



## ESA Recovery Planning for Middle Columbia River Steelhead

### Questions & Answers

#### Q 1: Why is a recovery plan needed for Middle Columbia River Steelhead?

The Middle Columbia River steelhead distinct population segment (DPS) was first listed as threatened in 1999 under the Endangered Species Act (ESA). A threatened species is one that is likely to become endangered in the foreseeable future throughout all or a significant portion of its range. The steelhead's threatened status was affirmed under the ESA on January 5, 2006. The ESA requires the National Marine Fisheries Service (NMFS, also called NOAA Fisheries Service) to develop recovery plans for all listed marine species.

The Middle Columbia River Steelhead Recovery Plan covers the spawning, rearing, and freshwater migration range of the Middle Columbia River steelhead -- approximately 35,000 square miles in the Columbia plateau of eastern Washington and eastern Oregon, as well as the Columbia River and estuary. See the map on page 2.

#### Q 2: What is a recovery plan—and what is in this recovery plan?

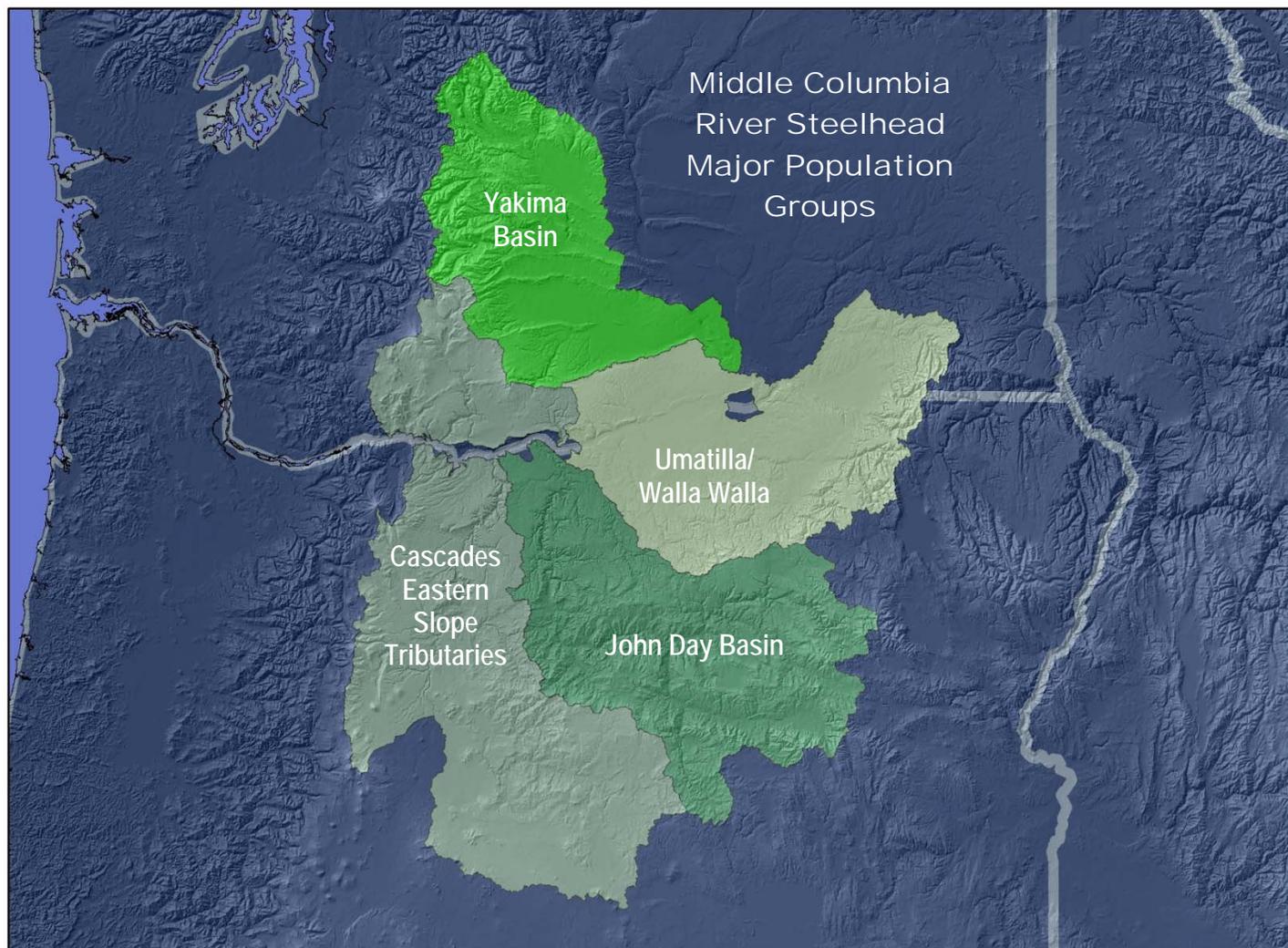
The purpose of the ESA is to provide a means for conserving the ecosystems upon which threatened and endangered species depend. A recovery plan is guidance -- like a roadmap -- for the people and the various private and public entities -- local, state, Federal, or tribal -- that are involved in efforts to improve conditions for a listed species.

