

From Pat Frazier, WDFW. This does not necessarily represent the views and opinions of any other member of the Cowlitz River Fisheries Technical Committee.

Answers to Questions from 12/2/08 Public Meeting

Q: More fish transported to the Tilton

A: There are several issues that impact our ability to increase the number of hatchery fish transported to the Tilton Basin.

First and foremost, all salmon and steelhead populations in the Tilton River are listed by National Marine Fisheries Service (NMFS) under the Endangered Species Act (ESA). At the time of listing NMFS determined that hatchery operations were a major contributor to the decline of native salmon and steelhead populations in the lower Columbia River and its tributaries via their negative impacts on productivity of wild stocks. Excessive numbers of hatchery fish spawning in natural spawning areas has been shown to decrease the productivity of wild fish in two ways: 1) hatchery fish interbreed with wild fish and reduce their genetic fitness and 2) hatchery fish compete with wild fish for spawning and rearing habitat.

As part of any listing, a recovery plan needs to be completed that shows what actions are being implemented to benefit recovery of listed species. Just such a recovery plan was recently completed for the Columbia River and the recovery plan calls out the need to reduce the number of hatchery fish returning to natural spawning locations. This plan identifies Tilton winter steelhead and coho salmon as being important populations for overall recovery of these two species. The number of hatchery fish returning to natural spawning areas will need to be controlled to benefit recovery of listed Tilton River salmon and steelhead.

A congressionally mandated scientific body called the Hatchery Scientific Review Group (HSRG) recently reviewed Lower Columbia River hatchery programs. This group scientists and biologists from the northwest area were tasked with evaluating current hatchery operations to determine if improvements could be implemented to better benefit wild populations and support sustainable fishing opportunities. One of their recommendations was to limit the number of hatchery winter steelhead and coho transported to the Tilton River.

There is also the Cowlitz Fisheries and Hatchery Management Plan (FHMP) that was required as part of the federal licensing process for the hydroelectric facilities in the Cowlitz Basin. The FHMP was developed by the Cowlitz Fisheries Technical Committee (FTC) and is intended to provide guidance regarding fishery and hatchery management decisions for the Cowlitz Basin. The FHMP is currently in the process of being updated. As part of this update all hatchery programs will be evaluated on the basis of their contribution to recovery of listed species and support for sustainable fisheries, with recovery taking priority over sustainable fisheries.

Increasing the number of hatchery fish transported to the Tilton River will depend on the impact of that action on recovery of salmon and steelhead listed under the ESA. The update of the FHMP provides an excellent opportunity to reevaluate current recovery and fishery goals for wild salmon and steelhead in the Tilton River and how hatchery fish can help achieve these goals. The update of the FHMP is scheduled for completion in 2009 and updates on progress will be provided later this year, including an opportunity for the public to provide input on this plan.

Q: Tilton steelhead season after March

A: Opening the steelhead season after March is tied to having fish available for harvest. In recent years low returns have limited the number of adult hatchery steelhead available for transportation to the Tilton River; therefore, we have not had the hatchery fish available to support this fishery. As a rule WDFW has only adopted fisheries allowing the retention of wild fish in situations where the wild population is healthy. The status of the Tilton wild winter steelhead population is depressed; therefore, a fishery allowing retention of wild fish in the Tilton is not an option until the status of the wild population improves significantly. Future fishing opportunities in the Tilton River will be guided by the FHMP that is currently being updated (see answer to question above) because the FHMP will set forth hatchery production programs upon which fisheries depend.

Steelhead fisheries in the Cowlitz Basin are currently supported by two different hatchery programs: 1) a program using Chambers Creek stock returning during November through January and 2) a program using Cowlitz stock returning during February through May. Through the updated FHMP it will be determined which of these programs will be implemented, including the number of smolts released at various locations in the Cowlitz Basin. The later returning Cowlitz stock program is the program that would support sport steelhead fishing in the Tilton River during the March through May time frame; therefore, the number of these fish released into the Tilton River as smolts or returning adults will determine WDFW's ability to establish a steelhead fishery during that time frame.

Another challenge to implementing fisheries during March through May includes impacts to natural production. Tilton River wild winter steelhead are listed as threatened under the federal Endangered Species Act (ESA). With this listing in place hatchery programs and fishing seasons will need to be operated in a manner that does not impede recovery of this listed population. This will be a key part of our consideration as we work through the FHMP update to determine future production levels and associated fishing opportunities in Cowlitz Basin as a whole, including the Tilton River.

Q: Audit trail for surplus fish? Steelhead to Food Bank, also

A: Unfortunately there has been much confusion over this issue and I appreciate this opportunity to provide answers.

