NATIONAL MARINE FISHERIES SERVICE REPORT ON SALMON REBUILDING PLANS

In March 2018, the Pacific Fishery Management Council's (Council) Salmon Technical Team (STT) presented the annual assessment of Pacific salmon stocks and informed the Council that two Chinook salmon and three coho stocks met the Fishery Management Plan (FMP) criteria for being overfished. The Council directed the STT to begin developing rebuilding plans for these stocks, under section 3.1.4 of the FMP. On June 18, 2018, the West Coast Regional Administrator notified the Council that NOAA's National Marine Fisheries Service (NMFS) had determined that these five salmon stocks were overfished under the Magnuson-Stevens Fishery Management and Conservation Act (MSA): Sacramento River fall-run Chinook, Klamath River fall-run Chinook, Queets River coho, Juan de Fuca coho, and Snohomish River coho.

It has been many years since a salmon stock has been determined to be overfished. In the intervening time, Amendment 16, which took effect on January 30, 2012, updated the FMP with respect to overfished criteria and rebuilding plan requirements, among other topics. Therefore, NOAA Fisheries would like to take this opportunity to review our MSA National Standard 1 (NS1) guidelines regarding rebuilding plans (50 CFR 600.310(j)) and how these guidelines interface with the salmon FMP (e.g., required elements T_{target} , T_{min} , and T_{max}), the appropriate scope for rebuilding plans, and the development of alternatives in an integrated document for analysis under the National Environmental Policy Act (NEPA).

REBUILDING PLAN EVOLUTION UNDER THE SALMON FMP

In 2009, NMFS published a final rule amending the guidelines for NS1 of the MSA (74 FR 3178, January 16, 2009). This action was necessary to provide guidance on how to comply with new annual catch limit (ACL) and accountability measure (AM) requirements for ending overfishing of fisheries managed by Federal fishery management plans (FMPs). It also clarified the relationship between ACLs, acceptable biological catch (ABC), maximum sustainable yield (MSY), optimum yield (OY), and other applicable reference points. This action was necessary to facilitate compliance with requirements of the Magnuson-Stevens Act to end and prevent overfishing, rebuild overfished stocks and achieve OY. This action also provided guidance on aspects of rebuilding plans. The Council amended all FMPs to address the new NS1 guidelines. The final rule which implemented Amendment 16 for the salmon FMP was published on December 29, 2011 (76 FR 81851).

Prior to Amendment 16, the FMP did not refer to "overfishing" and "overfished" and gave scant direction regarding rebuilding plans. The previous FMP identified "Conservation Alert" and "Overfishing Concern" as the mechanisms for addressing overfishing. A Conservation Alert was triggered during the preseason process when a stock was projected to fall short of its conservation objective (similar to the current term "Approaching Overfished"). An Overfishing Concern was triggered when a stock failed to meet its conservation objective three years in a row (similar to the current term "Overfished").

In the case of an Overfishing Concern, the FMP stated that the Council will direct its STT to work with state and tribal fishery managers to complete an assessment of the stock The STT was directed to recommend any needed adjustments to annual management measures to assure the conservation objective is met, or recommend adjustments to the conservation objective which may more closely reflect the MSY or ensure rebuilding to that level. Under the FMP, the STT recommendations "should identify actions that will recover the stock in as short a time as possible, preferably within ten years or less, and provide criteria for identifying stock recovery and the end of the overfishing concern."

Under Amendment 16, the FMP provides more proscriptive direction in terms of rebuilding plans, in response to the new NS1 guidelines. Added to the FMP was the direction that: "adoption of a rebuilding plan will require implementation either through an FMP amendment or notice and comment rule-making process." Under either procedure, the action requires consistency with other applicable law, including the National Environmental Policy Act (NEPA). NEPA requires that the deciding official consider alternatives to the proposed action; in this case, a rebuilding plan.

