

2025 Hood River Spring Chinook & Winter Steelhead Forecast

Christine Longjohn, Hood River Production Program, Parkdale, Oregon

Table 2. 2025 Adult Spring Chinook Run Predictions:

	Estimate	Lower 90% CI	Upper 90% CI
Hatchery	1,454	387	2,548
Wild	79	0	229
Total	1,533	387	2,777

Spring Chinook Forecast Discussion:

The hatchery spring chinook forecast model is driven by several indicators of ocean conditions as well as the previous run years return of jacks. The predictor variables in the forecast model appear to show some improvement over the generally poor conditions for chinook region wide for recent run years. The estimated jack return is down but expected to have a higher return of adults. The forecast models suggest that we should expect a run similar to the recent 10-year average (1,230) in 2025.

The forecast for wild spring chinook would be below the recent available 10-year average run of 109 adults during the Powerdale trap era (2000-2009), when we last had highly confident escapement estimates for wild chinook. However, with limited run years of data, and no recent run years for fitting the model, we have low confidence in accuracy.

If the return does in fact come in near the forecast of 1,454 adult spring chinook, we should have adequate abundance to support typical sport and tribal fisheries, while meeting broodstock goals.

Table 3. 2024 chinook run to river mouth, brood stock, escapement, and surplus available for harvest and natural spawning.

	Run to River Mouth	Broodstock	Remaining Escapement	Surplus
Hatchery	1,454	222	1,232	1,232
Wild	79	24	55	0
Total	1,533	246	1,287	1,232

Winter Steelhead Forecast Discussion:

This year will have no returned hatchery winter steelhead as the program was stopped in 2022.

The forecast models for wild steelhead uses predictor variables of estimates of out-migrating wild smolts from the Hood River, stream flow during the juvenile rearing period, and ocean conditions. The streamflow indicator was poor for this cohort but smolt estimates approximated recent averages. Ocean productivity conditions for wild

steelhead appeared to be slightly improved over previous years, but still below average. As a result, the run forecast suggests a 112 wild run below the recent 10-year average of 578 wild winter steelhead for the 2025/26 year.

Table 4. 2025/2026 winter steelhead run prediction

	Estimate	Lower 90% CI	Upper 90% CI
Hatchery	0	0	0
Wild	112	0	522
Total	112	0	522