Tribal 4(d) Rule

Evaluation and Recommended Determination

TRMP Title:	Tribal Resource Management Plan: Trinity River SONCC Coho Salmon
Tribal Plan submitted by:	Hoopa Valley Tribe
ESU/DPS Affected:	Southern Oregon / Northern California Coast (SONCC) Coho Salmon (*Oncorhynchus kisutch*)
NMFS Tracking #:	WCRO-2020-03718
Date:	May 31, 2022

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1. INTRODUCTION

1.1 Background on the Tribal 4(d) Rule

NOAA's National Marine Fisheries Service (NMFS) is the lead agency responsible for administering the Endangered Species Act (ESA) as it relates to salmon and steelhead. Actions that may affect listed species are reviewed by NMFS under Section 7, Section 10, or Section 4(d) of the ESA. These sections limit the application of take prohibitions described in Section 9, if certain criteria are met. NMFS issued a final rule pursuant to ESA Section 4(d) (4(d) Rule), adopting regulations necessary and advisable to conserve threatened species (50 CFR 223.203). Similarly, NMFS issued a final rule for Tribal Plans known as the Tribal 4(d) Rule (50 CFR 223.204), which harmonizes statutory conservation requirements with tribal rights and the Federal trust responsibility to tribes. The 4(d) Rules apply the take prohibitions in Section 9(a)(1) of the ESA to salmon and steelhead listed as threatened, and set forth specific circumstances when the prohibitions will not apply, known as 4(d). The Tribal 4(d) Rule (50 CFR 223.204) provides that Section 9 take prohibitions would not apply to activities carried out under a Tribal Resource Management Plan (TRMP) if NMFS determines that the plan will not appreciably reduce the likelihood of survival and recovery of listed species consistent with the requirements in the Tribal 4(d) Rule.

The purpose of the Tribal 4(d) Rule is to establish a process whereby the conservation needs of listed species are met while respecting tribal rights, values, and needs and not abridging any treaties, rights, executive orders, or statutes (65 FR 42481; July 10, 2000). The rule recognizes the trust responsibilities to the tribes and reinforces the commitment to government-to-government relations expressed in, among other things, Secretarial Order 3206 (June 5, 1997). In making a determination under the Tribal 4(d) Rule, the Secretary of Commerce shall use the best available biological data (including any tribal data and analysis) to determine the impact of the activities carried out under the TRMP on the biological requirements of the species, and will assess the effect of the activities carried out under the TRMP on survival and recovery, consistent with legally enforceable tribal rights and with the Secretary's trust responsibilities to tribes.

As described in the 4(d) regulations, in considering a TRMP for determination:

- The Secretary will consult on a government-to-government basis with the Tribe and provide technical assistance, to the extent practicable, in examining impacts on listed salmonids as the Tribe develops a TRMP that meets the management responsibilities and needs of the Tribe.
- The TRMP must specify the procedures by which the Tribe will enforce its provisions.
- The Secretary shall seek comment from the public on the Secretary's pending determination whether or not implementation of a TRMP will appreciably reduce the likelihood of survival and recovery of the listed salmonids.
- The Secretary shall publish notification in the Federal Register of any determination regarding a TRMP and the basis for that determination.

As the Hoopa Valley Tribe's TRMP is a plan related to fishery harvest, we will also evaluate the TRMP with criteria used to address fishing plans under limit 4 of the 4(d) Rule (50 CFR 223.203(b)(4)). The limit 4 criteria set appropriate considerations and conditions for minimizing the impacts of a fishery on threatened or endangered salmon and steelhead. The criteria are described in Section 2 below.

1.2 HVT Consultation History

On May 18, 2021, NMFS received a TRMP (Hoopa Valley Tribe 2021) and a letter from the Hoopa Valley Tribe (HVT) requesting formal consultation on the HVT TRMP under the ESA. We reviewed the TRMP and responded with a letter on May 26, 2021 indicating that the TRMP contained sufficient information for NMFS to begin its analysis under the provisions of the Tribal 4(d) Rule.

As per the Tribal 4(d) Rule, NMFS consulted with the Tribe and its representative staff during the development of the TRMP through policy and technical communications. This communication provided an opportunity for NMFS to provide technical assistance, exchange information, discuss conservation needs of the listed species, and discuss the importance of the action in relation to legally enforceable tribal rights and Federal trust responsibilities.

NMFS published a notice (87 FR 10174; Feb 23, 2022) informing the public of the availability of the Proposed Evaluation and Pending Determination (PEPD) for public review and comment. The PEPD detailed NMFS' proposed assessment of the TRMP. The comment period was 30 days and NMFS did not receive any comments. The following sections present the final Evaluation and Recommended Determination (ERD) for the HVT TRMP, under the Tribal 4(d) Rule for salmon and steelhead.

2. TRIBAL PLAN EVALUATION

Activities described in the HVT TRMP will affect the Southern Oregon/Northern California Coast (SONCC) Coho Salmon Evolutionarily Significant Unit (ESU), which is listed as threatened under the ESA (70 FR 37160; June 28, 2005). All coho salmon present in the project area are part of the SONCC Coho Salmon ESU. No other listed species are affected by the action.

