

8. COMMISSION POLICY ON HATCHERY AND FISHERY REFORM – DECISION:

TABLE OF CONTENTS

	Page
Decision Page (Green Sheet)	1 of 58
Commission Request (Blue Sheet)	3 of 58
Public Comments with WDFW Responses	5 of 58

“GREEN SHEET”

Meeting dates: July 10-11, 2009

Agenda item: #8 Commission Policy on Hatchery and Fishery Reform – Decision:

Staff Contacts: Andy Appleby, Hatchery Reform Coordinator, Fish Program (lead)
Sara Laborde, Special Assistant to the Director, Director’s Office
Heather Bartlett, Salmon and Steelhead Resources Division Manager, Fish Program

Presenters: Andy Appleby, Hatchery Reform Coordinator, Fish Program (lead)
Sara Laborde, Special Assistant to the Director, Director’s Office
Heather Bartlett, Salmon and Steelhead Resources Division Manager, Fish Program

Background:

This action request is the result of the Commission’s March 6, 2009, request to the Department for developing a draft Commission policy on hatchery reform (see attached “blue sheet”).

Hatchery reform has been an ongoing initiative in Puget Sound and Coastal Washington state for several years. The Department has embraced hatchery reform as a means to achieving salmon recovery while maintaining economically important harvest opportunities. In 2000, Congress formed the Hatchery Scientific Review Group (HSRG) – an expert panel of independent scientists funded by federal dollars – to study salmon and steelhead populations in Puget Sound/Coastal Washington and the Columbia River Basin. Many WDFW staff scientists participated in the HSRG review. The Department believes that production at levels similar to today can be maintained at most facilities and at the same time provide protection for wild fish and the recovery of wild stocks. Hatchery and harvest reform are critical to sustaining healthy fisheries and the future of fishing in the state of Washington.

Conclusions from the 2007 HSRG Progress Report to Congress indicate that, if properly-managed, hatcheries can provide significant benefits to the citizens of Washington. If managed improperly, they can confound efforts to rebuild wild salmon populations and undermine efforts to recover wild fish.

Columbia River hatcheries operated by the states and/or USFWS receive funding from the National Marine Fisheries Service (NMFS). Hatcheries must be reformed consistent with the HSRG recommendations in order to continue receiving federal money, and Washington’s lower river and coastal fisheries depend on those dollars to operate.

Department staff presented a draft proposed policy at the May 8-9, 2009, Commission meeting in Olympia, at which time commissioners suggested various changes and additions. The resulting changes were incorporated into the second draft presented to the Commissioners during the June 5-6 meeting. The Commission also heard public testimony on the draft policy during that meeting.

Department staff will present the Commission with the latest DRAFT (**Version 3, available Monday July 6**) Hatchery and Fishery Reform Policy (C-3619), and identify changes based on input received since the May 8-9, 2009 meeting.

Policy issue(s) you are bringing to the Commission for consideration:

A Commission policy on hatchery and fishery reform will provide guidance and support for the Department’s implementation of HSRG recommendations by clearly stating the Commission’s commitment to long-term hatchery and sustainable fishery strategies.

Public involvement process used and what you learned:

Comments on the draft policy have been sought from the public through various methods. Following the May 8-9, 2009, Commission meeting in Olympia, the updated DRAFT 2 Commission Policy on Hatchery and Fishery Reform (C-3619) was posted on the Department's web site at <http://wdfw.wa.gov/fish/management/hatcheries.html> , along with web links to related information such as:

- Fish and Wildlife Commission's January 2009 Report to Governor
- Hatchery Scientific Review Group (HSRG) reports
- 21st Century Salmon Initiative

The proposal was also posted on the Commission's web page <<http://wdfw.wa.gov/commission/>> and a news release issued on May 13, 2009 was widely distributed (available to view on the Internet at: <http://wdfw.wa.gov/do/newreal/release.php?id=may1309a>).

WDFW citizen advisory groups were notified about the draft policy and members were encouraged to provide comments. Department staff announced the comment opportunity during fisheries related advisory committee meetings.

Written and oral comments were received and summarized (see Public Comments and WDFW Responses 6/15/09) and the Draft 3 Policy was modified to reflect many of those comments.

Action requested:

Staff requests the Commission consider adoption of a Hatchery and Fishery Reform Policy.

Draft motion language:

Move to adopt Hatchery and Fishery Reform Policy (C-3619)

Justification for Commission action:

As the governing body for the Department of Fish and Wildlife, the Commission establishes policies to preserve, protect and perpetuate wildlife, fish, and wildlife and fish habitat (RCW 77.04.055, Commission - Duties).

Communications Plan:

Following the Commission approval, Commission Policy C-3619 will be circulated to Department staff, distributed to the public and posted on the Department's website.

Form revised 10/16/2008 – sdy

COMMISSION REQUEST TO DEPARTMENT

a.k.a. "Blue Sheet"

Title of Request: COMMISSION POLICY ON HATCHERY REFORM

Commissioner: MAHNKEN

Priority Level (put one check in each row):

Importance: High Medium Low

Urgency: High Medium Low

Date Requested: March 6, 2009 **Date Assigned:** March 10, 2009
[Dep. Director use]

Assigned To (Program/staff person): Fish Program, with IRM
[Dep. Director use]

Requested Due Date: May 8-9, 2009, Commission Meeting

Knowledge or Action Being Requested (narrative). Describe what you want to know. Be specific.

With Department staff input, develop a DRAFT Commission Policy on hatchery reform, using selective fisheries as a primary harvest management tool to protect and recover natural populations.

Output Requested (e.g., telephone call, memo, material from files, new report, presentation, other):

Briefing at the May 8-9, 2009, Commission meeting, along with DRAFT policy for Commission consideration.

WDFW

Public Comments And WDFW Responses

Draft Hatchery and Fishery Reform Policy C3619

Compiled by Andy Appleby
WDFW
Hatcheries Division
6/15/2009

Comments have been received from 25 individuals and or organizations and are placed here in the order received.

Written Public Comment Received on Draft hatchery and Fishery Reform Policy

- Comment 1)...Bruce Padgett**
- Comment 2)...Brett Wedeking**
- Comment 3)...Stuart Turner**
- Comment 4)...Native Fish Society**
- Comment 5)...Gary Johnson**
- Comment 6)...Wild Salmon Rivers**
- Comment 7)...Curt Kraemer**
- Comment 8)...Michael Genson**
- Comment 9)...Schuyler Dunphy**
- Comment 10)...David Neault**
- Comment 11)...Scott Rockey**
- Comment 12)...William Atlas**
- Comment 13)...Ryan Nathe**
- Comment 14)...Hatchery Scientific Review Group**
- Comment 15)...Salmon For All**
- Comment 16)...Bryan Townley**
- Comment 17)...Erik Lesko**
- Comment 18)...Friends of Issaquah Salmon Hatchery**
- Comment 19)...Randolph Harrison**
- Comment 20)...P. S. Rec. Fisheries Enhancement Oversight Committee**
- Comment 21)...Ray Pfliger**
- Comment 22)...Coastal Conservation Association**
- Comment 23)...Wild Steelhead Coalition**
- Comment 24)...Regional Salmon Recovery Boards (via WDFW staff)**
- Comment 25)...Confederated Tribes of the Umatilla Indian Reservation**

Comments Received At June Commission Meeting:

PUBLIC TESTIMONY:

1. Clint Muns, Shelton WA; PSRFE (*h/o*) –See **WDFW Response to Comment #20**
2. Lee Blankenship, ; HSRG- **See WDFW Response to Comment #14**
3. John Barr, Olympia WA; HSRG- **See WDFW Response to Comment #14**
4. Mark Cedergren, Westport Charter Boat Association
 - a) general support for policy
 - b) thinks MSF are effective
 - c) increase speed of implementation
5. Ed Wickersham, Vancouver WA; CCA (*h/o*)- **See WDFW Response to Comment #22**
6. Hobe Kytr, Salmon For All- **See WDFW Response to Comment #15**

7. Jim Wells, Salmon For All- **See WDFW Response to Comment #15**
8. Irene Martin, Skamokawa WA.-- **See WDFW Response to Comment #15**
 - a) careful approach to commercial selective gear
 - b) will take redesign and retesting
 - c) funding will be needed

Written Comment Summary:

Following is an attempt to group the Comments or parts of Comments received into categories for ease of comprehension:

- 1) Need for Wild Salmon Management Zones: --Comment 4, 9, 12, 23
- 2) Need to mark all the hatchery fish—Comment 3, 4, 5, 6, 10, 11, 20
- 3) Increase rather than limit hatchery production-Comment 1, 8, 11, 18, 19, 21,
- 4) Increase speed of implementation- Comment 14, 20, 22, Public Testimony number 1,2,3,4, 5
- 5) Decrease speed of implementation-Comment 15, Public Testimony number 6, 7, 8
- 6) Include brood stock guidelines for all population designations (both PNI, pHOS) -Comment 14, 22, 25

Balance of Comments or parts of Comments related to:

- 1) Increased monitoring for compliance with policy.
- 2) More specificity in policy language covering standards for PNI, pHOS.
- 3) Closure of hatcheries that cannot meet HSRG standards.
- 4) Need for "Cost effective" standards for hatchery operation.
- 5) Need for more Nutrient Enhancement projects.

Comment 1)

From: Bruce Padgett

Sent: Wednesday, May 13, 2009 2:58 PM

To: Commission (DFW)

Subject: Hatchery draft

I feel that your draft is wrong and that this state is wrong about the hatchery's and personal run them. I worked at a hatchery for nine months and what you all have planned is not for the good of the fish or anybody else, as long as the State personal in Olympia sit on there butts and do not none how to run hatchery or care for fish, except out of a book. Most State bios have no clue on how to care for fish either. I believe that the State wants to close most of the Hatchery's? I would also like to say that commercial fishing should not be allowed above Astoria Bridge! The Cowlitz Indians should be allowed to take over some hatchery's, because this State can not do it right.

Thank You

Bruce Padgett

WDFW Response: Comment noted. While we are making every effort to maintain sustainable recreational and commercial fisheries, the requirements of the Endangered Species Act (ESA) do require consideration to be given to natural populations of salmon and steelhead. This will require changes in the way we operate our facilities or we run the risk of having to drastically reduce the number of salmon and steelhead we release each year. The intent of this policy is to operate our hatcheries in a way that reduces the impact on natural fish to aid in their recovery while at the same time providing for fisheries.

Comment 2)

From: Brett Wedeking

Sent: Wednesday, May 13, 2009 3:59 PM

To: Commission (DFW)

Subject: Re: Public comments sought on proposed hatchery and fishery reform policy

Dear Commission,

I just received an email from WDFW concerning hatchery reform in Washington. I am a steelhead and salmon angler and I generally support the notion of fewer hatchery fish plants and returning river systems to wild only runs. However, I also support continued angling opportunities and common sense. There are plenty of watersheds and river systems that would benefit from eliminating hatchery production completely. The Sauk/Skagit and Hoh rivers come to mind as examples. They actually have wild steelhead and salmon runs left to save and have generally intact watersheds with spawning habitat. Please, stop planting hatchery fish in those systems and others like them, stop allowing the harvest of any wild salmon or steelhead and stop netting anywhere near the mouths of these rivers. Let the fish have a chance to recover. Even close them to all angling/netting for a few years and see what happens.

However, there are rivers that are pretty much lost causes. My home water, the Snoqualmie river, is pretty much a lost cause below the falls. There are at least half a dozen of golf courses along it pumping in fertilizer, thousands of homes, highways with water run off and the river has been channelized in many places. Suitable spawning habitat is minimal and the fish runs are struggling. Traditionally WDFW has planted hatchery steelhead in the Snoqualmie that provide angling opportunity almost every month the river is open but in a misguided attempt to restore steelhead populations WDFW is planning on eliminating the river's hatchery plants. The native, winter run of steelhead is in bad shape, if it still exists at all and WDFW is proposing the elimination of winter hatchery plants. That I can understand, kind of because there actually was a run of native, winter steelhead historically. My major problem with the hatchery reform plan as it applies to this river is that there were never any native summer run steelhead that returned up river of the Tolt. The hatchery steelhead though run all the way to the falls and. Now WDFW is trying to eliminate them and close the Tokul Creek hatchery in a supposed effort to help wild steelhead. Do you see the problem? There never were summer steelhead above the Tolt until we put them there! So there's no reason to stop planting hatchery summer steelhead. Let us fish!

And, what's even better is WDFW, to mitigate angling opportunity, proposed to increase hatchery production on the Skykomish river so anglers could catch more fish there. Now what's wrong with this? Well, why is it bad for the Snoqualmie to have hatchery fish but okay for the Skykomish? Shouldn't it be the opposite? The Skykomish is a much more intact watershed with miles and miles more spawning habitat and more wild fish returning. The Snoqualmie, remember, is kind of a ditch. The plan doesn't make any sense, at all. So why on earth would WDFW propose further screwing up a fairly intact watershed and saving a destroyed one? I don't get it.

If WDFW wants to save salmon and steelhead runs they need to identify the viable ones worth saving and do it. Severely restrict angling and netting anywhere near these waters. And take rivers like the Snoqualmie and as another example, the Cowlitz, and pump them full of hatchery fish to give anglers more opportunity to fish while leaving other runs alone. This way more people are happy and WDFW would actually be doing something proactive and real to save endangered runs. It's not complicated we just need action.

Thank you,

Brett Wedeking

WDFW Response: Intent of draft policy is to do just this. Through the Hatchery Action Implementation Plan process , (as described in the 21st Century Salmon and Steelhead Framework), watersheds of high (Primary) importance for conservation and recovery (Item 4 under Policy guidelines), medium (Contributing) importance and Low (Stabilizing) importance will be identified. Hatchery and Fishery reform will be implemented in a structured approach (as described in the Plans) to meet the recovery needs (high, medium, low) of each population. Those populations with medium or low importance to recovery can be used to support sustainable fisheries.

Comment 3)

From: Stuart Turner

Sent: Wednesday, May 13, 2009 7:41 PM

To: Commission (DFW)

Subject: Comments: Proposed hatchery and Fishery Reform Policies

To whom it may concern:

If the intent of the regulations is truly to get more selective opportunities to harvest abundant hatchery fish, then there MUST be an ABSOLUTE policy that ALL HATCHERY FISH ARE IN FACT MARKED WITH ADIPOSE FIN REMOVAL. As I have several good friends "in the business" I am aware that there have been large numbers of "Hatchery" fish that have not been marked/fin clipped in the past. The only way a "Selective" fishery will work is with the full cooperation of ALL PARTIES, including the tribes. Since this is like all regulations, basically self enforced, self compliance (fewer than 1% of all fisher persons are checked annually by enforcement) you must have the full goodwill and confidence of the public on this key issue.

