Moore, 1990

State of California — Business, Transportation and Housing Agency

Memorandum

To : Park Bypass Biologic File

Date : January 30, 1990

File No.: 1-Hum,DN-101-125.6/
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194411
RNP Bypass

FEB - 5

From : DEPARTMENT OF TRANSPORTATION - District 1
Mark Moore, Environmental Planning Mark Moore

Subject: Natural Spawning in Prairie Creek

A total of 94 salmon and steelhead redds have been observed by Redwood National Park fisheries biologists in Prairie Creek from a point approximately 100 yards below the channel change at the south end of the Bypass Project to the confluence of Prairie and Ten Tapo Creeks at the headwaters of Prairie Creek. These redds represent spawning for the period November 30, 1989 to January 29, 1990. These numbers are not inconsistent with those observed in past years. Nearly all of the redds probably represent chinook and coho salmon, as the steelhead run has not yet entered Prairie Creek in large numbers. Redd counts have not been conducted in May, Boyes or Brown Creeks.

The redds are distributed as follows:

- Most (62) are located between the May Creek confluence upstream to the Caltrans fish weir at Prairie Creek State Park Campground.
- Eleven are located below the confluence of May Creek, with six of the 11 within the limits of the channel change.
- Two are located between the Caltrans weir and the Boyes Creek confluence.
- Eleven are located between Boyes Creek and Big Tree Creek.
- Five are located between Big Tree Creek and Brown Creek.
- Three are located between Brown Creek and Ten Tapo Creek. A short section of this reach has not been surveyed, so there may be a few more redds not yet recorded.

These redds should collectively represent somewhere around 250,000 eggs currently incubating in Prairie Creek gravels, based on an average of 2,500 eggs per redd. Future counts should include an increasing number of steelhead redds. Survival to emergence of these eggs is unknown, but based on

qualitative observations, and barring an increase in fines beyond current levels, there will be some level of natural production this year in Prairie Creek.

MRM:mad