NMFS reviewed the TRMP submitted by the HVT to determine whether actions taken under the TRMP, if implemented, would appreciably reduce the likelihood of survival and recovery of the affected ESU. Though not explicitly required by the Tribal 4(d) Rule, in making its determination NMFS followed the criteria for evaluating fishery management plans under Limit 4 of the July 10, 2000, 4(d) Rule (65 FR 42422; revised and updated at 70 FR 37160; June 28, 2005). The limit 4 criteria provide a useful framework for evaluating biological consequences of the proposed TRMP. The following subsections evaluate the HVT TRMP using criteria from Limit 4 of the 4(d) Rule (50 CFR 223.203(b)(4)).

2.1 The TRMP clearly defines the scope and area of impact, and sets management objectives and performance indicators for the plan

The primary objective of the TRMP is to provide the HVT harvest opportunity for Chinook salmon, coho salmon, and steelhead in the Trinity River in a manner that does not appreciably reduce the likelihood of survival and recovery of the SONCC Coho Salmon ESU. The TRMP submitted by the HVT includes written descriptions, tables, figures, and maps that define the scope, area of impact, objectives, anticipated impacts for the actions and performance indicators of the TRMP (Hoopa Valley Tribe 2021). The geographic area of the TRMP is the section of the lower Trinity River (river mile 0.5 to 12) that lies within the boundaries of the Hoopa Valley Reservation (HVR) (Figure 1). The activities described in the TRMP include the HVT fisheries and associated research monitoring and evaluation. The HVT fisheries target Chinook salmon, coho salmon, and steelhead and include: 1) an individual Tribal Member Fishery (ITMF), which consists of gill nets and hook and line fishing and 2) a selective harvest weir, which targets hatchery origin (HOR) coho salmon with the goal of releasing natural origin (NOR) coho salmon unharmed. The TRMP includes a set of performance standards related to the primary objective, indicators that will be used to assess whether each standard is being achieved, and research monitoring and evaluation (RM&E) associated with each indicator (Table 1). Some elements of RM&E are not solely conducted or overseen by HVT but will be used to assess the performance of the TRMP.

