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## ▶ HARVEST

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### ➤ *Harvest Management To Meet The Needs Of Wild Fish*

#### **Goal:**

*Protect, restore, and enhance the productivity and diversity of wild salmonids and their ecosystems to sustain ceremonial subsistence, commercial, and recreational fisheries; non-consumptive fish benefits; and other related cultural and ecological values.*

#### **Objectives:**

- *Stewardship of salmonid populations will be the first priority in managing the resource.*
- *Status and productivity of wild salmonid populations and their habitats will be regularly monitored to evaluate performance of protection and recovery actions.*
- *Fishery approaches will be implemented and evaluated to protect depleted populations while providing more stable and sustainable access to healthy species and stocks.*
- *Commercial and recreational fisheries will continue to be restructured to improve their stability, management and profitability.*
- *Washington State will work with Canadian, Tribal, federal and other state fishery managers to resolve inter-jurisdictional impediments to salmon recovery.*

#### **Outcomes**

*Implementation of the Harvest Management actions will contribute to the following salmon recovery outcomes:*

- *We will have productive and diverse wild salmon populations (A).*
- *We will meet the requirements of the Endangered Species Act/Clean Water Act (B).*
- *Harvest management actions protect wild salmon (G).*
- *Enhance compliance with resource protection laws (H).*
- *Use the best available science and integrate monitoring and research with planning and implementation (L).*

**Har-1.**

**Action:** Comprehensive species management planning -- Continue and complete Comprehensive Species Management Planning under U.S. v. Washington and U.S. v. Oregon: review and revise regional harvest management plans relative to salmonid rebuilding and recovery goals; review/identify spawner and/or exploitation rate objectives, and identify fishery measures that meet spawner/exploitation guidelines in order to ensure sustainable harvest consistent with stock protection and ESA. This includes development of Comprehensive Chinook and Comprehensive Coho Management Plans for Puget Sound stocks; development of recovery and rebuilding plans for listed (such as Hood Canal summer chum) and non-listed stocks, as well as management plans for selected coastal rivers; implementation of U.S. and Canadian fishing regimes that support the 1999 Pacific Salmon Treaty Annexes and achieve stock protection and recovery objectives; completion of individual watershed plans initiated under U.S. v. Washington and the Puget Sound Salmon Management Plan.

**Key Tasks**

This action will occur in the context of several basic planning pathways, for example:

- Comprehensive Puget Sound chinook plan development, associated ESA compliance development and a number of watershed based recovery plans that support both.
- Hood Canal and Strait of Juan de Fuca summer chum recovery plan and associated ESA compliance development.
- Recovery plans for each of the affected ESUs and species groups.
- U.S. v Oregon Columbia River Fish Management Plan renegotiation will have a bearing on recovery plan development in the Columbia and Snake River basins.

A work planning task and its implementation will be completed to create a project management plan for each of these recovery plan and take authorization processes – recovery goals for listed stocks will be a key element of these plans.

Key tasks:

1. Review and revise regional harvest management plans relative to salmonid rebuilding and recovery goals;
2. Review/identify spawner and/or exploitation rate objectives; and
3. Identify fishery measures that meet spawner/exploitation guidelines in order to ensure sustainable harvest consistent with stock protection and ESA.

<p><b>Output - work accomplished</b></p>	<ul style="list-style-type: none"> <li>- Project management plans, including time lines and issue resolution strategies;</li> <li>- A plan for integrating the various, overlapping forums where recovery goals are discussed and developed; and</li> <li>- Recovery plans, containing recovery goals that include sustainable harvest.</li> </ul> <p>This is essentially a planning and evaluation action. Performance will be determined initially by whether products are completed by defined time lines. Additionally, the scientific review parameters, approach and outcomes will be peer reviewed while policy assessment and decisions will be open to public participation and review to ensure accountability.</p>
<p><b>Timeline &amp; Key milestones</b></p>	<p>March 1, 2000 - Products 1 and 2 above will be completed. The specific time lines for specific plans will be regularly updated and defined as part of project management plan development and implementation.</p>
<p><b>Staffing (FTEs) &amp; funding (\$ and sources)</b></p>	<p>6.25 FTEs (WDFW)  <b>Total:</b> \$832,250            \$475,250 GF-S (WDFW)            \$357,000 GF-F (WDFW)</p> <p>Coordination and assistance documenting the progress on this action will be provided by WDFW Intergovernmental Policy staff. WDFW Fish Program management and science staff will have the lead in work product development and joint work with co-managers.</p>
<p><b>Responsible Agency (ies)</b></p>	<p><b>Coordinated</b> effort with WDFW and Tribes co-lead. Some review will occur at a broad multi-tribe/state/federal general level, but it is important that local tribal and state staff be heavily involved in this activity since project planning, evaluation and adaptive management occurs at the geographic scale of watershed.</p> <p>Peer review and policy oversight will be closely integrated. Significant public interaction is anticipated given the level of locally based recovery efforts and the interaction between all Hs.</p>

