

From: [Commission \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Hatchery Policy C-3619
Date: Tuesday, December 1, 2020 3:21:05 PM

From: Irene Martin <i7846martin@gmail.com>
Sent: Tuesday, December 1, 2020 3:20 PM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>; Jim Wells <fvpredator@yahoo.com>
Subject: Hatchery Policy C-3619

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

Dear Comissioners,

On behalf of Salmon For All, a 501 (c) (6) organization of processors, buyers and commercial fishermen and associates from the Columbia River region, I am writing to express the strong support of Salmon For All for the hatchery reforms developed for Policy C-3619. We are all mindful of the need for continued scrutiny and reform of various departmental policies as circumstances change and believe the proposed reforms are well thought-out and necessary. Thank you for your efforts on behalf of hatcheries as a necessary and useful tool in fisheries.

Sincerely, Jim Wells, President, Salmon for All

By Irene Martin, Salmon For All Secretary, pro tem

From: [Commission \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#); [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad.smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Subject: FW: Hatchery Policy C-3619
Date: Tuesday, December 1, 2020 2:00:13 PM
Attachments: [2020 budget folio 12dec2019 0 \(1\).pdf](#)

From: Brian Haynes <brian_j_haynes@outlook.com>
Sent: Tuesday, December 1, 2020 1:54 PM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Hatchery Policy C-3619

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

To: Washington Fish and Wildlife Commission

I fully endorse the revised policy C-3619. The Wild Fish Conservancy is a litigious organization that has only contributed to the demise of our salmon and steelhead runs in Washington State. The inclusion of a third party oversight was previously attempted in 29 SB 6168 WDFW operating budget to include Washington Fish Academy of Science, a well known anti-hatchery group.

Sincerely,
Brian J. Haynes

Sent from [Outlook](#)

Washington Fish and Wildlife Commission
600 Capitol Way
Olympia, WA 98501

Dec.1, 2020

Dear Commissioners,

It is with great dismay, I respond to your new hatchery reform plan. I was hired in 1989, as the Washington Dept. of Wildlife's hatchery evaluation biologist for Mitchell Act hatcheries. I worked in that capacity through merger with Fisheries, and in 2000 I became an area fish biologist in SW Washington. I retired after 28 years with the Department. I am concerned with declining fish trends.

This new policy is a travesty, undoing the hard work of many research scientists. WDFW has always claimed "Best Available Science" (BAS) would guide its decision making. This is not BAS, but undercuts science to provide extra fish for harvest, without evaluating the consequences. It is embarrassing. It perpetuates status quo, dismisses modern fish science, and won't pass Federal muster. WDFW used to be in the forefront of fisheries science. Why are you throwing in the towel?

In 1995, WDFW produced a Wild Salmonid Policy which is still on the books and should direct fish management (WDFW 1995). Its purpose was to protect wild fish stocks by setting escapement goals and modifying harvest and hatchery practices to benefit wild fish runs. In 1999, WDFW was asked to provide a measure of hatchery reform, and the Gorton Science Advisory team was created, discussing hatchery principles and emerging issues. In 2005, Moberg et al.; wrote a paper on Washington hatchery reform. This was followed and expanded in 2009 by the original WDFW Hatchery Reform Policy crafted by the Hatchery Scientific Review Group and Long Live the Kings. This drove hatchery operations for the next decade. Finally, just this year, Anderson, et al. (2020) conducted another review of hatchery reform science in the State. Its "Overarching themes" were:

- Hatchery reform is but one of several factors requiring careful planning and aggressive implementation needed to achieve meaningful recovery of salmon populations
- Hatchery reform is largely aimed at reducing risk in a relative but not absolute sense
- In WDFW's hatchery system, a focus on efficiency and maximizing abundance prevents widespread implementation of risk reduction measures

Inexplicably, the commission has chosen to disregard over two decades of hatchery reform policy, and the just released science review, to pursue your new plan.

Currently, we see reduced numbers of hatchery fish surviving to return to harvest or their hatcheries of origin. SAR's are as low as they have ever been, when calculated at all. The new policy changes integrated and segregated populations to conservation and fishery supplementation hatcheries. Mitigation hatcheries will hopefully counter habitat damage, which never should have been permitted in the first place. Hatcheries cannot make up for damaged habitat. It's an impossible task, and hasn't succeeded. The process of "domestication" within hatcheries has not been fully addressed. It should be.

Increased harvest is a poor excuse for increasing hatchery production, in times of ESA listings. Fish life histories extend beyond the hatchery. Fish need to deal with ocean conditions. An excess of hatchery fish already exists in the North Pacific Ocean; from Russia, Japan, Korea, B. C. and the western United States. North Pacific carrying capacity cannot support all these fish. Fish are becoming smaller and younger, when harvested or returning to hatcheries. Harvest should not dictate hatchery production levels, but complement the ocean's carrying capacity. There are already too many hatchery fish in competition with each other. This competition affects "wild" stocks also. Carrying capacity is already

exceeded. Has the commission considered Russian, Japanese or Korean hatchery outputs? My guess is no. Can Asian hatcheries flood the north Pacific with smolts?

Hatcheries need proper evaluation. Success should be measured in the number of returning adults, not in smolts released. Hatcheries with poor SAR's should be re-examined or eliminated. WDFW has not been successful in reducing pHOS, so is this the reason for changing policy? What happened to the pHOS - pNOR ratios promoted by the HSRG?. Do we just disregard it?

Another major deficiency in our system is a lack of scientific monitoring to determine the effects of hatchery fish on individual runs of wild salmon. How will we know if we are succeeding? Wild fish cannot just be written off. The Endangered Species Act still advocates for their protection. It is unlikely federal fish management agencies will support your new policy, particularly with a new resource minded administration.

A study designed to evaluate the progress and effectiveness of hatchery reform was proposed, but not completed as designed, because data was not available for 159 hatchery programs. This is scandalous. Hatcheries need evaluations of success. A defined percentage of hatchery funds should be set aside for monitoring and analyzing both the local and cumulative effects of hatcheries. Fisheries targeting abundant hatchery runs can unintentionally increase mortality of co-mingled natural populations. Wild fish bycatch is inevitable in mixed stock fisheries built on expanding hatchery production.

Agency credibility is on the line. As an area bio, I was tasked with promoting steelhead gene banks to our angling constituents. This was a hard sell, eliminating hatchery plants on favored rivers. But, we succeeded here in SW Washington on the East Fork Lewis, the Green, and Gray's Rivers. It appears successful on the E. F. Lewis. What do we tell our constituents now? These programs haven't been fully evaluated. We propose a program, and then abandon it without analysis or explanation. Our credibility with the public is already at a nadir over hoof rot and fishing opportunity.

Many salmonid stocks were listed under the ESA in the 1990's. None have been delisted. Where is the hatchery contribution to delisting these runs? We may get there with Hood Canal chum. But, no other stocks are even close to delisting, and most continue to decline. Where is Agency's concern? Are you pleased having stocks go extinct on your watch?

I could spend much time discussing hatchery and wild genetics; domestication within hatcheries, natural rearing regimes, but I do not see any point. How can we discuss science, when you, as a group, have chosen to abandon fish science? I do not believe the new policy will suffice to obtain NOAA Fisheries HGMP standards for WDFW hatcheries. I do not believe they will let you operate after abandoning the 2009 hatchery policy. I will push for federal review of the new policy demanding an EIS and full compliance with SEPA and NEPA review.

I feel I am viewing the rearrangement of deck chairs on the Titanic. I am embarrassed at the commission's apparent willingness to abandon science, just to promote harvest expedience. I expect overall fish returns to continue their decline with this new policy, and more stocks go extinct. This will contribute to the continued erosion of WDFW credibility in the eyes of Washington's citizens.

Thanks for your attention, Jim Byrne

References

Gorton Science Advisory Team 1999. – The reform of Salmon and Steelhead Hatcheries in Puget Sound and Coastal Washington to Recover Natural Stocks While Providing Fisheries; Hatchery reform in Washington state: principles and emerging issues. HSRG Staff.

Mobrand, L. E., J. Barr, L. Blankenship, D. E. Campton, T. T. P. Evelyn, T. A. Flagg, C. V. W. Mahnken, L. W. Seeb, P. R. Seidel, and W. W. Smoker. 2005. Hatchery reform in Washington State: principles and emerging issues. Fisheries 30:11-23.

Washington Department of Fish and Wildlife. 1997. Final environmental impact statement for the Wild Salmonid Policy. Washington Department of Fish and Wildlife. Olympia, WA.

Washington Department of Fish and Wildlife 2009. Hatchery and Fishery Reform POLICY NUMBER: C-3619 Effective Date: November 6, 2009

Washington Department of Fish and Wildlife 2020. A Review of Hatchery Reform Science in Washington State Joseph H. Anderson, Kenneth I. Warheit, Bethany E. Craig, Todd R. Seamons and Alf H. Haukenes. Washington Department of Fish and Wildlife Final report to the Washington Fish and Wildlife Commission January 23 2020



November 30, 2020

Larry Carpenter, Chair
Washington Department of Fish and Wildlife Commission
PO Box 43200
Olympia, WA 98504-3200

RE: Hatchery and Fishery Reform Policy (C-3619)

Dear Chair Carpenter, Commissioners:

Trout Unlimited (TU) appreciates this additional opportunity to comment on the Washington Department of Fish and Wildlife (WDFW) Commission's Hatchery and Fishery Reform Policy (C-3619) review. With over 300,000 members and supporters – including 4,000 members in the state of Washington – and over 220 staff, TU is North America's largest nonprofit organization dedicated to the protection, conservation, and restoration of cold-water fish and their watersheds. Our strength is derived from our grassroots members and volunteers working together with our staff toward the common goal of ensuring resilient fish populations for future generations. TU is dedicated to using the best available science to guide our efforts, and we have the benefit of applying the expertise of our staff fisheries scientists to support policy and science efforts requiring careful analysis.

As an organization dedicated to conserving, protecting, and restoring North America's cold-water fisheries and their watersheds, we still have concerns with the policy review of C-3619. At this point in time several populations of salmon and steelhead within Washington are listed for protection under the Endangered Species Act (ESA) and many stocks have recently experienced or are experiencing some of their worst returns on record. Accordingly, we again strongly encourage you to reconsider the shift in policy, uphold the intention as the original policy stated, and not abandon the science-based fishery and hatchery reform, which is fundamental to the WDFW's commitment to policies that enhance wild fish recovery objectives and are designed to support long-term recreational, tribal, and commercial fisheries into the future.

As stated in our comments provided to you on September 7 of this year (attached), we still have concerns with the new policy, even after further edits between WDFW staff and Commissioners. The draft policy continues to ignore and undermines the conclusions and recommendations from staff scientists, counters the breadth of science on hatchery effects, and unfortunately delivers a policy that is committed to increased hatchery production in an effort to bolster short-term commercial and recreational fishing opportunities, with little regard for the genetic and ecological impacts these programs might have to natural-origin populations.

We do not believe our previously stated concerns have been addressed by this draft, which include:

1. This draft policy has no backstop on hatchery impacts to natural-origin populations and lacks a suitable framework to evaluate such limitations. Guidelines 1 – 3 are still not included in this draft policy, which include using the principles, standards, and recommendations of the Hatchery Scientific Review Group (HSRG), improved broodstock management, and watershed-specific action plans that systematically implement hatchery reform as part of a comprehensive, integrated (All-H) strategy for meeting conservation and harvest goals at the watershed and Evolutionarily Significant Unit (ESU)/Distinct Population Segment (DPS) levels, steelhead are wrapped into the current policy with no scientific framework on how to limit impacts.
2. Hatchery Genetic Management Plans (HGMP) are designed to be federal Endangered Species Act (ESA) permits and go through an extensive review process as part of the development of a biological opinion (Bi-Op) on the operation of hatchery programs. This leaves programs in areas with un-listed populations like the Olympic Peninsula and Southwest WA ESUs and DPSs with little accountability, as they will lack the NOAA review associated with a Bi-Op and the necessary scientific framework for managing impacts as was found in the previous policy.
3. This new policy does not recognize or mention the development of a Statewide Hatchery Monitoring and Evaluation Plan. We believe the intention focuses on the implementation of HGMPs, which are not designed to be Monitoring and Evaluation Plans (MEP). Not clearly identifying the value of MEPs within the current policy further removes critical data necessary to understand the impacts of hatchery programs and accurately determine the risk they pose to recovery of ESA listed wild salmonids.
4. Abundance and productivity are two cornerstones of healthy, self-sustaining wild steelhead production and the removal of guideline 11, which calls for the “goal of establishing at least one Wild Salmonid Management Zone (WSMZ) for each species in each major population group (biogeographical region, strata) in each ESU/DPS, undermines state process that has occurred to date and included comments and involvement from hundreds to thousands of citizen stakeholders. This is an unacceptable attempt to subvert public policy and it greatly reduces WDFW’s ability to provide the highest likelihood of maintaining and restoring key populations to healthy levels.

Additionally, we have further concerns with the SEPA process for both the original policy’s Determination of Non-Significance (DNS) and current draft policy DNS. We recommend that the WDFW withdraw the September 2020 DNS (given the multiple draft revisions that have occurred since that was issued, we believe the DNS is no longer applicable), issue a Determination of Significance, and prepare a full Environmental Impact Statement (EIS), to assess the full impacts of the previous Hatchery Reform policy. The previous policy, which was committed to a review, was never assessed under the 2009 policy, and with the removal of the HSRG guidelines in May 2018, is possibly in violation of the original DNS.

Overall, we are generally concerned with this entire policy review and process, from the removal of clear scientific backstops which begin in March 2018 to the ongoing limited communication between the FWC, WDFW policy and science staff, tribes, and general public through the review, the lack of transparency and communication has left this process flawed. It is our belief that until clear priorities are set, we are concerned that hatchery management will shift back toward management guidelines

used before the 2009 Hatchery Reform Policy was implemented and the full set of risks to natural-origin populations from hatchery programs were not taken into full consideration.

We greatly appreciate your consideration of these comments and again are happy to answer any questions you may have about our concerns.

Sincerely,

A handwritten signature in black ink that reads "Jonathan Stumpf". The signature is written in a cursive style with a large initial 'J' and a stylized 'S'.

Jonathan Stumpf
Wild Steelhead Advocate - Washington
Trout Unlimited
Jonathan.stumpf@tu.org
303-918-8802



September 7, 2020

Larry Carpenter, Chair
Washington Department of Fish and Wildlife Commission
PO Box 43200
Olympia, WA 98504-3200

RE: Hatchery and Fishery Reform Policy (C-3619)

Dear Chair Carpenter, Commissioners:

Trout Unlimited (TU) appreciates this opportunity to comment on the Washington Department of Fish and Wildlife (WDFW) Commission's Hatchery and Fishery Reform Policy (C-3619) review. With over 300,000 members and supporters – including 4,000 members in the state of Washington – and over 220 staff, TU is North America's largest nonprofit organization dedicated to the protection, conservation, and restoration of cold-water fish and their watersheds. Our strength is derived from our grassroots members and volunteers working together with our staff toward the common goal of ensuring resilient fish populations for future generations. TU is dedicated to using the best available science to guide our efforts, and we have the benefit of applying the expertise of our staff fisheries scientists to support policy and science efforts requiring careful analysis.

As an organization dedicated to conserving, protecting, and restoring North America's cold-water fisheries and their watersheds, our concerns with the policy review of C-3619 reflect that mission. With many wild stocks of salmon and steelhead within Washington being listed for protection under the Endangered Species Act (ESA) and many recently experiencing some of the worst returns on record, we strongly encourage you to reconsider this shift in policy, uphold the intention as the original policy stated, and not abandon the science-based fishery and hatchery reform, which is fundamental to the WDFW's commitment to policies that enhance wild fish recovery objectives and are designed to support long-term recreational, tribal, and commercial fisheries into the future.

We recognize that certain hatchery programs have a place within the management framework for fisheries and recovery within Washington State. This includes conservation hatcheries that contribute to the recovery of certain populations and harvest hatcheries—some with legal obligations—that provide important fishery opportunities that can be realized with acceptable risks to naturally spawning populations. However, in order to achieve these various program objectives, we need rigorous policies that reduce risks to natural-origin populations, support recovery goals, and minimize the ecological interactions to wild populations (ISAB 2001; Naish et al. 2007; McClure et al. 2008).

While we are generally supportive of the science-based guidelines and principles that were laid out in the original Hatchery Reform Policy that was adopted by WDFW's Fish and Wildlife Commission (FWC) in 2009, the current direction of the C-3619 policy review process, which started in early 2018, causes serious concern.

We believe the new policy, which has undergone review by both WDFW staff and the Washington Academy of Natural Sciences, ignores and undermines the conclusions and recommendations from both entities and unfortunately delivers a policy that is committed to increased hatchery production in an effort to bolster short-term commercial and recreational fishing opportunities, with little regard for the genetic and ecological impacts these programs might have to natural-origin populations. Additionally, rolling back many of these original policies from 2009 undermines the significant resources and investments to steelhead and salmon recovery on the federal, regional, state, and local level.

It is our view that the following policy reform considerations do not support Viable Salmonid Population (VSP) parameters of abundance, productivity, spatial structure, and diversity (e.g., McElhany et al. 2000), which are used for protecting and recovering the wild steelhead and salmon populations in Washington.

First, the new policy has no backstop on hatchery impacts to natural-origin populations and lacks any framework to determine such limitations. Specifically, for steelhead, the FWC has acknowledged during this process that the existing literature supported the hatchery impacts to wild populations warranted maintaining guidelines 1-3 of the previous policy. However, now that guidelines 1 – 3 have been removed in the new policy, which include using the principles, standards, and recommendations of the Hatchery Scientific Review Group (HSRG), improved broodstock management, and watershed-specific action plans that systematically implement hatchery reform as part of a comprehensive, integrated (All-H) strategy for meeting conservation and harvest goals at the watershed and Evolutionarily Significant Unit (ESU)/Distinct Population Segment (DPS) levels, steelhead are wrapped into the current policy with no scientific framework on how to limit impacts. It is our view this removal of the aforementioned guidelines does not take into consideration the Statewide Steelhead Management Plan (SSMP), which is supposed to be the guiding framework for steelhead management in the state.

Second, while we appreciate the requirement to develop Hatchery Genetic Management Plans (HGMP) for all steelhead and salmon hatcheries operated under the authority of this policy, HGMPs are designed to be federal Endangered Species Act (ESA) permits and go through an extensive review process as part of the development of a biological opinion (Bi-Op) on the operation of hatchery programs. In our view, this leaves programs in areas with un-listed populations like the Coast and Southwest WA ESUs with little accountability, as they will lack the NOAA review associated with a Bi-Op and the necessary scientific framework for managing impacts as was found in the previous policy.

Additionally, review documents provided by WDFW staff during the review of this policy called out the importance of developing a Statewide Hatchery Monitoring and Evaluation Plan as primary recommendations. This new policy does not recognize or mention any such plan and we believe the intention focuses on the implementation of HGMPs, which are not designed to be Monitoring and Evaluation Plans (MEP). MEPs are already severely underfunded and have tremendous information

gaps (e.g., PSEMPSW 2012), leading to high levels of uncertainty for many species and populations. Hence, not clearly identifying the value of MEPs within the current policy further removes critical data necessary to understand the impacts of hatchery programs.

Finally, as previously mentioned, the commitments made within the original Hatchery Reform Policy reflect and inform the science-based management intentions within the various recovery plans and other state policies, including the SSMP. This revised policy essentially guts one of the key policies in the SSMP, Natural Production, with the removal of guideline 11, which calls for the “goal of establishing at least one Wild Salmonid Management Zone (WSMZ) for each species in each major population group (bio-geographical region, strata) in each ESU/DPS. Each stock selected for inclusion in the WSMZ must be sufficiently abundant and productive to be self-sustaining in the future.” Abundance and productivity are the cornerstones to healthy, self-sustaining wild steelhead production and the removal of this WSMZ guideline undermines the WDFW’s ability to provide the highest likelihood of maintaining and restoring key populations to healthy levels.

Until clear priorities are set, we are concerned that hatchery management might shift back toward management guidelines used before the 2009 Hatchery Reform Policy was implemented and the full set of risks to natural-origin populations from hatchery programs were not taken into full consideration. We sincerely hope that the FWC takes our comments and concerns into careful consideration with the direction of the C-3619 Policy review.

We greatly appreciate your consideration of these comments, and we are happy to answer any questions you may have about our concerns.

Sincerely,



Jonathan Stumpf
Wild Steelhead Advocate - Washington
Trout Unlimited
Jonathan.stumpf@tu.org
303-918-8802

References

Independent Scientific Advisory Board (ISAB). 2001. A review of salmon recovery strategies for the Columbia River Basin. ISAB 2001-7, <http://www.nwppc.org/library/isab/isab2001-7.htm>.

McElhany P., M.H. Ruckelshaus, M.J. Ford, T.C. Wainright and E.P. Bjorkstedt. 2000. Viable Salmonid Populations and the Recovery of Evolutionarily Significant Units [Report] / NW Fisheries Science Center. - Seattle, WA : NOAA Fisheries Service, 156 p.. - NOAA Tech. Memo. NMFS-NWFSC-42.

McClure, M. M., Utter, F. M., Baldwin, C., Carmichael, R. W., Hassemer, P. F., Howell, P. J., Spruell, P., Cooney, T. D., Schaller, H. A., & Petrosky, C. E. 2008. Evolutionary effects of alternative artificial propagation programs: implications for viability of endangered anadromous salmonids. *Evolutionary applications*, 1(2), 356–375. <https://doi.org/10.1111/j.1752-4571.2008.00034.x>

Naish, K. A., Taylor, J. E., 3rd, Levin, P. S., Quinn, T. P., Winton, J. R., Huppert, D., & Hilborn, R. 2007. An evaluation of the effects of conservation and fishery enhancement hatcheries on wild populations of salmon. *Advances in marine biology*, 53, 61–194. [https://doi.org/10.1016/S0065-2881\(07\)53002-6](https://doi.org/10.1016/S0065-2881(07)53002-6).

Puget Sound Ecosystem Monitoring Program Salmonid Workgroup (PSEMPSW). 2012. Methods and Quality of VSP Monitoring Of ESA Listed Puget Sound Salmon and Steelhead. Bruce A Crawford editor. URL: [www.psp.wa.gov/downloads/psemp/salmonid_VSP_monitoring assessment.pdf](http://www.psp.wa.gov/downloads/psemp/salmonid_VSP_monitoring_assessment.pdf). 148 pages.

From: [Commission \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Proposed Hatchery Policy C-3619
Date: Monday, November 30, 2020 2:05:28 PM

From: Russ Howell <russhowell.vashon@gmail.com>
Sent: Monday, November 30, 2020 12:56 PM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Proposed Hatchery Policy C-3619

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

To the Commission:

I am writing to express my support for the adoption of the proposed Hatchery Policy C-3619. We understand that certain financially interested groups have been actively lobbying against this new policy in favor of returning to old, failed practices. I believe it is essential to oppose these ongoing attempts to resurrect past HSRG guidance, which has never produced meaningful improvement in salmon populations, and is now not only outdated but discredited and arguably destructive.

We need to increase hatchery production under new, enlightened practices. A properly run in-basin program, with integration of natural-origin stock, can turn hatcheries into "efficient tributaries," increasing salmonid populations pending successful and widespread habitat restoration -- a decades-long prospect -- while preserving genetic diversity. C-3619 represents an important step toward achieving long-sought, long-term benefit to the resource, the broader ecosystem, and all economic and cultural stakeholders. I urge you to adopt it.

Thank you,

Russ Howell
President, East Jefferson Chapter of Puget Sound Anglers
203 561 6921 (mobile)

From: [Commission \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: C-3619
Date: Monday, November 30, 2020 2:00:29 PM

From: Andy Fortino <andyf@pattisongc.com>
Sent: Monday, November 30, 2020 11:51 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: C-3619

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

To: Washington Fish and Wildlife Commission

I fully endorse the revised policy C-3619.

Best Regards,
Andy Fortino | Project Manager
Pattison General Contractor
15223 NE 90th Street, Suite [140, Redmond, WA 98052](#)
O: [425-497-8222](tel:425-497-8222) F: [425-497-8223](tel:425-497-8223) C: [206-851-9551](tel:206-851-9551)
andyf@pattisongc.com www.pattisongc.com
Smart building inspired by special clients

Sent from my T-Mobile 4G LTE Device

From: [Commission \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Washington Fish and Wildlife Commission I fully endorse the revised policy C-3619.
Date: Monday, November 30, 2020 2:00:19 PM

From: Jarrod Kirkley <kirkley720@gmail.com>
Sent: Monday, November 30, 2020 11:44 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: To: Washington Fish and Wildlife Commission I fully endorse the revised policy C-3619.

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

To: Washington Fish and Wildlife Commission

I fully endorse the revised policy C-3619.

Jarrod Kirkley.

From: [Commission \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: C-3619
Date: Monday, November 30, 2020 2:00:08 PM

From: Mark or Stephanie Sears <oldpursuit@frontier.com>
Sent: Monday, November 30, 2020 11:43 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: C-3619

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

I would like to let the commission know that my family is in support of the revised WDFW commission policy C-3619 for increased hatchery production.

Thank You
Mark Sears
Marysville, Wa.
425-238-2284

From: [Commission \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: I Support revised policy C-3619
Date: Monday, November 30, 2020 1:59:55 PM

From: MICHAEL E GILCHRIST <mikegilchrist@comcast.net>
Sent: Monday, November 30, 2020 11:42 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: I Support revised policy C-3619

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

To WDFW Commission

I have just reviewed C-3619 as-revised and find nothing to object to. I endorse as-revised.

Thank you for your efforts on this.
Mike Gilchrist

Member:
Puget Sound Recreational Fisheries Enhancement Oversight Committee

Treasurer: State Board Of Puget Sound Anglers

From: [Commission \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW:
Date: Monday, November 30, 2020 1:59:39 PM

From: Spencer Haug <spencer.haug1@gmail.com>
Sent: Monday, November 30, 2020 11:39 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject:

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

Washington Fish and Wildlife Commission,

I fully endorse the revised policy C-3619.

-Spencer Haug

From: [Commission \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Support Hatchery Policy
Date: Monday, November 30, 2020 12:37:25 PM

From: DOUGLAS E BUTLER <coachbutler@comcast.net>
Sent: Monday, November 30, 2020 11:39 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Support Hatchery Policy

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

To: Washington Fish and Wildlife Commission

From: Douglas Butler

I am writing this to let you know I support the revised policy C-3619

Thankyou,

Douglas E. Butler

From: [Commission \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: revised policy C-3619
Date: Monday, November 30, 2020 11:54:50 AM

From: Gabe Miller <gmiller@farwestsports.com>
Sent: Monday, November 30, 2020 11:38 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: revised policy C-3619

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

Hi-

I just wanted to send you all a quick email expressing my support for revised policy C-3619. It is extremely important for the business I work for, as well as the overall sportfishing industry to increase hatchery production. For that reason I support C-3619 and the removal of the majority of the HSRG language so the state and the tribes can have more flexibility with their hatchery programs. Inserting a third party only adds more layers of complexity to a process that the state and the co managers are already completely competent in handling on their own. My hope is that the commission will see this as well and support c-3619.

Thank you,
Gabe Miller
Farwest Sports

From: rgarner755@aol.com [mailto:rgarner755@aol.com]
Sent: Monday, November 30, 2020 10:58 AM
To: rgarner755@aol.com
Subject: PSA Action needed to improve hatchery production! Please send a support email today to the commission.

To all,

Please send a very simple support email today to the WDFW Commission on supporting the new Hatchery Policy C-3619 that will allow more hatchery production, where possible, by removal of HSRG language. Wild Fish Conservancy has done an action alert to try to stop this and is pushing back hard. The new policy will be done between tribes and state without the oversight of a third private party that has put more constraints on our hatchery production and made a very lucrative living by using it. Its important that we have the commissioners back and support them on this game changing event. They are trying to move forward and we need to show support for them. Butch and I have spent the last 5 years trying to get our hatchery production back. We have been working with our tribes to get this done.

Thanks
Ron Garner

Here is all that is needed,

Send email to: commission@dfw.wa.gov,

To: Washington Fish and Wildlife Commission

I fully endorse the revised policy C-3619.

Sign your name

From: [Commission \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Policy C-3619
Date: Monday, November 30, 2020 11:54:37 AM

From: Bruce Stapleton <4bstapleton@gmail.com>
Sent: Monday, November 30, 2020 11:29 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Policy C-3619

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

I FULLY ENDORSE THE REVISED POLICY C-3619!

Bruce K. Stapleton

From: [Commission \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: C-3619
Date: Monday, November 30, 2020 11:54:30 AM

From: Pep Dog <p_egashira@yahoo.com>
Sent: Monday, November 30, 2020 11:27 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: C-3619

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

To: Washington Fish and Wildlife Commission

I fully endorse the revised policy C-3619. We really need more fish in our waters and hatcheries are the only way to help since there isn't enough spawning areas.

Thanks
Paul Egashira

Sent from my iPhone

From: [Commission \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Washington fish and wildlife commission
Date: Monday, November 30, 2020 11:26:38 AM

From: Cory Rose <Divelist@hotmail.com>
Sent: Monday, November 30, 2020 11:23 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Washington fish and wildlife commission

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

I fully endorse the revised policy C-3619.

Saving our salmon runs is not a political tool. Pump up the hatcheries, cull the sea lion and seal populations along with bird predation. Stop allowing gill nets in the rivers. This is not rocket science people. Stop playing politics with our fisheries!!!

Cory Rose.

From: [Commission \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Vote to adopt C-3619
Date: Monday, November 30, 2020 11:26:18 AM

From: Allen Morrow <ramorrow@pacifier.com>
Sent: Monday, November 30, 2020 11:22 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Vote to adopt C-3619

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

Dear Commission Members,

I fully endorse the revised policy C-3619. It is time to recognize that the existing program has been a disaster. Please do your duty and vote to adopt these changes.