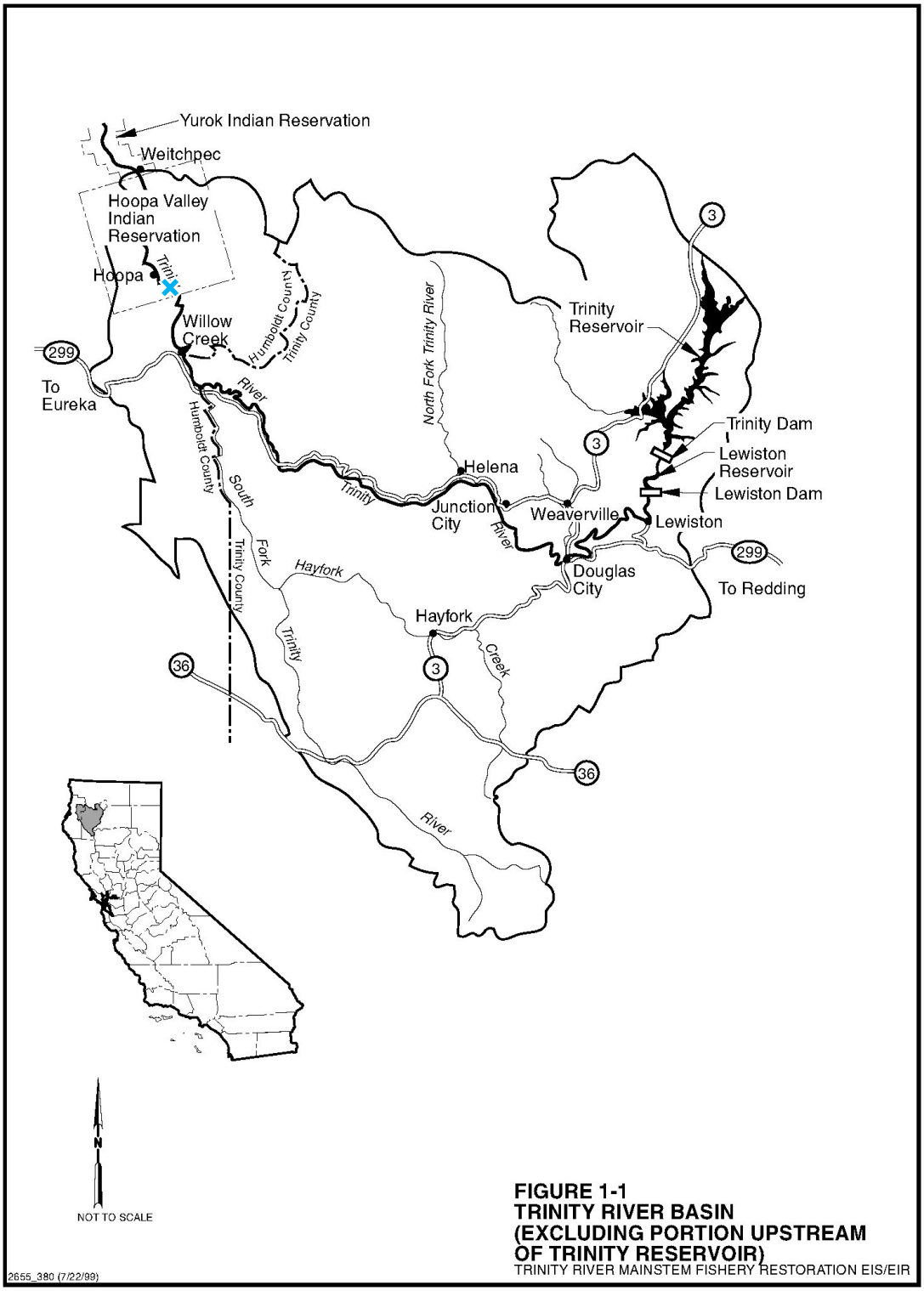

Figure 1. Map of the Trinity River basin. The HVR boundary is indicated by the dotted square. Location of the HVT resistance board weir indicated by a blue X. Map source: USFWS et al. (2000).

Table 1. Objectives, performance standards, and performance indicators from the HVT TRMP.

Objective or Performance Standard	Performance Indicators
1. Monitor and evaluate fisheries/weir and limit impacts on ESA protected coho salmon	1. Number of fish harvested and released
	2. Catch Per Unit Effort in the Individual Tribal Member Fishery (ITMF)
	3. Limits for impacts on natural origin return (NOR) coho salmon are established and maintained at weir
	4. Limits for impacts on NOR coho salmon are established and maintained for ITMF
	5. Effects of the weir on NOR coho salmon are minimized.
2. Monitor and evaluate adverse effects on NOR coho salmon	1. Estimates of injury and mortality of NOR coho salmon
	2. Changes in migration timing of coho salmon run
	3. Estimates of pre-spawn mortality for NOR coho salmon
	4. Weir is monitored and attended continuously
	5. Multiyear trends in NOR abundance
	6. Number of NOR coho salmon released
	7. Number of NOR coho salmon passing the weir
	8. Number of NOR coho salmon at Willow Creek and Junction City weirs (operated by California Department of Fish and Wildlife (CDFW))
	9. Number of NOR coho salmon on spawning grounds
	10. Number of NOR coho salmon returning to Trinity River Hatchery (TRH) (operated by CDFW)
3. Reduce escapement of hatchery coho salmon to natural spawning areas	1. Number of hatchery origin return (HOR) coho salmon passing the weir
	2. Percent hatchery origin spawners in natural production areas
	3. Harvest rate on HOR coho salmon at weir and in the ITMF
	4. Number of coho salmon taken for broodstock at TRH and offsite broodstock collection weir
4. Adhere to terms of the TRMP and provide regular reports to NMFS	1. Monitoring and evaluation framework are documented and employed
	2. HVT Fisheries are monitored and regulations enforced
	3. Progress (in-season) reporting
	4. Third party concerns are communicated between NMFS and HVT
	5. Annual reporting
5. Provide harvest opportunities for HVT while minimizing impacts on NOR coho salmon	1. HVT is able to prosecute meaningful fisheries
	2. Fishing effort and weir operation days
	3. Production of HOR at TRH is balanced to provide for meaningful fishery and sufficient brood-stock
	4. Species diversity and abundance
	5. Ratio of bycatch to target catch
	6. Total HVT fishery impacts and exploitation rate for NOR coho salmon (expressed as fractions of Trinity River run and of SONCC ESU)

As described in the TRMP, HVT fisheries are conducted in accordance with the HVT Fishing Ordinance (Hoopa Valley Tribe 1986). The Hoopa Valley Tribal Council (HVTC) governs the conduct of the Tribe's fishery, determines annual tribal fishing regulations, enforces the fishing

ordinance, and ensures collection of harvest statistics and other fishery monitoring information through the Hoopa Valley Tribal Fisheries Department (HVTFD) (PFMC and NMFS 2020; Hoopa Valley Tribe 2021). The HVTC determines the level of fishing opportunity that will be provided to tribal members (based on preseason estimates of Chinook salmon abundance) and implements and regulates the fisheries.

2.1.1 The TRMP defines populations within affected listed ESUs, taking into account unique biological and life history traits, and incorporate the concepts of ‘‘viable’’ and ‘‘critical’’ salmonid population thresholds

The TRMP describes the individual populations of SONCC coho salmon that will be affected by the fisheries described in the TRMP. The HVT fisheries will affect three population units in the Interior-Trinity Diversity Stratum of this ESU. The affected populations are Upper Trinity, Lower Trinity, and South Fork Trinity River populations as described by Williams et al. (2008). Here we use term Trinity Stratum when referring to all three populations as an aggregate.

The TRMP incorporates the concepts of “viable salmonid populations” (VSP) (McElhany et al. 2000) and considers several attributes in the review of the status of SONCC coho salmon. The VSP concepts of abundance, productivity, spatial structure, and diversity are used to assess species viability and define “viable” and “critical” population thresholds for the affected populations of SONCC coho salmon. The TRMP considers spatial and temporal distribution and the genetic and phenotypic diversity of SONCC coho salmon by managing harvest based on NOR coho salmon and distributing the effects of the fisheries across the entire coho salmon return.