The ESA requires that recovery plans must, at a minimum, contain (1) a description of site-specific management actions necessary to achieve the plan's goal for the conservation and survival of the species; (2) objective, measurable criteria which, when met, would result in a determination that the species should be removed from the list; and (3) estimates of the time required and cost to carry out the measures needed to achieve the plan's goal and to achieve intermediate steps toward that goal.

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# Middle Columbia River Steelhead



Recovery plans also need to be consistent with NMFS' mandates to provide for sustainable fisheries and to meet our treaty and trust obligations to Native American tribes.

This recovery plan provides:

- An explanation of steelhead biology
- Recovery goals & viability criteria
- An assessment of current status, limiting factors & threats
- Recovery strategies & site-specific actions
- Estimates of time & costs to implement actions
- An organizational structure to coordinate regional research,

monitoring & evaluation to track progress

### Q 3: What is a "distinct population segment?"

A distinct population segment (DPS) is a distinctive group of Pacific salmon or steelhead that is uniquely adapted to a particular area or environment and cannot be replaced. A "population segment" is considered distinct (a DPS and hence a "species" for purposes of conservation under the ESA) if it is discrete from and significant to the remainder of its species based on factors such as physical, behavioral, or genetic characteristics; it occupies an unusual or unique ecological setting; or its loss would represent a

significant gap in the species' range. A DPS may contain multiple populations that are connected by some degree of migration, and hence may have a broad geographic range across watersheds and river basins.

### Q 4: What does "recovery" mean?

In the ESA, recovery means the species is naturally self-sustaining, no longer needs the protection of the Act, and therefore can be "delisted" – taken off the list of threatened and endangered species. Delisting also requires a determination that threats to the species' survival have been addressed and protections are in place that would prevent further listings. For steelhead and salmon, recovery means that

naturally spawning populations are likely to persist in the long run, defined as the next 100 years. The steelhead or salmon species also has to be resilient enough to survive catastrophic changes in the environment, including natural events such as floods, earthquakes, storms, and decreases in ocean productivity. In terms of social and cultural values, recovery may mean sufficient abundance to allow sustainable harvest.

#### **Q 5: Is this plan voluntary or required?**

Recovery plans are guidance and planning documents; they are not laws or regulations. Identification of an action to be implemented by any public or private party does not create a legal obligation beyond existing legal requirements.

Although the ESA requires NMFS to develop recovery plans, NMFS relies, to a great extent, on local citizens and jurisdictions to voluntarily implement the actions the plan recommends or proposes. In many cases, the plan acknowledges and recommends coordinating the pre-existing, ongoing efforts that contribute to recovery, including conservation plans, completed section 7 consultations and permits, and pre-existing laws or regulations that are expected to benefit the species and its environment.

