

# Interoffice Memo

## South Central Region

1340 NW Wall Street, Suite 100, Bend, Oregon, 97701-1939, (503) 388-6669, Fax (503) 388-5101

DATE: July 12, 1996  
TO: MARTHA PAGEL  
FROM: BOB MAIN  
SUB: NORTH UNIT LD. WATER ACCOUNTING

STATE OF OREGON, }

} ss

County of Marion. }

I certify that the within was  
prepared by me on the 19 day of

Sept., 20 13 at 11 o'clock

A true and correct copy was recorded in the

Public Records, Vol. 9

Page 225

Water Resources Director

During the review of North Unit Irrigation District's (NUID) HB-3111 petition, WaterWatch (WW) raised questions concerning how the Water Resources Department (WRD) and the public could be sure that NUID drew water from the correct sources for the lands NUID irrigates. A meeting was held in Bend, OR. on July 10, 1996 to resolve these questions. Attending were Chuck Schonnocker (NUID), Eric Glover (USBR), Reed Benson (WW), and Bob Main (WRD).

### Background:

NUID irrigates approximately 50,000 acres (priority 1913) from the Deschutes River and 9,000 acres (priority 1968) from the Crooked River. The lands irrigated from the Deschutes River also have a supplemental water right from the Crooked River (priority 1955). The water from these two sources is mixed together in the main canal, then distributed to the lands of the district. The amount diverted from each source is measured and recorded.

Since 1981, WRD has required that NUID pump sufficient water from Crooked River to supply the demand created by the 9,000 acres of Crooked River lands. The remainder of this memo will detail the process agreed to by the parties to ensure that this happens.

### THE PROCESS

#### Assumptions:

Total irrigated	59,000 acres
Crooked River irrigated	9,000 acres
average loss from Crooked River pumps to delivery point	10%

TD = "total acre feet delivered on the Project to date"  
CRD = "Crooked River Demand"  
Crooked River lands are irrigated at the same rate as Deschutes lands

#### Then :

ratio of Crooked River lands to total irrigated is  $9000/59000 = .1525$

Crooked River Demand =  $(.1525 \times TD) + .10 \times (.1525 \times TD) = .16775 \times TD$

The watermaster produces the "storage report" approximately monthly during the irrigation season. The first storage report of the season is not calculated until demand exceeds the natural flow of the river. As part of the storage report the watermaster will add a section that will calculate the Crooked River Demand and will record the total pumped from Crooked River to date. After each storage report is produced, NUID will make a best effort to eliminate any deficit in the total pumped from Crooked River at a constant rate over the remainder of the irrigation season. In no case shall any deficit remain at the end of the irrigation season. NUID will supply to the watermaster, prior to each storage report, the total acre feet delivered and total pumped from Crooked River. The storage reports will remain on file in the watermaster's office and open to public inspection.

This process may require NUID to pump more water from Crooked River than is actually required by Oregon water law, for it assumes that the percentage of Crooked River acres in actual production in any given year is the same percentage as Deschutes River lands in actual production. In fact, a higher percentage of Deschutes lands are irrigated in any given year than Crooked River lands. If NUID were to establish an internal water ordering system that would allow accurate measurement of Crooked River deliveries, separate from all other deliveries, then the process for calculating Crooked River Demand will be renegotiated.