The TRMP incorporates information from the NMFS viability assessments, completed 5-year status reviews, and the 2014 recovery plan for SONCC coho salmon (Williams et al. 2008; NMFS 2014b; 2016; Williams et al. 2016). These NMFS documents identify the biological recovery objectives and designated populations that are most important for recovery of SONCC coho salmon. The biological recovery criteria identified for SONCC coho salmon populations are spawner abundance and density (abundance), population growth rate (productivity), juvenile distribution (spatial structure), and percent hatchery origin spawners/life history diversity (diversity) (Table 2).

As described in the recovery plan, populations of SONCC coho salmon have been designated as core, non-core, and dependent based on their role in rebuilding the ESU (Figure 2) (NMFS 2014b). Core populations will play a major role in recovering the ESU and must be at low risk of extinction to achieve recovery. Other populations will contribute to maintaining and increasing connectivity and diversity. Non-Core 1 must be at moderate risk of extinction to achieve recovery. Non-Core 2 populations and dependent populations have no target extinction risk.

In populations with extremely low numbers of spawning adults, depensatory effects can occur. Depensation effects are problems with successful reproduction (e.g., spawners being too scarce to find one another) that can affect demographic and genetic risks. A population below the depensation threshold is at high risk of extinction. The number of spawners needed to avoid

depensatory effects is referred to as the high risk or depensation threshold. To meet biological recovery criteria, a minimum number of spawners are needed to fully seed the freshwater habitat (NMFS 2014b), this is referred to as the low risk spawner threshold. The spawner thresholds for the Trinity River populations are considered in the management strategies described in the TRMP (Table 4). The extinction risk of an ESU depends upon the risks of its constituent populations and viability criteria used to assess extinction risk. Current extinction risks range from moderate to high among the three Trinity River populations (Upper Trinity River, Lower Trinity River, South Fork Trinity River) affected by the activities described in the TRMP (Table 3).

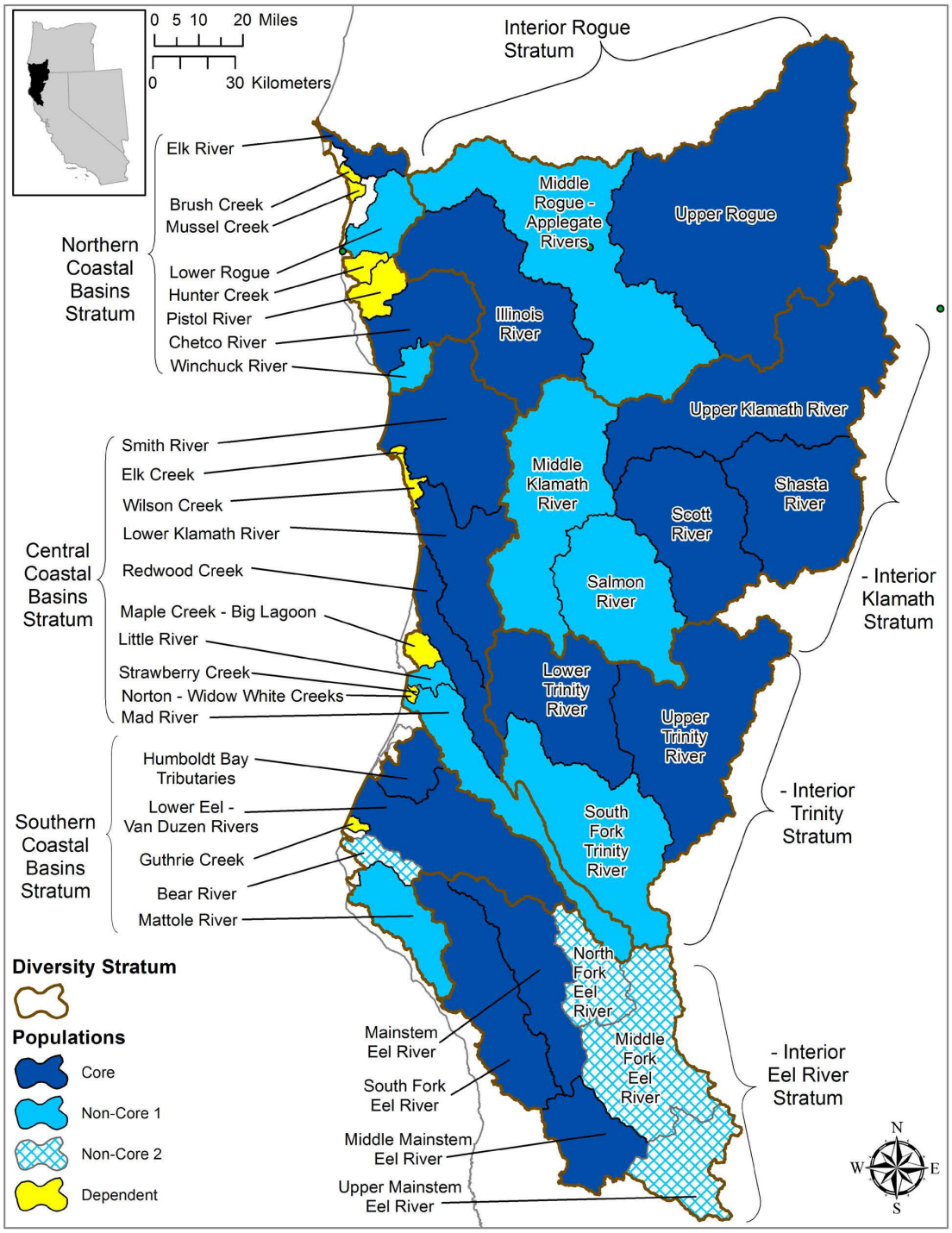

Figure 2. Map of the populations in the SONCC coho salmon ESU and the role of each population in recovery (NMFS 2014b).