MARK ALL THE FISH FROM HATCHERIES ALL THE TIME NO EXCEPTIONS.

People are not fools. If you try to play them, they will throw every fish caught in the icebox in retaliation, and pay the occasional fine when caught.

The real downside of this entire proposal is the complexity of the regulations is getting to the point where even a college graduate may have a hard time reading and keep up with the regs....The more complex it gets, to a degree, the lower participation from the general public. I prefer area regs that are CONCISE and CLEAR....use the email system for emergency closure when the predetermined harvest is reached.

One final point, I think there are more harvestable sea run cutts in Puget Sound than the current, and indeed now long standing NO HARVEST policy would indicate. I am for a short "keep" season, even with a slot limit or annual 3-5 fish limit. This is a resource not being fully and fairly utilized but the long term CAR fishery now in place.

Thank you for your consideration of my comments to the proposals.

Stuart Turner

WDFW Response: Currently 100% of the steelhead, 100% of the coho and 93% of the Chinook produced by WDFW/Tribal hatcheries that are intended to be marked are being marked.

The recently signed U.S vs. Oregon agreement, which governs hatchery production in the area of the Columbia River above Bonneville Dam, outlines not only hatchery production (see production tables in back of document), but also stipulates the marking/tagging protocols agreed to for each group of fish. This document is court ordered (similar to the Puget Sound Management Plan that came from the 1974 "Bolt" decision) but resulted from a different court case covering the Columbia River.

The MOA referred to is with the Tulalip tribe covering tribal Chinook and coho production in the Snohomish system. Mass-marking was agreed to be phased in with 100% ad clipping beginning in 2011 (80% clipping in 2009).

There are two other groups of fish that may be excluded from "marking", meaning not having an adipose fin clipped, and would be considered part of the referenced item. These

groups have caused much confusion for some folks. Both the state and federal laws describing the requirement to "mass-mark" fish recognize these needs.

1) Recovery-- Groups of fish that are being produced for recovery. Even the hatchery component of these stocks needs as much protection as we can give them (including protection from mark selective fisheries) because there are so few of them, consequently, they are not fin clipped. They do, however, receive a coded wire tag (CWT) so they can be recognized at the hatchery or on the spawning grounds when encountered. Examples would be Nooksack, Dungeness and White River spring Chinook.

2) Double Index Tag Groups- (DITs) In order to maintain the usability of the coded-wire tag system as a means of estimating mortality on natural populations with the advent of mark selective fishing (MSF), a method was needed to allow hatchery fish to mimic the harvest mortality suffered by wild fish. Prior to the wide spread use of MSF, the normal practice of clipping and tagging hatchery fish provided this information. However, with the increase use of MSF, the hatchery clipped/tagged group no longer represents the wild populations (wild fish do not get harvested in MSF). To overcome this, the Double index tag (DIT) group was developed and its use agreed to by the tribes, and other coast wide salmon managers (other state and federal governments). DITs are groups of hatchery fish that receive a CWT but not an adipose fin clip. When these fish return and get sampled, at either the hatchery or on the spawning grounds, (requires electronic detection), estimates can be made on the impacts of MSF on wild populations that get caught and released. There are a number of these DIT groups released from hatcheries in western WA (can be either state or tribal hatchery production) and while the number of fish is not large relative to the total hatchery production, DIT groups are produced in most major watersheds and with both coho and Chinook. The size of DIT groups range from 45,000 smolts for coho to 200,000 smolts for Chinook. This is on the order of 10% of the production from selected hatcheries that have a DIT group as part of their operations, but equals much less than 10% for hatchery production in western WA (many hatcheries do not have DIT groups as part of their tagging protocols).

Information on fish marking for groups 1 and 2, above can be found on our website, in the Future Brood Document, at the following web site. Look in the footnotes that come with each hatcheries production:

<http://wdfw.wa.gov/fish/management/hatcheries.html>

Comment 4)

Native Fish Society

Conserving biological diversity of native fish and protecting their habitats

May 18, 2009

Washington Department of Fish and Wildlife Commission
600 Capitol Way North,
Olympia, WA 98501-1091

RE: COMMENTS ON THE WDFW DRAFT 2 HATCHERY POLICY

The following is a copy of the WDFW Draft Hatchery Policy and I have added language to this policy and deleted some original language in the process. The purpose is to develop a policy that is more specific while being consistent with the intent of the policy to serve a conservation purpose. All of my additions are in red type.

Definition and Intent

Hatchery reform is the scientific and systematic redesign of hatchery programs to help recover wild salmon and support sustainable fisheries. The **primary purpose** of hatchery reform is to **establish objectives for each hatchery that protects native wild salmonid reproductive fitness, controls ecological impacts, and maintains their reproductive success. Consistent with this primary purpose,** improve hatchery effectiveness, ensure compatibility between hatchery production and salmon rebuilding programs, and support **cost effective** fisheries.

Note: By cost effective I am referring to the cost to produce a fish in the harvest. The Independent Economic Advisory Board for the Power Planning Council evaluated selected hatcheries in the Columbia River from the lower river to the upper river. I add this because the public pays for hatchery production yet there is seldom a transparent cost to catch accounting provided to show the effectiveness of the public funds used to subsidize the various fisheries. This report can be found at: http://www.nwcouncil.org/library/ieab/ieab2002-1_part2.pdf

WDFW Response: Comment noted.

General Policy Statement

The Washington Department of Fish and Wildlife (Department) shall promote the conservation and recovery of wild salmon and steelhead and **then** provide fishery-related benefits by implementing artificial production programs with the following characteristics:

Conservation Programs. All artificial production shall provide each wild salmonid population in each watershed the necessary diversity, spatial structure, productivity, and abundance of the target wild population.

Harvest Programs. Artificial production programs implemented to enhance harvest opportunities shall provide cost effective fishery benefits while ensuring watershed specific goals for the diversity, spatial structure, productivity, and abundance of wild populations to be met annually.

WDFW Response: Intent of draft policy is to do just this. Through the Hatchery Action Implementation Plan process , (as described in the 21st Century Salmon and Steelhead Framework), watersheds of high (Primary) importance for conservation and recovery (Item 4 under Policy guidelines), medium (Contributing) importance and Low (Stabilizing) importance will be identified. Hatchery and Fishery reform will be implemented in a structured approach (as described in the Plans) to meet the recovery needs (high, medium, low) of each population. Those populations with medium or low importance to recovery can be used to support sustainable fisheries.

Commercial and recreational fisheries shall harvest abundant hatchery fish. The Department shall implement mark selective salmon and steelhead fisheries, unless the wild populations affected by the fishery are meeting spawner and broodstock objectives. Compliance monitoring shall be conducted annually and adjustments made in the next year for any deficits in achieving objectives.

WDFW Response: Comment noted.

In addition, the Department may consider other management approaches provided they are as or more effective than a mark selective fishery in achieving spawner and broodstock management objectives.

2) Use the principles, standards, and recommendations of the Hatchery Scientific Review Group (HSRG) as the standard by which the management of hatcheries by the Department shall be operated consistent with the ESA, and protective of other wild native salmonids

WDFW Response: Comment noted. We believe this is implied in the policy, (Policy Guidelines Item 2."Use the principals, standards, and recommendations of the Hatchery Scientific Review group (HSRG) to guide the management of hatcheries operated by the Department.")

3) The Department shall prioritize improved broodstock management to reduce the impacts of hatchery fish to specific levels for each affected wild population and achieve specific fitness and viability objectives for each wild natural population.

4) The Department shall designate streams for the exclusive management for wild salmonids in each region. These watersheds and species shall be managed to protect the abundance, productivity, spatial diversity and biological diversity of wild native salmonids. In rivers where hatchery fish of one species is released does not preclude the management of other species under the wild salmonid policy. For example Wind River summer steelhead are managed as a genetic reserve even though hatchery spring chinook are released into this river.

WDFW Response: The addition of "Wild Salmon Management Zones" has been recommended by others. This concept is consistent with both the Hatchery Scientific Review Groups (HSRG) recommendations and the Statewide Steelhead Management Plan as adopted by the Fish and Wildlife Commission.

Develop an action plan that systematically implements hatchery reform as part of a comprehensive, integrated (All-H) plan for meeting **recovery**, conservation and harvest **objectives** at the **population, (a population is an indigenous species locally adapted to the watershed)** watershed and Evolutionarily Significant Unit (ESU) levels, including an action plan that systematically implements hatchery reform. For programs affecting the wild populations and recovery, the plan will include goals with the following elements:

a) Integrated programs implemented to enhance harvest opportunities (i.e., integrated harvest program) (**what is an integrated harvest program?**) will achieve a proportionate natural influence (PNI) equal to or greater than 0.70 (**explain the concervation value of this metric**) on average, use hatchery practices that reduce the risks of domestication **that meet specific criteria**, and use broodstock that is indigenous to the watershed.

Note: **spawner abundance for each wild population reported annually against spawner abundance objectives is the best way to determine whether the agency policy is being achieved. The ratio of hatchery to wild spawners in natural production areas must be determined annually so that the public and others can determine whether the objective of naturally spawning hatchery fish has been achieved. According to recent research, the proportion of naturally spawning hatchery fish is equal to the reduction in wild spawner reproductive success (Mark Chilcote, ODFW, personal communication). The goal should be zero naturally spawning hatchery fish. If there are naturally spawning hatchery fish the agency shall prevent naturally spawning hatchery fish in the next year. The HSRG views PNI as a way to reduce impacts if there are naturally spawning hatchery fish with wild fish. It is not the intent of HSRG to manage for a specific fraction of naturally spawning hatchery fish. The Department should adopt specific criteria for allowing a hatchery fraction to spawn naturally with wild fish. The effect shall be evaluated and based on findings adaptive management used to make management adjustments.**

WDFW Response: We believe this is implied in the policy, (Policy Guidelines Item 2."Use the principals, standards, and recommendations of the Hatchery Scientific Review group (HSRG) to guide the management of hatcheries operated by the Department.")

b) Segregated programs implemented to enhance harvest opportunities (i.e., segregated harvest program) will result in an average gene flow of less than 2% from the hatchery to the wild population.

Note: The agency cannot measure gene flow in a timely manner so this rule provides no conservation advantage. The rule should read that segregated harvest programs shall prevent naturally spawning hatchery fish in target and non-target rivers with the purpose of allowing no hatchery fish to spawn naturally with wild fish.

Both sections (a) and (b) place the burden of risk from the hatchery program on the wild populations. It is time that the burden of risk not be placed on wild salmonids but on the artificial production program to verify it is reducing the reproductive success and productivity of wild native salmonids.

WDFW Response: We believe this is implied in the policy, (Policy Guidelines Item 2."Use the principals, standards, and recommendations of the Hatchery Scientific Review group (HSRG) to guide the management of hatcheries operated by the Department.")

c) Integrated conservation programs will be implemented to minimize genetic divergence between the hatchery broodstock and the wild population and to maximize PNI (ideally at least 0.70). (Delete the escape clause:) However, PNI in the initial stages of the program will depend on the degree extinction risk and logistical challenges with the goal of the PNI being as high as practical.

Note: Again let me state the purpose of HSRG is to minimize impacts on wild populations from naturally spawning hatchery fish not to allow a certain fraction of the naturally spawning fish to be of hatchery origin. The purpose of PNI is to make sure that if hatchery fish do spawn naturally, they will do less harm. The purpose is to prevent naturally spawning hatchery fish and harm to wild native salmonids.

WDFW Response: The intent of this section is to acknowledge that in the beginning of a hatchery operation that is designed for recovery, the primary goal is to preserve a specific stock and its genetic legacy to avoid extinction. It is understood that there are so few natural fish left that preserving the genetic material will be the first priority. While PNI should be considered, managing for a high PNI may not be possible. It is an attempt to balance the genetic risks (of extinction) with the risk of domestication. (See HSRG final reports on Wenatchee, Methow Spring Chinook for similar language).

5) Externally mark all artificial salmon and steelhead production that is intended to be used for harvest unless the production is explicitly excluded through state tribal agreements signed by the Director and the appropriate tribal government(s). **Federal**

law passed by Norm Dicks instructs fish raised in federal hatcheries to clip all hatchery fish even when those hatcheries are operated by WDFW. How is this in compliance with federal law?

WDFW Response: see response to Comment 3, 10.

Sincerely,
Bill M. Bakke

Comment 5)

Dear WDFW,

I am concerned and troubled by a hatchery practice over the years that has left our river systems and watershed sterile from nutrients provided by fish carcasses. Many of my friends are aware of the practice of the state hatcheries selling the fish that is processed at hatchery to outside company's in Canada. More of the public needs to be aware of this problem and were there tax dollars are going.

These fish are paid for by State taxpayers and they should not be sold off to outside interests. Our river systems suffer greatly from this practice as well as our fisheries. Many studies have been done to confirm this issue. This subject has also been brought to WDFW on more than one occasion.

Will we see changes in this practice as part of Hatchery Reform? Bais Biology 101

I look forward to your response and follow up through email and NOF meetings.

Gary L Johnson

WDFW Response: We agree there is a need for additional nutrient enhancement. Currently (2008) WDFW hatcheries, through the help of many volunteers (both organizations and individuals), distribute over 120,000 salmon carcasses back into watersheds around the state to add nutrients to our streams. In addition, over 150,000 salmon (all species) were returned to the stream alive statewide to complete their life cycle and provide fisheries, adding more nutrients to the watersheds. We currently have under way an initiative to develop analogs (processed carcasses), made from salmon and other fish species that will greatly enhance our ability to returns marine derived nutrients back into our watershed. The analogs are pasteurized during the manufacturing process, which greatly reduces the potential for spreading disease. It is hoped that this will allow for a much broader use of this concept.

It is also important to point out that the selling of excess salmon carcasses has been greatly reduced over the past 5 years. We now donate the vast majority of food quality salmon carcasses to food banks (both local and state-wide). In 2008 over 220,000 salmon carcasses

(all species) were handled in this way. We hope to incorporate the unusable carcasses and fish by-products from the food bank program to supply the raw material for making analogs.

Comment 6)

WDFW DRAFT 2 HATCHERY POLICY

Comments

By

Wild Salmon Rivers

Peter W. Soverel

May 20, 2009

See Wild Salmon Rivers comments below in red on the WDFW Draft 2 of Hatchery Policy

Definition and Intent

Hatchery reform is the scientific and systematic redesign of hatchery programs to help recover wild salmon and support sustainable fisheries. The **primary purpose** of hatchery reform is to **establish objectives for each hatchery that protects native wild salmonid reproductive fitness, controls ecological impacts, and maintains their reproductive success.** Consistent with the **primary purpose** improve hatchery effectiveness, ensure compatibility between hatchery production and salmon rebuilding programs, and support **cost effective** fisheries.

