State of Washington
DEPARTMENT OF FISH AND WILDLIFE
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Main Office Location: Natural Resources Building, 1111 Washington Street SE, Olympia, WA

April 21, 2021

Ms. Lynne Barre
National Oceanic and Atmospheric Administration
National Marine Fisheries Service
7600 Sandpoint Way
Seattle, WA 98104

RE: **Actions taken in development of WDFW managed fishery season for 2021-2022 beneficial for Southern Resident killer whales.**

Dear Ms. Barre:

Puget Sound treaty Indian tribes and the Washington Department of Fish and Wildlife (WDFW) have completed their salmon season setting process associated with the Pacific Fishery Management Council's development of ocean fisheries for the 2021-2022 salmon fishing season. The information presented below describes actions taken in developing the fishing package for fisheries managed by the WDFW determined to be of importance to the recovery of federal and state Endangered Species Act listed Southern Resident killer whales (SRKWs). It is the belief of WDFW that actions taken in the development and subsequent implementation of the 2021-2022 fishing season for Puget Sound will result in neutral or slightly decreased risk to SRKWs across Washington waters of the Salish Sea relative to recent fishing seasons. These actions include:

- Increased abundance of prey available in forage areas typically utilized by SRKWs (though abundance increases due to fishery decreases are anticipated to be small relative to the total Chinook population; see subsequent sections);
- Reduced vessel noise and emission of sound frequencies in the audible range of SRKWs, principally sonar, loud vessels, etc., due to both the decreased presence of fishing vessels in certain times and areas, and planned outreach and education efforts;
- Reduced on water presence of vessels engaged in fishing.

Evidence for a neutral impact or potential benefit of these actions are demonstrated by:

Expectation for an overall average year for salmonid prey availability

- Using methodology developed by the Pacific Fishery Management Council SRKW ad hoc workgroup, the estimated starting abundance (prior to natural or fishing mortality) of Chinook in the SALISH region (aggregated Puget Sound, San Juan Islands, Juan de Fuca, and Georgia Strait) in October is approximately 605,100 Chinook (Table 1; STT supplemental report 1). This is similar to the recent 10-year post-season average of approximately 612,000 (2007 through 2016; Table 1).

- The 2021 forecast return of adult Puget Sound Chinook that will escape pre-terminal fisheries is approximately 207,000. This is similar to average Chinook abundance returning to Puget Sound back to 1975 (-2%; Table 2) but a small decrease from the recent 10-year average (-11%; Table 2).

- Annual Puget Sound pre-terminal fisheries are estimated to reduce the overall abundance of Chinook in the Salish Sea by an average of 3% relative to the starting abundance (Table 3). Reductions to Salish Sea Chinook abundances caused by pre-terminal fisheries have decreased substantially over time (Figure 1). Given the current magnitude of pre-terminal fishing in Puget Sound, fisheries management actions can not appreciably increase overall Chinook abundance to a level that quantifiably improves SRKW demographic rates. Recognizing this, SRKW populations have declined in recent years and actions described in this document may have some small and unquantifiable benefit to SRKW, by reducing vessel traffic and slightly increasing Chinook abundance. Recreational salmon fisheries in Puget Sound (recreational salmon catch reporting areas are shown in appendix A) which directly overlap in time and space with SRKW foraging activity have been curtailed for 2021-22 relative to recent years to address conservation needs for various stocks of ESA-listed Puget Sound Chinook.

- Evidence suggests that the winter can be a particularly biologically taxing period for SRKW. In addition to Chinook biology, which suggests fish are more concentrated in the summer than the winter, and SRKW dietary studies, which suggest greater diet diversification during the winter, recent J-Pod photogrammetry data has recorded J-Pod body condition declining over the winter period. J-Pod is of particular concern, as this pod has seen recent annual overall body condition declining and has driven recent overall SRKW population declines (Figure 2). Unlike K and L-Pod, which typically distribute along the West Coast in the Winter, J-Pod primarily remains in the Salish sea during the winter. Puget Sound fishery closures this year focused on the winter time period (Oct.-Apr.) and include the complete winter closure to Chinook fishing in Marine Areas 6, 7, 8, 9, and 12. These closures are comparable to last year and represent substantial fishery decreases compared to recent fishing seasons (Appendix C) and, recognizing that Winter fisheries in Puget Sound are typically of a low magnitude (both effort and catch) relative to other Chinook-directed fisheries along the West Coast, may provide some small benefit to J-Pod.

- Summer Puget Sound Chinook fisheries are similar to recent years, with the exception of Marine Area 7 (San Juan Area). The Marine Area 7 Chinook season is reduced by 1.5 months relative to recent years (Appendix C). Historically, SRKW are most concentrated in Marine Area 7 during the summer, so fishery reductions to this area may provide some benefit to SRKW.

