



John/Mike/57R file

State of Idaho
DEPARTMENT OF WATER RESOURCES

Western Region, 2735 Airport Way, Boise, Idaho 83705-5082 - (208) 334-2190
FAX (208) 334-2348

CECIL D. ANDRUS
GOVERNOR

R. KEITH HIGGINSON
DIRECTOR

January 18, 1995

OWEN ORNDORFF
JUNAYO RANCH LTD PARTNERSHIP
1087 RIVER ST #230
BOISE ID 83702

RE: Macks Creek Reservoirs

Dear Mr. Orndorff:

Thank you for your letter dated January 5, 1995. This response is to supply you with information regarding measuring device selection, and to confirm an on-site meeting scheduled at Lower Macks Creek Dam on January 24. This meeting will be attended by IDWR personnel Mike Stubblefield, John Westra and Cindy Hodges, and by Watermaster Connie Brandau.

Portable measuring devices are satisfactory and acceptable to this Department, provided they are adequately sized for the anticipated rates of flow and properly installed. I agree that portable devices would best suit your needs for all three required measurement locations. Attached is information which will help with device selection and sizing.

Although several types of measuring devices may be adapted to non-permanent applications, portable weir plates are by far the simplest to construct, install, and maintain. Other devices such as Parshall flumes are also acceptable. Measuring device sizing is dependant upon the flows which must be measured during the time the Watermaster is on duty. For example, Ms. Brandau has indicated that a maximum combined inflow of 150 miners inches, or 3.0 cfs, is typical above the Macks Creek Reservoirs during regulatory periods. Based on this estimate, rectangular contracted weirs with two foot crest length should be of sufficient size for use above the reservoirs at both the Macks Creek and Cottle Creek diversions. A similar weir with a three foot crest length should be adequate for the location below Lower Macks Creek Dam. Ms. Brandau should be consulted prior to weir sizing to confirm expected peak flows in these drainages during her term of service. Weir sizing information is included on page 8 of the enclosed booklet.

Portable weir plates may be fabricated on-site using steel, aluminum, or wood, so long as the crest is sharpened. Specifications are contained within the enclosed material. If you wish to purchase a manufactured device, we are compiling a list of local manufacturers whom you may contact. That list will be forwarded to you when completed.

1/18/95

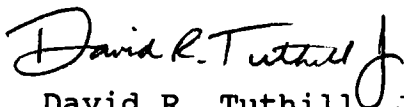
Page 2

The time in the delivery season when regulated deliveries may cease for the Macks Creek drainage is the time at which measured inflows, when released from Lower Macks Creek Reservoir, would be of no benefit to downstream rights. It is within the Watermaster's jurisdiction to recognize and act upon a futile call for water. Based on Ms. Brandau's previous experience in the Reynolds Creek drainage, I believe that a combined minimum inflow may be defined for Macks and Cottle Creeks which would automatically invoke the futile call. When combined flows fall to this rate each season, regulation may cease for Macks Creek and weirs may be removed, regardless of activity elsewhere in Reynolds Creek. It would be to the advantage of Junayo Ranch and the Watermaster to establish and agree upon this minimum rate of flow based on experience gained during this delivery season.

With regard to requested amendments to your storage permits, Cindy Hodges is preparing draft permit amendment applications which will reflect the exchange of stored and live flows on upper lands. She will bring the partially completed applications to the meeting for your review and action.

With the combined input of all parties attending the upcoming meeting, we look forward to the resolution of all the above issues.

Sincerely,



David R. Tuthill, Jr., P. E.
Manager, Western Region Office

DRT:ch

Enclosures

cc: Connie Brandau, Watermaster
Carl Myers
(no enclosures)