



DEPARTMENT OF FISH AND GAME

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FISH PATHOLOGIST REPORT

Location

Lower American River
Hazel Avenue Bridge Work

Dates

July 6th to 9th, and 13th to 16th, 2009

Species: Steelhead fingerlings (Oncorhynchus mykiss, Nimbus Hatchery origin)

Fish Health Assessment

To assess potential effects of bridge work, specifically underwater pile-driving, on juvenile salmonids in the American River at Hazel Avenue, three live cars were installed to hold fish for over-all assessment of health. Ten fish were placed in each live car, and three locations were used (at bridge site, entrance to Nimbus Hatchery fish ladder, and downstream below hatchery outfall ). Fish were placed in live cars on Mondays and removed for euthanization and assessment of health on Thursday afternoons. The entire observation was performed twice during consecutive weeks of mid-July. Mortality was not significant in any group (2 mortalities at the fish ladder site—1 each week). With the exception of some fin erosion and one obviously sick individual, fish scored pretty well and all parameters were within normal ranges (raw data in available Excel files). Below is a summary of the results:

Table with 9 columns: Group Id\*, Avg. Length (mm), Avg. Weight (g), KtL, Avg. Hematocrit (%), Avg. Plasma Protein (g/dL), Avg. Mesenteric Fat, Avg. Smolt Index Score, Over-All Score (perfect score is 0.0). Rows include data for Site 1, Site 2, and Site 3 across Week 1 and Week 2.

\*Site 1 = Lower American River, Hazel Ave. Bridge
Site 2 = Lower American River, Nimbus Fish Ladder
Site 3 = Lower American River, Below Nimbus Outfall

Comments: Water temperature ranged from 61-63°F the first week (July 6th to 9th) and 62-63°F the 2nd week (July 13th to the 16th).

Submitted By:

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