Puget Sound Recreational Discussion - 3/16/2017

## Outline of Presentation

 nagement Framework- North of Falcon
- Forecast
- Issues List
- Public Comment

Management Framework

2. Endangered Species Act
3. Pacific Salmon Treaty
4. Forecasted run size/Escapement Goals

## North of Falcon Process

1. Forecast the abundance of each stock.
2. Determine if there is a harvestable surplus.
3. Propose fisheries - predict what we will catch.
4. Model fisheries to determine which stocks are of conservation concern, constraining fisheries.
5. Negotiate with tribes and other states for fair sharing of catch and stocks that are constraining.
6. Final agreed-to State and Tribal salmon fisheries (ocean, Puget Sound) are described in the "List of Agreed Fisheries" document.

## Puget Sound Chinook Forecast Comparisons

| Basin | Wild |  |  |
| :---: | ---: | ---: | :---: |
|  | $\mathbf{2 0 1 6}$ |  | $\mathbf{2 0 1 7}$ |
| Dungeness | 2,032 | 606 | Comparison |
| Elwha | 88 | 77 | 0.30 |
| Nooksack springs | 175 | 153 | 0.87 |
| Skagit springs | 340 | 225 | 0.66 |
| Skagit summer/falls | 1,994 | 2,785 | 1.40 |
| Stillaguamish | 15,132 | 15,837 | 1.05 |
| Snohomish | 299 | 438 | 1.46 |
| Lake Washington | 3,339 | 3,412 | 1.02 |
| Green | 1,135 | 948 | 0.84 |
| Puyallup | 2,228 | 2,374 | 1.07 |
| White River springs | 353 | 945 | 2.68 |
| Nisqually | 811 | 593 | 0.73 |
| Skokomish | 762 | 478 | 0.63 |
| Mid Hood Canal | 1,835 | 1,956 | 1.07 |
| Total (others included) | 34,158 | 326 | 1.02 |

## Puget Sound Chinook Forecast Comparisons

| Basin | Hatchery |  |  |
| :---: | ---: | :---: | :---: |
|  | $\mathbf{2 0 1 6}$ |  |  |
| Hoko | 876 | 820 | Comparison |
| Dungeness | 296 | 256 | 0.94 |
| Elwha | 2,631 | 3,016 | 1.15 |
| Nooksack/Samish | 27,935 | 21,225 | 0.76 |
| Snohomish | 5,027 | 4,780 | 0.95 |
| Lake Washington | 3,512 | 3,722 | 1.06 |
| Green | 8,158 | 13,988 | 1.71 |
| Puyallup | 3,708 | 3,804 | 1.03 |
| Nisqually | 12,995 | 22,191 | 1.71 |
| Hood Canal | 42,694 | 48,305 | 1.13 |
| Total (others included) | $\mathbf{1 4 0 , 5 5 0}$ | $\mathbf{1 7 7 , 0 0 1}$ | $\mathbf{1 . 2 6}$ |
|  |  |  |  |

## Dungeness Chinook Adult Returns, 1986-2016




## Hoh Fall Chinook



## Quillayute Fall Chinook



## Coho Forecast vs Returns

| Year | Forecast |  | Run Size |  |
| :--- | :--- | :--- | :--- | :--- |
| 2012 | 732,363 |  | Comparison |  |
| 2013 | 882,134 |  | 836,494 | 0.95 |
| 2014 | 872,848 |  | 467,779 | 0.54 |
| 2015 | 891,854 | 215,081 | 0.24 |  |
| $2016 *$ | 225,403 | $\sim 390 k$ | 1.74 |  |
| Avg. | 720,920 | 583,019 | 0.81 |  |
| 2017 | 559,045 | - | - |  |
| *preliminary estimate |  |  |  |  |

## Puget Sound Coho Forecast Comparisons

| Basin | Wild |  |  |
| :---: | :---: | :---: | :---: |
|  | 2016 | 2017 | Comparison |
| Dungeness | 116 | 918 | 7.91 |
| Elwha | 153 | 513 | 3.35 |
| other Strait | 4,427 | 13,058 | 2.95 |
| Nooksack/Samish | 8,987 | 6,291 | 0.70 |
| Skagit | 8,912 | 11,160 | 1.25 |
| Stillaguamish | 2,770 | 7,622 | 2.75 |
| Snohomish | 16,740 | 107,325 | 6.41 |
| Lake Washington | 912 | 2,160 | 2.37 |
| Green | 958 | 3,852 | 4.02 |
| Puyallup | 1,576 | 7,560 | 4.80 |
| Nisqually | 1,486 | 3,290 | 2.21 |
| Deschutes | 48 | 67 | 1.40 |
| Skokomish | 3,959 | 24,271 | 6.13 |
| other Hood Canal | 35,313 | 115,577 | 3.27 |
| Total (others included) | 87,350 | 289,640 | 3.32 |

