

PN-471

JUL 9 1993

Memorandum

To: Project Superintendent, Burley ID
From: ^{ACTING} Regional Supervisor of Water, Power, and Lands, Boise ID
Subject: Revision of Flood Space, Jackson Lake Dam
(Reservoir Capacity Allocation)

As requested in your memorandum of June 16, 1993, we have reviewed the request by the Jackson Hole Chapter of Trout Unlimited for modification of the winter flood control space criteria to supplement releases from Jackson Lake Dam during the November through January period (their letter of June 1, 1993).

The current flood control rule curve (SN-902-1/1) was prepared in 1958. An update of the curve was started in this office about 4 years ago, but has not been finalized. The revised curve generally requires more total flood control space above Heise than the original curve, and assumes the same Palisades minimum space percentage (75 percent) and Jackson Lake winter space requirements.

During the revision, no detailed study was done of the minimum winter space requirement at Jackson Lake. A winter space requirement is designed to protect downstream development from rain floods and rain-on-snow floods, which may occur with little warning anytime during the winter beginning in November. It is quite possible that a detailed analysis would point to a greater space requirement since there have been several winter floods on record since 1958, most notably the flood of December 1964. Also, there has been significant development along the river downstream of the dam since 1958, increasing the potential cost of damages in the event that a winter flood cannot be controlled. The winter space requirement by itself will normally not affect the probability of refilling the reservoir.

As you pointed out in your memorandum, the present operation of Jackson Lake has been developed over the years to serve the best balance of irrigation, flood control, recreation, fish and wildlife and maintenance of project facilities. The change proposed by Trout Unlimited could affect all of these functions . . . not just flood control. The proposal, as stated, seems infeasible because of effects on the structure (ice problems), on other water uses, and because a block of stored water has not been identified to serve the winter streamflow need. The winter flood control criteria constrains storage contents and does not provide a block of water to be released over a long

many
time frame. In past years, the winter lake level has been well below the flood control constraint.

If pursued further, the streamflow need should be defined and an available resource identified. A public involvement process should include input from other agencies, interest groups, and the general public.



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