Allen Morrow, President
South Sound Chapter Puget Sound Anglers

From: [Commission \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Washington fish and wildlife commission
Date: Monday, November 30, 2020 11:25:48 AM

-----Original Message-----

From: Steve Ng <FishNg1@aol.com>
Sent: Monday, November 30, 2020 11:21 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Washington fish and wildlife commission

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

I fully endorse the revised policy C-3619.

Steve Ng

Sent from my iPhone

From: [Commission \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Support for Hatchery Production
Date: Monday, November 30, 2020 11:25:22 AM

From: walter wojcik <wojcikw@frontier.com>
Sent: Monday, November 30, 2020 11:19 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Support for Hatchery Production

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

Commissioners,

I urge you to support the new Hatchery Policy C-3619 that allows more hatchery production. Increase hatchery production is a win-win for the State and all who benefit from the resource.

Cordially,

Walt Wojcik
206/948-0463

From: [Commission \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW:
Date: Monday, November 30, 2020 11:24:49 AM

From: Woody Woods <wowoody1@yahoo.com>
Sent: Monday, November 30, 2020 11:15 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject:

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

I endorse the revised policy C3619 . William O Woods

[Sent from Yahoo Mail for iPad](#)

From: [Commission \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: C-3619
Date: Monday, November 30, 2020 11:24:21 AM

From: Ed Chapman <edchaphome@yahoo.com>
Sent: Monday, November 30, 2020 11:12 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: C-3619

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

Please know I am supportive of the revised Hatchery Policy, Washington must produce more fish in our hatcheries to support not only the Orcas but our recreational fishing community.

Paul Chapman

Lifetime resident and angler for 65 years, not too many left to catch another hatchery fish. I remember 25 or 30 years ago the awesome steelhead fishing on the Cowlitz River, now almost nothing.

From: [Commission \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: policy C-3619
Date: Monday, November 30, 2020 11:23:57 AM

-----Original Message-----

From: Rory O'Connor <petpuppies@gmail.com> On Behalf Of Rory O'Connor
Sent: Monday, November 30, 2020 11:10 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: policy C-3619

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

I fully endorse the revised policy C-3619.

Rory O'Connor
Bellingham, WA
360-393-9587

From: [Commission \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Hatchery Policy C-3619
Date: Monday, November 30, 2020 11:23:22 AM

From: (null) billy4hp <billy4hp@frontier.com>
Sent: Monday, November 30, 2020 11:10 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Hatchery Policy C-3619

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

To: Washington Fish and Wildlife Commission

I fully endorse the revised policy C-3619.

Best Regards,

William P Smith

Coleton J Smith

Anacortes, WA

Sent from my iPhone. Please excuse the brevity, typos and any punctuation errors...

From: [Commission \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Support fr revised Policy, C-3619
Date: Monday, November 30, 2020 11:22:35 AM

From: KARL BRACKMANN <poppakarl@outlook.com>
Sent: Monday, November 30, 2020 11:04 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Support fr revised Policy, C-3619

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

To: Washington Fish and Wildlife Commission

I fully endorse the revised policy C-3619.

Karl Brackmann
Puget Sound Anglers, Eastside Chapter President
Puget Sound Anglers, Vice president, Central Region, State
Puget Sound Anglers, Education, Fisheries, and Conservation Chapter



**Mr. Larry Carpenter
November 30, 2020
WDFW Commission Chair
Olympia, WA**

RE: Hatchery Policy C-3619

Dear Chair Carpenter,

I am reaching out to you today on behalf of the Puget Sound Anglers State Board and its 16 Statewide Chapters. We support the revisions of the Hatchery Policy C-3619. Please move this Policy forward and continue to work with our Co-Managers. We want to see the three HSRG points removed from the policy and do not want to revert back to the old policy. If SEPA was never properly executed on the previous policy, this should have terminated the old policy.

Please continue forward with the new revised policy and its language.

**Sincerely yours,
Ron Garner,
President
Puget Sound Anglers
State Board**

From: [Commission \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Policy C-3619
Date: Monday, November 30, 2020 11:01:48 AM

From: stan duncan <stan_duncan@hotmail.com>
Sent: Monday, November 30, 2020 10:52 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Policy C-3619

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

I agree with the Tribal Commission and Puget Sound Anglers in supporting the revised WDFW Commission Policy C-3619.

Stan Duncan

From: [Commission \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Hatchery Policy
Date: Monday, November 30, 2020 10:26:38 AM

From: Mike Kruse <mikenank@gmail.com>
Sent: Monday, November 30, 2020 10:18 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Hatchery Policy

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

I support the revised WDFW Commission Policy C-3619

From: [Commission \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: C-3619
Date: Monday, November 30, 2020 10:12:05 AM

From: pete@grizz91345.com <pete@grizz91345.com>
Sent: Monday, November 30, 2020 10:05 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: C-3619

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

As a sports fisherman it is hard for me to believe that reducing hatchery production would ever increase Salmon population in Puget Sound. I wish that people that do not fish or live outside of the state would mind their own business. After putting hatchery fish in the wound for 100 years+ It is hard for me to believe there are any "wild" fish left. It is about time for people (politicians) to get real and take care of the fish and not their pocketbooks. Long live the hatcheries and the salmon.

From: [Commission \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: C-3619
Date: Monday, November 30, 2020 10:02:06 AM

From: Andrew Derksema <sjifishing@gmail.com>
Sent: Monday, November 30, 2020 9:57 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: C-3619

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

***I support the revised WDFW Commission Policy C-3619.
Please do not let a fringe group destroy something that benefits Washingtonians, Washington's state economy, Washington state tribes and Southern Resident Killer Whales alike.***

Sincerely, Andrew Derksema.

Sent from my iPhone

From: [Commission \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: I support the revised WDFW Commission Policy C-3619
Date: Monday, November 30, 2020 10:02:05 AM

From: Bob Felder <felderconsult8780@gmail.com>
Sent: Monday, November 30, 2020 9:59 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: I support the revised WDFW Commission Policy C-3619

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

Dear Commision Members

I am a member of the Puget Sound Anglers and wholeheartedly support the revised policy regarding hatcheries.

Robert Felder
5005 Heather Drive
Anacortes, WA 98221

From: [Commission \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Revised WDFW policy C-3619
Date: Monday, November 30, 2020 9:52:29 AM

From: Jerry Johnson <johnsjerry@gmail.com>
Sent: Monday, November 30, 2020 9:14 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Revised WDFW policy C-3619

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

Good morning. As a recreational fisherman here in Washington waters for the past 15 years I support the WDFW Recised Policy C-3619.

Thank you, Jerry Johnson, Port Townsend

From: [Commission \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Support for the revised WDFW Commission Policy C-3619.
Date: Monday, November 30, 2020 9:51:57 AM

From: Alan Williams <outlook_A0896792683C8679@outlook.com>
Sent: Monday, November 30, 2020 9:15 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Support for the revised WDFW Commission Policy C-3619.

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

WDFW Commissioners, I am sending this email to express my support for the revised WDFW Commission Policy C-3619. From all the data I have seen the HSRG input has only closed hatcheries and resulted in less fish for sport fishing, the tribes and the resident Orcas. Please do not mandate that the HSRG or any like minded body be involved in setting Salmon hatchery policy. The Tribes and WDFW have enough trained biologist to make informed scientific decisions.

Thank you for your attention.

Alan R. Williams DVM
Mount Vernon, WA

Sent from [Mail](#) for Windows 10

From: [Commission \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: revised WDFW Commission Policy C-3619.
Date: Monday, November 30, 2020 9:51:33 AM

From: Joel Janetski <joel_janetski@byu.edu>
Sent: Monday, November 30, 2020 9:16 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Re: revised WDFW Commission Policy C-3619.

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

WDRW Commission:

I am an active recreational fisherman in the Puget Sound area as well as the Strait of Juan de Fuca. I am also a member of the East Jefferson chapter of the Puget Sound Anglers association. I write expressing concerns with the declining salmon population throughout this region. Although reasons for this are undoubtedly complicated, I am convinced that current policy is not working. I am encouraged by the language in the proposed WDFW Commission Policy Act C-3619 and wholeheartedly support it in hopes that we will see an increase in these iconic species in our region.

Thanks for listening.

Joel Janetski
Emeritus Professor of Anthropology
Brigham Young University
432 Sunset Blvd
Port Townsend, WA 98368
cell: 801.319.0542
Joel_Janetski@byu.edu

From: [Commission \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Commission policy C-3619
Date: Monday, November 30, 2020 9:50:59 AM

From: Doug LUMSDEN <doug.lumsden@comcast.net>
Sent: Monday, November 30, 2020 9:38 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Commission policy C-3619

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

Greetings,

As a fourth generation Washington resident and sportsman, I am writing to voice my support of the revised WDFW Commission Policy C-3619. The addition of the HSRG to the management process was clearly a mistake and has not produced any of the results that it promised. Please return management of our resources to the legal co-managers, The State of Washington and it's citizens and the Native American Shareholders. I appreciate your consideration in this matter.

***Doug Lumsden
7713 190th Pl. N.E.
Arlington, WA***

From: [Commission \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Hatcheries
Date: Monday, November 30, 2020 9:49:35 AM

-----Original Message-----

From: Ryan Lavine <rdlavinekmj@comcast.net>
Sent: Monday, November 30, 2020 9:49 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Hatcheries

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

My name is Ryan Lavine I am a member of the Puget Sound anglers Fidalgo San Juan chapter and I support WDFW Policy 3619 hatcheries reform

Sent from my iPhone

From: [Kloepfer, Nichole D \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Public comment on revised hatchery and fishery reform policy
Date: Monday, November 30, 2020 9:05:01 AM

-----Original Message-----

From: RUSSELL L CARVER <carver2947@msn.com>
Sent: Monday, November 30, 2020 9:01 AM
To: Kloepfer, Nichole D (DFW) <Nichole.Kloepfer@dfw.wa.gov>
Subject: Public comment on revised hatchery and fishery reform policy

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

Nichole and commission

I endorse the revised policy C-3619 please approve this policy and move forward .

Russell Carver kids fish event planner

Sent from my iPad

From: [Commission \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: WDFW Commission Hatchery PolicyC-3619
Date: Monday, November 30, 2020 8:46:32 AM

From: Dave Miller <4salebydavemiller@gmail.com>
Sent: Monday, November 30, 2020 8:19 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: WDFW Commission Hatchery PolicyC-3619

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

WDFW Commission,

I'm writing in support of the revised WDFW Commission Hatchery PolicyC-3619. It's time to let go of the failing HSRG policy and move forward with producing more hatchery fish and to stop blaming them for the lack of recovery of natural spawning Salmon.

Dave Miller
President of the Everett Salmon and Steelhead Club.

--

Dave Miller
Managing Broker
Hallmark Homes NW
425-530-0017
4salebydavemiller@gmail.com

From: [Commission \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Hatchery Fish
Date: Monday, November 30, 2020 8:46:22 AM

From: DAVID FINNEY <findog1@frontier.com>
Sent: Monday, November 30, 2020 8:45 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Hatchery Fish

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

I am 100% behind the revised WDFW Commission Policy C-3619. It is obvious that what has been tried isn't working.

David Finney



November 28, 2020

Fish and Wildlife Commission
Washington Department of Fish and Wildlife

Re: Hatchery and Fishery Reform Policy (C-3619), WDFW

Commissioners:

On behalf of the Wild Steelhead Coalition's Board of Directors and thousands of members, we are writing to reiterate our opposition to the Commission's revised recommendations for the Hatchery and Fishery Reform Policy (C-3619). This effort to circumvent the 2009 Hatchery Scientific Review Group (HSRG) guidelines is unwarranted, represents the injection of politics over the research findings of the Washington Department of Fish and Wildlife's own fishery biologists, and arbitrarily circumvented proper use of the State Environmental Policy Act (SEPA) in June 2018 when it abandoned guidelines #1, #2, and #3 of Washington's Hatchery Policy without any justification or agency review.

Hatchery production, especially broodstock facilities that use and kill wild salmon as breeding stock, are well documented to have detrimental, cascading effects on wild fish populations. Expanding these operations without sufficient monitoring or environmental review, especially when it contradicts the Department's own findings from the recent 2020 report "A Review of Hatchery Reform Science in Washington State."

This hasty, reckless policy change should be paused and subjected to a full Environmental Impact Statement (EIS) under the auspices of the SEPA process. It may well be that new research and methodologies will be made available to update the HSRG's 2009 recommendations, but any changes must be made through proper channels, rigorously vetted, align with the WDFW's own research on hatchery impacts on diminished, fragile stocks of wild and Endangered Species Act (ESA) listed native species, consider alignment with Washington's stated conservation goals, and implemented judiciously on a watershed by watershed place-based management regime. The Commission's current recommendations fails these tests across the board and should be halted while a new EIS is requested and completed.

For your reference, we will include a copy of our letter submitted in September 2020 on this topic as its recommendations still apply to the recently revised C-3619 proposal.

Thank you for your time and consideration,

Greg Topf
Chair, WSC Board of Directors

Rich Simms
WSC Board Member and Co-Founder



Addendum:

September 1, 2020

Fish and Wildlife Commission
Washington Department of Fish and Wildlife

Re: Hatchery and Fishery Reform Policy (C-3619), WDFW

Commissioners:

On behalf of the Wild Steelhead Coalition's Board of Directors and thousands of members, we are writing to formally submit our continued support for the 2009 Hatchery Scientific Review Group (HSRG) guidelines established as a part of WDFW's Hatchery and Fishery Policy (C-3619). We are deeply concerned by any effort to disregard or undermine these scientifically established best practices and the subsequent negative implications for native fish recovery in Washington waters.

As part of the recent policy review, the Fish and Wildlife Commission has recommended suspending the HSRG Policy guidelines 1, 2, and 3 for salmon species other than steelhead. The Wild Steelhead Coalition opposes this policy change. We hope the Commissioners will reject this recommendation when it comes time to vote and reaffirm the existing WDFW commitment to science-based hatchery program management as provided by the HSRG guidelines.

Unfortunately, we believe the recommendation to suspend these three policy guidelines is motivated by politics and cannot be defended by the available science, including the work of WDFW's own researchers. It would be a step backwards for Washington wild fish recovery and should be rejected. The WSC and its members are long-time advocates for fishery and hatchery management guided by rigorous monitoring and scientific evidence. We would support potential updates to the HSRG guidelines based on new research and fishery monitoring information, but not any suspension of guidelines due to inconvenience.

While we recognize that the policy recommendations explicitly do not include steelhead hatchery management, the WSC firmly acknowledges that all native fishery and hatchery management decisions have implications throughout Washington's interconnected watersheds and ecosystems. Therefore, all fishery and hatchery policy must be universally guided by the best science available in order to minimize negative impacts on wild fish populations (especially where these numbers are suppressed or struggling), establish watershed specific recovery plans, and prioritize sustainable, durable native fish recovery in order to support fisheries and the communities that depend upon them.

The WSC recognizes, and appreciates, the motivation to restore Southern Resident Killer Whale populations. We support and value these amazing animals and understand that the proposed HSRG guideline suspensions is explained by the need to aid these populations by providing additional salmon for their diet. But, recovery and protection of Washington native fish populations must be balanced with efforts to aid the Southern Resident



Killer Whales. We are deeply concerned about unintended consequences to native fish if hatchery guidelines are abandoned. Both challenges must be met with science-based policy and held to the highest ecological standards.

The Wild Steelhead Coalition is committed to working with the Fish and Wildlife Commission and the WDFW to collaborate on viable plans to restore Washington's dangerously faltering steelhead and salmon populations. Wherever possible, we strive to publically support the Commission and the agency's researchers, enforcement and policy-makers, but we must speak up on behalf of our membership whenever policy changes risk irresponsible outcomes regarding wild fish recovery or damage to the public trust. Unfortunately, the recent recommendation to suspend the HSRG guidelines 1, 2 and 3 as they pertain to policy 3619 is one of these times. We hope the commissioners will heed the best available science and reject the recommended changes to Washington's Hatchery and Fishery Reform Policy.

Thank you for your time, consideration and leadership,

Greg Topf
Chair, WSC Board of Directors

Rich Simms
WSC Board Member and Co-Founder

From: [Commission \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Support for WDFW Hatchery Policy C-3619
Date: Monday, November 30, 2020 8:03:56 AM

From: darkumm <darkumm@comcast.net>
Sent: Monday, November 30, 2020 7:57 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Support for WDFW Hatchery Policy C-3619

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

Please support the revised WDFW Commission Policy C-3619.

Thank you for your consideration in this matter,

Darwin Kumm

Sent from [Mail](#) for Windows 10

From: [Commission \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Warren, Ron R \(DFW\)](#); [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Support for C-3619
Date: Monday, November 30, 2020 8:02:29 AM
Attachments: [101919 History of Chinook Transfers \(updated\).pptx](#)

From: Dave Croonquist <dcroonquist@gmail.com>
Sent: Sunday, November 29, 2020 7:21 PM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Cc: David Croonquist <dcroonquist@gmail.com>
Subject: Support for C-3619

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

Ladies and Gentlemen of the WDFW Commission

I would like to add my personal support to the re-write of C-3619. We've had the original policy in place for almost 11 years and no strong results to show for the recovery of our salmonid populations. It is time for a change and the decisions need to be made by you, the Commission, through your directions to WDFW staff to become more aggressive in the utilization of our state hatchery facilities. We don't need an independent third party (the Hatchery Scientific Review Group - HSRG) providing oversight to the state and tribal biologists who have the expertise to properly manage our salmonid resources for recreational and commercial utilization by all Washingtonians and visitors to our state. Our fisheries used to be an economic boon to the state and could once again make Washington "The Salmon Fishing Capital of the United States".

Since 1985, we've seen a steady decrease in the numbers of natural origin salmonids that tracks the cuts that have been made to WDFW hatchery programs. The cuts in production have impacted state and tribal fisheries and, in a broad sense, the decline in the SRKW populations also follows the same trend line as the production cuts.

Hatcheries are not an end-all for salmonid recovery. I, too, want to see self-sustaining natural spawning populations, but waiting for habitat recovery and dependency on current natural spawning populations will not provide the jump start our river basins need for recovery. Hatcheries are, in my opinion, a very efficient spawning "tributary" in the river basins they are found in. An aggressive integrated hatchery program can help re-build salmonid populations. Maintaining segregated programs just exacerbates the continuing decline.

As a side note, it is also a time for an in-depth look at the impacts the Washington Department of Fisheries had on our salmonid populations. From 1952 to 1987, billions of salmon were released in Washington river basins. It was common for millions of eggs to be moved around the state to

backfill hatchery programs. Pre-1952 and post 1987, similar activities occurred. Run timing and the original genetics of our salmon populations were irrevocably altered. The "wild" fish of the late 18th and early 19th century no longer exist. Salmonids are plastic and can quickly adapt to their home rivers. Integrated programs can help achieve the goals of self-sustaining, natural spawning salmonid populations. I have attached an 8-year snapshot of just Chinook egg movement around the state by the Washington Department of Fisheries for your information.

We don't need to revert back to HSRG controls on what should be state and tribal functions working as co-managers. Please approve the revised Wildlife Commission Policy C-3619.

Thank you for your time and dedication to Washington's fish and wildlife resources.

Dave Croonquist

Member Puget Sound Anglers - North Olympic Peninsula Chapter, Sequim

From: [Commission \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Warren, Ron R \(DFW\)](#); [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Comments on draft revisions to POLICY NUMBER: C-3619 "Anadromous Salmon and Steelhead Hatchery Policy"
Date: Monday, November 30, 2020 8:00:27 AM

From: Jerry Holmes <jerry.holmes@comcast.net>
Sent: Sunday, November 29, 2020 8:48 PM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Comments on draft revisions to POLICY NUMBER: C-3619 "Anadromous Salmon and Steelhead Hatchery Policy"

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

I am responding to the Washington Fish and Wildlife Commission News Release "**Commission invites public comment on latest draft revision of Hatchery and Fishery Reform policy**", dated Nov 9, 2020.

My comments are below:

Under "General Policy Statement", first sentence, strike "optimizes achieving".

Throughout, there is reference to "wild population". I suggest that a definition that term should be documented. I also suggest that the definition focus on the gene pool and DNA specific to that watershed and not on where the fry hatches from.

Under "Policy Guidelines":

Item 1: the underlying assumption of this paragraph is that the stock of hatchery fish comes from parental brood stock not from that river system. That may be the case, but it doesn't have to be the case. Please see the comment above. What I'm encouraging is a consideration of using broodstock from the river system in question as parental stock for the hatchery production, thereby benefiting from the efficiencies of hatchery production while still leveraging the gene pool that has adapted to that specific river system's environment.

Item 2: I agree with the statement, if the assumption is made that the parental stock is from a different river system. Also, our current hatchery practices amplify the problem by using only one collection and release location for the hatchery. The hatchery focus should be on the entire river system, not just where the brick and mortar of the hatchery is established. Bottomline: spread the fish throughout the river system!

Editing of Appendix 2, Section 7: bolding of "SECTION 7 BROODSTOCK COLLECTION". 7.2 and 7.6 should be on their own line.

Additional thoughts:

A fish hatchery should be more than just an egg hatching facility. It should consider the entire

lifecycle of the fish and wherever possible feasibly replicate that cycle. For example, what's the environment that the fry are exposed to thru the smolt phase? Compare a concrete pond with a slough/stream environment. What rearing environment will produce the best outcome? Also, what happens to the adults after spawning in the hatchery setting? Do they get released into the environment to out migrate (in the case of steelhead) or die and fertilize the ecosystem (in the case of salmon) or are the carcasses discarded and not returned back into he ecosystem?

How do we know that this strategy is working? What are the measures? What data is to be used? For example, how do we know how many steelhead are returning to the Sauk River, during a run and prior to or concurrent with a fishing season? There are technologies and techniques that are applied in other fisheries in the world that provide data for this purpose so that we have better information to make real time decisions. Let's adapt and apply to the Washington State anadromous runs.

Comments submitted by Jerry Holmes, 206-898-8387, dated Nov 29, 2020.

From: [Commission \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: WDFW Hatchery Policy C-3619 update
Date: Monday, November 30, 2020 7:59:25 AM

From: president rentonpsa.org <president@rentonpsa.org>

Sent: Sunday, November 29, 2020 6:35 PM

To: Commission (DFW) <COMMISSION@dfw.wa.gov>

Subject: WDFW Hatchery Policy C-3619 update

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

Dear commissioners, my name is Brad Ridgeway and I'm the president of Renton Puget Sound Anglers.the Renton chapter support **revised Hatchery Policy C-3619**

Thank you

From: [Commission \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: C-3619
Date: Monday, November 30, 2020 7:59:04 AM

From: normanc@olyphen.com <normanc@olyphen.com>
Sent: Sunday, November 29, 2020 12:50 PM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: C-3619

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

Please learn from British Columbia's research and action proving that there is more income/fish to the state (province) from sport fishing than commercial harvesting.

Support Policy C-3619.

Norman Christie

Port Hadlock

From: [Commission \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Support for REVISED WDFW POLICY C-3619.
Date: Monday, November 30, 2020 7:58:28 AM

From: jay Evans <jjevans71@gmail.com>
Sent: Sunday, November 29, 2020 12:49 PM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Cc: PSA Mailing <psa-mailing@googlegroups.com>
Subject: Support for REVISED WDFW POLICY C-3619.

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

Sir,
I, support the revised WDFW Commission Policy C-3619.

Thank you,
Jay Evans

From: [Commission \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Hatchery discussion
Date: Monday, November 30, 2020 7:34:02 AM

From: Wendell Bunch <ccanadensis@gmail.com>
Sent: Sunday, November 29, 2020 10:26 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Hatchery discussion

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

I strongly support the revised WDFW Commission Policy C-3169. This action is long overdue.

Thank you, Wendell Bunch Oak Harbor Wa

From: [Commission \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: WDFW Commission Policy C-3619.
Date: Monday, November 30, 2020 7:33:51 AM

From: (null) billy4hp <billy4hp@frontier.com>
Sent: Sunday, November 29, 2020 8:27 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: WDFW Commission Policy C-3619.

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

WDFW,

As I sit at my home in Anacortes, with my boat safely tucked away on it's trailer until likely next May.

I get a call to arms email from the PSA in regards to **WDFW Commission Policy C-3619**.

I support increased hatchery output and the updated hatchery policy. Stop being steered by the WFC that uses tax payer dollars against tax payers!

Sent from my iPhone. Please excuse the brevity, typos and any punctuation errors...

From: [Commission \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: HSRG
Date: Monday, November 30, 2020 7:33:38 AM

From: Troy McKelvey III <troymckelvey3@gmail.com>
Sent: Saturday, November 28, 2020 9:44 PM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: HSRG

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

No HSRG

From: [Commission \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad.smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Warren, Ron R \(DFW\)](#); [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Comments re: Hatchery and Fishery Reform policy (C-3619)
Date: Monday, November 30, 2020 7:32:38 AM
Attachments: [HWC WDFW Comments FINAL 1.pdf](#)

From: dschamp@frontier.com <dschamp@frontier.com>
Sent: Friday, November 27, 2020 9:02 PM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Comments re: Hatchery and Fishery Reform policy (C-3619)

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

Please find the attachment containing comments on behalf of the Hatchery & Wild Coalition by Cameron Black, Director.

Verification of receipt would be appreciated.

Thanks.

From: [Kloepfer, Nichole D \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Batungbacal, Chalee W \(DFW\)](#); [Warren, Ron R \(DFW\)](#)
Subject: FW: Public comment on revised Hatcheryand Fishery Reform Policy
Date: Monday, November 30, 2020 7:19:40 AM

-----Original Message-----

From: Rob Larsen <bishoprob@comcast.net>
Sent: Saturday, November 28, 2020 10:35 PM
To: Kloepfer, Nichole D (DFW) <Nichole.Kloepfer@dfw.wa.gov>
Subject: Re: Public comment on revised Hatcheryand Fishery Reform Policy

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

>
>
> DFW Commission,
>
> I endorse the revised policy C-3619.You need to approve this policy now and move forward .
>
>
Rob Larsen

SOF PSA President
253 230 2839

From: [Kloepfer, Nichole D \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Warren, Ron R \(DFW\)](#); [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Public comment on revised Hatchery and Fishery Reform Policy
Date: Monday, November 30, 2020 7:19:08 AM

From: Irene_Carl Carver <crciec@msn.com>
Sent: Sunday, November 29, 2020 10:23 AM
To: Kloepfer, Nichole D (DFW) <Nichole.Kloepfer@dfw.wa.gov>
Subject: Public comment on revised Hatchery and Fishery Reform Policy

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

DFW Commission,

We sportsmen and women are counting on you to endorse the revised policy C-3619. Please approve this policy and move forward to do the right thing for we the people. You are on the commission to represent us to do what we support and what is right for our fisheries. My family and friends look forward to getting the good news that revised policy C-3619 is approved.

Thank you for being there for us.

Carl and Irene Carver and family

From: [Kloepfer, Nichole D \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Warren, Ron R \(DFW\)](#); [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Public comment on revised Hatcheryand Fishery Reform Policy
Date: Friday, November 27, 2020 11:30:12 AM

-----Original Message-----

From: fishaholic9@juno.com <fishaholic9@juno.com>
Sent: Friday, November 27, 2020 11:18 AM
To: Kloepfer, Nichole D (DFW) <Nichole.Kloepfer@dfw.wa.gov>
Subject: Public comment on revised Hatcheryand Fishery Reform Policy

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

DFW Commission,

I endorse the revised policy C-3619. You need to approve this policy now and move forward .

Hal Boynton

INTEROFFICE MEMORANDUM

TO: FISH AND WILDLIFE COMMISSION

FROM: KEVIN MALONE

SUBJECT: COMMENTS – POLICY C-3619

DATE: NOVEMBER 16, 2020

CC: FILES

commission@dfw.wa.gov.

The purpose of this correspondence is to provide comments on the updated Anadromous Salmon and Steelhead Hatchery Policy (C-3619). The document updates the previous version approved by the Commission on November 5, 2009.

Overall, the draft document appears to be a major step backward from the 2009 version in the implementation of hatchery reform in the state. The newest version reads as if it has been written by a committee wherein each member made sure his/her major issue was addressed or wording changed to ensure that policy did not get in the way of preferred hatchery operations. The emphasis has been changed from one of conservation to balancing conservation with other societal benefits. Additionally, there is little accountability in the 2020 version regarding when goals will be achieved and when or how non-performing programs would be eliminated.

Although the 2020 version retains much of the wording of the 2009 version, a major change is in the title:

2009 – Washington Department of Fish and Wildlife Hatchery and Fishery Reform

2020 – Anadromous Salmon and Steelhead Hatchery Policy

The titles imply that these are two separate policies. In the 2020 version, hatchery reform is mentioned only once compared to 14 times in the 2009 version. This difference gives the impression that hatchery reform has been abandoned, or at least heavily de-emphasized in the 2020 version. Is this meant to be the case?

In the Determination of Non-significance for this policy, the WDFW stated:

The objective of the policy is to implement a consistent scientific driven hatchery management framework for WDFW hatchery programs.

In reviewing the document, it is difficult to ascertain what this scientific framework consists of, or the science being used to drive hatchery management. This is in stark contrast to the November 5, 2009 version wherein Hatchery Reform, based on the principles and recommendations of the

HSRG, was the scientific framework being implemented. The HSRG identified multiple measures and performance metrics for different types of hatchery programs which were based on a thorough review of the scientific literature regarding hatchery operations and effects to natural populations of salmonids. Thus, it still represents the best available science called for in the updated policy document but is never mentioned.

It appears that the removal of references to the HSRG and Hatchery Reform is based on policy concerns and not scientific merit. Instead, the document simply states that programs will be based on best available science regarding hatchery effects to wild salmonids but makes no mention as to how this science will be developed. This leaves it up to the writers of each HGMP to define “the science” they are using to guide hatchery operations. This will likely lead to different conclusions as to how each hatchery program affects natural production.

An appendix should be provided that describes why the previous policy needed to be revised and a rationale for each change. For example, why were references to the HSRG removed? Why is nutrient re-cycling, which was not even mentioned in the previous version, now elevated to equal status with salmon recovery and providing food for Orca? Why were wild salmonid management zones eliminated? Was their removal based on new science? What is the difference between wild salmonid management zones and defining some populations as needing a special, high level of protection? The text implies there are very few populations that meet the premium status. Why isn't the policy to increase the number of populations that achieve premium status? Isn't this the goal of salmon recovery?