- Past and recent publications have suggested a particular importance of the Fraser Chinook stock to the nutritional health of J-Pod. The vast majority of the Fraser Chinook are unmarked (2021 forecast of 98% for Earlies; 96% for Lates) and all marine area recreational fisheries are mark-selective for Chinook. Mortalities on the Fraser stock are projected to be low in the 2021 Chinook pre-season model run (2,728; age 3-5) relative to the total Fraser starting cohort (742,125; age 3-5; October) in non-treaty Puget Sound fisheries (includes both recreational and commercial mortalities).

- Total abundance of Puget Sound chum for 2021 is forecasted to be 525,604; this is the lowest projected return in over two decades. It is worth noting that co-managers across Puget Sound have agreed to manage towards conservative fishing targets to meet escapement goals for returning wild chum. Until in-season updates to run sizes are available, these changes will reduce potential harvest in WDFW managed commercial fisheries in marine areas 10, 11, and 12/12B, compared with 2019 and 2020.

- The Fraser River sockeye return for 2021 is another sub-dominant sockeye year and may be further constrained due to a landslide at Big Bar north of Lillooet, British Columbia, that is still partially altering natural fish passage despite an extensive restoration effort. The forecast for the 2021 return year of Fraser sockeye is 1.33M; for comparison the 2020 estimated return was 292K, the lowest run size on record. At this forecast there is no harvestable surplus available for harvest in United States commercial fisheries managed by the Fraser River Panel. Unpublished data from NOAA researchers indicate that sockeye are present in the diet of SRKWs; although in sub-dominant years the prevalence is low.

Table 1. Estimated starting abundance (October) of age 3-5 Chinook in the SALISH Shelton region. 2007-2016 represent estimates from post-season FRAM runs (validation round 6.2) and 2021 represents the final pre-season FRAM run estimate. Estimates are rounded to the nearest 100.

Year	Region	Oct. Abundance
2007	SALISH	546,300
2008	SALISH	599,600
2009	SALISH	441,100
2010	SALISH	823,700
2011	SALISH	607,600
2012	SALISH	521,900
2013	SALISH	740,800
2014	SALISH	634,700
2015	SALISH	639,600
2016	SALISH	568,800
2021	SALISH	605,100
07-16 Avg		612,400

Table 2. Forecasted return of Puget Sound adult (age 3-5) Chinook escaping pre-terminal fisheries. Historic data (1975-2019) comes from the Puget Sound Chinook Run Reconstruction.

Year	Source	Total TRS
1975	PS RR	174606
1976	PS RR	178760
1977	PS RR	174026
1978	PS RR	183278
1979	PS RR	181060
1980	PS RR	236410
1981	PS RR	190974
1982	PS RR	192185
1983	PS RR	183776
1984	PS RR	245838
1985	PS RR	254148
1986	PS RR	232091
1987	PS RR	208024
1988	PS RR	211829
1989	PS RR	269405
1990	PS RR	296085
1991	PS RR	165172

1992	PS RR	117401
1993	PS RR	130908
1994	PS RR	139173
1995	PS RR	179704
1996	PS RR	173575
1997	PS RR	161192
1998	PS RR	181333
1999	PS RR	228348
2000	PS RR	179575
2001	PS RR	266743
2002	PS RR	267326
2003	PS RR	209458
2004	PS RR	218438
2005	PS RR	220530
2006	PS RR	276268
2007	PS RR	284358
2008	PS RR	238054
2009	PS RR	186197
2010	PS RR	210117
2011	PS RR	227624
2012	PS RR	265670
2013	PS RR	246538
2014	PS RR	142589
2015	PS RR	155383
2016	PS RR	234404
2017	PS RR	348280
2018	PS RR	265622
2019	PS RR	229627
2021	Forecast	207457
	10-yr avg	232585
	Series Avg	212491

Table 3. Analysis of difference in post-fishing September Chinook abundance using Chinook FRAM validation runs (v6.2) and Chinook FRAM validation runs with no Puget Sound fishing. Abundances represent starting SALISH abundance in October and the effects of Puget Sound fisheries throughout the entire management year (Timestep 1-3; expressed as annual abundance reduction). This analysis used the PFMC SRKW ad hoc workgroup framework and was conducted jointly by WDFW and NWIFC. However, it should be noted that NOAA, NWIFC, and WDFW are exploring potential improvements to this framework and its specific application to Puget Sound.

Year	Oct-Apr Abundance	Annual Abundance Reduction	% Reduction of Total
2007	546292	25696	4.7%
2008	599589	21566	3.6%
2009	441117	16476	3.7%
2010	823667	19880	2.4%
2011	607614	22089	3.6%
2012	521929	21077	4.0%
2013	740847	25240	3.4%
2014	634667	16798	2.6%
2015	639575	16558	2.6%
2016	568810	15601	2.7%

Figure 1: Reduction to post-fishing September abundance caused by Puget Sound pre-terminal fisheries from 1992 to 2016. This analysis used the PFMC SRKW ad hoc workgroup framework and was conducted jointly by WDFW and NWIFC. However, it should be noted that NOAA, NWIFC, and WDFW are exploring potential improvements to this framework and its specific application to Puget Sound.

