

WASHINGTON DEPARTMENT OF FISH AND WILDLIFE

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Subj: February Hatchery and Natural Production Report

Date: 10 March 2017

Cc: Distribution list.

HATCHERY ACTIVITIES

At Methow Hatchery, all 2015 brood fish were held on a mix of 95% surface and 5% well water, and all 2016 brood fish were held on 100% well water during the month. At Wells Hatchery, the 2015 brood yearling Chinook and rainbow trout were held on a mix of well and surface water containing 90% and 98% surface water, respectively, and all 2016 brood fish were held on 100% well water during the month.

2015 Twisp Spring Chinook Salmon

A total of 40,360 fish were on-station at the end of the month with three additional fish reported as mortalities. These fish had a mean fork length of 128 mm during the month and were at approximately 22 fish per pound (FPP). The number of fish on-station that apply to HCP mitigation obligations are listed in Appendix A.

2015 Methow Composite Spring Chinook Salmon

A total of 202,235 fish were on-station at the end of the month with 33 additional fish reported as mortalities. These fish had a mean fork length of 128 mm during the month and were at approximately 22 FPP. Hatchery staff reported excessive avian activity in Pond 13—the outdoor pond at Methow Hatchery—likely related to the cold winter and Pond 13 offering some of the only open water in the area. Staff have been attempting to haze birds during the day, and the Douglas PUD hazing contractor began hazing birds through the night. The number of fish on-station that apply to HCP mitigation obligations are listed in Appendix A.

2016 Twisp Spring Chinook Salmon

A total of 30,900 fish were on-station at the end of the month with 109 additional fish reported as mortalities. The number of fish on-station that apply to HCP mitigation obligations are listed in Appendix A.

2016 Methow Composite Spring Chinook Salmon

A total of 222,735 fish were on-station at the end of the month with 196 additional fish reported as mortalities. Approximately 67,000 and 29,000 of the WxW MetComp fry on-station are destined for the Chewuch (61,000 release target) and Goat Wall (25,000 release target) acclimation ponds, respectively. The number of fish on-station that apply to HCP mitigation obligations are listed in Appendix A.

2015 Wells Summer Chinook Salmon

Wells Hatchery had 335,239 summer Chinook Salmon progeny for the yearling program on-station at the end of the month and an additional 878 fish were reported as mortalities during February. This population had a mean fork length of 162 mm and was at approximately 12 FPP. These fish are being reared to fulfill HCP mitigation obligations (Appendix A).

2016 Wells Summer Chinook Salmon

Wells Hatchery had an estimated 444,000 fry on-station for the subyearling program and 372,107 eggs on-station for the yearling program. An additional 69,238 subyearling program progeny were listed as mortalities during the month of February. These progeny are being reared to fulfill HCP mitigation obligations (Appendix A).

2016 Summer Steelhead

Wells Hatchery had a total of 440,285 steelhead parr on-station at the end of the month including an estimated 33,461 Omak WxW progeny, 56,754 Twisp progeny, and 350,070 progeny for Okanogan, Columbia, and Methow River releases. Monthly mortality included 669 fish from the Omak WxW group, and 107 fish from the Okanogan HxH release group. Steelhead progeny are being reared to fulfill HCP mitigation obligations (Appendix A).

2017 Summer Steelhead

Trapping of 2017 brood summer steelhead began in August and finished during November 2016 with a total of 386 adults trapped from the Wells Dam fish ladders or the Wells Hatchery volunteer channel. A total of 163 of the hatchery-origin fish trapped were retained for broodstock and pre-spawn mortality has totaled five fish by the end of February (3%). Spawning of the broodstock began on 4 January 2017, and a total of 83 fish were spawned by the end of February.

2015 Spokane Rainbow

Wells Hatchery had 33,652 rainbow trout on-station at the end of the month after subtracting 89 mortalities. About 2,500 of these fish are larger sized fish at about 1.7 FPP, with the remaining fish at about 4 FPP. These fish are reared to fulfill the Off-License Settlement Agreement (Appendix B).

2016 Spokane Rainbow

Wells Hatchery had 62,418 fry from the 2016 brood on-station at the end of the month after subtracting 5,875 mortalities. These fish are reared to fulfill the Off-License Settlement Agreement (Appendix B).

2016 White Sturgeon

Wells Hatchery had 6,690 sturgeon progeny on-station at the end of the month after accounting for a negative population adjustment of 385 fish. An additional 48 fish were reported as mortalities during February. White sturgeon progeny are reared at Wells Hatchery under the Aquatic Settlement Agreement (Appendix C).