The policy goes to great lengths to say what the policy is not intended to do. For example, the policy is not intended to alter current harvest management policies, nor does it replace or reduce the need to restore habitat. It should also state, if true, the policy does not abandon past hatchery reform efforts of which the State has spent \$10's of millions implementing¹.

If the policy is to be implemented state-wide, then the policy should direct the WDFW to produce a report at least every 5-years on the Science of Hatcheries². The report should clearly lay out “best science” regarding the topics to be covered in the HGMPs: broodstock collection, mating protocols, interbreeding with wild populations, stray rates, monitoring and evaluation and needed research. All HGMPs submitted should be consistent with this document. If policy needs or goals are used to override the “best hatchery science” then associated risks to conservation and harvest objectives should be clearly described and signed off by the Director (see below).

Overall, there is a lack of accountability in the policy as it does not state when a hatchery program should be terminated. How many years should a program continue and not achieve its goals? The policy should direct the WDFW to develop performance metrics when hatchery production should be terminated or is no longer needed.

¹ Murdoch and Marston. 2020. WDFW Hatchery and Fishery Reform Policy Implementation Assessment. Draft Progress Report, 2009-2019.

² The Science of Salmon Hatcheries: https://wdfw.wa.gov/sites/default/files/2019-08/Hatcheries_Workshop_Summary_Appendices_7_29_19.pdf

The policy directs hatchery managers to conduct monitoring and evaluation to document goals are being achieved. Historically, funding has seldom been available to conduct all the needed monitoring and research, let alone produce HGMPs required under ESA. Many of the HGMPs submitted by WDFW state that certain objectives will be attained when funding becomes available. If funding is not provided then the negative effects these hatchery programs have on wild fish will continue, which does not advance the conservation and recovery of wild salmon and steelhead – the purpose of the policy.

The reliance on HGMPs to drive hatchery management is surprising. Development of HGMPs for WDFW hatchery programs has been ongoing for decades. Yet, the data in Appendix 3 indicate that ~50 additional program HGMPs will have to be completed under the new policy. Also, note that the text states Appendix 2 provides a completion date for each HGMP, this does not appear to be so. Appendix 2 (correct to appendix 3) lists the stage in development of each HGMP but does not provide a schedule. Again, this has been the issue with HGMPs for a long time...no clear schedule for completion which means the process drags out for years with resultant impacts to wild fish.

The policy appears to default to NMFS decision-making and science for HGMPs that affect ESA listed species. Does this mean that WDFW agrees that NMFS approved HGMPs meet the definition of best available science? Do the HGMPs submitted to NMFS have to meet the new WDFW policy? Approval of HGMP by NMFS relies on Federal funding which has been inadequate in the past. The policy should clearly state that in the absence of a NMFS approved HGMP, a program will be operated based on WDFW's conclusions regarding "best hatchery science".

The Committee should be commended for emphasizing the conservation of natural resources:

...the highest priority policy commitment shall be the conservation of natural resources, including the conservation and recovery of depressed coincident wild salmon and steelhead populations, the maintenance of wild populations currently in a healthy condition...

Although conservation is deemed the highest policy priority, its importance seems to then be reduced when describing HGMP provisions:

HGMP provisions should reflect a balance between minimizing genetic and ecological risks to coincident wild populations and providing for the ecological and societal benefits of hatchery propagated salmon and steelhead.

This statement, as written, implies that ecological and societal benefits (such as harvest) may have equal standing to conservation, as genetic and ecological risks must be balanced with each. If the highest priority is indeed conservation, then the statement should be rewritten to:

HGMP provisions shall be consistent with the highest priority of the policy which is the conservation of natural resources in a manner that does not impair these resources (RCW 77.04.012), with emphasis on the conservation and recovery of coincident wild salmon, steelhead and Southern Resident Killer Whale populations.

However, because the State has other legal commitments and responsibilities it must meet, it is suggested that the policy state:

Initial HGMP provisions shall be consistent with the highest priority of the policy which is the conservation of natural resources in a manner that does not impair these resources, with an emphasis of the conservation of wild salmon, steelhead and Southern Resident Killer Whale populations.

The Director shall review the Initial HGMP provisions for consistency with other legal and policy mandates. The Director will be responsible for balancing conservation with other societal benefits provided by the hatchery. The Director will document the rationale used to achieve this balance in the HGMP. A benefit/risk assessment will be conducted on any changes to the Initial HGMP provisions made by the Director that are not consistent with the highest priority of the policy, i.e. conservation. The benefit/risks assessment shall be included in the Final HGMP and approved by the Director.

The balancing of societal benefits with conservation is a policy exercise and should not be performed by scientists developing the HGMPs.

The Directors benefit/risk assessment can be used in HGMP Section 1.16 (Indicate alternative actions considered for attaining program goals, and reasons why those actions are not being proposed) to justify the submittal and implementation of the preferred alternative. In most previous HGMPs, the alternatives analysis is mostly cursory, with little analysis of risks of the different alternatives. Section 1.16 provides a place to clearly articulate to the public the rationale for the preferred alternative, outcomes of its implementation and the risk it poses to salmonids.

It is suggested that the overall success of the policy be simplified to state:

The success of the policy shall be measured by the number of hatchery programs that achieve the goals identified in the HGMPs.

The policy should identify a timetable for achievement of all hatchery program goals.

Other Comments

- The draft policy needs to be edited for clarity, redundancy and checked for errors. Statements such as the overall goal for conservation hatcheries is conservation, and fisheries supplementation is harvest should be removed. These goals are already imbedded in the definitions for the programs. The wrong appendices are being cited in the body of the document and they do not have all the data claimed (e.g. schedule for HGMP completion).
- The document needs to be consistent when using terms such as goals, objectives, purpose etc.

- The policy states that hatchery programs will be designated as one of the following in accordance with its purpose:
 - Conservation Programs
 - Mitigation Programs
 - Fishery Supplementation Programs

If HGMPs are going to be used, then the Committee should consider using the same purposes as described by NMFS; Augmentation, Mitigation, Restoration, Preservation/Conservation or Research. Or simplify even further and use the HSRG purposes which are conservation and/or harvest.

- Eliminate/edit statement *...need of rebuilding or recovery to carrying capacity abundance*. This statement makes no sense as carrying capacity is an outcome of habitat quality and quantity. Thus, even heavily degraded habitat has a fish carrying capacity and abundance associated with it. The statement needs a modifier such as ...to historical carrying capacity etc.
- Fishery Supplementation Programs – This term should be eliminated and replaced with Harvest Programs. The policy states that the overall goal for Fisheries Supplementation Hatcheries is harvest...so why not simply call them harvest programs? What is the policy imperative for this change in nomenclature? What is the difference between Fishery Supplementation and Hatchery Supplementation as found in the scientific literature below?
 - Supplementation is the use of artificial propagation in an attempt to maintain or increase natural production, while maintaining the long-term fitness of the target population and keeping the ecological and genetic impacts on non-target populations within specified biological limits (RASP 1992)³
 - Integrated recovery program - An artificial propagation project primarily designed to aid in the recovery, conservation or reintroduction of particular natural population(s), and fish produced are intended to spawn in the wild or be genetically integrated with the targeted natural population(s). Sometimes referred to as “**supplementation**”.
 - Hatcheries are also used for stock enhancement — also known as 'restoration aquaculture' — through which fish and shellfish are raised in a hatchery and then released to **supplement** the populations of recreational, commercial, and ecologically-important species.
- Mitigation Programs – The other two types are implemented in accordance, or objective to achieve spatial structure, diversity etc. But such objectives are not listed for mitigation programs. The policy should clarify that mitigation programs will have similar objectives.
- It is suggested that mitigation program be eliminated as a purpose unless these programs must achieve the same standards as other program types. Most (all?) hatchery programs in Washington State mitigate for lost or impaired habitat. The largest programs are generally associated with hydroelectric development.

³ Regional Assessment of Supplementation Project (RASP)

- Guideline 1 should be edited to remove indirect effects such as disease etc. as these are covered in Guideline 2 under ecological effects.
- It is unclear why Guideline 1 and Guideline 2 are even needed. The guidelines are superseded by Guideline 4. For example, Guideline 2 states that genetic risks shall be minimized in accordance with HGMPs (Guideline 4). Guideline 4 states that HGMP provisions should reflect a balance between minimizing genetic risks and other societal benefits. What is provided by Guideline 2 that is not covered by Guideline 4?
- The policy needs to address hatchery facilities not operated by the WDFW and direct how the policy will be used to influence their operation. These programs also negatively affect salmonid populations in the State. It is difficult to see how hatchery reform can be successful if these programs do not meet the same (or have higher) standards as WDFW programs.
- *Upon adoption of this Policy by the Commission, the Director is tasked to begin development of a joint policy agreement on salmon and steelhead hatchery programs with Tribal Co-Managers that has similar development and joint commitment provisions to those in “The Salmonid Disease Control Policy of the Fisheries Co-Managers of Washington State”.*

This statement implies that this 2020 version of the policy is an interim policy that will be updated with the future joint policy between the State and Tribes. Is this the case?

Thanks for the opportunity to comment on this draft policy.

Kevin Malone

1976malone@gmail.com

360-819-7056

From: [Commission \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Warren, Ron R \(DFW\)](#); [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: testimony letter wildlife commission - hatchery reform c-3619
Date: Monday, November 16, 2020 11:57:51 AM

From: Robert Harriman <bob.harriman@icloud.com>
Sent: Monday, November 16, 2020 10:13 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>; Director (DFW) <director@dfw.wa.gov>
Cc: Eleazer, Edward J (DFW) <Edward.Eleazer@dfw.wa.gov>; Burley, Craig C (DFW) <Craig.Burley@dfw.wa.gov>; Cunningham, Kelly J (DFW) <Kelly.Cunningham@dfw.wa.gov>; Team MillCreek (DFW) <TeamMillCreek@dfw.wa.gov>; Commission (DFW) <COMMISSION@dfw.wa.gov>; Wildthing (DFW) <WILDTHING@dfw.wa.gov>
Subject: testimony letter wildlife commission - hatchery reform c-3619

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

Dear Wildlife Commission & Wildlife Department :

The Borderline Bassin Contenders, a fishing & hunting club founded in 1973 is appreciative & thankful to comment on Hatchery Reform c-3619. We feel this reform is very important to managing and recovering salmon & steelhead resources to our state. That being said, We would again address, that yes wildstocks are important but those needs have to be addressed both by the ability to do so and in a realistic way if We users are ever to fish again.

Our agencies and user groups have worked very hard & diligently as follows:

The State has put millions of dollars & time to help protect & restore habitat both naturally & artificially.

The DNR & DOA & DOE has passed timber, agricultural, and commercial industry legislation and regulations (at the cost of billions to those industries) to preserve, protect, and enhance the salmon & steelhead resources (all rightly so) if the resource is to keep up and hopefully flourish.

The WDFW with cooperation of the recreational consumptive user groups have changed regulations to the extent of minimizing & including cutting seasons, retention limits, gear usage, etc. - all to help the resource while helping at the same time with volunteer restorations and cleanup projects.

The Tribes in co-management with WDFW has addressed their rightful

limits/allocations and has spent millions of dollars towards resource cleanup, habitat protection, and restoration, dam & breach mitigation, and planting fish - all of it upwards to above WDFW abilities in many instances - again all for the resource and their rightful heritage.

Commercial fisheries in cooperation with WDFW and Commission has changed their regulations by - lowering quotas, cutting size of fleets, styles of netting, season lengths, buy-back programs, etc - all to help the resource at millions of dollars of impact to their industry including support taxes to the state (of which by the way has been going to the State's general fund and should be going to WDFW hatchery fund).

Our point is that with all these important changes, regulations, and habitat protections for salmon & steelhead - the numbers of fish has continued **to drop** and will continue to drop unless all user groups agree that more aggressive numbers of supplementation is needed to happen ASAP. When you add in factors of feeding orca whales, and better yet nutrients of decomposing fish carcasses that feeds millions of sturgeon, fresh water clams, freshwater crawfish, scalpins, bulltrout, raccoons, bears, bobcats and the like - more numbers of spawning fish (whether wild or hatchery) become absolutely more important.

We agree that wild stocks are an important factor - **but we disagree that wild stocks of certain DNA are the only key to guaranteeing numbers of returning spawning fish.**

We have seen the experts rational of wild stock - better, stronger, more eggs, etc, etc - but even with this knowledge other factors take play (commercial offshore catches, warm ocean currents, excessive flooding and/or low levels in our rivers, high temperatures in our rivers & ocean, disease from fish farms, non-managed or protected seals & sealions, over populating mergansers & pike minnows, comorants, pelicans, etc.) - you name it something comes up every year.

We all know in fish & wildlife resources that domestic or in this case hatchery, if turned out into the wild will almost always become wild in a short period of time. When if breeding or spawning happens those little fish & animals will never magically or naturally go back and become domestic or hatchery again. Even the hatchery stocks that WDFW & Tribes have been planting all these years were not all marked nor were they all planted at different time periods to try to thwart co-mingling with wild stock (if such can be identified). So basically early wild stock returns & late hatchery returns have been mixing and spawning for years. Those returning & spawning hatchery fish have hatched & fed in their respective rivers & streams, have smolted up and went out to the wild blue sea. They fed & grew up in wild sea waters, eating wild food and now have been coming back to their respective rivers to do it all again. Maybe the first time was not as ambitious as true wild stock (again if that can actually be identified), but the next cycle, we bet, will be better and better as cycles go by. We know of no studies that show tame or hatchery fish reverting back to hatchery after living in the wild especially through a spawning cycle. We even know in hatchery put & take trout lakes for example, if a hatchery fish makes it through the first season of fish catching pressure, a carry-over as they are called, tend to change color, become firmer, and taste better in

less than a year - I have personally seen some of those planted fish try to spawn in creeks on those lakes - do you suppose that the natural wild instinct to spawn came back?

What we are trying to explain is that even if The Resource was kept totally wild, the recovery rate might, just might, come back in 15 to 20 years. That comeback is based on biological data supplementing only with wild stock and would most likely only occur **with no Recreational, Tribal, or Commercial fishing allowed.** Then again even at a 1 to 3 ratio of supplementing wildstock with hatchery, the 3 being hatchery, the resource has more assurance of many numbers of returns, especially during the unknowns of disasters, warm temperatures, floods, earthquakes you name it. One thing is for sure my grandkids and yours won't care what DNA the fish is as long as it swims & looks like a Chinook, Chum, Coho, Pink, Sockeye, and/or a Steelhead and has the whatever stripes, spots, tail fork, black mouth, etc. to identify it's species.

If hatchery reform c-3619 has more leniency towards hatchery to become naturally wild - the Borderline Bassin Contenders is in favor, if not, We would like the Wildlife Commission to amend to do so.

Thank you for your time & dedication towards our Fish & Wildlife resources. Please contact or call if any questions or clarifications are desired or required.

Sincerely,

Bob Harriman, legis Liaison
Borderline Bassin Contenders
2284 E Hemmi Rd
Bellingham, Wa 98226
ph 360-927-0967
email - bob.harriman@icloud.com



From: [Commission \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad.smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Batungbacal, Chalee W \(DFW\)](#); [Warren, Ron R \(DFW\)](#)
Subject: FW: Hatchery and Fishery Reform Policy
Date: Monday, November 16, 2020 9:05:15 AM

-----Original Message-----

From: Susan Crampton <scrampton@methownet.com>
Sent: Saturday, November 14, 2020 1:16 PM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Hatchery and Fishery Reform Policy

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

Dear Commissioners:

One more comment that there is too much hatchery and too little wild. Please step up to the science and your responsibilities and redraft changes.

Thank you, Susan Crampton Twisp, WA

From: [Commission \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Batungbacal, Chalee W \(DFW\)](#); [Warren, Ron R \(DFW\)](#)
Subject: FW: Comment submission - re Anadromous Salmon and Steelhead Hatchery Policy (draft revision)
Date: Thursday, November 12, 2020 8:13:46 AM

From: Brian Davern <badavern@yahoo.com>
Sent: Wednesday, November 11, 2020 9:36 PM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Comment submission - re Anadromous Salmon and Steelhead Hatchery Policy (draft revision)

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

The Hatchery Fishery Reform Policy attempts (and purports) to be many things by classifying hatcheries as, "conservation, mitigation or fishery". They do not and cannot do *anything* but reintroduce or supplement naturally propagating salmon and steelhead populations. How hatcheries do so must, *in every sense*, be compatible with (meaning not injurious to) their wild relatives.

Before hatchery practices receive my scrutiny, the interception of migrating juvenile and subsequently adult fish, must be rectified: Avian and aquatic predation upon outmigrating smolts largely nullifies the efforts to culture them and exposes their wild counterparts to similar ravages. Then, returning adults are sieved through gillnets, destroying age and size class diversity, creating a piscine monoculture, while pinnipeds await the survivors in riverine bottlenecks. Predation must be acceptably reduced and gillnets, as a capture tool, prohibited.

Culturing practices need substantial reform:

- 1) Milt to egg ratios (meaning, how many females eggs are exposed to a single male's milt) must never exceed natural spawning ratios.
- 2) Hatchery environment must mimic streams (Employ the methods developed by Peter Gray at the Kielder Hatchery on the River Tyne, UK):
 - a) Provide cover and shade.
 - b) " flow to swim against (in circular tanks).
 - c) " feed w/o habituating to humans.
 - d) Keep rearing densities below a threshold that causes dorsal fin nipping.
 - e) All (meaning, *every*) cultured fish receives an adipose clip.
 - f) Fish reared only to parr/development, then released into their

host stream in many

underpopulated locations to complete their presmolt maturation of months to years.

g) Couple (and prioritize over food banks, egg sales) dedicated nutrient enhancement efforts

in each of the release sites, both before release (f, above) and upon the following year's

stream temperature rise to 10C.

h) Institute monitoring/recording efforts to assess status (numbers and health) of fish in each

release site.

Decades of salmonid recovery effort and expense have 'netted' only a further reduction in their numbers. The reason... ? There has to be an authentic, focused and encompassing program that revises the role of hatcheries and how they operate, in and around wild salmon, steelhead, cutthroat and char. Anything less will be the aquatic equivalent of kicking the can *even further* down the road.

With utmost sincerity,

Brian Davern

Kelso, WA

From: [Commission \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Batungbacal, Chalee W \(DFW\)](#); [Warren, Ron R \(DFW\)](#)
Subject: FW: Hatchery and Fishery Reform policy (C-3619)-DRAFT
Date: Tuesday, November 10, 2020 4:55:58 PM

From: Ilene Le Vee <leveeis@comcast.net>
Sent: Tuesday, November 10, 2020 1:05 PM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Hatchery and Fishery Reform policy (C-3619)-DRAFT

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

Commission Chair Carpenter, Commission Members and Director Susewind:

I am a ranch/farmland owner in Klickitat/Clark counties in the scenic area of the Columbia Gorge. I am also a retired agency executive with the Department of Social and Health Services with over 25 of my 32 years having direct responsibility for and, participation in, writing/reviewing/approving/instituting agency RCW/WAC, policies, procedures, and program manuals, written public communications, etc. I am writing to offer comment/input on the above-referenced DRAFT policy.

I cannot comment on the technically specific subject matter contained in the DRAFT policy and will leave that to the fish/aquatic life professionals. I am offering comment on the repeated use of the word 'guideline' as it refers to the procedural aspects of the policy. If the word 'guideline' is to be interpreted as synonymous with the directive term 'policy', it must always be prefaced as such by the word 'shall'. It's been my experience that the word 'guideline' is meant to be interpretive and discretionary. However, the overarching language contained in this policy does not communicate to me that WDFW folks/constituencies will have much/any discretion in how this policy is operationalized. Therefore, I recommend that the word 'guideline' be replaced with the word, 'procedure(s)'.

Thank you for the opportunity to comment on this important policy.

Ilene Le Vee
Olympia, WA

From: [Commission \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Batungbacal, Chalee W \(DFW\)](#); [Warren, Ron R \(DFW\)](#)
Subject: FW: Hatchery and Fishery Reform
Date: Tuesday, November 10, 2020 8:22:15 AM

From: pappa ray <papparay@hotmail.com>
Sent: Monday, November 9, 2020 4:52 PM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Hatchery and Fishery Reform

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

There are two major items that you must address if you truly want to increase the number of Chinook and Steelhead Salmon for the resident Orca population as well as for recreational fishing. Cull/reduce the populations of the seals and Cormorants that decimate the returning Chinook to the rivers and the smolts to the ocean. The Cormorants that sit under the Astoria, and other bridges along the Columbia, eat tens of thousands of returning smolt and the seals devastate Chinook populations. If needed even going to the extremes of putting a bounty on the Cormorants just as a bounty has been placed on the Pike minnow should be considered. You might want to reconsider the use of gill nets that are being implemented at this time as well.

Ray Paul

From: [Commission \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW:
Date: Tuesday, November 10, 2020 8:21:41 AM

From: Steve Sanderson <dcspine24@gmail.com>
Sent: Monday, November 9, 2020 7:09 PM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject:

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

Open up all hatcherys at 100 percent capacity, thank you, steve sanderson, d.c.

From: [Commission \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: hatcheries
Date: Tuesday, November 10, 2020 8:21:31 AM

From: randikyle1 <randikyle1@yahoo.com>
Sent: Monday, November 9, 2020 5:10 PM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: hatcheries

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

More people means more hatcheries.

Sent from my Verizon, Samsung Galaxy smartphone

From: [Roger Bialous](#)
To: [Commission \(DFW\)](#)
Subject: comments on hatchery management
Date: Friday, November 6, 2020 12:56:41 PM

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

Hello,

Thank you for taking the time to consider my comments.

I think it is very clear at this point that hatcheries are not a magic bullet. They alone are not the solution. However, they are not without their practical applications either.

I implore those who manage our fisheries in the state of Washington to prioritize the health of wild salmon and steelhead populations and their recovery. I believe they can recover to responsibly fishable and yes, even responsibly harvestable levels if we give them a chance. To do this, we need to commit to experimenting and learning and adapting our policies when we learn from the results.

For example, we have been doing an experiment with escapement numbers for decades now and have decades of steadily declining salmon and steelhead populations to show for it. We've done a lot of good work on habitat restoration and culvert replacement, etc to help fish get home, but you can have 10 million miles honeymoon suite grade spawning habitat and if we don't allow enough wild fish to escape harvest to use it, your population will not recover. It will continue to decline.

We need to shift regulations for both sport and commercial fishing to be selective and eliminate the harvest of wild salmon and steelhead until such time as their populations are at a sustainably harvestable level.

We need to look at what works and what doesn't and actually use that hard earned knowledge to change policies to protect our wild fish.

People I fish with are not allowed to harvest wild salmon or steelhead in my boat or in my camp. Their genetics are too precious to put on my grill. That said, I love catching and bonking and eating hatchery salmon and steelhead. I'm certainly not above fishing the Cowlitz where any wild fish caught took a wrong turn!

For our beloved salmon and steelhead to survive and thrive and for us to have long seasons with fresh fish moving into our river systems over the course of months, not a couple weeks, we need the genetic diversity we can only get from wild fish. Not only does a run that enters the river and spawns over a broad time window provide for better sport, it helps the fish escape harvest from opportunistic predators and avoid (at least partially) redd loss from low water events, or landslides, etc.

I firmly believe the purpose of hatcheries is to take pressure off wild fish and to help their recovery. Please adopt this mindset and let it guide your decisions.

Thank you,
Roger Bialous
2451 53rd Ave SW
Seattle, WA 98116
206.369.9330

From: [Commission \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Save the Wild Fish
Date: Friday, November 6, 2020 10:06:29 AM

-----Original Message-----

From: pgj8890@comcast.net <pgj8890@comcast.net>
Sent: Friday, November 6, 2020 7:14 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Save the Wild Fish

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

Please this is crucial to biological and cultural diversity.

Thanks

From: [Commission \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Batungbacal, Chalee W \(DFW\)](#); [Warren, Ron R \(DFW\)](#)
Subject: FW: Wild Salmon Center Comments on C-3619 11/6/20
Date: Friday, November 6, 2020 10:05:30 AM
Attachments: [Wild Salmon Center FWC 11 6 20 C3619 Comments.pdf](#)

From: Jessica Helsley <jhelsley@wildsalmoncenter.org>
Sent: Friday, November 6, 2020 9:16 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Cc: Warren, Ron R (DFW) <Ron.Warren@dfw.wa.gov>
Subject: Wild Salmon Center Comments on C-3619 11/6/20

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

As requested by Chair Carpenter, please find our testimony from this morning's special commission meeting attached. Additionally, in response to Commissioner Kehoe's questions regarding ESA, we have provided an expanded explanation within the attached document. If you have any further questions please do not hesitate to contact us.

Cheers-
Jess

Jessica Helsley
Director
Washington Program
Wild Salmon Center
208.413.1120
she/her/hers

"Life itself is such a chancy proposition, that the only way to truly live is by taking great chances." - Senator Frank Church



Thank you Chair Carpenter and Commissioners. My name is Jessica Helsley and I am the Washington Director of the Wild Salmon Center. I appreciate the opportunity to provide you with our concerns and to correct several edits made to the document based upon our previous written comments.

As currently written, the policy:

1. Is a blatant abandonment of science. Completely ignoring the WA Academy of Science report and disregarding the growing concerns of staff, while also failing to consider existing recovery plan requirements.
2. The policy needs clearly defined goals with standards that can be measured as well as a plan to actually measure progress or the lack thereof.
3. We agree with Commissioner McIssac and the department that this policy is less prescriptive and argue that this subsequently reduces any environmental benefit of the policy.

While we appreciate that the commission took our previous comments into consideration, subsequent editing has dramatically altered the intent of those comments. Examples include:

1. Pg. 2:

Where it says, Hatchery programs “allow for the recovery of depressed wild populations,” we recommend that it be changed to “hatchery programs engage in the recovery of depressed wild populations.”

2. Pg 3. #4:

This basically reads that hatchery programs should be consistent with ESA; and where there are not listed fish, to balance the need to minimize impacts with benefits. We want to reiterate that:

INTERNATIONAL HEADQUARTERS

721 NW Ninth Avenue, Suite 300 • Portland, Oregon 97209 USA • tel: 503.222.1804 • fax: 503.222.1805

info@wildsalmoncenter.org • www.wildsalmoncenter.org

- Being consistent with the National Marine Fisheries Service policy judgements in compliance with the provisions of the ESA.
 - i. Getting an approved HGMP from NOAA indicates that your hatchery actions have received a jeopardy opinion that the hatchery will not reduce the likelihood of making the status of the population worse.
 - ii. A NOAA jeopardy determination on hatchery operations does not include, address or outline *what actions actually could or should be done for recovery or restoration*.
 - iii. Further, a NOAA determination allows for negative impacts on populations – as long as it does not make the *status worse* (i.e. go from threatened to endangered). This is why they call it a ‘take’ permit. They are allowing the applicant to have a negative impact.

Thus, a NOAA-approved HGMP can allow hatcheries to negatively impact listed populations, as long as they do not drive their status to a worse condition.

- iv. There is nothing in an HGMP that asks or provides guidance for Washington hatcheries to examine what they could do to actually *help recover or restore a population*.
- As stated in verbal testimony, just meeting ESA does not rebuild populations; it does not get you out of a constraining stock hole and a general directive to balance impacts does not keep you from driving currently viable wild populations into the same listed situation.
- Per our intent, we recommend this be changed to read: “Hatcheries shall be managed in a manner that does not impair the resource. Hatchery Genetic Management Plan provisions should reflect the important activities needed to provide sustainable fisheries into the future while minimizing genetic and ecological risks to wild populations to not impair this critical resource.”

3. Pg 4. #6.

Where it states “The Department shall strive to secure necessary funding to ensure that Department-operated hatchery facilities: comply with

environmental regulations for hatchery operations, including passage facilities, water intake screening, and pollutant and disease control systems;

We recommend this be changed to: The Department shall ensure that Department-operated hatchery facilities: comply with environmental regulations for hatchery operations, including passage facilities, water intake screening, and pollutant and disease control systems and will prioritize funding to accomplish this.

4. Pg 4. #7.

We recommended dropping the wording: “that have not had substantial genetic modification from past hatchery practices, are now in a healthy condition with little or no same species/run hatchery influence.” Instead we would put this highest status on populations that have sustainable habitat, which includes populations that have some hatchery influence. The intent of our comment is to provide populations with the tools necessary to adapt with our changing climate.

We recommend the wording be changed to:

“In considering the risks of possible deleterious impacts to wild salmon and steelhead populations from hatchery programs conducted in accordance with this Policy, the highest level of protection from possible negative effects of hatchery programs to wild populations shall be provided to those wild populations that have the habitat necessary to sustain a naturally spawning population and can adapt with its watershed. The process for identifying such populations shall begin immediately after the adoption of this Policy and the Commission shall consider approving a list of such populations on or before the first annual update report on the implementation of this Policy.”

5. Given the threats and stressors for salmon and steelhead in the ocean, estuaries, and throughout their watersheds, we recommend the Commission:

- Engage the world’s most robust and diverse hatchery system in mechanisms that will actually help to recover and restore populations rather than exacerbate existing problems.
- Direct the Program to:

- Identify predicted changes for the watershed, fish populations, and hatchery operations, and how each change will impact the facility's ability to successfully provide for sustainable fisheries without negative impact to wild populations while recovering and restoring those wild populations.
- Identify what species, life histories, and release strategies will need to be adjusted to address future conditions and decrease impacts to wild populations?

In closing, I would like to ask the department, what specifically were you not able to do under the old policy?

Thank you for your time.

From: [Commission \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Batungbacal, Chalee W \(DFW\)](#); [Warren, Ron R \(DFW\)](#)
Subject: FW: Quick Comments on C-3619
Date: Friday, November 6, 2020 10:03:28 AM

From: David Moskowitz <david@theconservationangler.org>
Sent: Friday, November 6, 2020 9:43 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Re: Quick Comments on C-3619

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

The public also needs to be able to consider and comment on the tribal comments and changes that may come from that Nov 17 meeting.