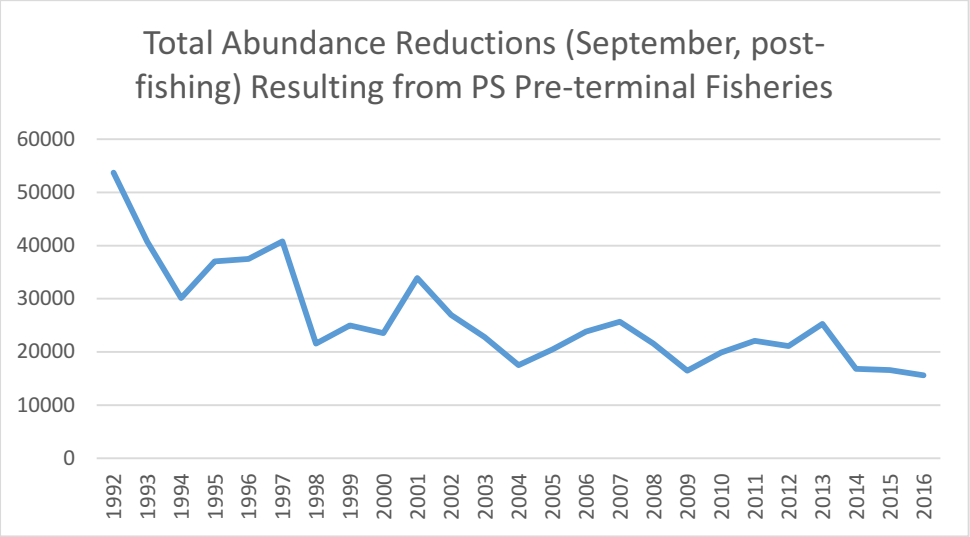
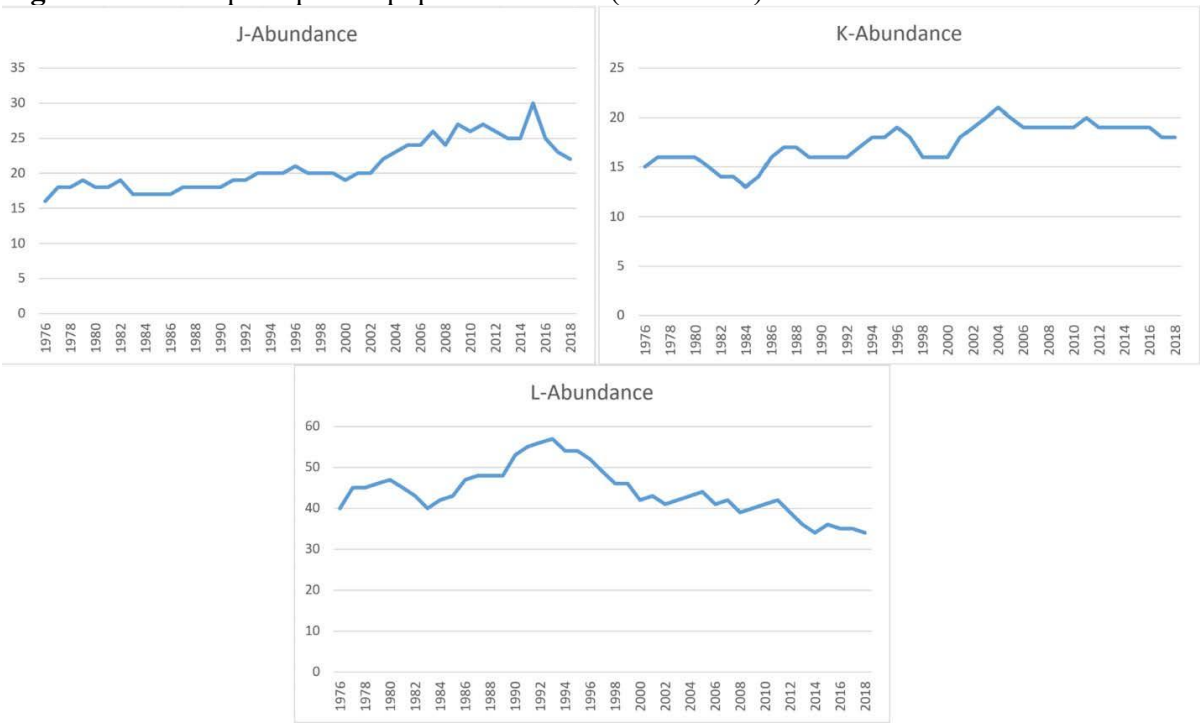


Figure 2: SRKW pod-specific population trends (1976-2018).