General Policy Statement

The Washington Department of Fish and Wildlife (Department) shall promote the conservation and recovery of wild salmon and steelhead and **then** provide fishery-related benefits by implementing artificial production programs with the following characteristics:

Conservation Programs. **All** artificial production shall **provide each wild salmonid population in each watershed the necessary** diversity, spatial structure, productivity, and abundance of the target wild population.

Harvest Programs. Artificial production programs implemented to enhance harvest opportunities shall provide **cost effective** fishery benefits while **ensuring** watershed specific goals for the diversity, spatial structure, productivity, and abundance of wild populations to be met **annually**.

WDFW Response: Intent of draft policy is to do just this. Through the Hatchery Action Implementation Plan process , (as described in the 21st Century Salmon and Steelhead Framework), watersheds of high (Primary) importance for conservation and recovery (Item 4 under Policy guidelines), medium (Contributing) importance and Low (Stabilizing) importance will be identified. Hatchery and Fishery reform will be implemented in a structured approach (as described in the Plans) to meet the recovery needs (high, medium, low) of each population. Those populations with medium or low importance to recovery can be used to support sustainable fisheries.

Commercial and recreational fisheries shall harvest abundant hatchery fish. The Department shall implement mark selective salmon and steelhead fisheries, unless the wild populations affected by the fishery are meeting spawner and broodstock objectives. The Department shall conduct compliance monitoring annually and adjust practices for the next year for any deficits in achieving objectives.

WDFW Response: Comment noted.

In addition, the Department may consider other management approaches provided they are as or more effective than a mark selective fishery in achieving spawner and broodstock management objectives.

2) Use the principles, standards, and recommendations of the Hatchery Scientific Review Group (HSRG) as the standard by which the management of hatcheries by the Department shall be operated consistent with the ESA.

WDFW Response: Comment noted. We believe this is implied in the policy, (Policy Guidelines Item 2."Use the principals, standards, and recommendations of the Hatchery Scientific Review group (HSRG) to guide the management of hatcheries operated by the Department.")

3) The Department shall prioritize improved broodstock management to reduce the impacts of hatchery fish to specific levels for each affected wild population and achieve specific fitness and viability objectives for each wild natural population.

Develop an action plan that systematically implements hatchery reform as part of a comprehensive, integrated (All-H) plan for meeting recovery, conservation and harvest objectives at the population, watershed and Evolutionarily Significant Unit (ESU) levels, including an action plan that systematically implements hatchery reform. For programs affecting the wild populations and recovery, the plan will include goals with the following elements:

a) Integrated programs implemented to enhance harvest opportunities (i.e. integrated harvest program) that will achieve a proportionate natural influence (PNI) equal to or greater than 0.70 based upon a running five year average, use hatchery practices that reduce the risks of domestication that meet specific criteria, and use broodstock that is indigenous to the watershed.

The Department shall measure spawner abundance and source (i.e. wild or hatchery origin) for each wild population annually against wild spawner abundance objectives to determine whether the objective of naturally spawning hatchery fish has been achieved. The hatchery program shall be managed with the goal of zero naturally spawning hatchery fish. If there are naturally spawning hatchery fish, the agency shall develop practices to prevent naturally spawning hatchery fish in the year class. NOTE: The HSRG uses PNI as a way to measure the impacts of naturally spawning hatchery fish with wild fish. The HSRG does not propose to manage to a specific fraction of naturally spawning hatchery fish. The current WDFW formulation of PNI is upside down placing the risk on wild populations rather than avoiding that risk.

WDFW response: Comment noted.

b) Segregated programs implemented to enhance harvest opportunities (i.e. segregated harvest program) will result in an average gene flow of less than 2% from the hatchery to the wild population.

Since the agency cannot measure gene flow in a timely manner, the rule should specify that segregated harvest programs shall prevent any naturally spawning hatchery fish in target and non-target rivers.

c) Integrated conservation programs will be implemented to minimize genetic divergence between the hatchery broodstock and the wild population and to maximize PNI (ideally at least 0.70). However, PNI in the initial stages of the program will depend on the degree extinction risk and logistical challenges with the goal of the PNI being as high as practical.

d.) Conduct annual reviews of all hatchery programs against the above described objectives adjusting practices to insure these programs are meeting the stated goals. The Department shall terminate those programs which fail to meet goals for any three consecutive years.

WDFW Response: Comment noted.

5) Externally mark all artificial salmon and steelhead production that is intended to be used for harvest unless the production is explicitly excluded through state tribal agreements signed by the Director and the appropriate tribal government(s). **Note: Federal law requires clipping all fish raised in federal hatcheries even when those hatcheries are operated by WDFW. The Department shall insure compliance.**

WDFW Response: see response to Comment 3, 10

Comment 7)

From: Curt Kraemer

Sent: Wednesday, May 20, 2009 1:40 PM

To: Commission (DFW)

Subject: Policy #C-3619 comments

Fish and Wildlife Commissioners -

Thank you very much for the opportunity to comment on the Draft hatchery and fishery reform policy - Policy number C-3619.

This is welcome addition to the guidance policies for the management of salmonid resources of this State. I applaud both the commission and WDFW staff for this important step forward in the scientific management of the resource. However I do have several comments that I believe will strength the policy.

1) This policy would benefit if the **Purpose** section were re-written as follows -

The purpose of this policy is to advance the conservation and recovery of wild salmonids (including salmon, steelhead and the various trout) by promoting and guiding the implementation of hatchery reform

WDFW Response: Comment noted.

2) Re-write the **Definition and Intent** section as follows -

Hatchery reform is the scientific and systematic redesign of hatchery programs to help maintain health wild salmonid populations, to promote the recovery of ESA listed salmonids while supporting sustainable fisheries.

WDFW Response: Comment noted.

3) Re-write the **General Policy Statement** section as follows -

The Washington Department of Fish and Wildlife (Department) shall promote the conservation and recovery wild salmonids and provide fishery-related benefits where appropriate by implementing artificial production programs with the following characteristics: ...

4) **Policy Guidelines** -

Item # 4 of the Policy guidelines does not cover all the major interactions of integrated/segregated programs with the wild resource. Specifically I'm think of a couple different cases. The first is where an integrated program is less than well integrated with the natural population. As I understand the HSRG's thinking and recommendations a successful or well integrated hatchery program is one that both is able to achieve a PNI equal to or greater than 0.70 and whose brood stock is representative of the wild population with which it is integrated. A representative brood stock would be one that substantially captures the diversity found in the natural population. Some of the characteristics of the diversity found in the natural population that would typically be included things like run timing, spawn timing, age and size struture, the various life histories, found in the natural spawning population.

WDFW Response: This is our understanding as well.

The second is the case where an adults from an integrated program also interact with a second stock different from that which the hatchery brood stock is integrated with. This most often happens in two cases; one where more than one stock of a species is found in the same basin. A couple Puget Sound Chinook examples illustrates my concern. In the Nooksack basin the adults from the integrated North Fork early population are interacting with the South Fork early stock. This are two different stocks and the natural spawning South Fork fish are being "swamped" with spawning adults from the North Fork program as well as fall fish from the Samish program (out of basin production). The interaction of adults from a large hatchery program from a nearby basin interacting with a smaller wild stock in a nearby basin is the second example of my concerns. Another example of this type of interaction would be fall hatchery Chinook from the Skokomish basin with the NORs in the mid-Hood Canal population (Duckabush, Dosewallips, and Hamma Hamma Rivers).

WDFW Response: This is our understanding as well.

I believe that a strict read of HSRG guidelines that the above examples would be considered to segregated problems. Regardless I believe that the policy guideline # 4 would be strengthen with the addition of a four item that explicitly identifies such programs as segregated programs. A potential working for d) might be -

d) Integrated programs implemented to enhance harvest optortunities whose returning adults interact on the with two or more stocks of the same species (at least one of which is not integrated with that hatchery program) will be considered to be a segregated program resulting in an average gene flow of less than 2% from the hatchery program to those non-integrated population(s) and achieving a PNI of at least 0.70 for the integrated population. Similarly attempts at an integrated program implemented to enhance harvest opportunities whose brood stock is not representative of the wild population will be considered to be a segregated program.

Sincerely,
Curt Kraemer

WDFW Response: We agree with this interpretation and believe it is implied in the policy, (Policy Guidelines Item 2."Use the principals, standards, and recommendations of the Hatchery Scientific Review group (HSRG) to guide the management of hatcheries operated by the Department.")

Comment 8)

From: Mike & Louise Genson

Sent: Friday, May 22, 2009 9:19 AM

To: Commission (DFW)

Subject: Comment on salmon and steelhead hatchery reform

To: WDFW Commissioners

Re: Salmon and trout hatchery programs

Hatchery salmon, steelhead and other trout are a vital resource to our state. The economic benefits from these programs cannot be overstated. Many areas of our state depend on hatchery produced fish to sustain a significant portion of their economies, as does the State itself. While I do support efforts to maintain populations of wild or native fish, it should not be done at the expense of hatchery programs. Our sport fishery depends on successful hatchery programs not on wild fish runs. I urge you to maintain present hatchery programs at this time, and to work towards improving and increasing hatchery programs in the future. Washington will remain THE PLACE to come for a quality salmon and trout fishing experience if we do this.

Very Sincerely,

Michael K. Genson

WDFW Response: While we are making every effort to maintain sustainable recreational and commercial fisheries, the requirements of the Endangered Species Act (ESA) do require consideration to be given to natural populations of salmon and steelhead. This will require changes in the way we operate our facilities or we run the risk of having to drastically reduce the number of salmon and steelhead we release each year. The intent of this policy is to operate our hatcheries in a way that reduces the impact on natural fish to aid in their recovery while at the same time providing for fisheries.

Comment 9)

From: Schuyler Dunphy

Sent: Saturday, May 23, 2009 12:21 PM

To: Commission (DFW)

Subject: proposed hatchery and fishery reform

WDFW:

I am writing to comment on the proposed hatchery reform document. I have a number of criticisms:

1. There is far too much reliance on hatchery broodstock programs. These threaten the viability of wild stocks by mining their gametes, effectively removing wild fish from the population (often less than healthy populations). In doing so we remove natural and sexual selection from these now domesticated individuals which likely explains their reduced fitness that has been observed in just one generation. I do not see any role for broodstock hatcheries unless it is an emergency situation to save almost extinct stocks.
2. There is an insufficient reduction in the number of hatchery fish released annually. Hatchery smolts outnumber wild fish by orders of magnitude in the stream and marine environment. This increases competition and predation on wild fish. I often hear from managers that ocean conditions are limiting the productivity of wild runs. If that is the case, which I believe it is, why are we increasing competition in this highly limiting environment? We know wild fish survive at a higher rate at sea the hatchery conspecifics, so why don't we maximize the number of wild ones to get a bigger wild return? I think we need to shut down many hatcheries and reduce hatchery releases by orders of magnitude to release wild stocks from undue competition with hatchery fish.
3. There are insufficient wild fish refuges. Rivers like the Skagit should not receive hatchery plantings. Those releases limit productivity of wild fish, as explained in #2, and explain why some habitat is not utilized in the river. The healthy habitat ought to support more wild fish.

I think there is a lack of recognition that wild fish offer the only hope for salmonids to adapt to a changing climate and human induced habitat alterations. All research says hatchery programs induce reduced fitness on those domesticated and that the wild fish suffer due to increased competition and predation. Thus, hatchery fish threaten today's and tomorrow's fisheries in Washington state.

Logan (Schuyler) Dunphy

WDFW Response: Intent of draft policy is to do much of what you have suggested. Through the Hatchery Action Implementation Plan process, (as described in the 21st Century Salmon and Steelhead Framework), watersheds of high (Primary) importance for conservation and recovery (Item 4 under Policy guidelines), medium (Contributing) importance and Low (Stabilizing) importance will be identified. Hatchery and Fishery reform will be implemented in a structured approach (as described in the Plans) to meet

the recovery needs (high, medium, low) of each population. Those populations with medium or low importance to recovery can be used to support sustainable fisheries. The addition of "Wild Salmon Management Zones" has been recommended by others. This concept is consistent with both the Hatchery Scientific Review Groups (HSRG) recommendations and the Statewide Steelhead Management Plan as adopted by the Fish and Wildlife Commission.

Comment 10)

From: David Neault

Sent: Monday, May 25, 2009 6:23 AM

To: Commission (DFW)

Subject: POLICY TITLE: Hatchery and Fishery Reform

In reading the proposed policy I only have a few concerns:

Under guideline 5 it states that the intent is to mark all fish intended to be used for harvest. Since I have seen many situations where significant numbers (>200,000) are not marked so they can be used for rate of return studies how will the commission address the intended to be used for harvest wording to ensure such excesses are not allowed.

The marking studies I noted were done at a tribal hatchery. Will the tribes be agreeing to similar restrictions on their marking of hatchery produced fish? Will they be following the HSRG's proposals as well on separation of 'pure' genetics fish vs. hatchery stock? Is there a process by which the state and tribes will be agreeing to follow the same goals?

Will more marking trailers be available so that peak marking periods can be met so fish are no longer released unmarked/untagged due to time constraints?

Thank You.

David Neault

WDFW Response: Currently 100% of the steelhead, 100% of the coho and 93% of the Chinook produced by WDFW/Tribal hatcheries that are intended to be marked are being marked.

The recently signed U.S vs. Oregon agreement, which governs hatchery production in the area of the Columbia River above Bonneville Dam, outlines not only hatchery production (see production tables in back of document), but also stipulates the marking/tagging protocols agreed to for each group of fish. This document is court ordered (similar to the Puget Sound Management Plan that came from the 1974 "Bolt" decision) but resulted from a different court case covering the Columbia River.

The MOA referred to is with the Tulalip tribe covering tribal Chinook and coho production in the Snohomish system. Mass-marking was agreed to be phased in with 100% ad clipping beginning in 2011 (80% clipping in 2009).

There are two other groups of fish that may be excluded from "marking", meaning not having an adipose fin clipped, and would be considered part of the referenced item. These groups have caused much confusion for some folks. Both the state and federal laws describing the requirement to "mass-mark" fish recognize these needs.

1) Recovery-- Groups of fish that are being produced for recovery. Even the hatchery component of these stocks needs as much protection as we can give them (including protection from mark selective fisheries) because there are so few of them, consequently, they are not fin clipped. They do, however, receive a coded wire tag (CWT) so they can be recognized at the hatchery or on the spawning grounds when encountered. Examples would be Nooksack, Dungeness and White River spring Chinook.

