

**WASHINGTON DEPARTMENT OF FISH AND WILDLIFE**

**Fish Program/Science Division/Methow Field Office**

20268 Hwy 20, Twisp WA, 98856

Phone: (509) 997-0048 and 997-0066

Fax: (509) 997-0072

**To:** Shane Bickford and Greg Mackey  
**From:** Charlie Snow, Charles Frady, and David Grundy  
**Subj:** January Hatchery and Natural Production Report  
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**Cc:** Distribution list.

**HATCHERY ACTIVITIES**

At Wells Hatchery, the 2018 brood Methow Coho were reared on 100% surface water during the month. The 2018 brood summer Chinook yearlings and the 2019 brood Okanogan, Methow, and Columbia safety-net steelhead and the Omak conservation program steelhead were reared on a 50% surface water/well water mix. All other populations were reared on 100% well water during January. The 2018 brood spring Chinook at Methow Hatchery were reared on 100% surface water during the month of January, while the 2019 brood remained on 100% well water.

**2018 Twisp Spring Chinook Salmon**

A total of 30,987 fish were on-station at the end of the month with four additional fish reported as mortalities. These fish were approximately 22 fish per pound (FPP). The number of fish on-station that apply to Douglas PUD, Chelan PUD, and Grant PUD HCP mitigation obligations is listed in Appendix A.

**2018 Methow Composite Spring Chinook Salmon**

A total of 207,079 fish were on-station at the end of the month with 94 additional fish reported as mortalities. These fish were approximately 22 FPP. These fish will support releases from the Chewuch Acclimation Pond (CAP; release target = 61,000), Goat Wall Acclimation Pond (GWAP; release target = 25,000), and from Methow Hatchery (release target = 107,765). The number of fish on-station that apply to Douglas PUD, Chelan PUD, and Grant PUD HCP mitigation obligations is listed in Appendix A.

**2019 Twisp Spring Chinook Salmon**

Correcting last month's reporting, loss at ponding totaled 156 fry leaving a total of 37,838 fry on station at the end of December. A total of 37,759 fry were on station at the end of January with 79 additional fish reported as mortalities. These fish were approximately 510 FPP. The number

of fish on-station that apply to Douglas PUD, Chelan PUD, and Grant PUD HCP mitigation obligations is listed in Appendix A.

### **2019 Methow Composite Spring Chinook Salmon**

A total of 205,980 fry were on-station the end of January, with 369 additional fish reported as mortalities. These fish were approximately 510 FPP. The number of fish on-station that apply to Douglas PUD, Chelan PUD, and Grant PUD HCP mitigation obligations is listed in Appendix A.

### **2018 Wells Summer Chinook Salmon**

Wells Hatchery had a total of 352,313 yearling program fingerlings on-station at the end of the month after subtracting 573 mortalities. This population includes an estimated 109,145 progeny for survival studies in 2020. These fish overall were at approximately 16 FPP by the end of the month. Summer Chinook are being reared to fulfill HCP mitigation obligations (Appendix A).

### **2019 Summer Chinook**

Wells Hatchery had an estimated 400,000 fry for the yearling program and 1,163,508 fry for subyearling programs on-station at the end of January. An estimated 50,402 yearling program progeny were culled during the month and an additional 36,492 subyearling program fry were recorded as mortalities in January. Subyearling program progeny include extra production to supplement Orca food sources in the marine environment (500,000 subyearling program for Orca recovery funded by the State of Washington). Summer Chinook are being reared to fulfill HCP mitigation obligations (Appendix A).

### **2019 Summer Steelhead**

Wells Hatchery had 437,835 steelhead progeny on-station at the end of the month, including 173,187 Columbia River safety-net progeny, 109,646 Methow safety-net progeny, 80,547 Okanogan safety-net progeny, and 19,691 Omak Creek conservation program progeny. Additionally, the hatchery had 27,168 Methow conservation and 27,596 Twisp conservation program parr on-station at the end of January. Mortality during the month totaled an additional 696 fish across all programs, primarily from the Columbia ( $N = 350$ ) and Methow ( $N = 220$ ) safety-net programs. Steelhead progeny are being reared to fulfill Douglas PUD and Grant PUD HCP mitigation obligations.

