Message 476-456
Subj: CONTAMINANT REPORT

.rm75
United States Government
ELECTRONIC MAIL MEMORANDUM

Fish & Wildlife Service
Reno Field Station
November 30, 1988

To: Regional Supervisor, Division of Realty, Portland, OR (ARW-RE)
Attn: Ed Loth

From: Field Supervisor, Reno, NV

Subject: Contaminant and Hazardous Wastes Assessment Report

This is in reply to your request for an assessment report concerning the proposed acquisition of water rights for Stillwater Wildlife Management Area, Nevada.

Overall water quality in the Newlands Project degrades from the upper to the lower end of the project, as exemplified by measurements of total dissolved-solids (TDS). Total dissolved solid levels in waters released from Lahontan Reservoir (before being used for irrigation within the project) averages 161 mg/1. The increased TDS levels in irrigation return flows from irrigated and drained land indicates dissolved salt content averaging one ton per acre per year (pers. comm., Ted Roefs, Bureau of Reclamation). The TDS levels are, however, highly variable among sites. Due to this increase of salts in the irrigation return flows, water typically entering the wetlands from drainage ditches approximated 600 mg/1 on the average during the period 1967 through 1986 (DOI, 1987). Whereas, water remaining in the delivery canals and not used for irrigation, enters the wetlands at an average of 250 mg/1. The increase in TDS of this delivery water compared with Lahontan Reservoir releases is due to the mixing of drain and delivery water and is a highly variable value. The TDS varies daily due to the proportion of drain verses delivery water, which depends on weather or not fields are being irrigated, as well as a variability between sites, as mentioned above.

While, there appears to be a substantial improvement between drain and delivery systems (600 mg/l vs. 250 mg/l), the actual value the wetlands receive will probably lie somewhere in-between these two extremes. Higher quality water purchased towards the upper end of the project will not be of the same quality when delivered to the wetlands, however, the total load of salts dissolved from the land and deposited in the wetlands will be reduced proportional to the lands taken out of production. Furthermore, the fact that these figures are highly variable between sites is also true for other

elements such as arsenic.

We hope this information will assist you in your planning efforts. Some additional information on specific sites is available and more data will soon be available to help your planning.

Please feel free to contact Bob Hallock or Howard Burge at (FTS) 470-5227,

for additional information.

s/s Richard J. Navarre
Field Supervisor

DOI. 1987. Newlands Project Operating Criteria and Procedures, Record of Decision, Wetland Analysis. 141 pp.

R1FWGB for R1RWRE 14:21 PST 05-Dec-88 Message 476-456 [12]

[Done]
^Z