#### **Q 6: What are the goals of this recovery plan?**

A: The first goal of this recovery plan is for the Middle Columbia River steelhead to become viable and able to be delisted. The recovery goals that are incorporated into the locally developed recovery plans may include other “broad sense” goals to address, for example, other legislative mandates or social, economic, and ecological values that may exceed the minimum necessary to delist the DPS. Delisting criteria must meet the ESA requirements, while recovery may be defined more broadly.

#### **Q 7: How long will it take to reach recovery?**

NMFS believes that the Middle Columbia River steelhead DPS can achieve a “negligible” risk of extinction within a reasonable time frame – e.g. 25 to 50 years or perhaps sooner – if the proposed actions are taken and if they have the predicted effects on steelhead habitat and survival.

#### **Q 8: Who makes the decision to delist?**

Under the ESA, the listing and delisting of marine species, including salmon, are the responsibility of NMFS. A species can be delisted when it has improved to the point that it is naturally self-sustaining and is no longer threatened with extinction.

The delisting decision must be based on the best available science concerning the current status of the species and its prospects for long-term survival. Delisting criteria include not only biological criteria but also criteria that address the threats to a species (i.e., the listing factors in ESA section 4[a][1]).

#### **Q 9: Who Wrote the Middle Columbia River Steelhead Recovery Plan?**

A: NMFS prepared the Proposed Recovery Plan for the Middle Columbia River Steelhead DPS, based on four locally developed recovery plans for Middle Columbia River tributaries in Washington and Oregon, where the steelhead spawn and spend the first year of their lives. Local support of recovery plans by those whose activities directly affect the listed species, and whose actions will be most affected by recovery efforts, is essential. NMFS therefore supported and participated in collaborative efforts to involve local communities and state, tribal and federal entities in recovery planning, and to coordinate the many conservation efforts already underway throughout the region.

For the purpose of recovery planning for the entire DPS, NMFS defined four “management units,” based on jurisdictional boundaries as well as areas where local planning efforts were underway. Recovery plans were locally developed for each management unit: (1) Oregon; (2) Washington Gorge, which in turn, is subdivided into three planning areas, White Salmon, Klickitat, and Rock Creek; (3) Yakima subbasin; and (4) Southeast Washington.

The DPS plan summarizes the management unit plans and also covers issues that affect all the Middle Columbia steelhead as they migrate through the mainstem Columbia River and its estuary. The DPS plan includes the management unit plans as appendices.

#### **Oregon Management Unit**

The Oregon Department of Fish and Wildlife wrote the recovery plan for Middle Columbia River steelhead that spawn in Oregon tributaries to the Columbia River.

#### **Washington Gorge Management Unit**

NMFS prepared the plan for the Washington Gorge management unit, which includes steelhead populations in Rock Creek, the White Salmon River, and the Klickitat River in south-central Washington.

#### **Yakima Basin Management Unit**

The Yakima Basin Fish and Wildlife Recovery Board wrote the plan for the steelhead that spawn in Yakima Basin tributaries.

#### **Southeast Washington Management Unit**

The Snake River Salmon Recovery Board developed the plan for steelhead that spawn in Southeastern Washington tributaries to the Columbia.

# Middle Columbia River Steelhead

As the management unit plans neared completion, NMFS convened a bi-state, tri-tribe group called the Middle Columbia Recovery Planning Forum (Mid-C Forum) to help with the “rollup,” i.e. the building up of a synthesis and overview based on the management unit plans. The Mid-C Forum contributed substance as well as scientific and critical review to the DPS plan. Participants in the Mid-C Forum include the Oregon Department of Fish and Wildlife (ODFW), Washington Department of Fish and Wildlife (WDFW), the Yakama Nation, Confederated Tribes of the Warm Springs Indian Reservation, Confederated Tribes of the Umatilla Indian Reservation, Washington Governor’s Salmon Recovery Office, Oregon Governor’s Natural Resources Office, Snake River Salmon Recovery Board, Yakima Basin Fish and Wildlife Recovery Board, US Bureau of Reclamation (BOR), US Fish and Wildlife Service (USFWS), US Forest Service (USFS), US Army Corps of Engineers (COE), Klickitat County, and NMFS Northwest Region.