2) Double Index Tag Groups- (DITs) In order to maintain the usability of the coded-wire tag system as a means of estimating mortality on natural populations with the advent of mark selective fishing (MSF), a method was needed to allow hatchery fish to mimic the harvest mortality suffered by wild fish. Prior to the wide spread use of MSF, the normal practice of clipping and tagging hatchery fish provided this information. However, with the increase use of MSF, the hatchery clipped/tagged group no longer represents the wild populations (wild fish do not get harvested in MSF). To overcome this, the Double index tag (DIT) group was developed and its use agreed to by the tribes, and other coast wide salmon managers (other state and federal governments). DITs are groups of hatchery fish that receive a CWT but not an adipose fin clip. When these fish return and get sampled, at either the hatchery or on the spawning grounds, (requires electronic detection), estimates can be made on the impacts of MSF on wild populations that get caught and released. There are a number of these DIT groups released from hatcheries in western WA (can be either state or tribal hatchery production) and while the number of fish is not large relative to the total hatchery production, DIT groups are produced in most major watersheds and with both coho and Chinook. The size of DIT groups range from 45,000 smolts for coho to 200,000 smolts for Chinook. This is on the order of 10% of the production from selected hatcheries that have a DIT group as part of their operations, but equals much less than 10% for hatchery production in western WA (many hatcheries do not have DIT groups as part of their tagging protocols).

Information on fish marking for groups 1 and 2, above can be found on our website, in the Future Brood Document, at the following web site. Look in the footnotes that come with each hatcheries production:

<http://wdfw.wa.gov/fish/management/hatcheries.html>

Comment 11)

From: Scott Rockey

Sent: Tuesday, May 26, 2009 1:55 PM

To: Commission (DFW)

Subject: Comments on Hatchery Reform

Hello Commission:

My comments are directed at Policy Guideline #2 and 4.

ALL hatchery raised Salmon and Steelhead need to be marked. Not marking Salmon or Steelhead that were released from a hatchery identifies them as being wild, which they are certainly not, and shouldn't be mistaken as such.

The % of Salmon returning to hatcheries that are used for nutrient enhancement should be increased.

The returning Salmon contain nutrients vital to the ecosystem, these nutrients would increase the nutrient levels in the streams therefore increasing the biotic potential of aquatic organisms. If the potential was to increase, the hatcheries would be able to release more Salmon, which would benefit everyone.

Release more Salmon. The cost of increasing hatchery productivity is minimal. The cost of hatcheries is in the man hours and the machinery. If a hatchery is at 50% capacity it would not cost much more to have it run at 100% capacity. More Salmon means more opportunities for fishermen who spend more money in the local economies to go fishing. Commercial fishermen catch more Salmon, make more money and spend the increased dollars in their local economies. The production is relatively cheap, the potential for economical significance is great.

Thank you for your consideration

Scott Rockey

WDFW Response: See response to Comments 3, 5 and 10 above.

Comment 12)

From: William Atlas

Sent: Tuesday, May 26, 2009 8:09 PM

To: Commission (DFW)

Subject: hatchery policy comments

Fish and Wildlife commissioners,

I am writing you today to express my concerns about the proposed hatchery reform document open for public comment. While I am pleased that our state has begun to acknowledge the need for hatchery reform, the current document fails to go far enough to protect wild fish from the effects of large scale hatchery programs. First, the policy going forward appears to rely more heavily on wild broodstock or integrated programs. I am extremely wary of these proposals and I don't believe we as a state should be expanding them. Removing wild fish from a population in order to provide harvest opportunity is dangerous for the future of wild fish in our state, particularly with so many populations failing to meet their escapement goals and recent federal listings. A large body of scientific research has highlighted the fact that domestication can rapidly reduce the fitness and performance of hatchery fish in the wild. The supposed benefits of a wild broodstock is that they don't limit the productivity of the wild population and provide a higher number of spawning fish, however any program managed with the foremost goal of providing harvest opportunity will fail to accomplish that goal and may undermine the existing wild population.

WDFW Response: Comment noted.

My second concern is the failure to address the ecological effects of hatchery fish. While it is generally recognized that having large numbers of hatchery fish spawning with wild stocks is undesirable, we tend to ignore the obvious ecological impacts of hatchery programs. In general the number of smolts released into a watershed is based on the number of returning adults desired rather than any understanding of the ecosystems capacity. Furthermore many hatchery smolts residualize in freshwater, often in very high densities. These fish compete with wild parr

for habitat and resources and prey heavily on ESA listed Chinook and Steelhead fry as well as Coho. Many times I have snorkeled the miles below an a hatchery release site and seen thousands of residualized smolts, undoubtedly these fish are severely limiting productivity in the area were they exist in high densities. Large hatchery programs also support large numbers of fish, avian and marine mammal predators. These communities are likely out of balance with the wild fish populations and may impact wild smolt survival severely.

WDFW Response: We believe this is implied in the policy, (Policy Guidelines Item 2."Use the principals, standards, and recommendations of the Hatchery Scientific Review group (HSRG) to guide the management of hatcheries operated by the Department.") The HSRG has recommended limits on hatchery fish spawning naturally (less than 30%), regardless of PNI. This is aimed at avoiding some of the ecological affects you have described.

I am also disappointed that the hatchery policy document makes no mention of wild fish refugia. If we are committed to recovering and maintaining strong populations of wild salmon and steelhead it is essential that we set aside some of our stronger watersheds. We should prioritize protecting high quality watersheds across a range of stream types and regions in order to ensure that the diversity of salmonid populations are protected. In doing so these populations will be able to adapt and persist without further hindrance from hatchery supplementation. While I acknowledge the societal demand for hatchery supported harvest opportunity, this should be the exception rather than the rule. Certain highly degraded systems are ideal for these types of programs because of their inability to support viable wild populations. The Cowlitz is an excellent example of this and currently supports on of the most popular and successful hatchery fisheries in the state. Watersheds such as the Hoh, Skagit, Quillayute, North, Naselle, Queets, Hoko and Klickitat are excellent examples of areas which would benefit from protection as wild fish refugia. They represent some of the best remaining habitat in our state and their respective regions and are capable of supporting strong, diverse populations of wild salmonids if we set them aside as refuges.

WDFW Response: The addition of "Wild Salmon Management Zones" has been recommended by others. This concept is consistent with both the Hatchery Scientific Review Groups (HSRG) recommendations and the Statewide Steelhead Management Plan as adopted by the Fish and Wildlife Commission.

I would like to point out the collapse of ocean survival in Puget Sound, particularly for wild steelhead. Populations in the Southsound and Hood Canal have suffered severe declines over the last two decades. Puget Sound is a confined glacial basin and is one of the most heavily supplemented areas in the entire state. With such massive numbers of hatchery fish entering the sound annually we are very likely exceeding its capacity and we are certainly altering the natural community dynamics in the sound. As a consequence, both wild and hatchery smolts perform very poorly with ocean survival below 1% for many hatchery steelhead programs. I believe we are headed in the right direction by changing our management objectives to emphasize parameters associated with strong diverse populations. However it is critical that we acknowledge the full impact of our hatchery programs and work to protect our best wild systems. We are at a crossroads as a society, four decades of intensive hatchery supplementation has failed to provide the quality fisheries we once believed they could. It is time to reconsider the role of hatcheries in our states fisheries and through focused, science based hatchery reform we

can continue to support popular harvest fisheries while protecting many of our states legacy of wild salmon and steelhead.

Sincerely,
Will Atlas
FFF Steelhead Committee
VP of Communications

Comment 13)

From: Ryan Nathe
Sent: Tuesday, May 26, 2009 9:31 PM
To: Commission (DFW)
Subject: Hatchery and Fishery Reform

To Whom it may concern:

It seems irresponsible to take broodstock from depressed salmonoid runs to seed hatcheries with fish that will ultimately be used for consumption. It is time the WDFW abandons its philosophy of 'hatcheries are the answer'. If this were true than we would not be faced with such dismal runs. The state should sacrifice a few rivers to catch and keep fisheries. What I mean by sacrifice is, increase hatchery production to its maximal levels on these few rivers and abandon token efforts to restore wild steelhead in these rivers. For example the Cowlitz. This river is so broken that it should be managed as a put and keep river. Increase hatchery fish in the river, allow bait and barbed hooks, allow fishing from boats and allow a generous limit. This will allow people who want to harvest fish to do so. Other rivers should be managed as catch and release. No bait, no barbs, no fishing from boats, and no steelhead retention. In this way we would lose a handful of rivers to meat fisheries, but we would preserve all the rest and we can stop with token efforts to restore virtually extinct runs on these broken rivers and reallocate those funds to other rivers that stand a chance of maintaining native runs. Use the money that would be allocated to hatcheries to preserve and restore spawning habitat.

Ryan Nathe

WDFW Response: Intent of draft policy is to do just this. Through the Hatchery Action Implementation Plan process, (as described in the 21st Century Salmon and Steelhead Framework) watersheds of high (Primary) importance for conservation and recovery (Item 4 under Policy guidelines), medium (Contributing) importance and Low (Stabilizing) importance will be identified. Hatchery and Fishery reform will be implemented in a structured approach (as described in the Plans) to meet the recovery needs (high, medium, low) of each population. Those populations with medium or low importance to recovery can be used to support sustainable fisheries.

Comment 14)

June 1, 2009

TO: Washington Fish and Wildlife Commission

FROM: The Hatchery Scientific Review Group (HSRG)

SUBJECT: COMMENTS ON PROPOSED HATCHERY AND FISHERY REFORM POLICY

The Congressionally-established HSRG has provided a foundation for hatchery reform principles that should aid salmon hatcheries in the Pacific Northwest in meeting conservation and sustainable harvest goals in the 21st century. The HSRG process has established principles for goal setting, scientific defensibility, and adaptive management of hatchery programs. Tools to determine outcomes of proposed actions have been developed and include a scientific framework for artificial propagation of salmon and steelhead, a benefit/risk assessment tool, hatchery operational guidelines, and monitoring and evaluation criteria.

The HSRG is pleased to see progress towards implementation of HSRG principles and recommendations in the form of the proposed “Hatchery and Fishery Reform Policy”. The Commission and Department are to be commended for jointly addressing *harvest* and *hatchery* reform policy because the two are so closely aligned. The HSRG also appreciates the opportunity to comment on the draft policy.

We feel that there are three areas in regard to broodstock and escapement management that need to be strengthened or are lacking in the current draft policy. First is the need to assign explicit conservation designations to all populations. Under “Policy Guidelines”, item number four, the current draft states “For programs affecting the wild populations of importance for conservation and recovery, the plan will include goals with the following elements:” The narrative goes on to describe managing broodstock to achieve a proportionate natural influence (PNI) equal to or greater than 0.7 on average.

The HSRG feels that all populations must be designated whether or not they are listed under ESA or are just “important for conservation and recovery.” The primary requirement for assigning a designation is having a goal (i.e. harvest, conservation, etc.). Since the Department has already done this for nearly all populations, assigning a designation should be relatively easy and could be done within weeks for the salmon populations in Washington. Based on information provided by the co-managers the HSRG has already assigned population designations to all of the Columbia River Basin populations using the same population designations (Primary, Contributing or Stabilizing) that were adopted and used by the Lower Columbia River Recovery Board.

WDFW Response: Intent of draft policy is to do just this. Through the Hatchery Action Implementation Plan process, (as described in the 21st Century Salmon and Steelhead

Framework) watersheds of high (Primary) importance for conservation and recovery (Item 4 under Policy guidelines), medium (Contributing) importance and Low (Stabilizing) importance will be identified. Hatchery and Fishery reform will be implemented in a structured approach (as described in the Plans) to meet the recovery needs (high, medium, low) of each population. Those populations with medium or low importance to recovery can be used to support sustainable fisheries.

The second addition the HSRG feels is important to address is the need to establish standards for each of the three population designations. The current draft only addresses PNI (equal to or greater than 0.7) for “important (primary) populations”. The PNI standards for contributing populations should also be established. We recommend that PNI for these populations should be at least 0.5. In addition to PNI standards it is also critically important to incorporate standards for limiting the percent of hatchery-origin adults (strays) on the spawning grounds (pHOS). The pHOS standard is noticeably missing but is critically important to help address ecological, as well as genetic, interactions. The scientific literature and analyses of the HSRG clearly indicate that reducing pHOS is a much more effective and sustainable approach for achieving a desired PNI than increasing pNOB (mean proportion of a hatchery broodstock composed of natural-origin fish) to overcome a high value of pHOS. Consequently, the HSRG recommends that pHOS be no greater than 30% for Primary or Contributing populations when those populations are influenced by genetically-integrated broodstocks. The HSRG has concluded that values of pHOS > 30% pose significant long-term genetic risks to natural populations even when a desired value of PNI is achieved via proper, integrated broodstock management.

WDFW Response: We agree and believe it is implied in the policy (Policy Guidelines Item 2."Use the principals, standards, and recommendations of the Hatchery Scientific Review group (HSRG) to guide the management of hatcheries operated by the Department.")

Lastly, the HSRG has concerns about the specified timeline for implementation of the guidelines within this policy. Item seven under the current draft calls for “a schedule that meets or exceeds the benchmarks identified in the *21st Century Salmon and Steelhead*”. The timeline implementation in this document stretches out for more than two decades. The HSRG feels a much greater urgency. Many weak, naturally spawning salmon and steelhead populations are heavily influenced by hatchery fish (e.g. lower Columbia Chinook and coho, steelhead everywhere, and most Puget Sound Chinook and coho). This negative hatchery influence inhibits recovery by (a) causing direct competition and potential interbreeding hatchery and natural-origin fish, thereby driving down the productivity of natural populations and (b) preventing those populations from adapting genetically to local conditions. Climate change and modified aquatic environments, resulting from human development, exacerbate this situation and dictates the need for more timely action. Proposed policy changes are not difficult or expensive; they can be accomplished relatively quickly. The HSRG does not agree with the contention that managing broodstock and natural escapement to achieve PNI and pHOS standards is a long-term expensive proposition. On the contrary, the HSRG believes that our recommendations will result in more *efficient* and *effective* hatchery operations that will reduce infrastructure costs in the long-run. Although implementation of HSRG recommendations will require some changes in procedures, and in some cases the use of new weirs, the HSRG sees no scientific, economic or management reason why full implementation of PNI and pHOS standards could not be accomplished within

five years for all Primary, Contributing and Stabilizing populations. The HSRG notes also that the Recovery Implementation Science Team (RIST) of NMFS, which includes both Tribal and WDFW representatives, has endorsed the HSRG guidelines as a “major improvement over the status quo”. Indeed, the RIST was cautious that the HSRG guidelines may not be sufficient for achieving recovery goals. The analyses and conclusions of RIST reinforce the need for rapid implementation of hatchery reforms.

