STATE OF CALIFORNIA

STATE WATER RESOURCES CONTROL BOARD

In re: Draft Order WR 2009-00XX-DWR)	TESTIMONY OF TERRY PRICHARD
)	
Woods Irrigation Company)	
)	

I, Terry Prichard, declare as follows:

- I was asked by John Herrick, Esq., to review the map entitled "San Joaquin The Gateway County of California, thought to be dated between 1910 and 1914. The purpose of my review was to comment, and/or make conclusions about water use in the areas designated by specified crops on the map at certain locations.
- 2. The map specifies beans and alfalfa on portions North of Middle River and South State Highway 4.
- 3. Although soil types can change over time in this area, going from more to less organic as they mineralize, I looked at the current soil surveys for the area. From this I determined that the relevant portions of the land currently have soil series designated as Egbert, of Ryde and Merritt with smaller areas of Dello and Grangeville. All are mineral soils, and thus not conducive to subsurface irrigation. From this, I conclude that depending on the crop, I can make reasonable conclusions about whether or not a certain crop would have been irrigated either by surface or subsurface irrigation. Attached hereto as WIC Exhibit 10A is a Google Earth map of the area over which I have placed the current soil types.
- 4. Beans are prominently shown on the map in the relevant area. Bean root zone vary from 18 to 36 inches in depth, however they extract 85% of their moisture from the top 18 inches. The bean-growing season includes summer months, and thus would require some sort of irrigation. Beans are shown on the map as being within the Egbert, Ryde and Merritt soil types, and thus would have required irrigation. From these soil types, I conclude that it was surface irrigation.
- 5. A similar analysis was done for alfalfa. Alfalfa can be "irrigated" through subsurface practices, or can rely on shallow ground water if the quality is good enough. However, the reasonable conclusion is that the summer water needs were satisfied by irrigation.
- 6. The map is hand drawn, and thus the exact locations of the listed crops cannot be exactly determined. As stated above, how the soils have changed over time has not yet been determined. However, given the crops listed and the soils, I believe the only reasonable conclusion is that surface irrigation was occurring in this area for the crops

listed. There may have been subsurface irrigation also, but there was certainly surface irrigation.