## Q 10: What is the scientific basis for the recovery plan?

The recovery plan draws upon the work of the Interior Columbia Technical Recovery Team (ICTRT), a team of scientists appointed by NMFS to provide a solid scientific foundation for the plan. The ICTRT included biologists from NMFS, the states of Washington and Oregon, and academic institutions. The ICTRT identified the historical populations and major population groups that make up the Middle Columbia River steelhead DPS, and recommended biological viability criteria.

The management unit plans also built upon the available scientific literature, local expertise, and the Subbasin Fish and Wildlife Plans previously completed under the direction of the Northwest Power and Conservation Council.

The DPS plan also uses information from two “modules” developed by NMFS to address conditions in the Columbia River mainstem and estuary - the Hydro Module (NMFS 2008 Draft), which summarizes effects of Federal and non-Federal mainstem Columbia River hydropower programs, and the Estuary Module (NMFS 2007). For hatchery and harvest factors, the Plan relies upon Hatchery and Genetic Management Plans, Artificial Production for Pacific Salmon (Appendix C of Supplemental Comprehensive Analysis, NMFS 2008 Biological Opinion), fishery management planning through U.S. v. Oregon for mainstem fisheries, and Fisheries Management Evaluation Plans for tributary fisheries.

## Q 11: What are the key limiting factors for the Middle Columbia River steelhead?

A: At a general level, based on information from the ICTRT and the four management unit plans, the major factors limiting the viability of Middle Columbia River steelhead populations are the following:

- Degraded tributary habitat
- Impaired fish passage in the mainstem Columbia River and tributaries
- Hatchery-related effects
- Predation/competition/disease

Two other factors, degradation of estuarine and nearshore marine habitat and harvest-related effects, pose some risk to steelhead viability for the entire DPS, but less than the other factors. Climate change represents a potentially significant threat to recovery of Middle Columbia River steelhead populations.

## Q 12: How were the limiting factors identified?

A: The DPS plan summarized limiting factors analyses from the management unit plans. The management unit plans identified limiting factors based on many sources of information, including the scientific research literature, reports by the Interior Columbia Technical Recovery Team, subbasin plans, modeling studies, and expert opinion. The DPS plan also incorporated findings from Middle Columbia steelhead 5-year status reviews, listing decisions, the hydropower and estuary modules, harvest agreements (e.g. U.S. v. Oregon) and the FCRPS biological opinion.

## Q 13: Is this plan just about habitat or are there actions for hatcheries, hydropower, and harvest too?

A: The DPS plan recommends actions for all the factors limiting survival of Middle Columbia River steelhead. The DPS plan incorporates well-developed suites of actions from the management unit plans to protect and improve steelhead habitat in the Middle Columbia tributaries. In some respects and in some geographic areas, site-specific habitat recovery actions are more fully developed and up-to-date than they are for artificial production of salmon and steelhead. However, hatcheries are currently undergoing three major scientific reviews that are expected to provide important information to help develop specific recovery actions for hatchery programs. These reviews include the Mitchell Act Environmental Impact Statement, the U.S. Fish and Wildlife Service Hatchery Review, and the congressionally established Hatchery Scientific Review Group (HSRG). Collectively, these scientific reviews will evaluate every anadromous fish hatchery program in the Columbia Basin and provide significant new information to help guide future actions. Several

agreements, including the 2008 Federal Columbia River Power System (FCRPS) Biological Opinion, are in place to ensure that hatchery programs are brought up-to-date with specific actions that are consistent with recovery.