## Puget Sound Coho Forecast Comparisons

| Basin | Hatchery |  |  |
| :---: | ---: | :---: | :---: |
|  | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ | Comparison |
| Nooksack/Samish | 28,789 | 45,609 | 1.58 |
| Skagit | 4,947 | 7,551 | 1.53 |
| Snohomish | 20,625 | 61,958 | 3.00 |
| Lake Washington | 3,502 | 18,218 | 5.20 |
| Green | 8,012 | 39,924 | 4.98 |
| Elliot Bay/Agate Pass Net Pens | 5,366 | 6,831 | 1.27 |
| Puyallup | 7,606 | 19,951 | 2.62 |
| Nisqually | 735 | 871 | 1.19 |
| Port Gamble | $\mathbf{1 4 , 1 9 9}$ | 12,067 | 0.85 |
| Quilcene | 43,164 | 36,261 | 0.84 |
| other Hood Canal | $\mathbf{4 8 , 2 1 2}$ | 43,724 | 0.91 |
| Total (others included) | $\mathbf{1 6 6 , 5 8 9}$ | $\mathbf{3 0 0 , 6 9 6}$ | $\mathbf{1 . 8 1}$ |
|  |  |  |  |

## Queets Wild Coho



## Hoh Wild Coho




## Puget Sound Pink Forecast Comparisons

| Basin | 2015 | 2017 | Comparison |
| :---: | :---: | :---: | :---: |
| Nooksack | 281,979 | 96,218 | 0.34 |
| Skagit | 603,385 | 85,600 | 0.14 |
| Stillaguamish | 210,062 | 40,205 | 0.19 |
| Snohomish | 1,625,306 | 171,632 | 0.11 |
| Green | 626,102 | 118,689 | 0.19 |
| Puyallup | 837,967 | 382,301 | 0.46 |
| Nisqually | 979,298 | 21,463 | 0.02 |
| Hood Canal | 312,576 | 229,440 | 0.73 |
| Strait of Juan de Fuca | 1,299,356 | 3,655 | 0.002 |
| Total (others included) | 6,778,025 | 1,150,522 | 0.17 |
| Fraser |  |  |  |
| 2015 Puget Sound Pink | cast: 6.8 mil | return: 3.7 mil | 0.53 |

## Recreational Discussion

-Timely agreement

- Constraining stocks
- Chinook (new FRAM): Nooksack early, Dungeness, Mid Hood Canal, Lake Washington
- Coho: Queets, Skagit, Stillaguamish
- In-season action
- Winter in-season action
-Run updates
- Meaningful angler opportunity
- Freshwater and marine


## Public Comment

On-line commenting - March-April http://wdfw.wa.gov/fishing/northfalcon/

## Puget Sound Sport Fishing Advisory Group

## http://wdfw.wa.gov/about/advisory/pssfag/

Public Meetings
March 17 - North of Falcon \#1, Olympia, 9 am April 4 - North of Falcon \#2, Lynnwood Embassy Suites, 9:30 am April 7-11 - PFMC \#2, Double Tree Sacramento

## 2016-17 Winter Chinook Fishery Encounters

(updated March 12, 2017)

| Marine Area | Preseason <br> Guideline | Preliminary <br> Estimate | \% of Guideline |
| :---: | :---: | :---: | :---: |
| 6 | 3,975 | 3,421 | $86 \%$ |
| 7 | 10,248 | 8,385 | $82 \%$ |
| $8-1 / 8-2$ | 6,125 | 2,920 | $48 \%$ |
| 9 | 6,081 | 5,342 | $88 \%$ |
| 10 | 2,597 | 2,761 | $106 \%$ |
| Total | 29,026 | 22,828 | $79 \%$ |

http://wdfw.wa.gov/fishing/reports plants.html

## North of Falcon Background Information

## What is North of Falcon?

- Each year (February-April) state, federal, and tribal fishery managers plan recreational and commercial salmon fisheries for the state and tribes
- Pacific Fishery Management Council (PFMC) establishes ocean salmon seasons from three to 200 miles off the Pacific Coast
- "North of Falcon" (NOF) process involves a series of public and state/tribal meetings to come to an agreement for the upcoming year's salmon fisheries
- NOF is north of Cape Falcon in northern Oregon and encompasses Oregon and Washington (Columbia River, Coast, and Puget Sound)


