NATIONAL MARINE FISHERIES SERVICE REPORT ON REGULATORY ACTIVITIES

The National Marine Fisheries Service (NMFS) provides this report on issues relevant to ocean salmon harvest management in 2023.

Amendment language in FMP and A21

At its November 2022 meeting, the Council adopted a new value for the Chinook salmon abundance threshold below which the management measures described in Amendment 21 are implemented to increase Chinook prey availability to Southern Resident Killer Whales (SRKW) in the Exclusive Economic Zone. The updated threshold value continues to use the same approach and method that was used to establish the original abundance threshold, but incorporated updates to the Fishery Regulation Assessment and Shelton et al. models to include more contemporary and larger datasets. The Fishery Management Plan (FMP) currently indicates that *"If a technical review of the best scientific information available provides evidence that, in the view of the STT, SSC, and the Council, a modification of the estimated value of the TS1 starting abundance estimates for the seven lowest years is necessary to be consistent with the best available scientific information, the Council may adopt an updated value for the threshold, which will be reported in the preseason process."* The change adopted in 2022 was informed by a technical review of recent updates per the FMP language. This was the first time since the adoption of Amendment 21 that the Council and NMFS had worked through the process for modification and it revealed a lack of clarity in the FMP language and expectations regarding the level of review required by the STT and SSC. Anticipating future review(s), the Council directed Council staff to work with NMFS to improve the FMP language to address these issues.

We are working with Council staff to review Section 6.6.8 of the FMP to improve clarity, and to identify any additional housekeeping revisions to the FMP that may be included in a new amendment. We will be prepared to report back to the Council at its April 2023 meeting.

Status of Consultation: California Coastal Chinook Evolutionarily Significant Unit (ESU)

NMFS re-initiated its consultation on the effect of ocean salmon fisheries on the California Coastal Chinook (CC Chinook) ESU in 2022. In our 2022 guidance letter, and subsequent reports to the Council, NMFS provided an overview of the performance of the impacts on CC Chinook in ocean salmon fisheries relative to the take limit under the Endangered Species Act (ESA) in recent years, summarized the actions taken to address the instances where the take limit had been exceeded, and described NMFS' rationale for re-initiation. We expect to complete the consultation before April.

Concerns regarding Central Valley spring Chinook (CVSC) returns in 2023

The Central Valley Spring Chinook (CVSC) ESU is listed as threatened under the ESA. Given the limited data available on CVSC and its similarity to Sacramento River Winter-run Chinook

(SRWC), the Council relies on the management framework developed for SRWC, along with other regulatory measures in the FMP, to limit impacts to CVSC salmon in a manner sufficient to avoid jeopardy to CVSC[1]. In March 2022, NMFS' Southwest Fisheries Science Center (SWFSC) presented information to the Council anticipating a weak 2020 CVSC brood year (BY) cohort because of poor survival to extreme drought conditions during juvenile outmigration and poor parent escapement (Agenda Item D.1.a Supplemental NMFS Report 1). Consequently, fisheries in 2023 are likely to encounter a very weak CVSC cohort.

The Science Center report indicated that, based on ocean spatial distribution patterns and migration timing, ocean fishery impacts on CVSC likely covary with planned ocean fishery impacts on SRFC and SRWC. Because of actions taken to offset poor anticipated freshwater survival for SRFC and SRWC (e.g., increased hatchery production, trucking of hatchery releases), 2023 forecasts for these stocks could be higher than they would be otherwise and will likely not reflect the impacts of poor freshwater environmental conditions on natural-origin productivity that CVSC experienced. Additional technical work was completed over the past year including work of the Habitat Committee to refine ecosystem indicators specific to CVSC as directed by the Council in spring 2022, as well as work by the SWFSC and CDFW to assess maturation rates for CVSC. This work contributed to informing expectations on the strength of 2023 CVSC abundance and vulnerabilities to fisheries.

We anticipate that 2023 salmon fishing will be very limited off South of Falcon in 2023 in response to low forecasts for both Klamath and Sacramento river fall Chinook. Although marine conditions for CVSC BY2020 were better than previous years, in general, the habitat indicators indicate overall poor returns for California Chinook stocks in 2023 as reflected in low abundance forecasts. In addition, combined freshwater and marine indicators specific to CVSC for BY2021 were the third lowest in the 39-year record such that adult returns in 2024 are likely also to be below average. Additional analysis on maturation rates indicate that, like other California Chinook stocks, CVSC return at age-3 in most years, although information suggests the wild component matures at a lower rate than the Feather River hatchery component and at a lower rate than SRWC. If that pattern holds, the majority of BY2020 CVSC will have returned to the river by spring of 2023, before much of the 2023 fishery takes place although they may be vulnerable to the fishery somewhat longer than SRWC or the Feather River component of CVSC. The information suggests that shaping of early season fisheries could therefore increase protections to CVSC.

[1] see NMFS. 2000. Endangered Species Act- Reinitiated Section 7 Consultation Biological Opinion. Effects of The Pacific Coast Salmon Plan on California Central Valley Spring-Run Chinook, and California Coastal Chinook Salmon. NMFS Protected Resources Division. April 28, 2000.

Status of ESA listing petitions and determinations

Upper Klamath/Trinity River Chinook ESU: NMFS received the petition in 2017 and announced a 90-day finding in 2018. NMFS continues to evaluate this petition and consult with the Karuk Tribe about incorporating traditional ecological knowledge in the status review.

Petition to list and designate critical habitat for OC/SONCC Chinook ESUs: In 2021, NMFS found that a previous petition to list new spring-run ESUs was not warranted. That petition had requested we identify and list new spring-run ESUs. In August 2022, NMFS received a petition to list the Oregon Coast and the Southern Oregon/Northern California Chinook ESUs. The 90-day finding issued in January 2023 for the most recent petition concluded that the petitioners met the standard for further review to determine if these ESUs warrant listing given new information. The Northwest Fishery Science Center (NWFSC) has put together a team to conduct the status reviews. We expect to make a 12-month determination next fall but a delay in the determination could occur.

Petition to list Olympic Peninsula steelhead Distinct Population Segment (DPS): In August 2022, NMFS received a petition to list the DPS. The 90-day finding issued in February 2023 concluded that the petitioners met the standard for further review to determine if the DPS warrants listing given new information. The NWFSC has put together a team to conduct the status reviews. We expect to make a 12-month determination next fall but a delay in the determination could occur.