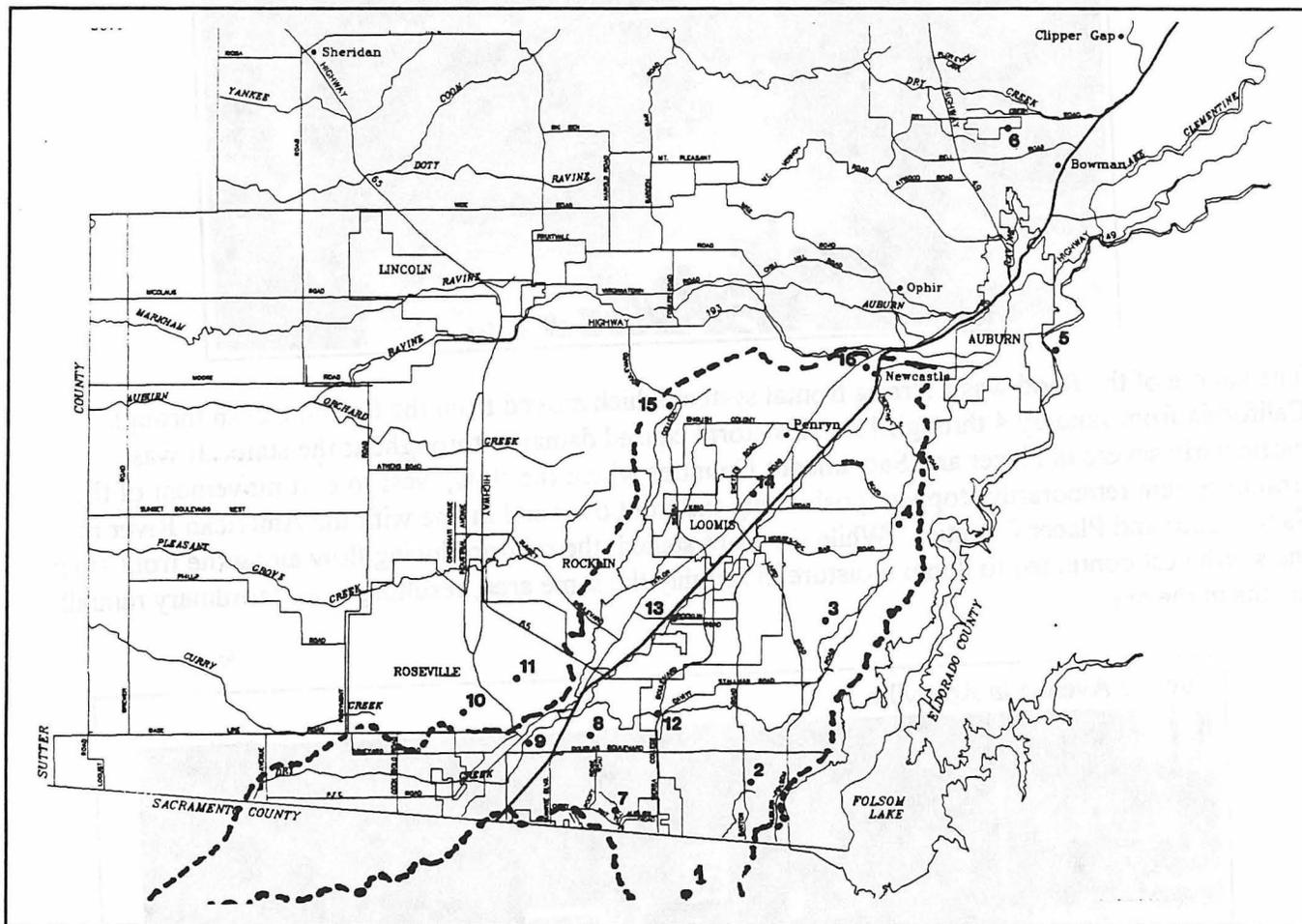


# The Floods of January 1995, in the Dry Creek Watershed, Placer County California

Dennis Huff<sup>1</sup>

The January 10 1995 flood was the largest ever recorded for the overall Dry Creek watershed in southwestern Placer County. The estimated flow at Vernon Street, at which point the watershed is approximately 80 square miles in area, was 15,000 cubic feet per second. Subsequent evaluations indicate that this is approximately the 100-year flood for that location.



The most extreme flows occurred on Miners Ravine and Linda Creek, tributaries of Dry Creek on the eastern side of the watershed. More than 300 homes were damaged in the populous areas along Linda Creek and Cirby Creek in Roseville: Several residences were inundated by more than 6 feet of water. Significant damages occurred to more than 100 other residences, mostly along Miners Ravine, Secret Ravine and Dry Creek. Many structures in the Sacramento County community of Rio Linda were also damaged heavily.