**Har-2.**

**Action:** Continue to implement annual harvest measures, through the North of Cape Falcon/Pacific Fisheries Management Council fishery season-setting process, that achieve spawner/exploitation objectives consistent with salmon recovery. Annual fishery measures include time, area and gear restrictions, and specify measures that implement selective harvest of hatchery fish, where appropriate, and that reduce release mortality of non-target species. Continue/pursue ESA authorization for harvest-related incidental takes through Sections 7 (endangered and threatened species) or 4(d) (threatened species) of ESA.

<b>Key Tasks</b>	<ol style="list-style-type: none"> <li>1. Lead annual co-manager/constituent salmon management planning and fishery regulation setting process called "North of Cape Falcon" which includes a series of open, public meetings.</li> <li>2. Establish annual abundance expectations.</li> <li>3. Plan fishery catch levels and time/area/gear regulations by species to have a high probability of meeting stock specific conservation objectives.</li> <li>4. Meet federally required consultation requirements under the Endangered Species Act for listed population groups (evolutionarily significant units, or "ESUs").</li> <li>5. Meet other federally mandated management requirements.</li> </ol>
<b>Output – work accomplished</b>	<ul style="list-style-type: none"> <li>- Pre-season forecasts for hatchery and wild chinook and coho stocks statewide.</li> <li>- PFMC ocean quotas for chinook and coho.</li> <li>- Agreed state/tribal fishery plans for other co-managed marine and terminal areas.</li> <li>- State management plans for other inside areas not subject to co-management (e.g., Willapa).</li> <li>- Pre-season plans have high expectation of meeting 100% of specified stock-specific conservation goals, consistent with actively supporting ESA recovery for listed populations.</li> <li>- 100% compliance with ESA take authorizations or exemptions.</li> <li>- Selective fisheries, including those directed at marked hatchery fish, will be initiated in at least two new areas.</li> </ul>
<b>Timeline &amp; Key milestones</b>	<p>November 2000 -February 2001: 2000 post-season review and 2001 forecast development.</p> <p>Late February-Early April 2000 North of Falcon Planning meetings.</p> <p>Late February-Early April 2001 Next North of Falcon Planning meetings.</p>
<b>Staffing (FTEs) &amp; funding (\$ and sources)</b>	<p>9.7 FTEs (WDFW)</p> <p><b>Total:</b> \$1,152,600</p> <p>\$822,600 GF-S (WDFW)</p> <p>\$330,000 GF-F (WDFW)</p>

<b>Responsible Agency (ies)</b>	<b>Coordinated</b> effort with WDFW and Tribes co-lead. This annual fishery management planning and evaluation involves extensive state/tribal interactions and negotiations with 24 treaty tribes, the State of Oregon, the federal government, Canadian Department of Fisheries and Oceans and numerous constituents/constituent groups. WDFW shares responsibilities with the tribes and Oregon Department of Fish and Wildlife to plan these meetings in an integrated manner with the Pacific Fishery Management Council process for establishing ocean salmon seasons.
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**Har-3.**

**Action:** Continue to investigate selective fishing methods in Washington ocean, inside marine, and freshwater fishing areas, and methods to reduce incidental impacts on non-target stocks and species. Measures implemented may include enhanced time, area, and gear depth measures, release of non-target species; requiring special fishing methods to reduce release mortality; setting limits on non-Indian catch of non-target species; and requiring logbooks for non-Indian commercial net fishers.