Reduced vessel noise and emission of sound frequencies in the audible range of SRKWs

- WDFW has implemented the commercial whale watching license program and adopted rules for commercial viewing of SRKW, as recommended by Governor Inslee's Orca Task Force. The rules adopted in December 2020 were designed to increase the number of SRKW foraging hours without commercial whale watching vessel presence. The new rules include the following reductions in vessel noise and disturbance from commercial whale watching:
    - limiting the commercial whale watching season to three months/year for viewing of SRKW at closer than one-half nautical mile, limiting commercial whale watching activity in the vicinity of SRKW to four hours per day during the specified season,
    - limiting commercial whale watching vessels to three within one-half nautical mile of SRKW, with an exclusion from approaching within one-half mile of a group containing a calf, and
    - year-round closure of the no-go zone on the west side of San Juan Island to commercial whale watching vessels save a hundred-yard corridor along the shoreline for commercial kayak tours.

- WDFW continues to promote and enforce the 2019 restrictions on speed and buffer distance around SRKW for all vessels.

- WDFW has increased outreach efforts to promote messaging about boating regulations, "Be Whale Wise" guidelines, the voluntary no-go zone, and the adjustment or silencing of sonar in the presence of SRKWs. In terms of outreach efforts, WDFW is creating video content to support Be Whale Wise messaging, expanding online and print advertising targeting recreational boaters, developing materials for pumpout and re-fueling stations along Puget Sound, and producing print materials for handout during Enforcement orca patrols. Other efforts include on-site signage at Washington State Parks and WDFW water access sites along Puget Sound, radio advertising, and targeted social media advertising. In addition, State Parks has integrated educational materials regarding whale watching regulations and guidelines in their boating safety education program. This ensures that all boaters taking the course are aware of current vessel regulations and best practices for SRKW protection. Finally, both WDFW and the "Be Whale Wise" partnership are coordinating with U.S. and Canadian governments and organizations on regulatory changes and education and outreach, ensuring transboundary benefits for SRKWs.

- WDFW has coordinated with partners to encourage the use of the Whale Report Alert System (WRAS) in Puget Sound. Developed by the Ocean Wise Research Institute, the system uses on-the-water reporting to alert large ships (ferries, barges, etc.) when whales are nearby. Reporting SRKW locations to the WRAS is a requirement for commercial whale watching license holders, and WDFW is training on-the-water staff like Enforcement personnel to contribute sightings as well.

- Commerce, Washington State Ferries, and PSP are working with the Ports, NOAA, and many others to pilot an "ECHO-like" program through your Washington Maritime Blue

alliance, currently envisioned as "Quiet Sound." Quiet Sound would have topic-area working groups to lead projects and programs on vessel operations, incentives, innovations, notification, monitoring, evaluation, and adaptive management. Funding for Quiet Sound may be secured in the 2021 state legislative session, and once the program is stood up, WDFW intends to participate in Quiet Sound and its working groups.

- WDFW will continue to promote adherence to the voluntary "No-Go" Whale Protection Zone along the southwest portion of San Juan Island in MA7 for all recreational vessels (Figure 3). The geographic extent of this area stretches from Eagle Point in the southeast to Mitchell Point in the north and extend offshore ¼ mile between these locations and ½ mile centered on Lime Kiln Lighthouse. This area is consistent with that already promoted by San Juan County, proposed by NOAA Fisheries as *Alternative 4* in the 2009 Environmental Assessment on New Regulations to Protect SRKWs from Vessel Effects in Inland Waters of Washington, and represents the area most frequently utilized for foraging and socialization in the San Juan Islands. WDFW will continue to work with San Juan County and will plan to adjust outreach on a voluntary zone to be consistent with any outcomes of current marine spatial planning processes. As mentioned, the area is now closed to commercial whale watching activities, save a hundred-yard corridor along the shoreline for commercial sea kayak tours.

  Commercial salmon fishing vessels licensed by WDFW operate in the vicinity of San Juan Island. This includes the area identified above in Figure 3 as the Voluntary "No-Go" Whale Protection Zone. These fisheries are under the regulatory control of the Pacific Salmon Commission's Fraser River Panel. For the most part, vessels operating within ¼ mile of San Juan Island utilize purse seine gear. This area is critically important to the purse seine fleet. Beyond ¼ mile of the Island there is a mix of gillnet and purse seine vessels. These vessels target sockeye and pink salmon returning to the Fraser River. More information on these fisheries is presented in the section below, which describes the "on-water presence of fishing vessels in key areas/time periods." Briefly, however, with the current forecast there is no harvestable surplus available for harvest in commercial fisheries management by WDFW.

