

## Office Memorandum • UNITED STATES

HYDRAULICS BRANCH  
OFFICIAL FILE COPY

TO : E. W. Lane

DATE: October 3, 1949

FROM : C. W. Thomas

SUBJECT: Retrogression in Eaglenest Creek below wasteway from Heart Mountain Canal--Shoshone Project, Wyoming.

1. On a field trip to Shoshone Project, August 11-18, 1949, in connection with seepage measurements in canals, I had the opportunity to observe many of the hydraulic structures on the project.

2. The Heart Mountain Canal crosses Eaglenest Creek in an inverted siphon under the creek channel. A wasteway extends from the canal to the creek at the upstream end of the siphon.

3. The project has been operated two seasons and the Eaglenest wasteway has been used to regulate flow in the canal. Small flows have been released almost continuously since beginning of operation and occasionally larger flows. The creek bed upstream from the crossing is normally dry during most of the year.

4. The flow of water through the wasteway has caused a general degrading of the creek bed with the result that the stilling-basin for the wasteway has been threatened. Large pieces of concrete had recently been placed at the downstream end as a temporary means of preventing undermining of the structure. Conditions at the time of the inspection are as shown in the accompanying Photographs H-855-38 and -39.

5. Major corrective measures may be necessary in the creek channel to protect the wasteway structure and prevent uncovering of the siphon tube should a flood occur in the creek.

BUREAU OF RECLAMATION  
HYDRAULIC LABORATORY

OFFICE

FILE COPY

WHEN BORROWED RETURN PROMPTLY

PAP 24

PAP 24



H-855-88



H-655-89