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UNITED STATES DISTRICT COURT  
WESTERN DISTRICT OF WASHINGTON  
AT SEATTLE

WILD FISH CONSERVANCY, )  
)  
Plaintiff, )  
)  
v. )  
)  
PHIL ANDERSON, in his official capacity )  
as the Director of the Washington )  
Department of Fish and Wildlife; )  
MIRANDA WECKER, in her official )  
capacity as Chair of the Washington Fish )  
and Wildlife Commission; BRADLEY )  
SMITH, in his official capacity as Vice )  
Chair of the Washington Fish and Wildlife )  
Commission; LARRY CARPENTER, in )  
his official capacity as a member of the )  
Washington Fish and Wildlife )  
Commission; JAY HOLZMILLER, in his )  
official capacity as a member of the )  
Washington Fish and Wildlife )  
Commission; JAY KEHNE, in his official )  
capacity as a member of the Washington )  
Fish and Wildlife Commission; ROBERT )  
KEHOE, in his official capacity as a )  
member of the Washington Fish and )  
Wildlife Commission; CONRAD )

COMPLAINT FOR DECLARATORY  
AND INJUNCTIVE RELIEF

COMPLAINT- 1

SMITH & LOWNEY, P.L.L.C.  
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1 MAHNKEN, in his official capacity as a )  
 member of the Washington Fish and )  
 2 Wildlife Commission; and ROLLAND )  
 SCHMITTEN, in his official capacity as a )  
 3 member of the Washington Fish and )  
 4 Wildlife Commission, )  
 )  
 5 Defendants, )  
 6 \_\_\_\_\_ )

7  
8 **INTRODUCTION**

9 1. The State of Washington declared steelhead the official state fish in 1969.  
 10 Despite that designation, wild Puget Sound steelhead have declined precipitously since that time.  
 11 The average region-wide abundance between 1980 and 2004 was less than four percent of levels  
 12 present in 1900. Puget Sound steelhead have continued to decline since being listed as a  
 13 threatened species under the Endangered Species Act (“ESA”) in 2007. The most recent five-  
 14 year average puts Puget Sound steelhead abundance at less than three percent of historical levels.  
 15

16 2. It was once believed that hatchery production could replace salmonid-sustaining  
 17 ecosystems and provide an abundance of fish. It is now understood that, not only have hatcheries  
 18 failed to meet those expectations, but they have contributed to the decline of wild salmonids.  
 19 Hatchery fish harm wild salmonid populations and their ability to recover through a variety of  
 20 mechanisms, including genetic introgression and ecological interactions. Genetic introgression  
 21 occurs when hatchery fish spawn with wild fish and thereby transfer their maladapted  
 22 (domesticated) genetic traits to the wild salmonid populations. Ecological interactions occur  
 23 when hatchery fish compete with wild fish for resources, such as food and territory.  
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27 3. The Defendants are officials of the Washington Department of Fish and Wildlife  
 28 (“WDFW”) that implement several hatchery programs in the Puget Sound region using a highly

1 domesticated stock known as Chambers Creek steelhead. The National Marine Fisheries Service  
2 (“NMFS”) explicitly excluded this stock when it listed the Puget Sound steelhead distinct  
3 population segment (“DPS”) as a threatened species under the ESA in 2007. NMFS further  
4 found that there are substantial opportunities for interactions between the hatchery and wild fish,  
5 with significant potential to reduce natural productivity of wild Puget Sound steelhead. The  
6 Defendants have nonetheless continued to implement the Chambers Creek steelhead hatchery  
7 programs.  
8

9  
10 4. Plaintiff Wild Fish Conservancy is concerned that the continued implementation  
11 of Chambers Creek steelhead hatchery programs in the Puget Sound region is harming wild  
12 salmonids and their ability to recover, including several species protected under the ESA.

13 5. This action challenges Defendants’ failure to comply with the ESA in their  
14 implementation of the Chambers Creek steelhead hatchery programs in the Puget Sound region.  
15 Plaintiff seeks declaratory and injunctive relief requiring Defendants to comply with the ESA.  
16

### 17 JURISDICTION AND VENUE

18 6. This Court has jurisdiction under section 11(g) of the ESA, 16 U.S.C. § 1540(g),  
19 and 28 U.S.C. § 1331 (federal question). The requested relief is also proper under 28 U.S.C. §  
20 2201 (declaratory relief) and 28 U.S.C. § 2202 (injunctive relief). As required by the ESA  
21 citizen suit provision, 16 U.S.C. § 1540(g)(2)(A)(i), Plaintiff provided sixty days notice of its  
22 intent to sue through a letter dated and postmarked January 23, 2014. A copy of that letter is  
23 attached as **Exhibit 1** to this Complaint.  
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25  
26 7. The Western District of Washington is the proper venue under 28 U.S.C. §  
27 1391(e) and 16 U.S.C. § 1540(g)(3)(A) because the violations alleged, and/or substantial parts of  
28

1 the events and omissions giving rise to the claims, occurred and are occurring within such  
2 District. This matter is properly assigned to a district judge in Seattle under Local Civil Rule  
3 3(d) because a substantial part of the events and omissions that give rise to the claim occurred  
4 within counties for which actions are assigned to a district judge in Seattle. Specifically, of the  
5 six Chambers Creek steelhead hatchery programs at issue in this matter, five are located  
6 primarily in Whatcom County, Skagit County, Snohomish County, and King County, while only  
7 one program is located primarily in Clallam County.  
8

9  
10 **PARTIES**

11 8. Plaintiff Wild Fish Conservancy is a membership-based 501(c)(3) nonprofit  
12 organization incorporated in the State of Washington with its principal place of business in  
13 Duvall, Washington. Wild Fish Conservancy is dedicated to the preservation and recovery of  
14 Washington's native fish species and the ecosystems upon which those species depend. Wild  
15 Fish Conservancy brings this action on behalf of itself and its approximately 2,400 members.  
16 Wild Fish Conservancy changed its name from "Washington Trout" in 2007. As an  
17 environmental watchdog, Wild Fish Conservancy actively informs the public on matters affecting  
18 water quality, fish, and fish habitat in the State of Washington through publications, commentary  
19 to the press, and sponsorship of educational programs. Wild Fish Conservancy also conducts  
20 field research on wild fish populations and has designed and implemented habitat restoration  
21 projects. Wild Fish Conservancy has lobbied, litigated, and publicly commented on federal and  
22 state actions that affect the region's native fish and ecosystems. Wild Fish Conservancy  
23 routinely seeks to compel government agencies to follow the laws designed to protect native fish  
24 species, particularly threatened and endangered species.  
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1 9. Plaintiff's members regularly spend time in areas in and around Puget Sound and  
2 the Strait of Juan de Fuca and their tributaries, including in the watersheds of the following rivers  
3 where Defendants' Chambers Creek steelhead hatchery programs are primarily implemented: the  
4 North Fork Nooksack River, the Skagit River, the Stillaguamish River, the Snohomish River, the  
5 Duwamish/Green River, and the Dungeness River. Plaintiff's members intend to continue to  
6 visit these areas on a regular basis, including in the summer of 2014 and beyond. These  
7 members observe, study, photograph, and appreciate wildlife and wildlife habitat in and around  
8 these waters. These members also fish, hike, camp, swim and snorkel in and around these  
9 waters. Plaintiff's members would like to fish in these waters for wild Puget Sound steelhead,  
10 wild Puget Sound Chinook salmon, and wild bull trout if those species were able to recover to a  
11 point where such activities would not impede the species' conservation and restoration.  
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14 10. Plaintiff's members derive scientific, educational, recreational, health,  
15 conservation, spiritual, and aesthetic benefits from Puget Sound, the Strait of Juan de Fuca, their  
16 tributaries, the surrounding areas, and from wild native fish species in those waters and from the  
17 existence of natural, wild and healthy ecosystems.  
18

19 11. The past, present, and future enjoyment of Plaintiff's interests and those of its  
20 members, including the recreational, aesthetic, spiritual, and scientific interests, have been, are  
21 being, and will continue to be harmed by Defendants' failures to comply with the ESA as  
22 described herein and by Plaintiff's members' reasonable concerns related to Defendants'  
23 violations. These injuries include reduced enjoyment of time spent in and around the waters  
24 described above, fewer visits to those areas than would otherwise occur, and refraining from  
25 engaging in certain activities while visiting these areas, such as fishing, than would otherwise  
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1 occur. These injures also include an inability to fish for wild salmonids due to their depressed  
2 status.

3 12. Plaintiff's injuries and those of its members are actual, concrete and/or imminent,  
4 and are fairly traceable to Defendants' violations of the ESA as described herein that the Court  
5 may remedy by declaring that Defendant's omissions and actions are illegal and issuing  
6 injunctive relief requiring Defendants to comply with their statutory obligations. Plaintiff's  
7 members will benefit from increased enjoyment of time spent in and around the waters described  
8 above and/or will visit the areas more frequently if the Defendants are required by the Court to  
9 comply with the ESA.  
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12 13. Defendant Phil Anderson is the Director of the Washington Department of Fish  
13 and Wildlife and is being sued in that official capacity.  
14

15 14. Defendant Miranda Wecker is the Chair of the Washington Fish and Wildlife  
16 Commission and is being sued in that official capacity.  
17

18 15. Defendant Bradley Smith is the Vice Chair of the Washington Fish and Wildlife  
19 Commission and is being sued in that official capacity.  
20

21 16. Defendant Larry Carpenter is a member of the Washington Fish and Wildlife  
22 Commission and is being sued in that official capacity.  
23

24 17. Defendant Jay Holzmilller is a member of the Washington Fish and Wildlife  
25 Commission and is being sued in that official capacity.  
26

27 18. Defendant Jay Kehne is a member of the Washington Fish and Wildlife  
28 Commission and is being sued in that official capacity.  
29

1 19. Defendant Robert Kehoe is a member of the Washington Fish and Wildlife  
2 Commission and is being sued in that official capacity.

3 20. Defendant Conrad Mahnken is a member of the Washington Fish and Wildlife  
4 Commission and is being sued in that official capacity.

5 21. Defendant Rolland Schmitten is a member of the Washington Fish and Wildlife  
6 Commission and is being sued in that official capacity.

7 22. The Defendants, in their official capacities, are responsible for overseeing the  
8 implementation of the WDFW's Chambers Creek steelhead hatchery programs in the Puget  
9 Sound region. Defendants' official authorities are such that they could respond to injunctive  
10 relief orders from this Court related to the challenged hatchery programs.

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12  
13 **BACKGROUND**

14 **I. The Endangered Species Act.**

15 23. The ESA is a federal statute enacted to provide a program to conserve threatened  
16 and endangered species and to protect the ecosystems upon which those species depend. 16  
17 U.S.C. § 1531(b). "Conserve," as used is in the ESA, means to use all methods and procedures  
18 necessary to bring threatened and endangered species to a point where the protections afforded by  
19 the statute are no longer necessary. 16 U.S.C. § 1532(3).

20  
21  
22 24. The ESA assigns certain implementation responsibilities to the Secretaries of the  
23 United States Department of the Interior and the United States Department of Commerce, which  
24 have delegated these duties to the Director of the United States Fish and Wildlife Service  
25 ("FWS") and the Assistant Administrator for Fisheries of NMFS, respectively.  
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1           25.     Section 4 of the ESA requires FWS and NMFS to determine whether species are  
2 threatened or endangered of extinction and to list species as such under the statute. 16 U.S.C. §§  
3 1533(a)(1) and (c)(1). Such a listing triggers various protective measures intended to conserve  
4 the species, including the designation of critical habitat and the preparation of a recovery plan.  
5 16 U.S.C. §§ 1533(a)(3) and (f).  
6

7           26.     Section 9 of the ESA makes it unlawful for any person to “take” species listed  
8 under the statute as endangered. 16 U.S.C. § 1538(a)(1). The take prohibition has been applied  
9 to certain species listed as threatened under the statute though regulations promulgated under  
10 section 4(d) of the ESA, 16 U.S.C. § 1533(d). 50 C.F.R. § 223.203(a); 50 C.F.R. § 17.31(a).  
11 Section 9 of the ESA prohibits a violation of those regulations. 16 U.S.C. § 1538(a)(1)(G).  
12

13           27.     “Take” is defined broadly under the ESA to include harass, harm, pursue, hunt,  
14 shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. 16  
15 U.S.C. § 1532(19).  
16

17           28.     Harass is defined to include an intentional or negligent act or omission which  
18 creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly  
19 disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or  
20 sheltering. 50 C.F.R. § 17.3.  
21

22           29.     Harm is defined to include significant habitat modification or degradation where it  
23 actually kills or injures wildlife by significantly impairing essential behavioral patterns, including  
24 breeding, feeding or sheltering. 50 C.F.R. § 17.3; 50 C.F.R § 222.102.  
25

26           30.     Section 10 of the ESA provides a mechanism by which NMFS and FWS may  
27 issue permits exempting from liability under section 9 of the ESA the take of threatened or  
28



1 endangered species associated with activities intended to enhance the propagation or survival of  
2 the affected species. 16 U.S.C. § 1539(a)(1)(A). Such permits are issued upon consideration of  
3 several factors, including the effects the activity would have on wild populations and whether the  
4 proposed activity would conflict with other programs intended to enhance the survival  
5 probabilities of the species. 50 C.F.R. § 17.22(a)(2); 50 C.F.R. § 222.308(c).  
6

7 31. Section 10 of the ESA also allows for the issuance of permits exempting from  
8 section 9 the take of threatened or endangered species incidental to projects determined by  
9 NMFS or FWS not to appreciably reduce the likelihood of survival and recovery of the protected  
10 species. 16 U.S.C. § 1539(a)(2)(B)(iv); 50 C.F.R. § 222.307(c)(2)(iii); 50 C.F.R. §  
11 17(b)(2)(i)(D). Parties seeking such a permit are required to develop a habitat conservation plan  
12 that will minimize adverse effects to ESA-listed species. 16 U.S.C. § 1539(a)(2)(A); 50 C.F.R. §  
13 17.22(b)(1)(iii); 50 C.F.R. § 222.307(b)(5).  
14  
15

16 32. NMFS has promulgated regulations under section 4(d) of the ESA that apply the  
17 take prohibition of section 9 of the ESA to certain salmonid species—known as the “4(d)  
18 Rule”—while also providing exemptions from that take prohibition—known as the “4(d)  
19 Limits.” 50 C.F.R. § 223.203. One such exemption is for artificial propagation programs for  
20 which a Hatchery Genetic Management Plan has been approved by NMFS as meeting detailed  
21 criteria. 50 C.F.R. § 223.203(b)(5). Another exemption exists for joint State-Tribe resource  
22 management plans implementing treaty fishing rights that have undergone a NMFS review and  
23 approval process. 50 C.F.R. § 223.203(b)(6).  
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1 **II. Factual Background.**

2 **A. Chambers Creek Steelhead Hatchery Programs.**

3 33. Defendants operate and fund several hatchery programs in the Puget Sound  
4 region<sup>1</sup> that use a stock of steelhead commonly referred to as Chambers Creek steelhead.<sup>2</sup>

5 NMFS has provided the following description of the development of this stock:

6  
7 The Chambers Creek winter-run steelhead stock was founded in the 1920s from the  
8 collection and spawning of native adult fish trapped in Chambers Creek, a south Puget  
9 Sound tributary. The propagation of Chambers Creek steelhead at this location occurred  
10 through 1945, when a new steelhead rearing program was initiated, leading to marked  
11 changes in this stock. In this new program, adult steelhead captured in Chambers Creek  
12 were transferred to the South Tacoma Hatchery in the upper watershed, where relatively  
13 warm water (12°C) was available to accelerate spawning maturation time. Additionally,  
14 the earliest maturing fish were selected for propagation. Continuous year-to-year use of  
15 these practices, combined with the warmer water and nutritional advances provided by  
16 newly developed dry diets, allowed the production of smolts in one year instead of two.  
17 The first hatcheries outside the Chambers Creek watershed to use this stock were located  
18 on the Green and Puyallup rivers and on Tokul Creek. The progeny of adult returns  
19 established through transplants of Chambers Creek hatchery fish to these and other Puget  
20 Sound hatchery release sites were transferred back to Chambers Creek when needed to  
21 offset egg take shortfalls, and were incorporated back into the winter-run steelhead  
22 population maintained at the site. However, as a standard practice, Chambers Creek was  
23 maintained as the sole annual source of eggs for other hatcheries.