## What Governmental Policies affect the NOF process?

- The Boldt Decision (1974): upheld by the Supreme Court and based upon treaties with the Puget Sound Treaty tribes to allow the state and tribes to manage their own fisheries (comanagers) and share half of the harvestable salmon
- Endangered Species Act (ESA): fisheries must not pose jeopardy ESA-listed fish such as Puget Sound Chinook (1999)
- Pacific Salmon Treaty (U.S./Canada): helps ensure enough fish destined for the southern U.S. are allowed to pass through Canadian waters to allow fishing opportunity and enough fish to reach the spawning grounds (and vice versa for fish returning to Canada)
- Conservation objectives are agreed to by the co-managers to ensure enough fish get past fisheries and reach rivers to spawn and recover the population


## What are the steps?

- Estimate the forecasted returns of individual hatchery and wild stocks of salmon
- Determine if enough fish are returning to allow for harvest
- Predict harvest for tribal and state recreational and commercial fisheries for Oregon and Washington; include the northern fisheries (Alaska and Canada) too
- Analyze forecast and harvest scenarios using the Fisheries Regulations Assessment Model (FRAM) to determine whether proposed fishing plans meet management objectives (e.g., ESA impact limits)
- Negotiate with the recreational anglers, commercial fishers, and tribes to allow a fair sharing of catch and ensure conservation objectives are met
- Combine all Puget Sound and ocean fisheries into the "Agreed-to Fisheries Document" that the recreational (sport) fishing rules pamphlet is based upon


## Glossary

AEQ: Adult equivalents (number of wild salmon that would have returned to the river if not killed in fisheries)

CERC: Critical exploitation rate ceiling (maximum fishery impacts allowed when a stock is in critically low abundance, see Escapement LAT)

Constraining stock: Wild fish for a particular river that is estimated to be the most overimpacted that will limit (or reduce) fishing opportunities

CWT: Coded-wire tag (placed in nose of juvenile salmon and recovered from adults that return to estimate where the fish is from)

Encounters: Number of fish harvested plus released fish

## ESA: Endangered Species Act

ERC: Exploitation rate ceiling (maximum allowable rate of returning wild salmon that can be killed in fisheries without compromising stock recovery)

Escapement LAT: Escapement Low Abundance Threshold (minimum number of naturally spawning salmon needed to recover that stock; if below then stock is in critical status)

Exploitation Rate (ER): Percent of total mortality (i.e., in fisheries and on spawning grounds) that occurs in fisheries, including landed and non-landed fishery mortality components

Forecast: Estimated number of adult salmon that will return
FRAM: Fisheries Regulation Assessment Model (used to combine forecasts and harvest of fisheries to estimate number of wild fish that will return to the rivers to spawn)

LCN: Lower Columbia Natural Tule Chinook (sometimes called LCR, Lower Columbia River, tule)
Release Mortality Rate: Percent of fish released that die due to the encounter with handling MSF: Mark-selective fisheries (hatchery targeted fishery where wild fish are released)

Escapement: Number of wild salmon returning to the spawning grounds for a particular stock NOF: North of Falcon (process to establish salmon seasons for state and tribal fisheries)

NT: Non-treaty fisheries (sport and commercial including net and troll)
SUS: Southern United States (WA, OR, CA)
SUS PT ER: Southern U.S. (WA, OR, CA) pre-terminal exploitation rate (caught in marine waters within the southern U.S.)

T: Treaty fisheries (tribal ceremonial/subsistence and commercial: net, freshwater net, troll (tr))
Total ER: Total exploitation rate for Alaska, Canada, and southern U.S.

# FISH AND WILDLIFE COMMISSION POLICY DECISION 

## POLICY TITLE: 2017-2018 North of Falcon

Supersedes: C-3608, 2015-2016
C-3001 C-3622
See Also: C-3620
C-3621
Effective Date: January 13, 2017
Approved by: $\frac{\text { Washington Fish and Wildlife Commission, January 13, 2017 }}{\text { Termination Date: }}$ Chair
POLICY NUMBER: C-3608

Washington Fish and Wildlife Commission, January 13, 2017

## North of Falcon Policy

This Policy will guide Department staff in considering conservation, allocation, in-season management, and monitoring issues associated with the annual salmon fishery planning process known as "North of Falcon." When considering management issues, Department staff will ensure that decisions are made consistent with: the Department's statutory authority; U.S. v. Washington; U.S. v. Oregon; the Endangered Species Act; the Puget Sound Chinook Harvest Management Plan; the Pacific Salmon Treaty; the Pacific Fishery Management Council's Framework Salmon Management Plan; pertinent state/tribal agreements; and the applicable Fish and Wildlife Commission policies.

The Department will implement this Policy consistent with the purposes and intended outcomes described in the 21st Century Salmon and Steelhead Planning Project including:

- Salmon and steelhead will be managed to recovery and to assure sustainability in a way that is science-based, well-documented, transparent, well-communicated, and accountable.
- Fisheries will be managed to meet or exceed ESA, recovery, and conservation goals; and harvest management measures will protect and promote the long-term wellbeing of the commercial and recreational fisheries.


