

ports checked by the Bureau of Reclamation with the thought in mind of determining differences with respect to the application of the Blaney-Criddle Formula in arriving at consumptive use, leaching requirements, irrigation efficiency, etc. We have been advised by officials of the Bureau of Reclamation that, though we differ in the application of the formula in some respects which has a minor effect on the end result, the total over-all contribution differential to the Sea between Imperial Irrigation District and the Bureau of Reclamation studies is less than 60,000 acre-feet per annum.

It should be noted that this small variation is less than the aggregate difference between the observable and theoretical flow to the Sea of 72,500 acre-feet contributable to rainfall. We do not know whether the Bureau took rainfall into consideration; if not, the 60,000 acre-feet difference would be offset by rainfall with the effect of reducing the difference to zero. But, even if they did take rainfall into account, there would only be an annual difference of 60,000 acre-feet. Compared to our average Pilot Knob diversion of 2,930,000 acre-feet per year, this amounts to only 2.5 per cent, a very low figure for a District which operates from a diversion point 60 miles away on an order placed eleven days in advance at a point 150 miles up the River at Parker Dam. I believe that it is difficult enough to anticipate what we are going to do today, without trying to anticipate what we are going to do ten days hence.

I appreciate the opportunity afforded to me in these few minutes to spread the facts upon the record for one and all to examine at will. Careless and unthinking charges have been made regarding the use Imperial Irrigation District makes of its share and right to Colorado River water. Let there be no doubt that the record of this District is clear, is based on fact and speaks for itself.

Sincerely yours,

R. F. CARTER, *General Manager.*

[Enclosures]

IMPERIAL IRRIGATION DISTRICT

DIVERSION REQUIRED AT PILOT KNOB FOR IMPERIAL UNIT BASED ON BLANEY-CRIDDLE FORMULA AND 1959-1966 CROP PATTERN FOR HISTORIC PPM SALINITY CONCENTRATION OF IRRIGATION WATER

Double cropping, average 8 years—1959-66 (acres)

Acres in crops : 548,000.

Area irrigated for crops : 434,000.

Double cropped : 114,000 or 20.8% of 548,000 acres—Say 21%.

T-1018.—REQUIRED FOR DELIVERY TO FARMS

Input irrigation water at—	845 p.p.m. ¹ (percent)	Acre-feet per irrigated acre
Average consumptive use per irrigated acre, 1959-66 ²		4.26
Leaching requirement ³	20	5.33
Farm efficiency (leaching requirement)	95	5.61
System regulation and system loss (historic 8-year average) ⁴	18	⁵ 6.84
Required for delivery at Pilot Knob per acre irrigated		6.8

¹ Average measured salinity, 1959-66.

² Refer T-1030.

³ Based on leaching requirement for historic 8-year average salinity of irrigation water, refer T-1031.

⁴ System loss includes seepage, transpiration, and evaporation losses, unmeasured deliveries to some 1,500 or more service pipes, deliveries to farm homes, and farms less than 2 acres.

⁵ Round to 6.8 acre-feet.

Quantity required at Pilot Knob ¹

	<i>Acre-feet</i>
Consumptive use by crops-----	4.26×434, 000=1, 849, 000
Leaching requirement and/or irrigation efficiency	
	(5.61-4.26)×434,000= 586, 000
System regulation and system loss-----	(6.8-5.61)×434, 000= 516, 000
Total required to IID at Pilot Knob ¹ -----	2, 951, 000

¹ Based on Blaney-Criddle formula.