Enforcement Emphasis

- Currently WDFW enforcement conduct coordinated patrols with the U.S. Coast Guard, NOAA Office of Law Enforcement, San Juan County Sheriff's Office, Sound Watch, and other partners year-round. These patrols include monitoring and enforcement of fisheries and the Marine Mammal Protection Act related to vessel operation in the presence of marine mammals throughout Puget Sound. Patrols in the marine areas of northern Puget Sound, particularly MA7 are specifically targeted to enforce regulations related to killer whales. These patrols will be increased in intensity at times SRKW calves are present. For comparison, in 2017, WDFW Police conducted 55 patrols; 50 federal and 5 state-funded whale patrols. In total for 2018, WDFW Police conducted 140 patrols; 50 federal and 90 state-funded patrols. For 2019, WDFW Police conducted 105 patrols specific to MA7 during the summer; (50 federal-funded and 55 state-funded patrols).

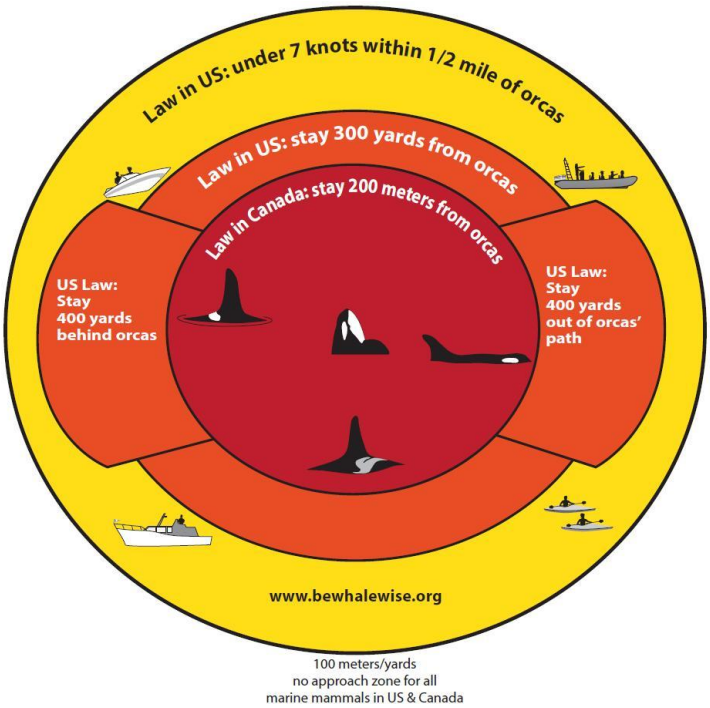


Figure 2. Mock-up of Whale Wise Guidelines promotional decal.

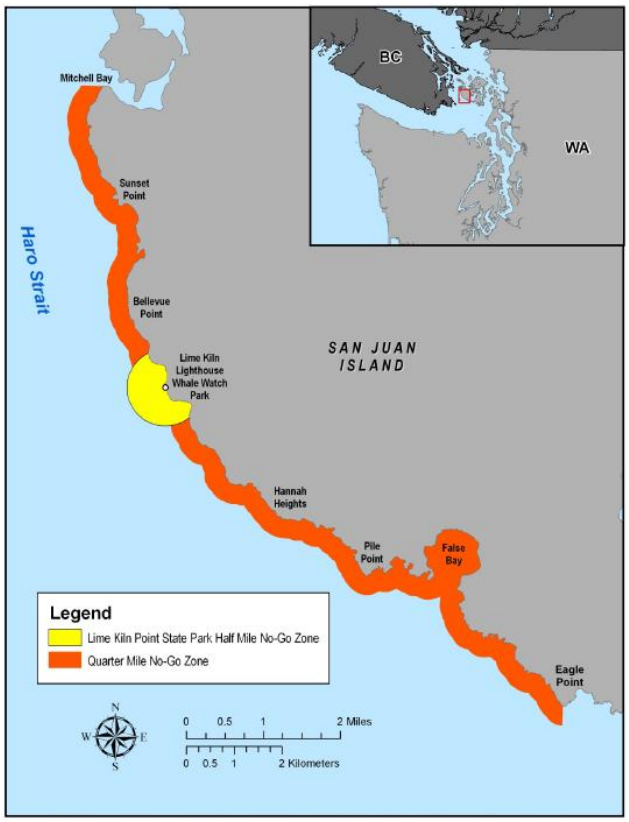


Figure 3. Recreational Vessel Voluntary "No-Go" Whale Protection Zone.

- WDFW is able to provide an increased enforcement and monitoring presence this summer through a combination of funds from the Joint Enforcement Agreement (JEA) with NOAA Fisheries as well as additional state general funds. As you know, maintaining the JEA is critical to funding enforcement efforts that align with NOAA Fisheries priorities and is one of the programs scheduled to be eliminated in the President's budget for federal FY19. Without the JEA in future years, WDFW's ability to enforce and monitor federally managed fisheries and state fisheries that interact with ESA-listed stocks as well as protected species will be significantly diminished.

