## PETITION FOR RECONSIDERATION OF FULLY APPROPRIATED STREAM KINGS RIVER SYSTEM, TRIBUTARY TO TULARE LAKE BASIN May 9, 2017

Decision D 1290, adopted on November 30, 1967 by the State of California State Water Rights Board (the predecessor to the State Water Resources Control Board) designated the Kings River as a fully appropriated stream. Decision D 1290 approved eight major applications (353, 360, 5640, 10979, 11023, 11075, 15231, and 16469) for Fresno Irrigation District, as Trustee, in the Kings River watershed for amounts of water exceeding the long-term mean annual runoff of the Kings River measured at Piedra (the historic measuring point just downstream of Pine Flat Dam where the river enters the floor of the San Joaquin Valley). As stated in the Board's Decision D 1290, "Only in years of exceptionally high runoff would any water be allowed to leave the Kings River service area through Fresno Slough. Since Pine Flat Dam began storing water, outflow through Fresno Slough has occurred in less than one-third of the years, and for nine consecutive years there was no such outflow. Under these circumstances, it must be concluded that the prior major applications which are to be approved will appropriate essentially all of the available unappropriated water of the Kings River" [Decision D 1290, pgs. 37-38]. Floodwater leaving the Kings River Service Area through the Fresno Slough and James Bypass, discharges to Mendota Pool where the water meets the San Joaquin River and flows to the Pacific Ocean.

Because Kings River water is periodically discharged to the San Joaquin River during above average water years, it could be argued that some Kings River water is available for appropriation. To the extent that the State Water Resources Control Board (Board) ever changes its previous and still current determination that the Kings River is a fully appropriated stream, and considers any Kings River waters to be unappropriated or not beneficially used under current licenses, then this Petition is submitted along with the application filed by Consolidated Irrigation District, Fresno Irrigation District and Alta Irrigation District to appropriate any waters of the Kings River deemed unappropriated or not beneficially used for use within the Counties of Fresno, Kings and Tulare, including those areas of said counties included in groundwater basins subject to the mandate to achieve groundwater sustainability under the Sustainable Groundwater Management Act (SGMA).

As stated in the Board's Decision D 1290 dealing with the entire Kings River, the Board's ruling states: "It is the intention of KRWA to utilize all of the runoff of the river. While this is not possible in years of extreme flood, the association (KRWA) members have planned their overall project to take maximum advantage of all storage facilities available to them. This includes recharge of groundwater and underground storage as

well as the storage of flood waters in Tulare Lake Basin and maximum retention in Pine Flat Reservoir." [Decision D 1290, pg. 35]

Permits were issued for all eight of the applications approved with Decision D 1290. Subsequently six of these permits were converted to Licenses for the Diversion and Use of Water and issued to the Fresno Irrigation District, as Trustee, for the use, storage & diversion of all Kings River waters. Two permits (Permit 15717 from Application 11023 and Permit 15718 from Application 11075) were later revoked. The six Kings River licenses (11517, 11518, 11519, 11520, 11521 and 11522) were subsequently transferred to the Kings River Water Association (KRWA) as Trustee for the 28 member units of the KRWA.

While it has always been the intention of the KRWA member units to utilize all of the runoff of the river, they have not always been able to achieve that goal in years of extreme flood. Since the construction of Pine Flat Dam (completed in 1954), the hydrology of the Kings River has produced flood years on average about once every three years. However, several flood years often occur in sequence, with significant below-average water years in between flood years. The Kings River is tributary to the Tulare Lake Basin, but in above average water years, the U.S. Army Corps of Engineers, which operates Pine Flat Dam according to an established Flood Control Manual, will declare a flood release on a daily basis when the water level in Pine Flat Reservoir is above a designated safe water level and the projected inflow is in excess of current demands within the Kings River Service Area. Flood release water is initially discharged out James Bypass (Fresno Slough) before any flood water is sent to the Tulare Lake Basin, where valuable farmland would be flooded. Table 1 below indicates the historical amount of floodwater that has been discharged out James Bypass and into the San Joaquin River since the construction of Pine Flat Dam, with discharge flowrates that can approach and occasionally exceed 5,000 cfs.

