

### Young salmon and steelhead survival

Under the HCPs, Chelan PUD must meet minimum targets for either combined juvenile and adult survival or for juvenile-only survival through our reservoirs and past our dams. The minimum combined survival target is 91 percent and juvenile-only survival target is 93 percent. Chelan has met or exceeded those levels for all spring migrating salmon and steelhead species at both the Rocky Reach and Rock Island hydro projects\*.

Spring Species	3-year average project passage survival (percent)	
	Rock Island Dam	Rocky Reach Dam
Sockeye	93.27	93.59
Spring Chinook	93.75	92.28**
Steelhead	96.75	95.79

\*Once technology becomes available, Chelan PUD will measure survival levels for the smaller Chinook which migrate in the summer. At this point there is no technology to measure survival for these fish.

\*\*Combined adult and juvenile measurement.

### Fish Spill Levels (% of daily river flow)

Moving fish safely through the reservoirs and past the dams is a primary objective of the HCPs. To help move fish past the dams, Chelan PUD uses fish spill at Rock Island Dam and a fish bypass system with supplemental spill at Rocky Reach Dam\*.

	Spring	Summer
Rocky Reach	0%	9%
Rock Island	10%	20%

\*Sending water and fish through spill gates during the juvenile fish migration season.

### Bird and Fish Predation Control Programs

Various birds and fish feed extensively on young salmon and steelhead. Controlling these predators in the Rocky Reach and Rock Island reservoirs is one of the tools Chelan PUD uses to meet our passage survival targets. Various means are used to control the predators including removing pikeminnow from the reservoirs by rod and reel and long-line fishing.

Pikeminnow removed in 2010	85,307
Total removed since 1994	650,066

### Hatchery production

Chelan PUD funds hatchery production as part of the no-net-impact requirement of the HCPs. These initial production requirements will expire in 2013 and be recalculated based on project survival and other factors.

Species	Location	2011 production targets (fish)
Spring Chinook	Chiwawa River	298,000
	Methow River	288,000
Summer Chinook	Wenatchee River	864,000
	Similkameen River	576,000
	Methow River	400,000
	Chelan Falls	600,000
Sockeye	Lake Wenatchee	280,000
	Skaha Lake, BC	591,000
Steelhead	Wenatchee River	400,000

### Tributary projects

Chelan PUD funded our first habitat project in 2005 as part of compensating for fish that do not survive migration through our reservoirs and past our dams. Chelan PUD funds two accounts which are used by a committee to award money to projects that members decide will have the best biological outcome.

HCP Habitat Account	No. of Projects to date	Funding provided to date*
Rocky Reach	15	\$1,082,839
Rock Island	23	\$2,262,417
Total	38	\$3,345,256

\*as of Dec. 1, 2010



The new Chelan Falls acclimation facility will replace the aging Turtle Rock Island hatchery and increase the number of returning summer Chinook adults to the new Chelan River habitat. The facility will rear up to 600,000 yearling summer Chinook.