

**Snake River Fall Chinook life History Diversity:
Flow/Spill – A recent update on Fall Chinook Migration Characteristics**

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In order to characterize the migration characteristics of subyearling fall Chinook the PIT tag data from hatchery/production subyearling fall Chinook releases above Lower Granite Dam were analyzed to estimate survival and travel time in the reach Lower Granite Dam to McNary Dam. Fish were grouped into two-week blocks based on their detection date at Lower Granite Dam. Survival and travel time were estimated, as well as downstream timing past Little Goose, Lower Monumental, Ice Harbor, and McNary dams. Timing data was used to estimate the average in-river conditions the fish experienced passing through the river reach; such as water transit time, discharge, spill percentage and water temperatures at the dams and reservoirs. The relationship between survival and travel time through the reach Lower Granite Dam tailwater to McNary Dam tailwater was compared to in-river conditions in a series of bi-variate weighted regressions. Generally, survival was highest during periods of high flow and spill and cooler temperatures. Court ordered summer spill appeared to improve survival in recent years when flows were lower and temperatures warmed, compared to prior years when spill ended June 20.