## Fishery Management

## General

- On a statewide basis, fishing opportunities will be provided when they can be directed at healthy wild and hatchery stocks.
- Selective fishing methods and gears that maximize fishing opportunity and minimize impacts on depressed stocks will be utilized to the fullest extent possible taking into consideration legal constraints on implementation and budgetary limits associated with required sampling, monitoring and enforcement programs.
- When assessed from a statewide perspective, fishing directed at chinook, coho, pink, sockeye, or chum salmon will not be exclusively reserved for either sport or commercial users.
- When managing sport fisheries, meaningful recreational fishing opportunities will be distributed equitably across fishing areas and reflect the diverse interests of fishers, including retention and catch and release fisheries.
- The Department will seek non-treaty fishing access to unutilized portions of treaty harvest allocations through the implementation of pre-season agreements, taking into consideration changes in abundance, fishery conflicts, and factors that may influence attainment of spawning escapement objectives.
- The Puget Sound harvest management objectives for chinook and coho stocks, in priority order, are to: (1) provide meaningful recreational fishing opportunities; and (2) identify and provide opportunities for commercial harvest. When managing sport fisheries in this region, recreational opportunities will be distributed equitably across fishing areas, considering factors such as: the uniqueness of each area; the availability of opportunities for various species in each area throughout the season; the desire to provide high levels of total recreational opportunity; and the biological impacts.
- For fisheries directed at Fraser River-origin chum, pink, and sockeye stocks, the majority of harvest will be provided to the commercial fisheries.
- For fisheries directed at harvestable Puget Sound-origin chum stocks, the majority of harvest will be provided to the commercial fisheries.
- For fisheries directed at Lake Washington sockeye, the first 200,000 non-treaty harvest will be provided to recreational fishers. If the allowable non-treaty harvest is greater than 200,000, commercial harvest directed at this stock may be considered.
- For fisheries directed at harvestable Puget Sound origin pink salmon, seasons will be established that provide meaningful opportunities for both recreational and commercial fisheries while minimizing gear and other fishery conflicts.


## Grays Harbor

- Grays Harbor will be managed consistent with the Commission's Grays Harbor Policy (POL C3621).


## Willapa Bay

- Willapa Bay will be managed consistent with the Commission's Willapa Bay Salmon Management Policy (POL-C3622).


## Columbia River

- The Fish and Wildlife Commission's policy on Columbia River Salmon Management (POL-C3620) shall guide pre-season and in-season planning of Columbia River salmon fisheries. Columbia River harvest management regimes shall be developed in cooperation with Oregon Department of Fish and Wildlife representatives.


## Pacific Ocean

- Pacific Ocean harvest shall be managed consistent with the Pacific Fishery Management Council's Framework Salmon Management Plan and the National Standards that provide for fair and equitable allocation of fishing privileges among various fishers.


## In-Season Management

- When in-season management actions are taken, they will be implemented in a manner that is consistent with pre-season conservation and harvest management objectives, and the fishery intent developed through the North of Falcon process.
- Prior to use, in-season updates of stock abundance affecting Puget Sound fisheries will be evaluated for technical merit and potential to improve achievement of conservation and allocation objectives.
- When possible, in-season updates should be documented within the co-manager's annual List of Agreed Fisheries or as part of regional comanager memoranda of understanding.
- Descriptions of potential modifications to fisheries that are contingent on in-season updates should be included in the List of Agreed Fisheries.


## Monitoring and Sampling

- Monitoring, sampling and enforcement programs will be provided to account for species and population impacts of all fisheries.
- Fishery participants will be required to comply with fishery monitoring and evaluation programs designed to account for species and population impacts.


## Enforcement and Compliance

- Enforcement strategies will be developed and staffing will be provided to promote compliance with state regulations.
- WDFW Enforcement will seek to establish and maintain effective coordination with Tribal enforcement to enhance the sharing of information.


## Gear and Fishery Conflicts

- Recreational and commercial fisheries shall be structured to minimize gear and other fishery conflicts. Unanticipated fishery interaction issues identified in-season, including conflicts with fisheries directed at other species, shall be resolved by involving the appropriate sport and commercial representatives in a dispute resolution process managed by Department staff.


## Incidental Mortalities

- The Department will manage fisheries to minimize mortalities on non-target species (e.g. rockfish, sea birds, etc.). Management regimes will include strategies to limit seabird mortalities consistent with the federal Migratory Bird Treaty Act.