18 Chambers Creek Hatchery, originally a private trout hatchery, was purchased by the  
19 Washington Department of Game in 1972 and rebuilt. This hatchery was subsequently  
20 used to propagate and further develop the Chambers Creek winter-run steelhead stock and  
21 became the major source of winter-run steelhead broodstock for western Washington.

22 Chambers Creek-derived winter-run steelhead have been propagated and released from  
23 most Puget Sound steelhead facilities, including Reiter Ponds, Tokul Creek, Wallace  
24 River, Dungeness, Bogachiel, Hurd Creek, Eells Springs, Kendall Creek, McKinnon  
25 Ponds, Samish, Lake Whatcom, Puyallup, Soos Creek, Voights Creek, Marblemount,

26 <sup>1</sup> “Puget Sound region,” as used herein, refers to Puget Sound, the Strait of Juan de Fuca, Hood  
27 Canal, and the Strait of Georgia and their tributaries, bounded to the west by the Elwha River  
(inclusive) and to the north by the Nooksack River and Dakota Creek (inclusive).

28 <sup>2</sup> “Chambers Creek steelhead,” as used herein, includes hatchery stock derived entirely or  
29 partially from Chambers Creek steelhead.

1 Barnaby Slough, Grandy Creek, Fabors Ferry, Baker River, Davis Slough, Whitehorse  
2 Ponds, Arlington, and the Chambers Creek facilities. Most of the programs using this  
transplanted stock are still active.

3 The original goal of the Chambers Creek program was to produce an early returning adult  
4 steelhead that smolted after one year. By the mid 1970s, it was concluded that the  
5 advanced adult spawn timing selected to meet the yearling smolt objective created  
6 temporal separation in natural spawning areas between Chambers Creek hatchery winter-  
run and native late- winter-spawning steelhead, reducing the likelihood of interbreeding.

7 34. Chambers Creek steelhead are excluded from the Puget Sound steelhead DPS  
8 listed and protected as a threatened species under the ESA. 72 Fed. Reg. 26,722, 26,726 (May  
9 11, 2007). Chambers Creek steelhead were excluded from the ESA-listed species because the  
10 hatchery stock is significantly different from wild steelhead due to decades of artificial selection  
11 at hatcheries, which has resulted in a highly domesticated stock.  
12

13 35. Upon information and belief, Defendants are currently operating the following six  
14 Chambers Creek steelhead hatchery programs<sup>3</sup> in the Puget Sound region:  
15

16 a. The Kendall Creek Winter Steelhead Hatchery Program located in the  
17 North Fork Nooksack River watershed (the “Nooksack River Program”);

18 b. The Marblemount Winter Steelhead Hatchery Program located in the  
19 Skagit River watershed (the “Skagit River Program”);  
20

21 c. The Whitehorse Ponds Winter Steelhead Hatchery Program located in the  
22 Stillaguamish River watershed (the “Stillaguamish River Program”);  
23

24  
25 <sup>3</sup> “Chambers Creek steelhead hatchery programs,” as used herein, includes all Defendants’  
26 activities and facilities in the Puget Sound region involved in the rearing, release, and monitoring  
27 of Chambers Creek hatchery steelhead, including but not limited to broodstock collection  
28 activities, incubation and rearing activities, acclimation activities, fish releases, monitoring and  
29 evaluation activities, surface and ground water withdrawals, effluent discharges, hatchery  
facilities and associated structures including weirs, fish ladders, and other structures used to  
collect and/or monitor fish, water intake structures, and effluent discharge structures.

1 d. The Soos Creek Hatchery Winter Steelhead Program located in the  
2 Duwamish/Green River watershed (the “Duwamish/Green River Program”);

3 e. The Snohomish Basin Winter Steelhead Hatchery Program located in the  
4 Snohomish River watershed (the “Snohomish River Program”); and

5 f. The Dungeness River Early Winter Steelhead Hatchery Program located in  
6 the Dungeness River watershed (the “Dungeness River Program”).

7  
8 36. While the targeted annual release numbers and the actual annual releases numbers  
9 have varied, the following table provides a summary, based upon information and belief, of the  
10 current hatchery fish release targets for each of these programs:  
11

| Chambers Creek Steelhead Hatchery Program | Targeted Annual Release Number | Release Sites                                  |
|---|--------------------------------|--|
| Nooksack River Program                    | 150,000                        | Kendall Creek, Nooksack River                  |
| Skagit River Program                      | 230,000                        | Cascade River                                  |
| Stillaguamish River Program               | 140,000                        | Whitehorse Spring Creek, Stillaguamish River   |
| Duwamish/ Green River Program             | 70,000                         | Soos Creek, Icy Creek, Green River             |
| Snohomish River Program                   | 150,000                        | Tokul Creek, Snohomish River                   |
|   | 20,000                         | Wallace River, Snohomish River                 |
|   | 160,000                        | Reiter Ponds, Skykomish River, Snohomish River |
| Dungeness River Program                   | 10,000                         | Dungeness River                                |
| <b>Total Release</b>                      | <b>930,000</b>                 |  |

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26 37. Defendants previously implemented a Chambers Creek steelhead hatchery  
27 program on Voights Creek in the Puyallup River watershed.  
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1           **B.     ESA-Listed Species and Designated Critical Habitat.**

2           38.     The Puget Sound Chinook salmon evolutionary significant unit (“ESU”) is listed  
3 as a threatened species under the ESA. 64 Fed. Reg. 14,308 (March 24, 1999); 70 Fed. Reg.  
4 37,160 (June 28, 2005). Critical habitat has been designated for this species. 70 Fed. Reg.  
5 52,630 (Sept. 2, 2005). NMFS has applied the ESA section 9 take prohibition to this species. 50  
6 C.F.R. §§ 223.102(c)(8), 223.203(a).

7           39.     The Puget Sound steelhead DPS is listed as a threatened species under the ESA.  
8  
9 72 Fed. Reg. 26,722 (May 11, 2007). NMFS has applied the ESA section 9 take prohibition to  
10 this species. 50 C.F.R. §§ 223.102(c)(23), 223.203(a). The Puget Sound steelhead DPS is  
11 currently below three percent of its historical abundance and the species continues to decline.

12           40.     The coterminous United States population of bull trout is listed as a threatened  
13 species under the ESA. 64 Fed. Reg. 58,910 (Nov. 1, 1999). Critical habitat was designated for  
14 threatened bull trout in 2005, 70 Fed. Reg. 56,212 (Sept. 26, 2005), and then expanded in 2010,  
15 75 Fed. Reg. 63,898 (Oct. 18, 2010). FWS has applied the ESA section 9 take prohibition to this  
16 species. 50 C.F.R. §§ 17.21 and 17.31(a), 17.44(w).

17           **C.     The Harmful Effects the Chambers Creek Steelhead Hatchery Programs**  
18           **Inflict on Threatened Salmonids.**

19           41.     Defendants’ Chambers Creek steelhead hatchery programs harm, harass, kill, and  
20 otherwise “take” threatened Puget Sound Chinook salmon, threatened Puget Sound steelhead,  
21 and threatened bull trout (collectively, “threatened salmonids”) through a variety of mechanisms,  
22 including through genetic introgression, ecological interactions, broodstock collection activities,  
23 facility effects, monitoring and evaluation activities, and disease transmission.  
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1 42. Defendants' Chambers Creek steelhead hatchery programs cause take of  
2 threatened Puget Sound steelhead through genetic introgression. Fish become domesticated in a  
3 hatchery environment and thereby less fit to survive and reproduce in the wild. The Chambers  
4 Creek steelhead are highly-domesticated due to decades of artificial production and now have  
5 genetically heritable life history traits that contrast significantly with most populations within the  
6 Puget Sound steelhead DPS. Take through genetic introgression occurs when Chambers Creek  
7 steelhead are allowed to spawn in the wild and thereby pass their maladaptive genes to the wild  
8 populations within the Puget Sound steelhead DPS. The resultant offspring have markedly  
9 reduced fitness, dying at a much higher rate before spawning than would occur with two wild  
10 parents. NMFS noted these concerns when it listed the Puget Sound steelhead DPS under the  
11 ESA:  
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14  
15 The [Biological Review Team ("BRT")] concluded that efforts by hatchery  
16 managers to prevent natural spawning by Chambers Creek winter-run...hatchery  
17 fish were unlikely to be completely effective, with potentially adverse  
18 consequences. The BRT concluded that opportunities for genetic and ecological  
19 interactions between hatchery and wild steelhead in Puget Sound were substantial,  
20 with significant potential to reduce natural productivity.

21 72 Fed. Reg. 26,722, 26,728 (May 11, 2007).

22 43. Defendants' Chambers Creek steelhead hatchery programs cause take of  
23 threatened salmonids through a variety of ecological interactions. The Chambers Creek  
24 steelhead hatchery programs cause take through increased competition for food and space,  
25 including rearing and spawning territory, and for spawning mates. The Chambers Creek  
26 steelhead hatchery programs cause take through predation on threatened salmonids, both by  
27 hatchery smolts and by residualized hatchery fish. The Chambers Creek steelhead hatchery  
28

1 programs also cause take because the hatchery fish—less fit for survival in the wild—attract  
2 predators that then consume threatened salmonids.

3 44. Defendants' Chambers Creek steelhead hatchery programs cause take through  
4 broodstock collection activities, which are activities associated with the capture of returning  
5 adult hatchery fish to supply the hatchery's broodstock (*i.e.*, eggs and milt). These activities can  
6 include employing a weir or other barrier that forces migrating adults to enter a ladder or trap or  
7 capturing adult fish using a net or a hook and line. While generally aimed at hatchery steelhead,  
8 these activities cause take of threatened salmonids, for instance, by delaying their migration to  
9 natural spawning habitat or inflicting physical injury or causing death from capture or handling.  
10 The Chambers Creek steelhead hatchery programs cause take, through the broodstock collection  
11 activities, by incidental or intentional collection, capture, trapping, and/or removal of threatened  
12 salmonids. Take also occurs when the broodstock collection activities, and/or structures or  
13 devices associated therewith, harm, harass, injure, and/or kill threatened salmonids. Broodstock  
14 collection activities also cause take by adversely affecting the ability of threatened salmonids to  
15 migrate, including by delaying or preventing spawning migration.

16 45. Defendants' Chambers Creek steelhead hatchery programs cause take of  
17 threatened salmonids through a variety of facility effects. The programs cause take because the  
18 hatcheries create a false attractant for threatened salmonids. Take occurs when the threatened  
19 salmonids are harmed, injured, delayed, or killed when attempting to enter hatchery facilities,  
20 including facility outfalls and fish ladders. Take also occurs when threatened salmonids enter  
21 hatchery facilities and are thereby captured, trapped, or collected by the hatchery. Additional  
22 take occurs when threatened salmonids that have entered hatchery facilities are injured or killed  
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1 in the hatchery environment or during attempts to return them to the wild and when their  
2 spawning migration is delayed or prevented. The Chambers Creek steelhead hatchery programs  
3 cause take because the effluent discharged from the hatcheries adversely affects threatened  
4 salmonids. The water withdrawals at the hatchery facilities also cause take of threatened  
5 salmonids by reducing water flow in the rivers and streams and because threatened salmonids are  
6 harmed, injured, killed, trapped and/or captured (*i.e.*, entrained) by the surface water intake  
7 structures. The hatchery programs also cause take because weirs and other in-stream structures  
8 delay or prevent threatened salmonids' migration abilities.  
9

10  
11 46. Defendants' Chambers Creek steelhead hatchery programs cause take of  
12 threatened salmonids through monitoring and evaluation activities. Monitoring and evaluation  
13 activities are those undertaken to evaluate the success of the programs and/or its effects on wild  
14 fish. Specific activities can include electrofishing and other salmonid sampling efforts that  
15 directly affect threatened salmonids and ecological research activities that adversely affect the  
16 habitats of threatened salmonids or disrupt their typical life history functions. The monitoring  
17 and evaluation activities capture, collect, trap, harm, harass, injure, kill, and otherwise take  
18 threatened salmonids.  
19

20  
21 47. Defendants' Chambers Creek steelhead hatchery programs cause take of  
22 threatened salmonids through the transmission of diseases. The unnaturally high densities of fish  
23 maintained in the hatchery facilities leads to increased occurrence of infection of fish within  
24 hatcheries and the creation of concentrated and effective vectors for the transmission of infection  
25 to other fish. The Chambers Creek steelhead hatchery programs transmit disease through water  
26  
27  
28



1 discharges from the hatcheries or directly from fish released by the hatcheries to threatened  
2 salmonids.

3 48. Defendants' Chambers Creek steelhead hatchery programs are severely affecting  
4 threatened salmonids by contributing to their decline in population and impeding their ability to  
5 recover to a point where the protections of the ESA would not be necessary. NMFS has  
6 concluded that Chambers Creek hatchery steelhead do not have a role in the recovery of Puget  
7 Sound steelhead and are likely contributing to reductions in productivity of wild steelhead  
8 populations. The Chambers Creek steelhead hatchery programs are inhibiting the recovery wild  
9 native salmonids.  
10  
11

12 49. Defendants have not obtained any applicable ESA authorization that exempts the  
13 take caused by the Chambers Creek steelhead hatchery programs from liability under section 9 of  
14 the ESA. However, as indicated by this Complaint, Plaintiff's concerns extend far beyond the  
15 mere lack of ESA authorization because these programs are contributing to the decline of  
16 threatened salmonids, including threatened Puget Sound steelhead. Plaintiff is therefore  
17 concerned that any authorization of these hatchery programs would not be compatible with the  
18 ESA and that Defendants would not comply with the requirements of any such authorization in a  
19 manner that sufficiently reduced adverse effects to threatened salmonids.  
20  
21

22 **CAUSE OF ACTION**

23 50. Plaintiff realleges and incorporates by reference each and every allegation set  
24 forth above;  
25

26 51. Defendants' Chambers Creek steelhead hatchery programs being implemented in  
27 the Puget Sound region—including those specifically describe herein and any others  
28

1 implemented and/or funded by Defendants that are not specifically described herein—cause  
2 “take” of threatened Puget Sound Chinook salmon, threatened Puget Sound steelhead, and  
3 threatened bull trout. Such take violates section 9 of the ESA and regulations promulgated under  
4 section 4(d) of the ESA;

5  
6 52. Defendants are in violation of section 9 of the ESA and regulations promulgated  
7 under section 4(d) of the ESA for causing take of threatened Puget Sound Chinook salmon,  
8 threatened Puget Sound steelhead, and threatened bull trout. These violations are ongoing;

9  
10 53. These violations of the ESA are reviewable under section 11(g) of the ESA, 16  
11 U.S.C. § 1540(g);

12 **REQUEST FOR RELIEF**

13 WHEREFORE, Plaintiff prays that this Court:

14  
15 A. Issue a declaratory judgment declaring that Defendants are in violation of section  
16 9 of the ESA and regulations promulgated under section 4(d) of the ESA for causing “take” of  
17 threatened Puget Sound Chinook salmon, threatened Puget Sound steelhead, and threatened bull  
18 trout through the implementation and funding of Chambers Creek steelhead hatchery programs  
19 and the activities associated therewith in the Puget Sound region;

20  
21 B. Issue a mandatory injunction requiring Defendants to comply with the ESA;

22  
23 C. Enjoin Defendants from implementing and funding Chambers Creek steelhead  
24 hatchery programs and the activities associated therewith in the Puget Sound region unless and  
25 until compliance with the ESA is achieved;

26  
27 D. Grant such preliminary and/or permanent injunctive relief as Plaintiff may from  
28 time to time request during the pendency and resolution of this case;

1 E. Award Plaintiff its reasonable litigation expenses, including attorney fees, expert  
2 witness fees, Court costs, and other expenses as necessary for the preparation and litigation of  
3 this case under section 11(g)(4) of the ESA, and/or as otherwise authorized by law; and

4 F. Grant such additional relief as the Court deems just and proper.  
5

6 RESPECTFULLY SUBMITTED this 31st day of March, 2014

7 SMITH & LOWNEY, PLLC

8 By: s/ Brian A. Knutsen

9 By: s/ Richard A. Smith

10 By: s/ Elizabeth H. Zultoski

Brian A. Knutsen, WSBA # 38806

11 Richard A. Smith, WSBA # 21788

Elizabeth H. Zultoski, WSBA # 44988

12 2317 E. John Street, Seattle, WA 98112

13 Tel: (206) 860-2883; Fax: (206) 860-4187

14 Email: briank@igc.org; rasmithwa@igc.org

elizabethz@igc.org

15 *Attorneys for Plaintiff Wild Fish Conservancy*  
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# **EXHIBIT 1**