WDFW Response: (From: Washington Fish and Wildlife Commission Status Report and Recommendations, January 15, 2009)

The Department of Fish and Wildlife is committed to implementation of hatchery reform as a central element of our strategy to recover and maintain healthy, fit, natural populations while providing harvest opportunities. However, our Department cannot act unilaterally. Pursuant to a federal court order, co-managers are obligated to reach agreement regarding hatchery production levels through annual negotiation as outlined in a document known as the “Equilibrium Brood Document.” This document is a required part of the Puget Sound Management Plan. Any changes to hatchery production must be coordinated with the respective tribal co-managers. In May 2008, the Department began working with tribal co-managers to develop a long-term schedule for comprehensive hatchery reform, referred to as the “Hatchery Action Implementation Plan.” This plan will be completed by the end of the next biennium; it will include a detailed timetable for site specific operational changes and facility improvements necessary for completion of all hatchery reform actions by the year 2030.

The recommendations of the HSRG will take many biennia to put into effect. While some of the actions can be carried out with little or no additional funding, most of them will require a significant investment of time and money. An independent engineering assessment of Department hatchery facilities concluded that more than \$150 million in capital investments would be needed to update hatchery facilities and ensure compliance with environmental regulations.

We also have a comment on implementation of selective fisheries. The draft policy states that “As a general policy, the Department shall implement mark-selective salmon and steelhead fisheries, unless the wild populations substantially affected by the fishery are meeting spawner and broodstock management objectives”. We assume that this refers to achieving your goals for PNI and pHOS. While achieving these goals is important, these are minimal acceptable conditions, not necessarily targets. That is, if you can remove additional hatchery fish from natural spawning populations with a resulting decrease in pHOS, then natural productivity can generally be improved more than by just reaching your goals. A stewardship responsibility that protects natural populations from hatchery fish needs to be an integral part of fisheries management. Therefore we suggest that the use of selective harvest techniques to reduce harvest on natural spawners and/or to increase the harvest of hatchery fish would be a benefit even if your goals are being reached.

WDFW Response: Comment noted.

Again, thank you for the opportunity to review the draft policy. If the Commission would like further clarification of our guidelines or the timelines for implementation we would gladly meet with the Commission.

Cc: Governor Christine Gregoire
Congressman Norm Dicks

Comment 15)

From: Salmon For All

Sent: Wednesday, May 27, 2009 11:33 AM

To: Commission (DFW); Yeager, Susan D (DFW)

Cc: Hatfield, Brian; Senator Ken Jacobsen; Brian Blake; Takko, Dean

Subject: Salmon For All's response to C-3619, the Proposed Hatchery Reform Policy

Dear Chair Wecker and Members of the Washington Fish & Wildlife Commission,

Attached please find the response of Salmon For All to Draft 2 of C-3619, the Proposed Hatchery Reform Policy now under consideration by the Washington Fish & Wildlife Commission.

Thank you for the opportunity to provide comment on this proposal.

Respectfully,

Hobe Kytr, Administrator
Salmon For All

May 27, 2009

Washington Fish & Wildlife Commission

Dear Commissioners:

We would like to comment on WDFW Commission proposed policy C-3619 on Hatchery and Harvest Reform. Unfortunately, the public hearings have been scheduled for the months of June and July, when the vast majority of Washington State's commercial salmon fishermen are engaged in fishing either offshore or in Alaskan waters, and unavailable to comment in person.

A number of fishermen in the Columbia River commercial salmon gillnet fishery are involved currently in the development of selective fishing gear for the mainstem Columbia. The most promising gears at present are the seine, both purse and beach, and the tangle net with an auxiliary oxygen system for the recovery box. For the present, other options, such as the trap, reef net and fish wheel are considered much more problematic, and are on the low end of the priority list.

We would like to draw your attention to a number of issues and parameters regarding development of alternative harvest methods.

1. None of these gears, except the tangle net, were ever designed or used on a commercial scale on the Columbia River with the idea of returning fish to the water alive.

2. There have been dramatic changes in environmental and water conditions since these gear types were last used. For example, there has been an exponential proliferation of invasive aquatic plants, such as Eurasian milfoil, that tends to foul stationary gear even after brief periods of time.
3. There have been large increases in marine mammal predations and societal attitudes regarding them have changed in the seventy or more years since gears such as seines and traps were last used on the Columbia.
4. There is a need for selective harvest methods to be economically viable. Most of these gears are both labor and capital intensive. They will need to produce more fish than a gillnet, not only to fund increased equipment expenses but to support three or four families, as compared with a one person gillnet boat operation.
5. Continuing in the economic viability vein, these gears need to fish primarily in the mainstem where fish still have substantial market value, not in the tributaries, where quality often rapidly degrades.
6. Mobility: Both hatchery and natural salmon populations typically fluctuate substantially in terms of when and where their migration occurs while in the river. Technologies that are the most flexible in terms of time and area are the best fit in order to take advantage of harvesting opportunities. Gears such as traps and wheels, which are extremely site specific and not generally very mobile, are less reliable methods of ensuring that harvestable surpluses can be caught.

In sum, we are looking for a policy that encourages creativity and experimentation, while using caution in order to ensure that unacceptable bycatch losses and other unacceptable costs and problems are avoided. There also needs to be a recognition that new gear will not materialize overnight, and that years of experimentation may be necessary.

In this regard funding is going to be crucial to dealing with some real challenges. The Colville Tribe is approaching its second season of a five-year testing phase with experimental gear. Lower Columbia fishermen are being paid to design, build and test the gear. We note that the mainstem Columbia below Bonneville Dam, with tidal influence, strong current, and a multiplicity of stocks and species is a far more complicated milieu for gear experimentation than the upper Columbia. Expecting fishermen to design viable alternative harvest technologies and deploy them on a commercial scale is not realistic in anything under ten years.

We would further comment that the notion that mark-selectivity is preferable to all alternatives ignores the limitations of live-capture technologies. For example, using a small-mesh tangle net during warm water conditions in summer will likely impact non-target listed species such as summer steelhead and sockeye, whereas using a large-mesh gillnet allows the non-target fish to simply swim through the gear, thus avoiding capture and handling entirely. In this case, utilizing the larger mesh size is superior to going mark-selective.

Finally, in the context of the HSRG recommendation of removing large numbers of more abundant hatchery fish before they become a habitat/spawning ground issue, we would suggest an additional policy statement:

“If there are substantial hatchery surpluses to be harvested and the commercial fishery develops selective harvest technologies that are equal to or lower than the prevailing rates in other fisheries, it will be a policy to reserve impact handling mortalities of non-target stocks for the commercial fishery commensurate with the level of fish to be harvested.”

This policy will also provide incentive for fishermen and local communities to build infrastructure and invest once again in resources they have depended upon for 150 years. In the rush to solve these scientific and technical problems, the livelihoods and communities of those most affected have largely been overlooked, as have the needs of the consumer market. Perhaps it would be well to pause and reflect that the large hatchery programs on the Columbia River and elsewhere came into being to mitigate for harvest opportunities lost by those communities due to the diversion of water and habitat that salmon needed, in order to serve other purposes. The past president of the Oregon Restaurant Association recently commented, "People don't come to visit Oregon with the idea of eating a hazelnut or a pear, but they do expect to eat salmon." We don't need to import the Northwest icon from British Columbia or Alaska.

Respectfully,
Hobe Kytr, Administrator

cc: Rep. Brian Blake, Chair, House Agriculture and Natural Resources Committee
Sen. Kenneth Jacobsen, Chair, Senate Natural Resources, Ocean & Recreation Committee
Sen. Brian Hatfield
Rep. Dean Takko

WDFW Response: (From: Washington Fish and Wildlife Commission Status Report and Recommendations, January 15, 2009 6)

In the Columbia River and coastal areas, some commercial fisheries have already been converted to mark-selective (i.e., ocean coho troll fishery and the Columbia River Spring Chinook tangle net fishery). Beginning this year, the Department will launch a three-phase effort to convert commercial fisheries to mark-selective practices. The first phase will be devoted to an assessment of the biological, legal, and economic hurdles to selective commercial fishing. In the next phase, alternative live-capture options will be evaluated. During the final phase, we will implement the strategies for commercial selective fisheries that demonstrated the most promise. Close collaboration with stakeholders and the Washington State Legislature will be important throughout the process.

Comment 16)

From: Bryan Townley
Sent: Sunday, May 31, 2009 10:20 PM
To: Commission (DFW)
Subject: Hatchery Reform & Regulations

To: Washington Fish and Wildlife Commission,

There are multitude of ideas and issues the Commission is being made aware of. The Commission should make their decisions based on science and studies conducted by state and tribal biologists. The **Commission should not make decisions based on special interest groups agendas.** While I'm sure many of these issues have already been addressed, I am writing to you to voice some of the ideas many of us feel are warranted. These include:

-A one wild fish per year on certain rivers with spaghetti tags. The one tag would

include a surcharge and is not replaceable.

-Change the regulation on the selective fishery on the Snoqualmie. The only reason this went through is due to a local special interest groups. They didn't take this measure on the Skykomish? Same river system. Also, with this system it **makes no sense to not release summer steelhead on the Snoqualmie** and go ahead with the release of these same type of fish to the Wallace, Sultan, and Skykomish rivers (same river system again). If the argument is to designate the Snoqualmie as a wild summer run river then why not the others on the Sky that hold way more habitat for wild fish. The majority of the Snoqualmie summer fish shoot directly to the falls where they have nowhere to go and are caught and retained for table fare. This is a great urban fishery that many anglers look forward to. It seems ironic that the Snoqualmie is the **only** river in the area that has seen fly fishing type regulations imposed on it. Once again, the same local special interest group again. We pay to fish here too.

-One more for the Snoqualmie system. It would make logical sense to **open the upper portion (above the bridge) of Tokul creek** for the winter run season and close the lower creek to ensure escapement numbers. This fishery has been open only right below the bridge where the fish are intercepted before making their return. There is a lot of area above where sportsmen can fish without having an impact on the number of fish returning.

-Increase hatchery production both summer and winter run on the Cowlitz river. **What is going on with the early Blue Creek winter run?**

-**Allow sport seasons on any rivers with open net seasons.** This one is getting old. The nets wiped out the hatchery runs on the Skookumchuck and the Wynoochie in 2008. The nets were in the river while hatcheries were just trying to get the escapement numbers. If they don't have the numbers, close it to everyone.

-**Limit the amount of guides on these rivers.** These river fisheries are commercialized by catching steelhead for a profit. This state hasn't shown the will to attempt to control Indian fishing. They (the tribes) consider it a business. I thought that steelhead were a game fish (sport fishing).

-What is going on with these individuals catching fish for people with disabilities. I'm not talking about two individuals next to one another fishing, but **having a fisherman out on the river catching a limit of fish while the disabled person is nowhere in sight.** This has been a common occurrence up at the Barrier Dam. There should be a distance (under 25ft maybe?) not 100yds away.

I would like to Thank You for taking these ideas into consideration.

Sincerely,
Bryan Townley

WDFW Response: Comments noted. While we are making every effort to maintain sustainable recreational and commercial fisheries, the requirements of the Endangered Species Act (ESA) does require consideration to be given to natural populations of salmon and steelhead. This will require changes in the way we operate our facilities or we run the risk of having to drastically reduce the number of salmon and steelhead we release each year. The intent of this policy is to operate our hatcheries in a way that reduces the impact on natural fish to aid in their recovery while at the same time providing for fisheries.

Comment 17)**From:** Lesko, Erik**Sent:** Friday, May 29, 2009 3:00 PM**To:** Commission (DFW)**Subject:** PacifiCorp comments regarding proposed hatchery and fishery reform policy

Dear Fish and Wildlife Commission - I have reviewed the proposed policy dated May 12, 2009 and have the following comment regarding the draft policy.

- As you may know, PacifiCorp along with various resource agencies are beginning a reintroduction program for coho, winter steelhead and spring chinook to the upper North Fork Lewis River. The draft policy relies on mark-selective fisheries to enhance harvest and reduce hatchery fish and their potential influence on wild stocks. However, with limited enforcement presence the potential to affect natural stocks increases with increased harvest. These effects can be from direct poaching, or indirectly from hooking and handling mortalities. The success of our reintroduction programs relies, in part, on successful trapping of and adequate number of adult returns for reintroduction. Therefore, PacifiCorp does not support increased harvest opportunities without the assurance of increased enforcement or possibly changes in the type of bait or lures used to reduce any hooking mortality.

Thank you for the opportunity to comment

Erik Lesko

WDFW Response: Comment noted.

Comment 18)**From:** Gestin Suttle**Sent:** Thursday, May 28, 2009 12:18 PM**To:** Commission (DFW)**Subject:** Comments to Draft Hatchery and Fishery Reform Policy

HELLO,

PLEASE FIND ATTACHED AND BELOW COMMENTS FROM FRIENDS OF THE ISSAQUAH SALMON HATCHERY RE: THE COMMISSION'S DRAFT HATCHERY AND FISHERY REFORM POLICY.

I'M ALSO HAPPY TO ANSWER ANY QUESTIONS YOU MAY HAVE. THANK YOU.

FRIENDS OF ISSAQUAH SALMON HATCHERY

125 West Sunset Way Issaquah WA. 98027 Tel: 425-392-1118 Fax:425-392-3180

May 28, 2009

Washington Fish and Wildlife Commission
600 Capitol Way N.
Olympia, WA 98501-1091

Dear Commission Members,

Thank you for the opportunity to provide comments on the proposed hatchery and fishery reform policy. As you consider policy reforms, Friends of the Issaquah Salmon Hatchery (FISH) would like to encourage the commission to continue its focus of increasing chinook fishing opportunities throughout the Puget Sound region. In particular, FISH is advocating the opening of selective chinook fisheries on Lake Washington and in Puget Sound Marine Areas 10, 11 and 12.

Creating additional chinook fishing opportunities in these areas would benefit the public because it will provide more opportunities in the most densely populated area of the state, which supplies the greatest cost benefit. A high percentage of the state's population lives close to Lake Washington or within easy travel. Opening fisheries in urban areas is particularly attractive and beneficial to families because of the ability to get to these locations quickly, which would encourage increased participation in outdoor recreational opportunities among families.

Opening up selective chinook fisheries would also allow the public access to a prized species that has been returning to Issaquah in large numbers. Currently, many chinook that return to the hatchery that are not needed for the spawning program must be "surplussed" or killed without being spawned. While the surplussed fish go to local food banks when possible, FISH contends there would be a greater public benefit if these fish were caught by anglers before reaching the Issaquah hatchery. Last year 614 chinook were surplussed and in 2007, when a record number of chinook returned to Issaquah, 11,663 were surplussed.

On the other hand, it would not be beneficial to lower the production level of chinook because that could have a wide-ranging ripple effect that might include reducing the number of naturally spawning salmon to unsustainable levels and limit food supplies for wildlife such as Puget Sound orcas.

