet, none of the CHART assessments reference any work of the TRTs, nor have the TRTs been requested to review the CHART assessments. This failure is directly at odds with the ostensive role of the TRTs in regional recovery planning. The CHART assessments should be reviewed by the TRTs and justified with the work of the several TRTs to identify habitats critical for the recovery of the listed ESUs at issue in the proposed rule.

Controversial Reading of Section 3(5)(A)(i)

The proposed rule relies upon a narrow and controversial interpretation of the relevant language of the ESA regarding the definition of critical habitat in support of its proposal to define the lateral extent of critical stream habitat. Section 3(5)(A)(i) of the ESA states that critical habitat for threatened and endangered species means

“the specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the provisions of section 4 of this Act, on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; ...”

The proposed rule proffers to interpret the key phrase *specific areas within the geographical area occupied by the species* to mean the specific parts of streams or rivers in which water is present and in which individual members of the listed ESUs occur. This is patently too narrow, and a simply implausible approach to protecting and recovering salmonid habitats. The clear intent of the section is demonstrated by the key modifier of the term *specific areas...*, the clause *...on which are found those physical or biological features essential to the conservation of the species*. Both current ecological science and basic salmon biology provide no grounds for restricting the local geographic scope of this phrase to stream channels within the ordinary high water line. The geomorphological features of river/floodplain systems described previously in these comments are clearly physical features that are directly related to the creation and maintenance of dynamic habitat conditions affecting spawning, rearing, sheltering, and migration that are essential to the conservation of the species. As such, riparian zones, floodplains, channel migration zones, and physical conditions such as the absence of channel constraint (revetments, bank armoring) necessary to permit the dynamic interaction between river channels and floodplains are clearly essential to the conservation of the listed salmon and steelhead ESUs.

The proposed rule attempts to proffer two pragmatic justifications for the proposed restriction of the lateral extent of critical habitat, namely the difficulty of crafting a one-size-fits-all definition or

criterion that would specify a functional area of the riparian zone adjacent to the bankfull channel and the difficulty of Federal agencies knowing in advance exactly where critical (riparian) habitat areas are. With respect to the first, the proposal states that

“designating a set riparian zone width will (in some places) accurately reflect the distance from the stream on which PCEs might be found, but in other cases may understate or overstate the distance” (FR69, 239 at 74584).

NOAA Fisheries’ reasoning here is implausible. It is hard to believe that in the subset of the cases referred to in which a designated set riparian zone width either accurately reflected or understated the distance from the stream on which PCEs might be found, the listed species is better protected by not making an effort to identify and protect (by designating as critical habitat) a set riparian zone width that has a high probability of including PCEs. And even in the remaining subset of cases in which the riparian zone width may have been overstated, such overstatement is no argument that the properly protective width is zero.

With respect to the second purported pragmatic justification, the proposal states

“Designating a functional buffer avoids [the problem that a set riparian zone width may be too wide or too narrow] , but makes it difficult for Federal agencies to know what areas are critical habitat.”

Again, NOAA Fisheries’ reasoning is hard to follow or accept. At FR 69, 239, 74579 and 74580, NOAA fisheries goes to some length to argue that since the initial critical habitat designations in 2000 more extensive, up-to-date, and accurate information on the geographical areas occupied by the species has been acquired and placed into geographic information systems (GIS) mapping databases. Such GIS databases are readily accessible to relevant federal agencies when jeopardy and adverse modification determinations are required. Clearly, functional riparian zone widths specified on a case-by-case basis and extending to varying distances beyond the bankfull width of a stream channel can be defined and mapped and maps uploaded to GIS databases where they can be readily accessed by federal agency biologists required to make jeopardy or adverse modification determinations. Moreover, even in cases in which there might be merit to the claim that it is “difficult for Federal agencies to know in advance what areas are critical habitat”, such circumstances provide no justification for the claim that the manner in which the listed species can best be protected is by not attempting to specify the appropriate riparian zone width. Nor would such circumstances appear to provide any reason for such agencies not endeavoring as best they can to identify where those areas of critical habitat are and to endeavor to insure that such areas are not destroyed or adversely modified by agency actions.

Conclusion

The proposed rule should be withdrawn. It fails to reflect the best available science regarding the temporal and spatial extent of habitats required for the survival and recovery of the listed Pacific salmon and *O. mykiss* ESUs and the physical and biological processes that are required to produce and maintain the array of complex stream channel and floodplain habitats needed by salmonids over the course their complex life cycles. The proposed rule fails to adopt a recovery perspective to the delineation of critical habitat, in direct violation of the conservation standard required by the Endangered Species Act.

References

- Dahm, Clifford, N. B. Grimm, P. Marmontier, H. M. Valett, and P. Vervier. 1998. Nutrient dynamics at the interface between surface waters and groundwaters. *Freshwater Biology* 40: 427 - 451.
- Huggenberger, P., E. Hoehn, R. Beschta, and W. Woessner. 1998. Abiotic aspects of channels and floodplains in riparian ecology. *Freshwater Biology* 40: 407 - 425.
- Ninth Circuit 2004. Gifford-Pinchot Task Force v. United States Fish and Wildlife Service. August 6, 2004. United States Court of Appeals for the Ninth Circuit. No. 03-35279. D.C. No. CV-00-05462-FDB Opinion, pp. 10583 - 10614.
- Poole, Geoffrey C. 2002. Fluvial landscape ecology: addressing uniqueness within the river discontinuum. *Freshwater Biology* 47: 641 - 660.
- Tabacchi, E., D.L. Correll, R. Hauer, G. Pinay, A-M. Planty-Tabacchi, and R. C. Wissmar. 1998. Development, maintenance, and role of riparian vegetation in the river landscape. *Freshwater Biology* 40: 497 - 516.
- Ward, J. V., G. Bretschko, M. Brunke, D. Danielopol, J. Gibert, T. Gonser, and A. G. Hildrew. 1998. The boundaries of river systems: the metazoan perspective. *Freshwater Biology* 40: 531 - 569.
- Ward, J. V., Tochner, K., Arscott, D.B., and Claret, C. 2002. Riverine landscape diversity. *Freshwater Biology* 47:517-539.
- Wiens, John C. 2002. Riverine landscapes: taking landscape ecology into the water. *Freshwater Biology* 47: 501-515.
- Wissmar, R.C., and R. L. Beschta. 1998. Restoration and management of riparian ecosystems: a catchment perspective. *Freshwater Biology* 40: 571 - 585.