**SMITH & LOWNEY, P.L.L.C.**  
2317 EAST JOHN STREET  
SEATTLE, WASHINGTON 98112  
(206) 860-2883, FAX (206) 860-4187

January 23, 2014

**Certified U.S. Mail – Return Receipt Requested**

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

**Certified U.S. Mail – Return Receipt Requested**

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

**Certified U.S. Mail – Return Receipt Requested**

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

**Certified U.S. Mail – Return Receipt Requested**

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

**Certified U.S. Mail – Return Receipt Requested**

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

**Certified U.S. Mail – Return Receipt Requested**

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

**Certified U.S. Mail – Return Receipt Requested**

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

**Certified U.S. Mail – Return Receipt Requested**

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

**Certified U.S. Mail – Return Receipt Requested**

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

**Certified U.S. Mail – Return Receipt Requested**

Secretary Penny Pritzker  
United States Department of Commerce  
1401 Constitution Ave. N.W.  
Washington, D.C. 20230

**Certified U.S. Mail – Return Receipt Requested**

Acting Assistant Administrator for NOAA Fisheries Samuel D. Rauch III  
(effective January 27, 2014, Assistant Administrator for NOAA Fisheries Eileen Sobeck)  
NOAA Fisheries Service  
1315 East West Highway  
Silver Spring, MD 20910

**Certified U.S. Mail – Return Receipt Requested**

Secretary Sally Jewell  
United States Department of the Interior  
1849 C Street N.W.  
Washington, D.C. 20240

**Certified U.S. Mail – Return Receipt Requested**

Director Daniel M. Ashe  
United States Fish and Wildlife Service  
1849 C Street N.W.  
Washington, D.C. 20240

**RE: Notice of Intent to Sue for Violations of Section 9 of the Endangered Species Act Associated with WDFW's Chambers Creek Steelhead Programs**

Dear Honorable Civil Servants:

This letter provides notice of Wild Fish Conservancy's intent to sue Phil Anderson, in his official capacity as the Director of the Washington Department of Fish and Wildlife, Miranda Wecker, in her official capacity as Chair of the Washington Fish and Wildlife Commission, Bradley Smith, in his official capacity as Vice Chair of the Washington Fish and Wildlife Commission, Larry Carpenter, in his official capacity as a member of the Washington Fish and Wildlife Commission, Jay Holzmilller, in his official capacity as a member of the Washington Fish and Wildlife Commission, Jay Kehne, in his official capacity as a member of the Washington Fish and Wildlife Commission, Robert Kehoe, in his official capacity as a member of the Washington Fish and Wildlife Commission, Conrad Mahnken, in his official capacity as a member of the Washington Fish and Wildlife Commission, and Rolland Schmitt, in his official capacity as a member of the Washington Fish and Wildlife Commission (collectively, "WDFW") for violations of section 9 of the Endangered Species Act ("ESA"), 16 U.S.C. § 1538, associated with WDFW's implementation of hatchery programs in the Puget Sound region that use the stock commonly referred to as Chambers Creek steelhead. This letter is provided pursuant to section 11(g) of the ESA, 16 U.S.C. § 1540(g).

In 1969, steelhead was declared Washington's official "state fish." Despite that recognition, wild steelhead populations have been depressed for some time and remain diminished. Wild Puget Sound steelhead have declined precipitously over the past thirty years: the average region-wide abundance between 1980 and 2004 was less than 4% of what it was in 1900. Since being listed as threatened under the ESA in 2007, Puget Sound wild steelhead abundance has continued to decline. The recent five-year average is less than 3% of what it was in 1900. In 2010, scientists from the regional science center of the NOAA Fisheries Service concluded "Chambers Creek steelhead have no role in the recovery of native Puget Sound steelhead." The Chambers Creek steelhead hatchery programs are the sole subject of this notice letter and, contrary to aiding recovery, these programs harm wild steelhead and prevent their recovery

**I. Legal Framework.**

Section 9 of the ESA prohibits the "take" of endangered species by any person. 16 U.S.C. § 1538(a). This prohibition has generally been applied to species listed as "threatened" through regulations promulgated under section 4(d) of the ESA, 16 U.S.C. § 1533(d). Section 9 of the ESA prohibits violations of those regulations. 16 U.S.C. § 1538(a)(1)(G).

"Take" includes actions that harass, harm, pursue, wound, kill, trap, capture, or collect a protected species. 16 U.S.C. § 1532(19). "Harass" is defined to include acts that create the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns, which include breeding, feeding, or

sheltering. 50 C.F.R. § 17.3. “Harm” includes significant habitat modification or degradation that kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering. *Id.*; 50 C.F.R. § 222.102.

## **II. Factual Background.**

### **A. Affected Species.**

The Puget Sound distinct population segment (“DPS”) of steelhead was listed as a threatened species in 2007. 72 Fed. Reg. 26,722 (May 11, 2007). The National Marine Fisheries Service (“NMFS”) has applied the ESA section 9 take prohibition to this species. 50 C.F.R. §§ 223.102(c)(23), 223.203(a).

The Puget Sound Chinook salmon evolutionary significant unit (“ESU”) is listed as a threatened species. 64 Fed. Reg. 14,308 (March 24, 1999); 70 Fed. Reg. 37,160 (June 28, 2005). NMFS has applied the ESA section 9 take prohibition to this species. 50 C.F.R. §§ 223.102(c)(8) and 223.203(a).

The coterminous United States bull trout population is listed as a threatened species. 64 Fed. Reg. 58,910 (Nov. 1, 1999). The United States Fish and Wildlife Service has applied the ESA take prohibition to this species. 50 C.F.R. §§ 17.21 and 17.31(a).

### **B. WDFW’s Chambers Creek Steelhead Hatchery Programs.**

WDFW operates several hatchery programs in the Puget Sound region<sup>1</sup> that use a stock of steelhead commonly referred to as “Chambers Creek steelhead.”<sup>2</sup> NMFS has provided the following description of the development of this stock:

The Chambers Creek winter-run steelhead stock was founded in the 1920s from the collection and spawning of native adult fish trapped in Chambers Creek, a south Puget Sound tributary. The propagation of Chambers Creek steelhead at this location occurred through 1945, when a new steelhead rearing program was initiated, leading to marked changes in this stock. In this new program, adult steelhead captured in Chambers Creek were transferred to the South Tacoma Hatchery in the upper watershed, where relatively warm water (12°C) was available to accelerate spawning maturation time. Additionally, the earliest maturing fish were selected for propagation. Continuous year-to-year use of these practices, combined with the warmer water and nutritional advances provided by newly developed dry diets, allowed the production of smolts in one year instead

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<sup>1</sup> Puget Sound region, as used herein, refers to Puget Sound, the Strait of Juan de Fuca, Hood Canal, and the Strait of Georgia and their tributaries, bounded to the west by the Elwha River (inclusive) and to the north by the Nooksack River and Dakota Creek (inclusive).

<sup>2</sup> Chambers Creek steelhead, as used herein, refers to hatchery stock derived entirely or partially from Chambers Creek steelhead.



of two. The first hatcheries outside the Chambers Creek watershed to use this stock were located on the Green and Puyallup rivers and on Tokul Creek. The progeny of adult returns established through transplants of Chambers Creek hatchery fish to these and other Puget Sound hatchery release sites were transferred back to Chambers Creek when needed to offset egg take shortfalls, and were incorporated back into the winter-run steelhead population maintained at the site. However, as a standard practice, Chambers Creek was maintained as the sole annual source of eggs for other hatcheries.

Chambers Creek Hatchery, originally a private trout hatchery, was purchased by the Washington Department of Game in 1972 and rebuilt. This hatchery was subsequently used to propagate and further develop the Chambers Creek winter-run steelhead stock and became the major source of winter-run steelhead broodstock for western Washington. Chambers Creek-derived winter-run steelhead have been propagated and released from most Puget Sound steelhead facilities, including Reiter Ponds, Tokul Creek, Wallace River, Dungeness, Bogachiel, Hurd Creek, Eells Springs, Kendall Creek, McKinnon Ponds, Samish, Lake Whatcom, Puyallup, Soos Creek, Voights Creek, Marblemount, Barnaby Slough, Grandy Creek, Fabors Ferry, Baker River, Davis Slough, Whitehorse Ponds, Arlington, and the Chambers Creek facilities. Most of the programs using this transplanted stock are still active.

The original goal of the Chambers Creek program was to produce an early returning adult steelhead that smolted after one year. By the mid 1970s, it was concluded that the advanced adult spawn timing selected to meet the yearling smolt objective created temporal separation in natural spawning areas between Chambers Creek hatchery winter-run and native late-winter-spawning steelhead, reducing the likelihood of interbreeding.<sup>3</sup>

Chambers Creek steelhead are excluded from the Puget Sound steelhead DPS listed and protected as a threatened species under the ESA. 72 Fed. Reg. 26,722, 26,726 (May 11, 2007).

WDFW operates several Chambers Creek steelhead hatchery programs<sup>4</sup> in the Puget Sound region. The following table provides a summary of information currently available to Wild Fish Conservancy regarding those programs:

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<sup>3</sup> Letter from George Pess, Jim Myers and Jeff Hard of the Northwest Fisheries Science Center to the Lower Elwha Klallam Tribe dated April 14, 2010, Supporting Materials.

<sup>4</sup> Chambers Creek steelhead hatchery programs, as used herein, includes all activities and facilities involved in the rearing, release, and monitoring of Chambers Creek steelhead, including but not limited to broodstock collection activities, incubation and rearing activities, acclimation activities, fish releases, monitoring and evaluation activities, surface and ground water withdrawals, effluent discharges, hatchery facilities and associated structures including weirs, fish

| <b>Basin in which the Hatchery Program is Located</b> | <b>Hatchery Program Name</b> | <b>Stated<sup>5</sup> Annual Release Number</b> | <b>Stated Release Sites</b>                              |
|---|------------------------------|---|--|
| Dungeness River                                       | Dungeness                    | 10,000  | Dungeness River  |
| Duwamish/Green River                                  | Palmer Ponds                 | 220,000   | Green River, Soos Creek, Cristy Creek, Icy Creek         |
| Nooksack River  | Kendall Creek                | 150,000   | Kendall Creek, Whatcom Creek, Samish River               |
| Puyallup River  | Voights Creek                | 200,000   | Voights Creek (Puyallup River)                           |
| Skagit River  | Marblemount                  | 334,000   | Skagit River, Clark Creek, Baker River, Sauk River       |
| Snohomish River                                       | Reiter Pond                  | 250,000   | Various locations on the Skykomish River; Pilchuck River |
|   | Tokul Creek                  | 185,000   | Various locations on the Snoqualmie River                |
|   | Wallace River                | 20,000  | Wallace River  |
| Stillaguamish River                                   | Whitehorse Pond              | 150,000   | Whitehorse Spring Creek, Pilchuck Creek, Canyon Creek    |

Attached hereto as an Appendix A is a table summarizing additional information regarding WDFW's Chambers Creek steelhead hatchery programs being implemented in the Puget Sound region that are the subject of this notice letter.<sup>6</sup> Attached hereto as Appendix B are excerpts of Hatchery and Genetic Management Plans prepared by WDFW that further describe the hatchery programs subject to this notice letter, including the locations of facilities and fish release sites. Wild Fish Conservancy provides herein notice of its intent to sue WDFW for all violations of section 9 of the ESA associated with implementation of the hatchery programs described in these materials, including any modified versions thereof, and any other Chambers Creek hatchery steelhead programs WDFW is implementing in the Puget Sound region.

### **III. Take Caused by WDFW's Chambers Creek Steelhead Hatchery Programs.**

WDFW's Chambers Creek steelhead hatchery programs cause take through a variety of mechanisms and activities. These include genetic introgression, ecological

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ladders, and other structures used to collect and/or monitoring fish, water intake structures, and effluent discharge structures.

<sup>5</sup> The Stated Annual Release Numbers and Stated Release Sites provided herein are based upon information currently available to Wild Fish Conservancy, including information obtained from Hatchery and Genetic Management Plans for the programs. Wild Fish Conservancy does not have access to information necessary to verify these descriptions.

<sup>6</sup> The information provided in Appendix A is also based upon information currently available to Wild Fish Conservancy, including information obtained from Hatchery and Genetic Management Plans for the programs. Wild Fish Conservancy does not have access to information necessary to verify these descriptions.

interactions, broodstock collection activities, facility effects, monitoring and evaluation activities, and disease transmission.

**A. Take Through Genetic Introgression.**

WDFW's Chambers Creek steelhead hatchery programs cause take through genetic introgression. This is perhaps the most detrimental harm caused by these programs. Fish become domesticated in a hatchery environment and thereby less fit to survive and reproduce in the wild. Chambers Creek steelhead are highly-domesticated due to decades of artificial production and now have genetically heritable life history traits that contrast significantly with most populations within the Puget Sound steelhead DPS.

Take through genetic introgression occurs when Chambers Creek steelhead are allowed to spawn in the wild and thereby pass their maladaptive genes to the wild populations within the Puget Sound steelhead DPS. The resultant offspring have markedly reduced fitness, dying at a much higher rate before spawning than would occur with two wild parents.

NMFS noted these concerns when it listed the Puget Sound steelhead DPS under the ESA:

The [Biological Review Team ("BRT")] concluded that efforts by hatchery managers to prevent natural spawning by Chambers Creek winter-run...hatchery fish were unlikely to be completely effective, with potentially adverse consequences. The BRT concluded that opportunities for genetic and ecological interactions between hatchery and wild steelhead in Puget Sound were substantial, with significant potential to reduce natural productivity.

72 Fed. Reg. 26,722, 26,728 (May 11, 2007).

**B. Take Through Ecological Interactions.**

WDFW's Chambers Creek steelhead hatchery programs cause take of ESA-listed Puget Sound Chinook salmon, Puget Sound steelhead, and bull trout through ecological interactions. Such take occurs through a variety of mechanisms.

WDFW's Chambers Creek steelhead hatchery programs cause take of ESA-listed salmonids through increased competition for food and space, including rearing and spawning territory. The programs also cause take of Puget Sound steelhead through increased competition for spawning mates.

WDFW's Chambers Creek steelhead hatchery programs cause take of ESA-listed salmonids through predation. This occurs when the hatchery fish, including smolts and residualized fish, prey on protected fish. The programs also cause take when hatchery

fish—less fit for survival in the wild—attract predators that then consume ESA-listed fish.

**C. Take Through Broodstock Collection Activities.**

WDFW's Chambers Creek steelhead hatchery programs cause take of Puget Sound Chinook salmon, Puget Sound steelhead, and bull trout through the broodstock collection activities. Broodstock collection activities are those associated with the capture of returning steelhead adults. These activities can include employing a weir or barrier that forces migrating adults to enter a ladder or trap or capturing adult fish using a net or a hook and line.

While generally aimed at hatchery steelhead, these activities harm listed salmonids, for instance, by delaying their migration to natural spawning habitat or inflicting physical injury or causing death from capture or handling. The programs cause take when the broodstock collection activities result in incidental or intentional collection, capture, trapping, and/or removal of ESA-listed salmonids. Take also occurs when the broodstock collection activities, and/or structures or devices associated therewith, harm, harass, injure, and/or kill protected fish. Broodstock collection activities also cause take when they affect the ability of ESA-listed salmonids to migrate, including when spawning migration is delayed or prevented.

**D. Take Through Facility Effects.**

WDFW's Chambers Creek steelhead hatchery programs cause take of Puget Sound Chinook salmon, Puget Sound steelhead, and bull trout through facility effects. A variety of facility effects cause such take.

The programs cause take because the hatcheries create a false attractant for ESA-listed salmonids. Take occurs when the ESA-protected fish are harmed, injured, delayed, or killed when attempting to enter hatchery facilities, including facility outfalls and fish ladders. Take also occurs when the protected fish enter hatchery facilities and are thereby captured, trapped, or collected by the hatchery. Additional take occurs when ESA-listed salmonids that have entered hatchery facilities are injured or killed in the hatchery environment or during attempts to return them to the wild and when their spawning migration is delayed or prevented.