<sup>1</sup> District Engineer, Placer County Flood Control and Water Conservation District, 1144 B Avenue, Auburn CA, 95603

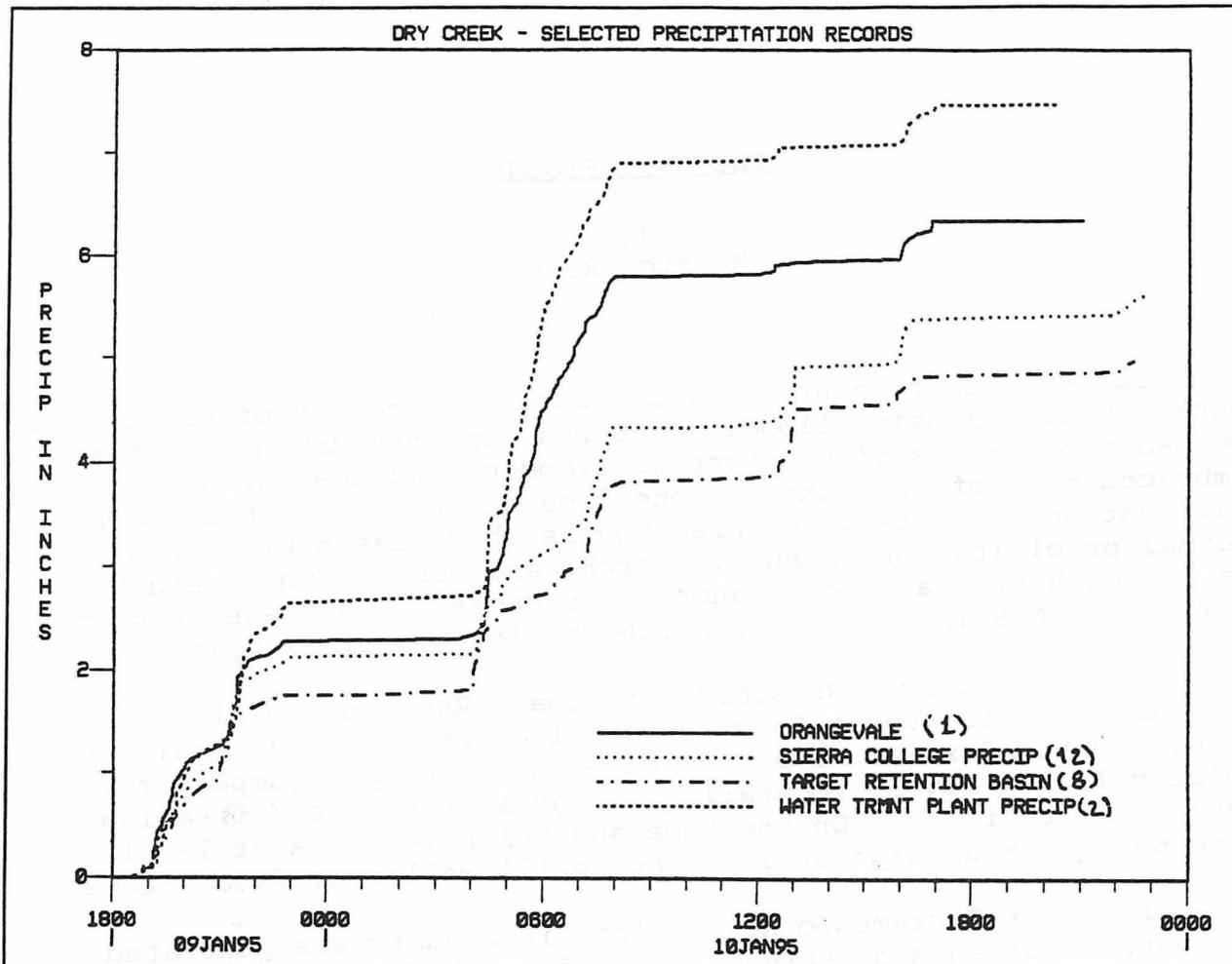
Flooded Residence In Roseville



The source of the flood was a strong frontal system which moved from the Pacific Ocean through California from January 4 through 15. This storm caused damages throughout the state. It was particularly severe in Placer and Sacramento Counties where the slow, west to east movement of the frontal system temporarily stopped, positioning the front over and in line with the American River in Sacramento and Placer Counties. While the front stalled, the rain-producing flow along the front from the southwest continued to dump moisture in roughly the same area, resulting in extraordinary rainfall depths in the area.

Sunrise Avenue in Roseville





Heavy rainfall occurred during two main periods. The first period began about 6 p.m. on the evening of January 9 and lasted for about 3 hours. The second period of heavy rainfall began at about 4 am on January 10 and lasted about 3 hours also. Numerous small, short duration, intense thunderstorms occurred thereafter through evening on the 10th.

The hyetographs shown above for selected stations indicate the temporal distribution of rainfall and amounts received over the 24-hour period ending at 6 p.m. on January 10. As shown, the greatest amount of rainfall received was early on the morning of January 10. This part of the storm produced the greatest amount of flooding.

According to the statistics for rain gages in the area with relatively long records, the depths measured for periods from 2 through 24 hours were extreme in several locations. They exceed the amounts which could be expected no more than once every 200 to 500 or more years on the average.

The storm and flood of January 95 were remarkable in other ways. The second largest flood, that of February 1986, had occurred just 9 years earlier in approximately the same area, with the same orientation and direction of flow of moist air feeding the system. It has been speculated that the state's topography and typical storm tracks may favor this particular area. If this were the case, it would be important to know in anticipating the potential for flooding over a long term both within and outside the area in question. Unfortunately, however, there is insufficient data to conclude with reasonable assurance that this is the case.