

Description of Data Sources
and Table Layout
for the Butte Creek Watershed
Diversions and Imports Map

Data collection for this map was difficult for several reasons. A map compiled by the Water Resources Control Board (WRCB) and obtained from the Department of Water Resources, Northern District, Red Bluff, CA by Heather Harmon for the BCWP shows diversions from Butte Creek and the Sutter By-pass, Butte Creek's southern extension below the Butte Creek Watermaster Service Area. However, although the map displays the water right at each of these diversions, it is given in terms of a right to divert water at a certain *rate*, given in cubic feet per second (cfs). There are no records given of *quantities* diverted; that is, there is no information on how many acre-feet of water is used by these particular diverters. With the most useful format for providing this data being one that shows *how much* water is going to various places, the lack of data was a problem in trying to provide a complete representation of diversions and imports in the Butte Creek system.

During an interview with Jim Langley, DWR Watermaster for the Butte Creek Watermaster Service Area (See Appendices B & C), the WRCB map was discussed. Langley concluded that, as certain rights he knew of specifically were represented incorrectly on the map, he had little confidence in it. For these reasons, this map was not used. Also, as the Butte Creek Watermaster Service Area is the only area with adjudicated water rights, it is the only area with an active monitoring program of its diversions. Records for diversions such as unincorporated diversions, and the Sanborn Slough Bifurcation are unavailable as they are not in the service area. Stories of clandestine pumping operations and the placing wells in such close proximity to the creek as to remove part of its subsurface flow were told to the Project during research. Future investigations into exact water diversions locations, and quantification of these diversions are encouraged.

As described above, there are undoubtedly diversions on Butte Creek that are not on this map. Numerous diversions in the area around and below the Sanbourn Slough Bifurcation are unmonitored, and cumulatively have the ability to change the flows in the lower creek substantially. *The Lower Butte Creek Project* (Jones & Stokes, 1998) addresses many of these problems. It should be noted that flows within the watershed are augmented by flows from the West Branch of the North Fork of the Feather River, the Sacramento River, Thermalito Afterbay (allforks of the Feather River), and groundwater pumping, all of these reaching Butte Creek by a variety of routes, in varying quantities, depending on the time of year.

The main data source for the attached Diversions and Imports Table and Map is a report done by Todd Hillaire, Department of Water Resources (DWR), Northern District, Red Bluff, CA. The title of the report was originally "Butte Basin Study - Basic Data." of May, 1992. The version used here was revised and submitted to Charles Ferchaud and Ralph Hiton of DWR on 6-15-93, as seen by Hillaire's signature and date on the attached memorandum.

Data for Diversions 60 and 61, diversions that are in the Watermaster Service Area, but were not included in the Hillaire report, was solicited from Jim Langley, DWR Watermaster for Butte

Creek. He responded by letter dated 9-30-97 stating that "the watermaster service did not maintain records on either one of these diversions in years past but from my experience both Adams Esquon and Gorrill personnel have kept very good records of their diverted water." Langley went on to suggest that the Watershed Project contact these individual farms to obtain the information. Both Gorrill Ranch and Rancho Esquon ranch managers were contacted by letter requesting information on their diversions from Butte Creek.

Don Heferen, Manager of the Gorrill Ranch, responded by telephone in October, 1997. He related that there were no written records for the Gorrill diversion that he could provide to the Watershed Project. He gave the following values for diversions, in acre-feet: April - 700; May - 1400; June - 1400; July - 700-800; August - Dry. He was contacted again in an attempt to synthesize this information into a format consistent with the data from the Hillaire report. Hefren provided averages that have been placed in the table.

Rick Ponciano, Manager at Rancho Esquon, responded by way of fax. He provided the amount of water diverted for the years 1988 through 1997, along with the maximum rates of diversion, in cubic feet per second, for each of these years.