On Fri, Nov 6, 2020 at 9:41 AM David Moskowitz <david@theconservationangler.org> wrote:

Dear Commissioners:

The issues being discussed by Commissioner McIssac around whether science is being abandoned is missing the point.

The draft policy creates a new policy that is less restrictive from a biological, scientific and environmental perspective.

The draft policy as it exists is loosening up everything so that the policy is not being driven by prescriptive science by not having measurable outcomes.

Furthermore, the suspension of the HSRG criteria contributes to a lack of specificity.

Please set the process aside so that staff concerns on the draft can be resolved.

Getting it right is more important than getting it done.

Sincerely,

David Moskowitz

--

David A. Moskowitz
Executive Director

The Conservation Angler

david@theconservationangler.org

www.theconservationangler.org

971-235-8953



Tout ce qui est impossible reste à accomplir. ~ Jules Verne

All that is impossible remains to be accomplished.

From: [Commission \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Warren, Ron R \(DFW\)](#); [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Washington Hatchery Policy
Date: Friday, November 6, 2020 10:02:26 AM

-----Original Message-----

From: Edie Anderson <edie.eugene@icloud.com>
Sent: Thursday, November 5, 2020 8:19 PM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Washington Hatchery Policy

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

Dear Commissioners:

Please, please let the best available fishery science guide hatchery policy. Hatcheries can play a part. But remaining populations of wild salmon must be protected from interbreeding with hatchery fish. Where there is a will, there is a way. The survival of anadromous fish in the northwest is in your hands.

Thank you for your work,
Bruce H. Anderson

Sent from my iPad

From: [Commission \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Warren, Ron R \(DFW\)](#); [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Hatchery and Fishery Reform Policy Comments for November 6, 2020 meeting
Date: Thursday, November 5, 2020 12:14:57 PM

-----Original Message-----

From: rlc314 <rlc314@peoplepc.com>
Sent: Thursday, November 5, 2020 10:31 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Hatchery and Fishery Reform Policy Comments for November 6, 2020 meeting

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

Dear Commissioners:

As a Washington resident and fisherman I have witnessed first hand the steep decline in our anadromous fisheries and particularly the native component of these populations. Washington's fisheries have even declined to the point where the wildlife that depend on healthy populations of salmon such as orcas are now at risk. Clearly the management of our anadromous fishery by the WDFW is failing.

I am disappointed that the Hatchery and Fishery Reform Policy does not require the use of the best available science to make adaptive changes to correct the obvious failures and just assumes a well-informed program will solve the problems caused by mismanagement. Why doesn't the WDFW focus on scientific based redesign of hatchery programs to help recover wild salmon and steelhead?

The focus of and enlightened Policy must be on methods to support sustainable fisheries instead of just hand waving and hoping to improve hatchery effectiveness without any scientific evidence that this approach will solve the problems that the hatcheries have created. Unfortunately the proposed Hatchery and Fishery Reform Policy contradicts scientific research by the WDFW as well as risks any hope for a future recovery of wild populations of native fish. What is the purpose of ignoring your own scientific research?

Research has shown that prioritizing hatchery production to attempt to provide chinook salmon populations to recover Orca populations is not working. It is so much easier to just assume an unscientific expanded hatchery program will solve all the problems when hatcheries are the root of many of the problems. To paraphrase Albert Einstein – we can't hope to solve today's problems by applying the failed methods of the past. Clearly what is needed is a healthy population of native wild fish that can be relied on to provide a reliable food base rather than a hit or miss hatchery based system. Simply expanding hatchery production does not address the underlying root cause of the problem of declining populations of our once robust anadromous fishery. The Hatchery and Fishery Reform Policy must consider the critical importance of recovering wild salmon and steelhead populations as the essential step to ensure the long term health of our fishery and our environment to the benefit of humans as well as wildlife.

Richard Curtis
PO Box 451
Ethel, WA 98542

From: [Commission \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Batungbacal, Chalee W \(DFW\)](#); [Warren, Ron R \(DFW\)](#)
Subject: FW: Hatchery and Fishery Reform Policy
Date: Thursday, November 5, 2020 10:21:20 AM

From: DONALD J STARKIN <DSTARKIN@msn.com>
Sent: Thursday, November 5, 2020 9:20 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Hatchery and Fishery Reform Policy

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

Dear Commissioners:

The recent draft to the state's Hatchery and Fishery Reform Policy proposed by WDFW is short sighted and totally misguided. If you support what WDFW has proposed it will lead to the expiration and extinction of our wild fish runs. Please remember in making your decisions that once they're gone they're gone forever. When our wild fish are gone the hatcheries will soon follow.

Respectfully,
Donald J Starkin
P. O. Box 236
Lyle, WA 98635

From: [Commission \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Warren, Ron R \(DFW\)](#); [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Hatchery meeting Columbia River
Date: Thursday, November 5, 2020 6:59:22 AM

From: gregg kininmonth <gsk1140@hotmail.com>
Sent: Wednesday, November 4, 2020 6:27 PM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Hatchery meeting Columbia River

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

I cannot participate in the Zoom, so I want to voice my strong opinion about increasing Hatchery production on the Lower Columbia Tribs, especially on the Cowlitz. As a 60 year man who grew up fishing of the Cowlitz I have seen a once World Class fishery disseminated over the last 10 years since WDFW began thier Wild Fish policy. It only makes common sense that a hatchery fish that is the same genetically as a wild fish should be greatly increased to supplement the ever decreasing salmon and steel head populations to keep the species from going extinct.

The benefits would greatly enhance and contribute to society far more than any concerns.

Thank you for your time.

R.

Gregg Kininmonth
La Center, WA.

From: [Commission \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Batungbacal, Chalee W \(DFW\)](#); [Warren, Ron R \(DFW\)](#)
Subject: FW: draft policy revisions salmon, hatcheries, Willapaw
Date: Wednesday, November 4, 2020 7:28:13 AM

From: Art <artj463@gmail.com>
Sent: Wednesday, November 4, 2020 5:02 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: draft policy revisions salmon, hatcheries, Willapaw

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

Dear Commissioners:

This lifelong recreational fisherman, former commercial fisherman, processor, and broker, would remind the commissioners that adding a 'pandemic context' component to these ongoing policy revisions is essential. While other variables affecting salmon are always included in your consideration, the society for whom your efforts are spent has never reevaluated its relationship to natural resources as it is now doing under the still unfolding pandemic reality.

Since that cultural/psychological process is still in flux, DFW and the commission's essential guidance can anticipate significant changes to the American lifestyle. In blunt terms, the constituency of recreational fishers (hunters and gatherers) will proportionately increase over their commercial counterparts. The social value of 'hands-on' involvement with nature is a predictable consequence of its perceived decline. The features of climate change, and our former assurance of longevity brought into question by contagion, guarantees an enhanced metric for the resources you would protect on our behalf.

As if your jobs weren't already challenging enough, a shifting social adjustment is forming under your feet. Because salmon has long been a 'poster-child' for conservation and the environment – your work has grown in importance.

Consider adding a formal pandemic addendum to ongoing commission business. See if surveys that go beyond existing license-holder audiences confirms broader awareness and appreciation for the resources you supervise.

Thank you.

Art James
Sequim

Sent from [Mail](#) for Windows 10

From: [Commission \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: WDFW Hatchery Policy Draft
Date: Monday, November 2, 2020 2:27:57 PM

From: Ross Barkhurst <RP.Barkhurst@hotmail.com>
Sent: Monday, November 2, 2020 2:01 PM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: WDFW Hatchery Policy Draft

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

It seems clear that where the highest mortality harvest (commercial) takes place, Chinook and Coho NOR escapement is the lowest, and trending down sharply over the last two years. Although the Willapa Policy Review would imply otherwise, its review stopped with 2018. Chinook recruits, for example, returning from parents which spawned as survivors of the current policy, did not return until 2019 and 2020. Hatchery rack returns are showing a steep decline in wild escapement for the two largest destinations, Willapa River (Forks Creek) and Naselle hatcheries. The Forks Creek returns are half the goal. The Naselle are half of goals.

The lack of hatchery policies which would necessarily complement the " all H" goals regularly touted, is a contributor here. For example when numbers of hatchery Coho and Chinook are placed front of the Naselle in the Stanley Channel, they get netted. When numbers of Coho are upped by nest boxes full of hatchery eggs they and true wild Coho get netted and retained in 2T and 2U in front of and inside the Willapa River.

The result of this lack of integrated policy is that Chinook NOR escapement (measured at hatchery rack) have dropped markedly over last two years;

Willapa River	depleted
Palix	nil
Nemah	Increased to four time goal (the exception)
Naselle	depleted
Bear River	nil to zero

These are results from 2019 and 2020 to date. For Coho, escapement bay wide has been missed four out of the last five years.

There are two major shortcomings of the draft hatchery policy that contribute as follows;

1. Hatchery production puts fish where they are no longer available under conservation mandates if taken by high mortality nets.

2. The "schedule" in the draft Hatchery Policy is not really a schedule. It is a status only. For hatcheries in Willapa Drainage it just says " non ESA". If this means no plan is forthcoming, because we have no ESA species yet, this is a problem. It is just the route to ESA. Hatcheries and salmon management policies must work together in order to prevent

ESA. ESA is causing problems in the Columbia and Puget Sound, and at least one Willapa species, Chinook, is now labeled as "subject to overfishing".

The achievement of four times the escapement goal for Chinook in the North Nemah is clearly due to the lack of recruitment to commercial fishers for this watershed. Most other streams are declining, while this one is the exception with an explanation that proves the rule.

The only "plan" we are aware of is to markedly increase Chinook production in Naselle hatchery. Escapement there will likely be less than half required for 2019 and 2020. At Forks Creek it looks similar. Of course these are NOR recruits to the rack, not the gravel. Escapement to actual redds should be expected to be even far less.

The worst performers are the Bear River and Naselle River. Naselle less than half, Bear River close to zero.

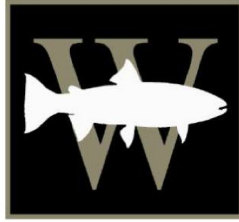
It is likely not a coincidence that these two rivers are the farthest South, well below the dispersion gap, in the depleted plankton forage zone referenced in the WBERT report. This Banas and Hickey study surely qualifies as best available science. A credible Hatchery Policy would address such matters before millions more smolts were added to the mix, action also recommended by the Governor's Orca Task Force.

There is no hatchery plan of which we are aware that examined these key factors before an announcement to further increase production at Naselle. We are aware of a proviso in a budget bill for the last Naselle production increase that requires said increase to be contingent on meeting HSRG standards. This was ignored. pNOB is not achievable there, even live spawning is tiny. Is there a plan for achieving HSRG or HGMP? Shouldn't there be?

The draft hatchery plan does call out the requirement for use of best available science, and other key items. With no hatchery plans in Willapa drainage, this seems as unlikely as compliance with "all H" factors specified in both Willapa Policy and now draft Hatchery Policy.

It is respectfully requested that hatchery plans implementing best available science and valid HGMP factors be required for all hatcheries in the Willapa Drainage, including any continuance of nest boxing or snagging of wild Chum off their nests for brood stocking.

Ross P. Barkhurst, South Bend



Wild Fish Conservancy

N O R T H W E S T

S C I E N C E E D U C A T I O N A D V O C A C Y

1

October 12th, 2020

WDFW State Environmental Policy Act Comments

Post Office Box 43200

Olympia, WA 98504-3200

Delivered electronically to: commission@dfw.wa.gov, SEPAdesk2@dfw.wa.gov

Re: SEPA comments on draft Fish and Wildlife Commission Policy c-3619 (SEPA #20045)

Introduction

Thank you for taking comments on the Washington Department of Fish and Wildlife's (WDFW) Determination of Nonsignificance (DNS) under the State Environmental Policy Act (SEPA) for the draft changes to C-3619, the Anadromous Salmon and Steelhead Hatchery Policy (Hatchery Policy Revision), which would replace the C-3619 adopted in 2009, the Hatchery and Fishery Reform Policy (Original Hatchery Policy).

Given the fundamental significance of C-3619 for long-standing wild fish recovery efforts within the state of Washington and beyond, the Wild Fish Conservancy and The Conservation Angler are very concerned that the Hatchery Policy Revision abandons the Hatchery Science Reform Group's (HSRG) science-based guidance described in the Original Hatchery Policy, without justification, or exploration of the potential environmental consequences of this change. The Hatchery Policy Revision will have a statewide impact that will harm fish species listed under the Endangered Species Act (ESA) and undermine statewide recovery efforts. It is thus clear that the revision of C-3619 is likely to have significant adverse environmental impacts, and it must undergo full environmental review. The information provided by WDFW through this SEPA review is wholly inadequate to justify a DNS.

The DNS is based on incomplete, insufficient, and misleading environmental review, which fails to identify the well-documented environmental impacts associated with status-quo hatchery production, let alone the increased hatchery production this new policy appears intended to enable (See Attached Final SRKW-Enhancement Fish Production document). WDFW failed to properly identify and evaluate the direct, indirect, and cumulative environmental impacts of the actions likely to result from the Hatchery Policy Revision. These impacts include those resulting

from the deletion of several HSRG-endorsed conservation measures included in the original C-3619, such as a statewide commitment to Wild Salmonid Management Zones.

The ecological and genetic risks of abandoning HSRG guidance and thresholds are clearly articulated in “A Review of Hatchery Reform Science in Washington State” (2020) (2020 Study), a final report prepared by WDFW and independently reviewed by the Washington Academy of Natural Sciences. The 2020 Study was prepared at the request of the Fish and Wildlife Commission (FWC) and purportedly intended to guide the development of this new hatchery reform policy. However, WDFW has inexplicably ignored the findings of the 2020 Study in reaching its conclusion that the Hatchery Policy Revision would not have a significant environmental impact. The DNS is thus irreconcilable with WDFW’s own scientific conclusions, as expressed in the 2020 Study.

WDFW should withdraw the DNS, issue a Determination of Significance (DS), and prepare a comprehensive Environmental Impact Statement (EIS) to assess and analyze the full impacts of the Hatchery Policy Revision in compliance with SEPA, including a no action alternative. This EIS will also give WDFW the opportunity to remedy the SEPA violation committed in June 2018, when the FWC suspended Guidelines #1, #2, and #3 of the Original Hatchery Policy without any SEPA consideration or review. In order to prevent similar future SEPA violations as the Revised Hatchery Policy is adjusted, we recommend WDFW initiate a phased non-project SEPA review process, to ensure that information not currently provided by WDFW (i.e. the environmental impacts of specific hatchery programs) receive the proper SEPA review and subsequent EIS’s where required.

DNS Ignores Potential Widespread Harm to Wild Fish and Ecosystems, Including Endangered Southern Resident Killer Whales

1. Through SEPA, the state failed to conduct a robust and accurate analysis of the environmental impacts resulting from this policy, as well as the likely magnitude of those environmental impacts. These significant adverse environmental impacts include, but are not limited to, removing approximately 230 million fish eggs from the environment in the 2018-2019 spawning year and the associated environmental impacts resulting from the artificial propagation and release of those offspring thereafter. Over 60 hatchery facilities are in operation and release fish at over 200 locations throughout the state of Washington. The Hatchery Policy Revision removes without justification important environmental accountability requirements that exist in the Original Hatchery Policy, and paves the way for substantial increases in hatchery production beyond the science-based HSRG recommended guidelines and thresholds established in there. The risks extend not only to wild fish competing with or breeding with hatchery fish, but to the entire ecosystem that is reliant on healthy self-sustaining fish populations, ranging from but not limited to our forests and apex predators like endangered Southern Resident killer whales.

2. The regulatory agencies lack sufficient regulatory controls to allow the proposed action to go forward. WDFW is currently in a fiscal crisis, with budget shortfalls requiring substantial cutbacks in programs and services. Even prior to the 2020 budget crisis, WDFW concluded that its hatchery system focused on production efficiency and maximizing abundance instead of the widespread implementation of environmental risk reduction measures (WDFW 2020).

Statewide actions and associated environmental impacts guided by the Hatchery Policy Revision include, but are not limited to:

- Killing wild fish for broodstock, reducing the abundance of already-depressed wild fish populations.
- Rearing fish in hatcheries, with associated habitat, water quality, water quantity, and disease impacts on the environment.
- Releasing domesticated fish, with associated competition, disease, and predation impacts.
- Enabling adult hatchery fish to spawn in the wild, often in excess of science-based hatchery-origin spawner thresholds provided through the original c-3619, with associated well-documented genetic impacts on wild fish populations (Science Division Talks).
- Wild fish bycatch mortality occurring in nonselective fisheries enabled through hatchery production.
- The potential to amplify and spread exotic and endemic viruses and diseases.

These impacts are caused by status-quo hatchery programs that are violating the letter and intent of the existing C-3619 hatchery reform policy, which to our knowledge has never been reviewed through an EIS. Potential increases in hatchery production enabled under the Hatchery Policy Revision are likely to result in even greater environmental impacts.

DNS Ignores Findings in 2020 Report

Significant adverse environmental impacts from hatchery programs are well-documented in scientific literature (Hatchery Science Literature document, Study 2020) , but are not identified in WDFW's SEPA checklist or determination. As directed by the FWC through the C-3619 review process, WDFW and the Washington State Academy of Sciences conducted A Review of Hatchery Reform Science in Washington State (2020 Study). This thorough WDFW-produced and independently-reviewed report provides the following key and relevant conclusions which were not analyzed by WDFW during its threshold determination process, nor provided to the public through the SEPA process. These conclusions exemplify the potential for the revised C-3619 to have significant adverse environmental impacts that must be considered through an environmental impact statement:

1. The HSRG principles of reducing pHOS and increasing pNOB to achieve fitness gains in wild populations are well-founded, and should be fundamental goals in any hatchery reform management action. *[WFC: despite this, commitments to HSRG principles have been removed in the revised C-3619 without justification].*
2. Excessive hatchery program size requires more careful scrutiny and scientific justification because it affects virtually every aspect of hatchery risks to specific populations, and to the ecosystem as a whole. *[WFC: the revised C-3619 enables increases in hatchery production beyond science-based thresholds currently in place].*
3. Hatcheries have potential for large magnitude ecological impacts on natural populations that are not well understood, not typically evaluated and not measured.
4. Hatchery risks include fishery risks, ecological risks and genetic risks. Fisheries targeting abundant hatchery runs can unintentionally increase mortality of co-mingled natural populations. *[WFC: despite this, the revised C-3619 deleted the statewide commitment to develop, promote and implement alternative fishing gear to maximize catch of hatchery-origin fish with minimal mortality to native salmon and steelhead. While the revised policy states it is not intended to alter current harvest management policies to pursue and implement mark-selective fishing, we are aware of no policy that will promote selective fishing gears after the current C-3619 is replaced with the re-written C-3619].*
5. Research on ecological [HxW] interactions lags far behind the attention devoted to genetic risks of hatcheries. Importantly, research suggests the potential for ecological interactions in marine environments shared between multiple hatchery and natural populations, yet very little is known about the likelihood or magnitude of population scale ecological impacts of hatcheries.
6. Studies comparing the number of offspring produced by hatchery-origin fish and natural origin fish when both groups spawn in the wild (relative reproductive success, RRS) have demonstrated a general pattern of lower reproductive success of hatchery-origin fish.
7. In WDFW's hatchery system, a focus on efficiency and maximizing abundance prevents widespread implementation of risk reduction measures.
8. We recommend a more rigorous, consistent and intentional evaluation of cumulative hatchery effects across multiple hatchery programs operating within a geographic Region.
9. WDFW invests considerable effort into population monitoring, yet this information does not often achieve its potential as a hatchery evaluation tool because analysis, reporting, and synthesis are typically underfunded. Furthermore, for many hatchery programs, the absence of a clear framework for application of monitoring data in decision making precludes clearly articulated risk tolerance thresholds.

10. Hatchery Genetic Management Plans (HGMPs) and the NOAA Biological Opinions authorizing them are the primary regulatory documents guiding hatchery management. In most cases, they lack clearly articulated monitoring and evaluation plans for understanding and controlling hatchery risks. Quantifiable methods for measuring risk and numerical thresholds for either risk tolerance or program changes are relatively rare. As emphasized by the HSRG (2015), we suggest that stand-alone monitoring and evaluation plans, inclusive of risk assessment methods, risk tolerance thresholds and an adaptive management process, are essential components of scientifically defensible hatchery programs. *[WFC: despite this, within the revised C-3619 HGMPs appear to be the primary mechanism for directing operations and identifying conservation measures at individual hatchery facilities].*
11. Fish disease risks associated with enhancement hatchery programs include the potential for the: a) introduction of exotic pathogens, b) amplification of endemic pathogens, c) horizontal transmission between infected hatchery and their wild counterpart, d) introduction of pathogens at unusual times, e) alteration genetic factors contributing to disease resistance, f) introduction pollutants to natural systems via the effluent. Transmission of pathogens can occur between hatchery and wild fish in either direction. The increased rearing numbers of suitable fish hosts at hatchery production facilities can serve to amplify the number of pathogens shed into the environment (Moffitt et al. 2004). *[WFC: WDFW's SEPA checklist and determination neither acknowledged nor addressed the disease risk associated with their hatchery programs. For example, Purcell (2017) presents results from adult salmon sampled during hatchery spawning activities, acknowledging that piscine orthoreovirus (PRV) is widespread in WA salmon and steelhead. The established northeast Pacific PRV-1 variant was recently found to have derived from a single introduction from North Atlantic waters (Siah et. al. 2020)].*

Hatchery Policy Removes Key Environmental Protections

Provisions within the Original Hatchery Policy “to protect the environment from hatchery impacts” have been removed in the Hatchery Policy Revision with no justification, discussion, or analysis. These deletions are hidden from the public during the SEPA review process since neither the original policy C-3619 nor a crosswalk comparing the original policy and the rewrite were provided to the public. Conservation-intended hatchery and fishery reform commitments which have been deleted in the Hatchery Policy Revision without scientific rationale or justification include:

1. Eliminated WDFW’s commitment to the science-based principles, standards, and recommendations of the HSRG to reduce the genetic and ecological impacts of hatchery fish and improve the fitness and viability of natural production. In the review performed at the request of the Commission, the WDFW and WA Academy of Sciences concluded

these principles are fundamental to effective hatchery reform management actions (WDFW 2020).

2. Whereas the current policy C-3619 is intended to promote and guide the implementation of hatchery and fishery reform for all state hatcheries (anadromous and resident fish hatcheries), the C-3619 rewrite is limited to those hatcheries producing anadromous salmon and steelhead. The state took eggs from over 31 million eggs from resident fish in 2018 ([2018-2019 WDFW Final Hatchery Escapement Report](#)), however under the revised C-3619, these programs are excluded from the hatchery reform policy.
3. Removed statewide commitment to Wild Salmonid Management Zones, an important HSRG recommendation.
4. Removed statewide commitment to develop, promote and implement alternative fishing gear to maximize catch of hatchery-origin fish with minimal mortality to native salmon and steelhead.
5. Removed statewide commitment to implement hatchery reform actions on a schedule that meets or exceeds the benchmarks identified in the 21st Century Salmon and Steelhead Framework.
6. Removed statewide commitment to develop watershed-specific H-integration action plans for meeting conservation goals at the watershed scale.

WDFW Failed to Provide and Analyze Key Information

Within the SEPA checklist and determination provided to the public, WDFW's effort to inform the public about the policy's likely environmental impacts was wholly inadequate, and opaque at best. To our knowledge, there was no public notification of the Hatchery Policy Revision SEPA comment period. WDFW obfuscated the policy's potential adverse environmental impacts by using the phrase "does not apply" or "not applicable" 86 times within the SEPA checklist provided to the public, rarely providing any additional explanation or justification. This response clearly contradicts the Hatchery Reform Science Review that the Commission requested be completed to inform the development of this policy. The checklist provided by WDFW to the public clearly represents a bad-faith effort by WDFW to confound the public's objective review of this significant policy. As stated in SEPA checklist instructions, applicants are expected to completely answer all questions that apply, and note that in the checklist Part B-Environmental Elements, words "project," "applicant," and "property or site" should be read as "proposal," "proponent," and "affected geographic area," respectively. The instructions state that applicants may use "not applicable" or "does not apply" only when they can explain why it does not apply and not when the answer is unknown.

In addition to the substantive deficiencies of the SEPA determination and materials provided by WDFW for the public's review, several procedural deficiencies prevent sufficient public SEPA review. These include but are not limited to failing to provide the public with the original C-3619 policy and prior SEPA documents from 2009; failing to provide the public with Appendices 1 and 2 referenced in the draft C-3619 rewrite; and failing to provide complete responses to public disclosure requests made by Wild Fish Conservancy in April, 2020 for pertinent information necessary for the public to provide comments and review. Furthermore, the agency violated

SEPA when the Fish and Wildlife Commission (FWC) suspended Guidelines #1, #2, and #3 of policy C-3619 in June, 2018 without conducting any SEPA analysis.

Neither the Original Hatchery Policy, nor a comparison between it and the proposed Hatchery Policy Revision, were provided as part of the SEPA review process. This omission obfuscates the significant changes and environmental impacts represented in the proposed policy, as described below.

We requested Original Hatchery Policy SEPA determination and supporting records from the SEPA coordinator on Sept. 23, but were told we would need to submit a PDR. As of **October 12th, 2020** we have not received the requested documents, or acknowledgement of the public disclosure request.

To better understand the rationale for the new 3619 policy, Wild Fish Conservancy submitted a Public Disclosure Request to WDFW on April 22, 2020. The specific and focused request was for “Any records created or received by the WA Fish and Wildlife Commission related to the C-3619 Hatchery Policy between March 1, 2020 and April 22, 2020. Please include related records created or received by any individual Commissioners as well as the Commission’s “Fish Committee.” The Department has been slow to respond to the request, undermining the public’s ability to assess the policy and the state’s proposed determination of non-significance. While the request was for records created over a 1.5 month period, over 5.5 months later we have yet to receive all the requested information. Regardless of the intent, the perception is certainly that of foot-dragging.

The lack of publicly available SEPA documents and associated determination for the existing policy contributes to a lack of transparency on how this current analysis fully evaluates the changes in environmental impacts. This is in stark contrast to other alarming documents, such as the Steelhead at Risk Report, that note severe threats with the species and ecosystems this policy concerns. Good policy making has strategic, measurable, achievable, relevant, and time-bound goals to ensure effectiveness. These components are lacking in the draft policy rewrite of 3619, complicating the public’s understanding of the environmental implications of the policy being reviewed.

Conclusion

The State’s proposed threshold Determination of NonSignificance (DNS) is based on an incomplete, deficient, and misleading environmental review and fails to address many well-documented environmental impacts associated with status-quo hatchery production, let alone the changes to hatchery production this new policy enables.

Within the SEPA checklist (A.8), WDFW indicates that terms and conditions to prevent hatchery production from impacting ESA-listed species may need to be developed through consultation with NOAA and the USFWS. It is incumbent on WDFW to describe the Hatchery Policy Revision’s conservation elements sufficiently enough to allow for meaningful environmental review and comment. Lacking this, it is impossible to fairly evaluate the environmental impact of

the proposal without performing a full EIS. The federal ESA, NEPA, and the state SEPA are separate obligations, and WDFW must comply with them all. A phased SEPA review would allow public input on the environmental impacts of specific hatchery programs on a case-by-case basis once WDFW and the federal agencies negotiate the promised conservation elements. A decision by WDFW to conduct a phased SEPA review will prevent similar SEPA violations under the policy, such as the FWC's suspension of Guidelines #1, #2, and #3 of policy C-3619 in June, 2018 that never received SEPA review and represents a current and ongoing SEPA violation.

As such, a full environmental impact statement as part of a phased non-project SEPA review is required to fully identify and analyze probable adverse environmental impacts, reasonable alternatives, and possible mitigation; and to comply with SEPA.

Respectfully submitted,



Kurt Beardslee, Executive Director
Wild Fish Conservancy
Kurt@wildfishconservancy.org; 206.310.9301



Pete Soverel, President
The Conservation Angler
16430 72nd Ave West
Edmonds, WA 98026
soverel@msn.com
425-742-4651 (office)

Cc. WA Fish and Wildlife Commission



Wild Fish Conservancy

N O R T H W E S T

S C I E N C E E D U C A T I O N A D V O C A C Y

October 12, 2020

WA Fish and Wildlife Commission

Post Office Box 43200

Olympia, WA 98504-3200

Delivered electronically to: commission@dfw.wa.gov

Re: Proposed changes to Fish and Wildlife Commission Policy C-3619

Commissioners:

Thank you for taking comments on the draft policy C-3619. We continue to have serious concerns about the substance and process behind the Commission's proposed revisions to Washington's Hatchery and Fishery Reform Policy.

Based on guidelines from the independent science-based Hatchery Science Review Group (HSRG), the state's Hatchery and Fishery Reform Policy 3619 (2009) guided science-based limits on the number of hatchery fish produced because of the negative impacts (genetic and ecological) they can have on wild salmon and steelhead. It also made a number of other important wild fish conservation commitments - including those to promote and implement selective fishing gear - designed to recover wild fish populations that will sustain that industry, Orcas, and meet salmon harvest commitments made to tribes, in the long-term.

In 2018 the Fish and Wildlife Commission suspended three key tenets of policy 3619 while it "reviewed and updated" the science behind the policy and evaluated the policy's effectiveness. The suspension, a significant policy change, was done absent State Environmental Policy Act (SEPA) review. At that time, the Commission requested two reports from WDFW: 1) a review of hatchery reform science to see what's changed since 2009, and 2) an assessment of how well C-3619 has been implemented since 2009.

In 2020, WDFW science staff - with independent review by the WA Academy of Sciences - released a final [Hatchery Reform Science Review](#) that explained that the science behind the original policy C-3619 was sound. In its C-3619 [Implementation Assessment report](#), WDFW science staff conclude that since its adoption in 2009, WDFW cannot demonstrate that the state has effectively implemented the policy. In short, the science in the current C-3619 (adopted in 2009) is sound, but the policy hasn't been effectively implemented.

