



MEMORANDUM

DEPARTMENT OF FISH AND WILDLIFE
INTRA DEPARTMENTAL

FROM: Adam Storch
TO: Files
SUBJECT: 2022 Willamette River spring Chinook Run and 2023 forecast
GEN. DATE: 13 August 2012

Summary of 2022 Willamette River spring Chinook return

Subsection Test

The total Willamette River spring Chinook return to the Columbia River mouth during 2022 is estimated to be 57,317 fish (Table 1). An estimated 10,728 of these fish were unmarked (~19%). The 2022 total reconstructed return was approximately 109% of forecast. The Clackamas River component was approximately 137% of forecast, with 6,432 spring Chinook returning to the Clackamas River compared to 4,704 (95% credible interval: 2,321–7,201) fish expected.

The total return of adipose-fin-marked hatchery fish to the Columbia River mouth in 2022 is estimated to be 46,589, compared to 37,019 (95% credible interval: 21,561–53,649) fish expected. Counts at the Willamette Falls fishway indicate that 31,937 fin-marked hatchery fish and 6,692 unmarked fish passed the fish ladder. The full reconstruction of the 2022 return is shown in Table 2.

Table 1. 2022 forecasted and reconstructed return of Willamette River spring Chinook to Columbia River mouth.

| [[character]] | [[character]] | [[character]] | [[character]] | [[character]] | [[call]] | [[character]] |
|---------------------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 2022 Forecast | 1,731 | 34,770 | 16,082 | 107 | 50,958 | 52,689 |
| 95% CrI | 770–2,705 | 18,704–50,559 | 4,595–29,438 | 0–316 | 30,842–72,915 | 32,700–74,813 |
| 2022 Reconstructed Return | 1,926 | 37,907 | 17,435 | 49 | 55,391 | 57,317 |