WDFW's Chambers Creek steelhead hatchery programs cause take because the effluent discharged from the hatcheries adversely affects ESA-listed salmonids. The water withdrawals at the hatcheries also cause take of ESA-listed salmonids by reducing water flow in the rivers and streams and because protected fish are harmed, injured, killed, trapped and/or captured (*i.e.*, entrained) by the surface water intake structures.

The hatchery programs also cause take because weirs and other in-stream structures delay or prevent ESA-listed salmonids' migration abilities.

**E. Take Through Monitoring and Evaluation Activities.**

WDFW's Chambers Creek steelhead hatchery programs cause take of Puget Sound Chinook salmon, Puget Sound steelhead, and bull trout through monitoring and evaluation activities. Monitoring and evaluation activities are those undertaken to evaluate the success of the programs and/or its effects on wild fish. Specific activities can include electrofishing and other salmonid sampling efforts that directly affect listed salmonids and ecological research activities that adversely affect the habitats of listed salmonids or disrupt their typical life history functions. The monitoring and evaluation activities cause take of ESA-listed salmonids when they capture, collect, trap, harm, harass, injure, and kill protected fish.

**F. Take Through Disease Transmission.**

WDFW's Chambers Creek steelhead hatchery programs cause take of Puget Sound Chinook salmon, Puget Sound steelhead, and bull trout through the transmission of diseases. The unnaturally high densities of fish maintained in the hatchery facilities leads to increased occurrence of infection of fish within hatcheries and the creation of concentrated and effective vectors for the transmission of infection to other fish. Take occurs when the Chambers Creek steelhead hatchery programs transmit disease through water discharges from the hatcheries or directly from fish released by the hatcheries to ESA-listed salmonids.

**IV. WDFW's Violations of Section 9 of the ESA.**

WDFW is in violation of section 9 of the ESA, 16 U.S.C. § 1538 for implementing and funding the Chambers Creek steelhead hatchery programs in the Puget Sound region. As described above, these programs cause take of ESA-listed Puget Sound steelhead, Puget Sound Chinook salmon, and bull trout. The descriptions provided above of take and of WDFW's Chambers Creek steelhead hatchery programs operating in the Puget Sound region are based upon the information currently available to Wild Fish Conservancy. Wild Fish Conservancy intends to sue WDFW for all take of ESA-listed salmonids resulting from all of WDFW's Chambers Creek steelhead hatchery programs being implemented in the Puget Sound region.

This take is not exempt from liability under section 9 of the ESA. However, Wild Fish Conservancy's concerns regarding WDFW's Chambers Creek steelhead hatchery programs being implemented in the Puget Sound region stretches far beyond the mere lack of authorization for these programs. These hatchery programs are severely affecting ESA-listed salmonids and their ability to recovery to a point where the protections of the ESA would not be necessary.

The hatchery programs are "segregated hatchery programs" as defined by the congressionally-chartered Hatchery Science Review Group ("HSRG"). The HSRG has made clear recommendations regarding the maximum acceptable level of gene flow from segregated hatchery programs to wild conspecific populations. This is measured by

pHOS—the proportion of the total number of adult fish present on spawning grounds in the wild that originate from segregated hatchery facilities. The HSRG recommendation is to maintain a pHOS of less than five percent. This and/or similar requirements would be imposed on WDFW's Chambers Creek steelhead hatchery programs through any exemption from liability under section 9 of the ESA that may be granted, along with monitoring and evaluation requirements necessary to ensure compliance with such requirements. It is unlikely that WDFW would be able to fully comply with these requirements and that the hatchery programs will continue to contribute to the decline of ESA-listed salmonids.

Accordingly, Wild Fish Conservancy provides notice of its intent to sue WDFW to bring its Chambers Creek steelhead hatchery programs in the Puget Sound region into compliance with section 9 of the ESA. This includes complete compliance with any exemption from ESA liability for take that may be lawfully issued in accordance with the requirements of the ESA, the National Environmental Policy Act, and any other applicable statutes and regulations.

**V. Party Giving Notice of Intent to Sue.**

The full name, address, and telephone number of the party giving notice is:

Wild Fish Conservancy  
15629 Main Street NE  
Duvall, WA 98019  
Tel: (425) 788-1167

**VI. Attorneys Representing Wild Fish Conservancy.**

The attorneys representing Wild Fish Conservancy in this matter are:

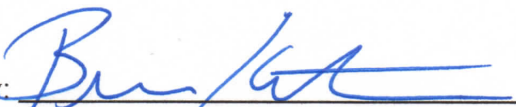
Brian A. Knutsen and Richard Smith  
Smith & Lowney, PLLC  
2317 East John Street  
Seattle, WA 98112  
(206) 860-2883

**VII. Conclusion.**

This letter provides notice under section 11(g) of the ESA, 16 U.S.C. § 1540(g), of Wild Fish Conservancy's intent to sue WDFW for violations of the ESA discussed herein. Unless the ongoing and imminent violations described herein are corrected within sixty days, Wild Fish Conservancy intends to file suit against WDFW to enforce the ESA. Wild Fish Conservancy is available during the sixty-day notice period to discuss effective remedies and actions that will assure future compliance with the ESA.

Very truly yours,

SMITH & LOWNEY, PLLC

By:   
Brian A. Knutsen

- c. Director Phil Anderson (via email, [director@dfw.wa.gov](mailto:director@dfw.wa.gov))  
Washington Fish and Wildlife Commission (via email, [commission@dfw.wa.gov](mailto:commission@dfw.wa.gov))  
Michael S. Grossmann (via email, [MikeG1@atg.wa.gov](mailto:MikeG1@atg.wa.gov))

# APPENDIX A



**Puget Sound "Chambers Creek" Winter Steelhead Programs**

(information from winter steelhead Puget Sound HGMPs received from NOAA Sep 2013)

| <b>Region</b>         | <b>Program name</b> | <b>Watershed</b> | <b>Facilities</b>  | <b>Proposed release<br/>(thousands)</b> | <b>Release location</b>   | <b>Source of information</b>  |
|-----------------------|---------------------|------------------|--|---|---|---|
| <b>Dungeness</b>      | Dungeness           | Dungeness        | Dungeness Hatchery; Bogachiel Hatchery; Hurd Creek Hatchery  | 10,000                                  | Dungeness R.  | Dungeness Winter Steelhead Program draft Hatchery and Genetic Management Plan, WDFW, August 4, 2005     |
| <b>Duwamish/Green</b> | Palmer Ponds        | Green            | Palmer Ponds; Soos Creek Hatchery; Keta Creek Hatchery (Muckleshoot Tribe); Flaming Geyser Ponds; Icy Creek Rearing Pond | 220,000                                 | Green 150,000; Soos Creek 35,000; Cristy Creek 15,000; Icy Creek 20,000 (all are Green R. tribs).                         | Palmer Ponds Winter Steelhead Program draft Hatchery and Genetic Management Plan, WDFW, August 4, 2005* |
| <b>Nooksack</b>       | Kendall Creek       | Nooksack         | Kendall Creek Hatchery; McKinnon Pond  | 150,000                                 | Kendall Cr (Nooksack) (40,000 to Whatcom Creek Hatchery for release into Whatcom Creek (5,000) and Samish River (35,000)) | Kendall Creek Winter Steelhead Program draft Hatchery and Genetic Management Plan, WDFW, August 4, 2005 |
| <b>Puyallup</b>       | Voights Creek       | Puyallup         | Voights Creek Hatchery; Puyallup Hatchery  | 200,000                                 | Voights Creek (trib to Carbon R. which is a trib to Puyallup R.)  | Voights Creek Winter Steelhead Program draft Hatchery and Genetic Management Plan, WDFW, August 4, 2005 |
| <b>Skagit</b>         | Marblemount         | Skagit           | Marblemount Hatchery; Baker River Trap; Barnaby Slough; Davis Slough; Grandy Creek/Fabors Ferry                          | 334,000                                 | Clark Creek (on-station) 136,000; Davis Slough, Baker River, Grandy Creek/Fabors Ferry, Sauk River 198,000 total          | Marblemount Winter Steelhead Program draft Hatchery and Genetic Management Plan, WDFW, August 4, 2005   |

|   |                 |               |  |                  |   |   |
|---|-----------------|---------------|--|------------------|---|---|
| <b>Snohomish</b>                                | Reiter Pond     | Skykomish     | Tokul Creek Hatchery (early);<br>Wallace River Hatchery (rearing);<br>Reiter Ponds (rearing and release) | 250,000          | Snohomish River watershed   | Reiter Pond Winter Steelhead<br>Program draft Hatchery and Genetic<br>Management Plan, WDFW, August 4,<br>2005                              |
|   | Tokul Creek     | Snohomish     | Tokul Creek Hatchery   | 185,000          | Snoqualmie River watershed (Duvall,<br>mouth, and upriver of Tolt and the<br>Raging rivers) | Tokul Creek Winter Steelhead<br>Program draft Hatchery and Genetic<br>Management Plan, WDFW, August 4,<br>2005                              |
|   | Wallace River   | Snohomish     | Tokul Creek Hatchery (early);<br>Wallace River Hatchery (rearing<br>and release)                         | 20,000           | Wallace River (Sky trib)  | Wallace River Winter Steelhead<br>Program draft Hatchery and Genetic<br>Management Plan, WDFW, August 4,<br>2005                            |
| <b>Stillaguamish</b>                            | Whitehorse Pond | Stillaguamish | Whitehorse Pond (trib to NF<br>Stillaguamish R.)   | 150,000          | Whitehorse Pond 130,000; Pilchuck Creek<br>10,000; Canyon Creek 10,000                      | Whitehorse Pond Winter Steelhead<br>Program draft Hatchery and Genetic<br>Management Plan, WDFW, August 4,<br>2005                          |
| <b>Total Releases in Puget Sound<br/>waters</b> |                 |               |  | <b>1,369,000</b> |   | *Title page of document says<br>"Palmer Ponds Summer Steelhead<br>Program" but body of document<br>describes a winter steelhead<br>program. |

# **APPENDIX B**

# HATCHERY AND GENETIC MANAGEMENT PLAN (HGMP) DRAFT

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|                           |   |
|---------------------------|---|
| Hatchery Program          | Dungeness Winter Steelhead Program  |
| Species or Hatchery Stock | Winter Steelhead ( <i>Oncorhynchus mykiss</i> )<br>(Chambers Creek stock) |
| Agency/Operator           | WDFW  |
| Watershed and Region      | Dungeness River (Strait of Juan de Fuca)<br>Puget Sound                   |
| Date Submitted            | August 4, 2005  |
| Date Last Updated         | August 1, 2005  |

**SECTION 1. GENERAL PROGRAM DESCRIPTION****1.1) Name of hatchery or program.**

Dungeness River Winter Steelhead Program

**1.2) Species and population (or stock) under propagation, and ESA status.**Chambers Creek Winter Steelhead (*Oncorhynchus mykiss*) - not listed**1.3) Responsible organization and individuals**

**Name (and title):** Ron Warren, Region 6 Fish Program Manager  
 Manuel Farinas, Complex Manager

**Agency or Tribe:** Washington Department of Fish and Wildlife

**Address:** 600 Capitol Way North, Olympia, WA 98501-1091

**Telephone:** (360) 204-1204 (360) 249-1229

**Fax:** (360) 664-0689 (360) 681-7823

**Email:** warrerrw@dfw.wa.gov farinmaf@dfw.wa.gov

**Other agencies, Tribes, co-operators, or organizations involved, including contractors, and extent of involvement in the program:**

**1.4) Funding source, staffing level, and annual hatchery program operational costs.**

| Operational Information  | Number    |
|--|-----------|
| Annual operating cost (dollars)  | \$304,153 |
| The above information for annual operating cost applies cumulatively to the Dungeness Hatchery Fish Programs and cannot be broken out specifically by program. Funding sources are General Fund - State and Wildlife Fund - State. |           |

**1.5) Location(s) of hatchery and associated facilities.**

**Dungeness Hatchery:** Dungeness River (18.0018) at RM 10.5

**Hurd Creek:** Hurd Creek (18.0028) at RM 0.2, tributary to Dungeness River (18.0028) at RM 3.

**Bogachiel Hatchery:** Bogachiel River (20.0162)

**1.6) Type of program.**

Isolated harvest

*Dungeness Winter Steelhead HGMP*

**1.7) Purpose (Goal) of program.**

The goal of this program is release 10,000 steelhead smolts to provide fish for harvest (in-river sport fishery).

**1.8) Justification for the program.**

This program will be operated to provide fish for harvest while minimizing adverse effects on listed fish. This will be accomplished in the following manner:

1. Hatchery fish will be released as smolts at a time to minimize or eliminate adverse interactions with listed fish.
2. Fish will be acclimated before release.
3. Hatchery fish will be propagated using appropriate fish culture methods and consistent with Co-Managers Fish Health Policy and state and federal water quality standards; e.g. NPDES criteria.
4. Juvenile fish produced in excess to production goals will be dealt with appropriately such as by being planted in a lake without an outlet.

To minimize impacts on listed fish by WDFW facilities operation and the Dungeness steelhead program, the following Risk Aversions are included in this HGMP:

## **SECTION 5. FACILITIES**

### **5.1) Broodstock collection facilities (or methods).**

Dungeness Hatchery has an off-channel adult pond. There is no in-river rack on the Dungeness River that might prevent adults from passing upstream naturally. All fish to the hatchery trap are volunteers.

There is no broodstock collection at Hurd Creek.

### **5.2) Fish transportation equipment (description of pen, tank truck, or container used).**

The Dungeness Complex has four tanker trucks: a 1200 gallon, 900, 700 and a 400 gallon tank used for fish transport.

### **5.3) Broodstock holding and spawning facilities.**

Steelhead adults are held in an earthen adult pond. (42' X 135' X 2.5'). Spawning is done at the pond site. It is done in accordance to WDFW spawning guidelines (Seidel 1983)

### **5.4) Incubation facilities.**

Incubation at Hurd Creek consists of vertical stack (FAL) incubators.

### **5.5) Rearing facilities.**

Rearing started at Hurd Creek in 4' diameter circular ponds and in a 20' diameter circular pond prior to transport back to Dungeness for final rearing in 10' X 100' raceways.

### **5.6) Acclimation/release facilities.**

Dungeness Hatchery acclimates in 10' X 100' raceways and releases the steelhead. Hurd Creek does not acclimate or release on site.

### **5.7) Describe operational difficulties or disasters that led to significant fish mortality.**

NA

*Dungeness Winter Steelhead HGMP***SECTION 10. RELEASE**

Describe fish release levels, and release practices applied through the hatchery program.