Instead of reinstating the suspended tenets of C-3619 and demanding accountability from the Department to immediately begin implementing this 2009 policy, members of the Commission doubled-down and drafted a full revision of the original C-3619 which ignores many of the conclusions reached in the WDFW science and implementation reviews. The proposed revision deletes key conservation commitments, and abandons Hatchery Science Review Group (HSRG) science-based fishery and hatchery reform guidelines without justification and contrary to best available science. Absent the HSRG's objective management standards, we see even less opportunity for hatchery program accountability. There is no clear prioritization of wild fish recovery over other short-term fishing interests.

As proposed, the completely revised C-3619 policy opens the door even wider on unsustainable increases in hatchery production that will further compromise our investments in habitat, wild salmon, and killer whale recovery, undermine wild fish populations, and threaten Endangered Species Act salmon and steelhead recovery efforts.

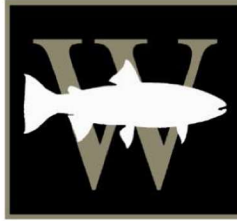
WDFW's hastily prepared threshold Determination of Nonsignificance (DNS) for the revised C-3619 policy is based on an incomplete, deficient, and misleading environmental review and fails to address many well-documented environmental impacts associated with status-quo hatchery production, let alone the changes to hatchery production this new policy enables. As such, a full environmental impact statement as part of a phased non-project SEPA review is required to identify and analyze probable adverse environmental impacts, reasonable alternatives, and possible mitigation; and to comply with SEPA. We justify this conclusion in the attached comments which were submitted to the SEPA Coordinator earlier today.

Respectfully submitted,



Kurt Beardslee, Executive Director
Wild Fish Conservancy
kurt@wildfishconservancy.org; 206.310.9301

Attachment: WFC comments to the SEPA Coordinator on draft Fish and Wildlife Commission Policy C-3619 (SEPA #20045)



Wild Fish Conservancy

N O R T H W E S T

S C I E N C E E D U C A T I O N A D V O C A C Y

September 7, 2020

WA Fish and Wildlife Commission

Post Office Box 43200

Olympia, WA 98504-3200

Delivered electronically to: commission@dfw.wa.gov

Re: Proposed changes to Fish and Wildlife Commission Policy c-3619

Commissioners:

Thank you for taking comments on the draft policy c-3619. While the Commission mentioned at their August 1, 2020 meeting that they would be soliciting public comment on this matter, no solicitation or invitation could be found in a WDFW press release to the public, or on the news portion of the WDFW website. Important hatchery science review and 3619 policy implementation reports remain missing from the policy review website, and a lack of transparency and public awareness about this policy continues to be of great concern to our organization. Regardless of the intent, it appears that the Commission is obstructing the public's ability to provide meaningful review and comment on their proposed modifications to a policy which is fundamental to salmon recovery.

Further, existing WDFW hatchery and fishery reform commitments have been deleted in the current draft 3619 rewrite, with inadequate rationale or justification provided by the Commission. These include:

1. Deleted commitment to the science-based principles, standards, and recommendations of the HSRG to reduce the genetic and ecological impacts of hatchery fish and improve the fitness and viability of natural production. In the review performed at the request of the Commission, the WDFW and WA Academy of Sciences concluded these principles are fundamental to effective hatchery reform management actions.
2. Deleted statewide commitment to Wild Salmonid Management Zones, an important HSRG recommendation.
3. Deleted statewide commitment to specific mark-selective fishery implementation benchmarks.

4. Deleted statewide commitment to develop and implement selective gears outside of the Columbia River.
5. Deleted statewide commitment to implement hatchery reform actions on a schedule that meets or exceeds the benchmarks identified in the 21st Century Salmon and Steelhead Framework.
6. Deleted statewide commitment to develop watershed-specific H-integration action plans for meeting conservation goals at the watershed scale.

The Wild Fish Conservancy has submitted public comment previously on this policy, and we refer the Commission back to our outstanding concerns from our July 28th letter, attached. We remain concerned that hatchery reform science is being abandoned, and commitments made in the existing policy are being eliminated or reversed. The proposed changes will undermine the public's substantial investment in wild salmon and steelhead recovery.

Conservation organizations and other concerned citizens remain largely unaware of the current c3619 public comment opportunity, indicating a serious lack of transparency. We ask that the Commission provide an additional public review period of the current draft c3619 through October 31st, this time with a bona fide solicitation for public input and reasonable public access to the two reports prepared specifically to inform the c3619 re-write: Hatchery Reform Science in Washington State Report (WDFW, 2020) and the WDFW Hatchery and Fishery Reform Policy Implementation Assessment Report (WDFW, 2020). We also again ask the Commission to take a vote on reinstating policy guidelines 1, 2, and 3 from the original 3619 Hatchery and Fishery Reform Policy (C-3619) until a scientifically-defensible rationale for suspending these actions is provided.

Respectfully submitted,



Kurt Beardslee, Executive Director
Wild Fish Conservancy
kurt@wildfishconservancy.org; 206.310.9301

Attachments: WFC comments to FWC dated July 28, 2020.



Wild Fish Conservancy

N O R T H W E S T

July 28, 2020

WA Fish and Wildlife Commission

Post Office Box 43200

Olympia, WA 98504-3200

Delivered electronically to Commissioners

Re: Proposed changes to Fish and Wildlife Commission Policy c-3619

Introduction

On June 15th, 2018 the Washington Fish and Wildlife Commission (FWC) directed the WA Department of Fish and Wildlife (WDFW) to initiate a review of all sections and aspects of the Hatchery and Fishery Reform Policy (C-3619), including a review of the latest scientific information related to hatcheries and the performance results since the policy was adopted. The Commission-mandated C-3619 review also required changing the language tone about the “positive value of hatchery programs.”

Simultaneously, the Commission suspended the former C-3619 policy guidelines #1-3 which read:

1. Use the principles, standards, and recommendations of the Hatchery Scientific Review Group (HSRG) to guide the management of hatcheries operated by the Department. In particular, promote the achievement of hatchery goals through adaptive management based on a structured monitoring, evaluation, and research program.
2. The Department will prioritize and implement improved broodstock management (including selective removal of hatchery fish) to reduce the genetic and ecological impacts of hatchery fish and improve the fitness and viability of natural production working toward a goal of achieving the HSRG broodstock standards for 100% of the hatchery programs by 2015.
3. Develop watershed-specific action plans that systematically implement hatchery reform as part of a comprehensive, integrated (All-H) strategy for meeting conservation and

harvest goals at the watershed and Evolutionarily Significant Unit (ESU)/Distinct Population Segment (DPS) levels. Action Plans will include development of stock (watershed) specific population designations and application of HSRG broodstock management standards. In addition, plans will include a time-line for implementation, strategies for funding, estimated costs including updates to cost figures each biennium.

Given the fundamental significance of policy C-3619 for long-standing wild fish recovery efforts within the state of Washington and beyond, the Wild Fish Conservancy (WFC) is concerned that the Fish and Wildlife Commission is abandoning science-based fishery and hatchery reform without justification and contrary to best available science, and that the public process on hatchery and fishery reform policy is being conducted in an exclusive and opaque manner.

Background

The stated purpose of the *current* WDFW Hatchery and Fishery Reform Policy (C-3619) is “to advance the conservation and recovery of wild salmon and steelhead by promoting and guiding the implementation of hatchery reform.” This policy is fundamental to WDFW’s commitment to science-based hatchery and fishery management policies that aid wild fish recovery objectives designed to support long-term sustainable tribal, commercial, and recreational fisheries goals. The guidelines within the current C-3619 also reflect and inform science-based management commitments made throughout the state in regional salmon and steelhead recovery plans, federal Endangered Species Act recovery plans, Hatchery Genetic Management Plans, Fishery Management Plans, the Statewide Steelhead Management Plan, and other state policies. While viewed as inconvenient in the short-term by some, science-based hatchery and fishery management policies are critical for protecting and recovering the abundance, productivity, diversity, and spatial structure of Washington’s wild salmon and steelhead. These population characteristics provide wild salmon and steelhead - and the hundreds of species which rely on them - with the resilience necessary to survive current and future climate-induced habitat impacts.

Since the FWC’s C-3619 review began in June 2018, the Wild Fish Conservancy and others have expressed considerable concern, both in writing and in oral testimony at Commission and Committee meetings, regarding the direction and administration of the policy review process. A WFC public disclosure request (PRR No. 20122) likewise documents apprehension within the WDFW Science Division caused by the FWC’s suspension of key tenants of C-3619 and the FWC’s apparent willingness to abandon the science-based conservation and recovery emphasis in the existing policy. Representative letters from similarly concerned former Fish and Wildlife Commissioners, and other Pacific Northwest fishery scientists, can be reviewed in the attachments below.

Consistency with the Science

Review of Hatchery Reform Science in Washington State (2020)

As directed by the FWC through the C-3619 review process, WDFW and the Washington State Academy of Sciences conducted a Review of Hatchery Reform Science in Washington State (2020) to identify advances in hatchery reform science that have occurred since C-3619 was adopted in 2009. This thorough WDFW-produced and independently-reviewed report provides the following key conclusions which appear to be contraindicated in the current C-3619 policy revisions being considered by the FWC:

1. The HSRG principles of reducing pHOS and increasing pNOB to achieve fitness gains in wild populations are well-founded, and should be fundamental goals in any hatchery reform management action.
2. Excessive hatchery program size requires more careful scrutiny and scientific justification because it affects virtually every aspect of hatchery risks.
3. Hatcheries have potential for large magnitude ecological impacts on natural populations that are not well understood, not typically evaluated and not measured
4. Hatchery risks include fishery risks, ecological risks and genetic risks. Fisheries targeting abundant hatchery runs can unintentionally increase mortality of co-mingled natural populations.
5. Research on ecological [HxW] interactions lags far behind the attention devoted to genetic risks of hatcheries. Importantly, research suggests the potential for ecological interactions in marine environments shared between multiple hatchery and natural populations, yet very little is known about the likelihood or magnitude of population-scale ecological impacts of hatcheries.”
6. Studies comparing the number of offspring produced by hatchery-origin fish and natural-origin fish when both groups spawn in the wild (relative reproductive success, RRS) have demonstrated a general pattern of lower reproductive success of hatchery-origin fish.
7. In WDFW’s hatchery system, a focus on efficiency and maximizing abundance prevents widespread implementation of risk reduction measures.
8. We recommend a more rigorous, consistent and intentional evaluation of cumulative hatchery effects across multiple hatchery programs operating within a geographic region.”
9. WDFW invests considerable effort into population monitoring, yet this information does not often achieve its potential as a hatchery evaluation tool because analysis, reporting, and synthesis are typically underfunded. Furthermore, for many hatchery programs, the absence of a clear framework for application of monitoring data in decision making precludes clearly articulated risk tolerance thresholds.”

The new C-3619 policy direction the Commission is considering eliminates fundamental HSRG science guidelines and, ironically, is contrary to the conclusions of the hatchery science review conducted by WDFW and the WA Academy of Natural Sciences as part of the C-3619 policy review process. It contradicts science-based commitments and recommendations in federal Endangered Species Act recovery plans, regional salmon recovery plans, and hatchery genetic management plans. It undermines the public’s substantial investments in wild salmon and steelhead recovery efforts, and therefore Orca recovery efforts. In reviewing the draft C-3619 re-write (June 2020) we are left with the distinct impression that some Commissioners are committed to increasing hatchery production in Washington in an effort to provide short-term increases in fishing opportunities, no matter the negative consequences to massive ongoing science-based efforts to recover wild fish to levels that will support sustainable fishing practices well into the future.

Draft WDFW Hatchery and Fishery Reform Policy Implementation Assessment (2020)

As directed by the FWC through the C-3619 review process, WDFW also conducted a hatchery and Fishery Reform Policy Implementation Assessment (2020) to address the apparent FWC question: “we’ve used hatchery reform science for ten years now – how well is it working to achieve wild fish recovery?” However, for reasons described in the report beginning on page 3, WDFW found the data necessary to answer that question were unavailable or insufficient to the task. Consequently, WDFW re-focused their assessment to evaluate whether and to what extent the agency had actually implemented the fishery and hatchery reform actions mandated in the 2009 policy C-3619. Among the many findings in this report, these WDFW conclusions are particularly relevant to our concerns related to the proposed FWC revisions to C-3619: A lack of funding was a common reason that prevented implementation of some guidelines; a lack of comprehensive statewide monitoring and evaluation program are areas of special concern; and defining program success and collecting and analyzing data to adaptively manage our programs are critical missing components.

The tenets of C-3619, including the HSRG recommendations identified in the first three suspended guidelines, have not been found inadequate or inappropriate. They conform to the best available hatchery reform science as determined by WDFW and the WA Academy of Natural Sciences in 2020. What is lacking is the leadership and capacity for WDFW’s effective implementation of the state’s Hatchery and Fishery Reform Policy C-3619.

Public Process

The Stakeholder Interview Summary commissioned as part of the C-3619 review process noted that the majority of individuals interviewed agreed that any changes to the Policy must be based on the best available science (Triangle Associates, 2019). The Hatchery Science Review Group started their work in the face of Federal Endangered Species Act listings in 1999, and has been

actively updating their guidelines in reports to congress ever since. Given the long-term implications for the statewide hatchery and fishery reform policy, any proposed departure from the HSRG guidelines should coincide with a robust public involvement process.

Intentionally or otherwise, this opportunity for public input has been lacking. C-3619 public engagement materials previously available on the WDFW hatchery and fishery reform policy review website no longer appear during internet searches. Since December of 2019 meeting agendas, presentations, limited stakeholder assessments, science review reports, and other important files have been removed. Draft Policy documents have not been made available until hours before opportunities for public testimony, and there have been several last minute formal decisions moving this policy review forward that were inadequately represented on agendas. These problems were noted in engagement reports produced by Triangle Associates in April of 2019, and have only worsened over time.

There should be ample time and opportunity for the public, especially those organizations directly involved in salmon recovery efforts informed by C-3619, to weigh in on each proposed change. These communities include the 29 sovereign tribal nations, 25 Salmon Recovery Funding Board lead entities, 14 regional fisheries enhancement groups, 7 regional salmon recovery organizations, 45 conservation districts, the Puget Sound Partnership and ten associated Local Integrating Organizations, non-profit conservation organizations, and countless other local government, public benefit, and other members of the public. Sparse comment, participation, and engagement on the subject is further evidence of exclusive and ineffective public outreach.

Request for Action

Considering the consistent findings within two separate science and policy reviews, the concerns voiced over the nature of the public involvement process, and the treatment of tribal co-managers as stakeholders rather than sovereign nations throughout this review, the Wild Fish Conservancy asks the Commission to suspend further development of C-3619 policy changes. Hatchery policy in the state of Washington has sweeping implications for salmon recovery, should be carefully considered, and must be grounded in science. We believe that the public engagement has fallen short and is becoming overly politicized. Until a robust, broadly supported engagement strategy can be realized, this approach to policy making will only further divide communities dedicated to fish recovery throughout the Pacific Northwest.

Additionally, based on the results of WDFW's Hatchery Reform Science Review the Wild Fish Conservancy requests that the Commission take a vote on immediately reinstating policy guidelines 1, 2, and 3 from the original 3619 Hatchery and Fishery Reform Policy (C-3619) until a scientifically-defensible rationale for suspending these actions is provided. While implementation goals have been missed, and compliance with the policy has fallen short, the

scientific justification for these guidelines remains sound. Instead of turning its back on sound hatchery and fishery reform science, the Commission and WDFW should instead commit to finally and fully implement the policy they adopted over ten years ago.

Thank you for your serious deliberations on this significant policy review and your commitment to wild salmon and steelhead within the State of Washington.

Sincerely,

A handwritten signature in black ink, appearing to read "Kurt Beardslee". The signature is fluid and cursive, with a long horizontal stroke at the end.

Kurt Beardslee, Executive Director
Wild Fish Conservancy
kurt@wildfishconservancy.org; 206.310.9301

Timeline of the C-3619 events

- June 15th, 2018-- Letter to Washington State Governor Jay Inslee dated regarding the suspension of key provisions within the Hatchery Reform Policy, signed by 77 individuals, including 21 PhD fishery scientists (attached).
- March 2019-- The Wild Fish Conservancy was forwarded a letter sent to Washington Legislators from 5 former Fish and Wildlife Commissioners (attached). These former Commissioners expressed that they felt the decision to eliminate commitments to science-based decision making and fish conservation made in the former hatchery policy were being held subordinate to outside pressures.
- April 2019, Wild Fish Conservancy staff scientists participated in a stakeholder process, noting sparse attendance (15 individuals).
- November 2019, Tribal Co-managers express deep frustration that a government-to-government consultation has not been initiated on the c-3619 policy review, and note significant challenges with regards to creating a lawful co-management process to address hatchery reform.
- February 6th, 2020 Wild Fish Conservancy Staff attend the Hatchery Science Review Workshop where past HSRG scientists, and other organizations testify with concern that scientific conclusions are inconsistent with the current direction of the policy review.
- April 15th, 2020, Governor's Salmon Recovery Office requests a formal briefing on FWC Hatchery Reform Policy, noting that they have not been updated on the science review, tribal engagement, or public feedback.
- Wild Fish Conservancy staff gave testimony 6/10/2020 expressing the above mentioned inconsistencies with science, as well as a lack of transparency on the opportunity for public comment.
- June 12th, 2020, Fish and Wildlife Commission Policy Decision [Draft] document was not made available to the public until 6:50am the day the Fish and Wildlife Commission voted to adopt it (at 1:00pm)
- July 28th, 2020, updated documents necessary for public review prior to the July 30 – August 1 Commission meeting are still not available to the public.

The letter below was drafted and signed by five former WDFW Fish and Wildlife Commissioners and delivered to members of the Washington state Legislature in March 2019.

March 11, 2019

Dear Legislator,

We, the undersigned former Washington Fish and Wildlife Commissioners, took part in the development and approval of the Department's Hatchery and Harvest Reform Policy as well as its Columbia River Reform Policy. We are writing to voice our dismay that much of the progress that we made through these reforms is being reversed.

After too many years of arbitrarily picking numbers to placate various user groups, our Commission decided to take a more principled approach. Our "Hatchery and Harvest Reform Policy" was central to that effort. The policy announced commitments to: 1) the best available science; and 2) wild fish conservation as the highest priority. Those commitments were made to apply both to fish protected under the ESA where the law already requires such stewardship as well as to runs that have not been listed *where the law's protections are less rigorous*. Without such clear commitments to science and to conservation, we believed then, and still believe now, that the Department will be perpetually driven by pressures to maintain historical practices rather than moving towards a sustainable future.

The current Commission's decision to suspend belief in the science and relax standards in place that protect wild fish genetics was perplexing. That decision relegated conservation and science to positions subordinate to outside pressures. We are keenly aware that it takes courage and strength of commitment to bring an end to practices that science has shown are detrimental to wild fish recovery. The reform policies were designed to create incentives for more selective fisheries and impose disincentives on users employing old more harmful methods. ***The Columbia River policy called for a buyback of non-Indian gillnets that was never attempted***. Only with a determined effort to move towards more selective harvest methods can we produce much greater numbers of hatchery fish without harm to wild fish genetics.

Some users assert that current wild fish genetics are not pure enough—nothing like the wild fish of old. They claim that it makes no sense to conserve those "mongrel" fish. Established science tells us otherwise: *if they are free from excessive hatchery influence*, naturally spawning fish will fairly quickly evolve and adapt to their home

stream. By protecting naturally spawning fish, we are rebuilding genetically fit runs and protecting this fitness into the future.

For the state's non-tribal fishers, fishing is *not* a right, but a privilege. With the privilege comes a responsibility. Most users prefer not to adopt new fishing techniques, but everyone has a responsibility. We all are called upon to contribute through better forest practices, shoreline development rules, and habitat restoration spending. Fishermen and women cannot be exempted.

The 2018 State of the Salmon report from the Governor's Office listed 13 of the 15 listed runs as "below the goal." Only two of the runs were "near the goal. Reversing the downward trajectory will take courage and commitment. The millions of dollars being spent on salmon habitat restoration will be largely wasted *if no additional wild fish are allowed to escape into the restored habitat*. We cannot return to a time when we fished without concern for wild fish runs. We cannot return to a state of ignorance about the importance of fish genetics.

Fish runs are the public's heritage. As stewards of those resources, we urge you take a stand. The Department needs your direction to resist the pressure to allow fishing methods of the past that are unsustainable in the long run. The best path forward can be found by following the lodestars of conservation and good science. We urge your support of those principles.

With respect,

Dr. Conrad Mahnken, Former Director, Manchester Research Station, NW Fisheries Science Center, WA Fish and Wildlife Commissioner 2006-2016

Rollie Schmitten, Former Director, National Marine Fisheries Service, NOAA, WA Fish and Wildlife Commissioner 2009-2014

Chuck Perry, Former Range Land Ecologist, WDFW, WA Fish and Wildlife Commissioner 2005- 2013

Gary Douvia, Vice President, Raymond James, LLP, WA Fish and Wildlife Commissioner 2006- 2013

Miranda Wecker, Former Director of the Marine Program, UW Olympic Natural Resources Center, WA Fish and Wildlife Commissioner 2005-2017

A Letter to Washington State Governor Jay Inslee
In Regards to Defending Science-Based Salmon Recovery Policy

Governor Jay Inslee
Office of the Governor
PO Box 40002
Olympia, WA 98504-0002

Dear Governor Inslee,

We, the undersigned fishery and environmental scientists, are writing to let you know of our deep concerns regarding the June 15, 2018 decision by the Washington State Department of Fish and Wildlife Commission (FWC) to suspend key policy guidelines of their 2009 Hatchery and Fishery Reform Policy (POL-C3619), while it undergoes a 6-12-month review. (A copy of the policy is attached).

The reason the FWC adopted the Hatchery Reform Policy in 2009 was “to advance the conservation and recovery of wild salmon and steelhead by promoting and guiding the implementation of hatchery reform.” The Policy’s stated intent was to improve hatchery effectiveness, ensure compatibility between hatchery production and salmon recovery and rebuilding programs, and support sustainable fisheries.

It is important, here, to point out that shortly after the Endangered Species Act (ESA) listing of Puget Sound Chinook salmon in 1998, Congress recognized that hatchery fish spawning with wild fish significantly reduced the genetic fitness of wild fish. They also recognized that hatchery fish comprised most of the commercial, tribal and recreational harvest. To address this obvious conflict between the need to maintain fishing opportunity and at the same time meet the ESA requirement to protect and recover wild fish, Congress with support from Governor Gary Locke established and funded a group of independent scientists in 2000, the Hatchery Scientific Review Group (HSRG). The HSRG was charged with reviewing the hatchery management practices of state, federal and tribal hatcheries, and making recommendations to Congress on how to manage hatcheries consistent with the requirements of the ESA and recovery of wild salmon and steelhead populations. The HSRG submitted its report, “Hatchery Reform”, to Congress in 2004. A similar report for Columbia River hatcheries was submitted to Congress in 2009.

In 2011, the National Marine Fisheries Service (NMFS) 4(d) rule for salmon and steelhead formally recognized the importance of the HSRG’s Hatchery Reform Report by noting that “NMFS considers the HSRG’s principles, findings, and recommendations important to the advancement and implementation of measures needed to reduce risk of adverse hatchery related effects to natural-origin salmon and steelhead populations.” As you know, just recently the HSRG has worked successfully with the Lummi, Upper Skagit and Tulalip Tribes to develop scientifically credible Hatchery Genetic Management Plans that respect their Treaty Rights and produce hatchery salmon for harvest.

Even the federal courts have ruled that hatchery fish on the spawning grounds undermine the recovery of wild fish and cannot be counted toward recovery of ESA listed populations. The State of Washington has already lost a lawsuit concerning the management of hatchery steelhead because they ignored this fact. So, we do not understand why the FWC suddenly without a full public review, decided to ignore the best available science and not utilize independent scientists, the HSRG, to ensure that the state’s hatcheries are

managed consistent with the needs of wild fish. It is not only a dangerous precedent regarding the management of our state's fish and wildlife, it is as short sighted as ignoring the science of climate change. As with climate change, the overwhelming body of science confirms the need to protect wild salmon on the spawning grounds.

We would urge you to personally review the recent action by the Fish and Wildlife Commission to suspend the principles, standards and recommendations of the HSRG. We would call upon you to take two immediate steps. First, we would urge you to call upon the FWC to immediately reinstate the three key policy guidelines while conducting the Hatchery and Fishery Reform Policy review. Second, the actions of the FWC to suspend the guidelines while conducting the review gives the appearance of an inherent bias against the HSRG. Therefore, we would call upon you to put together a true independent process to review the HSRG recommended principles, standards and recommendations.

Unfortunately, the FWC's actions have created significant division at a time we can least afford it. We, like you, believe strongly that following the best available science and the use of independent science can bring people together for the common purpose of restoring our salmon runs and Orca Whale populations.

Sincerely,

Name	Title	Affiliation
Andrew Kinziger, PhD	Professor	Humboldt State University, Department of Fisheries Biology
Anne Shaffer, PhD	Executive Director	Coastal Watershed Institute
C I Goddard, PhD	Executive Secretary	Great Lakes Fishery Commission, AFS Fellow, Retired
Christopher Frissell, PhD	Principal Scientist	Frissell & Raven Hydrobiological and Landscape Sciences
Conrad Mahnken, PhD	Former WDFW Commissioner	WDFW, NOAA-Fisheries, Retired
David Montgomery, PhD	Professor of Geomorphology	Department of Earth & Space Sciences, UW
Gene Helfman, PhD	Professor Emeritus	Odum School of Ecology, University of Georgia
Jack Stanford, PhD	Professor Emeritus	Flathead Lake Biological Station
Julian Olden, PhD	Professor, SAFS	University of Washington
Ken Leber, PhD	Founder	Science Consortium for Ocean Replenishment
Lance Morgan, PhD	President	Marine Conservation Institute
Lars Moberand, PhD	Past Chair of HSRG	HSRG, Retired

Matthew Sloat, PhD	Director of Science	Wild Salmon Center
Michael Blouin, PhD	Professor, Department of Integrative Biology	Oregon State University
Michael R. Miller, PhD	Associate Professor of Population and Quantitative Genetics	University of California, Davis
Nick Gayeski, PhD	Aquatic Ecologist	Wild Fish Conservancy
Patrick Trotter, PhD	Fishery Science Consultant	Retired
Peter Paquet, PhD	Northwest Power and Conservation Council	Retired
Richard Williams, PhD	Fisheries Ecologist and Research Associate	Department of Biology at The College of Idaho
Robert J Naiman, PhD	Professor Emeritus	School of Aquatic & Fishery Sciences, UW
Stephen Conroy, PhD	Senior Ecologist	King County Department of Transportation
Aaron Hill	Executive Director	Watershed Watch Salmon Society
Aaron Jorgenson	Biologist	Wild Fish Conservancy
Adam Brandt	Board of Directors, Secretary	Washington Water Trails Association
Adrian Tuohy	Biologist	Wild Fish Conservancy
Aileen Jeffries	Senior Research Scientist	Harbor Porpoise Project, Biota Maxima
Alan Levine	Director	Coast Action Group
Alexandra Morton	Founder	Raincoast Conservation Society
Amy Carey	Executive Director	Sound Action
Andree Hurley	President and Acting Executive Director	Washington Water Trails
Andy Appleby	Hatchery Biologist	WDFW, Retired
Ann E Prezyna	Environmental Attorney	
Chuck Owens	President	Peninsula Citizens for the Protection of Whales

Colleen Weiler, MSc	Jessica Rekos Fellow for Orca Conservation	Whale and Dolphin Conservation
Dave Seiler	Research Scientist	WDFW, Retired
Doug Hennick	Aquatic Ecologist	Wild Fish Conservancy
Emma Helverson	Outreach Coordinator	Wild Fish Conservancy
Frank Haw	Director	Washington Department of Fisheries, Retired
Grace Stiller	President and Founder	Nature Stewards Program
Jamie Glasgow	Director of Ecology	Wild Fish Conservancy
Jessica Helsley	Executive Director	Coast Salmon Foundation, Coast Salmon Partnership
Jim Lichatowich	Fishery Biologist and Author	Retired
Jim Martin	Chief of Fisheries	ODFW, Salmon Advisor to Governor Kitzhaber, Retired
John Barr	Chief Enhancement Biologist	Nisqually Tribe, HSRG, Retired
John Brosnan	Executive Director	Seattle Audubon Society
John C. McGlenn	President	Washington Wildlife Federation
John Kober	Executive Director	Pacific Rivers
John Sneva	Biologist	WDFW
Johnny Le Coq	Founder and CEO	Fishpond
Juan Carlos Cardenas N.	Executive Director, Veterinary Doctor	Centro Ecoceanos, Santiago de Chile
Justin Eastman	Biologist	Wild Fish Conservancy
Karen G. Wristen	Executive Director	Living Oceans Society
Kurt Beardslee	Executive Director	Wild Fish Conservancy
Lee Blankenship	Senior Research Scientist	WDFW, Retired
Lorna Smith	Vice-President	Olympic Forest Coalition
Maradel K. Gale	Executive Director	Bainbridge Beach Naturalists

Marcie Keever	Director, Oceans & Vessels Program	Friends of the Earth
Maria Meyer	Community Outreach Administrator	Central Co-op
Mark Greenwood	Secretary	Kitsap-Olympic Peninsula Chapter #383 of Trout Unlimited
Mark Sherwood	Executive Director	Native Fish Society
Mary Lou White	Field Biologist	Wild Fish Conservancy
Megan Adams	Biologist	Raincoast Conservation Foundation
Micah Wait	Director of Conservation	Wild Fish Conservancy
Misty MacDuffee	Wild Salmon Program Director	Raincoast Conservation Foundation
Noah Greenwald	Endangered Species Director	Center for Biological Diversity
Patrick Hanratty	Biologist	WDFW, Retired
Patrick Myers	Director of Outreach and Development	Wild Fish Conservancy
Paul Richard Dorn	Retired Senior Research Scientist	Suquamish Tribe, 1977 – 2017
Paul Seidel	Regional Hatchery Division Manager	WDFW, Retired
Peter Bahls	Fish Biologist and Director	Northwest Watershed Institute
Shari Tarantino	Executive Director	Orca Conservancy
Stan Moberly	President	American Fisheries Society, Retired
Steve Erickson	Executive Director	Whidbey Environmental Action Network
Steve Manlow	Executive Director	Lower Columbia Fish Recovery Board
Susan Ballinger	Founder and Lead	Wenatchee Naturalist Program
Tom Flagg	Supervisory Fisheries Research Biologist	NOAA-Fisheries, Retired
Whitney Neugebauer	Executive Director	Whale Scout



October 7th, 2020

Marie K. Mentor
President

Robert J. Jirsa
Past President

Gerry Adams
CPA (ret.)

