Jones & Stokes

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Memorandum

Date: January 7, 2005

To: Curt Aikens

cc: Alan Lilly

Robert Kano

From: Stephanie Theis, Project Manager

Subject: **Updated Results of the 2004 Spawning Escapement Surveys**

The following memorandum summarizes the results of the 2004 Chinook salmon spawning escapement surveys on the lower Yuba River. A couple of errors were found in the data, resulting in a change in the estimate.

The estimate of total spawning escapement in 2004 is 14,468 salmon, encompassing all three survey reaches (the Narrows to Highway 20 bridge [Rose Bar], Highway 20 bridge to Daguerre Point Dam [Parks Bar], and Daguerre Point Dam to Simpson Lane [Daguerre]). The following table presents the estimated number of adults and grilse salmon and their distribution by survey reach. This year, 27% spawned in the Rose Bar Reach, 38% spawned in the Parks Bar Reach, and 35% spawned in the Daguerre Reach.

Survey Reach	Adults	Grilse	Total	Percentage
Rose Bar	2,608	1,221	3,829	27
Parks Bar	3,871	1,663	5,534	38
Daguerre	2,781	2,324	5,105	35
Total	9,260	5,208	14,468	100
Percentage	64	36	100	

Weekly carcass surveys were conducted from October 7 to December 22, 2004 using the modified Schaefer mark-recapture method. Water visibility ranged from approximately less than a foot to greater than 18 feet. Visibility was often affected due to frequent poor weather conditions, including rain and overcast conditions. The surveys were terminated on December 22 because of low numbers of fish, indicating the end of the spawning season, and because poor weather was affecting visibility, making carcass retrieval difficult.

The recapture rates of marked fish were as high as 84% for adult fish, and 73% for grilse. The average recovery rate was 43% for adults and 26% for grilse. Sufficient numbers of adults and grilse were recovered to make separate adult and grilse estimates.

In addition, there were 20 coded wire tagged (CWT) fish recovered this year (10 from the Rose Bar reach, 6 from the Parks Bar reach, and 4 from the Daguerre Reach). The heads of these fish were sent to the Nimbus Hatchery where they will later be transferred to the Healdsburg DFG office for tag recovery and identification. The majority of the adipose-fin-clipped fish were observedcollected heads were collected early in the season. A summary of the results from DFG is anticipated in May.

Lengths were 110 fish. A length-frequency diagram will be prepared and presented in the annual report. Flow and water temperature data will also be presented in the annual report.