**Table 1** Historical Floodwater Discharge at James Bypass Gaging Station Since the Construction of Pine Flat Dam

Historical Floodwater Discharge out James Bypass			
Water Year	WY % of Avg.	Total AF	
1955-56	153%	91,205	
1957-58	150%	212,797	
1966-67	199%	484,870	
1968-69	258%	1,551,343	
1969-70	78%	62,173	
1973-74	123%	86,353	

Historical Floodwater Discharge out James Bypass			
	WY % of		
Water Year	Avg.	Total AF	
1977-78	203%	551,189	
1978-79	102%	11,763	
1979-80	179%	579,581	
1981-82	183%	452,756	
1982-83	264%	2,309,290	
1983-84	116%	568,609	
1985-86	192%	667,750	
1986-87	46%	1,347	
1994-95	204%	586,510	
1995-96	123%	74,542	
1996-97	156%	437,113	
1997-98	183%	986,453	
1998-99	74%	20,043	
2004-05	149%	63,194	
2005-06	173%	612,148	
2010-11	195%	503,465	

Table 1 above demonstrates that floodwater is not typically available until the water year hydrology is 150% of more above average, except in years that follow a very wet year (i.e., 1998-99 following 1997-98). The water year on the Kings River is defined as October through September. Figure 1 is a graphical depiction of the historical floodwater discharge out Fresno Slough/James Bypass.

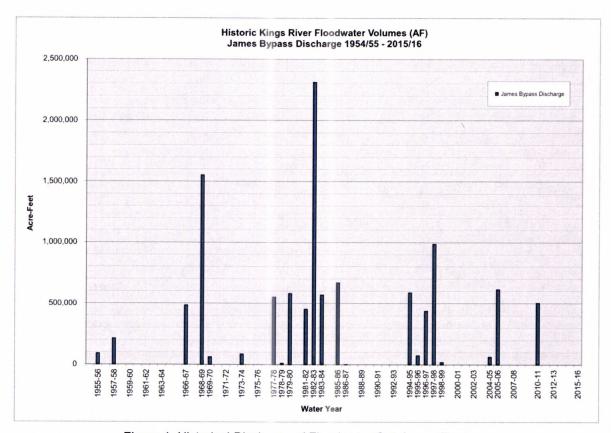


Figure 1 Historical Discharge of Floodwater Out James Bypass

Because of the timing of floodwater availability, KRWA member units have not historically been able to beneficially use all licensed floodwater. When floodwater is available, local precipitation is often sufficient to delay the start of the irrigation season, and crop evapotranspiration is often reduced overall for the year. In addition, floodwater often becomes available in late spring before irrigation demands increase. The graphs below indicate for the past four recent flood years the time during the calendar year when floodwater was leaving the Kings River Service Area (denoted in dark blue). Note that the majority of the floodwater is available in late spring before the peak irrigation season begins in June.