Reduced on-water presence of fishing vessels in key areas/time periods

- Marine Area 7 will be closed to Chinook fishing in early August (1-15) and September. This will likely result in a reduction to the amount of vessel traffic from sport anglers in an area and time where SRKWs are frequently observed. Additionally, winter sport fisheries in 2021-2022 are closed in Marine Areas 6, 7, 8, 9, and 12 (Appendix C). Some of these also represent a potential spatio-temporal overlap with SRKW distribution (particularly with J Pod), thus, the reduction in vessel traffic here may provide a benefit.

- Appendix C (below) displays the general recreational season structure for 2021/22 season fisheries. Notably there are no Chinook directed fisheries in May-June and September-April in the Strait of Juan de Fuca (with the exception of MA 5 March and April), San Juan Island, Georgia Strait, Admiralty Inlet, and Port Susan/Port Gardner areas (MAs 6-9). Reductions in fisheries were considerable this year and greatly reduced from the average in many areas.

- The number of days fished in WDFW managed commercial purse seine and gillnet fisheries in US waters of the San Juan Island and Strait of Georgia (MAs 7 and 7A; San Juan Islands and Point Roberts areas respectively, see Appendix B) during 2009, 2013, and 2017 averaged 11 days in August and early September; with the majority of days in August. Specific to these gear types for 2021 fisheries in MAs 7 and 7A targeting Fraser River sockeye, are likely to be zero or dramatically reduced in comparison to recent years on the 2021 cycle-line (2009, 2013, and 2017). Based on the low forecast with no harvestable surplus, days open for WDFW managed purse seine and gillnet fisheries will be determined in-season by the Fraser River Panel.

- Non-target species (Chinook and coho) are required to be released by purse seines during the Fraser fishery. Generally speaking, these are small footprint fisheries targeting specific portions of commercial Marine Areas 7 and 7A (San Juan Islands to the US-Canada border).

We hope this information is helpful in understanding changes in WDFW managed fisheries for 2021/22 relative to recent year fisheries.