Passage for juvenile steelhead migrating to the ocean and adult steelhead returning to their natal streams is limited primarily by the four Federal dams on the Lower Columbia River mainstem – Bonneville, John Day, The Dalles, and McNary – which are part of the FCRPS. The plan recommends the actions to improve fish passage through the mainstem Columbia River that are contained in NMFS' 2008 FCRPS Biological Opinion.

For Columbia River harvest, recovery plans explicitly rely on Fishery Management and Evaluation Plans (FMEPs) for tributary fishery management and on the U.S. v. Oregon process for mainstem fishery management. These plans and processes have been and are being developed to be consistent with recovery objectives. They have been the subject of ESA consultations and will continue to be reviewed for consistency with recovery objectives through adaptive management. Oregon and Washington have submitted FMEPs affecting Mid-Columbia steelhead. Mainstem fisheries will be managed consistent with the recent U.S. v. Oregon management agreement, which extends through 2017. For ocean fisheries off the coast of Alaska and Canada, our recovery plans rely on the recent revisions of the Pacific Salmon Treaty between the United States and Canada. For U.S. coastal fisheries, we will continue to rely on specific actions determined through the Pacific Fisheries Management Council.

#### **Q 14: What role will hatcheries play in recovery?**

A: Recovery depends on natural populations of steelhead spawning in the wild. Influence from hatchery fish is a limiting factor for the Middle Columbia steelhead DPS because of out-of-basin hatchery fish straying onto natural spawning grounds in some areas and also because of the difficulty of determining natural population abundance when hatchery fish are spawning in the same area. In those areas, actions are recommended to prevent or remove hatchery strays. In other areas, hatchery production is managed in such a way as to support fisheries without impeding naturally produced fish. Artificial production can also sometimes be used to assist reintroduction of steelhead to historically accessible areas, such as the Upper Deschutes/Crooked River area.

The hatchery programs in the Middle Columbia are managed under the Mitchell Act and the U.S. v. Oregon process, involving the fisheries co-managers and regulated by NMFS. NMFS is working with the funding agencies and hatchery operators to update and complete Hatchery and Genetic Management Plans (HGMPs) for every hatchery program in the Middle Columbia region as a means of implementing improvements and reducing biological risks. The HGMPs are the basis for NMFS' biological opinions on hatchery programs under sections 7 and 10 and the 4(d) rule, which relate to incidental and direct take of listed species. The HGMPs describe each hatchery's operations and the actions taken to support recovery and minimize ecological or genetic risks, such as straying and other forms of competition with naturally produced fish.

Evaluating the factors that influence interactions between hatchery fish and naturally produced fish under varying freshwater conditions and ocean

conditions is an important area of future research as well as ESA consultations and NEPA review.

#### **Q 15: How will this recovery plan become official – Who must approve it?**

A: NOAA Fisheries Service must approve recovery plans based on the statutory requirements and any relevant regulations and agency guidance. In Oregon, the Oregon Fish and Wildlife Commission must also approve the plan under Oregon's Native Fish Conservation Policy. In Washington the Salmon Recovery Boards forward their plans for the Governor's approval.

#### **Q 16: Will this plan force me to do things differently on my land?**

The plan in itself cannot force anyone to do anything. It is not regulatory. However, landowners may benefit from taking actions recommended in the plan, which may be eligible for the various Federal and state incentive programs for land conservation. Having an approved recovery plan in place may help local groups or entities to obtain funding for recovery actions.

#### **Q 17: What is the relationship of this process to subbasin planning?**

A: This recovery plan incorporates the work of subbasin plans prepared by the Northwest Power and Conservation Council for implementation of the Northwest Power Act. While subbasin plans generally focused on freshwater habitat limiting factors and actions, recovery plans address the full salmonid life cycle and the full range of limiting factors and threats that affect that life cycle.