## Communications

- The Department shall strive to make ongoing improvements for effective public involvement during the North of Falcon planning process and annual salmon fishery implementation, incorporating the following intents:
- North of Falcon participants will be included as observers during appropriate state/tribal discussions of fishery issues.
- All decisions made during the North of Falcon process will be recorded in writing.
- A variety of tools will be used to effectively communicate with the public, to receive input on pre-season planning or in-season fishery issues, and to make available the record of decisions. Such tools will include: recreational and commercial advisory groups; public workshops to address key issues; the WDFW North of Falcon Web site; and in-season tele-conferences.
- The Department will increase transparency by consulting with stakeholders throughout the pre-season planning process and prior to making major decisions with the co-managers.


## Other Species

- The Fish and Wildlife Commission's policy on Lower Columbia Sturgeon Management (POLC3001) shall guide pre-season and in-season planning of Columbia River and coastal sturgeon fisheries and related incidental impacts.


## Delegation of Authority

The Fish and Wildlife Commission delegates the authority to the Director to make harvest agreements with Northwest treaty tribes and other governmental agencies, and adopt permanent and emergency regulations resulting from the agreements made during the annual North of Falcon process.

| TABLE 2. Recreational management Alternatives collated by the STT for non-Indian ocean salmon fisheries, 2017. (Page 1 of 8) |  |  |
| :---: | :---: | :---: |
| A. SEASON ALTERNATIVE DESCRIPTIONS |  |  |
| ALTERNATIVE I | ALTERNATIVE II | ALTERNATIVE III |
| North of Cape Falcon | North of Cape Falcon | North of Cape Falcon |
| Supplemental Management Information | Supplemental Management Information | Supplemental Management Information |
| 1. Overall non-Indian TAC: 104,500 (non-mark-selective equivalent of 100,000) Chinook and 64,400 coho marked with a healed adipose fin clip (marked). <br> 2. Recreational TAC: 54,500 (non-mark selective equivalent of 50,000) Chinook and 58,800 marked coho; all retained coho must be marked. <br> 3. A trade with commercial troll may be considered in April. <br> 4. No Area 4B add-on fishery. <br> 5. Buoy 10 fishery opens August 1 with an expected landed catch of 15,000 marked coho in August and September. <br> 6. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries. | 1. Overall non-Indian TAC: 90,000 Chinook and 60,000 coho marked with a healed adipose fin clip (marked). <br> 2. Recreational TAC: 45,000 Chinook and 50,400 marked coho; all retained coho must be marked. <br> 4. No Area 4B add-on fishery. <br> 5. Buoy 10 fishery opens August 1 with an expected landed catch of 15,000 marked coho in August and September. <br> 6. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries. | 1. Overall non-Indian TAC: 80,000 Chinook and 18,900 coho marked with a healed adipose fin clip (marked). <br> 2. Recreational TAC: 40,000 Chinook and 18,900 marked coho; all retained coho must be marked. <br> 4. No Area 4B add-on fishery. <br> 5. Buoy 10 fishery opens August 1 with an expected landed catch of 15,000 marked coho in August and September. <br> 6. Overall Chinook and/or coho TACs may need to be reduced or fisheries adjusted to meet NMFS ESA guidance, FMP requirements, upon conclusion of negotiations in the North of Falcon forum, or upon receipt of preseason catch and abundance expectations for Canadian and Alaskan fisheries. |
| Queets Rivers to Leadbetter Point <br> - June 17 through earlier of June 30 or a coastwide marked Chinook quota of 7,500 (C.5). <br> Seven days per week. Two fish per day, all salmon except coho. All Chinook must be marked with a healed adipose fin clip (C.1). Chinook 24 -inch total length minimum size limit (B). See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5). | Queets Rivers to Leadbetter Point | Queets Rivers to Leadbetter Point |

## A. SEASON ALTERNATIVE DESCRIPTIONS

| ALTERNATIVE I |
| :--- |
| Leadbetter Point to Cape Falcon |
| - June 17 through earlier of June 30 or a coastwide |

- June 17 through earlier of June 30 or a coastwide marked Chinook quota of 7,500 (C.5).
Seven days per week. Two fish per day, all salmon except coho. All Chinook must be marked with a healed adipose fin clip (C.1). Chinook 24-inch total length minimum size limit (B). See gear restrictions and definitions (C.2, C.3) Inseason management may be used to sustain season length and keep harvest within the overall Chinook recreational TAC for north of Cape Falcon (C.5).


## U.S./Canada Border to Cape Alava (Neah Bay)

- June 24 through earlier of September 30 or 6,120
marked coho subarea quota with a subarea guideline of 8,800 Chinook (C.5)
Seven days per week. All salmon, except no chum beginning August 1; two fish per day. All coho must be marked with a healed adipose fin clip (C.1). Beginning August 1, Chinook non-retention east of the BonillaTatoosh line (C.4.a) during Council managed ocean fishery. See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook and coho recreational TACs for north of Cape Falcon (C.5).