<b>Key Tasks</b>	<p>The following tasks and time lines have been identified for this activity through June 2001:</p> <ol style="list-style-type: none"> <li>1. Develop a selective fishing methods "initiative" and work plan <ul style="list-style-type: none"> <li>- Develop one or more constituent work groups to assist development of industry supported problem statement, opportunities and strategies for development of new selective fishing approaches and methods.</li> <li>- Identify specific legislative changes to WDFW laws that might be necessary to pursue experimental development and operational changes to commercial fishing gears and practices.</li> <li>- Continue field collaboration with Canada Fisheries and Oceans to observe and evaluate its government-industry partnership efforts. Further evaluate and document existing selective gears in Washington during 1999 and 2000 in order to understand essential operating parameters for selective fisheries.</li> </ul> </li> <li>2. Identify specific, pilot selective experiments and evaluations that should be conducted in 2000, including location, gears, and funding needs.</li> <li>3. Pursue and secure additional funding and grant sources, to be leveraged by salmon recovery account funds to be used to implement at least one experimental application for the year 2000 program.</li> <li>4. Implement and report on the year 2000 field application.</li> </ol>
<b>Output - workload accomplished</b>	<ul style="list-style-type: none"> <li>- Selective fishing methods development plan.</li> <li>- Year 2000 funding for actual field investigations/testing.</li> <li>- FY 2001 work plan with deliverables, time lines and performance measures.</li> <li>- Plans and funding developed according to schedule.</li> </ul>
<b>Timeline &amp; Key milestones</b>	<p>April 15, 2000 - Completion of the initial implementation plan (task 1).  On-going - Continued field collaboration with Canada Fisheries and Oceans (task 1).  May 15, 2000 - Completion date for selecting specific, pilot selective experiments and evaluation (task 2).  July 1, 2000 - Completion date to develop funding plan (task 3).  May 1, 2001 - Completion date for reporting on the year 2000 field application (task 4).</p>

<p><b>Staffing (FTEs) &amp; funding (\$ and sources)</b></p>	<p>2 FTEs (WDFW)  <b>Total:</b> \$222,500  \$ 22,500 GF-S (WDFW)  \$200,000 SRA (WDFW [\$50,000 SRFB grant])</p> <p>WDFW staffing plan consists of policy development, constituent collaborative planning meetings, and technical plan development and design.</p>
<p><b>Responsible Agency (ies)</b></p>	<p><b>Coordinated</b> effort with WDFW and Tribes co-lead. This effort will initially and primarily be focused at non-Indian fisheries and will entail WDFW establishing and convening constituent advisor groups (or subgroups of existing stakeholder forums). One or more Tribal representatives also will be invited to participate, and other field level interactions with the tribes will be pursued as appropriate to meeting joint management objectives. Some legislative involvement is also planned to help pave the way for any legislative changes that may be required to facilitate the investigations and implement resulting recommendations over the next six years.</p>

**Har-4.**

**Action:** Continue and expand commercial and recreational fishery monitoring to collect data on which catch estimates are based, to collect basic biological information used to determine stock demographics and distribution in fisheries, and to ensure that new fishing techniques are achieving the desired outcomes. Capture, handling, and collection of biological samples from ESA-listed species may require incidental take authorization under Sections 7, 10, or 4(d) ESA.

<b>Key Tasks</b>	<p><u>Bycatch</u></p> <ol style="list-style-type: none"> <li>1. Collect on-the-water data from recreational fisheries on the number of released coho, chinook chum and seabird species by Puget Sound recreational fishers, with an emphasis in the Strait of Juan de Fuca and the ocean.</li> <li>2. Collect on-the-water data in order to estimate the numerical incidence (and condition) of chinook, coho, chum, seabird and marine mammal species encountered and released in July, August and September purse seine fisheries directed at Fraser River pink and sockeye salmon (<i>note: due to updates on 1999 Fraser River sockeye abundance, little activity is expected in this area during the 1999 fishing season</i>).</li> <li>3. Collect chinook tissue samples from North Puget Sound sub-fishing-areas, from the Canadian border to south of the San Juan Islands; conduct genetic analysis on these samples to estimate the stock origin/composition of chinook</li> <li>4. Monitor the numerical incidence (and condition) of chinook, coho, chum, seabird and marine mammal species encountered and released in fall reef net fisheries in the Lummi/San Juan Island area.</li> </ol> <p><u>Dockside Sampling</u></p> <ol style="list-style-type: none"> <li>5. Continue comprehensive dockside sampling of non-Indian fishery landings to collect basic catch, effort, release and biological information on fish and seabirds from 1999 salmon fisheries - work with the treaty tribes to ensure that successful integrated sampling of both treaty and non-treaty fisheries occurs.</li> </ol>
<b>Output - work accomplished</b>	<ul style="list-style-type: none"> <li>- The 2000 plan is implemented.</li> <li>- Year 2001 dockside sampling plans developed.</li> <li>- Year 2001 on-water bycatch monitoring plans developed.</li> <li>- 100% of 1999 sampling and fishery monitoring objectives met where adequate resources are available.</li> <li>- 100% of year 2000 fisheries occur in compliance with ESA and pre-season North of Falcon agreements, signifying that adequate monitoring and evaluation is in place.</li> </ul>
<b>Timeline &amp; Key milestones</b>	<p>2000 activities to occur as fisheries progress. January-June 2001- Develop Year 2001 plans.</p>



