

## Memorandum

To: **Mr. Colin Purdy**  
**Senior Environmental Scientist Supervisor**  
**Rancho Cordova, Ca.**

Date: August 24, 2017

From : **Department of Fish and Wildlife-Chico Office**  
Subject : **Big Chico Creek 2017 Adult Escapement Estimate**

Big Chico Creek was initially spot checked for salmon at historical viewing sites (Higgins Hole, Hennings Hole and Salmon Hole) on July 6, 2017. Additional spot checks were conducted throughout the summer holding period, with no salmon observed on subsequent visits.

Flows within Big Chico Creek for adult spring-run migration averaged approximately 818 cfs from February - June 2017. Water and flow conditions through Iron Canyon Fish Ladder were more than adequate to allow fish passage upstream into holding habitat. However, this year marks the third consecutive year that adult spring-run Chinook have migrated into Big Chico Creek only to halt their upstream migration at Iron Canyon Fish Ladder. A group of 20-25 salmon were observed at Salmon Hole in late July and monitored through mid-August. On July 24, only nine salmon were remaining in Salmon Hole and evidence of mortality (skeletal remains) were observed along the southern margins of the pool. Average daily water temperatures were over 20°C from approximately June 15 through August 31 and peaked at 23.7°C on August 3, 2017(Figure 1). On August 15, 2017, no salmon remained in Salmon Hole and were presumed deceased due to elevated water temperatures.

**The 2017 spawning escapement for spring-run Chinook salmon is 0.**

Any questions or concerns about the 2017 Big Chico Creek salmon escapement survey can be addressed to me at (530) 895-5110 or [clint.garman@wildlife.ca.gov](mailto:clint.garman@wildlife.ca.gov).

Clint Garman  
Environmental Scientist

cc: Mr. Colin Purdy

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Salmon Hole daily average Temperatures  
June 1 - August 31, 2017

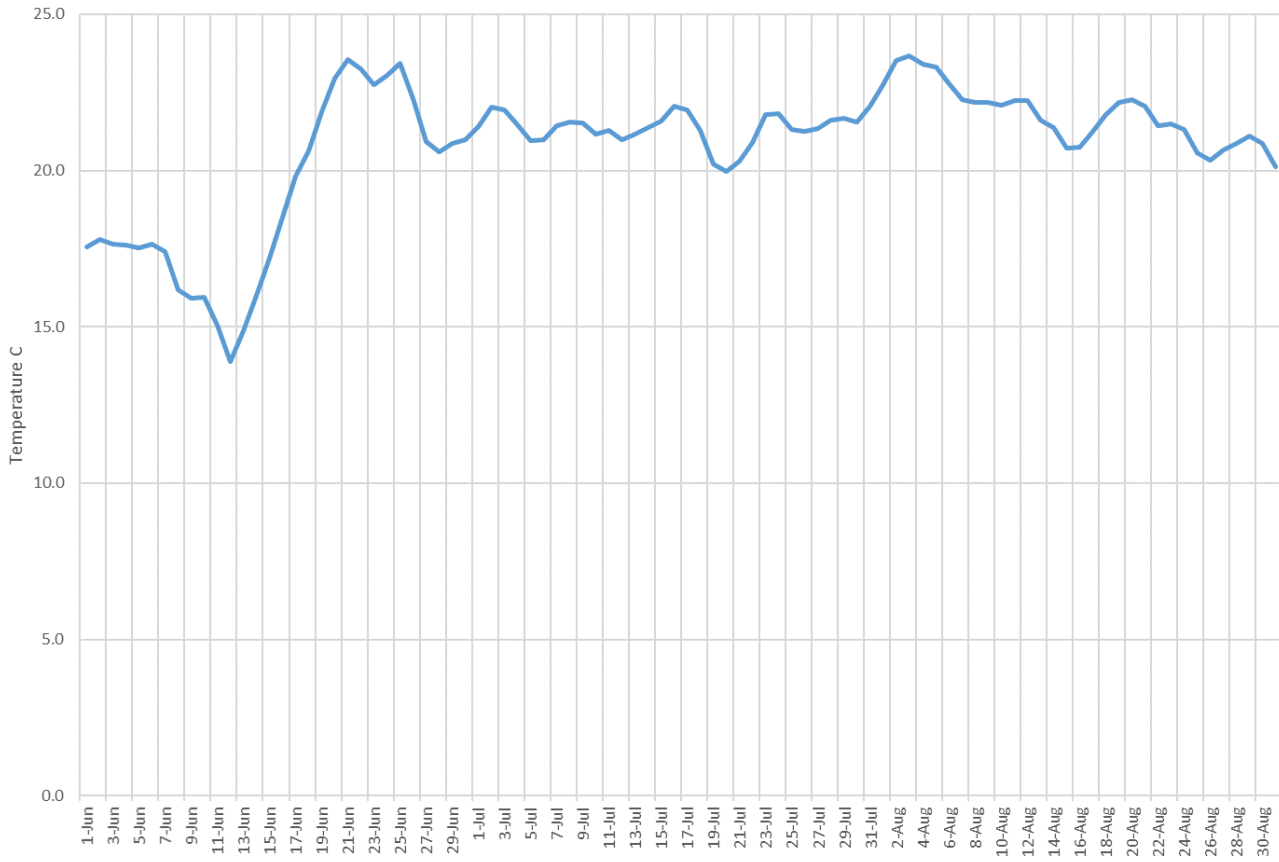


Figure 1. Average Daily temperatures at Salmon Hole