Increasing chinook fishing opportunities on Lake Washington and in Areas 10, 11 and 12 will generate such high public interest that it would provide a strong source of economic development for the state in terms of increased fishing licenses and increased revenues related to fishing. In 2006, recreational anglers in Washington spent an estimated \$904.8 million on fishing-related equipment and trip-related items.

In addition, a chinook fishery on Lake Washington would enhance the Department of Fish and Wildlife's public outreach efforts. Because of Lake Washington's urban, centralized location, it is one of Washington State's most popular lakes and would serve as an ideal backdrop to showcase how the state successfully runs hatcheries. This would create improved opportunities for the Department of Fish and Wildlife to use the Issaquah facility as a model of how hatchery practices are evolving in response to environmental concerns and how its partnership with FISH leverages resources to create greater public awareness and understanding of the salmon life cycle and habitat needs. This would help send the right message to businesses and the general public about the need to continue funding hatcheries at their most optimum levels.

We appreciate your time in considering these matters and hope you will respond favorably to this request.

Sincerely,
Gestin Suttle
Executive Director

WDFW Response: While we are making every effort to maintain sustainable recreational and commercial fisheries, the requirements of the Endangered Species Act (ESA) does require consideration to be given to natural populations of salmon and steelhead. This will require changes in the way we operate our facilities or we run the risk of having to drastically reduce the number of salmon and steelhead we release each year. The intent of this policy is to operate our hatcheries in a way that reduces the impact on natural fish to aid in their recovery while at the same time providing for fisheries. In addition, the following description of implementing new mark-selective fisheries was taken from: Washington Fish and Wildlife Commission Status Report and Recommendations, January 15, 2009 5.

Mark-Selective Fisheries Approach to “Full Implementation”

Mark-selective fisheries were developed by the Department as a strategy to maintain fishing opportunity directed at hatchery fish, while assuring that a sufficient number of wild fish escape to spawn naturally. Washington was the first state in the nation to mass mark hatchery fish by clipping the adipose fin, allowing them to be quickly distinguished from wild fish in the field. Concurrently, the Department developed the sophisticated computer model that allows confident predictions of wild fish mortalities associated with catch and releases during mark-selective fisheries. However, even with these capabilities in place, the Department cannot unilaterally implement or extend mark-selective fisheries. As discussed above in connection with hatchery reform and treaty rights, current law requires the Department to seek agreement with our tribal co-managers before we institute any changes in harvest management, including expansion of mark-selective fisheries. The status of our efforts to reach agreement with the affected tribes is summarized below. In areas where tribal consent is not required, the Department is moving towards “full implementation” of mark-selective fisheries in both recreational and commercial fisheries. In the lower Columbia River and on the ocean, for example, we are working to identify all non-selective fisheries that should be converted to mark-selective fisheries as described below. The long-term plan for the Columbia River expands mark-selective fisheries in concert with actions needed to maintain hatchery production levels and to meet wild fish recovery goals.

Co-Management Approach through North of Falcon

While the tribes have generally endorsed mark-selective fisheries in principle, some tribes are more willing than others to agree to expansions in the non-treaty selective fisheries. Under a court order pursuant to U.S. v. Washington, agreement must be reached with affected tribes before state-managed (non-treaty) non-selective fisheries can be converted to mark-selective fisheries. This is because the consequences of such changes can be significant. The consequences are not easily predicted, because they depend on many variables (such as the number of fishermen who will take part in a new fishery, the percentage of marked to unmarked fish in the area when the season occurs, the timing of the peak runs, etc). Extensive monitoring and enforcement for a number of years are the only ways to quantify and control a new fishery to alleviate the concerns of affected tribes. The expense of extra monitoring and enforcement associated with new mark selective fisheries has been substantial. The pace of expansion of new fisheries thus has been slowed by these cost considerations and the concerns of our tribal co-managers.

Defining “Full Implementation” Unlike the hatchery reform program, we do not currently have a long-term assessment that defines the goal – the definition of “full implementation” for non-treaty mark-selective fisheries in all regions. In the Puget Sound and coastal regions, the treaty rights of all affected tribes must be brought into the calculation. Because the consent of affected tribes is often contingent on the specifics of the proposed seasons, it would be difficult to negotiate a long-term or comprehensive plan for “full implementation” with all the tribes that would have to agree to such a plan. To date, rather than laying out a unilateral definition of “full implementation” in Puget Sound and the coast, our Department has worked in partnership with recreational stakeholders to define, for each region, a set of goals for expansion for the next 3-5 years. The goals for near-term expansion are then advanced by the Department during the appropriate negotiations with the tribes. For example, with the agreement of tribal governments and \$500,000 of additional funding, five new recreational mark selective fisheries for Chinook and coho salmon were implemented in Puget Sound in 2007.

The Commission sees the value of defining what “full implementation” of mark-selective fisheries would mean. We know that in some watersheds, there is no need to convert existing fisheries to mark-selective fisheries, because the stocks are healthy or wild and hatchery stocks are fully segregated. In the Skagit River, for example, very strong returns of wild Chinook and coho salmon are mixed with relatively few hatchery fish. Selective fisheries have been implemented for both species in areas of the Skagit River where hatchery fish are concentrated, but selective fisheries probably do not make good sense where wild fish predominate. In other watersheds, the objectives of hatchery reform cannot be achieved unless and until mark-selective harvest can be implemented to effectively remove excess hatchery fish. Department staff has been asked to generate a clear vision for “full implementation.” The Puget Sound Recreational Fishing Cabinet – a group of sport fishers that has advised the agency on priorities for conversion to mark-selective fisheries – has identified their vision of “full implementation” of mark-selective fisheries in Puget Sound. The Cabinet’s vision will be considered, as will the views of other stakeholders, as the Department develops its vision. Once the agency’s vision has been developed, it will be shared with our tribal co-managers, but at this time we have asked staff not to seek full tribal concurrence. We need to take the first step of defining our vision and goal for “full implementation” before we begin the discussion with co-managers.

Schedule for Immediate Expansion

Working with our recreational advisors, twelve candidate areas have been proposed for either new or expanded selective fishing in marine waters in 2009. We will discuss these proposals with our tribal co-managers during the 2009 North of Falcon process. Funding for monitoring and enforcement will be pivotal to initiating these new fisheries. Work will continue in those areas in which tribal consent for expansion of mark-selective fisheries is not required. In the Columbia River and coastal areas, some commercial fisheries have already been converted to mark-selective (i.e., ocean coho troll fishery and the Columbia River tangle net fishery for spring Chinook). Beginning this year, the Department will launch a three-phase effort to convert commercial fisheries to mark selective practices. The first phase will be devoted to an assessment of the biological, legal, and economic hurdles to

selective commercial fishing. In the next phase, alternative live-capture options will be evaluated. During the final phase, we will implement the strategies for commercial selective fisheries that demonstrated the most promise. Close collaboration with stakeholders and Washington State Legislature will be important throughout the process.

Comment 19)

From: Randolph Harrison

Sent: Thursday, May 28, 2009 4:10 PM

To: Commission (DFW)

Subject: The future role of Puget Sound hatcheries and Issaquah hatchery in particular.

Dear Commission Members,

As a member of Friends of Issaquah Salmon Hatchery since its formation, I have had a long-standing interest in the ever-changing issues of both Puget Sound salmon and the role of the Issaquah hatchery.

I know that you have already received a detailed email from the executive director of FISH, Ms. Gestin Suttle. In the name of brevity, allow me to say that I strongly agree with all of the points she made in her compelling message. I was particularly struck by what I feel is the relevance of the connection between hatchery-spawned salmon and our resident Orca population. I fully understand that we face a situation regarding all of these species wherein the questions outnumber the answers. From what I have been able to learn during the last five years, it seems clear that a primary concern about our orcas relates directly to their primary food source, specifically salmon.

I not only lack any scientific background but my interest in our unique Puget Sound dates back only two decades, the time frame that began when I moved my family here from the east coast, primarily because of the attraction of our environment. That said, it seems only logical that, when decisions are made regarding hatchery operations, the need to ensure our resident orca pods have sufficient food stocks would be of paramount importance.

I also respectfully submit that yet another important -- albeit parochial -- factor to consider is the unique educational benefit to the general public provided by the Issaquah hatchery, its staff and the scores of volunteers devoted not only to its daily operation but also to expanding the universe of knowledge and appreciation of the role salmon play in our collective world.

The economic pressures faced by all aspects of our society today, from corporations and governmental agencies to individuals and families, are absolutely fundamental factors in what we do and how we do it. We all know that.

At the risk of sounding pedantic, it boils down to the question of how best to invest very finite resources.

Our hatcheries ensure their are salmon coming home year in, year out. They ensure our children get as excited about their environment as we did, that we have salmon in our markets and that the links in the natural chain that require salmon for their very survival are not broken because of human acts.

I thank you for taking on this crucial and controversial issue and I know you are each motivated by your respective desire to do what is best for the long term.

I have lived in more than 55 places in my 65 years. I chose the Pacific Northwest as the place to raise my sons. The issue, as I see it, is what their children and grandchildren will think

of the decisions we make today. I'm confident that when all is said and done, we'll all do the right thing.

Respectfully yours,
Randolph Harrison

WDFW Response: See reply to Comment 18, above.

Comment 20)

From: David Knutzen
Sent: Monday, June 01, 2009 3:54 PM
To: Commission (DFW)
Subject: hatchery and fishery reform policy comments

The Puget Sound Recreational Enhancement Oversight Committee has reviewed the draft Hatchery and Fishery Reform Policy. Attached are suggestions to this policy for your consideration. It is an important policy statement and we as a group applaud your efforts to work toward full implementation. The Oversight Committee would gladly meet with members of the Commission should further detail be desired.

Thank you for taking the time to consider our suggestions.

June 1, 2009

TO: Washington Fish and Wildlife Commission
FROM: Puget Sound Recreational Fisheries Enhancement Oversight Committee

SUBJECT: Proposed Hatchery and Fishery Reform Policy Comments

The Puget Sound Recreational Fisheries Enhancement Oversight Committee (PSRFEOC) applauds the Commission for developing a Hatchery and Fishery Reform implementation policy (C-3616) and giving the public the opportunity to provide comments and input. As you are aware Hatchery Reform is the best available science to manage our hatchery and fishery programs while also achieving recovery of weak salmon and steelhead stocks. Protection of the basic genetic material or genes of native stocks is critical towards this recovery. In a July 2008 letter Governor Gregoire asked the Commission to address Hatchery Reform and Mark Selective Fisheries. This policy statement is a necessary step in this progression and testimony that these issues will be addressed.

As a citizen oversight committee (PSRFEOC) established by statute, we have direct input to staff in developing staff programming concepts that directly impact the recreational sport fishing community and its ability to access hatchery produced salmon through various mark selective fisheries in Puget Sound. With this in mind, we want to make sure, as you do, that the policy provides specific and measurable guidelines and goals to staff for the implementation of the concepts developed and presented to agency by the Hatchery Scientific Review Group (HSRG). Members of the committee have been discussing ideas about the wording and implementation process. We wanted you to know that we will have testimony to present at your meeting on June 5 concerning the policy draft and we'd like the opportunity to participate with staff by reviewing and commenting

on the final draft that will be presented for your action at the July Commission meeting. In addition to our public testimony on June 5th we have prepared the following suggested edits to the current draft policy.

1) Item 2 under the Policy Guidelines: Reword –*Implement the principals, standards, and recommendations of the Hatchery Scientific Review Group (HSRG) in the management of hatcheries operated by the Department.*

WDFW Response: Comment noted.

2) Item 4a under the Policy Guidelines: Reword – *Integrated programs implemented to enhance harvest opportunities (i.e., integrated harvest programs) will achieve a proportionate natural influence (PNI) equal to or greater than 0.70 and a percentage hatchery origin strays (pHOS) not great than 0.30 on average, use hatchery practices that reduce the risks of domestication, and broodstock that is indigenous to the watershed.*

WDFW Response: We believe this is implied in the policy (Policy Guidelines Item 2."Use the principals, standards, and recommendations of the Hatchery Scientific Review group (HSRG) to guide the management of hatcheries operated by the Department."

3) Item 5 under the Policy Guidelines: Reword – *Externally mark all hatchery produced Chinook, coho, and steelhead production that is intended for harvest, except in the case of currently existing State/Tribal agreement that deviate from this policy. All future agreements need to be in compliance with HSRG recommendations for marking.*

WDFW Response: Currently 100% of the steelhead, 100% of the coho and 93% of the Chinook produced by WDFW/Tribal hatcheries that are intended to be marked are being marked.

The recently signed U.S vs. Oregon agreement, which governs hatchery production in the area of the Columbia River above Bonneville Dam, outlines not only hatchery production (see production tables in back of document), but also stipulates the marking/tagging protocols agreed to for each group of fish. This document is court ordered (similar to the Puget Sound Management Plan that came from the 1974 "Bolt" decision) but resulted from a different court case covering the Columbia River.

The MOA referred to is with the Tulalip tribe covering tribal Chinook and coho production in the Snohomish system. Mass-marking was agreed to be phased in with 100% ad clipping beginning in 2011 (80% clipping in 2009).

There are two other groups of fish that may be excluded from "marking", meaning not having an adipose fin clipped, and would be considered part of the referenced item. These groups have caused much confusion for some folks. Both the state and federal laws describing the requirement to "mass-mark" fish recognize these needs.

1) Recovery-- Groups of fish that are being produced for recovery. Even the hatchery component of these stocks needs as much protection as we can give them (including protection from mark selective fisheries) because there are so few of them, consequently, they are not fin clipped. They do, however, receive a coded wire tag (CWT) so they can be recognized at the hatchery or on the spawning grounds when encountered. Examples would be Nooksack, Dungeness and White River spring Chinook.

2) Double Index Tag Groups- (DITs) In order to maintain the usability of the coded-wire tag system as a means of estimating mortality on natural populations with the advent of mark selective fishing (MSF), a method was needed to allow hatchery fish to mimic the harvest mortality suffered by wild fish. Prior to the wide spread use of MSF, the normal practice of clipping and tagging hatchery fish provided this information. However, with the increase use of MSF, the hatchery clipped/tagged group no longer represents the wild populations (wild fish do not get harvested in MSF). To overcome this, the Double index tag (DIT) group was developed and its use agreed to by the tribes, and other coast wide salmon managers (other state and federal governments). DITs are groups of hatchery fish that receive a CWT but not an adipose fin clip. When these fish return and get sampled, at either the hatchery or on the spawning grounds, (requires electronic detection), estimates can be made on the impacts of MSF on wild populations that get caught and released. There are a number of these DIT groups released from hatcheries in western WA (can be either state or tribal hatchery production) and while the number of fish is not large relative to the total hatchery production, DIT groups are produced in most major watersheds and with both coho and Chinook. The size of DIT groups range from 45,000 smolts for coho to 200,000 smolts for Chinook. This is on the order of 10% of the production from selected hatcheries that have a DIT group as part of their operations, but equals much less than 10% for hatchery production in western WA (many hatcheries do not have DIT groups as part of their tagging protocols).