Tom A. Alberg
Madrona Venture Group

Douglas T. Boyden
*Mercer Human Resource
Consulting (Ret)*

Brian Bogen
Cascadia Capital, LLC

Michael Devany
Vice Admiral NOAA (Ret)

Norm Dicks
Van Ness Feldman, LLP

David Dufenhorst
Sun Road Real Estate Holdings

JJ Gould
Anthony's Restaurants

Scott Grimm
LifeWatch Services Inc.

Leah Hair
Environmental Leader

Sarah Henke
Puget Sound Express

Gaylord Kellogg
Biocement Technologies

Jim Kraft
Washington Water Trust

Douglas S. Little
Perkins Coie LLP

Lisa W. Seeb, Ph.D.
University of Washington

Tom Schadt
Fisheries Scientist, Consultant

Tim Thompson
Thompson Consulting Group

David A. Troutt
Nisqually Indian Tribe

Mike Voegtlin
Precision Cast Parts Corp. (Ret.)

Sheri Ward
Plum Creek (Ret.)

Jacques R. White, Ph.D.
Executive Director

Dear Chair Carpenter and Commissioners,

We at Long Live the Kings (LLTK) urge you to consider improvements to your revised Anadromous Salmon and Steelhead Hatchery Policy (POL-C3619).

LLTK is committed to wild salmon recovery AND sustainable fisheries. We greatly appreciate the impact of the current low abundance of our wild and hatchery salmon populations. Recreational and commercial fisheries are at risk, whales are starving, and tribal treaty obligations are strained. We also appreciate that hatchery salmon currently play a role in meeting these many demands on the resource: 70-80% of the salmon that return to Washington waters were spawned in hatcheries. Therefore, we are working to address constraints to both wild and hatchery salmon productivity.

That said, hatcheries can have negative genetic and ecological impacts on wild fish, preventing progress toward the ultimate goals of recovering our wild salmon--eliminating the need for their legal protection--and reducing our dependence on hatchery production. Since 1999, LLTK has played a pivotal role in advancing science-based management to help align hatchery production objectives with wild fish conservation and fishery needs. We were on the Hatchery Scientific Review Group's facilitation team for their Puget Sound and Coastal Washington review; facilitated the US Fish and Wildlife Service internal review of their northwest hatcheries; and participated on the Puget Sound Hatchery Action Advisory Committee. The tenets of hatchery reform live on in our work.

The Fish and Wildlife Commission originally instituted the Hatchery and Fishery Reform Policy in 2009 to ensure the principles, standards, and the current science of hatchery reform were integrated into the Department's management construct as one leg of an All-H (habitat, hatcheries, harvest, hydro) recovery strategy. The initial policy was effective in that it was concise, prescriptive, and grounded in a sound scientific framework, with specific objectives for one to measure progress against. The Commission's revised policy is not. Instead, for most of its guidelines it simply mandates federal Hatchery Management Plans (HGMPs) be completed and defers determining whether state hatchery programs are abiding by best science to the HGMP process. This removes internal accountability and allows for a disconnect between the hatchery management and fish science wings of the Department. Further, HGMP's are a requirement under the Endangered Species Act designed to prevent extinction. The Act does not provide for the wild population viability we need for sustainable fisheries. It also removes the ability to evaluate salmon and steelhead populations in the context of hatchery management where HGMP's are not required. Given this, we find WDFW's changes to the policy are not consistent with the Agency's mandate to "preserve, protect, perpetuate and manage."

Further, caveats and exceptions are included that leave several guidelines open to interpretation. For example, instead of establishing exclusively “Wild” Salmon Management Zones in “each ESU/DPS” as originally mandated, guideline 7 of the revised policy states that “...the highest level of protection from possible negative effects of hatchery programs to wild populations shall be provided to those wild populations that have not had substantial genetic modification from past hatchery practices or are now in a healthy condition with little or no same species/run hatchery influence.” This change allows for fewer salmon populations to be protected, and for looser protections than originally intended. And, guideline 5b states all hatchery fish shall be externally marked, except “...for conservation or other management purposes” with no definition of “other” leaving the door open to the release of many unmarked hatchery fish with little justification.

Finally, we concur with Trout Unlimited in their letter that the Commission should follow the recommendation of the Department’s staff in their hatchery reform policy report and include the need for creating Statewide Hatchery Monitoring and Evaluation Plan and funding its implementation.

As made clear by our Salish Sea Marine Survival Project and the many other studies identifying the primary constraints to salmon productivity, wild and hatchery salmon are facing significant and shared challenges. Degraded habitat, increased predation, reduced prey availability, and reduced diversity all contribute lower productivity. It’s important that we focus on these as constraints to all salmon, but at the same time we must continue to manage the risks hatchery salmon pose to wild salmon by retaining clear and measurable guidelines for managing the interface between wild and hatchery populations.

We welcome the opportunity to meet with you to further discuss this issue and the opportunities we see for increasing the productivity and sustainability of our salmon and southern resident killer whales.

Regards,



Marie Mentor
Board President



Jacques White, PhD.
Executive Director

Cc: Kelly Susewind, Director, Washington Department of Fish and Wildlife

Cc: David Postman, Chief of Staff, Office of Governor Jay Inslee

Cc: Kelly Wicker, Deputy Chief of Staff, Office of Governor Jay Inslee

Cc: Keith Phillips, Senior Policy Advisor, Office of Governor Jay Inslee

Cc: JT Austin, Senior Policy Advisor, Office of Governor Jay Inslee

Cc: Justin Parker, Executive Director, Northwest Indian Fisheries Commission

Cc: Jaime Pinkham, Executive Director, Columbia River Inter-Tribal Fisheries Commission

Cc: Barry Thom, Regional Administrator of NOAA West Coast Region

Cc: Allyson Purcell, Anadromous Production and Inland Fisheries Branch Chief, NOAA West Coast Region



STATE OF WASHINGTON
RECREATION AND CONSERVATION OFFICE

October 8, 2020

Mr. Larry Carpenter, Chair
Washington Fish and Wildlife Commission
PO Box 43200
Olympia, WA 98504-3200

Dear Mr. Carpenter:

Subject: Comments on Proposed August 1, 2020 Update to Hatchery Policy C-3619

I am writing on behalf of the Governor's Salmon Recovery Office (GSRO). The role of the GSRO is to work with state agencies, regional salmon recovery organizations, and other partners to ensure a coordinated and consistent statewide approach to salmon recovery. Given the statewide importance of hatchery reform to salmon recovery and the intersection of our agency authorities and interests, we offer the following comments on the proposed Hatchery Policy C-3619 update.

The GSRO requests that WDFW ensure the policy is in alignment with the Statewide Salmon Recovery Strategy: Extinction is not an Option and the federally adopted Salmon Recovery Plans and regional sustainability plans. Salmon and Southern Resident Orcas require that Washington State continues to make progress on recovery. Washington's regional salmon recovery organizations have worked diligently with a multitude of partners, including WDFW and other state agencies, federal agencies, Tribes, local governments, and a variety of stakeholders, to develop adopted Salmon Recovery Plans and related regional sustainability plans that take all of these factors into consideration. These plans form the foundation for salmon recovery efforts across the state and represent a commitment from a multitude of partners to work together to recover salmon and steelhead to healthy and harvestable levels. The WDFW Hatchery Policy needs to be consistent with the statewide strategy and regional recovery plans.

GSRO requests that the following language be reinserted back into the new policy. This language was included in the original policy but has been removed from the new draft policy update. *"The intent of hatchery reform is to improve hatchery effectiveness, ensure compatibility between hatchery production and salmon recovery plans and rebuilding programs, and support sustainable fisheries."*

In addition, the GSRO requests that Section 3 of the HGMP Table of Contents (Relationship of Program to Other Management Objectives) be revised to include: *"3.6, Relationship to existing state and federally adopted recovery plans and regional sustainability plans, and associated*



goals, objectives, targets, measures and actions. Explain any proposed deviations from the plan(s).” The GSRO appreciates the emphasis in the new policy on recovery and conservation of salmon and steelhead, and the use of general references to conservation such as “regionally accepted policies,” “habitat protection and recovery strategies,” and “other management plans.” However, these general references lack a direct policy commitment to aligning hatchery production with state and federally adopted recovery plans and rebuilding programs that were the cornerstone of the previous policy.

The GSRO appreciates the emphasis in the new policy on recovery and conservation of salmon and steelhead, and the use of general references to conservation such as “regionally accepted policies,” “habitat protection and recovery strategies,” and “other management plans.” However, these general references lack a direct policy commitment to aligning hatchery production with state and federally adopted recovery plans and rebuilding programs that were the cornerstone of the previous policy.

Finally, the GSRO encourages the Fish and Wildlife Commission to engage directly with the statutorily recognized Regional Salmon Recovery Organizations. There are seven of these organizations located across the state, each working closely with agencies, tribes, and other partners to implement salmon recovery. Increasing direct communication with the recovery organizations will strengthen individual partnerships with WDFW and will also help to achieve our shared and mutually beneficial goal of salmon recovery in Washington.

Thank you for the opportunity to provide these comments. If you have any questions or would like to discuss them in more detail, please feel free to contact me at (360) 628-2548, or via email at erik.neatherlin@gsro.wa.gov

Sincerely,



Erik Neatherlin
Executive Coordinator, Governor’s Salmon Recovery Office

cc: Kelly Susewind, Director, WDFW
Washington Fish and Wildlife Commission
JT Austin, Governor’s Policy Office
Council of Regions

From: [Commission \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [brad smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Warren, Ron R \(DFW\)](#); [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Public Comment on Draft Hatchery Policy C-3619
Date: Tuesday, October 13, 2020 9:16:40 AM

From: Keith Denton <keith8denton@gmail.com>
Sent: Tuesday, October 13, 2020 9:08 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Public Comment on Draft Hatchery Policy C-3619

This message has originated from an External Source. Please use caution when opening attachments, clicking links, or responding to this email. Contact your desktop support or IT security staff for assistance and to report suspicious messages.

Dear Commissioners,

I realize this public comment is several hours passed the October 12th deadline, I hope you will still consider it.

I would like to thank the scientists and policy personnel for all of their hard work they put into the Hatchery Scientific Review and the subsequent Policy document. As a fisheries biologist with over 15 years of experience in the state of Washington I understand how much work goes into preparing these documents.

As a long time fisheries biologist in the state of Washington I have had the privilege of working with many state, tribal, and federal professionals from all walks of the salmon world, including hatcheries. It is clear to me that while the state of Washington provides a valuable conservation and economic opportunity with some of their hatchery operations, there are simply too many hatcheries and not enough resources to evaluate which ones are successfully meeting their goals and which ones could be reduced or phased out. I know that the state already collects vast quantities of data to track hatchery success (CWT recaptures, pHOS, pNOB, etc) but most of this data is never actually analyzed and then compared to hatchery evaluation metrics and goals. Furthermore, the State's hatchery programs are not cheap. By my understanding they comprise between a quarter to a third of the total WDFW budget. While they certainly provide economic benefit (particularly to small rural towns like the one I live in) there seems to be no comprehensive data on which to evaluate the economic cost or benefit of individual hatcheries, or even hatchery regions. It is clear to me that some hatcheries are providing a good "return on investment" to their local communities while others are simply dropping money into the river that we will never see again with the additional insult of adversely impacting wild stocks. So I ask the commission to provide for more information by which the state can make informed hatchery policy based on the data that is already being collected and the economics of individual hatcheries.

To be clear, I am talking about supplemental hatcheries with my above comments. I fully understand

that conservation hatcheries are not and should not be economically driven. At some point, seriously depressed stocks need a lifeline. This brings me to my final comment: I do not agree with the addition of "mitigation" as a hatchery purpose. In my view, conservation and supplementation are two opposed purposes that fill the range of acceptable purposes for a hatchery programs. We are either trying to save a seriously depressed stock or we are trying to provide extra fish for harvest. Theoretically these purposes both have measurable goals. Mitigation sounds to me like a catch all category that could be used to justify any program and has no metrics by which to evaluate it.

In closing, I believe many of the State's hatchery programs provide much needed conservation and/or economic benefit, but we must also try something different in a few places if we are to truly understand the effects of hatcheries on our wild stocks. Please consider crunching the data you have already collected and also evaluate the economics of at least some of the under performing programs. We must try something different than the status quo on a few of our rivers and these studies can show us which ones to focus on.

Thank you.

Keith Denton
Sequim, WA
keith8denton@gmail.com

From: [Kloepfer, Nichole D \(DFW\)](#)
To: [Batungbacal, Chalee W \(DFW\)](#)
Subject: FW: Public review draft of policy C-3619 revisions
Date: Thursday, September 3, 2020 5:20:50 PM
Importance: High

For you!

From: Peterson, Laurie L (DFW) <Laurie.Peterson@dfw.wa.gov>
Sent: Thursday, September 3, 2020 5:16 PM
To: Kloepfer, Nichole D (DFW) <Nichole.Kloepfer@dfw.wa.gov>
Cc: Susewind, Kelly (DFW) <Kelly.Susewind@dfw.wa.gov>; Warren, Ron R (DFW) <Ron.Warren@dfw.wa.gov>; Pamplin, Nathan (DFW) <Nathan.Pamplin@dfw.wa.gov>; Cunningham, Kelly J (DFW) <Kelly.Cunningham@dfw.wa.gov>
Subject: FW: Public review draft of policy C-3619 revisions
Importance: High

Hi Nikki,

Could you please forward this message from Jacques White, Executive Director of Long Live the Kings, to the Fish and Wildlife Commissioners? Looks like he meant to write directly to the Commission regarding the suggested timeline for public comment on policy C-3619. He asked that I forward his email below to the Commissioners.

Thanks very much -Laurie

Laurie Peterson

Fish Science Division Manager
WDFW Fish Program | Science Division
Office phone: 360-902-2790
Cell phone: 360-972-5844
Pronouns: She/Her
e-mail: Laurie.Peterson@dfw.wa.gov

-----Original Message-----

From: Jacques White <JWhite@ltk.org>
Sent: Thursday, September 3, 2020 4:44 PM
To: Peterson, Laurie L (DFW) <Laurie.Peterson@dfw.wa.gov>
Cc: Susewind, Kelly (DFW) <Kelly.Susewind@dfw.wa.gov>; Warren, Ron R (DFW) <Ron.Warren@dfw.wa.gov>; Pamplin, Nathan (DFW) <Nathan.Pamplin@dfw.wa.gov>; Michael Schmidt <MSchmidt@ltk.org>
Subject: Public review draft of policy C-3619 revisions

Laurie,

I am writing on behalf of Long Live the Kings to request the Washington Fish and Wildlife Commission consider extending the deadline for submission of comments on the draft policy C-3619 revisions by at least 30 Days.

Our organization was deeply involved in helping to develop the scientific foundation for the suspended Hatchery Reform policy, and we continue to operate several hatchery programs in the state.

We are requesting this delay because the new policy will be critically important for guidance of the Washington Department of Fish and Wildlife to assure hatchery operations follow best available science and practice, and support fisheries while continuing to reduce risks to critically low stocks of salmon and steelhead listed under the federal Endangered Species Act.

This is an especially difficult time to respond for organizations like ours who are operating remotely due to COVID-19 while trying to maintain high standards of quality for our field work during the busy summer season.

Please share our request with Chairman Larry Carpenter and other members of the Fish and Wildlife Commission.

I hope the Commission will consider a delay until at least October 7, 2020.

Thanks in advance for considering our request,

Jacques White
Executive Director
Long Live the Kings

From: [Commission \(DFW\)](#)
To: [Barbara Baker](#); [Bob Kehoe](#); [Brad Smith](#); [Dave Graybill](#); [Donald McIsaac](#); [Anderson, James R \(DFW\)](#); [Larry Carpenter](#); [McBride, Tom A \(DFW\)](#); [Linville, Molly F \(DFW\)](#); [Thorburn, Kim M \(DFW\)](#)
Cc: [Warren, Ron R \(DFW\)](#)
Subject: FW: New fish policy
Date: Monday, August 3, 2020 10:19:59 AM

From: longshotinc0406 <longshotinc0406@gmail.com>
Sent: Monday, August 3, 2020 8:47 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: New fish policy

Please move forward with the new policy, HSRG is a failed plan and needs to be terminated. Let's raise fish, save small fishing businesses, their communities and give the tax paying public a fair shot at utilizing this once booming resource.

Thank you for your time and service.

James Long

49 yrs resident and fisherman in Washington state

Sent from my Verizon, Samsung Galaxy smartphone

From: [Commission \(DFW\)](#)
To: [Warren, Ron R \(DFW\)](#); [Cunningham, Kelly J \(DFW\)](#)
Cc: [Director \(DFW\)](#)
Subject: FW: learn this
Date: Monday, September 28, 2020 7:44:29 AM

From: James <crivellobuzz@aol.com>
Sent: Saturday, September 26, 2020 10:11 AM
To: Commission (DFW) <COMMISSION@dfw.wa.gov>
Subject: Fwd: learn this

-----Original Message-----

From: James <crivellobuzz@aol.com>
To: holcombmarine@msn.com <holcombmarine@msn.com>
Sent: Fri, Sep 25, 2020 5:15 pm
Subject: Fwd: learn this

-----Original Message-----

From: James <crivellobuzz@aol.com>
To: cpr-fish@toledotel.com <cpr-fish@toledotel.com>
Sent: Fri, Sep 25, 2020 5:05 pm
Subject: Fwd: learn this

-----Original Message-----

From: James <crivellobuzz@aol.com>
To: bryce.glaser@dfw.wa.gov <bryce.glaser@dfw.wa.gov>
Sent: Fri, Sep 25, 2020 5:05 pm
Subject: learn this

How about the Quinault fishery management! Superb steelhead, not the small cookie cutter loser fish we now are catching in the late steelhead run. I no longer fish! I protest your junk science and lack of quality fishery management. I dare you WDFW bio's to look your children in their innocents eyes and tell them this stupid wild verses hatchery fish dogma junk science, "you know is a lie." Tell them how smart daddy is at his job. How daddy stopped fathers and their sons and daughters fishing the early steelhead run on the Cowlitz River. How daddy put river guides out of business and other fishing related businesses. Daddy has cost millions of dollars entering the economy in Lewis County and other areas. Lost fish at the hatchery, years not recycling summer steelhead, placing incompetent people in management positions.

Remember wild and hatchery fish were cross bred at the hatchery. The fairly tale that hatchery fish depressed and threaten wild steelhead is a fantasy and an out and out lie and the data proves it. Summer Steelhead study proves my point, but WDFW cherry picks extrapolated data and uses only what fits their junk science management.

I said it before and I will say it again, wild salmonids were sacrificed on the alter of Hydro Power and that

daddy is a fact, not a bunch of junk science. Hatcheries and a mitigation agreement were to ease the impact of lost wild fish for the sportie and that is also a historical fact, they knew then the impact the Dam would have.

Dams did depress wild Salmonids along with an increase in the parasite C-Shasta, its nasty for the survival of the infected fish and depressed wild smolts surviving in river. Read the attached daddy and learn how little hatchery fish actually could not have depressed wild Salmonids. Run timing separates the wild and then early Cowlitz Steelhead run from mating. The major numbers of returning hatchery fish were removed at Barrier Dam, removed out of the main river. There were not thousands of hatchery fish in the system waiting for the late wilds to show up to breed with, daddy. Predatory birds nail outgoing smolts, I have seen this first hand, these birds need to be culled down in number.

So what if a few hatchery did spawn with a wild, based on data by WDFW those offspring could hardly swim and find food to eat and are just weaker than a wild fish at their offspring surviving, not vital. In a nut shell these fish should never make it back to the river as an adult and the few that do have little if any chance of finding another wild fish to spawn with. Its a self limiting issue based on what WDFW told the public.

WDFW stop the lies and bring back the early steelhead runs and redeem your integrity because frankly IMO you have none. The hatchery fish only provided us with a great fishery and are innocent if your junk science management paradigm.

After I read the list below it definitely points directly at the evil hatchery fish depressing wild Salmonid populations over the years, its crystal clear daddy.

Hundred of Dams

Continuing unchanging impacts via dam and river issues/ warmer water caused by the Dams

C-Shasta Parasite has increased

Loss of ancestral spawning grounds

Predatory Birds

Gravel recruitment loss

Water and trib creeks summer water levels

Netting

Seals and Sea Lions in river

Loss of Beaver Dams

Logging

Small adult bio mass of surviving adult wild Steelhead left to spawn to increase the overall population

Read and educate your self "Daddy"

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3346369/>



Lower Columbia Fish Recovery Board

September 7, 2020

Mr. Larry Carpenter, Chair
Washington Fish and Wildlife Commission
PO Box 43200
Olympia, WA 98504-3200

Dear Mr. Carpenter:

Subject: Comments on Proposed August 1, 2020 Update to Hatchery Policy C-3619

The Lower Columbia Fish Recovery Board (LCFRB) is writing in response to the Fish and Wildlife Commission's (Commission) August 1, 2020 request for comments on the latest version of the Hatchery Policy C-3619 update. The LCFRB provided comprehensive written comments on the policy update on June 9, 2020, as well as via email on July 25, 2020. Many of the concerns raised in our prior comments remain unaddressed. To avoid repetitiveness, we have therefore attached our prior comments to this letter. In addition, we offer the following supplemental comments and recommendations for your consideration, based on our review of the latest policy language.

Commitment to Recovery Plan Implementation. One of the most concerning changes in the proposed policy language is elimination of any direct reference to state and federally approved salmon and steelhead recovery plans. While we appreciate the emphasis in the policy on "conservation" and "recovery" of salmon and steelhead, this version of the policy reflects a departure from the previous and direct policy commitment to aligning hatchery production with state and federally approved recovery plans. Specifically, the original policy C-3619 stated:

*"The intent of hatchery reform is to improve hatchery effectiveness, **ensure compatibility between hatchery production and salmon recovery plans** and rebuilding programs, and support sustainable fisheries" (emphasis added)*

This statement has been eliminated. While there are general references to "regionally accepted policies", "habitat protection and recovery strategies", and "other management plans", there is no direct reference to state and federally approved recovery plans in the body of the proposed policy, or in the Draft Prototype Hatchery and Genetic Management Plan (HGMP) Table of Contents. We view this as a fundamental and critical flaw in the proposed policy.

The Washington Department of Fish & Wildlife (WDFW) has been a key partner in developing and implementing recovery plans statewide, and we believe it is important to reaffirm the agency's commitment to working not just toward "recovery and conservation" in a general sense, but toward achieving the specific goals and objectives outlined in recovery plans. As noted in our previous correspondence, in the Lower Columbia region WDFW has been proactive at implementing hatchery and harvest reform, and worked with the LCFRB to develop and implement the Lower Columbia Conservation and Sustainable Fisheries Plan (2017). Unfortunately, the proposed elimination of any discrete reference to existing recovery plans and

implementation strategies raises questions regarding the Commission's ongoing commitment toward aligning hatchery production with recovery plan goals and objectives, both in the Lower Columbia and statewide. We therefore specifically request that the original language above be reinserted into the proposed policy. We also request that Section 3 (Relationship of Program to Other Management Objectives) of the HGMP Table of Contents be revised to include "3.6, *Relationship to existing state and federally adopted recovery plans, and associated goals, objectives, targets, measures and actions. Explain any proposed deviations from the plan(s)*".

Commitment to Use Best Available Science. This version of the policy continues to abandon any reference to use of the Hatchery Scientific Review Group (HSRG) guidelines. Instead, the policy calls upon development of HGMPs based on "best available and evolving science" as the mechanism by which to achieve the stated policy purposes. To eliminate use of HSRG standards is contrary to WDFW's own science review and conclusions regarding effective management of hatchery programs. While WDFW and the WA Academy of Sciences did recognize that the HSRG guidelines were based on modeled results rather than empirical data, they both clearly confirmed that the HSRG guidelines were useful and needed to be maintained. In fact, WDFW concluded that "The principles of reducing pHOS and increasing pNOB to achieve fitness gains in wild populations are well-founded, and should be fundamental goals in any hatchery reform management action". While use of HSRG guidelines has been eliminated, no other methods for objectively evaluating hatchery programs have been identified for use in HGMPs. It is difficult to understand how hatchery programs would be managed or evaluated if there are no standards set with respect to their impacts on natural populations. Until alternative, science-based guidelines are developed, the use of HSRG standards should not be eliminated. To eliminate their use entirely is contrary to best available science.

In closing, we wish to reiterate the importance of ensuring this policy update provides for a thorough and comprehensive public review process. The notice that the Commission's August 1, 2020 draft policy is open for comment was not widely publicized, and can only be found through searching multiple layers of WDFW's website. A policy change of such statewide importance to salmon recovery should be broadly publicized and announced, including via news releases and on the front page of WDFW's website. We also recommend that before a policy is adopted, WDFW should review the proposed policy update through its State Environmental Policy Act (SEPA) procedures, as a non-project action. That would help to provide the broad public and stakeholder review that we believe this policy change warrants.

Thank you for the opportunity to provide these comments. If you have any questions or would like to discuss them in more detail, please feel free to contact me at (360) 425-1553, or via email at smanlow@lcfwb.gen.wa.us

Sincerely,



Steve Manlow
Executive Director
Lower Columbia Fish Recovery Board

Attachments: June 9, 2020 Comments on Policy C-3619 Update
July 25 Email Comments to Don Mclsaac

cc: Kelly Susewind, Director, WDFW
Washington Fish and Wildlife Commission
Erik Neatherlin, GSRO
Council of Regions