NATURAL PRODUCTION ACTIVITIES

PIT Tag Antenna Arrays

Data collected at all Methow basin PIT tag interrogation sites operated under this program, including Twisp (TWR), lower Methow (LMR), Lost River (LOR), Early Winters Creek (EWC), Gold Creek (GLC), Libby Creek (LBC), and Wolf Creek (WFC) are uploaded to the PTAGIS database regularly, and can be viewed at the following website: <http://www.ptagis.org/data/quick-reports/small-scale-site-detections>

Appendix A. Number of fish reared at Wells and Methow hatcheries to meet Douglas County PUD Habitat Conservation Plan mitigation objectives and other hatchery rearing agreements. Values are derived by applying fixed mitigation levels to the entire population on-station, and do not necessarily reflect separate rearing or release strategies.

Brood year	Species	Life stage	Program	Target release No.	Month												Total released /transfer	
					Mar '16	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan '17	Feb		
2014	Spring Chinook	Yearling smolt	CCPUD NNI	60,516 <i>released</i>	71,821	--	--	--	--	--	--	--	--	--	--	--	--	71,812
2014	Spring Chinook	Yearling smolt	GCPUD Priest Rapids NNI	134,126 <i>released</i>	159,183	--	--	--	--	--	--	--	--	--	--	--	--	159,161
2014	Spring Chinook	Yearling smolt	DCPUD Wells NNI	29,123 <i>released</i>	34,564	--	--	--	--	--	--	--	--	--	--	--	--	34,559
2015	Spring Chinook	Yearling smolt	CCPUD NNI	60,516 <i>released</i>	65,270	65,259	65,211	65,701	65,697	65,695	65,692	65,691	65,666	65,638	65,618	65,608	--	--
2015	Spring Chinook	Yearling smolt	GCPUD Priest Rapids NNI	134,126 <i>released</i>	144,664	144,638	144,531	145,618	145,610	145,604	145,600	145,595	145,541	145,478	145,435	145,413	--	--
2015	Spring Chinook	Yearling smolt	DCPUD Wells NNI	29,123 <i>released</i>	31,411	31,405	31,382	31,618	31,616	31,615	31,614	31,613	31,602	31,588	31,578	31,574	--	--
2016	Spring Chinook	Yearling smolt	CCPUD NNI	60,516 <i>released</i>	--	--	--	--	--	--	--	68,677	68,677	68,677	68,677	68,594	--	--
2016	Spring Chinook	Yearling smolt	GCPUD Priest Rapids NNI	134,126 <i>released</i>	--	--	--	--	--	--	--	152,213	152,213	152,213	152,213	152,030	--	--
2016	Spring Chinook	Yearling smolt	DCPUD Wells NNI	29,123 <i>released</i>	--	--	--	--	--	--	--	33,050	33,050	33,050	33,050	33,011	--	--
2014	Summer Chinook	Yearling smolt	DCPUD Fixed Hatchery Compensation	320,000 <i>released</i>	358,953	43,953	--	--	--	--	--	--	--	--	--	--	--	350,000
2015	Summer Chinook	Sub-yearling	DCPUD Fixed Hatchery Compensation	484,000 <i>released</i>	427,075	439,709	--	--	--	--	--	--	--	--	--	--	--	439,709
2015	Summer Chinook	Yearling smolt	DCPUD Fixed Hatchery Compensation	320,000 <i>released</i>	348,172	345,069	344,395	344,121	343,198	336,304	336,117	336,117	336,117	336,117	336,117	335,239	--	--
2016	Summer Chinook	Sub-yearling	DCPUD Fixed Hatchery Compensation	484,000 <i>released</i>	--	--	--	--	--	--	--	--	583,000	583,000	513,238	444,000	--	--

Appendix A. Continued.