Sincerely,

Kelly Cunningham
Fish Program Director

cc: Teresa Mongillo, NOAA Fisheries
Susan Bishop, NOAA Fisheries
James Dixon, NOAA Fisheries
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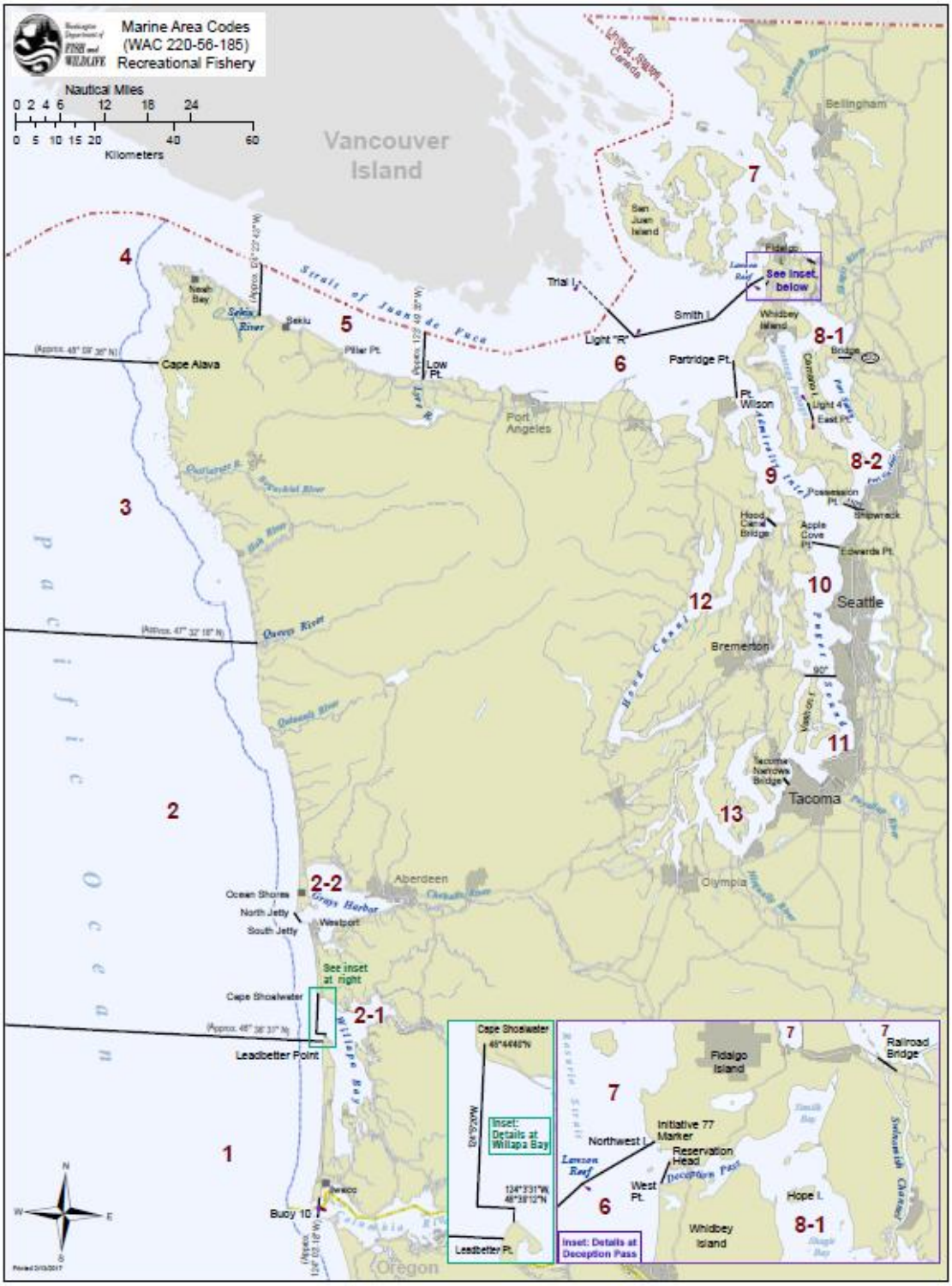
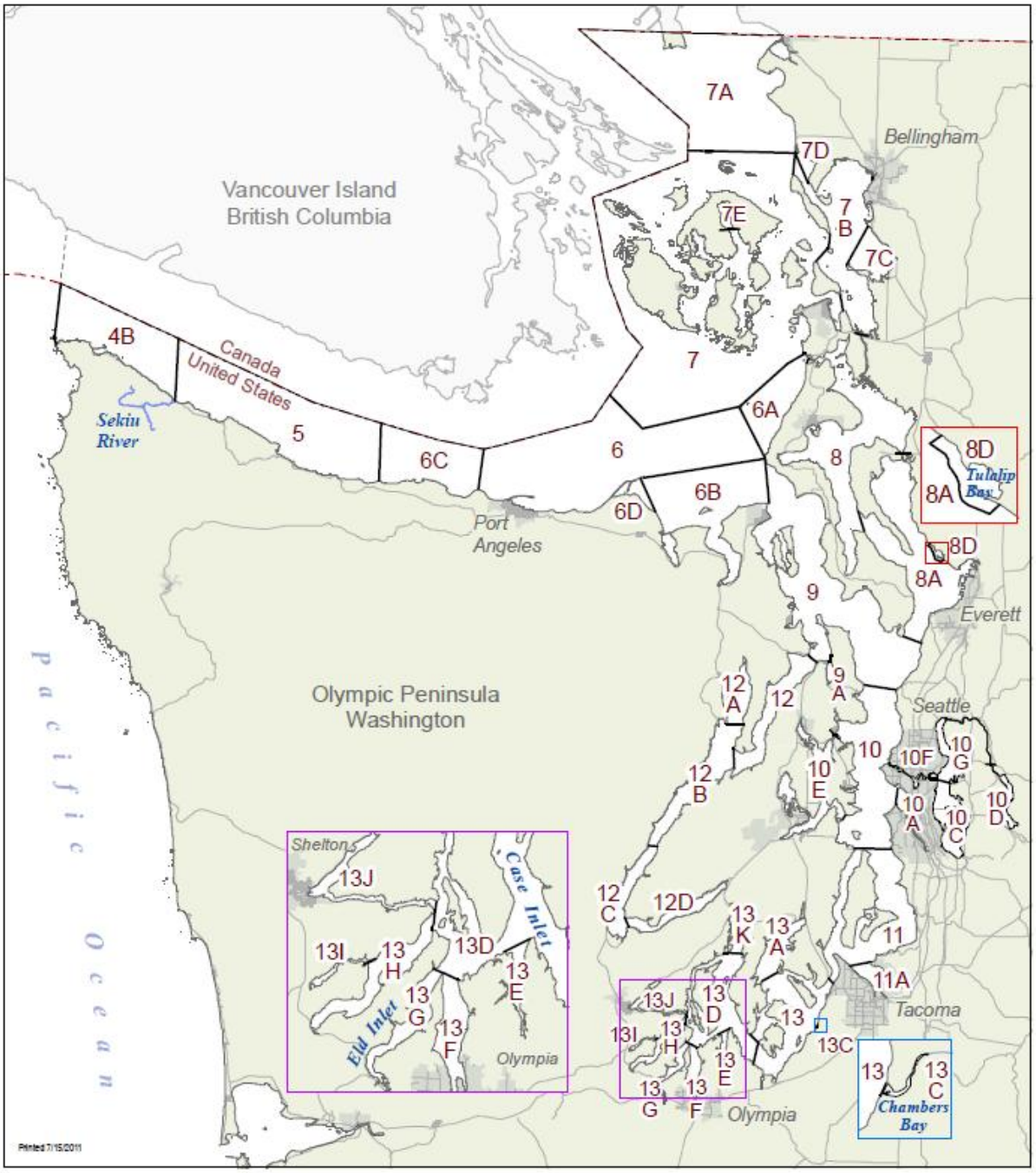
APPENDIX A: Puget Sound Recreational Salmon Management and Catch Reporting Areas.