## Cape Alava to Queets River (La Push Subarea)

- June 24 through earlier of September 30 or 1,530
marked coho subarea quota with a subarea guideline of 2,700 Chinook (C.5)
- October 1 through earlier of October 15 or 100 marked coho quota or 100 Chinook quota (C.5) in the area north of $47^{\circ} 50^{\prime} 00 \mathrm{~N}$. lat. and south of $48^{\circ} 00^{\prime} 00^{\prime \prime} \mathrm{N}$. lat.
Seven days per week. All salmon, two fish per day. All coho must be marked with a healed adipose fin clip. (see Ocean Boat Limits, C.1). See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook and coho recreational TACs for north of Cape Falcon (C.5).

Seven days per week. All salmon, two fish per day plus one additional pink. All coho must be marked with a healed adipose fin clip (see Ocean Boat Limits, C.1). See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook and coho keep harvest within the overall Chinook and coho
recreational TACs for north of Cape Falcon (C.5).
U.S./Canada Border to Cape Alava (Neah Bay)

- July 1 through earlier of September 10 or a subarea guideline of 7,100 Chinook (C.5).

Seven days per week. All salmon, except coho; no chum beginning August 1; two fish per day (C.1). Beginning August 1, Chinook non-retention east of the BonillaTatoosh line (C.4.a) during Council managed ocean fishery. See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook and coho recreational TACs for north of Cape Falcon (C.5).

## Cape Alava to Queets River (La Push Subarea)

- July 1 through earlier of September 10 or a subarea guideline of 2,100 Chinook (C.5).
- October 1 through earlier of October 15 or 100 Chinook quota (C.5) in the area north of $47^{\circ} 50^{\prime} 00 \mathrm{~N}$. lat. and south of $48^{\circ} 00^{\prime} 00^{\prime \prime} \mathrm{N}$. lat

Seven days per week. All salmon, except coho; two fish per day. See gear restrictions and definitions (C.2, C.3). Inseason management may be used to sustain season length and keep harvest within the overall Chinook and coho recreational TACs for north of Cape Falcon (C.5).

## A. SEASON ALTERNATIVE DESCRIPTIONS

## Queets River to Leadbetter Point (Westport Subarea)

- July 1 through earlier of September 30 or 21,750
marked coho subarea quota with a subarea guideline of 21,900 Chinook (C.5)
Seven days per week. All salmon; two fish per day, no more than one of which can be a Chinook. All coho must be marked with a healed adipose fin clip (C.1). See gear restrictions and definitions (C.2, C.3). Grays Harbor Control Zone closed beginning August 14 (C.4.b). Inseason management may be used to sustain season length and keep harvest within the overall Chinook and coho recreational TACs for north of Cape Falcon (C.5).


## Leadbetter Point to Cape Falcon (Columbia River

## Subarea)

- July 1 through earlier of September 30 or 29,400 marked coho subarea quota with a subarea guideline of 13,500 Chinook (C.5).
Seven days per week. All salmon; two fish per day, no more than one of which can be a Chinook. All coho must be marked with a healed adipose fin clip (C.1). See gear restrictions and definitions (C.2, C.3). Columbia Control Zone closed (C.4.c). Inseason management may be used to sustain season length and keep harvest within the overall Chinook and coho recreational TACs for north of Cape Falcon (C.5)


## ALTERNATIVE II

## Queets River to Leadbetter Point (Westport Subarea)

- June 24 through earlier of September 17 or 18,650
marked coho subarea quota with a subarea guideline of 21,400 Chinook (C.5),
Same as Alternative 1.


## Leadbetter Point to Cape Falcon (Columbia River

## Subarea)

- June 24 through earlier of September 30 or 25,200 marked coho subarea quota with a subarea guideline of 13,200 Chinook (C.5)
Same as Alternative 1.


## ALTERNATIVE III

Queets River to Leadbetter Point (Westport Subarea)

- July 2 through earlier of September 7 or a subarea guideline of 19,000 Chinook (C.5)

Five days per week (Sunday through Thursday). All salmon, except coho; two fish per day (C.1). See gear restrictions and definitions (C.2, C.3). Grays Harbor Control Zone closed beginning August 14 (C.4.b). Inseason management may be used to sustain season length and keep harvest within the overall Chinook and coho recreational TACs for north of Cape Falcon (C.5).

## Subarea)

Subarea)

- July 1 through earlier of September 16 or 18,900 marked coho subarea quota with a subarea guideline of 11,700 Chinook (C.5).
Same as Alternative 1


## 2017 Salmon Season Setting NORTH of FALCON



## 2017 Puget Sound Salmon Forecasts: Sockeye, Chum and Pink

## Sockeye

- The forecast for Baker Lake sockeye is 47,000 fish, which is about 25 percent above the recent five year average.
- A fishery is unlikely in Lake Washington, where only 77,300 sockeye are expected to return this year, continuing about a decade of poor returns.