**10.1) Proposed fish release levels.**

| Age Class  | Maximum Number | Size (fpp) | Release Date | Location                  |
|------------|----------------|------------|--------------|---------------------------|
| Eggs       |                |            |              |                           |
| Unfed Fry  |                |            |              |                           |
| Fry        |                |            |              |                           |
| Fingerling |                |            |              |                           |
| Yearling   | 10,000         | 5*         | after June 1 | Dungeness R.<br>(18.0018) |

\* 5 fish per pound (fpp) – 206 mm fl

**10.2) Specific location(s) of proposed release(s).**

**Stream, river, or watercourse:** Dungeness River (18.0018)  
**Release point:** Dungeness River (RM 10.5)  
**Major watershed:** Dungeness River  
**Basin or Region:** Puget Sound (Straits of Juan de Fuca)

**10.3) Actual numbers and sizes of fish released by age class through the program.**

| Release year | Eggs/<br>Unfed<br>Fry | Avg size | Fry | Avg size<br>fpp | Fingerling | Avg size<br>fpp | Yearling | Avg<br>size<br>fpp |
|--------------|-----------------------|----------|-----|-----------------|------------|-----------------|----------|--------------------|
| 1995         |                       |          |     |                 |            |                 | 9,900    | 5                  |
| 1996         |                       |          |     |                 |            |                 | 10,008   | 5                  |
| 1997         |                       |          |     |                 |            |                 | 7,800    | 5                  |
| 1998         |                       |          |     |                 |            |                 | 10,690   | 9                  |
| 1999         |                       |          |     |                 |            |                 | 11,000   | 6                  |
| 2000         |                       |          |     |                 |            |                 | 10,465   | 6                  |
| 2001         |                       |          |     |                 |            |                 | 12,199   | 6                  |
| 2002         |                       |          |     |                 |            |                 | 10,250   | 5                  |
| 2003         |                       |          |     |                 |            |                 | 13,715   | 6                  |
| 2004         |                       |          |     |                 |            |                 | 10,500   | 6                  |
| Average      |                       |          |     |                 |            |                 | 10,653   | 6                  |



# HATCHERY AND GENETIC MANAGEMENT PLAN (HGMP) DRAFT

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|                           |   |
|---------------------------|---|
| Hatchery Program          | Palmer Ponds Summer Steelhead Program   |
| Species or Hatchery Stock | Winter Steelhead ( <i>Oncorhynchus mykiss</i> )<br>Green River (Chambers Creek stock) |
| Agency/Operator           | WDFW  |
| Watershed and Region      | Duwamish/Green River<br>Puget Sound   |
| Date Submitted            | August 4, 2005  |
| Date Last Updated         | August 2, 2005  |

**SECTION 1. GENERAL PROGRAM DESCRIPTION**

**1.1) Name of hatchery or program.**

Palmer Ponds Winter Steelhead Program

**1.2) Species and population (or stock) under propagation, and ESA status.**

Green River (Chambers Creek stock) Steelhead (*Oncorhynchus mykiss*) - not listed

**1.3) Responsible organization and individuals**

**Name (and title):** Chuck Phillips, Region 4 Fish Program Manager  
 Brodie Antipa, Complex Manager  
**Agency or Tribe:** Washington Department of Fish and Wildlife  
**Address:** 600 Capitol Way North, Olympia, Wa. 98501-1091  
**Telephone:** (425) 775-1311 Ext 120 (253) 840-4790  
**Fax:** (425) 338-1066 (253) 840-4724  
**E-mail** **phillcep@dfw.wa.gov** **antipbja@dfw.wa.gov**

**Other agencies, Tribes, co-operators, or organizations involved, including contractors, and extent of involvement in the program:**

From the WDFW on-station winter steelhead production at Palmer Ponds, 100,000 pre-smolts are transferred to the Muckleshoot Tribal facility at Keta Creek in March for conditioning and release (90,000) in early May. If available, an additional 15,000 pre-smolts are transferred to conditioning ponds in Flaming Geyser State Park for release in early May.

**1.4) Funding source, staffing level, and annual hatchery program operational costs.**

| Operational Information  | Number   |
|--|----------|
| Annual operating cost (dollars)  | \$49,536 |
| The above information for annual operating cost applies cumulatively to the Palmer Ponds Fish Programs. Funding source is Wildlife Fund – State. |          |

*Palmer Ponds Summer Steelhead HGMP*

**1.5) Location(s) of hatchery and associated facilities.**

|                                |  |
|--------------------------------|--|
| <b>Palmer Ponds:</b>           | Unnamed stream (09.0147) at RM 0.2, tributary to Green River (09.0001) at RM 56.1.                               |
| <b>Soos Creek Hatchery:</b>    | Big Soos Creek (09.0072) RM 1, tributary to the Green River (09.0001) at RM 33.5.                                |
| <b>Keta Creek Hatchery:</b>    | Keta Creek (09.0113) at RM 1.2, tributary to the Green River (09.0001) at RM 40.1 (Muckleshoot tribal facility). |
| <b>Flaming Geyser Ponds:</b>   | Cristy Creek (no WRIA) at RM 0.1, tributary to Green River (09.0001) at RM 44.3.                                 |
| <b>Icy Creek Rearing Pond:</b> | Icy Creek, tributary to the Green River (09.0001) at RM 48.3   |

**1.6) Type of program.**

Isolated harvest

**1.7) Purpose (Goal) of program.**

The goal of this program is release 220,000 winter steelhead into the Green River watershed to provide adult fish for sport and tribal harvest opportunity.

**1.8) Justification for the program.**

This program will be operated to provide fish for harvest while minimizing adverse effects on listed fish. This will be accomplished in the following manner:

1. Hatchery fish will be released as smolts at a time to minimize or eliminate adverse interactions with listed fish.
2. Fish will be acclimated before release.
3. Hatchery fish will be propagated using appropriate fish culture methods and consistent with the Co-Managers' Disease Policy, spawning and genetic guidelines and state and federal water quality standards.
4. Juvenile fish produced in excess to production goals will be dealt with appropriately such as by being planted in a lake without an outlet.

To minimize impacts on listed fish by WDFW facilities operation and the Palmer Pond steelhead program, the following Risk Aversions are included in this HGMP:

## **SECTION 5. FACILITIES**

### **5.1) Broodstock collection facilities (or methods).**

Broodstock is captured in the outlet to the large rearing pond at Palmer. The fish are trapped in a concrete raceway structure where the pond outflow is collected. Trapping of steelhead at Soos Creek may take place if flows permit the weir with a V-trap ladder to be kept in.

### **5.2) Fish transportation equipment (description of pen, tank truck, or container used).**

All adipose-fin clipped adults trapped at Palmer remain at Palmer. If broodstock are trapped at Keta Creek, they are hauled in various sized tanker trucks equipped with oxygen tanks, air stones and re-circulating pumps.

### **5.3) Broodstock holding and spawning facilities.**

Adults are held in 20' diameter circular holding ponds at Palmer. Fish are spawned at pond side. If flows permit trapping at Soos Creek, fish will be held in the holding pond and spawned at pond side (see Soos Creek coho HGMP for detail).

### **5.4) Incubation facilities.**

All eggs are taken to Soos Creek Hatchery for incubation in shallow troughs (see Soos Creek coho HGMP).

### **5.5) Rearing facilities.**

Portion of the steelhead destined for Palmer Ponds are initially reared at Soos Creek Hatchery. They are transferred to Palmer between 80-100 fish per pound (fpp). Fish are reared in a large earthen rearing pond at Palmer. Small groups of fish may be reared in a series of four 20' diameter circular ponds.

### **5.6) Acclimation/release facilities.**

Fish are acclimated and released directly from the ponds at Palmer and at Soos Creek while fish are acclimated at Flaming Geyser State Park (if fish available) prior to release.

### **5.7) Describe operational difficulties or disasters that led to significant fish mortality.**

None at Palmer Ponds or Flaming Geyser Ponds.

## Palmer Ponds Summer Steelhead HGMP

**SECTION 10. RELEASE**

Describe fish release levels, and release practices applied through the hatchery program.

**10.1) Proposed fish release levels.**

| Age Class  | Maximum Number | Size (fpp) | Release Date | Location       |
|------------|----------------|------------|--------------|----------------|
| Eggs       |                |            |              |                |
| Unfed Fry  |                |            |              |                |
| Fry        |                |            |              |                |
| Fingerling |                |            |              |                |
| Yearling   | 150,000        | 5          | May          | Palmer Pond    |
|            | *35,000        | 5          | May          | Soos Cr.       |
|            | 15,000         | 5          | May          | Flaming Geyser |
|            | 20,000         | 5          | May          | Icy Creek      |

\*- Release from Soos Creek Hatchery began in May of 2003 as well as Icy Creek.

Note - If fish available, 15,000 are released from Flaming Geyser Pond.

5 fish per pound (fpp) ~ 206 mm fl.

**10.2) Specific location(s) of proposed release(s).****Stream, river, or watercourse:**

Green River

**Release point:**

Palmer Ponds (Green River, 09.0001) at RM 56.1 and at Soos Creek Hatchery at RM 1, tributary to the Green River at RM 33.5.

Flaming Geyser Park (Green River) at RM 44.3 (15,000)

Icy Creek at RM 48.3 (20,000)

**Major watershed:**

Duwamish/Green River

**Basin or Region:**

Puget Sound

**10.3) Actual numbers and sizes of fish released by age class through the program.**

| Release year | Eggs/<br>Unfed Fry | Avg size | Fry | Avg size | Fingerling | Avg size | Yearling | Avg size |
|--------------|--------------------|----------|-----|----------|------------|----------|----------|----------|
| 1995         |                    |          |     |          |            |          | 90,184   | 6        |
| 1996         |                    |          |     |          |            |          | 105,529  | 6        |
| 1997         |                    |          |     |          |            |          | 209,791  | 7        |
| 1998         |                    |          |     |          |            |          | 158,288  | 9        |
| 1999         |                    |          |     |          |            |          | 149,395  | 8        |

*Palmer Ponds Summer Steelhead HGMP*

| Release year | Eggs/Unfed Fry | Avg size | Fry | Avg size | Fingerling | Avg size | Yearling | Avg size |
|--------------|----------------|----------|-----|----------|------------|----------|----------|----------|
| 2000         |                |          |     |          |            |          | 240,292  | 7        |
| 2001         |                |          |     |          |            |          | 133,718  | 6        |
| 2002         |                |          |     |          |            |          | 74,183   | 5        |
| 2003         |                |          |     |          |            |          | 110,580  | 5.5      |
| Average      |                |          |     |          |            |          | 141,329  | 7        |

Data source: Palmer Ponds hatchery records

**10.4) Actual dates of release and description of release protocols.**

Typically steelhead smolts are released in early to mid-May. Fish are released volitionally for several weeks then force released at the end of the release window.

**10.5) Fish transportation procedures, if applicable.**

The smolts to be released on site do not need any transportation. Fish destined for release at Palmer Ponds and Flaming Geyser Pond are transferred using a 300-gallon tank equipped with re-circulating pumps.

**10.6) Acclimation procedures.**

All steelhead released at Palmer Ponds, as well as at Icy Creek, are acclimated on spring water over the entire rearing period. Prior to the release at Soos Creek, fish are acclimating on surface water.

**10.7) Marks applied, and proportions of the total hatchery population marked, to identify hatchery adults.**

All steelhead are 100% identified with an adipose-fin clip (mass mark).

**10.8) Disposition plans for fish identified at the time of release as surplus to programmed or approved levels.**

No surplus fish to programmed levels has occurred.

**10.9) Fish health certification procedures applied pre-release.**

A routine fish health inspection by the Area WDFW Fish Health Specialist takes place prior to release.

# HATCHERY AND GENETIC MANAGEMENT PLAN (HGMP) DRAFT

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|                           |  |
|---------------------------|--|
| Hatchery Program          | Kendall Creek Winter Steelhead   |
| Species or Hatchery Stock | Winter Steelhead ( <i>Oncorhynchus mykiss</i> )<br>Kendall(Chambers Creek stock) |
| Agency/Operator           | WDFW   |
| Watershed and Region      | North Fork Nooksack River<br>Puget Sound   |
| Date Submitted            | August 4, 2005   |
| Date Last Updated         | August 1, 2005   |

**SECTION 1. GENERAL PROGRAM DESCRIPTION****1.1) Name of hatchery or program.**

Kendall Creek Winter Steelhead Program

**1.2) Species and population (or stock) under propagation, and ESA status.**Kendall Creek Steelhead (*Oncorhynchus mykiss*) - not listed  
(Chambers Creek Origin)**1.3) Responsible organization and individuals**

**Name (and title):** Chuck Phillips, Region 4 Fish Program Manager  
Ted Thygesen, Nooksack Complex Manager

**Agency or Tribe:** Washington Department of Fish and Wildlife

**Address:** 600 Capitol Way North, Olympia, Wa. 98501-1091

**Telephone:** (425) 775-1311 Ext 120 (360) 676-2138

**Fax:** (425) 338-1066 (360) 738-6291

**Email:** [phillcep@dfw.wa.gov](mailto:phillcep@dfw.wa.gov) [thygetlt@dfw.wa.gov](mailto:thygetlt@dfw.wa.gov)

**Other agencies, Tribes, co-operators, or organizations involved, including contractors, and extent of involvement in the program:**

Volunteers operate, maintain and rear at McKinnon Pond 50,000 steelhead. It is located on the Middle Fork of the Nooksack River.

**1.4) Funding source, staffing level, and annual hatchery program operational costs.**

| Operational Information   | Number    |
|---|-----------|
| Annual operating cost (dollars)   | \$364,697 |
| The above information for annual operating cost applies cumulatively to the Kendall Creek Hatchery Fish Programs and cannot be broken out specifically by program. . Funding source is General Fund – State and General Fund - Federal. |           |

**1.5) Location(s) of hatchery and associated facilities.****Kendall Creek Hatchery:** NF Nooksack River (01.0120) RM 46 at confluence with Kendall Creek (01.0406), Puget Sound, Washington**McKinnon Pond:** MF Nooksack River (01.0339) RM 4.8 near the confluence with un-named stream (01.0352) that emanates from peat bogs and beaver dams.



**1.6) Type of program.**

Isolated harvest

**1.7) Purpose (Goal) of program.**

The goal of this program is release 150,000 steelhead smolts to provide fish for sport and tribal harvest opportunity.

**1.8) Justification for the program.**

This program will be operated to provide fish for harvest while minimizing adverse effects on listed fish. This will be accomplished in the following manner:

1. Hatchery fish will be released as smolts at a time to minimize or eliminate adverse interactions with listed fish.
2. Fish will be acclimated before release.
3. Hatchery fish will be propagated using appropriate fish culture methods and consistent with the Co-Managers' Disease Policy, spawning and genetic guidelines and state and federal water quality standards.
4. Juvenile fish produced in excess to production goals will be dealt with appropriately such as by being planted in a lake without an outlet

To minimize impacts on listed fish by WDFW facilities operation and the Kendall Creek steelhead program, the following Risk Aversions are included in this HGMP:

## **SECTION 5. FACILITIES**

### **5.1) Broodstock collection facilities (or methods).**

Fish are collected at the Kendall Creek Hatchery holding pond. Returning adults enter the ladder from Kendall Creek and hold in the pond. They are hand transferred to Capilano troughs to prevent jumping and escape.

### **5.2) Fish transportation equipment (description of pen, tank truck, or container used).**

Adults are transported to the Capilanos via a tractor and fish tote with water.

### **5.3) Broodstock holding and spawning facilities.**

Adults are spawned directly from the Capilanos.

### **5.4) Incubation facilities.**

Eggs are incubated in vertical incubators using well water that is a constant 47 F.

### **5.5) Rearing facilities.**

Fish are reared in shallow troughs indoor or Capilano troughs outdoors. They are then transferred to raceways (100' X 10' X 3.5'). After the WCH and McKinnon steelhead transfers are complete, the remaining fish, for release at Kendall Creek Hatchery, are transferred to a raceway (135' X 20' X 5').

McKinnon Pond is an asphalt-rearing pond (292' X 42' X 6') with a concrete collection raceway at the end.

### **5.6) Acclimation/release facilities.**

Fish are released from raceway ponds at Kendall Creek.

McKinnon Pond steelhead have been released from the pond in the past. But because of main channel movement and no outlet to the Middle Fork (no trap in place), these fish are seined out of the pond and trucked back to Kendall Creek for acclimation and release.

### **5.7) Describe operational difficulties or disasters that led to significant fish mortality.**

None.

**SECTION 10. RELEASE**

Describe fish release levels, and release practices applied through the hatchery program.

**10.1) Proposed fish release levels.**

| Age Class  | Maximum Number | Size (fpp) | Release Date | Location      |
|------------|----------------|------------|--------------|---------------|
| Eggs       |                |            |              |               |
| Unfed Fry  |                |            |              |               |
| Fry        |                |            |              |               |
| Fingerling |                |            |              |               |
| Yearling   | 150,000        | 5          | After May 15 | Kendall Creek |

\*- ~40,000 yearlings transferred to Whatcom Creek Hatchery (WCH) in October, planted after May 1 @ 5 fpp (5,000 planted in Whatcom Creek and 35,000 into the Samish River).

5 fish per pound (fpp) – 206 mm fl

**10.2) Specific location(s) of proposed release(s).**

**Stream, river, or watercourse:** Nooksack River (01.0120)  
**Release point:** Kendall Creek (01.0406) at RM 46 with confluence with Nooksack River.  
**Major watershed:** Nooksack River  
**Basin or Region:** Puget Sound

**10.3) Actual numbers and sizes of fish released by age class through the program.**

| Release year | Eggs/Unfed Fry | Avg size | Fry    | Avg size | Fingerling | Avg size | Yearling | Avg size |
|--------------|----------------|----------|--------|----------|------------|----------|----------|----------|
| 1999         |                |          |        |          |            |          | 33,900   | 6        |
| 2000         |                |          |        |          |            |          | 35,000   | 5        |
| 2001         |                |          |        |          |            |          | 30,500   | 6        |
| 2002         |                |          |        |          |            |          | 34,800   | 5        |
| 2003         |                |          | 20,000 | 250      |            |          | 140,000  | 5        |
| 2004         |                |          |        |          |            |          | 137,000  | 5        |

Data source: Kendall Creek hatchery records

**10.4) Actual dates of release and description of release protocols.**

Steelhead are forced-released after May 15, during high spring glacial runoff, to encourage quick migration to salt water and to provide visual protection for listed chinook juveniles.