APPENDIX B: Puget Sound Commercial Salmon Management and Catch Reporting Areas.



Appendix C: 2021-22 recreational Puget Sound Chinook salmon seasons relative to recent years. NS, MSF, and NR represent non-selective, mark-selective, and Chinook non-retention regulations, respectively.

Area 5

Year	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
2017			MSF MSF	MSF NR							MSF	MSF MSF
2018			MSF MSF	MSF NR	NR NR					MSF	MSF MSF	MSF MSF
2019			MSF MSF	MSF NR	NR NR						MSF	MSF MSF
2020			MSF MSF	MSF NR	NR NR						MSF MSF	MSF MSF
2021			MSF MSF	MSF NR	NR NR						MSF MSF	MSF MSF

Area 6

Year	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
2017			MSF MSF	MSF							MSF MSF	MSF
2018			MSF MSF	MSF NR	NR NR					MSF MSF	MSF MSF	MSF
2019			MSF MSF	MSF NR	NR NR						MSF MSF	MSF
2020			MSF MSF	MSF NR	NR NR							
2021			MSF MSF	MSF NR	NR NR							

Area 7

Year	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
2017			MSF MSF	NS NS	NS NS				MSF MSF	MSF MSF	MSF MSF	MSF MSF
2018			MSF MSF	NS NS	NS NR				MSF MSF	MSF MSF	MSF MSF	MSF
2019			MSF MSF		NR NR					MSF MSF	MSF MSF	MSF
2020			MSF MSF	NR MSF	NR NR							
2021			MSF MSF	NR MSF	NR NR							

Area 8.1

Year	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
2017							MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF
2018				NR NR	NR NR			MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF NR
2019				NR NR	NR NR	NR NR				MSF MSF	MSF MSF	MSF MSF
2020												
2021				NR NR	NR NR							

Area 8.2

Year	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
2017				NR NR	NR		MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF
2018				NR NR	NR NR			MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF NR
2019				NR	NR					MSF MSF	MSF MSF	MSF MSF
2020												
2021				NR NR	NR NR							

Area 9

Year	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
2017			MSF	NR NR	NR		MSF MSF		MSF	MSF MSF	MSF MSF	MSF
2018			MSF	NR NR	NR NR				MSF MSF	MSF MSF	MSF MSF	MSF
2019			MSF	MSF NR	NR NR					MSF MSF	MSF MSF	MSF
2020			MSF	MSF NR	NR NR							
2021			MSF	MSF NR	NR NR							

Area 10

Year	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
2017			NR MSF	MSF NR	NR NR	NR NR	MSF MSF	MSF MSF	MSF MSF	MSF MSF		
2018			NR MSF	MSF NR	NR NR	NR NR	NR		MSF MSF	NR NR	NR NR	
2019		NR NR	NR MSF	MSF MSF	NR NR	NR NR	NR		MSF MSF	MSF MSF	MSF MSF	
2020		NR NR	NR MSF	MSF MSF	NR NR	NR NR	NR		MSF MSF	MSF MSF	MSF MSF	
2021		NR	NR MSF	MSF MSF	NR NR	NR NR			MSF MSF	MSF MSF	MSF MSF	

Area 11

Year	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
2017		MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF
2018		MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF
2019			MSF MSF	MSF MSF	MSF MSF				MSF MSF	MSF MSF	MSF MSF	MSF MSF
2020			MSF MSF	MSF MSF	MSF MSF							
2021		MSF	MSF MSF	MSF MSF	MSF MSF	NR NR	MSF MSF	MSF MSF				

Area 12

Year	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
2017			SoA msf SoA msf	SoA msf SoA msf	SoA msf SoA msf	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF
2018			SoA msf SoA msf	SoA msf SoA msf	SoA msf SoA msf	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF
2019			SoA msf SoA msf	SoA msf SoA msf	SoA msf SoA msf	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF
2020			SoA msf SoA msf	SoA msf SoA msf	SoA msf SoA msf	NR NR	NR NR					
2021			SoA msf SoA msf	SoA msf SoA msf	SoA msf SoA msf	NR NR	NR NR					

Area 13

Year	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr
2017	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF
2018	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF
2019	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF
2020	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF
2021	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF	MSF MSF