Information on fish marking for groups 1 and 2, above can be found on our website, in the Future Brood Document, at the following web site. Look in the footnotes that come with each hatcheries production:

<http://wdfw.wa.gov/fish/management/hatcheries.html>

4) Item 7 under the Policy Guidelines: The benchmarks identified in the 21st Century Salmon and Steelhead Framework permit a much too long period for action. Multiple decades for implementation of HSRG recommendations are far too long for such a critically needed program. Many of the recommendations could be implemented immediately, while a five year window for full implementation seems reasonable.

WDFW Response: (From: Washington Fish and Wildlife Commission Status Report and Recommendations, January 15, 2009)

The Department of Fish and Wildlife is committed to implementation of hatchery reform as a central element of our strategy to recover and maintain healthy, fit, natural

populations while providing harvest opportunities. However, our Department cannot act unilaterally. Pursuant to a federal court order, co-managers are obligated to reach agreement regarding hatchery production levels through annual negotiation as outlined in a document known as the “Equilibrium Brood Document.” This document is a required part of the Puget Sound Management Plan. Any changes to hatchery production must be coordinated with the respective tribal co-managers. In May 2008, the Department began working with tribal co-managers to develop a long-term schedule for comprehensive hatchery reform, referred to as the “Hatchery Action Implementation Plan.” This plan will be completed by the end of the next biennium; it will include a detailed timetable for site specific operational changes and facility improvements necessary for completion of all hatchery reform actions by the year 2030.

The recommendations of the HSRG will take many biennia to put into effect. While some of the actions can be carried out with little or no additional funding, most of them will require a significant investment of time and money. An independent engineering assessment of Department hatchery facilities concluded that more than \$150 million in capital investments would be needed to update hatchery facilities and ensure compliance with environmental regulations.

5) Items 8-10 under the Policy Guidelines: If gear changes are needed people need to plan for acquisition of new gear and should be allowed transition time but conservation and recovery should be the driving factor. This should be completed within five years. The policy statement should have annual benchmarks of success identified and reviewed until full implementation is completed.

Thank you for taking the time to consider our recommendations. We look forward to providing necessary clarification and support as this process continues.

WDFW Response: Comment noted.

Comment 21)

RECEIVED

MAY 28 2009

FISH AND
WILDLIFE COMMISSION

Pflieger
PUBLIC INPUT - NO
RESPONSE NECESSARY
6/9/09
CC: COMMISSION

Jim S.
Andy A.

WDFW

THIS IN REFERENCE TO PROPOSED
HATCHERY + FISHERY REFORM POLICY.

I AM 73 YEARS OF AGE AND HAVE
FISHED THE COLUMBIA RIVER SYSTEM
FOR MOST OF THOSE YEARS AND I
WOULD LIKE TO SUBMIT TO YOU THAT
THE SALMON + STEELHEAD ISSUE WILL
NEVER BE SOLVED BY ANY OF THE
METHODS SUGGESTED THUS FAR AS PROVED
BY ALL THE SCIENTIFK FINDINGS
PRESENTED TOE PUBLIC WHICH SEEMINGLY
HAS NOT HELPED. I CAN PROVIDE YOU
WITH A METHOD TO SATURATE THE
RIVERS WITH SALMON + STEELHEAD
WHICH WOULD BE FAR LESS COSTLY
THAN THE MILLIONS AND PERHAPS
BILLIONS SPENT IN THE LAST 50
YEARS. FIRST OF ALL I WOULD
LIKE TO REMIND YOU THAT HATCHERY
+ WILD FISH BECOME ONE + THE
SAME AND HERE'S WHY, AS FAR
BACK AS I CAN REMEMBER
HATCHERIES HAVE BEEN USED TO

BUILD RUNS IN THE COLUMBIA, FURTHER YEARS AGO FISH WERE NOT OFTEN MARKED, SO THE POINT BEING THAT MOST EVERY STEELHEAD + SALMON ENTERING THE COLUMBIA RIVER SYSTEM IS THE OFFSPRING OF A ONCE HATCHERY REARED FISH. I DO AGREE THAT A HATCHERY RAISED FISH IS NOT AS STRONG AS A FISH SPAWNED IN A RIVER SYSTEM, EVEN THOUGH THEY TASTE AS GOOD OR BETTER, HOWEVER WHEN THESE FISH RETURN AS ADULTS MANY ARE NOT ABLE TO REACH A HATCHERY AS I HAVE SEEN THEM RUNNING UP IRRIGATION DITCHES AND THE LINES THEREFORE THEY END UP SPAWNING IN THE RIVER SYSTEM AND GUESS WHAT THOSE SMOLT THEN BECOME WILD FISH WITH THE SAME MIXED GENETICS AS ALL OTHER WILD FISH. SO THE ANSWER IS NOT TO OPEN THE SEASON AND THEN SUDDENLY CLOSE IT AGAIN, NOT TO TEAR OUT DAMS, NOT TO CHARGE MORE FOR TAGS BUT SIMPLY TO BUILD MORE AND BETTER HATCHERIES WHICH

WOULD SATURATE RIVERS WITH BOTH
WILD & NATCHERY FISH.

THE MORE GOING IS A SIMPLE BUT
EFFECTIVE SOLUTION SO IF PEOPLE
WHO ARE INVOLVED IN SAVING THE
SALMON ARE TRULY INTERESTED
IN ACTUALLY SAVING THEM INSTEAD
OF THEIR OWN PERSONAL INTERESTS
THEN THEY WILL FASHION A PLAN
ALONG THESE LINES SIMPLY BECAUSE
IT WILL WORK.

SOME DAY SOME WAY SILLY OUTDATED
TREATIES THAT NOW EXISTS BETWEEN
TRIBES AND ALL OTHER PEOPLE ON
THE PLANET MUST BE BROKEN OR
AT LEAST CHANGED TO CONFORM WITH
MODERN TIMES SO THAT NETS ARE
REMOVED FROM RIVERS

Ray Pfliger Ray Pfliger

WDFW Response: While we are making every effort to maintain sustainable recreational and commercial fisheries, the requirements of the Endangered Species Act (ESA) does require consideration to be given to natural populations of salmon and steelhead. This will require changes in the way we operate our facilities or we run the risk of having to drastically reduce the number of salmon and steelhead we release each year. The intent of this policy is to operate our hatcheries in a way that reduces the impact on natural fish to aid in their recovery while at the same time providing for fisheries.

Comment 22)



CCA

**COASTAL CONSERVATION ASSOCIATION
WASHINGTON**

June 1, 2009
Washington Fish and Wildlife Commission
600 Capitol Way North
Olympia, WA 98501

RE: Comments on Draft Hatchery and Fishery Reform Policy

Coastal Conservation Association (CCA) Washington is pleased to provide the following comments regarding the Commission's draft Hatchery and Fishery Reform Policy ("policy"). This policy demonstrates that the Commission and the Department consider hatcheries and harvest to be interrelated and that they both play a fundamental role in salmon recovery efforts.

CCA is a national 501(c) (3) grassroots conservation organization founded to advocate for the conservation and restoration of our coastal marine resources. CCA's objective is to conserve, promote and enhance the present and future availability of these coastal resources for the benefit and enjoyment of the general public. The nearly 5,000 members of CCA Washington are concerned about the continued decline of our endangered, wild salmon and steelhead populations and believe hatchery and harvest reforms are urgently needed to achieve recovery.

The congressionally-established, independent Hatchery Scientific Review Group (HSRG) has identified a series of essential recommendations for recovering and rebuilding runs of Chinook, Coho and Steelhead in Puget Sound and the Columbia River Basin. These recommendations represent the best available science for aligning hatchery and harvest management with the objectives of recovery, conservation and sustainable fisheries. We commend the Commission for referencing HSRG's recommendations but believe the current policy draft omits several fundamental reform principles.

NOAA designates populations as primary, contributing or stabilizing for many Evolutionary Significant Units (ESU's) of listed salmon, depending on their importance to recovery. These designations serve as an important road map for broodstock and escapement management through hatchery and harvest activities. HSRG adopted this important principle in its recommendations and the draft policy also recommends it for critical populations. In essence, these designations indicate the goals for a specific population, whether it be harvest or conservation, and help us better focus on the overall health of the species. This information is essential for all salmon management activities and CCA Washington believes the Commission should require primary, contributing or stabilizing designations for all salmon populations (not just listed stocks).

WDFW Response: Intent of draft policy is to do just this. Through the Hatchery Action Implementation Plan process, (as described in the 21st Century Salmon and Steelhead Framework) watersheds of high (Primary) importance for conservation and recovery (Item 4 under Policy guidelines), medium (Contributing) importance and Low (Stabilizing) importance will be identified. Hatchery and Fishery reform will be implemented in a structured approach (as described in the Plans) to meet the recovery needs (high, medium, low) of each population. Those populations with medium or low importance to recovery can be used to support sustainable fisheries.

Comments on draft Hatchery & Fishery Reform Policy June 1, 2009 Page 2 of 2

The draft policy does recognize the importance of minimizing the divergence between hatchery broodstock and wild populations by maximizing proportionate natural influence index (PNI) to at least 0.70 for "populations of importance for conservation and recovery." We encourage the Commission to extend this important measurement to contributing populations as well since they, too, have an important role to play in meeting recovery objectives (although it may be appropriate to require a smaller PNI for these populations). Fundamental to HSRG's recommendations is the need to monitor and reduce the percentage of hatchery origin spawners (pHOS) for all salmon populations. While the proposed policy recognizes the importance of minimizing the divergence between hatchery broodstock and the wild population by increasing PNI, it is silent on the need to reduce pHOS. We will not achieve recovery unless harvest and hatcheries are reformed to reduce the negative impact of hatchery strays on the long-term fitness of natural origin spawning populations. Throughout the Columbia River Basin and the Puget Sound, hatchery fish dominate natural Chinook and Coho escapement (pHOS of 80% in some rivers). This severely reduces the fitness and productivity of wild salmon populations. The policy should adopt a pHOS standard of not greater than 30% for all contributing and primary populations.

WDFW Response: We agree and believe it is implied in the policy; (Policy Guidelines Item 2."Use the principals, standards, and recommendations of the Hatchery Scientific Review group (HSRG) to guide the management of hatcheries operated by the Department.")

The draft policy correctly identifies the need to "Develop and promote the use of fishing techniques that allow non-target fish to be released with minimal mortality." The HSRG has also recommended that "selective commercial fishing gear needs to be developed and assessed for use." Mass marking of hatchery Chinook and Coho salmon and steelhead allows

us to protect wild fish and selectively harvest hatchery fish by differentiating between the two, but we must require the use of fishing gear that is capable of mark selective catch-and-release in mixed stock fisheries. The Department should move swiftly to develop and require the use of commercial fishing gear capable of mark-selective harvest, such as seines, pound nets and fish traps. As you may know, the Colville Tribe is selectively harvesting hatchery fish with great success using some of this selective commercial gear under a test permit in the upper Columbia. Despite similar directives under state law, WDFW has not made a serious effort to implement the use of such selective gear under test permits. CCA Washington encourages the Commission to establish a timetable for the development and implementation of mark-selective commercial gear to complement mark-selective recreational fishing.

WDFW Response: (From: Washington Fish and Wildlife Commission Status Report and Recommendations, January 15, 2009 6)

In the Columbia River and coastal areas, some commercial fisheries have already been converted to mark-selective (i.e., ocean coho troll fishery and the Columbia River tangle net fishery for spring Chinook). Beginning this year, the Department will launch a three-phase effort to convert commercial fisheries to mark selective practices. The first phase will be devoted to an assessment of the biological, legal, and economic hurdles to selective commercial fishing. In the next phase, alternative live-capture options will be evaluated. During the final phase, we will implement the strategies for commercial selective fisheries that demonstrated the most promise. Close collaboration with stakeholders and the Washington State Legislature will be important throughout the process

CCA Washington believes it is essential to require mark-selective recreational and commercial fishing practices for all mixed stock fisheries where wild and endangered salmon and steelhead are present. These reforms are critical to achieving recovery and leveraging record investments in habitat, hatchery and hydro improvements and to ensure that more Endangered Species Act (ESA) listed and wild fish actually reach the spawning grounds. Selective harvest practices will also reduce bycatch mortality of other non-target species, including sturgeon, marine mammals and seabirds.

With many of our remaining salmon and steelhead runs edging closer to extinction, hatchery and harvest reforms are urgently needed. Regrettably, the draft policy references a lengthy, 40 year implementation schedule based on the *21st Century Salmon and Steelhead Initiative*. Wild salmon and steelhead need these reforms now to insure their chances of recovery. We encourage the Commission to set a far more ambitious schedule for implementing this important policy. The key hatchery and harvest reform actions can and should be accomplished at a relatively low cost over the next several years. Higher expected returns of both hatchery and wild salmon to Washington waters under the new Pacific Salmon Treaty underscore the importance of accelerating these reforms. Our organization seeks a partnership with the Commission and Department in implementing these critical reforms, including identifying and securing any necessary funding. For example, funds from the recently enacted Columbia River salmon and steelhead license stamp could fuel the transition to mark-selective recreational and commercial fishing in the Columbia. Similar opportunities will arise in other key reform

areas. We hope you will continue working closely with stakeholder groups and to innovate as you seek to implement this important policy.

Again, we commend the Commission and Department for taking a leadership role in the conservation and recovery of our wild salmon and steelhead populations and appreciate your consideration of our recommendations.

Sincerely,

Andrew E. Marks, Vice Chair
Government Relations Committee
Washington CCA

**WDFW Response: (From: Washington Fish and Wildlife Commission
Status Report and Recommendations, January 15, 2009)**

The Department of Fish and Wildlife is committed to implementation of hatchery reform as a central element of our strategy to recover and maintain healthy, fit, natural populations while providing harvest opportunities. However, our Department cannot act unilaterally. Pursuant to a federal court order, co-managers are obligated to reach agreement regarding hatchery production levels through annual negotiation as outlined in a document known as the “Equilibrium Brood Document.” This document is a required part of the Puget Sound Management Plan. Any changes to hatchery production must be coordinated with the respective tribal co-managers. In May 2008, the Department began working with tribal co-managers to develop a long-term schedule for comprehensive hatchery reform, referred to as the “Hatchery Action Implementation Plan.” This plan will be completed by the end of the next biennium; it will include a detailed timetable for site specific operational changes and facility improvements necessary for completion of all hatchery reform actions by the year 2030.