## HATCHERY AND GENETIC MANAGEMENT PLAN (HGMP) DRAFT

|                           |   |
|---------------------------|---|
| Hatchery Program          | Voights Creek Winter Steelhead  |
| Species or Hatchery Stock | Voights Creek Winter Steelhead ( <i>Oncorhynchus mykiss</i> )<br>(Chambers Creek stock) |
| Agency/Operator           | Washington Department of Fish and Wildlife  |
| Watershed and Region      | Puyallup River, Puget Sound   |
| Date Submitted            | August 04, 2005   |
| Date Last Updated         | August 3, 2005  |

Voights Creek Winter Steelhead HGMP

**SECTION 1. GENERAL PROGRAM DESCRIPTION**

**1.1) Name of hatchery or program.**

Voights Creek Winter Steelhead Program

**1.2) Species and population (or stock) under propagation, and ESA status.**

Voights Creek (Chambers Creek stock) Winter Steelhead (*Oncorhynchus mykiss*) - not listed

**1.3) Responsible organization and individuals**

**Name (and title):** Chuck Phillips, Region 4 Fish Program Manager  
 Brodie Antipa, Complex Manager  
**Agency or Tribe:** Washington Department of Fish and Wildlife  
**Address:** 600 Capitol Way North, Olympia, WA. 98501-1091  
**Telephone:** (425) 775-1311 Ext 120 (253) 840-4790  
**Fax:** (425) 338-1066 (253) 840-4724  
**E-mail** **phillcep@dfw.wa.gov** **antipbja@dfw.wa.gov**

**Other agencies, Tribes, co-operators, or organizations involved, including contractors, and extent of involvement in the program:**

The Puyallup Tribe of Indians shares co-management of the winter steelhead program.

**1.4) Funding source, staffing level, and annual hatchery program operational costs.**

| Operational Information   | Number    |
|---|-----------|
| Annual operating cost (dollars)   | \$264,123 |
| The above information for annual operating cost applies cumulatively to the Voights Creek Hatchery Fish Programs and cannot be broken out specifically by program. Funding sources are General Fund – State and General Fund – Federal. |           |

**1.5) Location(s) of hatchery and associated facilities.**

**Voights Creek Hatchery:** Located at RM 0.5 on Voights Creek (10.0414), a tributary of the Carbon River (10.0413). Voights Creek enters the Carbon River at RM 4. The Carbon River is a tributary to the Puyallup River (10.0021) and joins it at RM 17.8.

**Puyallup Hatchery:** Clarks Creek, (10.0027)

*Voights Creek Winter Steelhead HGMP*

**1.6) Type of program.**

Isolated harvest

**1.7) Purpose (Goal) of program.**

The goal of this program is release 200,000-winter steelhead to provide adult fish for sport and treaty harvest opportunity in the Puyallup River.

**1.8) Justification for the program.**

This program will be operated to provide fish for harvest while minimizing adverse effects on listed fish. This will be accomplished in the following manner:

1. Release steelhead as smolts with expected brief freshwater residence to minimize or eliminate adverse interactions with listed fish.
2. Fish will be acclimated before release
3. Hatchery fish will be propagated using appropriate fish culture methods and consistent with Co-Managers Fish Health Policy and state and federal water quality standards; e.g. NPDES criteria.
4. Juvenile fish produced in excess to production goals will be dealt with appropriately such as by being planted in a lake without an outlet.

To minimize impacts on listed fish by WDFW facilities operation and the Voights Creek winter steelhead program, the following Risk Aversions are included in this HGMP:

## **SECTION 5. FACILITIES**

### **5.1) Broodstock collection facilities (or methods).**

Broodstock are collected in an off-line trap situated alongside Voights Creek. The trap pond is earthen and measures approximately 30' X 250'. The pond doubles as a rearing pond in the spring. Prior to 1996, adults were diverted into the trap pond by a permanent rack in Voights Creek. Since 1996, the rack has been inoperative due to gravel deposition. Returning adults enter the trap pond volitionally at this time.

### **5.2) Fish transportation equipment (description of pen, tank truck, or container used).**

Fish hauls utilize fish tanker trucks of 500 to 2,000 gallon capacity equipped with water pumps and oxygen tanks.

### **5.3) Broodstock holding and spawning facilities.**

Broodstock are held in a large earthen pond. Adults are seined, sorted, killed and spawned at pondside.

### **5.4) Incubation facilities.**

Incubation utilizes 68 vertical Heath Techna vertical incubators with the eyeing capacity of 11 million eggs and the hatching capacity of 5.5 million salmon.

### **5.5) Rearing facilities.**

The facility utilizes 9 "standard" concrete rearing ponds, two 1/4-acre asphalt ponds and one large earthen pond (also used to trap adults).

### **5.6) Acclimation/release facilities.**

There is the potential to release smolts from three different ponds, a 30' X 250' earthen rearing pond or two 1/3-acre oval asphalt ponds.

### **5.7) Describe operational difficulties or disasters that led to significant fish mortality.**

Occasionally, water orifices, which supply individual vertical incubators, will plug with debris causing the loss of complete vertical stacks of eggs or fry.

## Voights Creek Winter Steelhead HGMP

**SECTION 10. RELEASE**

Describe fish release levels, and release practices applied through the hatchery program.

**10.1) Proposed fish release levels.**

| Age Class  | Maximum Number | Size (fpp) | Release Date | Location      |
|------------|----------------|------------|--------------|---------------|
| Eggs       |                |            |              |               |
| Unfed Fry  |                |            |              |               |
| Fry        |                |            |              |               |
| Fingerling |                |            |              |               |
| Yearling   | *200,000       | 5          | May          | Voights Creek |

\*- Beginning in release year 2003, all 20,000 fish destined for planting into the White River from the Puyallup Hatchery will be released from Voights Creek facility. Total release will be 200,000 steelhead.

**10.2) Specific location(s) of proposed release(s).**

**Stream, river, or watercourse:** Puyallup River (10.0021)  
**Release point:** Voights Creek (10.0414; RM 0.5)  
**Major watershed:** Puyallup River (10.0021)  
**Basin or Region:** Puget Sound

**10.3) Actual numbers and sizes of fish released by age class through the program.**

| Release year | Eggs/<br>Unfed Fry | Avg size | Fry | Avg size | Fingerling | Avg size | Yearling | Avg size |
|--------------|--------------------|----------|-----|----------|------------|----------|----------|----------|
| 1995         |                    |          |     |          |            |          | 42,262   | 5        |
| 1996         |                    |          |     |          |            |          | 49,550   | 9        |
| 1997         |                    |          |     |          |            |          | 56,500   | 7        |
| 1998         |                    |          |     |          |            |          | 179,100  | 6        |
| 1999         |                    |          |     |          |            |          | 180,000  | 9        |
| 2000         |                    |          |     |          |            |          | 178,600  | 8        |
| 2001         |                    |          |     |          |            |          | 176,300  | 9        |
| 2002         |                    |          |     |          |            |          | 211,300  | 7        |
| 2003         |                    |          |     |          |            |          | 200,000  | 5        |
| 2004         |                    |          |     |          |            |          | 231,859  | 5        |
| Average      |                    |          |     |          |            |          | 150,547  | 7        |

Data source: Voights Cr. hatchery records



# HATCHERY AND GENETIC MANAGEMENT PLAN (HGMP) DRAFT

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|                           |  |
|---------------------------|--|
| Hatchery Program          | Marblemount Winter Steelhead Program   |
| Species or Hatchery Stock | Winter Steelhead ( <i>Oncorhynchus mykiss</i> )<br>Skagit (Chambers Creek stock) |
| Agency/Operator           | WDFW   |
| Watershed and Region      | Skagit River<br>Puget Sound  |
| Date Submitted            | August 4, 2005   |
| Date Last Updated         | July 14, 2005  |

Marblemount Winter Steelhead HGMP

**SECTION 1. GENERAL PROGRAM DESCRIPTION**

**1.1) Name of hatchery or program.**

Marblemount Winter Steelhead Program

**1.2) Species and population (or stock) under propagation, and ESA status.**

Skagit River Winter Steelhead (*Oncorhynchus mykiss*) - not listed  
(Chambers Creek origin)

**1.3) Responsible organization and individuals**

**Name (and title):** Chuck Phillips, Region 4 Fish Program Manager  
Ted Thygeson, Complex Manager  
**Agency or Tribe:** Washington Department of Fish and Wildlife  
**Address:** 600 Capitol Way North, Olympia, WA 98501-1091  
**Telephone:** (425) 775-1311 Ext 120 (360) 676-2138  
**Fax:** (425) 338-1066 (360) 738-6291

**phillcep@dfw.wa.gov thygetlt@dfw.wa.gov**

**Other agencies, Tribes, co-operators, or organizations involved, including contractors, and extent of involvement in the program:**

**1.4) Funding source, staffing level, and annual hatchery program operational costs.**

| Operational Information   | Number    |
|---|-----------|
| Annual operating cost (dollars)   | \$351,149 |
| The above information for annual operating cost applies cumulatively to the Marblemount Hatchery Fish Programs (including Marblemount Hatchery steelhead) and cannot be broken out specifically by program. Funding sources are General Fund – State, General Fund - Federal & Wildlife State – Local (Seattle City Light). |           |

*Marblemount Winter Steelhead HGMP*

**1.5) Location(s) of hatchery and associated facilities.**

**Marblemount Hatchery:** Located on Clark Creek (04.1421) at RM0.5, which is a tributary to the Cascade River (04.1411). The Cascade River is a tributary to the Skagit River (03.0176) at RM 78.

**Baker River Trap:** Baker River (03.0435) at RM 1.0. Baker River is a tributary to the Skagit River (03.0176) at RM 56.5

**Barnaby Slough:** Skagit River (03.0176) at RM 70.2

**Davis Slough:** Skagit River (03.0176) at RM 40

**Grandy Creek/Fabors Ferry:** Skagit River (03.0176) near Concrete, Washington at RM 68

**1.6) Type of program.**

Isolated harvest

**1.7) Purpose (Goal) of program.**

The goal of the program is release 334,000 steelhead smolts to provide steelhead for sport and tribal harvest opportunities (5,000 adults annually) and to have a self-sustaining hatchery run (400 adults; total for Marblemount and Barnaby Slough).

**1.8) Justification for the program.**

This hatchery program will be operated to provide fish for harvest while minimizing adverse effects on listed fish. This will be accomplished in the following manner:

1. Hatchery fish will be released as smolts at a time to minimize or eliminate adverse interactions with listed fish.
2. Fish will be acclimated before release.
3. Hatchery fish will be propagated using appropriate fish culture methods and consistent with the Co-Managers' Disease Policy, spawning and genetic guidelines and state and federal water quality standards.
4. Juvenile fish produced in excess to production goals will be dealt with appropriately such as by being planted in a lake without an outlet.

To minimize impacts on listed fish by WDFW facilities operation and the Marblemount steelhead program, the following Risk Aversions are included in this HGMP:

## **SECTION 5. FACILITIES**

### **5.1) Broodstock collection facilities (or methods).**

Adult fish return to the Clark Creek trap where they enter through a four-step ladder and a V trap. From there, they are held in 10' X 200' holding section.

### **5.2) Fish transportation equipment (description of pen, tank truck, or container used).**

Standard 900-gallon non-insulated tank mounted on a truck. Compressed oxygen and 12V aerators are included.

### **5.3) Broodstock holding and spawning facilities.**

See section 5.1.

### **5.4) Incubation facilities.**

Eggs are incubated in 4-gallon isolation buckets until eyed and IHNV tests return negative. They are then transferred to vertical incubators.

### **5.5) Rearing facilities.**

Fish are initially reared in 15' X 1' X .5' troughs and then transferred to 100' X 10' X 3' raceways. Fish are also reared in 300' X 30' X 4.5' asphalt channels.

### **5.6) Acclimation/release facilities.**

Approximately 30,000 pre-smolts are acclimated at Davis Slough that is located at approximately RM 40 on the Skagit River. Also, there are 60,000 acclimated at Puget Sound Energies' (PSE) Baker River trap.

### **5.7) Describe operational difficulties or disasters that led to significant fish mortality.**

At the Marblemount Hatchery there have been no major disasters (flooding, operational difficulties) that have led to significant fish mortalities.

### **5.8) Indicate available back-up systems, and risk aversion measures that will be applied, that minimize the likelihood for the take of listed natural fish that may result from equipment failure, water loss, flooding, disease transmission, or other events that could lead to injury or mortality.**

Hatchery crew is on stand-by at all times. All parts of the hatchery facility are equipped with low water alarms. All tools are disinfected between ponds. At acclimation site fish are held only 3-5 days.

*Marblemount Winter Steelhead HGMP***SECTION 10. RELEASE****Describe fish release levels, and release practices applied through the hatchery program.****10.1) Proposed fish release levels.**

| Age Class  | Maximum Number | Size (fpp) | Release Date | Location     |
|------------|----------------|------------|--------------|--------------|
| Eggs       |                |            |              |              |
| Unfed Fry  |                |            |              |              |
| Fry        |                |            |              |              |
| Fingerling |                |            |              |              |
| Yearling   | 334,000        | 5*         | May 1 - 15   | Skagit River |

\* 5 fish per pound (fpp) – 206 mm fl

**10.2) Specific location(s) of proposed release(s).****Stream, river, or watercourse:** Clark Creek

Clark Creek (04.1421) at RM 0.5, tributary to the Cascade River (04.1411). The Cascade is a tributary to the Skagit River (03.0176) at RM 78. Davis Slough (RM 40), Baker River trap (RM 1 of Baker River, enters Skagit River at RM 56.5) and Grandy Creek/Fabors Ferry (RM 68) and Sauk River (RM 79)

Skagit River

Puget Sound

*Marblemount Winter Steelhead HGMP***10.3) Actual numbers and sizes of fish released by age class through the program.**

| Release year | Eggs/<br>Unfed Fry | Avg size | Fry | Avg size | Fingerling | Avg size | Yearling | Avg size |
|--------------|--------------------|----------|-----|----------|------------|----------|----------|----------|
| 1995         |                    |          |     |          |            |          | 72,214   | 6.2      |
| 1996         |                    |          |     |          |            |          | 204,509  | 8        |
| 1997         |                    |          |     |          |            |          | 412,181  | 7        |
| 1998         |                    |          |     |          |            |          | 238,623  | 6.5      |
| 1999         |                    |          |     |          | 3,600      | 38       | 285,300  | 5        |
| 2000         |                    |          |     |          |            |          | 266,680  | 7        |
| 2001         |                    |          |     |          |            |          | 200,010  | 6.6      |
| 2002         |                    |          |     |          |            |          | 230,000  | 6        |
| 2003         |                    |          |     |          |            |          | 328,330  | 7.2      |
| 2004         |                    |          |     |          |            |          | 266,321  | 6.3      |
| Average      |                    |          |     |          |            |          | 250,417  | 6.6      |

**10.4) Actual dates of release and description of release protocols.**

Fish are released between May 1 and May 15.

**10.5) Fish transportation procedures, if applicable.**

Standard 900-gallon non-insulated tank mounted on a truck. Compressed oxygen and 12V aerators are included.

**10.6) Acclimation procedures**

Approximately 30,000 smolts are acclimated at Davis Slough that is located at approximately RM 40 on the Skagit River. Another 60,000 steelhead are acclimated at Puget Sound Energies' Baker River trap.

**10.7) Marks applied, and proportions of the total hatchery population marked, to identify hatchery adults.**

All hatchery steelhead are adipose-fin clipped every year.