Table 2. Demographic recovery criteria for SONCC coho salmon populations (NMFS 2014b).

VSP Parameter	Population Role	Biological Recovery Objective	Biological Recovery Criteria
Abundance	Core	Achieve a low risk of extinction	The geometric mean of wild (NOR) adults over 12-years meets or exceeds the "low risk threshold" of spawners for each core population
	Non-Core	Achieve a moderate or low risk of extinction	The annual number of wild adults is greater than or equal to four spawners per IP-km for each non-core population
Productivity	Core and Non-Core	Population growth rate is not negative	Slope of regression of the geometric mean of wild adults over the time series ≥ zero
Spatial Structure	Core and Non-Core	Ensure populations are widely distributed	Annual within-population juvenile distribution ≥ 80% of habitat
	Non-Core and Dependent	Achieve inter- and intra-stratum connectivity	≥ 80% of accessible habitat is occupied in years following spawning of cohorts that experienced high marine survival
Diversity	Core and Non-Core	Achieve low or moderate hatchery impacts on wild fish	Proportion of hatchery-origin adults (pHOS)
	Core and Non-Core	Achieve life-history diversity	Variation is present in migration timing, age structure, size, and behavior. The variation in these parameters is retained.

Table 3. Population designations and extinction risk for Trinity River populations of the SONCC Coho Salmon ESU (NMFS 2014b).

Population Unit	Population Type	Population Role	Extinction Risk	Extinction Risk Criteria Used
Lower Trinity River	Potentially independent	Core	High	Spawner Density
Upper Trinity River	Functionally independent	Core	Moderate	Spawner Density
South Fork Trinity River	Functionally independent	Non-Core	High	Spawner Density

Table 4. Spawner thresholds for Trinity River populations of the SONCC Coho Salmon ESU (NMFS 2014b).

Population	Low-risk Threshold	High- risk Depensation Threshold
Lower Trinity River	3,600	112
South Fork Trinity River	970	242
Upper Trinity River	5,800	365

2.1.2 The TRMP sets escapement objectives or maximum exploitation rates for each management unit or population based on its status, and assures that those rates or objectives are not exceeded.

The HVT TRMP describes and quantifies the capture of NOR coho salmon in the ITMF and weir fishery. For evaluating the fisheries described in the TRMP, we consider the harvest rates (HRs)

described in the TRMP as an adequate indicator of exploitation. The activities conducted pursuant to the HVT TRMP will limit the exploitation of NOR SONCC coho salmon by ensuring that the Tribe's fisheries do not exceed a three-year average HR of 5.45 percent.

As described in the TRMP, the effects on NOR SONCC coho salmon are different in the ITMF and the weir because captured NOR coho salmon are retained in the ITMF and they are released in the weir fishery. When fish are released, a small proportion will eventually die because of the effects of being captured and handled. This level of mortality can be estimated by using a proportional rate (percent of fish released) of incidental mortality due to capture and handling.

The TRMP provides a common metric, HR, to represent the mortality of NOR coho salmon from: 1) capture and retention in the ITMF and 2) capture and release in the weir fishery. This common metric allows the total fishery related mortality to be accounted for.

HVT ITMF

The number of NOR coho salmon retained in the ITMF is converted to an HR where:

$$ITMF\ HR = \frac{\text{(NOR coho salmon retained)}}{\text{(NOR coho salmon abundance)}}$$

Where:

$$\text{NOR coho salmon abundance} = \text{NOR coho salmon returning to the Trinity River mouth}$$

ITMF HR for NOR coho salmon during 2001-2019 are provided in the TRMP. Descriptive statistics for the ITMF HR are as follows:

HR range: 0% to 8.0 percent

HR average: 3.0 percent

Average of three highest HRs: 7.0 percent

Maximum three-year rolling average HR: 5.0 percent

The ITMF HR on NOR coho salmon is expected to be similar to the historical harvest with any consecutive three-year rolling average not exceeding 5.0 percent.

HVT Weir

The mortalities of NOR coho salmon resulting from the weir fishery is represented as an HR where:

$$Weir\ HR = \frac{\text{(NOR coho salmon released)} \times \text{(Incidental mortality rate)}}{\text{NOR coho salmon abundance}}$$

Where:

$$Incidental\ mortality\ rate = 3\ percent$$

The incidental mortality rate for the weir is based on studies of similar weir operations and NMFS reviews (NMFS 2011; 2014a; 2017a; 2017b). Weir HRs for NOR coho salmon are provided in the TRMP. During 2016-2019, the HR averaged 0.45 percent. The weir HR on NOR coho salmon is expected to be similar to this recent average with a consecutive three-year rolling average not exceeding 0.45 percent. Combined, the ITMF and weir fisheries are expected to align with the historical averages. Thus, the activities described in the TRMP would result in a HR not to exceed a three-year rolling average of 5.45 percent.