The recommendations of the HSRG will take many biennia to put into effect. While some of the actions can be carried out with little or no additional funding, most of them will require a significant investment of time and money. An independent engineering assessment of Department hatchery facilities concluded that more than \$150 million in capital investments would be needed to update hatchery facilities and ensure compliance with environmental regulations.

Comment 23)

June 1, 2009

To: **Washington Fish and Wildlife Commission**
600 Capitol Way North
Olympia, WA 98501-1091
Email: commission@dfw.wa.gov

RE: proposed hatchery and fishery reform policies

Dear Commissioners,

On behalf of the Wild Steelhead Coalition, we respectfully submit the following comments on the draft hatchery and fishery reform policies contained in the draft dated May 12, 2009.

Overall, we are encouraged to see that the leading paragraph of the general policy statement explicitly includes the conservation and recovery of wild salmon and steelhead. Likewise, we are pleased to see that the draft policy includes guidelines for implementing the HSRG principles, standards and guidelines, and that WDFW will systematically implement hatchery reform as part of comprehensive, integrated All-H planning for meeting conservation and harvest goals. We strongly support WDFW's commitment to All-H management, and are convinced that in order to realize successful design and implementation of All-H management there must be a commitment to integrating habitat management issues with hatchery and harvest policies. However, we are concerned that the draft policy guidelines lack explicit language that demonstrates this kind of commitment. In fact, this draft is titled "hatchery and fishery reform", which indicates an assumption that these management areas can be separated from habitat issues, and therefore doesn't constitute All-H management. Habitat is missing from this vision of All-H management and we find this to be a major weakness. With respect to All-H management and this draft hatchery policy, we strongly support an explicit commitment to the designation and implementation of Wild Salmonid Management Zones, as described by the HSRG but extended to all species of salmonids within selected basins. Additional comments and recommendations are offered in the bulleted list that follows.

- The draft contains no statement that hatcheries will be used in an adaptive management framework, yet we feel this is a key element of effective hatchery reform. There must be a commitment to monitoring, evaluation, and feedbacks to decision-making that will allow for learning and improvements in hatchery operations. We feel that these guidelines should outline a framework for evaluating the costs and benefits of hatchery programs that can support a transparent decision-process for the closure of hatchery programs where costs clearly outweigh benefits. A second example is the need to scientifically monitor and evaluate the impacts of existing segregated and integrated hatcheries on the life history, genetics and productivity of wild stocks. The policy should spell out that planning for new integrated or captive brood stock steelhead hatcheries should be based on monitoring and evaluation of existing hatcheries of these types.
- Under the General Policy Statement, the focus on harvest fisheries aimed at abundant hatchery stocks would be improved with a statement addressing risks posed by mixed stock fisheries. For example, early timed winter run hatchery steelhead have for many

years been targeted by sport and tribal fisheries for extremely high harvest rates that are inappropriate for early returning wild winter run steelhead.

- (#2) We recommend adding “and the results of new scientific research” after “HSRG”.
- (#3) It is not clear to us that improving broodstock management is the key to reducing the impacts of hatchery fish on wild fish, or to improve the fitness and viability of natural production. In fact, the available research at this time indicates that the use of wild stocks for supplementation or recovery may significantly reduce productivity of wild fish in only a few generations. Reliance on wild broodstock seems to assume there are no ecological interactions between hatchery and wild fish, and this position is simply not valid. As recommended by the HSRG, we would like to see new guidelines for sizing hatcheries that are scientifically appropriate under ecosystem considerations that include the size of the basin (smaller basins should have smaller hatchery programs). One goal here should be to limit competition between hatchery and wild juveniles, and an approach could entail limiting the annual hatchery production of smolts by the average annual production of natural smolts. In all cases, hatchery programs should be rigorously evaluated for their performance based on reversing long-term declines in hatchery smolt-to-adult return rates and their ability to carefully control disease outbreaks.
- (#4) We do not believe that limiting PNI to values of at least 0.70 is sufficient to reduce the risks that integrated hatchery programs pose to wild stocks. As noted above, genetic interactions are only one part of the risk that hatcheries pose to wild stocks. This section would be strengthened with an explicit recognition that hatchery-wild interactions include genetic, harvest, disease and other ecological interactions.
- (#4) We would like to see guidelines for the implementation, monitoring, and eventual closure of conservation hatcheries; these guidelines could be modeled after those now currently used in NOAA's Hood Canal steelhead project.
- (#4) We would like to see more detailed guidelines for the implementation of integrated versus segregated hatchery programs. Specifically, what is the decision-process that will be used to make these determinations?
- (#8) This policy guideline would be strengthened with explicit language about expanding the use of selective fishery regulations at times and in areas where non-target fish (for instance, resident rainbows, rearing parr, or migrating smolts) are vulnerable to non-selective fishing techniques.

Sincerely,

Nate Mantua, Ph.D., VP of Science
Dick Burge, M.Sc., VP of Conservation
Wild Steelhead Coalition
218 Main St. Box #264
Kirkland, WA 98033

Responses are provided to comments in the order they appear in the above document:

WDFW Response: The addition of "Wild Salmon Management Zones" has been recommended by others. This concept is consistent with both the Hatchery Scientific Review Groups (HSRG) recommendations and the Statewide Steelhead Management Plan as adopted by the Fish and Wildlife Commission.

WDFW agrees that adaptive management will be an important aspect of implementing Hatchery Reform. As WDFW works to achieve the HSRG standards for managing hatcheries (Policy Guidelines; 2), it is clear that different actions and strategies will be required and additional monitoring will be needed to measure success.

Comment on # 3, #4): WDFW believes that Policy Guidance; Item 2; "Use the principals, standards, and recommendations of the Hatchery Scientific Review group (HSRG) to guide the management of hatcheries operated by the Department" address these issues.

Comment on #8): WDFW believes the existing language in the draft policy is clear on this topic. Policy Guidelines: 8) "Develop and promote the use of fishing techniques that allow non-target fish to be released with minimal mortality."

In addition recent changes to the fishing regulations' are aimed directly at this topic; See "Fishing rules will change June 6 on several rivers to protect Puget Sound wild steelhead" @ <http://wdfw.wa.gov/do/newreal/release.php?id=jun0309a> for more details.

Comment 24)

Regional Salmon Recovery boards have contacted us requesting that we add a supporting statement in the draft policy that "hatchery and fishery reform actions will be consistent with salmon recovery plans."

Sara G. LaBorde

Special Assistant to the Director

Washington Department of Fish and Wildlife

WDFW Response: WDFW agrees with this clarification. It has always been the intent of hatchery reform to be consistent with the salmon recovery plans. This concept is consistent the Statewide Steelhead Management Plan as adopted by the Fish and Wildlife Commission. Where there are salmon recovery plans, WDFW will utilize population goals and designations as well as work with recovery boards to synchronize our implementation plans to make the most of habitat and hatchery investments.

Comment noted.

Comment 25)



Minthorn
Conf. Tribes / Umatilla Indian Reser

cc: Phil Anderson Jim Scott
 Lisa Veneroso Ron Warren

CONFEDERATED TRIBES
of the
Umatilla Indian Reservation
Fish & Wildlife Commission
P.O. Box 638
Pendleton, Oregon 97801

June 8, 2009

Phil Anderson, Director
Washington Department of Fish and Wildlife
600 Capitol Way N.
Olympia, WA 98501

RECEIVED

JUN 15 2009

OFFICE OF THE DIRECTOR

Re: **WDFW Proposed Policy Decision on Hatchery and Fishery Reform**

Dear Mr. Anderson:

The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) are providing the following comments in response to the recent draft (Draft 2) of the Washington Department of Fish and Wildlife (WDFW) Hatchery and Fishery Reform Policy, Policy No. C-3619.

The CTUIR Objects to the Wholesale Adoption of the HSRG Recommendations.

Guideline 2 of the proposed policy provides: "The Department shall: use the principles, standards and recommendations of the Hatchery Scientific Review Group (HSRG) to guide the management of hatcheries operated by the Department." This apparent wholesale adoption of the Hatchery Science Review Group (HSRG) principles, standards and recommendations is wholly inappropriate. As WDFW is aware, the HSRG recommendations are not designed to be used as policy objectives. Their purpose is clearly outlined in the Policy Statement introduction to the HSRG Report: "*The HSRG recommendations are technical and scientific in nature. They are not intended to be policy decisions, but rather their function is to inform policy decisions.*" Given that the HSRG Policy Statement was drafted in large part through the work of the *United States v. Oregon* Policy Committee, with WDFW's participation, this proposed policy directive is inexplicable.

It is Inappropriate to Base Policy Directives on a Limited Use Model such The AHA Model.

The HSRG recommendations are based on the AHA (All H Analyzer) model. This model has significant limitations in terms of the data sets that can be input, and the consequently the results it produces. These significant concerns, and others, are detailed in the recent Recovery Implementation Science Team (RIST) report on Hatchery Reform Science¹. This

¹ The RIST is an independent science team formed by NMFS in April 2009 and tasked with reviewing the HSRG Report and its use of the AHA model, because, in part, of the lack of previous "widespread use" of the AHA model. RIST Report, April 2009, Executive Summary.

TREATY JUNE 9, 1855 * CAYUSE, UMATILLA AND WALLA WALLA TRIBES

report strongly cautions the use of the quantitative results from the AHA model and provides an extensive review of the concerns relative to its use. "Consistent with previous reviews, we strongly recommend caution about putting too much weight on the quantitative results of the AHA model. We ... do not think that the AHA model can accurately predict the outcomes of specific hatchery or habitat actions in a quantitative ways." RIST Report, April 2009, p. 4. To base an entire policy on a model and the recommendations from that model which has significant questions attached to it is not good management, and can be characterized as irresponsible..

The Technical Specifications in the Proposed Policy are Vague.

Of a more technical nature, proposed Guideline 4 would be served by more clarification and definition. This guideline calls for developing an "action plan" to implement hatchery reform, and provides certain PNI and stock segregation requirements for "*programs affecting wild populations of importance for conservation and recovery*" Unfortunately, there are no criteria whatsoever provided to determine which wild populations are important and which are not? Clearly, this specification contemplates that some will be of importance and some will not. Who will make this decision and on what basis? In CTUIR's view, all wild populations are important for conservation and recovery.

Even more troublesome is WDFW's adoption of percentage of natural influence (PNI) standards of .70, beyond that even recommended by the HSRG. There is no demonstrated justification for such a restrictive standard at this time. Further, if the HSRG standards for primary, contributing, and stabilizing populations are being used to make this determination then it should be specifically stated in the Policy. The PNI criteria specified in the Policy Guideline #4 would seem to suggest that only primary populations would fall under this guideline and that contributing and stabilizing populations would not be covered under the Policy and are unimportant for recovery.

The Proposed Policy is in Conflict with Washington's Commitments in *United States v. Oregon*.

The proposed policy is in direct conflict with the *United States v. Oregon* Policy Committee's agreed upon interpretation of, and intended use for, the HSRG Report. While we appreciate WDFW's stated commitment in proposed Guideline 1 to implement hatchery reform consistent with its *United States v. Oregon* obligations, this commitment appears to be mere lip service given Guidelines 2 and 4.

External marking of all artificial salmon and steelhead production is unnecessary.

Proposed guideline 5 requires facilities to "[e]xternally mark all artificial salmon and steelhead production intended for harvest unless the production is explicitly excluded through state-tribal agreements signed by the Director and the appropriate tribal governments." We assume that with respect to adipose fin clipping, this policy means the WDFW will abide by its marking commitments in the 2008-2017 *United States v. Oregon* Management Agreement. For those fish that WDFW intends to mark, that are non-external methods of marking that may be employed, and that better serve to fill the gaps in our data collection. These include any programs where we can use Coded Wire Tags (CWT) as marks and evaluate returns using electronic CWT detection. PIT tags also offer opportunities to evaluate returning fish where

they are passing dams or other facilities with detection capabilities. It is no longer necessary to use adipose fin clips as the only suitable identifier for hatchery origin fish.

We look forward to working with your agency to examine the potential application of HSRG recommendations or principles in SE Washington subbasins on a case-by-case basis. This is the way the HSRG recommendations are intended for use; they are potential tools for hatchery reform in appropriate situations, not rules to be applied universally. Thank you for the opportunity to comment. If you have any questions on our comments please contact Gary James or Brian Zimmerman of my staff at 541-276-4109.

Sincerely,



Jay Minthorn, Chairman Fish and Wildlife Commission
Confederated Tribes of the Umatilla Indian Reservation

BZ/BHH

Cc:

Responses are provided to comments in the order they appear in the above document:

a) The CTUIR Objects to the Wholesale Adoption of the HSRG Recommendations.

WDFW Response: WDFW believes the spirit and intent of the statement cited from the HSRG Policy Statement above ("*The HSRG Recommendations are technical and scientific in nature. They are not intended to be policy decisions, but rather their function is to inform policy decisions.*") is captured in the Draft Policy (see Policy Guidelines, item 2;"Use the principles, standards, and recommendations of the Hatchery Scientific Review Group (HSRG) to *guide* the management of hatcheries operated by the Department. (Emphasis added).

b) It is Inappropriate to Base Policy Directives on a Limited Use Model such as The AHA Model.

WDFW Response: WDFW is familiar with the recent RIST review of the AHA model. We agree with the conclusion that one should be cautious about interpreting the results as predicted by AHA, however, it should also be pointed out that the RIST concluded that: "*We believe the general thrust of the HSRG recommendations are scientifically sound and will lead to an improved situation for wild salmon populations....*" And further, "*We agree with*

the HSRG that the available scientific information, both theoretical and empirical, indicates that gene flow from hatchery populations into natural populations is likely to reduce natural population productivity. Limiting natural spawning by hatchery origin fish will be an effective way to reduce these risks....." (Recovery Implementation Science Team; Hatchery Reform Science, Executive Summary, April 2009)

c) The Technical Specifications in the Proposed Policy are Vague:

WDFW Response: WDFW agrees. The need to further clarify this section has been noted by several reviewers. WDFW plans to address this issue in revised versions of the policy.

d) The Proposed Policy is in Conflict with Washington's Commitments in United States v. Oregon.

WDFW Response: WDFW is fully committed to the U.S. v. OR. process and the commitments therein and believes the Draft Policy affirms this: (see Item 1, Policy Guidelines).

e) External marking of all artificial salmon and steelhead production is unnecessary.

WDFW Response: WDFW is fully committed to the U.S. v. OR. process and the commitments therein and believes the Draft Policy affirms this: (see Items 1, 5, Policy Guidelines).

End of Comments