Lower Columbia Fish Recovery Board

2020 BOARD

June 9, 2020

Todd Olson, Chair
Hydro-Electric Representative

Paul Greenlee, Vice Chair
SW WA Cities Representative

Dennis Weber,
Secretary-Treasurer
Cowlitz County Commissioner

Taylor Aalvik
Cowlitz Indian Tribe

Mike Backman
Wahkiakum County Commissioner

F. Lee Grose
Lewis County Citizen Designee

Richard Mahar
Skamania County Commissioner

Hal Mahnke
Cowlitz County Citizen Designee

Gary Medvigy
Clark County Councilor

Gary Stamper
Lewis County Commissioner

Don Swanson
SW WA Environmental
Representative

Dean Takko
WA State Senate

Olaf Thomason, Sr.
Wahkiakum County Citizen
Designee

Jade Unger
Clark County Citizen Designee

Del Wilson
Skamania County Citizen Designee

~~~~~  
Steve Manlow  
Executive Director

11018 NE 51<sup>st</sup> Circle  
Vancouver, WA 98682  
(360) 425-1555

Mr. Larry Carpenter, Chair  
Washington Fish and Wildlife Commission  
PO Box 43200  
Olympia, WA 98504-3200

Dear Mr. Carpenter:

Subject: Fish and Wildlife Commission Recommendations on Hatchery and Fishery Reform Policy C-3619

The Lower Columbia Fish Recovery Board (LCFRB) is writing in response to the Fish and Wildlife Commission's (Commission) recent actions regarding updates to the Hatchery and Fishery Reform Policy C-3619. Hatchery and harvest reform are fundamental elements of the LCFRB's overall salmon steelhead recovery approach in the Lower Columbia region, and the LCFRB has worked closely with Washington Department of Fish and Wildlife (WDFW) to facilitate implementation efforts since adoption of the Lower Columbia Salmon Recovery and Fish & Wildlife subbasin Plan (Recovery Plan) in 2006. We are therefore concerned with the Commission's recent recommendations regarding updates to the above-referenced policy, as well as the lack of opportunity for meaningful and broad public engagement in the Commission's formulation of recommendations. We offer the following for your consideration.

As one of the seven regional recovery organizations in Washington State, the LCFRB is charged by state statute with developing and facilitating implementation of a salmon and steelhead recovery plan for the Lower Columbia region. In that capacity, the LCFRB coordinated the development of State's first recovery plan that was adopted by the National Marine Fisheries Service (NMFS) in 2006, updated in 2010, and integrated into the NMFS Domain recovery plan in 2013. The adopted Lower Columbia Salmon Recovery and Fish & Wildlife Subbasin Plan (Recovery Plan) was developed in a collaborative, transparent and inclusive manner. The Washington Department of Fish & Wildlife (WDFW) was a key partner in developing the recovery plan, and is the lead partner in implementing its hatchery and harvest reform actions.

In the Lower Columbia region, large scale salmon and steelhead hatchery production has been occurring for over a century. For example, from 1913 to 1930, about 320 million Chinook salmon fry were released into the lower Columbia River by Washington State hatcheries alone, and similar numbers were estimated for Oregon and federal hatcheries. Around the time of initial Endangered Species Act (ESA) listings, Lower Columbia hatcheries were producing approximately 50 million salmon and steelhead per year, and approximately two-thirds of that number were tule fall Chinook. Total Lower Columbia production has since been reduced to approximately 41 million salmon and steelhead

(Columbia Basin Partnership, in press). However, salmon and steelhead adult returns are still dominated by production from the region's over 20 hatchery programs. Currently, about 82% of the fish returning to the Lower Columbia region are of hatchery origin.

The LCFRB fully realizes and appreciates the substantive economic and recreational benefits that hatcheries provide to our local communities, and that is well documented in the Recovery Plan. Our mission statement also highlights the importance of recovering salmon and steelhead to "healthy, harvestable levels that will sustain productive sport, commercial, and tribal fisheries". Hatcheries not only support commercial, recreational and Tribal fisheries in the Lower Columbia, they also play a key role in supporting reintroduction and supplementation programs for species such as spring Chinook and chum. The Recovery Plan recognizes that even after viable ESUs of salmon are recovered, hatcheries may continue to be needed to provide fish for fisheries as mitigation for permanent loss of habitat and hydro system mortality.

One of the greatest challenges we collectively face in the Lower Columbia region is maintaining viable fisheries on the path to achieving recovery of natural origin populations. While the "All-H" Recovery Plan recognizes the benefits of hatcheries, it also acknowledges that the historic hatchery production cited above has substantively reduced productivity of natural origin spawners. Hatchery impacts are most pervasive for spring Chinook, fall Chinook, and coho with natural productivity estimated to have been reduced by 40-50% for the majority of the populations. Along with degraded habitat conditions, hydro impacts in the Columbia, Lewis and Cowlitz Rivers, and historic harvest rates of 65%, 70% and over 80% for fall Chinook, spring Chinook and coho (respectively), hatchery production was a significant factor contributing to listing of Lower Columbia salmon and steelhead under the ESA in the late 1990s. However, substantive progress has been made in each area, including reducing hatchery and harvest impacts since the ESA listings - those sectors were the first to be impacted by ESA constraints, and WDFW has been proactive in implementing hatchery and harvest reform. These efforts need to be sustained.

As part of the All-H recovery approach in the LCR, the LCFRB collaborated with the WDFW to develop the Lower Columbia Conservation and Sustainable Fisheries Plan (WDFW & LCFRB, 2017) (CSF Plan). The goal of the CSF Plan is to support efforts to return natural origin salmon and steelhead to healthy and harvestable levels, while sustaining important Tribal, commercial and recreational fisheries. The CSF Plan sets forth specific strategies, actions, and management practices that WDFW will use in operating its Lower Columbia hatcheries and in managing related fisheries. The CSF Plan was adopted by both WDFW and the LCFRB, and represents a strong policy-level commitment by WDFW to address its respective hatchery and harvest implementation actions identified in the NMFS and State approved Recovery Plan. These actions comprise approximately 20% of the Recovery Plan's 365 actions. The principles of reducing the proportion of hatchery origin spawners and increasing the proportion of natural origin broodstock to achieve fitness and productivity gains in wild populations are foundational to CSF Plan management approaches. These principles were recently reaffirmed by WDFW's science review of Policy C-3619 (Anderson, 2020).

Recovery progress has been made with many populations, especially our Lower Columbia steelhead populations. However, significant challenges still remain for many populations, including reducing the number of hatchery fish on the spawning grounds through harvest, weirs, and program size adjustments, and improving population productivity. This is especially the case for tule fall Chinook and coho populations, which also continue to suffer from historic and ongoing habitat degradation that has not been successfully offset through land management improvements and active restoration. It is important to remember, however, that while hatchery, harvest, habitat and other impacts have accrued for over a century, we have only been actively trying to recover ESA-listed salmon and steelhead for several salmon life cycles. Fish population responses to recovery actions can take multiple generations to manifest, which conflicts with the public's expectation of immediate results. That expectation seems to be an important driver in the current impetus to increase hatchery production, despite the poor ocean conditions that appear to be depressing both hatchery and natural origin production across the northwest in recent years.

We have reviewed the Commission's recommended updates to Policy C-3619, as well as the prior suspension of key elements, and are concerned they may represent a pivot away from the overarching conservation and recovery direction of the existing policy, as well WDFW's commitments to implementing the CSF Plan. While we certainly understand the current pressure to increase hatchery production to better align with historic hatchery production levels, we believe it is critically important to ensure Policy C-3619 continues to ensure hatcheries are managed in a manner that continues to support efforts to rebuild ESA-listed salmon and steelhead to healthy and harvestable levels, in context of an "All-H" recovery approach. In light of this, we are providing specific comments and recommendations on the draft policy language in Appendix A.

The LCFRB believes that any changes in policy direction that affects future implementation of the Recovery Plan should be conducted in a manner that provides for thorough, comprehensive and transparent public review. Unfortunately, the Commission's original suspension of Hatchery Scientific Review Group (HSRG) elements of Policy C-3619 on June 15, 2018 was not expected, and did not provide for thorough stakeholder review. Although "possible guidance" was referenced on the agenda, there was no clear indication that the Commission would be considering suspending key policy elements during that meeting. As noted above, the suspended HSRG elements are foundational to WDFW's approach to implementing the hatchery reform actions under the CSF Plan. The Commission's suspension of those elements therefore raises questions regarding the status of WDFW's hatchery reform action implementation in the Lower Columbia region.

Similar to the above situation, the Commission's currently recommended Policy C-3620 update language was adopted on April 10, 2020, and there was little to no opportunity for thorough and meaningful stakeholder review before the Commission took action. The Fish Committee finalized recommended policy language on April 9, it was posted to the website on the morning of the April 10 meeting, and it was approved by the full Commission that same day. Although "Fish Committee Recommendation" was identified on the agenda and prior work plan documents, there was no opportunity for stakeholders to review the Commission's actual recommended language before it was vetted and adopted during the April 10 meeting. Stakeholder participation was limited, likely in part due to Governor Inslee's mandatory Covid 19 shutdown under Proclamation 20-05. Given the importance of hatchery management and reform to multiple stakeholders, including the LCFRB and other recovery organizations, we believe that a comprehensive and thorough public review opportunity is warranted as the both the Policy C-3619 and C-3620 review processes move forward.

We appreciate the opportunity for my staff to engage in the recent hatchery reform workshop with the Commission, Governor's Salmon Recovery Office, WDFW staff and Council of Regions. We also thank you for the opportunity to provide these comments. If you have any questions or would like to discuss them in more detail, please feel free to contact me at (503) 347-6251, or our Executive Director Steve Manlow at (360) 425-1553.

Sincerely,



Todd Olson  
Chairman  
Lower Columbia Fish Recovery Board

cc: Kelly Susewind, Director, WDFW  
Washington Fish and Wildlife Commission  
Steve Manlow, LCFRB  
Erik Neatherlin, GSRO



**APPENDIX A – LCFRB COMMENTS ON FISH AND WILDLIFE COMMISSION POLICY C-3619  
UPDATE LANGUAGE**

The following is a summary of LCFRB comments on the Fish and Wildlife Commission’s April 10, 2020 draft Policy C-3619 update language, in relation to the Lower Columbia Salmon Recovery and Fish & Wildlife Subbasin Plan (Recovery Plan), and the Conservation and Sustainable Fisheries Plan (CSF Plan).

***Purpose (Section B):***

This section expands the purpose of the policy to include providing mitigation for lost production in blocked areas, and sustainable economic and stability to fisheries. This expands the purpose of the policy to more than just hatchery reform actions as originally focused. Given the original focus on recovery, the expansion to include fishery benefits, without prioritization, is concerning. This could lead to hatchery programs being justified solely on the need to support fisheries, with potentially less emphasis on implementation of hatchery reform actions supporting recovery if they reduce fishery benefits. For instance, reducing program size may be a necessary hatchery reform action that may not occur under this updated policy because it would reduce support for fisheries. Including fisheries as a consideration in this policy is a reasonable change, but it should not be given the same priority as hatchery reform to support recovery. This recommended change has the potential to move toward a hatchery management strategy that does not prioritize the conservation and recovery of natural populations as intended with the original policy. We strongly recommend that the original intent be retained, but would support inclusion of the additional factors as supporting considerations in decision-making.

***General Policy Statement (Section D):***

This section calls for including a definition of mitigation for “permanently lost habitat”, as contrasted with “restorable” habitat. We support the concept of advocating for protection and restoration of currently damaged habitat. However, definitions for these terms need to be crafted to promote alignment with recovery plans and associated habitat strategies that already identify restoration priorities. Also, hatchery production for mitigation of “permanently lost habitat” should only be within the context of existing mitigation and program responsibilities and requirements, not as justification for increased production - unless the increase is fully consistent with recovery of natural origin populations.

Rather than advocating for more hatchery production to offset unmitigated impacts from permanently lost or impaired habitat, which can conflict with recovery needs for many populations in the Lower Columbia, we recommend focusing mitigation on substantively improving productivity and capacity of existing habitat in a manner that supports recovery of natural origin populations. This is a more ecologically sustainable, longer term solution that avoids exacerbating the impacts associated with hatchery production increases. Currently, we are only addressing about 14% of documented habitat restoration needs on a statewide basis.

We support the recommendation to include a narrative about achieving Treaty Indian fishery right obligations.

With regard to additional narrative regarding “broader ecological benefits”, it will be important to explicitly acknowledge that hatchery programs can produce both negative and positive ecological effects. The long-term focus and emphasis should be on restoring ecological benefits by returning natural origin salmon and steelhead to healthy and harvestable levels.

This section also includes a recommendation to add language to the policy regarding increasing salmon abundance to achieve “ecological, socio-cultural, legal, and fishery-related purposes”. Depending on how these items are prioritized and incorporated into the policy, this addition has the potential to conflict with hatchery reform actions and approaches identified for implementation in the CSF Plan, and the ability of WDFW to achieve the productivity targets set forth in the Recovery Plan. A key concern regarding incorporation of these additional purposes is how they would be weighed and prioritized relative to hatchery reform actions aimed at

recovery progress. For example, if these additional purposes are given equal priority with conservation and recovery of natural populations, then the updated policy will likely result in a reduction in hatchery reform efforts and increased adverse impacts to natural origin populations. Also, hatchery reform actions can be modeled to some degree to provide objective results. In contrast, the additional purposes can only be measured in very subjective terms, which can be problematic in determining how to best to manage hatchery programs. The WDFW and the Washington Academy of Sciences (WSAS) reviews also identified this challenge. Unless clear priorities are set, under the proposed language, hatchery management could shift toward management approaches used before adoption of Policy C-3619, and before implementation or Recovery Plan reform actions. This could lead to situations where full risk/benefit analyses cannot be completed and the adverse impacts of hatchery programs on natural populations are not fully recognized or addressed. In contrast, if these additional purposes are viewed as additional considerations to be evaluated when managing hatchery programs, and secondary to conservation and recovery needs, they would be less problematic. For example, this could involve first identifying various management options for a given hatchery program that each meet recovery objectives, and then applying the additional considerations to determine which is most appropriate from a broader perspective. Such a process would better align with the results of the WDFW and WSAS science reviews, which recognized the need to include these types of considerations as part of an effective hatchery management strategy.

***Policy Guidelines (Section E):***

This section refers to development of HGMPs in consultation with co-managers, which we assume to refer to Tribes. We believe that acknowledging and supporting the critical role of Tribes as co-managers is a critical addition to the policy.

While there are references to development of HGMPs, there are no references in the recommended policy update to ensuring alignment with state and federally adopted recovery plans, which were developed collaboratively with WDFW. Complying with ESA requirements associated with HGMPs, FHMPs and NOAA established fishery take limits is not the same as proactively working to achieve recovery plan targets. The former is often focused on avoiding “jeopardy” and maximizing harvest and hatchery production within ESA thresholds, whereas the latter is working proactively to recover ESA listed species to healthy and harvest levels, in light of population-specific goals. We encourage the Commission to include policy statements that call for alignment of hatchery plans with the goals, objectives, and threat reduction and productivity improvement targets identified in adopted recovery plans, and consulting with regional recovery organizations during plan development.

As mentioned above, identifying ecological risks of hatchery programs is critical to an effective hatchery management program, so we support the proposed addition of a guideline focusing on addressing them. WDFW and WSAS both identified the variety of ecological impacts that are associated with hatchery programs (i.e. competition, predation, disease, and facility effects). Unfortunately though, both reviews also recognized that there is little empirical data or modeling that is available to quantitatively estimate these impacts. In absence of estimates for these such impacts, we encourage consideration of carry capacity as an additional element to help determine appropriate programs sizes. WDFW and WSAS both identified program size as an essential and critical part of a hatchery management program and stressed that throughout Washington the majority of program sizes are large and likely having adverse ecological impacts. In fact, WDFW concluded that “Program size requires more careful scrutiny and scientific justification because it affects virtually every aspect of hatchery risks”. WDFW further concluded that “reducing program size may be a more important management action than reducing pHOS or increasing pNOB”. Ecological risks for each hatchery program should be evaluated by comparing hatchery production in comparison to the carrying capacity at both the juvenile and adult life stages. This could be implemented by assuming that if the total number of both hatchery and natural origin spawning adults or smolts exceeds the carrying capacity for either life stage, then the hatchery program could likely be having adverse impact on the natural population, which is supported by both WDFW and WSAS. In the Lower Columbia, EDT modeling has been used to estimate current production capacity, as measured by number of spawning adults and smolts, and these estimated capacities could potentially be used to help evaluate program

sizes. Similar information is available for other regions as well. For the Lower Columbia, determining appropriate program size could be further informed by population designations (Primary, Contributing and Stabilizing), as these reflect recovery priority in the Recovery Plan.

The Commission suspended implementation of HSRG standards in June of 2018, and the recommended policy update language in this section would permanently strike reference to those standards. This change will eliminate the use of HSRG standards and guidelines to evaluate and manage WDFW-operated hatchery programs. It is difficult to understand how hatchery programs would be managed or evaluated if there are no standards set with respect to their impacts on natural populations. While WDFW and WSAS did recognize that the HSRG guidelines were based on modeled results rather than empirical data, they both clearly stated that the HSRG guidelines regarding PNI, pHOS and pNOB were useful and needed to be maintained. In fact, WDFW concluded that “The principles of reducing pHOS and increasing pNOB to achieve fitness gains in wild populations are well-founded, and should be fundamental goals in any hatchery reform management action”.

To eliminate use of the HSRG guidance is contrary to WDFW’s own science review and conclusions regarding effective management of hatchery programs in Washington. Additionally, this change is contrary to the results of the WSAS review, the Lower Columbia Recovery Plan, and the CSF Plan. The CSF Plan was intended to be WDFW’s implementation plan for its actions in the Recovery Plan, and by adhering to the HSRG guidelines, WDFW could show that it was achieving the productivity and threat reduction targets set forth in the Recovery Plan. This would no longer be the case if WDFW ceases use of those standards. WDFW would need to develop a new methodology for determining if they are achieving the productivity targets set forth in the Recovery Plan. Based on the conclusions of WDFW and WSAS, managing for HSRG pHOS, PNI and pNOB standards in conjunction with maintaining appropriate program sizes would appear to be strong foundation for an effectively managed hatchery program. WDFW supported this concept in their review, and noted “These data strongly suggest that in addition to pHOS and PNI, an appropriately sized hatchery program is critical for ensuring that fitness in the natural environment is sustained in the integrated hatchery-wild population.” In light of the above, the revisions proposed by the Commission do not appear to align with best available science. Use of the above referenced HSRG standards should be retained.

The watershed-specific action plans identified in the previous policy do not appear to have ever been completed. They may have been completed for some basins within the state, but in the Lower Columbia, the CSF Plan replaced the need for these plans. We therefore request that the existing CSF Plan be used as the foundation for continuing to move forward with hatchery and harvest reform in the Lower Columbia region. However, we recognize the need to adaptively manage and update key elements based on the outcome of the WDFW and WSAS reviews.

We support maintaining both guideline points 5 and 11 from the previous Policy, as proposed. The recommended change to identify the need for operational costs is a positive addition.

Converting to a written annual report is a good step because it will provide an easily accessible record of what was presented to the Commission. The key is to clearly establish what will be included in this report. We suggest that this report needs to show how hatchery programs are being operated in a manner that supports the purposes of this policy, especially the purpose to “...advance the conservation of natural conservation and recovery of natural origin salmon and steelhead (salmon) by promoting and guiding the continuing to implementation of hatchery reform measures”. If use of the HSRG guidelines is abandoned, which as noted we would disagree with, there would still need to be objective metrics that could be used to evaluate short- and long-term impacts and benefits to natural origin populations. To date, no alternative metrics have been brought to the table for consideration.

The proposal to prepare an alternative to guideline #11 has the potential to result in actions that are inconsistent with both the Recovery Plan and CSF Plan. This bullet calls out the need to provide the highest level of genetic and ecological protection for natural populations that are in healthy status and have limited impact from hatchery programs. By omission, we are uncertain whether this means that there would be limited

protection provided to populations that are in less healthy state, or that are more highly impacted by hatchery programs. This prioritization of specific populations is potentially in conflict with the population designations set forth in the Recovery Plan, including its NOAA and WDFW approved “recovery scenario”. There should be some reference to the Recovery Plans in this prioritization of populations. As mentioned earlier, the expectation is that WDFW still needs to achieve their hatchery productivity improvement targets, which are developed to support the broader recovery scenario. This policy should clearly articulate this concept.

All HGMPs should be updated as part of the proposed annual reviews. The process of updating the HGMPs should include a thorough public review to ensure transparency in the process. The reviews, however, should not be just qualitative in nature. We recommend that they include population status updates and hatchery program evaluations to present information regarding the impact, adverse or beneficial, on natural populations. There should be specific metrics provided to show how hatchery production is interacting with natural populations. For listed populations, the evaluation should document WDFW’s progress toward achieving threat reduction and productivity improvement targets established in the Recovery Plan.

***Adaptive Management (Section F):***

Both WDFW and WSAS strongly indicated the need for a complete monitoring strategy. WDFW specifically recommended “crafting a stand-alone monitoring and adaptive management plan for each hatchery program that quantifies both benefits and risks, and explicitly links hatchery performance metrics to potential operational changes”. This bullet needs to be strengthened to call for this monitoring and adaptive management plan as recommended by WDFW. Additionally, this bullet should outline the need for funding of this monitoring and adaptive management plan, as was done in *Section E, bullet 5*. The monitoring strategy should include monitoring at the subbasin scale, as well as broader geographic (e.g., strata) scales. This would better align with WDFW’s identified need to have a program that “considers information aggregated among multiple hatchery programs in a region”. Specifically, WDFW recommended “that a more explicit, quantitative cumulative assessment of all hatchery programs within a geographic region is warranted”. A full description of this monitoring and adaptive management plan should be provided in the HGMP for each hatchery. WDFW noted that HGMPs “provide detailed descriptions of hatchery operations, in most cases, they lack clearly articulated monitoring and evaluation plans for understanding and controlling hatchery risks”. Including the monitoring and adaptive management plan in the HGMPs would provide a permanent record to support implementation of these plans.

Similar to our comments above, we recommend including an element in the Adaptive Management process that calls for engaging with regional recovery organizations. Both WDFW and WSAS highlighted a lack of connection between hatchery program management and habitat capacity and recovery plans. WDFW specifically stated that “directly linking hatchery management to habitat capacity and habitat recovery plans remains a major challenge”. Including a recovery organization engagement process would help address this issue. Additionally, connecting the program size to the carrying capacity would take a large step forward in addressing WDFW’s concern.

***LCFRB Conclusions***

The Recovery Plan acknowledges the need to maintain viable commercial, recreational and Tribal fisheries in the Lower Columbia, and the role of hatcheries in maintaining those fisheries. The Recovery Plan recognizes that:

- Conservation hatchery programs can contribute to recovery through the preservation, reintroduction, and supplementation of naturally-spawning populations;
- Hatcheries can provide harvest opportunities consistent with measures to restore and maintain healthy, harvestable naturally-spawning populations;
- Some hatchery programs have legal obligations to provide fish for mitigation purposes and those obligations will likely be offset to varying degrees by increases in natural production; and,
- Conservation and harvest benefits from hatchery programs can be realized with acceptable risks to naturally-spawning populations through effective integrated or segregated hatchery programs.

The Recovery Plan also acknowledges that achieving these purposes requires that we ensure hatchery and fishery programs avoid and reduce risks to natural original populations, support achievement of region-wide recovery goals, and minimize adverse ecosystem effects and ecological interactions. Development of the CSF Plan was intended to provide clarity on how WDFW will achieve both hatchery production and recovery goals, in a transparent and objective manner that is guided by best available science. We are concerned that the proposed policy update represents a shift away from the recovery focus of the original policy, and are uncertain what this may mean with regard to WDFW's commitment to implement its Recovery Plan actions in the Lower Columbia Region. We are also not seeing clarity on what tools, approaches or standards will be applied to objectively guide and evaluate hatchery management decisions that will affect recovery. We ask that the Commission carefully consider these concerns, and work proactively to address them as this process moves forward.

*Lower Columbia Fish Recovery Board (LCFRB) comments on Draft Policy C-3619 Update Language (version 07-15-20), submitted via email to Don McIsaac on July 25, 2020.*

Don:

Thanks for the opportunity to discuss the latest version of the Hatchery Policy C-3619 document last week. The discussion provided additional context and helped me better understand the intent of proposed changes. I will be discussing the policy update with my Board during our August 7 meeting, and will also be going through it in more detail with my Chairman (cc'd) in the interim. Given the timing of upcoming Commission meetings, and after having reviewed the updated policy language in more detail after our discussion, I wanted to offer some feedback and thoughts as a follow-up. I apologize for the length of these comments, but some warrant a detailed explanation.

- We understand the need to develop a policy that better balances the needs of hatchery production to support fisheries and mitigation, with addressing recovery and conservation needs. The updated policy language clearly articulates the multiple purposes, which in concept aligns with our broader LCFRB mission that also calls for maintaining viable commercial, sport and tribal fisheries on the path to recovery. As discussed, our greatest uncertainty centers on how the multiple purposes will be balanced relative to recovery needs, and whether the policy will support continued progress that we have been observing, as well as address gaps (e.g., high pHOS in certain watersheds). We would like to see assurance that the policy will support continued progress on both implementation and monitoring.
- During our discussion, I reiterated the need to ensure that increased habitat protection and restoration is also fully considered as a viable option for offsetting impacts from permanently lost habitat. This is especially important given that permanently improved habitat productivity or improving access to existing functional habitat can produce more sustainable benefits, from a recovery perspective in particular. However, there is also clearly a role for hatcheries in mitigating for permanently lost habitat, especially given the lag-time in achieving habitat and watershed process benefits, the limited funding that has plagued restoration progress, and ongoing habitat losses. The Lower Columbia Salmon Recovery and Fish & Wildlife Subbasin Plan (2010) ("Recovery Plan") explicitly acknowledges the mitigation role of hatcheries. The policy as written supports both mitigation approaches, and we believe the most efficacious means for achieving mitigation can be worked through existing processes (e.g., FERC, state/federal agreements and programs, biops, etc.) that involve multiple stakeholders. The updated policy provides for this.
- As noted, we support and appreciate the General Policy Statement that identifies the conservation and recovery of depressed wild salmon and steelhead as part of the highest priority policy commitment, as well as managing fisheries to achieve conservation goals for wild stocks. These statements provide a solid foundation for bringing recovery needs identified in adopted recovery plans to the table for consideration.
- The broadening of the purpose statements should be coupled with a call for methods to objectively evaluate policy implementation effectiveness. In our June 6, 2020 letter, we highlighted the importance of clear metrics against which to measure progress and program benefits/impacts. While we appreciate the reservations about using HSRG standards as strict pass/fail thresholds for all management decisions, the hatchery policy science review did

validate the importance of pHOS, PNOB and other HSRG metrics in evaluating programs in a general sense. Appropriate use of such metrics in HGMPs should not be ruled out, and it does not appear the policy would. With the prior references to HSRG standards being removed, however, there is a pressing need to ensure HGMPs include approaches for objectively and consistently evaluating progress. As part of this policy update process, we believe WDFW should clearly articulate alternative methods and metrics that will be brought to the table, and the science review should be relied upon as the basis. We also suggest wording be added to the policy calling for WDFW to "...strive to develop metrics and approaches for objectively evaluating progress toward achieving goals and objectives established in each HGMP", perhaps under Policy Guideline 4. Absent objective metrics, it is unclear how effectiveness will be measured as called for in the Authority Definition and Intent Section, except in a qualitative sense.

- We support the statements calling for hatchery programs to be implemented as part of an "all-H" strategy. Those statements align well with the "All-H" recovery approach outlined in the Recovery Plan. It is also important to note that about one-quarter to one-third of the over 365 actions in the Lower Columbia Salmon Recovery and Fish & Wildlife Subbasin Plan (2010) ("Recovery Plan") relate to hatcheries and harvest - recent monitoring under the Conservation and Sustainable Fisheries Plan (CSFP) indicates that most of these actions have already been fully or partially initiated by WDFW and other hatchery managers. We commend WDFW for proactively moving recovery forward in the Lower Columbia region.
- We appreciate the policy statement calling for the highest level of protection from hatchery impacts to those wild populations that have not had substantial genetic modification from past hatchery practices or are now in a healthy condition with little or no same species/run hatchery influence. Such populations to a large degree have already been identified and prioritized through the recovery planning process in the Lower Columbia, and generally consist of "primary" salmon populations that have also been assigned "core" or "legacy" designations by the NOAA Willamette/Lower Columbia Technical Review Team (TRT). Many steelhead populations within "gene banks" and "wild salmonid management zones" may also fit within this category, and are showing the greatest recovery progress in the region. In short, such populations are already given great weight in recovery plans and associated recovery scenarios approved by NOAA. Given the importance and role of such populations to recovery, we encourage WDFW to consult with state's 7 regional recovery organizations and NOAA as part of this process. The policy should explicitly call for this.
- I want to clarify our perspective on the relationship of agency policies to the recovery plan, as I don't think we were in alignment on that point. The NOAA-approved [recovery scenario](#) (Section 4.4.3, Table 4-6) is the foundation for the recovery plan. This scenario was developed collaboratively with 82 recovery partner organizations (each with their own policies), and involved extensive public engagement. It is designed to meet the [viability criteria](#) (Section 4.3.1, Box 4-1) established by the TRT, which included WDFW. In addition to improvement targets for VSP parameters, the plan defines impact reduction targets for each potentially-manageable threat category (hydro, habitat, harvest, hatcheries, predation, etc.). The "recovery burden" is equitably allocated among threat categories in proportion to the significance of the threat – the greater the impact, the more work under that H is needed, and vice versa. From a social and political standpoint, this concept was fundamental in keeping recovery partners at the table. The Recovery Plan's strategies, measures, and actions, which are explicitly associated with

partners with management authority like WDFW, are intended to achieve the needed threat reductions within the framework of adaptive management. The CSFP Plan represents WDFW's commitment to addressing their respective actions etc., and the agency has been working diligently to achieve recovery plan objectives as embodied in the Recovery Plan scenario. It has been a key consideration in how fisheries, hatcheries, and monitoring programs are managed in the Lower Columbia.

While multiple agency policies and programs were certainly incorporated and referenced in development of the Recovery Plan, the expectation was that such policies would be implemented and updated as necessary to ensure threat reduction targets and productivity improvements are achieved across the H's. Adaptively managing strategies and actions based on observed results is obviously a critical part of implementation. However, adjusting the overall recovery scenario and objectives has much broader implications - across all recovery partners in both WA and OR, across all "Hs", as well as across fish populations at the strata scale. Reducing recovery burden on one population means increasing it on one or more other populations, to still achieve VSP parameters and targets. If the Recovery Plan's recovery scenario and overall objectives were updated in response to changes in each of the 82 partner's policies, whether beneficial to recovery or not, the Recovery Plan would obviously have little value. This is why recovery plan goal and scenario updates arising from the adaptive management process must be developed and evaluated by the LCFRB's Implementation Steering Committee in consultation with affected implementing partners, with extensive public participation. Revisions must also be submitted to NMFS and the U.S. Fish and Wildlife Service for concurrence prior to final adoption and issuance. Simply adjusting policies does not warrant reconsideration of the recovery scenario. Updates must be supported by defensible rationale grounded in results of monitoring and adaptive management. Scenario shifts have been made in the past for biological reasons (see [Table 4-6](#)), but it was demonstrated that overall VSP parameters at the strata and ESU scales could still be achieved.