# Middle Columbia River Steelhead

**Q 18: How will the recovery plan influence decisions made by the various entities, such as NMFS, Oregon Watershed Enhancement Board, Washington’s Salmon Recovery Funding Board, or the Northwest Power and Conservation Council, that fund recovery projects?**

A: NMFS is requiring that funding through the Pacific Coastal Salmon Recovery Fund (PCSRF) be based on recovery needs. PCSRF funds are authorized (16 U.S.C. 3645[d][2]) for projects with demonstrable and measurable benefits to recovery of ESA listed salmon and steelhead. NMFS also encourages other funding entities to prioritize funding based on recovery needs. The Northwest Power and Conservation Council, through its administration of the Fish and Wildlife Program, will implement the Bonneville Power Administration’s obligations from the FCRPS Biological Opinion.

**Q 19: Who are the “co-managers?”**

Northwest Indian tribes, the states of Washington and Oregon, and Federal agencies including the National Marine Fisheries Service, the U.S. Fish and Wildlife Service, and WHO-ALL? are “co-managers” in regulating salmon and steelhead harvest. The tribes have court-affirmed, legally enforceable treaty rights reserving to them a share of the salmon and steelhead harvest. In the Treaties of 1855 between the U.S. government and the Confederated Tribes of the Warm Springs Reservation of Oregon, the Confederated Tribes and Bands of the Yakama Indian Nation, the Confederated Tribes of the Umatilla Indian Reservation, and the Nez Perce Tribe, the tribes, in exchange for the preponderance of their lands, reserved the rights to fish within their reservations and “at all other usual and accustomed places.”

The usual and accustomed places are understood to include the millions of acres of aboriginal land ceded to the United States in the 1855 treaties, which extends to the Upper Columbia and Snake River basins, and includes most of the geographic range of the Middle Columbia steelhead DPS. A complex history of treaties, executive orders, legislation, and court decisions have culminated in the recognition of tribes as co-managers who share management responsibilities and rights for fisheries in the Columbia Basin.

**Q 20: What is the relationship of this recovery plan to section 7 consultations and other types of regulatory decisions?**

This recovery plan provides important context and contains useful information which NOAA Fisheries and action agencies and permittees can use in section 7 consultations and other regulatory decisions. At the same time, this plan draws upon NOAA’s experience with species conservation gained in the course of section 7 consultations and section 10 permits. Relevant information includes:

- The importance of affected populations to listed species viability.
- The importance of affected habitat to salmon/steelhead populations and species viability.
- The congruence of proposed activities with recovery plan strategies and actions.
- The relevance of research associated with the proposed action to the research, monitoring and evaluation plan for the affected species.

**Q21. What is the relationship of this recovery plan to NOAA’s Biological Opinion on the Federal Columbia River Power System (FCRPS BiOp)?**

The FCRPS BiOp includes actions that would make significant contributions to recovery, and its actions are congruent with this recovery plan. However, there are several important distinctions:

- The recovery plan is broader in scope than the FCRPS BiOp. The recovery plan addresses all threats and provides actions in all sectors – including tributary and estuary habitat; hatchery; harvest; and tributary and mainstem hydropower – actions that together could lead to recovery of the species. The FCRPS BiOp provides for those actions the FCRPS action agencies – Bonneville Power Administration, U.S. Army Corps of Engineers, and U.S. Bureau of Reclamation – have authority to implement.
- The recovery plan timeline is until recovery is achieved, which could take 25 to 50 years – hopefully, less. The FCRPS BiOp covers FCRPS agency actions for a 10-year period.
- Implementing the recovery plan actions is voluntary. Federal agencies, tribes, states, land owners, water users, and local governments have the discretion to implement recovery actions if they are able. The FCRPS BiOp is contingent upon the action agencies’ commitment to implement the actions evaluated in the BiOp.
- Recovery plans may incorporate actions from consultations and permits, such as the FCRPS BiOp, because those actions are likely to contribute to recovery. Because of the consultations and permits, those recovery actions are reasonably certain to occur and may provide a foundation for other actions called for by the recovery plan.