# HATCHERY AND GENETIC MANAGEMENT PLAN (HGMP) DRAFT

|                           |   |
|---------------------------|---|
| Hatchery Program          | Reiter Pond Winter Steelhead Program  |
| Species or Hatchery Stock | Skykomish Winter Steelhead ( <i>Oncorhynchus mykiss</i> )<br>(Chambers Creek stock) |
| Agency/Operator           | Washington Department of Fish and Wildlife  |
| Watershed and Region      | Snohomish River<br>Snohomish River  |
| Date Submitted            | August 04, 2005   |
| Date Last Updated         | August 3, 2005  |

**SECTION 1. GENERAL PROGRAM DESCRIPTION**

**1.1) Name of hatchery or program.**

Reiter Pond Winter Steelhead Program

**1.2) Species and population (or stock) under propagation, and ESA status.**

Skykomish River (Chambers Creek stock) Winter Steelhead (*Oncorhynchus mykiss*) - not listed

**1.3) Responsible organization and individuals**

**Name (and title):** Chuck Phillips, Region 4 Fish Program Manager  
 Doug Hatfield, Snohomish Complex Manager  
**Agency or Tribe:** Washington Department of Fish and Wildlife  
**Address:** 600 Capitol Way North, Olympia, WA 98501-1091  
**Telephone:** (425) 775-1311 Ext 120 (360) 793-1382  
**Fax:** (425) 338-1066 (360) 793-9558  
**Email:** phillice@dfw.wa.gov hatfidgh@dfw.wa.gov

**Other agencies, Tribes, co-operators, or organizations involved, including contractors, and extent of involvement in the program:**

**1.4) Funding source, staffing level, and annual hatchery program operational costs.**

| Operational Information  | Number   |
|--|----------|
| Annual operating cost (dollars)  | \$90,903 |
| The above information for annual operating cost applies cumulatively to the Reiter Ponds Fish Programs. Funding source is Wildlife Fund – State. |          |

**1.5) Location(s) of hatchery and associated facilities.**

**Broodstock, Incubation and Early Rearing:**

Tokul Creek Hatchery: Located at RM 0.5 on Tokul Creek (07.0440), which is a tributary to the Snoqualmie River (07.0219) at RM 39. The Snoqualmie River is a tributary to the Snohomish River (07).



*Reiter Pond Winter Steelhead HGMP*

**Rearing:**

Wallace River Hatchery: Located on the Wallace River (07.0490) at RM 4 at its confluence with May Creek (07.0943)

**Rearing & Release:**

Reiter Ponds: Located on the Skykomish River (07.0012) at RM 46. The Skykomish River is a tributary to the Snohomish River (07)

**1.6) Type of program.**

Isolated harvest

**1.7) Purpose (Goal) of program.**

The goal of this program is release 250,000-winter steelhead to provide for sport and tribal harvest opportunity in the Snohomish River basin (WRIA 07.0000).

**1.8) Justification for the program.**

This hatchery program will be operated to provide fish for harvest while minimizing adverse effects on listed fish. This will be accomplished in the following manner:

1. Hatchery fish will be released as smolts at a time to minimize or eliminate adverse interactions with listed fish.
2. Fish will be acclimated before release.
3. Hatchery fish will be propagated using appropriate fish culture methods and consistent with the Co-Managers' Disease Policy, spawning and genetic guidelines and state and federal water quality standards.
4. Juvenile fish produced in excess to production goals will be dealt with appropriately, such as by being planted in a lake with no outlet to provide recreational opportunity.

To minimize impacts on listed fish by WDFW facilities operation and the Reiter Ponds winter steelhead program, the following Risk Aversions are included in this HGMP:

## **SECTION 5. FACILITIES**

### **5.1) Broodstock collection facilities (or methods).**

See Tokul Creek winter steelhead HGMP. Intent is to spawn/take eggs at the Tokul Creek facility.

### **5.2) Fish transportation equipment (description of pen, tank truck, or container used).**

No broodstock are transported between stations. Fish are hauled in 400-gallon tanker trucks equipped with oxygen tanks, air stones and re-circulating pumps.

### **5.3) Broodstock holding and spawning facilities.**

See Tokul Creek winter steelhead HGMP.

### **5.4) Incubation facilities.**

Initial incubation takes place at Tokul Creek Hatchery in shallow troughs supplied by spring water. The Hatchery Scientific Review Group (HSRG) has recommended expanding the facility at Reiter to provide for incubation. Scoping plans are underway, but will need funding.

### **5.5) Rearing facilities.**

Initial rearing takes place at Tokul Creek Hatchery in shallow troughs supplied by spring water. Once fish reach 500 fish per pound (fpp) the fish are transferred outside into rearing ponds (80' X 20' X 3'). These ponds receive their water supply from Tokul Creek. The fish remain in these ponds until they reach a size of 100 fpp. They are then transferred to Wallace River Hatchery where they are placed in standard size raceways for additional rearing. This typically takes place in July. Once the fish reach a size of 70 fpp, 250,000 - 270,000 fish are transferred to Reiter Ponds and placed in a large (1400' X 90' X 8') earthen pond for final rearing. The fish are released from these ponds in May of the year at 6 fpp.

The Hatchery Scientific Review Group (HSRG) has recommended expanding the facility at Reiter to provide for early rearing of winter steelhead so that the need for rearing at the Wallace River Hatchery is eliminated. Scoping plans are underway, but will need funding.

### **5.6) Acclimation/release facilities.**

When the fish reach a size of 70 fpp in July (at Wallace River Hatchery) they are transferred to Reiter Ponds and placed in a large (1400' X 90' X 8') earthen pond for final rearing. The fish are released from these ponds in May of the following year at 6 fpp.

Reiter Pond Winter Steelhead HGMP

**SECTION 10. RELEASE****Describe fish release levels, and release practices applied through the hatchery program.****10.1) Proposed fish release levels.** *(Use standardized life stage definitions by species presented in Attachment 2. "Location" is watershed planted (e.g. "Elwha River").)*

| Age Class  | Maximum Number | Size (fpp) | Release Date | Location               |
|------------|----------------|------------|--------------|------------------------|
| Eggs       |                |            |              |                        |
| Unfed Fry  |                |            |              |                        |
| Fry        |                |            |              |                        |
| Fingerling |                |            |              |                        |
| Yearling   | 250,000        | 6          | May          | Snohomish R. watershed |

**10.2) Specific location(s) of proposed release(s).**

**Stream, river, or watercourse:** Snohomish River (07) and the Skykomish River  
**Release point:** Reiter Ponds (RM 46, Skykomish R. (07.0012)), multiple acclimation/planting sites (see below), Pilchuck River (tributary to the Snohomish R.) and the Snoqualmie River.  
**Major watershed:** Snohomish River  
**Basin or Region:** Puget Sound

Skykomish River plants at: Reiter Ponds 165,000  
Index (NF Skykomish) 15,000  
Sultan R. (07.0881) 30,000  
Monroe 15,000

Snohomish River plants at: Pilchuck R. (07.0125) 25,000  
(tributary to the Snohomish R)

*Reiter Pond Winter Steelhead HGMP***10.3) Actual numbers and sizes of fish released by age class through the program.**

| Release year | Eggs/Unfed Fry | Avg size | Fry | Avg size | Fingerling | Avg size | Yearling | Avg size |
|--------------|----------------|----------|-----|----------|------------|----------|----------|----------|
| 1995         |                |          |     |          |            |          | 190,900  | 6        |
| 1996         |                |          |     |          |            |          | 250,300  | 6        |
| 1997         |                |          |     |          |            |          | 69,200   | 6        |
| 1998         |                |          |     |          |            |          | 238,800  | 6        |
| 1999         |                |          |     |          |            |          | 234,986  | 5        |
| 2000         |                |          |     |          |            |          | 199,521  | 5        |
| 2001         |                |          |     |          |            |          | 184,700  | 6        |
| 2002         |                |          |     |          |            |          | 202,538  | 6        |
| 2003         |                |          |     |          |            |          | 215,034  | 5        |
| 2004         |                |          |     |          |            |          | 236,149  | 7.3      |
| Average      |                |          |     |          |            |          | 202,213  | 6        |

Note: Of the numbers above, approximately 165,000 are released on-station (Reiter Ponds) with the remainder being acclimated/planted at sites in the Snohomish River system.

**10.4) Actual dates of release and description of release protocols.**

Fish are released on-station between May 1 and May 15. The release protocol is forced.

**10.5) Fish transportation procedures, if applicable.**

Fish are transported to release sites in tankers equipped with oxygen and recirculation systems.

**10.6) Acclimation procedures.**

Reared on station from July to the following May when released.

**10.7) Marks applied, and proportions of the total hatchery population marked, to identify hatchery adults.**

All hatchery steelhead are adipose-fin clipped.

# HATCHERY AND GENETIC MANAGEMENT PLAN (HGMP) DRAFT

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|                           |   |
|---------------------------|---|
| Hatchery Program          | Tokul Creek Winter Steelhead Program  |
| Species or Hatchery Stock | Tokul Creek Winter Steelhead ( <i>Oncorhynchus mykiss</i> )<br>(Chambers Creek stock) |
| Agency/Operator           | Washington Department of Fish and Wildlife  |
| Watershed and Region      | Snohomish River, Puget Sound  |
| Date Submitted            | August 04, 2005   |
| Date Last Updated         | July 25, 2005   |

**SECTION 1. GENERAL PROGRAM DESCRIPTION****1.1) Name of hatchery or program.**

Tokul Creek Winter Steelhead Program

**1.2) Species and population (or stock) under propagation, and ESA status.**Tokul Creek (Chambers Creek stock) Winter Steelhead (*Oncorhynchus mykiss*) - not listed**1.3) Responsible organization and individuals**

**Name (and title):** Chuck Phillips, Region 4 Fish Program Manager  
 Doug Hatfield, Cascade Complex Manager

**Agency or Tribe:** Washington Department of Fish and Wildlife

**Address:** 600 Capitol Way North, Olympia, WA 98501-1091

**Telephone:** (425) 775-1311 Ext 120 (360) 793-1382

**Fax:** (425) 338-1066 (360) 793-9558

**Email:** phillice@dfw.wa.gov hatfidgh@dfw.wa.gov

**Other agencies, Tribes, co-operators, or organizations involved, including contractors, and extent of involvement in the program:**

**1.4) Funding source, staffing level, and annual hatchery program operational costs.**

| Operational Information  | Number    |
|--|-----------|
| Annual operating cost (dollars)  | \$180,032 |
| The above information for annual operating cost applies cumulatively to the Tokul Creek Hatchery Fish Programs. Funding source is Wildlife Fund – State. |           |

**1.5) Location(s) of hatchery and associated facilities.****Broodstock, Incubation, Rearing & Release:**

Tokul Creek Hatchery: Located on Tokul Creek (07.0440) at RM 0.5. Tokul Creek is a tributary of the Snoqualmie River (07.0219) at RM 39. The Snoqualmie River is a tributary to the Snohomish River (07) at RM 20.5.

**1.6) Type of program.**

Isolated harvest

*Tokul Creek Winter Steelhead HGMP*

**1.7) Purpose (Goal) of program.**

The goal of this program is release 185,000-winter steelhead to provide for sport and tribal harvest opportunity in the Snohomish River basin (WRIA 07.0000).

**1.8) Justification for the program.**

This hatchery program will be operated to provide fish for harvest while minimizing adverse effects on listed fish. This will be accomplished in the following manner:

1. Hatchery fish will be released as smolts at a time to minimize or eliminate adverse interactions with listed fish.
2. Fish will be acclimated before release when possible.
3. Hatchery fish will be propagated using appropriate fish culture methods and consistent with the Co-Managers' Disease Policy, spawning and genetic guidelines and state and federal water quality standards.
4. Juvenile fish produced in excess to production goals will be dealt with appropriately, such as by being planted in a lake with no outlet.

To minimize impacts on listed fish by WDFW facilities operation and the Tokul Creek winter steelhead program, the following Risk Aversions are included in this HGMP:

## **SECTION 5. FACILITIES**

### **5.1) Broodstock collection facilities (or methods).**

Tokul Creek Hatchery has a concrete adult capture pond and fish ladder. The pond is supplied by water from Tokul Creek and once the water passes through the adult pond it is returned to the creek. The pond is approximately 100' X 10' X 3' and is divisible into numerous sections. The pond is operated from November 25th to February 10th.

### **5.2) Fish transportation equipment (description of pen, tank truck, or container used).**

No broodstock are transported on-station or between stations.

### **5.3) Broodstock holding and spawning facilities.**

Tokul Creek Hatchery has a concrete adult capture pond and fish ladder. The pond is supplied by water from Tokul Creek and once the water passes through the adult pond it is returned to the creek. The pond is approximately 100' X 10' X 3' and is divisible into numerous sections. The pond is operated from November 25th to February 10th.

### **5.4) Incubation facilities.**

96 shallow trough (1' x 15' x .5') incubators fed by pathogen free spring water at 8.9 degrees Centigrade (~49 degrees Fahrenheit).

### **5.5) Rearing facilities.**

Fish are hatched and initially reared in shallow troughs until they reach 500 fish per pound (fpp). They are then transferred to six 10' X 80' raceways where they continue to rear until they reach a size of 50 fpp. They are then transferred to a large semi-natural rearing pond in October and released from this pond in May of the following year at 6 fpp.

### **5.6) Acclimation/release facilities.**

They are transferred to a large semi-natural rearing pond in October and released from this pond in May of the following year at 6 fpp.

### **5.7) Describe operational difficulties or disasters that led to significant fish mortality.**

Virus problems have led to egg/fish mortality.



Tokul Creek Winter Steelhead HGMP

**SECTION 10. RELEASE****Describe fish release levels, and release practices applied through the hatchery program.****10.1) Proposed fish release levels.** *(Use standardized life stage definitions by species presented in Attachment 2. "Location" is watershed planted (e.g. "Elwha River").)*

| Age Class  | Maximum Number | Size (fpp) | Release Date | Location                |
|------------|----------------|------------|--------------|-------------------------|
| Eggs       |                |            |              |                         |
| Unfed Fry  |                |            |              |                         |
| Fry        |                |            |              |                         |
| Fingerling |                |            |              |                         |
| Yearling   | 185,000        | 6          | May          | Snoqualmie R. Watershed |

**10.2) Specific location(s) of proposed release(s).**

**Stream, river, or watercourse:** Snoqualmie River (07.0219)  
**Release point:** Tokul Creek Hatchery @ RM 0.5 (07.0440), multiple acclimation/planting sites in Snoqualmie River watershed (Duvall, mouth and upriver of Tolt and the Raging rivers).  
**Major watershed:** Snohomish River (07)  
**Basin or Region:** Puget Sound

## Tokul Creek Winter Steelhead HGMP

**10.3) Actual numbers and sizes of fish released by age class through the program.**

| Release year   | Eggs/Unfed Fry | Avg size | Fry | Avg size | Fingerling | Avg size | Yearling | Avg size |
|----------------|----------------|----------|-----|----------|------------|----------|----------|----------|
| 1995           |                |          |     |          |            |          | 74,000   | 6        |
| 1996           |                |          |     |          |            |          | 179,000  | 6        |
| 1997           |                |          |     |          |            |          | 137,000  | 6        |
| 1998           |                |          |     |          |            |          | 230,000  | 6        |
| 1999           |                |          |     |          |            |          | 186,700  | 6        |
| 2000           |                |          |     |          |            |          | 176,647  | 6        |
| 2001           |                |          |     |          |            |          | 198,171  | 6        |
| 2002           |                |          |     |          |            |          | 195,506  | 5.5      |
| 2003           |                |          |     |          |            |          | 193,474  | 5        |
| 2004           |                |          |     |          |            |          | 183,143  | 5        |
| <b>Average</b> |                |          |     |          |            |          | 175,364  | 5.8      |

Data source: Tokul Cr. hatchery records

Note: Of the numbers above, approximately 100,000 are releases on-station (Tokul Creek) with the remainder being acclimated/planted at sites in the Snoqualmie River system.

**10.4) Actual dates of release and description of release protocols.**

Fish releases are made the first week of May. The release protocol is forced. The pond is drawn down and fish are weighed out for release. Fish to be planted at off-station sites are loaded into tankers for transport to the release sites. Fish to be released on-site are weighed into the creek.

**10.5) Fish transportation procedures, if applicable.**

Fish are weighed into tanker trucks equipped with oxygen and recirculation tanks.

**10.6) Acclimation procedures (methods applied and length of time).**

Incubated and reared on the same water source (river) prior to release.

**10.7) Marks applied, and proportions of the total hatchery population marked, to identify hatchery adults.**

All hatchery steelhead are adipose-fin clipped.