The most recent salmon stock determined to be overfished, prior to 2018, was Sacramento River fall-run Chinook salmon (SRFC). In 2010, SRFC was determined by NMFS to be overfished (75 FR 28564, May 21, 2010) for failing to meet the conservation objective in three consecutive years (2007-2009). Amendment 16 included a new control rule for SRFC, and, in 2012, the Council adopted that control rule as the rebuilding plan after considering it and two other alternatives in the environmental assessment (EA) for the 2012 ocean salmon management measures (77 FR 25915, May 2, 2012). The three-year geometric mean escapement for SRFC (2010-2012) exceeded S_{MSY} for the stock, and SRFC was determined to be rebuilt in 2013.

NS1 GUIDELINES

NMFS has developed guidelines for complying with the NS1 provisions of section 301 of the MSA (50 CFR 600.310). Under these guidelines, rebuilding plans must include the following elements; including these elements in rebuilding plan alternatives allows the Council to make an informed decision on adopting rebuilding plans.

T_{target}: the target time for rebuilding the fishery in as short a time as possible, taking into account the status and biology of the overfished stock, the needs of the fishing communities, recommendations by international organizations in which the United States participates, and the interaction of the overfished stock of fish within the marine ecosystem.

 T_{min} : the amount of time the stock is expected to take to rebuild to MSY biomass level in the absence of any fishing mortality ("expected" means to have at least a 50 percent probability of attaining MSY, where such probabilities can be calculated). The starting year for the T_{min} calculation should be the first year that the rebuilding plan is expected to be implemented. Note that, for salmon, we use spawning escapement for biomass, so the MSY biomass level is termed S_{MSY} in salmon rebuilding plans.

 T_{max} : the maximum time for rebuilding a stock to B_{MSY} (S_{MSY} for salmon). If T_{min} is less than 10 years, T_{max} is 10 years.

To be approved, a rebuilding plan must identify T_{target} and state how the plan will accomplish rebuilding to S_{MSY} within that time (e.g., the identified harvest strategy).

SCOPE OF REBUILDING PLANS

Rebuilding overfished stocks is required under MSA section 304(e). The purpose of a rebuilding plan is to identify what action the Council will take to rebuild an overfished stock to MSY in the shortest time possible, taking into account the needs of fishing communities and to identify the target time for rebuilding. The salmon FMP also allows the Council to direct the Habitat Committee to work with federal, state, local, and tribal habitat experts to review the status of essential fish habitat affecting overfished stocks and to recommend restoration and enhancement measures. While restoring and enhancing habitat can be beneficial, implementing these measures is beyond the authority of the Council and is, therefore, beyond the scope of the rebuilding plans under the MSA.

Text of MSA 304(e)(4)

- (4) For a fishery that is overfished, any fishery management plan, amendment, or proposed regulations prepared pursuant to paragraph (3) or paragraph (5) for such fishery shall—
- (A) specify a time period for rebuilding the fishery that shall—
- (i) be as short as possible, taking into account the status and biology of any overfished stocks of fish, the needs of fishing communities, recommendations by international organizations in which the United States participates, and the interaction of the overfished stock of fish within the marine ecosystem; and
- (ii) not exceed 10 years, except in cases where the biology of the stock of fish, other environmental conditions, or management measures under an international agreement in which the United States participates dictate otherwise;
- (B) allocate both overfishing restrictions and recovery benefits fairly and equitably among sectors of the fishery; and
- (C) for fisheries managed under an international agreement, reflect traditional participation in the fishery, relative to other nations, by fishermen of the United States.

When NMFS adopts the rebuilding plans, it must do so through notice-and-comment rulemaking.¹

¹ Rebuilding plans can also be adopted by amendment of the FMP, but NMFS understands the Council is not planning to amend the FMP.

REBUILDING PLAN ALTERNATIVES

Implementing rebuilding plans is a major federal action under NEPA. Therefore, NEPA analysis at the appropriate level is required. For the current rebuilding plans under development, NOAA Fisheries, with assistance from Council staff, has determined that an environmental assessment (EA) is the appropriate level of NEPA analysis. Under NEPA, a range of alternatives is required, including a No-action Alternative (i.e., status quo). NMFS and NOAA General Council also recommend a No Fishing Alternative (e.g., an alternative that identifies T_{min}), and at least one Action Alternative.