Table 5. Historical and expected harvest rates for the HVT fisheries on NOR coho salmon.

Fishery	Gear	Mark Selective	Historical Harvest Rate		Maximum Three-Year Rolling Average Expected
			Range	Average	
Individual Tribal Member Fishery (ITMF)	Gillnets Hook and line	No	0 to 8.0%	3.0%	5.0%
Selective Harvest Weir	Floating resistance board weir	Yes	0 to 1.1%	0.45%	0.45%

2.1.3 The TRMP displays a biologically based rationale demonstrating that the harvest management strategy will not appreciably reduce the likelihood of survival and recovery of the ESU in the wild, over the entire period of time the proposed harvest management strategy affects the population, including effects reasonably certain to occur after the proposed actions cease.

The harvest management framework described in the TRMP is based on annual HRs for NOR coho salmon in the HVT fisheries. The HRs would be calculated post-season using the estimated abundance of the Trinity Stratum coho salmon. The fisheries will be distributed across the entire period of migration for coho salmon which we expect to result in an equivalent HR across the individual populations comprising the Trinity Stratum. The fisheries will be managed according to the HRs in Table 5 and will occur in a manner similar to recent history. In the ITMF, impacts to NOR coho salmon are expected to align with historical HRs. However, the TRMP proposes that the ITMF would adhere to a three-year rolling average not to exceed a 5.0 percent HR on NOR coho salmon. The weir fishery is expected to result in impacts similar to the harvest impacts that occurred in recent history and would not exceed a three-year rolling average HR of 0.45 percent on NOR SONCC coho salmon. The limits are based on the abundance of NOR coho salmon, which will serve to protect the NOR component of the ESU while allowing for harvest of the HOR component. The TRMP commits the HVT to manage the fisheries conservatively in order to keep the HRs under the established limits. The establishment of this HR limit ensures that the risk to SONCC coho salmon will not increase. We believe these limits are sufficient to not appreciably reduce the likelihood of survival and recovery of SONCC coho salmon.

In addition to limiting the exploitation of NOR coho salmon, the TRMP seeks to reduce the stress from, and the threat of, HOR coho salmon on NOR coho salmon by operating a selective harvest weir. Operation of the weir is intended to remove HOR coho salmon and reduce the potential adverse biological effect of hatchery fish interacting with NOR coho salmon in the

basin. Hatchery fish pose a risk to the diversity of coho salmon in the Trinity River. Therefore, selective harvest of HOR fish has been identified as an action likely to benefit NOR SONCC coho salmon in the Trinity River (NMFS 2014b; CDFG 2017; NMFS 2020). NMFS (2014b) identified key limiting stresses and threats for SONCC coho salmon. Stresses are the physical, biological, or chemical conditions and associated ecological processes that that may impede SONCC coho salmon recovery. Threats are those activities or impacts that cause or contribute to stresses. Hatchery fish are a key stress/threat (Table 6) for the Trinity River while the stress/threat associated with harvest is low for each of the Trinity River populations (Table 7).

Table 6. Key limiting stresses and threats for Trinity River populations of the SONCC Coho Salmon ESU (NMFS 2014b).

Population	**Key Limiting Stresses**		**Key Limiting Threats**	
Lower Trinity River	Lack of floodplain and channel structure	Altered hydrologic function	Channelization & Diking	Hatcheries
South Fork Trinity River	Altered hydrologic function	Impaired water quality	Dams & Diversions	Roads
Upper Trinity River	Altered hydrologic function	Adverse hatchery related effects	Dams & Diversions	Hatcheries

Table 7. Severity ranking for stress and threat from fisheries and scientific collecting for Trinity River populations of the SONCC Coho Salmon ESU (NMFS 2014b).

Population	**Stress from Adverse Fishery- and Collection-Related Effects**	**Threat from Fishing and Collecting**
South Fork Trinity River	Low	Low
Lower Trinity River	Low	Low
Upper Trinity River	Low	Low

The TRMP references the SONCC Harvest Control Rule Risk Assessment (RA) that was recently completed by the Pacific Fishery Management Council (PFMC 2021). The RA evaluates the risk to the SONCC Coho Salmon ESU from harvest in marine and freshwater environments and specifically modeled the effects of fixed exploitation rates (ERs) on the short-term (20-year) and long-term (100-year) extinction risk for individual and aggregate population groups (Figure 3). This information, which is the best scientific information available, allows us to assess the relative risk to Trinity Stratum coho salmon from the fisheries described in the TRMP. To estimate the relative risk from the HVT fisheries, we compare the risk of the ER equivalent of the fisheries described in the TRMP to the risk in the absence of fishing. Using the historical ERs from the RA, the equivalent of the HVT fisheries is an ER of 2.8 percent. Using the modeled risk of extinction for the Trinity Stratum coho salmon from the RA (Figure 3), the increase in risk (short-term) from the this ER is less than five percent when compared to a zero-fishing scenario (64 percent; Figure 3). As described in the RA, the risk to Trinity Stratum coho salmon is high regardless of the intensity of fishing because of low abundance and/or productivity. Whether or not Trinity Stratum coho salmon can persist over the long term is largely dependent on factors other than fishing (PFMC 2021; NMFS 2022). NMFS (2022)

considered the combined effect of ocean and freshwater fisheries on the SONCC Coho Salmon ESU and found that a total ER of 16% on Trinity Stratum coho salmon was not likely to jeopardize the ESU or adversely modify critical habitat.