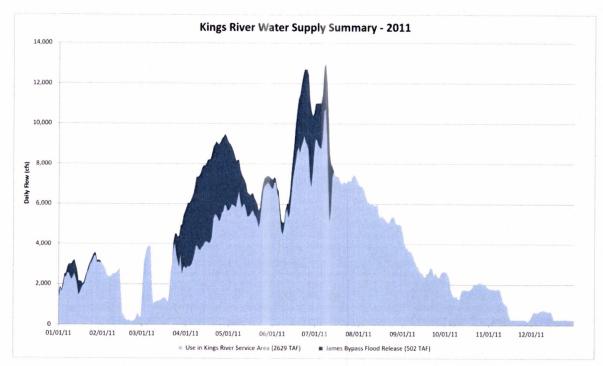


Figure 2 Floodwater Availability in 2011

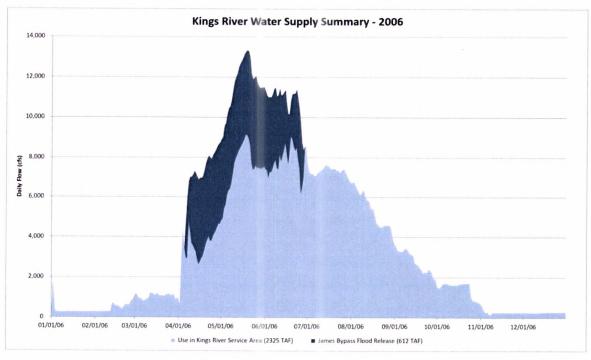


Figure 3 Floodwater Availability in 2006

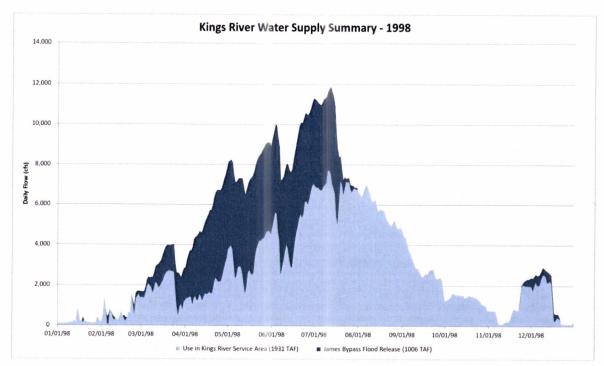


Figure 4 Floodwater Availability in 1998

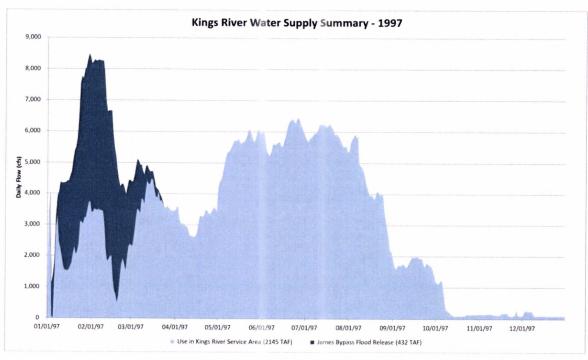


Figure 5 Floodwater Availability in 1997

The Kings River Service Area, serving parts of Fresno, Kings and Tulare counties, is an agriculturally rich, conjunctive use area, meaning that both surface water and groundwater are used to meet irrigation demands. Available surface water for irrigation is delivered by the member units, while groundwater is generally pumped by private landowners who extract groundwater for beneficial use. As noted in Decision D 1290, "Even with storage and regulation, normal operation requires a supplementary use of groundwater in nearly all of the Kings River service area. The groundwater overdraft in the San Joaquin Valley south of the San Joaquin River is estimated to be 2,000,000 acre-feet per year." [Decision 1290, pg. 16]

Runoff on the Kings River is highly variable, ranging from a high of 4,476,300 AF (266.7%) in 1982-83 to a low of 361,000 AF (21.5% of average) in 2014-15. Many of the KRWA member units intentionally recharge the groundwater when water in excess of irrigation demands is available. However, average irrigation demands have historically exceeded the availability of surface water, with resultant groundwater pumping causing a groundwater overdraft condition.

The provisions of recently adopted SGMA mandate KRWA members to capture available excess surface water in order to bring overdrafted groundwater basins into compliance with SGMA standards. Therefore, those members must take action to increase groundwater recharge activities. The counties served by the Kings River Service Area (Fresno, Kings and Tulare) have all been designated as critically overdrafted by SGMA. To the extent that any waters of the Kings River are deemed unappropriated, excess or not having been put to beneficial use, the applicants' application includes any such waters so as to allow them to put said waters to beneficial uses within Fresno, Kings & Tulare counties on projects proposed under SGMA and otherwise to assist these counties and their respective groundwater basins to achieve groundwater balance and sustainability. Water that is used to recharge the groundwater is beneficially used later that year or the following year when the groundwater is extracted by landowners for beneficial use.

Groundwater recharge projects can capture and utilize the floodwater whenever it is available, spring or summer, unlike direct use for meeting irrigation demands. Therefore, the applicants, as well as others within Fresno, Kings and Tulare counties, intend to construct additional groundwater recharge projects to capture and store underground any available Kings River water that historically has been discharged out James Bypass. In addition, some projects are proposed for direct irrigation use in areas of said counties that do not have a current surface water supply.

This Petition is being submitted in case the State Water Resources Control Board ever changes its previous and still current determination that the Kings River is a fully appropriated stream, and considers any Kings River waters to be unappropriated or not

beneficially used under current licenses. In that event, the applicants - Consolidated Irrigation District, Fresno Irrigation District and Alta Irrigation District – request that the State Board consider and approve their application to appropriate any and all excess flood waters, any waters not beneficially used; or, any currently unappropriated waters of the Kings River for use within the Counties of Fresno, Kings and Tulare.