

Questions & Answers about Interim Abundance and Productivity Targets for Interior Columbia Basin Pacific Salmon and Steelhead Listed Under the Endangered Species Act

Why is NMFS issuing interim abundance and productivity targets?

The National Marine Fisheries Service (NMFS) is providing these interim abundance and productivity targets for the Interior Columbia Basin in support of regional, state, tribal and local planning efforts. It is NMFS' intent that these preliminary estimates be meaningful to stakeholders by helping them gauge the level of effort that may be needed to recover the species. These targets should also help reduce the uncertainty that would otherwise occur for affected landowners and other stakeholders. NMFS also hopes that these interim abundance and productivity targets will encourage local involvement in establishing the final recovery goals through the Technical Recovery Team (TRT) and formal recovery planning process.

Why is NMFS providing interim targets for the Interior Columbia Recovery Domain?

NMFS is providing interim targets for the Interior Columbia Recovery Domain to assist subbasin and watershed recovery planning already underway in the Columbia Basin. In response to the interest in recovery planning for the Interior Columbia Basin, NMFS is issuing these interim targets to ensure that these efforts have adequate preliminary guidance. The scientific team responsible for developing the formal recovery criteria (the Interior Columbia TRT) was established in October 2001, and is approximately 9 months away from providing draft recommendations for recovery criteria. However, adequate technical information is currently available for this ESU to provide sound preliminary abundance and productivity objectives.

Why are no interim targets provided for other recovery domains?

The TRTs for the Willamette/Lower Columbia and the Puget Sound recovery domains will be providing preliminary recommendations for population viability criteria and ESU recovery scenarios by late April 2002. Hence, NMFS will await the more specific criteria from these TRTs rather than issue short-lived interim targets. These preliminary TRT products may subsequently need to undergo co-manager and peer review, as well as review by recovery planning policy groups (such as the Puget Sound Shared Strategy and the ESA Executive Committee for the Willamette/Lower Columbia Recovery Domain) and the broader public, before they are finalized.

NMFS is currently in the process of determining how best to provide interim targets for the remaining recovery domains.

What do these interim abundance and productivity targets mean?

The interim abundance and productivity targets provide a preliminary and general sense for the number and productivity of naturally-produced salmon and steelhead spawners that will be necessary to achieve recovery and satisfy NMFS' Endangered Species Act (ESA) recovery objectives. These targets are intended to help those stakeholders, that are beginning subbasin and recovery planning to gauge the gap between current conditions and the ESA recovery objectives.

How were the interim targets derived?

These interim targets are based on a variety of sources including earlier technical products developed by the NMFS Northwest Science Center, work by state and tribal co-managers, as well as joint products. They are provided as a matter of policy to assist tribal, regional, state, and local recovery planning efforts. These targets include preliminary objectives that have been developed previously or were created utilizing established analytical methods. Interim targets for the:

- *Upper Columbia spring chinook salmon and steelhead ESUs* were developed through the Quantitative Analytical Report (QAR) (Ford et al., 2001) process;
- *Snake River spring/summer chinook, fall chinook and sockeye ESUs* were developed through the 1995 Proposed Snake River Recovery Plan (NMFS, 1995), and the 2000 Federal Columbia River Power System Biological Opinion; and
- *Snake River and mid-Columbia steelhead ESUs* were developed applying the methodology used in the QAR to data from the Idaho Department of Fish and Game, the Oregon Department of Fish and Wildlife, and the Washington Department of Fish and Wildlife.

Can we expect the interim target values for other ESUs to be similar to those for the Interior Columbia ESUs?

No. The preliminary TRT recovery goals for the Willamette/Lower Columbia, Puget Sound, or other ESUs will reflect ESU-specific biological factors that are considered in determining viability criteria for ESUs and their component populations.

What is the relationship of these interim targets to the final recovery goals to be produced by the Technical Recovery Teams (TRTs)?

The interim targets are provided only as a matter of preliminary management guidance to assist current regional, state, tribal, and local recovery planning efforts. These targets will be superseded by the more scientifically-rigorous viability criteria to be developed through TRT products and the formal recovery planning process.