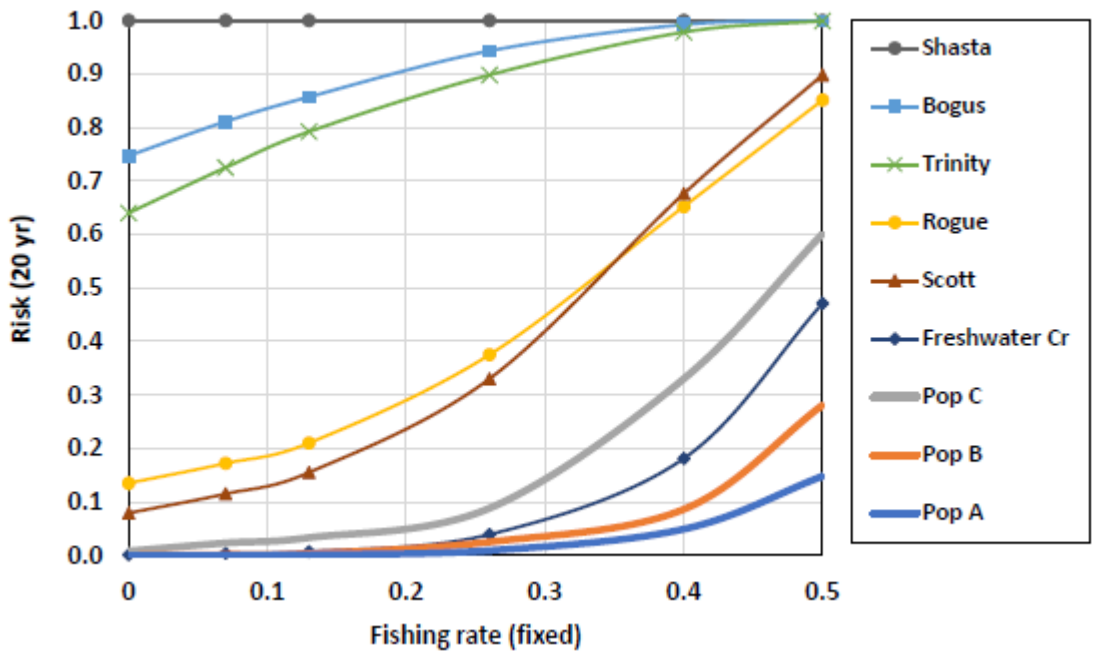

Figure 3. Modeled effects of fixed ERs on the risk of falling below critical wild population abundance thresholds (PFMC 2021).

Additionally, the TRMP proposes a comprehensive re-evaluation of the TRMP after three years to determine if it is meeting the objectives and performance standards. Several triggers are also identified that would prompt a re-evaluation during the first three years of TRMP implementation. Triggers identified in the TRMP are: (1) the proposed harvest rates are exceeded (2) the actions described by the TRMP are implemented in such a manner that causes an effect upon ESA protected species that was not previously considered in NMFS' evaluation; (3) new information or monitoring reveals effects that may affect listed species in a way not previously considered; or (4) a new species is listed or critical habitat is designated that may affect NMFS' evaluation of the TRMP. The HVT will conduct monitoring of the ITMF and weir fisheries, harvest will be managed to the prescribed limits, and in-season and post-season reports will be provided to NMFS annually. Implementation of harvest limits, annual reporting, additional monitoring of the weir, and re-evaluation triggers are activities that were developed specifically for the TRMP to reduce the risks to SONCC coho salmon. All of the above components will allow NMFS to monitor the effects on SONCC coho salmon over the course of TRMP implementation. Given established HRs that would result in low increase in risk to the ESU, the benefits of decreased hatchery fish on spawning grounds, monitoring of impacts to NOR coho salmon, the three-year re-evaluation period, and regular reporting, we believe that implementation of the TRMP will not appreciably reduce survival and recovery of SONCC coho salmon.

2.1.4 The TRMP includes effective monitoring and evaluation programs to assess compliance, effectiveness, and parameter validation and provides for evaluating monitoring data and making any revisions of assumptions, management strategies, or objectives that are needed.

The TRMP includes effective monitoring and evaluation programs to assess compliance, effectiveness, and parameter validation and provides for evaluating monitoring data and making any revisions of assumptions, management strategies, or objectives that are needed. The monitoring efforts are not expected to result in effects to ESA-listed species beyond the effects included in the ITMF and weir fisheries because the monitoring efforts do not involve additional handling or activities that would result in additional encounters or behavioral changes.

