2017 Salmon Return Projections Concerning

All of Idaho’s salmon populations are predicted to nosedive in 2017. Pre-season forecasts from the Idaho Department of Fish and Game show that returns of spring/summer chinook, fall chinook, sockeye and steelhead will all be down, and in some cases disastrously.

Counts of spring chinook bear this out so far. As of May 9, only 99 chinook had passed Lower Granite Dam, the last of eight they must pass to return to their natal waters. That constitutes 0.7 percent of the 10-year average of 13,152 for the date. By all indications, the run is late, but the forecast for wild fish shows a return of only 55 percent of the 10-year average.

This year’s runs of sockeye and steelhead have not yet started, but are also forecast to be very poor. There are two main culprits for these anticipated low returns. First, many of these fish out-migrated as smolts to the ocean in spring-summer 2015 when a disastrously low snowpack combined with unusually warm river/reservoir temperatures to harm and kill hundreds of thousands of migrating adult and juvenile fish. The juveniles that did survive the out-migration arrived in the ocean stressed by the high temperatures and dam impacts – and then encountered a warmer-than-normal ocean.

Here’s a breakdown of the predicted adult salmon and steelhead returns to the Snake River for 2017. It’s important to note that these are biologists’ best predictions based on the best available information and, but we still have to wait several months before we know the actual returns for 2017. Having said that, both the predictions and the early signals of actual returns are troubling.

**SNAKE RIVER STEELHEAD**

- **ESA Status:** Threatened (listed 1997)
- **Historic annual return:** 1 million
- **Ten-year average for wild fish:** 30,982
- **2017/2018 forecast for wild fish:** 17,325
- **Unofficial recovery target:** 90,000 wild fish annually, for eight consecutive years

The Snake River and its tributaries will see one of the lowest returns of steelhead in decades this year.

The Idaho Department of Fish and Game is forecasting about 60,000 wild and hatchery-reared steelhead will return above Lower Granite Dam on the Snake River. That would be the lowest since 1998 when 58,353 wild/hatchery fish returned. Last year, a poor year for steelhead, more than 87,000 steelhead were counted at Lower Granite Dam. The 10-year average is 151,687 wild and hatchery steelhead combined.

Moreover, the preseason prediction calls for a total return of about 7,300 B-run steelhead, including 1,100 wild fish to Bonneville Dam. At Lower Granite Dam, the forecast calls for only 5,500 B-run steelhead, including only 825 wild fish. If true, this constitutes a disaster for these populations.

(Steelhead are broken into an A-run and a B-run. A-run steelhead leave the ocean in July. B-run steelhead leave the ocean in August. Most B-run steelhead spend two years in the ocean; most A-run steelhead spend one year there.)
**SNAKE RIVER SPRING/SUMMER CHINOOK**

**ESA Status:** Threatened (listed 1992)  
**Historic annual return:** 2 million  
**Ten-year average for wild fish:** 18,229  
**2017 forecast for wild fish:** 10,124  
**Unofficial recovery target:** 80,000 wild fish annually, for eight consecutive years

Spring/summer chinook were once Idaho’s most widely distributed and abundant salmon, numbering in the millions. The Salmon River alone historically produced 39 percent of the spring chinook and 45 percent of the summer chinook in the entire Columbia River basin.

The forecast for wild and hatchery chinook in 2017 is 55,170 fish, 69 percent of the 10-year average of 80,229. By May 9, however, only 99 chinook, or 0.7 percent of the 10-year average for that date, had passed Lower Granite Dam. While the run appears to be picking up and the total count should improve, it is unlikely to match the 10-year average.

With thousands of miles of pristine, intact habitat in wilderness, roadless and other protected areas throughout Idaho, this species' recovery depends almost entirely on downriver survival on the lower Snake and lower Columbia rivers. Benefitting from court-ordered spill, chinook returns have been relatively stable since 2010, even showing a healthy jump in 2014, but still remain far below the estimated 80,000 wild fish needed to constitute recovery.

**SNAKE RIVER SOCKEYE**

**ESA Status:** Endangered (listed 1991)  
**Historic annual return:** 100,000+  
**Ten-year average for wild fish:** 214  
**2017 forecast for wild fish:** 86  
**Recovery target:** 2,500 wild fish annually, for eight consecutive years

Sockeye salmon spawn in the glacial lakes of the Sawtooth Valley and, historically, a few other high elevation lakes in central Idaho. Recent records reveal extremely erratic returns to Idaho. In 2015, afflicted by hot water in the heavily dammed lower Snake and Columbia rivers, more than 95 percent of returning Snake River sockeye perished and failed to return to their natal spawning beds. In fact, there haven’t been more than 100 returning wild sockeye since 2014.

A commendable emergency rescue program has forestalled extinction of sockeye salmon, but these long-distance, high-elevation climbers require greatly improved in-river survival downstream to assure their protection and recovery.

**SNAKE RIVER FALL CHINOOK**

**ESA Status:** Threatened (listed in 2005)  
**Historic annual return:** 150,000  
**Ten-year average for wild fish:** 10,184  
**2017 forecast for wild fish:** 8,135  
**Recovery target:** 3,000 wild fish from at least two populations

Snake River fall chinook have made an encouraging advance in recent years, reminding the region of what’s possible when we provide salmon with a foothold. Court-ordered spill at Snake and Columbia river dams, combined with generally good ocean conditions, have made a difference for these mainstem river spawners. Total fall chinook returns in 2017 are forecast to be 27,191, or 70 percent of the 10-year average. Of those, 8,135, or 80 percent of the 10-year average, are forecast to be wild fish.

While NOAA Fisheries has never established an official recovery goal, scientists estimate that 3,000 wild fall chinook from at least two distinct populations must return for multiple consecutive years to constitute recovery under the Endangered Species Act. Today there is just a single population. Establishing a second will require removal of the lower Snake River dams or passage through Idaho Power’s Hells Canyon Complex of dams.