

EFFECT UPON IRRIGATION OF CRITICAL LOW FLOW OF ROGUE RIVER

By

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In the Grants Pass Irrigation District, we use just the normal flow of the Rogue River; the low flow in the river is used as a diversion, also for water power, not for storage.

We have a permit with the State of Oregon to use 800 cfs of water to run the two high-lift pumps, by water powered turbines. Through the use of 660 cfs, there are 100 cfs of irrigation water pumped to two high canals; one the South highline, which carries 60 cfs, the other, North highline or Tokay canal, at 40 cfs, plus one canal fed by gravity flow that carries 110 cfs.

We are forced by the Oregon Game Commission to let 87 cfs go by for the fish ways; it figures out the flow of the river must be at least 1,097 cfs for the district to operate at normal capacity.

When the flow of the river gets low, we cooperate with the Game Commission and lower the flow of the fish ways and the one gravity canal. In being able to do this, it helps in keeping the water above the dam high enough so the turbines do not draw air.

We are also able to transfer water from the South highline canal down to the gravity canal, when things get tough.

In the past history of the District, they have had to rotate the turbine driven pumps twice, but not in the seven years I have been here, although it was close to that point in 1955, and again in 1959. I don't recall the flow measurement in 1955, but in 1959, August 17, it was the lowest, at a gage reading of 945 and the reading at Raygold Dam, which is farther up the river, read on the 16th of August was 1100 cfs. The two gages vary, as you can see. However, it started raining and saved the day for us.

Since getting acquainted with Mr. Frost and the work his group does, I find it one of the greatest helps for the irrigation management, towards supplying information to the water users.

I want to thank the group responsible for the excellent job that is being done.

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