To ensure compliance with ESA requirements, the Tribe will conduct monitoring of HVT fisheries within the HVT reservation each year as described in the HVT TRMP. To summarize the TRMP, monitoring includes a roving sampling program that will randomly survey the ITMF fisheries, a complete survey of all ITMF effort below the harvest weir, constant (24 hours/day) surveillance of the weir, and sampling of all fish handled at the weir. The monitoring program will collect and compile information on catch, effort, escapement, and biological characteristics (e.g., age, size, hatchery marks) of coho salmon handled in the fisheries and returning to the Trinity River. HVT will notify NMFS before installation and removal of the weir and will provide an in-season (mid-October) report of SONCC coho salmon encountered.

The TRMP considers ancillary effects of the weir on fish migration, includes plans for monitoring these effects, and contingencies intended to mitigate for these effects. The physical presence of a weir or trap can affect salmonid behavior by delaying upstream migration (delay) or by causing them to avoid the weir structure (rejection). To monitor for delay and rejection, daily monitoring of the ITMF directly below the weir will be conducted. Increases in catch rates in the ITMF may be indicative of increased concentration of fish below the weir. If increased concentrations are suspected, a diver survey will be employed to observe fish densities below the weir. When the weir is closed (i.e., fishing), capture of fish in the weir traps will confirm that fish are successfully passing the weir. The traps will be emptied every day when the weir is closed to minimize any delays to coho salmon migration from being held in the traps. In the case that delay or rejection of NOR coho salmon is observed, mitigation efforts include removal of weir panels to increase potential navigation pathways through the weir structure.

A post-season report will be provided to NMFS annually and will describe all impacts on NOR coho salmon and identify potential modifications to improve fisheries planning and fisheries implementation. The post-season report will also evaluate the performance of the TRMP against the performance indicators. As described in the TRMP, if performance standards are not fully met, HVT will work with NMFS to discuss amendments to the TRMP. The TRMP will be evaluated regularly including when new information becomes available. Finally, the TRMP includes a schedule and triggers for re-evaluation between the HVT and NMFS.

2.1.5 The TRMP provides for effective enforcement, education, and coordination among involved jurisdictions.

The HVT provides for effective enforcement of the fisheries described in the TRMP by monitoring and enforcing harvest regulations on the HVT reservation. Activities associated with the TRMP are implemented under the direction and authority of the HVTC. The HVTC works with the HVTFD to set annual management and conservation objectives and inter-tribal harvest guidelines. Regulations and restrictions are established in the Hoopa Tribal Fishing Ordinance (Hoopa Valley Tribe 1986). The Hoopa Tribal Fishing Ordinance and regulations are enforced by Tribal Enforcement Officers.

The HVTC conducts public outreach, holds public hearings, and solicits public input regarding the Fishery under the HVT Legislative Procedures Act (LPA, Tribal Ordinance 4-89). As described in the TRMP, the HVTFD will develop an informational paper and list of frequently asked questions in relation to traditional fish weir projects. In addition, HVT and NMFS will coordinate on any potential concerns raised by the public and will determine an appropriate response.

2.1.6 The TRMP includes restrictions on fisheries that minimize any take of listed species, including time, size, gear, and area restrictions.

The TRMP describes several measures that are intended to reduce potential impacts to NOR SONCC coho salmon. These measures include a mark selective fishery and regular weir openings allowing for uninhibited fish passage. During operation of the weir, mark selective regulations (i.e., retention of hatchery marked coho salmon and release of unmarked coho salmon) will be employed. The weir operation plan prescribes a schedule that includes routine periods of uninhibited passage to allow fish to migrate past the weir without being trapped.

2.1.7 The TRMP is consistent with plans and conditions established within any Federal court proceeding with continuing jurisdiction over tribal harvest allocations.

The TRMP describes the federally reserved fishing rights of the HVT to harvest anadromous fish in the Trinity River Basin. In order to meet Federal trust responsibilities to protect the fishery resources of the HVT, the objectives of the TRMP are to facilitate meaningful opportunities for the HVT to access fish populations of the Trinity River Basin.

2.1.8 The amount of take is monitored and provided to NMFS on a regular basis

The TRMP describes a system of monitoring and evaluation that will be used to track the take resulting from the HVT fisheries. As described in the TRMP, the HVT will provide in-season and postseason reports to NMFS on an annual basis.

3. PUBLIC REVIEW AND COMMENTS

As required by the Tribal 4(d) Rule (50 CFR 223.204 (b)(4)), NMFS published notice of the pending determination and sought comment from the public as to whether the TRMP evaluated

in the PEPD would appreciably reduce the likelihood of survival and recovery of ESA-listed salmon and steelhead. The public comment period was 30 days. No comments were received.

4. RECOMMENDED DETERMINATION

NMFS has evaluated the TRMP submitted by the HVT under the Tribal 4(d) Rule. Based on this evaluation, our determination is that the TRMP adequately addresses the requirements of the ESA Tribal 4(d) Rule and would not appreciably reduce the likelihood of survival and recovery of the SONCC Coho Salmon ESU. If the NMFS WCR Regional Administrator concurs with this determination, ESA take prohibitions would not apply to fisheries implemented in accordance with the approved TRMP.

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