To date, NMFS has established five TRTs (Puget Sound, Willamette/Lower Columbia, Interior Columbia, Southern Oregon/Northern California Coasts, and North-Central California Coast) to develop biological delisting criteria. The TRTs are undertaking rigorous reviews and analyses of technical data to develop viability criteria for each of the ESUs and populations within their recovery domains. These criteria will then be used by appropriate local policy forums to determine final recovery goals. The TRTs will work closely with local biologists to compile the most complete data possible. Accordingly, the TRT criteria will be more accurate, more specific, and more complete than the interim targets. In addition to abundance and productivity recovery goals, the TRTs will provide recovery criteria for the spatial distribution and genetic diversity of viable salmon and steelhead populations. Finally, the TRTs will establish population recovery goals in the context of an ESU by generating alternative delisting scenarios (e.g., different combinations of viable populations that would provide for the recovery of an ESU as a whole).

Why do we need the Technical Recovery Teams if NMFS is issuing these targets?

The TRTs' recommended viability criteria will be more detailed and comprehensive than these interim targets. The TRTs' products will detail the population abundance, growth rate, number and distribution of populations, and population diversity required for viable salmonid populations. The TRTs will also provide alternative population recovery scenarios for viability of the ESU as a whole. Furthermore, the TRTs will detail specific factors for decline for each population that will need to be addressed for recovery. The interim targets will provide guidance to recovery planners until they are refined by the more comprehensive TRT final recovery goals.

Do these interim targets have legal significance?

No, these interim targets do not have legal meaning. They are provided as a matter of general management guidance by NMFS. These interim goals will precede (and eventually be replaced by) the final recovery goals developed through the TRT and formal recovery planning processes, and are intended to provide an early gauge of the level of effort that could be needed to meet final recovery goals. The TRT biological recovery goals, in turn, will be incorporated into delisting criteria and included in NMFS' formal recovery plans.

What if these interim targets turn out to be higher or lower than the goals established through the TRTs and formal recovery?

It is certainly possible and likely that these targets will be adjusted either up or down to reflect more accurate information, specific application to the populations and ESUs as a whole, and broader societal goals. Therefore, these targets are preliminary and only intended to provide a general sense of abundance and productivity objectives.

Do these interim abundance targets provide for harvest or other take?

These interim abundance targets make no particular assumptions regarding harvest or any other mortality factor. Rather, these targets are meant to provide a general sense of the number of spawners needed under the ESA for the recovery of naturally produced populations in their natural ecosystems. Different levels of take, in order to be consistent with recovery goals, must be accommodated for by increased productivity (e.g., increased number of spawners, increased survivorship in the early life-history stages, improved habitat condition). Different levels of take from harvest, the hydropower system, or other sources will need to be considered and determined within the context of meeting the viability criteria and broader recovery goals. Final recovery goals will need to account for tribal treaty rights.

Do these interim targets include hatchery fish?

No. These targets are for naturally produced spawning adults. NMFS is in the process of revising its policy on artificial propagation in ESA listing determinations to give consideration to the potential role of hatchery production in mitigating extinction risk, and to ensure that hatchery and natural populations within the same ESU are treated properly in listing determinations. NMFS, however, believes that the ESA's goal is the recovery and conservation of naturally reproducing and self-sustaining species in their natural ecosystems. NMFS expects its draft artificial propagation policy to be available for review and comment by late spring.

How do these interim abundance targets compare to present levels?

The abundance levels of returning natural spawners, for the most part, were substantially less than these interim abundance targets for the years 1995 - 1999. For example, for the Methow and Wenatchee spawning aggregations, returns averaged about 100 to 150 naturally produced spawners for those years. However, in 2000-2001 there was a marked increase in returns with an estimated 1500 to 2000 naturally produced spawners in those drainages (from a total of 10,000 returning hatchery and natural spawners, approximately 80% of those returns were hatchery-produced spawners, and 20% were naturally produced spawners). The 2000-2001 returns represent a very strong year, and we hope for more such years in the future. The higher returns in 2000/2001 are believed to be due to a combination of improved ocean conditions as well as improvements in hydropower system and fishery management. Although one or a few years with strong returns is encouraging, it does not lead automatically to a delisting. Population status needs to be measured as the geometric mean of 8 years of return trends, or approximately 2 salmon generations. Also, abundance goals should not be considered in isolation, but must be met together with goals for productivity, spatial distribution, and genetic diversity.