# HATCHERY AND GENETIC MANAGEMENT PLAN (HGMP) DRAFT

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|                           |   |
|---------------------------|---|
| Hatchery Program          | Wallace River Winter Steelhead Program  |
| Species or Hatchery Stock | Skykomish Winter Steelhead ( <i>Oncorhynchus mykiss</i> )<br>(Chambers Creek stock) |
| Agency/Operator           | Washington Department of Fish and Wildlife  |
| Watershed and Region      | Snohomish River, Puget Sound  |
| Date Submitted            | August 04, 2005   |
| Date Last Updated         | August 3, 2005  |

**SECTION 1. GENERAL PROGRAM DESCRIPTION****1.1) Name of hatchery or program.**

Wallace River Winter Steelhead Program

**1.2) Species and population (or stock) under propagation, and ESA status.**Skykomish River (Chambers Creek stock) Winter Steelhead (*Oncorhynchus mykiss*) - not listed**1.3) Responsible organization and individuals**

**Name (and title):** Chuck Phillips, Region 4 Fish Program Manager  
Doug Hatfield, Snohomish Complex Manager

**Agency or Tribe:** Washington Department of Fish and Wildlife

**Address:** 600 Capitol Way North, Olympia, WA 98501-1091

**Telephone:** (425) 775-1311 Ext 120 (360) 793-1382

**Fax:** (425) 338-1066 (360) 793-9558

**Email:** [phillcep@dfw.wa.gov](mailto:phillcep@dfw.wa.gov) [hatfidgh@dfw.wa.gov](mailto:hatfidgh@dfw.wa.gov)

**Other agencies, Tribes, co-operators, or organizations involved, including contractors, and extent of involvement in the program:**

**1.4) Funding source, staffing level, and annual hatchery program operational costs.**

| Operational Information   | Number     |
|---|------------|
| Annual operating cost (dollars)   | \$ 397,492 |
| The above information for annual operating cost applies cumulatively to the Wallace River Hatchery Fish Programs and cannot be broken out specifically by program. Funding sources are General Fund – State, General Fund – Federal, Wildlife Fund – Local and Puget Sound Recreational Enhancement Fund. |            |

**1.5) Location(s) of hatchery and associated facilities.****Rearing & Release:**

Wallace River Hatchery: Located on the Wallace River (07.0940) at RM 4 from the confluence with the Skykomish River (07.0012). It is a tributary of the Skykomish River at RM 36.

**Broodstock, Incubation & early Rearing**

Tokul Creek Located on Tokul Creek (07.0440) at RM 0.5. Tokul Creek is a tributary of the Snoqualmie River (07.0219) at RM 39. The Snoqualmie River is a tributary to the Snohomish River (07) at RM 20.5.

*Wallace River Winter Steelhead HGMP*

**1.6) Type of program.**

Isolated harvest

**1.7) Purpose (Goal) of program.**

The goal of this program is release 20,000-winter steelhead to provide for sport and tribal harvest opportunity in the Snohomish River basin (WRIA 07.0000).

**1.8) Justification for the program.**

This hatchery program will be operated to provide fish for harvest while minimizing adverse effects on listed fish. This will be accomplished in the following manner:

1. Hatchery fish will be released as smolts at a time to minimize or eliminate residualization and decrease any potential impacts to listed fish.
2. Fish will be acclimated before release.
3. Hatchery fish will be propagated using appropriate fish culture methods and consistent with the Co-Managers' Disease Policy, spawning and genetic guidelines and state and federal water quality standards.
4. Juvenile fish produced in excess to production goals will be dealt with appropriately, such as being planted in lakes with no outlet.

To minimize impacts on listed fish by WDFW facilities operation and the Wallace River winter steelhead program, the following Risk Aversions are included in this HGMP:

## **SECTION 5. FACILITIES**

### **5.1) Broodstock collection facilities (or methods).**

See Tokul Creek winter steelhead HGMP.

### **5.2) Fish transportation equipment (description of pen, tank truck, or container used).**

No broodstock are transported between stations. Fish are hauled in 400-gallon tanker trucks equipped with oxygen tanks, air stones and re-circulating pumps.

### **5.3) Broodstock holding and spawning facilities.**

See Tokul Creek winter steelhead HGMP.

### **5.4) Incubation facilities.**

Initial incubation takes place at Tokul Creek Hatchery in shallow troughs supplied by spring water.

### **5.5) Rearing facilities.**

Fish are initially reared at Tokul Creek Hatchery. At 100 fish per pound (fpp), 300,000 are transferred to Wallace River Hatchery where they are placed in standard size raceways for additional rearing. This typically takes place in July.

The Hatchery Scientific Review Group (HSRG) has recommended expanding the facility at Reiter to provide for early rearing of winter steelhead so the need for initial rearing of 300,000 at the Wallace River Hatchery is eliminated. Scoping plans are underway, but will need a major amount of funding to accomplish.

### **5.6) Acclimation/release facilities.**

Once the fish reach a size of 70 fpp all, but 20,000 are transferred to Reiter Ponds. The 20,000 remaining at Wallace are released during the following May at 6 fpp.

### **5.7) Describe operational difficulties or disasters that led to significant fish mortality.**

Because surface water is the source for the hatchery the threats from diseases and parasites present the most significant threat to fish health. Additionally, electrical power is required to supply water to the ponds; therefore, the loss of power also presents a constant threat.

Wallace River Winter Steelhead HGMP

**SECTION 10. RELEASE****Describe fish release levels, and release practices applied through the hatchery program.**

**10.1) Proposed fish release levels.** (Use standardized life stage definitions by species presented in *Attachment 2*. "Location" is watershed planted (e.g. "Elwha River").)

| Age Class  | Maximum Number | Size (fpp) | Release Date | Location      |
|------------|----------------|------------|--------------|---------------|
| Eggs       |                |            |              |               |
| Unfed Fry  |                |            |              |               |
| Fry        |                |            |              |               |
| Fingerling |                |            |              |               |
| Yearling   | 20,000         | 6          | May          | Wallace River |

**10.2) Specific location(s) of proposed release(s).**

**Stream, river, or watercourse:** Wallace River (07.0940)  
**Release point:** Wallace River Hatchery (RM 4)  
**Major watershed:** Snohomish River  
**Basin or Region:** Puget Sound

**10.3) Actual numbers and sizes of fish released by age class through the program.**

| Release year | Eggs/<br>Unfed Fry | Avg size | Fry | Avg size | Fingerling | Avg size | Yearling | Avg size |
|--------------|--------------------|----------|-----|----------|------------|----------|----------|----------|
| 1999         |                    |          |     |          |            |          | 14,760   | 7        |
| 2000         |                    |          |     |          |            |          | 15,800   | 7        |
| 2001         |                    |          |     |          |            |          | 20,000   | 7        |
| 2002         |                    |          |     |          |            |          | 20,000   | 8        |
| 2003         |                    |          |     |          |            |          | 19,700   | 7        |
| 2004         |                    |          |     |          |            |          | 18,500   | 7.5      |
| Average      |                    |          |     |          |            |          | 15,793   | 7.3      |

Data source: WDFW hatchery release records

**10.4) Actual dates of release and description of release protocols.**

Fish are released from mid to the end of May and are forced from the ponds.

# HATCHERY AND GENETIC MANAGEMENT PLAN (HGMP) DRAFT

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|                           |   |
|---------------------------|---|
| Hatchery Program          | Whitehorse Pond Winter Steelhead Program  |
| Species or Hatchery Stock | Stillaguamish River Winter Steelhead<br>( <i>Oncorhynchus mykiss</i> ) Chambers Creek stock |
| Agency/Operator           | Washington Department of Fish and Wildlife  |
| Watershed and Region      | Stillaguamish River<br>Puget Sound  |
| Date Submitted            | August 4, 2005  |
| Date Last Updated         | August 3, 2005  |



**SECTION 1. GENERAL PROGRAM DESCRIPTION****1.1) Name of hatchery or program.**

Whitehorse Pond Winter Steelhead Program

**1.2) Species and population (or stock) under propagation, and ESA status.**Stillaguamish River (Chambers Creek stock) Winter Steelhead (*Oncorhynchus mykiss*) - not listed**1.3) Responsible organization and individuals**

**Name (and title):** Chuck Phillips, Region 4 Fish Program Manager  
Doug Hatfield, Complex Manager

**Agency or Tribe:** Washington Department of Fish and Wildlife

**Address:** 600 Capitol Way North, Olympia, WA. 98501-1091

**Telephone:** (425) 775-1311 Ext 120 (360) 793-1382

**Fax:** (425) 338-1066 (360) 793-9558

**Email:** phillice@dfw.wa.gov hatfidgh@dfw.wa.gov

**Other agencies, Tribes, co-operators, or organizations involved, including contractors, and extent of involvement in the program:**

**1.4) Funding source, staffing level, and annual hatchery program operational costs.**

| Operational Information   | Number   |
|---|----------|
| Annual operating cost (dollars)   | \$91,891 |
| The above information for annual operating cost applies cumulatively to the Whitehorse Ponds Fish Programs and cannot be broken out specifically by program. Funding source is Wildlife Fund – State. |          |

**1.5) Location(s) of hatchery and associated facilities.****Broodstock, Incubation, Rearing and Release:**

Whitehorse Pond: Located 1.5 miles upstream of the mouth of Whitehorse Springs Creek (WRIA 05.0254A). The creek is a tributary to the NF Stillaguamish River (05.0135) at RM 28 from its confluence with the mainstem Stillaguamish River (05.0001).

**1.6) Type of program.**

Isolated harvest

*Whitehorse Pond Winter Steelhead HGMP***1.7) Purpose (Goal) of program.**

The goal of this program is release 150,000 winter steelhead smolts to provide sport and tribal harvest opportunity.

**1.8) Justification for the program.**

This hatchery program will be operated to provide fish for harvest while minimizing adverse effects on listed fish. This will be accomplished in the following manner:

1. Hatchery fish will be released as smolts at a time to minimize or eliminate adverse interactions with listed fish.
2. Fish will be acclimated before release when possible.
3. Hatchery fish will be propagated using appropriate fish culture methods and consistent with the Co-Managers' Disease Policy, spawning and genetic guidelines and state and federal water quality standards.
4. Juvenile fish produced in excess to production goals will be dealt with appropriately such as by being planted in lakes with no outlets.

To minimize impacts on listed fish by WDFW facilities operation and the Whitehorse Rearing Pond winter steelhead program, the following Risk Aversions are included in this HGMP:

**Table 1.** Summary of risk aversion measures for the Whitehorse Rearing Pond winter steelhead program.

| <b>Potential Hazard</b>               | <b>HGMP Reference</b> | <b>Risk Aversion Measures</b>  |
|---------------------------------------|-----------------------|--|
| Water Withdrawal                      | 4.2                   | Water for Whitehorse Ponds is obtained from through water right permit # S1-00825 and routed back to the Stillaguamish River. No listed species are present in any of the water sources.   |
| Intake Screening                      | 4.2                   | No listed species of salmonids are present in the water source.  |
| Effluent Discharge                    | 4.2                   | Effluent from the Whitehorse Pond is regulated through NPDES permit # WAG 13-3008.   |
| Broodstock Collection & Adult Passage | 7.9                   | Winter steelhead voluntarily enter an off-channel pond in a time period (December through March) when summer chinook are not present.  |
| Disease Transmission                  | 9.2.7                 | The program is operated consistent with the Co-Manager's Fish Health Policy.   |
| Competition & Predation               | 2.2.3, 10.11          | Fish are released at a time, size, and life-history stage (smolts) to foster rapid migration to marine waters. Smolts are released in May to allow chinook salmon to grow to a size that reduces the potential for predation. Studies are/will be conducted in riverine, estuarine, and nearshore areas to evaluate the ecological risks posed by the release of steelhead smolts. |

**1.9) List of program "Performance Standards".**

See below

## **SECTION 5. FACILITIES**

### **5.1) Broodstock collection facilities (or methods).**

Returning volunteers are trapped in an off-channel (off the Stillaguamish River) trap that is situated in the hatchery outlet channel.

### **5.2) Fish transportation equipment (description of pen, tank truck, or container used).**

Standard 900-gallon non-insulated tank mounted on a truck. Compressed oxygen and 12V aerators are included.

### **5.3) Broodstock holding and spawning facilities.**

Fish are held in two 10' X 50' X 2.5' raceways.

### **5.4) Incubation facilities.**

Eggs are incubated in 4-gallon isolation buckets until eyed.

### **5.5) Rearing facilities.**

Fish are reared in a 1.75-acre dirt bottom semi-natural rearing pond at Whitehorse.

### **5.6) Acclimation/release facilities.**

Fish are reared in a 1.75-acre dirt bottom semi-natural rearing pond at Whitehorse.

### **5.7) Describe operational difficulties or disasters that led to significant fish mortality.**

### **5.8) Indicate available back-up systems, and risk aversion measures that will be applied, that minimize the likelihood for the take of listed natural fish that may result from equipment failure, water loss, flooding, disease transmission, or other events that could lead to injury or mortality.**

Listed Stillaguamish chinook are reared at the facility but there is no natural production in the hatchery creek. Whitehorse Hatchery is supplied by a gravity fed spring water supply from Whitehorse Spring. Alarm systems are in place in case of water loss. Flooding has not been an issue since the spring water source is very stable.

Whitehorse Pond Winter Steelhead HGMP

**SECTION 10. RELEASE****Describe fish release levels, and release practices applied through the hatchery program.****10.1) Proposed fish release levels.** *(Use standardized life stage definitions by species presented in Attachment 2. "Location" is watershed planted (e.g. "Elwha River").)*

| Age Class  | Maximum Number | Size (fpp) | Release Date | Location         |
|------------|----------------|------------|--------------|------------------|
| Eggs       |                |            |              |                  |
| Unfed Fry  |                |            |              |                  |
| Fry        |                |            |              |                  |
| Fingerling |                |            |              |                  |
| Yearling   | 130,000        | 6          | May          | Whitehorse Pond* |
|            | 10,000         | 6          | May          | Pilchuck Creek*  |
|            | 10,000         | 6          | May          | Canyon Cr.*      |

\*Implementation with 2004 releases.

**10.2) Specific location(s) of proposed release(s).**

**Stream, river, or watercourse:** Stillaguamish River (05)

**Release point:** Whitehorse Spring Creek (05.0254A) RM 1.5 to confluence with N.F. Stillaguamish which is at RM 28 from confluence to mainstem Stillaguamish River. Pilchuck Creek (05.0062) at RM 11, Canyon Creek (05.0359) at RM 34.

**Major watershed:** Stillaguamish River (05.)

**Basin or Region:** Puget Sound

## Whitehorse Pond Winter Steelhead HGMP

**10.3) Actual numbers and sizes of fish released by age class through the program.**

| Release year   | Eggs/<br>Unfed Fry | Avg size | Fry | Avg size | Fingerling | Avg size | Yearling | Avg size |
|----------------|--------------------|----------|-----|----------|------------|----------|----------|----------|
| 1995           |                    |          |     |          |            |          | 178,325  | 6        |
| 1996           |                    |          |     |          |            |          | 169,705  | 5        |
| 1997           |                    |          |     |          |            |          | 121,862  | 6        |
| 1998           |                    |          |     |          |            |          | 157,953  | 5        |
| 1999           |                    |          |     |          |            |          | 140,418  | 6        |
| 2000           |                    |          |     |          |            |          | 129,827  | 5        |
| 2001           |                    |          |     |          |            |          | 150,131  | 6        |
| 2002           |                    |          |     |          |            |          | 160,393  | 6        |
| 2003           |                    |          |     |          |            |          | 173,960  | 6        |
| 2004           |                    |          |     |          |            |          | 155,025  | 5        |
| <b>Average</b> |                    |          |     |          |            |          | 153,760  | 6        |

Data source: Whitehorse pond hatchery records.

**10.4) Actual dates of release and description of release protocols.**

Most fish are released between May 1st and May 15th.

**10.5) Fish transportation procedures, if applicable.**

NA

**10.6) Acclimation procedures (methods applied and length of time).**

Reared at Whitehorse Ponds throughout the rearing period on spring water.

**10.7) Marks applied, and proportions of the total hatchery population marked, to identify hatchery adults.**

All hatchery steelhead are adipose-fin clipped.

**10.8) Disposition plans for fish identified at the time of release as surplus to programmed or approved levels.**

Programmed levels will be controlled by limiting the number of broodstock collected. Fish are enumerated at time of fin clipping.