As you may know, Coho, Chinook (both fall and spring), chum and steelhead in the lower Columbia River are listed as “threatened” under the Endangered Species Act (ESA). The opinion by many scientists (including Federal, State and private) is that too many hatchery fish mixed with natural fish on the spawning ground has a damaging effect on the natural population, by reducing their ability to reproduce. This is true even in a case like the Cowlitz where the hatchery fish are genetically the same as the wild fish. This is because life in a hatchery selects for different behaviors and traits than life in the wild. It is believed that these traits, once selected for, get passed on to the offspring. When too many hatchery fish spawn in the wild, these traits get passed on to the wild fish and limit the ability of the naturally produced fish to survive. In order to demonstrate to NOAA fisheries (the federal agency that administers the ESA for salmon) that we are attempting to reduce the impacts to listed fish by our hatchery program, we are reducing (but not eliminating) the number of hatchery fish we allow to spawn in the wild.

So the issue for WDFW is; what to do with the extra hatchery fish produced?

Salmon returning to the Cowlitz River and all other rivers and streams belong to all citizens of the state. The Washington Department of Fish and Wildlife is charged with managing those fish, and as they are state property, we are required to follow very specific requirements when making final distributions of them. In this effort, we strive to make the best use of adult salmon returning to the Cowlitz, and all our hatchery facilities. These fish are used in a variety of ways. Some adult salmon are used for broodstock. These fish are spawned and the eggs are used to perpetuate the hatchery program. Some fish are passed upstream to meet adult escapement goals or provide fishing opportunity. Adult fish over and above the needs of hatchery broodstock and those released upstream to spawn naturally can be donated to: foodbanks; tribes for ceremonial and subsistence purposes; used for educational or research purposes and sold to the contracted buyer. “Some fish carcasses are used in the nutrient enhancement program, returning nutrients to the rivers and streams as appropriate.”

The production of fish from Cowlitz Hatchery (both Salmon and Trout) is fully funded by Tacoma Public Utilities (TPU). This is a required part of the Settlement Agreement as mitigation for lost natural production caused by the dams on the Cowlitz. In most years none of the fish returning to the Cowlitz Hatcheries have been sold. In the past, all fish not needed for broodstock were passed upstream. In some years that number was very high, as an example, in 2006 over 65,000 live salmon were returned to the upper Cowlitz River. In an effort to reduce the impacts of this many hatchery fish spawning in the wild, WDFW needed to use these extra fish in a different way. In 2007, only about 24,000 salmon were

returned to the upper river and more than 20,000 adult salmon from Cowlitz Hatcheries were given to food banks, both local and state wide. In 2008, WDFW anticipated that the number donated to foodbanks would be even higher, thanks to a better than expected return. The processor used by the foodbank has an FDA approved processing plant that ensures the fish are handled properly and remain safe to eat. In past years, up to 1,000,000 meals annually were provided through this process to needy citizens in every county of the state (from all our hatcheries). I'm sure you will agree that using excess hatchery fish in this way is an important use of this valuable state resource.

For 2008 the disposition of coho returning to the Cowlitz Salmon Hatchery was as follows:

Cowlitz Salmon Hatchery- 2008 Coho

Preliminary Information as of 16 March 2009

		Adults	Jacks	Total
Wild	Return to Hatchery	6,391	465	6,856
	Number Broodstock	529	23	552
	Upper Cowlitz	4,882	321	5,203
	Tilton	845	104	949
	Foodbank	-	-	-
	Sold	-	-	-
	Other (Disposal, education, etc.)	135	17	152
Hatchery	Return to Hatchery	77,858	14,232	92,090
	Number Broodstock	1,072	29	1,101
	Upper Cowlitz	13,728	1,509	15,237
	Tilton	1,800	254	2,054
	Foodbank	57,435	12,062	69,497
	Sold	3,548	351	3,899
	Other (Disposal, education, etc.)	275	27	302
Total (Wild and Hatchery)	Return to Hatchery	84,249	14,697	98,946
	Number Broodstock	1,601	52	1,653
	Upper Cowlitz	18,610	1,830	20,440
	Tilton	2,645	358	3,003
	Foodbank	57,435	12,062	69,497
	Sold	3,548	351	3,899
	Other (Disposal, education, etc.)	410	44	454

As you review these numbers it is important to remember that the coho return is not complete at this time and the numbers may change slightly as additional fish

return. The numbers provided above can be verified using WDFW's "Form 3" and other hatchery records. Detailed information can be obtained by contacting Mark Johnson at the Cowlitz Salmon Hatchery or WDFW's Hatchery Division stationed in the Olympia Headquarters Office.

Q: NMFS – no non-indigenous steelhead above Mayfield? Swofford?

A: Regulations concerning the transportation of non-indigenous steelhead to above Mayfield Dam is the authority of National Marine Fisheries (NMFS). Currently NMFS is not allowing non-indigenous steelhead to be transported to above Mayfield Dam. The question is what waters are included in this restriction. Clearly waters where fish have access to the mainstem Cowlitz River or its tributaries cannot receive non-indigenous steelhead. In the case of Swofford Pond there is no ability for the fish to escape this pond and return to the mainstem Cowlitz River or its tributaries; therefore, NMFS would allow non-indigenous steelhead to be released at this site.