- As you noted, the purpose of the prior policy was very focused on recovery. It actually included a discrete intent statement that called for ensuring "...compatibility between hatchery production and salmon recovery plans...". That language has been removed. The proposed policy language substantively broadens the purpose to better support fishery and mitigation needs, but still maintains references to recovery. In general, we do not have a concern with broadening the purposes. However, there is little clarity on how priorities will be balanced, metrics for measuring progress are lacking, and the policy defers to HGMPs as the mechanism for implementation. This creates some level of uncertainty with regard to how WDFW will operate hatcheries relative to the Recovery Plan priorities. Our comfort level would be substantively increased if the policy included a discrete statement that WDFW, as a key recovery partner, will continue to work proactively toward achieving adopted recovery plan goals, objectives and targets, and will continue to implement their associated recovery plan measures, strategies and actions, within the context of adaptive management.

I hope these comments are helpful in articulating our perspective on the policy. I'd be happy to discuss any of these points in more detail. I would also appreciate it if you could forward these comments to the other Commission members for consideration.



Thanks again for taking the time to discuss the policy update with us.

*Steve Manlow*

*Executive Director*

*Lower Columbia Fish Recovery Board*

*360-425-1553 – Office*

*360-608-8418 – Work Cell*

[www.lcfrb.gen.wa.us](http://www.lcfrb.gen.wa.us)

[www.lowercolumbiasalmonrecovery.org](http://www.lowercolumbiasalmonrecovery.org)

**From:** [Commission \(DFW\)](#)  
**To:** [Warren, Ron R \(DFW\)](#)  
**Cc:** [Batungbacal, Chalee W \(DFW\)](#)  
**Subject:** FW: Hatchery and Fishery Reform Policy  
**Date:** Monday, September 28, 2020 7:43:12 AM

---

-----Original Message-----

From: Leonard Neil <[quinaultpierce@gmail.com](mailto:quinaultpierce@gmail.com)>  
Sent: Sunday, September 27, 2020 9:06 PM  
To: Commission (DFW) <[COMMISSION@dfw.wa.gov](mailto:COMMISSION@dfw.wa.gov)>  
Subject: Hatchery and Fishery Reform Policy

Please put more fish in the water via hatchery production and more hatcheries or re-open hatcheries that have been closed.

Thank you.

Fred Osborn  
206 947 8754

Sent from my iPad

**From:** [Commission \(DFW\)](#)  
**To:** [Batungbacal, Chalee W \(DFW\)](#)  
**Cc:** [Warren, Ron R \(DFW\)](#)  
**Subject:** FW: Hatcheries are absolutely necessary.  
**Date:** Monday, September 21, 2020 11:41:54 AM

---

---

**From:** Dick Gies <dgies@charter.net>  
**Sent:** Thursday, September 17, 2020 2:55 PM  
**To:** Commission (DFW) <COMMISSION@dfw.wa.gov>  
**Subject:** Hatcheries are absolutely necessary.

I support the continued, and increased, production of salmon, steelhead, and trout in Washington.

Richard Gies  
Richland WA

**From:** [Commission \(DFW\)](#)  
**To:** [Warren, Ron R \(DFW\)](#)  
**Cc:** [Batungbacal, Chalee W \(DFW\)](#)  
**Subject:** FW: Draft hatchery plans  
**Date:** Monday, September 28, 2020 7:43:47 AM

---

-----Original Message-----

From: Paul Hart <paulandmila@icloud.com>  
Sent: Saturday, September 26, 2020 10:16 AM  
To: Commission (DFW) <COMMISSION@dfw.wa.gov>  
Subject: Draft hatchery plans

It is difficult to comment on this draft without knowing the results of steps previously taken. Based on steep declines in steelhead returns to North Central Washington streams it seems the policies have caused a major reduction in harvest opportunities for recreational and tribal fisheries. If wild fish from these streams are used for brood stock it would seem that genetic concerns could be alleviated. It also seems that careful, scientific hatchery management could allay disease concerns. So why not bolster hatchery production of steelhead to facilitate the recovery of wild genetic strains?

—Paul Hart

Sent from my iPad



September 1, 2020

Fish and Wildlife Commission  
Washington Department of Fish and Wildlife

***Re: Hatchery and Fishery Reform Policy (C-3619), WDFW***

Commissioners:

On behalf of the Wild Steelhead Coalition's Board of Directors and thousands of members, we are writing to formally submit our continued support for the 2009 Hatchery Scientific Review Group (HSRG) guidelines established as a part of WDFW's Hatchery and Fishery Policy (C-3619). We are deeply concerned by any effort to disregard or undermine these scientifically established best practices and the subsequent negative implications for native fish recovery in Washington waters.

As part of the recent policy review, the Fish and Wildlife Commission has recommended suspending the HSRG Policy guidelines 1, 2, and 3 for salmon species other than steelhead. The Wild Steelhead Coalition opposes this policy change. We hope the Commissioners will reject this recommendation when it comes time to vote and re-affirm the existing WDFW commitment to science-based hatchery program management as provided by the HSRG guidelines.

Unfortunately, we believe the recommendation to suspend these three policy guidelines is motivated by politics and cannot be defended by the available science, including the work of WDFW's own researchers. It would be a step backwards for Washington wild fish recovery and should be rejected. The WSC and its members are long-time advocates for fishery and hatchery management guided by rigorous monitoring and scientific evidence. We would support potential updates to the HSRG guidelines based on new research and fishery monitoring information, but not any suspension of guidelines due to inconvenience.

While we recognize that the policy recommendations explicitly do not include steelhead hatchery management, the WSC firmly acknowledges that all native fishery and hatchery management decisions have implications throughout Washington's interconnected watersheds and ecosystems. Therefore, all fishery and hatchery policy must be universally guided by the best science available in order to minimize negative impacts on wild fish populations (especially where these numbers are suppressed or struggling), establish watershed specific recovery plans, and prioritize sustainable,



durable native fish recovery in order to support fisheries and the communities that depend upon them.

The WSC recognizes, and appreciates, the motivation to restore Southern Resident Killer Whale populations. We support and value these amazing animals and understand that the proposed HSRG guideline suspensions is explained by the need to aid these populations by providing additional salmon for their diet. But, recovery and protection of Washington native fish populations must be balanced with efforts to aid the Southern Resident Killer Whales. We are deeply concerned about unintended consequences to native fish if hatchery guidelines are abandoned. Both challenges must be met with science-based policy and held to the highest ecological standards.

The Wild Steelhead Coalition is committed to working with the Fish and Wildlife Commission and the WDFW to collaborate on viable plans to restore Washington's dangerously faltering steelhead and salmon populations. Wherever possible, we strive to publically support the Commission and the agency's researchers, enforcement and policy-makers, but we must speak up on behalf of our membership whenever policy changes risk irresponsible outcomes regarding wild fish recovery or damage to the public trust. Unfortunately, the recent recommendation to suspend the HSRG guidelines 1, 2 and 3 as they pertain to policy 3619 is one of these times. We hope the commissioners will heed the best available science and reject the recommended changes to Washington's Hatchery and Fishery Reform Policy.

Thank you for your time, consideration and leadership,

Greg Topf  
Chair, WSC Board of Directors

Rich Simms  
WSC Board Member and Co-Founder



WA Fish and Wildlife Commission  
Washington Department of Fish and Wildlife  
PO Box 43200  
Olympia, WA 98504-3200

Re: Proposed revision of Fish and Wildlife Commission Policy C-3619

September 7, 2020

Dear Commissioners,

Thank you for the opportunity to provide comments regarding proposed revisions to Policy C-3619. While our organization successfully determined that there was an opportunity to provide comment on the extensive revisions being proposed to C-3619, we believe that other Washingtonians were not adequately made aware of their opportunity to review and comment. Even though “wildlife, fish, and shellfish are the property of the state,” as determined by RCW 77.04.12. The lack of public outreach by the Commission to get comments on this proposed policy has been less than adequate. We recommend the Commission conduct a broader solicitation for public comment, and to extend the comment period until October 31, 2020, so that all Washingtonians are aware of their opportunity to participate in this public process.

We support policies undergoing routine review, evaluation, and adaptation to ensure that they meet their objective and the Department’s mandate. We appreciated the scientific review conducted for development of the Hatchery Reform Science in Washington State Report, as well as the internal review conducted for development of the WDFW Hatchery and Fishery Reform Policy Implementation Assessment Report, which highlighted the lack of implementation of the original policy. Failure to implement any policy does not serve to undermine the integrity of the policy itself, but rather the credibility of the implementing agency and its associated accountability structure, in this case, undermining the credibility of both the Department and the Commission.

Below you will find our recommendations on considerations and objectives to both strengthen the proposed policy revisions and align the policy with the mandate of the Department.

**1. We base our comments on the legislative mandate of the Department and Commission (RCW 77.04.012), which identifies a clear priority to preserve, protect and perpetuate fish and wildlife – and to manage in a manner that does not impair the resource.**

“Wildlife, fish, and shellfish are the property of the state. The commission, director, and the department shall preserve, protect, perpetuate, and manage the wildlife and food fish, game fish, and shellfish in state waters and offshore waters.

INTERNATIONAL HEADQUARTERS

721 NW Ninth Avenue, Suite 300 • Portland, Oregon 97209 USA • tel: 503.222.1804 • fax: 503.222.1805  
info@wildsalmoncenter.org • www.wildsalmoncenter.org

The department shall conserve the wildlife and food fish, game fish, and shellfish resources in a manner that does not impair the resource.

In a manner consistent with this goal, the department shall seek to maintain the economic well-being and stability of the fishing industry in the state. The department shall promote orderly fisheries and shall enhance and improve recreational and commercial fishing in this state.

The commission may authorize the taking of wildlife, food fish, game fish, and shellfish only at times or places, or in manners or quantities, as in the judgment of the commission does not impair the supply of these resources.

The commission shall attempt to maximize the public recreational game fishing and hunting opportunities of all citizens, including juvenile, disabled, and senior citizens.

Recognizing that the management of our state wildlife, food fish, game fish, and shellfish resources depends heavily on the assistance of volunteers, the department shall work cooperatively with volunteer groups and individuals to achieve the goals of this title to the greatest extent possible.

Nothing in this title shall be construed to infringe on the right of a private property owner to control the owner's private property.”

**2. Using only a National Marine Fisheries Service (NMFS)-approved HGMP and “compliance with provisions of ESA” as the Commission vision of an adequate hatchery program falls short of your responsibilities.**

“For each hatchery program that may potentially affect a species listed under the ESA, the Hatchery Genetic Management Plan shall describe operations that are consistent with the National Marine Fisheries Service policy judgements in compliance with the provisions of the ESA.” (Section 4 of the policy).

- While operating consistent with NMFS, policy judgements must be a requirement, as the HGMP is not a plan to improve wild populations. A NMFS- approved HGMP can allow hatcheries to negatively impact listed populations if they do not drive their status to a worse condition.
- Utilizing a jeopardy determination (an HGMP approval) as a threshold does not constitute what is necessary for recovery or restoration of a population.
- There is nothing in this policy or the HGMP template that provides guidance for hatcheries to examine mechanisms they can take to *actually help recover or restore a population.*

**3. “HGMP provisions should reflect a balance between the need to minimize genetic and ecological risks to coincident wild populations while providing for the ecological and societal benefits of hatchery propagated salmon and steelhead.” (Section 3)**

- When a species is listed, the federal government steps in because the State has failed to properly protect the species. What is Washington State doing to change its previous approach to management to keep the remaining non-listed populations in the state from following the same declining trends?
- When we examine the decline of salmon and steelhead populations and the dire condition they are in, most would agree that their status is due to the decades long decisions by forest managers, water managers, land managers, hydro managers, hatchery managers, transportation managers, as well as fish and wildlife managers to “balance their impacts on



salmon and steelhead with the social and economic benefit of the action.” Balancing” – or pretending to balance important actions has done nothing but perpetuate the decline of our salmon and steelhead populations.

- We recommend the following wording changes to the draft policy language to align the policy with the Department’s mandate:

*From:*

- “Hatchery Genetic Management Plan provisions should reflect a balance between the need to minimize genetic and ecological risks to coincident wild populations and providing for the ecological and societal benefits of hatchery propagated salmon and steelhead.”

*To:*

- “Hatcheries shall be managed in a manner that does not impair the resource. Hatchery Genetic Management Plan provisions should reflect the important activities needed to provide sustainable fisheries into the future while minimizing genetic and ecological risks to wild populations to not impair this precious resource.”

**4. This revised policy as proposed is short-sighted and wholly misses the opportunity for the Commission to lead and direct the Department to prepare as an agency for the changes in environmental conditions and species adaptations needed for climate change.**

- The adaptive management section identifies likely changes, but only “acknowledges that adaptive management procedures will be essential to achieve the purpose of this Policy and are expected to occur after proper evaluation and as appropriate to achieve the purposes of this Policy.”

Given the threats and stressors for salmon and steelhead in the ocean, estuaries, and throughout their watersheds, we recommend the Commission:

- Engage the world’s largest hatchery system in mechanisms that will actually help recover and restore populations rather than exacerbate existing problems.
- Prioritize advanced science-based climate change actions in this policy while simultaneously insisting that the Department incorporate climate change impacts into consideration with every agency decision.

**5. This policy appears satisfied with the current suite of hatchery programs and actions if the hatchery has an approved HGMP. We recommend including in Section 4, that every hatchery plan include:**

- The role of hatchery production in the applicable salmon recovery plan
- Identification of predicted changes for the watershed, fish populations, and hatchery operations, and how each change will impact the facility’s ability to successfully provide for

sustainable fisheries without negative impact to wild populations while recovering and restoring those wild populations.

- What species, life histories, and release strategies will need to be adjusted to address future conditions and decrease impacts to wild populations?

**6. To successfully rebuild salmon and steelhead populations, we need salmon and steelhead that are adapting with their watersheds. This is absent from this policy.**

As watersheds, estuaries, and oceans continue to change, salmon and steelhead adapting with their watersheds. We know that the strength of salmon and steelhead is their adaptability, and we can utilize that strength to help salmon and steelhead prepare for the future. To achieve this, we need to ensure that salmon and steelhead spawning in the watershed are driving the genetics and adaptations to changing conditions. And having populations adapting to these changes is good for both wild spawners and hatchery productivity.

- We recommend the following changes to #7:

*From:*

- “In considering questions of balance between the risks of possible deleterious impacts to wild salmon and steelhead populations from hatchery programs conducted in accordance with this Policy, the highest level of protection from possible negative effects of hatchery programs to wild populations shall be provided to those wild populations that have not had substantial genetic modification from past hatchery practices or are now in a healthy condition with little or no same species/run hatchery influence. A process for identifying such populations shall begin soon after the adoption of this Policy and the Commission shall consider approving a list of such populations on or before the first annual update report on the implementation of this Policy.”

*To:*

- “In considering the risks of possible deleterious impacts to wild salmon and steelhead populations from hatchery programs conducted in accordance with this Policy, the highest level of protection from possible negative effects of hatchery programs to wild populations shall be provided to those wild populations that have habitat to sustain a naturally spawning population that can adapt with its watershed. The process for identifying such populations shall begin soon after the adoption of this Policy and the Commission shall consider approving a list of such populations on or before the first annual update report on the implementation of this Policy.”

**7. Performance and Reporting of Hatchery Programs should be strengthened.**

- Harvest Managers provide an annual report of predicted and actual returns and predicted and actual harvest; Hydro Managers provide both annual and daily reports of juvenile and adult passage, mortality, survival and spill rates; Salmon Recovery Regions provide bi-annual reports

on the progress made on their salmon recovery plans and the habitat restoration projects completed within the reporting period.

- We recommend the following additions to the annual report:
  - Identification of how each hatchery is managing its programs to meet or exceed the HGMP requirements.
  - A report on the “Performance Indicators” identified in Section 1.10 of the HGMP Template.
  - A report on the progress of addressing the measures identified in 11.2 of the HGMP.
  - Articulation of the percentage of hatcheries with completed HGMPs.
  - Identification of the percentage of hatcheries meeting their HGMP requirements.
  - For many decades, condition stability allowed for accurate predictions of indicators based solely off the number of fish released. However, as environmental conditions continue to change, we must expand our analysis of hatcheries to include more than just the number of fish released each year. As such, the annual report should contain a summary for each hatchery to include:
    - What was produced
    - Cost of the production
    - What fisheries were supported by the production
    - Survival rate of the fish produced

Sincerely,



Guido Rahr  
President and CEO

**From:** [Commission \(DFW\)](#)  
**To:** [Warren, Ron R \(DFW\)](#)  
**Cc:** [Batungbacal, Chalee W \(DFW\)](#)  
**Subject:** FW: Comments to draft policy C-3619  
**Date:** Monday, September 28, 2020 5:27:02 PM

---

---

**From:** Craig McCallum <CraigandJillM@msn.com>  
**Sent:** Monday, September 28, 2020 4:43 PM  
**To:** Commission (DFW) <COMMISSION@dfw.wa.gov>  
**Subject:** Comments to draft policy C-3619

The effect of improving the hatcheries will never reach its full potential if the unnatural presence of seals and sea lions far up the spawning rivers remain. The numbers of seals and sea lions are historically high, and there is a relatively low number of nuisance seals/sea lions that create a relatively high instance of smolt and spawning age salmon mortality. The numbers of fish consumed prior to reaching the salt water and after reaching the fresh water defeats the purpose of improved hatchery production as the number of seals blocking the path remains. This is a direct threat to the effectiveness of our hatcheries that needs to be addressed. It should be considered the quickest way to improve the breeding and survival habitat of salmon and steelhead.

Best regards,  
Craig McCallum  
13057 134th Ave NE  
Kirkland, WA 98034

Tel: 206-229-4954



Dale Beasley President  
PO Box 461  
Ilwaco, WA 98624  
360-244-0096  
crabby@bakerbay.org

Tom Echols Executive Director  
806 Puget St NE  
Olympia, WA 98506  
360-951-2398  
tomechols@aol.com



Chairman Carpenter & Washington Fish and Wildlife Commission

Follow up preliminary comments on recent WFWC meeting in July/August

## RE: salmon management

CCF/CRCFA president Dale Beasley listened in to the recent WFWC meeting for 3 days of salmon discussions but did not speak on the ZOOM opportunities for 2 minutes which is inadequate to do anything but list one or two substantive comments; please review our previous submitted written comments on WFWC salmon policy prior to the recent meeting. We will comment further once all salmon materials resulting from this Commission meeting are thoroughly reviewed.

Salmon policies under consideration **C – 3620, C – 3622, and C – 3619** all need to further evolve toward producing abundant Washington salmon for HARVEST with **NO fisherman or Orca left behind** as good public policy with **“Dinner Plate Results”** for **ALL** our state citizens that will dramatically increase JOBS in our coastal and rural demographically depressed communities that has resulted from lost historical ACCESS to salmon due to multiple adverse stressors. Please review the Legislative mandate (RCW 77.04.012) for salmon that goes well beyond the 1<sup>st</sup> priority of conservation of the resource.

- ✓ **Commission/Department Mandate of the Washington State Legislature – RCW 77.04.012 – “The department shall promote orderly fisheries and shall enhance and improve recreational and commercial fishing in this state. Further stating, the department shall seek to maintain the economic well-being and stability of the fishing industry in the state.”**

Salmon management has two important aspects:

## Prevent the DEPLETION of both fish and fishermen

HSRG along with other past deplorable salmon policies have been failures that has resulted in highly significant reduced salmon fishing opportunity and seriously depleted the **“economic well-being and stability of the fishing industry”** that the commission is now addressing for correction utilizing adaptive management that is now headed in a far better direction but may not be going far enough to put Washington salmon back on the Dinner Plates of ALL our citizens which MUST become the intended accountability OUTCOME . The Commission MUST also recognize that the 2012 heinous Kitzhaber plan for the Columbia River has FAILED to live up to any of the multiple promises to the fishing industry and has resulted in **“significant deterioration of the economic well-being and stability of the fishing industry”**. The intended consequence of ALL Washington salmon policy MUST once again not only address conservation of ESA listed salmon but provide abundant ACCESS to harvestable salmon for all fishermen.

Historical Review of lost fishing opportunity

All too often in the past the fishing industry has been depleted due to undeserved fish policy changes that started way back in 1977 when WDFW began to manipulate salmon policy and fish stocks, "Washington fish for Washington Fishermen" which sounded great at the time to everyone that did not fully understand the **unintended consequences** leading to significantly reduced fishing opportunity which has distressed our coastal Fish Dependent Communities and still is a total FAILURE. This salmon policy eliminated all Toutle River Coho from lower Columbia River hatcheries and instituted the Cowlitz Coho that turned right leaving the Columbia River was intended to provide Coho for the Westport charter fleet that at the time numbered 240 vessels, today just 18 – economically devastating not just to the charterboat industry but also ALL Washington fishermen both recreational and commercial. Please note that the Cowlitz Coho were less than half the size of the Toutle River Coho that averaged over 12# at maturity. Salmon stock manipulation/elimination had a DRASTIC reduction in the size of the fish returning and began the downward spiral that led to serious 90+% depletion of fishing harvest opportunity that has ended in a crash landing for all Washington salmon fishermen.

Long term wellbeing and stability of the fishing industry of course takes more than simple hatchery production increases to replace the 160 million salmon smolt lost production that has been suspended over the last 2 decades that has been the **knee on the neck** of our **Fish Dependent Communities** across Washington and left our citizens' Dinner Plates Empty. Remediation ACTIONS much needed.

- ✓ **WDFW draft 25 year Strategic Plan appears to be total elimination of all Commercial Fishing in Washington State with NO mention of commercial fishing or any significant involvement of commercial fishing in the plan development – reprehensible! Needs a complete redraft** and must rejuvenate **"economic well-being and stability of the entire fishing industry"** including **both recreational and commercial fishing** as directed by the legislature.

Our Washington iconic salmon will continue to decline unless we address the full range of decimation, but without crucial hatchery production increases the rest will not be able to **put Washington salmon back on our dinner plates** for all our citizens to enjoy, nor will the STARVATION of the Orcas and Rural Fish Dependent Communities deteriorated DEMOGRAPHICS be abated. **ACCESS to salmon for HARVEST takes more than rhetoric and policy change; it takes aggressive ACTION** at multiple levels. There is NO substitute Action available that is better at addressing lost Access to salmon by our citizens than increased salmon hatchery production that approaches past results of full Dinner Plates. History has shown us that the ocean can handle significantly more salmon than it is being presented with today. If the salmon are not produced, they cannot rear to maturity and provide healthy food for our citizens that need more than a visual experience from our iconic salmon. ALL citizens deserve the healthy benefits of Washington salmon on their dinner plates; all of our citizens include the forgotten consumer.

WFWC/WDFW MUST realize that pristine salmon habitat in Washington is disappearing (much of it permanently behind 100's of dams) much faster than expensive habitat restoration efforts can replace even some of the historical habitat losses. Avian and pinniped **PREDATION** of salmon has significantly increased as hatchery salmon production has significantly plummeted, deleterious cumulative forces resulting in significant lost fishing opportunity – CUMULATIVE loss must be addressed at all levels but

without significant hatchery production increases, all citizens will continue to lose more access to fish for our dinner plate enjoyment.

### **Aggressive ACTIONS required**

- ✓ **Manage Salmon for Abundant Harvest with NO Fisherman left behind as Good Public Policy**
- ✓ C – 3620, C – 3622, and C – 3619 are headed in the RIGHT direction – go further
- ✓ Anthropocene adverse salmon impacts must be remediated – **RAISE MORE SALMON**
- ✓ Public Interest is well served by increased salmon production
- ✓ Seriously reduce salmon **PREDATION** (become advocates for modernization of ESA & MMPA)
- ✓ Continue to save salmon habitat and prioritize replacement of lost habitat where most appropriate
- ✓ Continue to open blocked salmon habitat increasing spawning potential and rearing
- ✓ CCF/CRCFA fully supports salmon and dams coexisting – both BENEFIT society immensely
- ✓ Encourage the BPA to Raise More Salmon beyond ESA requirements, more West of Bonneville
  - One third of our BPA electrical rate is attributed to salmon, we need harvest accountability
  - Need a return to Salmon JOB mitigation hatcheries
- ✓ This list is representative and not all inclusive,

The most reasonable and prudent alternatives to our citizens lost access to salmon is to RAISE MORE SALMON, control predation, reduce pollution, protect salmon habitat, and rehabilitate the habitat where most appropriate, where accountability leads to positive OUTCOMES for abundant salmon harvest with NO fisherman left behind. Major AGGRESSIVE ACTIONS required.

Thank you for beginning to return salmon back to abundance,

Dale Beasley, president CCF/CRCFA



September 7, 2020

Larry Carpenter, Chair  
Washington Department of Fish and Wildlife Commission  
PO Box 43200  
Olympia, WA 98504-3200

**RE: Hatchery and Fishery Reform Policy (C-3619)**

Dear Chair Carpenter, Commissioners:

Trout Unlimited (TU) appreciates this opportunity to comment on the Washington Department of Fish and Wildlife (WDFW) Commission's Hatchery and Fishery Reform Policy (C-3619) review. With over 300,000 members and supporters – including 4,000 members in the state of Washington – and over 220 staff, TU is North America's largest nonprofit organization dedicated to the protection, conservation, and restoration of cold-water fish and their watersheds. Our strength is derived from our grassroots members and volunteers working together with our staff toward the common goal of ensuring resilient fish populations for future generations. TU is dedicated to using the best available science to guide our efforts, and we have the benefit of applying the expertise of our staff fisheries scientists to support policy and science efforts requiring careful analysis.

As an organization dedicated to conserving, protecting, and restoring North America's cold-water fisheries and their watersheds, our concerns with the policy review of C-3619 reflect that mission. With many wild stocks of salmon and steelhead within Washington being listed for protection under the Endangered Species Act (ESA) and many recently experiencing some of the worst returns on record, we strongly encourage you to reconsider this shift in policy, uphold the intention as the original policy stated, and not abandon the science-based fishery and hatchery reform, which is fundamental to the WDFW's commitment to policies that enhance wild fish recovery objectives and are designed to support long-term recreational, tribal, and commercial fisheries into the future.

We recognize that certain hatchery programs have a place within the management framework for fisheries and recovery within Washington State. This includes conservation hatcheries that contribute to the recovery of certain populations and harvest hatcheries—some with legal obligations—that provide important fishery opportunities that can be realized with acceptable risks to naturally spawning populations. However, in order to achieve these various program objectives, we need rigorous policies that reduce risks to natural-origin populations, support recovery goals, and minimize the ecological interactions to wild populations (ISAB 2001; Naish et al. 2007; McClure et al. 2008).



While we are generally supportive of the science-based guidelines and principles that were laid out in the original Hatchery Reform Policy that was adopted by WDFW's Fish and Wildlife Commission (FWC) in 2009, the current direction of the C-3619 policy review process, which started in early 2018, causes serious concern.

We believe the new policy, which has undergone review by both WDFW staff and the Washington Academy of Natural Sciences, ignores and undermines the conclusions and recommendations from both entities and unfortunately delivers a policy that is committed to increased hatchery production in an effort to bolster short-term commercial and recreational fishing opportunities, with little regard for the genetic and ecological impacts these programs might have to natural-origin populations. Additionally, rolling back many of these original policies from 2009 undermines the significant resources and investments to steelhead and salmon recovery on the federal, regional, state, and local level.

It is our view that the following policy reform considerations do not support Viable Salmonid Population (VSP) parameters of abundance, productivity, spatial structure, and diversity (e.g., McElhany et al. 2000), which are used for protecting and recovering the wild steelhead and salmon populations in Washington.

First, the new policy has no backstop on hatchery impacts to natural-origin populations and lacks any framework to determine such limitations. Specifically, for steelhead, the FWC has acknowledged during this process that the existing literature supported the hatchery impacts to wild populations warranted maintaining guidelines 1-3 of the previous policy. However, now that guidelines 1 – 3 have been removed in the new policy, which include using the principles, standards, and recommendations of the Hatchery Scientific Review Group (HSRG), improved broodstock management, and watershed-specific action plans that systematically implement hatchery reform as part of a comprehensive, integrated (All-H) strategy for meeting conservation and harvest goals at the watershed and Evolutionarily Significant Unit (ESU)/Distinct Population Segment (DPS) levels, steelhead are wrapped into the current policy with no scientific framework on how to limit impacts. It is our view this removal of the aforementioned guidelines does not take into consideration the Statewide Steelhead Management Plan (SSMP), which is supposed to be the guiding framework for steelhead management in the state.

Second, while we appreciate the requirement to develop Hatchery Genetic Management Plans (HGMP) for all steelhead and salmon hatcheries operated under the authority of this policy, HGMPs are designed to be federal Endangered Species Act (ESA) permits and go through an extensive review process as part of the development of a biological opinion (Bi-Op) on the operation of hatchery programs. In our view, this leaves programs in areas with un-listed populations like the Coast and Southwest WA ESUs with little accountability, as they will lack the NOAA review associated with a Bi-Op and the necessary scientific framework for managing impacts as was found in the previous policy.

Additionally, review documents provided by WDFW staff during the review of this policy called out the importance of developing a Statewide Hatchery Monitoring and Evaluation Plan as primary recommendations. This new policy does not recognize or mention any such plan and we believe the intention focuses on the implementation of HGMPs, which are not designed to be Monitoring and Evaluation Plans (MEP). MEPs are already severely underfunded and have tremendous information

gaps (e.g., PSEMPSW 2012), leading to high levels of uncertainty for many species and populations. Hence, not clearly identifying the value of MEPs within the current policy further removes critical data necessary to understand the impacts of hatchery programs.

Finally, as previously mentioned, the commitments made within the original Hatchery Reform Policy reflect and inform the science-based management intentions within the various recovery plans and other state policies, including the SSMP. This revised policy essentially guts one of the key policies in the SSMP, Natural Production, with the removal of guideline 11, which calls for the “goal of establishing at least one Wild Salmonid Management Zone (WSMZ) for each species in each major population group (bio-geographical region, strata) in each ESU/DPS. Each stock selected for inclusion in the WSMZ must be sufficiently abundant and productive to be self-sustaining in the future.” Abundance and productivity are the cornerstones to healthy, self-sustaining wild steelhead production and the removal of this WSMZ guideline undermines the WDFW’s ability to provide the highest likelihood of maintaining and restoring key populations to healthy levels.

Until clear priorities are set, we are concerned that hatchery management might shift back toward management guidelines used before the 2009 Hatchery Reform Policy was implemented and the full set of risks to natural-origin populations from hatchery programs were not taken into full consideration. We sincerely hope that the FWC takes our comments and concerns into careful consideration with the direction of the C-3619 Policy review.

We greatly appreciate your consideration of these comments, and we are happy to answer any questions you may have about our concerns.

Sincerely,



Jonathan Stumpf  
Wild Steelhead Advocate - Washington  
Trout Unlimited  
[Jonathan.stumpf@tu.org](mailto:Jonathan.stumpf@tu.org)  
303-918-8802

## References

Independent Scientific Advisory Board (ISAB). 2001. A review of salmon recovery strategies for the Columbia River Basin. ISAB 2001-7, <http://www.nwppc.org/library/isab/isab2001-7.htm>.

McElhany P., M.H. Ruckelshaus, M.J. Ford, T.C. Wainright and E.P. Bjorkstedt. 2000. Viable Salmonid Populations and the Recovery of Evolutionarily Significant Units [Report] / NW Fisheries Science Center. - Seattle, WA : NOAA Fisheries Service, 156 p.. - NOAA Tech. Memo. NMFS-NWFSC-42.

McClure, M. M., Utter, F. M., Baldwin, C., Carmichael, R. W., Hassemer, P. F., Howell, P. J., Spruell, P., Cooney, T. D., Schaller, H. A., & Petrosky, C. E. 2008. Evolutionary effects of alternative artificial propagation programs: implications for viability of endangered anadromous salmonids. *Evolutionary applications*, 1(2), 356–375. <https://doi.org/10.1111/j.1752-4571.2008.00034.x>

Naish, K. A., Taylor, J. E., 3rd, Levin, P. S., Quinn, T. P., Winton, J. R., Huppert, D., & Hilborn, R. 2007. An evaluation of the effects of conservation and fishery enhancement hatcheries on wild populations of salmon. *Advances in marine biology*, 53, 61–194. [https://doi.org/10.1016/S0065-2881\(07\)53002-6](https://doi.org/10.1016/S0065-2881(07)53002-6).

Puget Sound Ecosystem Monitoring Program Salmonid Workgroup (PSEMPSW). 2012. Methods and Quality of VSP Monitoring Of ESA Listed Puget Sound Salmon and Steelhead. Bruce A Crawford editor. URL: [www.psp.wa.gov/downloads/psemp/salmonid\\_VSP\\_monitoring assessment.pdf](http://www.psp.wa.gov/downloads/psemp/salmonid_VSP_monitoring_assessment.pdf). 148 pages.