<p><b>Staffing (FTEs) &amp; funding (\$ and sources)</b></p>	<p>37.7 FTEs (WDFW)  <b>Total:</b> \$3,158,884  \$1,254,600 GF-F (WDFW)  \$ 811,800 GF-S (WDFW)  \$ 50,000 SRA (WDFW - SRFB grant)  \$ 393,600 GF-P/L (WDFW)  \$ 648,884 Other - ALEA (WDFW)</p> <p>Existing dockside sampling programs occur in each of the regions through a variety of state, federal and local funding sources.</p>
<p><b>Responsible Agency (ies)</b></p>	<p><b>Coordinated</b> effort with WDFW and the Tribes co-lead. The bycatch monitoring work plans above reflect the intent to collaborate with the commercial and recreational fishing constituents and Tribal managers in design and conduct. Complementary funding sources include commercial fishing industry funding of a logbook program that will be verified by this activity and by the recreational boating industry through an agreement on research boat usage. North Puget Sound treaty Tribes and recreational fishers will help collect samples. Other, ongoing fishery monitoring programs are also closely coordinated with Tribal managers and industry to ensure their integrated success.</p>

**Har-5.**

**Action:** Continue non-Indian commercial salmon fleet license buyback.

<b>Key Tasks</b>	<p>WDFW will administer federal and state funds for buying back Puget Sound salmon licenses associated with the harvest of Canadian Fraser River sockeye.</p> <p>The reduction in allocation of U.S. non-Indian fishers under the newly re-negotiated annex to the Pacific Salmon Treaty provided for purchase of excess licenses.</p>
<b>Output-Work Accomplished</b>	<ul style="list-style-type: none"><li>- Eliminate excess fishing power in Washington's commercial fishing industry;</li><li>- Increase the profit margin per license holder for those remaining in the fishery; and</li><li>- Reduce threat of over-fishing on listed and critical wild salmon stocks.</li></ul> <p>Purse seines reduced by 71% to 81% from current 262 licenses Gill nets reduced by 64% to 82% from current 690 licenses. Reef nets reduced by 62% from current 39 licenses.</p>
<b>Time line &amp; Key milestones</b>	1999-2001 Biennium
<b>Staffing (FTEs) &amp; funding (\$ and sources)</b>	<p>6 FTEs (WDFW)</p> <p><b>Total:</b> \$8,300,610</p> <p>\$1,335,610 GF-S (WDFW)</p> <p>\$2,340,000 SRA (WDFW)</p> <p>\$4,625,000 GF-F (WDFW)</p>
<b>Responsible Agency (ies)</b>	<p><b>Coordinated</b> effort with WDFW lead. WDFW has administered the last three license buyback programs authorized under the federal Magnusen Act. The department works closely with NMFS to structure the rules of the buyback process. Meetings are held with representatives of the commercial fishing industry to obtain their input on how the license buyback will best meet their goals and those of the state.</p>

**Har-6.**

**Action:** ESA compliance for WDFW harvest and science/research activities.

**Key Tasks**

Harvest: The take of ESA-listed species in WDFW-managed fisheries must be authorized by NMFS/USF&WS. Currently, harvest is, or will be, authorized in the following manner:

- Section 10 Incidental Take Permits.
- Section 7 Consultation.
- Section 4(d) take exemption.