## Chum

- The overall forecast for Puget Sound wild chum is down 32 percent from the recent 10 year average and the hatchery chum forecast is down 33 percent.
- The major areas that support fisheries are Hood Canal and South Sound. The Hood Canal forecast is about 493,000 and the forecast for South Sound is 433,000. Both are down about 30 percent from the 10 year average.
- Several rivers, including the Skagit, Stillaguamish, and Snohomish, are expected to have very low returns of chum, similar to the last several years.


## Pink

- The total forecast for Puget Sound pink salmon is 1.15 million, which is 82 percent lower than the previous
 10 -year period.
- Some rivers, such as the Skagit, Stillaguamish and Dungeness , are not forecast to meet escapement goals.
- The low number of pink salmon returning is likely due to poor conditions in Puget Sound rivers in 2015 and marine areas in 2016.



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## 2017 Salmon Season Setting <br> NORTH of FALCON



Washington
Department of
FISH and
WILDLIFE
2017 Puget Sound Salmon Forecasts: Coho and Chinook

## Chinook

- The forecast of 166,235 hatchery chinook is up 27 percent from the 2016 forecast and is very close to the recent five-year average.
- The return of wild chinook is expected to be 27,918 , which is down 10 percent from the 2016 forecast. Returns of wild chinook will constrain fisheries including those targeting hatchery fish - in some areas.


## Coho

- Puget Sound wild coho are up considerably over 2016, when wild coho were forecast to return in historically low numbers. This year's return is similar to the 10-year average.
- Skagit and Stillaguamish coho are expected to return in very low numbers, which will mean fishing will be limited in those areas.
- The forecast for Puget Sound hatchery coho is up 73 percent over last year.



Puget Sound hatchery vs wild chinook forecasts and recent returns.


Puget Sound coho returns with forecasts

## Marine Area 7 (San Juan Islands) summer Chinook fishery fact sheet

## Background

The summer Chinook fishery in Area 7 (San Juan Islands) has remained under nonselective regulations during the months of July, August, and September while many other areas have switched to mark-selective (MSF) regulations, except July 2016 which was MSF. The Area 7 summer fishery is considered a mixed-stock fishery that harvests fish from both Puget Sound and Canadian river systems. The Pacific Salmon Treaty (Canada and U.S.) provides protection to wild salmon stocks compelling both countries to limit impacts on wild stocks of concern, with the conservation burden relying more heavily on the country of origin. Each year fewer wild Chinook return to Puget Sound, comprising an expected $15 \%$ of the total Chinook forecast. The Commission issued a North of Falcon policy (policy $C$-3608), which provides guidance to maintain meaningful opportunity, uniqueness of fisheries, and utilize MSF regulations in order to aid in maximizing fishing opportunity and minimize impacts on depressed stocks.

## July Fishery Proposal

- Convert July Chinook fishery to MSF (release wild Chinook)
- Daily limit of Chinook would increase from 1 to 2
- Southern Rosario and Eastern Strait closure would be considered for removal
- August and September would remain a nonselective Chinook fishery and the Rosario and Eastern Strait closures would remain in effect


## Data analysis from dockside samples

- Legal-sized mark rates (mark rate has improved by 5\% from 2011-13 to 2014-16 average)
- July: 68\%
- August: 34\%
- September: 32\%
- Coded Wire Tag proportions used in FRAM model for North of Falcon during July
- Nooksack-Samish: 18\%; Skagit: 17\%; Stilly-Sno: 7\%; Mid Sound: 12\%; South Sound: 7\%; Hood Canal: 6\%; Canada: 29\%; Other: 4\%
- Genetics (2009 study)
- July: Puget Sound: 79\%; Canada: 19\%; Other: 2\%
- August: Puget Sound: 43\%; Canada: 54\%; Other: 3\%
- September: Puget Sound: 49\%; Canada: 45\%; Other: 6\%


## Justification

Nearly all Chinook released from Puget Sound hatcheries are marked (>99\%). The high July mark rate in Area 7 makes it a strong candidate for converting to MSF as almost 2 out of every 3 legalsized Chinook encountered could be kept, and fewer wild fish die due to the release mortality rate for legal-sized Chinook (at an assumed morality rate of $10 \%$ ). Further, anglers would have an increased daily limit from 1 to 2 Chinook. Most of the wild Chinook encountered during July are from Puget Sound stocks, thus converting to MSF would help stabilize Puget Sound fisheries, including Area 7 and allow for additional conservation.