Brood year	Species	Life stage	Program	Target release No.	Month												Total released /transfer
					Mar '16	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan '17	Feb	
2016	Summer Chinook	Yearling smolt	DCPUD Fixed Hatchery Compensation	320,000 <i>released</i>	--	--	--	--	--	--	--	--	368,940	372,107	372,107	372,107	--
2015	Summer steelhead	Yearling smolt	DCPUD Fixed Hatchery Compensation ¹	300,000 <i>released</i>	310,143	134,985	--	--	--	--	--	--	--	--	--	--	307,697
2015	Summer steelhead	Yearling smolt	DCPUD Wells NNI ¹	8,000 <i>released</i>	8,270	3,599	--	--	--	--	--	--	--	--	--	--	8,205
2015	Summer steelhead	Yearling smolt	GCPUD Priest Rapids NNI	80,000 <i>released</i>	82,705	35,996	--	--	--	--	--	--	--	--	--	--	82,052
2016	Summer steelhead	Yearling smolt	DCPUD Fixed Hatchery Compensation ¹	300,000 <i>released</i>	--	--	--	358,776	371,024	373,452	337,536	331,315	317,688	314,795	314,694	314,555	--
2016	Summer steelhead	Yearling smolt	DCPUD Wells NNI ¹	8,000 <i>released</i>	--	--	--	9,567	9,893	9,958	9,001	8,835	8,471	8,395	8,392	8,388	--
2016	Summer steelhead	Yearling smolt	GCPUD Priest Rapids NNI	80,000 <i>released</i>	--	--	--	95,673	98,939	99,587	90,009	88,350	84,716	83,945	83,918	83,881	--
2016	Summer steelhead	Yearling smolt	GCPUD Priest Rapids NNI	20,000 <i>transferred</i>	--	--	--	34,627	34,010	34,716	34,616	34,616	35,606	34,542	34,542	33,461	--

¹40,000 Inundation steelhead to be released in the Twisp with 8,000 NNI fish to total 48,000. 100,000 inundation steelhead to be released in the Methow as a safety net program. 160,000 inundation steelhead to be released directly to the Columbia.

Appendix B. Fish reared at Wells or Methow hatcheries under the Off-License Settlement Agreement.

Brood year	Species	Life stage	Program	Target (pounds) disposition	Month												Total released /transfer
					Mar '16	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan '17	Feb	
2014	Rainbow trout	Juv	WDFW sport fish		13,732	10,709	3,037	--	--	--	--	--	--	--	--	--	
					(6,638)	(4,951)	(1,380)	(740)	(--)	(--)	(--)	(--)	(--)	(--)	(--)	(--)	
				Number (pounds) released	19,850	2,180	7,162	1,700	--	--	--	--	--	--	--	--	--
2015	Rainbow trout	Juv	WDFW sport fish		73,936	63,618	63,352	60,608	36,100	36,052	33,026	32,949	32,897	32,975	33,741	33,652	
					(114)	(260)	(792)	(1,377)	(1,570)	(2,488)	(3,471)	(4,308)	(5,178)	(7,516)	(8,656)	(8,288)	20,000
				Goal is 20,000 pounds annual combined	--	--	--	--	20,000	--	--	--	--	--	--	--	--
2016	Rainbow trout	Juv	WDFW sport fish		--	--	--	--	--	--	--	--	--	72,878	68,293.	62,418	
					(--)	(--)	(--)	(--)	(--)	(--)	(--)	(--)	(--)	(73)	(20)	(65)	
					--	--	--	--	--	--	--	--	--	--	--	--	--
2016	Lahontan cutthroat	Juv	WDFW sport fish		--	200,000	161,503	156,757	--	--	--	--	--	--	--	--	
					(--)	(200)	(161)	(156)	--	(--)	(--)	(--)	(--)	(--)	(--)	(--)	150,000
					--	--	--	--	150,000	--	--	--	--	--	--	--	--

Appendix C. Fish reared at Wells Hatchery pursuant to the Aquatic Settlement Agreement – White Sturgeon Management Plan.

Brood year	Species	Life stage	Program	Target disposition	Month												Total released/culled /transferred		
					Mar '16	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan '17	Feb			
2015	White sturgeon	Juvenile rearing	Wells White Sturgeon Supplementation	Up to 5,000	5,203	5,198	5,153	--	--	--	--	--	--	--	--	--	--		
				Culled	--	--	--	--	--	--	--	--	--	--	--	--	--	1,462	
				Transferred	2,200	--	--	--	--	--	--	--	--	--	--	--	--	--	5,000
				Wells reservoir	--	--	--	5,288	--	--	--	--	--	--	--	--	--	--	5,288
2016	White sturgeon	Juvenile rearing	Wells White Sturgeon Supplementation	Up to 5,000	--	--	--	35,845	25,087	17,246	15,235	13,560	10,458	9,343	9,495	6,690			
				Culled	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
				Transferred	--	--	--	--	--	--	--	--	--	--	--	2,293	--	2,293	
				Wells reservoir	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--