FMEP: Fishery Management and Evaluation Plans will be developed for all WDFW-managed sport fisheries not covered by Section 10 incidental take permits. These are expected to include all sport fisheries directed on steelhead and salmon, resident fish (trout, warmwater, whitefish, sturgeon, smelt, etc.) in the Lower Columbia, Middle Columbia, Snake River, and Puget Sound "Recovery Regions".

Note that freshwater salmon fisheries in Puget Sound are covered under PFMC/North-of-Falcon assessments and federal Section 7 biological opinions.

Research/Monitoring:

Section 10 Permits:

- Bonneville Dam Research (Vancouver WDFW Office)
- Rock Island Bypass steelhead and spring chinook studies
- Tucannon River Research
- Upper Columbia Spring Chinook Research/Assessment
- Upper Columbia Steelhead direct take Assessment (Hanford Reach)

Section 4(d) take exemption:

- Detailed Research Statement for all WDFW research/monitoring will be developed and provided to NMFS by October, 2000 to address June, 2000 final 4(d) rule for 9 threatened salmon and steelhead ESUs.

Section 6 Cooperative Agreement:

- Detailed Research Statement for all WDFW research/monitoring, as well as handling at hatchery traps, developed and provided to USF&WS for 2 threatened Bull Trout DPSs.

<p><b>Output-Work Accomplished</b></p>	<p>Section 10 Incidental Take Permits and annual reports covering:</p> <ul style="list-style-type: none"> <li>- Upper Columbia River Basin – Resident Trout, Warmwater, Whitefish, Summer/Fall Chinook sport fisheries;</li> <li>- Mainstem Columbia River - salmon/steelhead sport, commercial salmon/sturgeon, select-area fall commercial salmon, select-area sport, fall selective gear test, recreational sturgeon, recreational warmwater, Wanapum Tribal subsistence fishery, Ringold steelhead sport fishery, smelt commercial/test, sturgeon tagging stock assessment, tributary salmon/steelhead sport (2000 only), miscellaneous.</li> </ul> <p>Section 7 Incidental Take Statements and annual reports covering:</p> <ul style="list-style-type: none"> <li>- Commercial and recreational Puget Sound marine and freshwater salmon fisheries – covered under PFMC Section 7 consultation and Biological Opinion.</li> <li>- Ocean sport and troll salmon fisheries - covered under PFMC Section 7 consultation and Biological Opinion.</li> <li>- Ocean “Groundfish” – covered under PFMC Section 7 consultation and Biological Opinion.</li> <li>- Snake River Basin Biological Assessment - Snake, Tucannon, and Grande Ronde sport steelhead (Year 2000 only).</li> </ul> <p>WDFW-managed fisheries, in effect at the time of listing (November, 1999) are exempted from take prohibitions as regards Columbia Basin and Coastal/Puget Sound Bull Trout.</p> <p>Fishery Management and Evaluation Plans - FMEP - (expected 4) Research/Assessment - annual reports, research/monitoring statement for 9 threatened steelhead/salmon ESUs, and research/monitoring statement for 2 threatened bull trout DPSs and annual reports</p>
<p><b>Time line &amp; Key milestones</b></p>	<p>Schedule varies according to Permit Requirements:</p> <p>January 31 Annual Reporting Dates for Most Section 10 Permits.</p> <p>June 30 Annual Reporting Requirement for Bull Trout Section 6 Takes.</p> <p>October 1 Expected Completion Date for FMEPs (4d); Research Statement 4(d).</p> <p>October 31 - Re-apply for annual Columbia River Fishery Section 10 Permits.</p>
<p><b>Staffing (FTEs) &amp; funding (\$ and sources)</b></p>	<p>3.5 FTEs (WDFW)</p> <p><b>Total:</b> \$455,000</p> <p>\$455,000 GF-S (WDFW)</p>
<p><b>Responsible Agency (ies)</b></p>	<p><b>Coordinated</b> effort with WDFW lead. WDFW is responsible for providing annual (and other) take reports to NMFS and USFWS and obtaining the appropriate take authorizations (Section 10 Permits, 4(d) exemptions [FMEPs, HGMPs, etc.]). WDFW will ensure that FMEPs are reviewed by Tribes, per NMFS Draft FMEP Template.</p>