## Baker Sockeye Fisheries Fact Sheet

Background: WDFW held two public meetings during 2014-15 to receive input on the management of future Baker Sockeye fisheries. At the meetings, constituents were able to voice their opinions to fisheries managers on how WDFW could best meet the established conservation goals, as well as meeting the needs of anglers through management changes. At the conclusion of the meetings, attendees reached consensus on several key fishery regulations they would recommend to be implemented for future seasons. These recommendations include: season start/end dates, river harvest quotas, and daily limits. The details provided below serve as a starting place for the North of Falcon Baker sockeye discussions. We are still accepting public input on how to proceed with the Baker Sockeye fishing season and you are encouraged to submit any comments you may have, online at: wdfw.wa.gov/fishing/northfalcon/.

## 1) 2017 Forecast

The 2017 Baker sockeye preseason forecast is for 47,000 sockeye. After setting aside the necessary fish for broodstock needs, natural spawning, and test fishing, approximately 18,000 harvestable fish remain in the state's half of the total harvestable share.

## 2) Season Start/End Dates and Bag Limits

At the end of the second Baker Sockeye workshop, the meeting attendees agreed upon the following regulations recommendations for Baker sockeye seasons:

## Skagit River Fishery

River Share: 20\% of state share
Season Dates: June 16 - July 15 or when the river fishery quota is reached
Daily limit: 3 fish
Requests to extend the area of the Skagit River fishery, depending on monitoring costs.

## Baker Lake Fishery

Lake Share: 80\% of state share
Season Dates: July 10 - Sept. 8
Daily limit: Runsize dependent (30,000 forecast $=3$ fish; 40,000 $=4$ fish; 50,000 $=5$ fish; 60,000 $=6$ fish ; Ability to update bag limits after run is updated from in-season update (ISU) model.

For a full summary of the notes and presentations from both Baker Sockeye Workshops please go to: wdfw.wa.gov/fishing/salmon/sockeye/baker river.html.

## 2017 Salmon Season Setting

 NORTH of FALCON
## Puget Sound Chinook minimum size limit reduction

## Background:

The minimum size limit for Chinook retention has varied widely during the history of the Puget Sound sport fishery. It was $12^{\prime \prime}$ in the 1930's, no size limit in the 1970's, size limit of $20^{\prime \prime}$ in the late $1970^{\prime}$ s, and has remained $22^{\prime \prime}$ (today's limit) since 1983. The current size limit (22") was designed to help achieve 50:50 harvest sharing between state and tribal fisheries. Reducing the size limit for winter mark-selective fisheries has received the most support, while some would like to see the change made for summer fisheries to help catch jacks in terminal areas.
Some of the reasons for reducing the size limit to 20 inches, include:

## More successful angler trips and helping to reduce the number hatchery fish on the spawning grounds

Reducing the minimum size limit to $20^{\prime \prime}$ will allow for more successful trips for those who choose to keep 20$22^{\prime \prime}$ fish. It will allow anglers to access a more hatchery fish that they help to fund through license fees, while simultaneously reducing the number of hatchery strays on spawning grounds. Increased harvest will help restore $50: 50$ sharing of allowable catch.

## Modeling of the size limit change has been approved

In 2013, the Pacific Fishery Management Council approved the changes necessary to properly model size limit changes in the Fishery Regulation Assessment Model (FRAM).

## Size limit reductions will have a negligible impact on protected Chinook

Modeling indicates that reducing the minimum size limit from $22^{\prime \prime}$ to $20^{\prime \prime}$ during winter MSFs will not measurably increase ESA impacts, because these are mark-selective, hatchery-directed fisheries.

## Recreational fisheries will see an increase in the number of allowable encounters

The abundance and size structure of fish present in Puget Sound in any given year is variable, but on average reducing the size limit to $20^{\prime \prime}$ may translate into

a about $30 \%$ increase in what's considered to be legal to keep during winter MSFs and a about $10 \%$ increase during summer fisheries. Mid and South Puget Sound areas would likely see the largest increase in catch during the winter.

## Shouldn't decrease the number of larger chinook available in the fishery

Dropping the minimum size limit to $20^{\prime \prime}$ would not result in a noticeable decrease in the number of Chinook that grow to larger sizes (ages 4-5). There is a very low chance of catching the same fish twice in marine recreational fisheries. These odds are further reduced due to the mortality rates of released fish combined with the expected natural mortality, which is about a 50 percent chance of surviving from age 2 until maturing to an adult salmon ready to return to rivers.

## Monitoring fisheries will continue so that changes are well understood

Given that it has been nearly 20 years since the minimum limit was less than 22, " it will be necessary to monitor fisheries to measure changes in fishing effort, angler behavior (e.g., compliance, voluntary release), catch success, and stock exploitation patterns. The sampling programs already in place for "intensively monitored" mark-selective fisheries are sufficiently rigorous to provide this insight.