### **2019 Kamloops Rainbow Trout**

Wells Hatchery had 34,831 trout fry remaining on-station at the end of the month at about 20 FPP to support lake plants in 2020. This population was adjusted downward by 3,600 fish due to routine population monitoring during the month, and 169 additional fish were reported as mortalities during January. Kamloops Rainbow Trout are reared under the Off-License Settlement Agreement (Appendix B).

### **2018 Methow Coho**

The Douglas PUD Coho mitigation program began with brood year 2018. Wells Hatchery had 43,209 Methow Coho fry on-station at the end of January after removing 34 mortalities during the month (Appendix A). These fish were at approximately 30 FPP and will be reared at Wells Hatchery until transfer to the Twisp Acclimation Pond as pre-smolts in spring 2020.

### **2019 Methow Coho**

Wells Hatchery received 42,489 eyed Coho eggs from the 2019 brood on 8 January and had 41,739 eyed-eggs on-station at the end of the month after removing 750 mortalities (Appendix A). These fish will be reared at Wells Hatchery until transfer to the Twisp Acclimation Pond as pre-smolts in spring 2021.

### **2019 White Sturgeon**

Wells Hatchery had 571 White Sturgeon progeny on-station at the end of the month, after removing four mortalities during January. These fish were between 2–8 FPP at the end of the month. 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), Lower Chewuch (CRW), 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
					Feb '19	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan '20	
2017	Spring Chinook	Yearling smolt	CCPUD NNI	60,516 <i>released</i>	69,272	69,248	--	--	--	--	--	--	--	--	--	--	69,136
2017	Spring Chinook	Yearling smolt	GCPUD Priest Rapids NNI	134,126 <i>released</i>	153,532	153,480	--	--	--	--	--	--	--	--	--	--	153,232
2017	Spring Chinook	Yearling smolt	DCPUD Wells NNI	29,123 <i>released</i>	33,337	33,325	--	--	--	--	--	--	--	--	--	--	33,271
2018	Spring Chinook	Yearling smolt	CCPUD NNI	60,516 <i>released</i>	63,724	63,716	63,710	64,466	64,460	64,449	64,444	64,437	64,432	64,423	64,410	64,384	--
2018	Spring Chinook	Yearling smolt	GCPUD Priest Rapids NNI	134,126 <i>released</i>	141,237	141,218	141,206	142,881	142,867	142,844	142,833	142,817	142,806	142,786	142,757	142,698	--
2018	Spring Chinook	Yearling smolt	DCPUD Wells NNI	29,123 <i>released</i>	30,667	30,663	30,660	31,024	31,021	31,016	31,014	31,010	31,008	31,003	30,997	30,984	--
2019	Spring Chinook	Yearling smolt	CCPUD NNI	60,516 <i>released</i>	--	--	--	--	--	--	--	--	66,257	66,257	66,051	65,918	--
2019	Spring Chinook	Yearling smolt	GCPUD Priest Rapids NNI	134,126 <i>released</i>	--	--	--	--	--	--	--	--	146,850	146,850	146,394	146,098	--
2019	Spring Chinook	Yearling smolt	DCPUD Wells NNI	29,123 <i>released</i>	--	--	--	--	--	--	--	--	31,886	31,886	31,787	31,723	--
2017	Summer Chinook	Yearling smolt	DCPUD Fixed Hatchery Compensation	320,000 <i>released</i>	290,763	290,612	--	--	--	--	--	--	--	--	--	--	289,159
2018	Summer Chinook	Sub-yearling	DCPUD Fixed Hatchery Compensation	484,000 <i>released</i>	547,189	544,876	544,149	--	--	--	--	--	--	--	--	--	531,921
2018	Summer Chinook	Yearling smolt	DCPUD Fixed Hatchery Compensation	320,000 <i>released</i>	398,353	398,353	398,353	331,534	330,179	330,077	328,984	357,235	357,089	356,733	352,886	352,313	--
2019	Summer Chinook	Sub-yearling	DCPUD Fixed Hatchery Compensation	484,000 <i>released</i>	--	--	--	--	--	--	--	--	--	--	502,857	563,508	--

Appendix A. Continued.