Are the interim abundance and productivity targets as high as we need to aim?

No. To meet broader societal needs, NMFS advises that recovery planning efforts aspire towards abundance and productivity goals that exceed these interim targets. These targets provide only preliminary guidance for the minimum levels of abundance and productivity that may be needed for the recovery of self-sustaining and naturally producing populations.

NMFS has maintained that recovery planning will include close coordination and partnership with co-managers. Why then were co-managers not included in the development of these interim targets?

So that NMFS could quickly issue these interim targets in support of current and ongoing recovery planning efforts, stakeholders and co-managers were not provided the opportunity to review draft targets. NMFS, however, stresses that these interim targets are largely derived from sources that had substantial co-manager involvement and opportunities for public input. Moreover, they are only informal guidance provided to help recovery planners gauge the gap between current conditions and the ESA recovery objectives. NMFS remains committed to the formal recovery planning process involving substantial co-manager cooperation and partnership, and we hope that these interim targets stimulate interest in participating in formal subbasin planning and recovery planning efforts. These interim targets will be updated and refined through the TRT and formal recovery planning process. These interim targets are issued, in part, to allow current and ongoing recovery efforts to aim for a target, even if it is preliminary.

Will NMFS accept comments on these interim targets?

NMFS provides these targets to provide a preliminary sense of ESA recovery objectives. Since these interim targets will be replaced by more specific and comprehensive products developed through the Interior Columbia TRT, it would be most effective for technical information and comments to be provided to NMFS for use in the development of TRT products. Also, since final recovery goals will be developed through broad policy and stakeholder involvement, we encourage interested entities to express their interest and ideas to us for the formal recovery and subbasin planning processes.

Why are these interim targets just for the portion of ESUs that presently spawn below the major mainstem dams that do not provide for fish passage?

More substantial scientific evaluation and policy determinations are needed prior to identifying potential spawning habitats above these barriers (e.g., Chief Joseph Dam on the upper Columbia, Hells Canyon Dam on the Snake mainstem, and Dworshak Dam on the north fork Clearwater River). The TRTs will evaluate potential spawning aggregations above these barriers in the context of whole-ESU viability scenarios.

Isn't NMFS undertaking coastwide status reviews for Pacific salmon and steelhead ESUs? Why doesn't NMFS just wait for those status reviews to be completed before issuing interim targets?

Yes, we are undertaking status review updates for 24 of the 26 currently listed ESUs, as well as one candidate ESU. However, these efforts to update the present status, viability, and level of extinction risk for an ESU will not include the exhaustive evaluation of what is required to recover an ESU that is at risk of extinction. Detailing such recovery requirements involves a separate effort that is accomplished through the TRT and formal recovery planning process. Although it is conceivable that an original listing determination could be revised once a status review update is completed, NMFS remains committed to moving forward in its recovery efforts for all ESUs currently listed as threatened or endangered under the ESA. Provision of these interim targets is part of that commitment.

When will we have achieved final abundance goals, and how should our progress toward abundance targets be measured?

Subbasin- or tributary-level returns of salmon and steelhead are typically highly variable from year to year. As a result, average returns over a short time period can be very different than longer term averages, and may not be indicative of longer term abundance trends for a particular subbasin or spawning area. The uncertainty inherent in shorter term abundance estimates could be accounted for by providing shorter term recovery targets that exceed the final recovery objectives. Such shorter term recovery targets would incorporate estimates of sampling error and annual population variability, and reflect a predetermined level of acceptable risk. The levels of acceptable risk and the relevant time-frames for determining whether recovery goals have been met will be determined during formal recovery planning.

How do these interim targets relate to Subbasin Planning efforts already underway?

NMFS hopes that these interim targets will help stimulate subbasin planning. NMFS also hopes that these interim targets will encourage local involvement in improving these interim estimates and establishing the final recovery goals through the TRT and formal recovery planning process.

Commonly Used Acronyms

ESA – Endangered Species Act

ESU – Evolutionarily Significant Unit

NMFS – National Marine Fisheries Service

QAR – Quantitative Analytical Report

TRT – Technical Recovery Team

- * Please refer to the Interim Targets Letter & Enclosure for the above cited references.
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