Brood year	Species	Life stage	Program	Target release No.	Month												Total released /transfer
					Feb '19	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan '20	
2019	Summer Chinook	Yearling smolt	DCPUD Fixed Hatchery Compensation	320,000 <i>released</i>	--	--	--	--	--	--	--	--	--	--	450,402	400,000	--
2018	Summer steelhead	Yearling smolt	DCPUD Fixed Hatchery Compensation <sup>1</sup>	300,000 <i>released</i>	334,926	327,063	--	--	--	--	--	--	--	--	--	--	304,610
2018	Summer steelhead	Yearling smolt	DCPUD Wells NNI <sup>1</sup>	8,000 <i>released</i>	8,931	8,722	--	--	--	--	--	--	--	--	--	--	8,123
2018	Summer steelhead	Yearling smolt	GCPUD Priest Rapids NNI	80,000 <i>released</i>	89,314	87,217	--	--	--	--	--	--	--	--	--	--	81,229
2018	Summer steelhead	Yearling smolt	GCPUD Priest Rapids NNI	20,000 <i>transferred</i>	18,219	9,096	--	--	--	--	--	--	--	--	--	--	18,240
						9,173	9,067	--	--	--	--	--	--	--	--	--	
2019	Summer steelhead	Yearling smolt	DCPUD Fixed Hatchery Compensation <sup>1</sup>	300,000 <i>released</i>	--	--	--	--	413,950	398,116	397,024	395,767	348,991	324,432	323,833	323,307	--
2019	Summer steelhead	Yearling smolt	DCPUD Wells NNI <sup>1</sup>	8,000 <i>released</i>	--	--	--	--	11,039	10,616	10,587	10,554	9,306	8,652	8,636	8,622	--
2019	Summer steelhead	Yearling smolt	GCPUD Priest Rapids NNI	80,000 <i>released</i>	--	--	--	--	110,387	106,164	105,873	105,538	93,064	86,515	86,355	86,215	--
2019	Summer steelhead	Yearling smolt	GCPUD Priest Rapids NNI	20,000 <i>transferred</i>	--	--	--	--	21,211	20,864	20,824	20,795	19,747	19,719	19,710	19,691	--
2018	Methow Coho	Yearling smolt	DCPUD Mitigation	37,000 <i>released</i>	48,648	48,595	48,581	45,505	45,671	43,516	43,437	43,372	43,302	43,279	43,243	43,209	--
2019	Methow Coho	Yearling smolt	DCPUD Mitigation	37,000 <i>released</i>	--	--	--	--	--	--	--	--	--	--	--	41,739	--

<sup>1</sup>40,000 Inundation steelhead to be released in the Twisp or Methow 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	
					Feb '19	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan '20		
2018	Kamloops Rainbow trout	Juv.	WDFW sport fish	Number (pounds) released	31,411	31,384	4,983	974	--	--	--	--	--	--	--	--	--	59,364
				Goal is 20,000 pounds annual combined	(7,479)	(11,012)	(3,322)	(487)	(487)	(--)	(--)	(--)	(--)	(--)	(--)	(--)	(--)	
2019	Kamloops Rainbow trout	Juv.	WDFW sport fish	Number (pounds) released	--	--	25,602	24,802	24,725	24,808	68,449	66,307	40,818	40,604	38,600	34,831	21,520	21,520
				Goal is 20,000 pounds annual combined	(--)	(--)	(7)	(29)	(96)	(349)	(1,695)	(4,349)	(57)	(148)	(965)	(1,742)	(3,587)	

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	
					Feb '19	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan '20		
2018	White Sturgeon	Juvenile rearing	Wells White Sturgeon Supplementation	Up to 325	99	99	99	--	--	--	--	--	--	--	--	--	--	99
				Culled	--	--	--	--	--	--	--	--	--	--	--	--	--	
				Transferred	--	--	--	--	--	--	--	--	--	--	--	--	--	
				Wells reservoir	--	--	--	99	--	--	--	--	--	--	--	--	--	
2019	White Sturgeon	Juvenile rearing	Wells White Sturgeon Supplementation	Up to 325	--	--	--	--	--	1,504	1,214	1,066	580	575	575	571	365	
				Culled	--	--	--	--	--	--	--	--	--	--	--	--		--
				Transferred	--	--	--	--	--	--	--	--	365	--	--	--		--
				Wells reservoir	--	--	--	--	--	--	--	--	--	--	--	--		--