MONTANA FISH AND GAME COMMISSION STAND ON REICHLE DAM

Description of Project

The Bureau of Reclamation proposes that Reichle Dam be built on the Big Hole River. If built it will be about 17 miles upstream from Twin Bridges and will inundate 10 - 11 miles of the Class 1 (blue ribbon) section of the Big Hole. The impoundment area has the highest fisheries value of any stretch of river in the Jefferson Basin. According to a Bureau of Sport Fisheries and Wildlife report the reservoir will have an annual water level fluctuation of about 40 feet, however, if the fluctuation is from the conservation pool to the minimum pool it will be 73 feet. Mediocre trout fishing can be created in such a reservoir through an expensive stocking program. At best it will be inferior to the fishery lost.

The purpose of the project is to irrigate lands in the Bureau of Reclamation's Jefferson and Whitehall Units. To give an idea of the extent of the project, it will require over 200 miles of primary canals plus lateral canals and drains. The Jefferson Unit includes 42,275 acres of land not previously irrigated and 11,705 acres which would receive supplementary water. These extend from the Twin Bridges area to the east side of Canyon Ferry Reservoir near the dam.

The Whitehall Unit includes 7,340 acres not previously irrigated and 2,890 acres to receive supplementary water. These lands are west and north of Jefferson River, generally between Twin Bridges and Whitehall.

The Bureau of Reclamation proposes sufficient flow releases from Reichle Dam to not only satisfy irrigation needs, but also to increase the present low summer flows in the 17 miles of the Big Hole River and 77 miles of the Jefferson River below the dam. Increased flows will be provided only if the Bureau of Sport Fisheries and Wildlife, and in turn the Montana Fish and Game Department, recommend them as tangible means for improving the existing sport fishery downstream from the dam.

Another project feature would be Milligan Reservoir, a regulatory reservoir in Milligan Draw about 6 miles northwest of Three Forks. Since Milligan Creek is an intermittent stream, this reservoir will be filled almost entirely from Reichle Reservoir through a canal. If built, Milligan Reservoir will be full (about 1,000 surface acres) from October through June. The water level will be drawn down 60 feet in July and August (to 350 surface acres), and the reservoir will be refilled in September. It is anticipated sport fishing could be developed in this reservoir.

Power production at Reichle is scheduled to start about 10 years after the first irrigation. According to the Bureau of Reclamation, generation of hydroelectric power will be completely incidental to the operation of Reichle Reservoir for other purposes.

Project Costs

An article in the November 14, 1964 BILLING'S GAZETTE says the project will cost \$81,818,000 of which farmers will repay 7½ million dollars over 50 years. Farmers will receive \$6.63 more annual income from each irrigated acre. They will pay back \$5.65 annually. Quoting directly from the article:

"The benefit-cost ratios are \$1.14 to each dollar spent in the district and \$1.51 in the whole area from increased business, taxes, etc., under the complete plan . . .

"The project's cost on the basis of each fully irrigate acre, is \$1,032. That puts it beyond the farmer's means.

"Most of the cost, \$58,716,600, would be paid by the sale of power throughout the Missouri Basin (evidently from other power projects - added by GDH). Sales of Reichle's power would pay back \$3,454,000.

"Repayment for irrigation pumping power would bring in \$774,000 and the rest -- \$11,307,000 -- wouldn't be repaid.

"That 11 million dollars would be charged off to recreation, flood control and fish and wildlife benefits.

"The plan'offers the best opportunity to insure the area against the effects of water shortage, drought and seasonal dry periods,' Aldrich says.

"The Bureau recommends it, he adds, because it would give farmers the opportunity to grow different crops, increase feed grain production needed for cattle and open up dry benchlands to irrigation."

Montana Fish and Game Commission Stand and Basis for it

On November 18, 1964 the Montana Fish and Game Commission adopted the stand that the Big Hole River should be maintained in its free-flowing natural state. This is based on the following:

- 1. The Commission, and in turn the Fish and Game Department, is changing emphasis from just minimizing losses due to programs of other agencies to a positive program of development of the State's fisheries resources. Emphasis is being placed on Montana's renowned fishing streams, a priceless resource which will be increasingly more important to the State's economy.
- 2. The Commission indicated a desire that all Montana's blue ribbon trout streams remain free-flowing. There are only 410 miles of these streams on our stream classification map. They are of national as well as statewide value. In fact, Montana is unique in having a considerable share of the finest trout streams left in the nation. They are a heritage in our trust.

Admittedly, impoundments stocked with trout often support as many or more fisherman days than the river replaced. However, Montana's top trout streams provide much better fishing through natural trout reproduction when free flowing, than the ensuing impoundment does even with a huge trout stocking program. We are not interested in numbers of fisherman days as such, but in quality fishing. Our surveys indicate two-thirds of Montana fishermen prefer stream fishing to lake and reservoir fishing. Montana's stream fishing for wild fish is the attraction to out-of-state fishermen - they have sufficient reservoirs and stocked fish at home.

A stand must be taken if Montana's blue ribbon streams are to be preserved as free-flowing trout streams. Irrigation and hydro-power projects which will severely damage the fisheries have been planned for each of them.

- 3. The Bureau of Reclamation contends water will be released into Jefferson River far in excess of conceivable needs for irrigation. Nevertheless, we anticipate water allocated to the Jefferson River for fish would be usurped for irrigation. Presently private and corporate ditches take all the water from stretches of the river during dry years and still feel they are getting less than they are entitled to. In other words, we doubt Reichle Dam will be able to solve this problem and release surplus water for fish. Particularly so under Montana water law, since fish are not recognized as a beneficial use of water. Without a guarantee that water will be retained in the rivers for fish, we feel strongly that fisheries benefits cannot be ascribed to Jefferson River as a result of Reichle Dam.
- 4. The Bureau of Sport Fisheries and Wildlife has made recommendations, but there is no guarantee of provisions to insure irrigation waste waters do not carry silt back to the streams to the extent that this alone ruins the remaining fishery.
- 5. We question the Bureau of Reclamation's contention that Reichle Dam can produce power without affecting other project purposes. We understand fish and wildlife conservation is a project purpose. Hydro-power production usually involves "peaking" operations which in turn can severely damage a fishery.
- 6. If improvement of summer flows in the Big Hole and Jefferson Rivers is desired, it should be done by impounding less important sites rather than ruining the best stretch of the Big Hole itself.
- 7. Our evaluation of the project boils down to "a bird in hand is worth two in the bush". Based on our experiences with other large dams, we prefer to have the Big Hole River as it is than to lose the best part of it hoping the fisheries downstream may be improved. Our experience with large water development projects indicates the plans we are given to evaluate are only tentative. There is no guarantee they will be carried out or that one project will not lead to another which will further alter stream flows. We have found that where the Bureau of Reclamation must allocate water between irrigation and fish and wildlife, the irrigators are first fully served. We have no doubt but that will be the case if Reichle Dam is built. In spite of stated objectives, fish and wildlife conservation is not likely to be a full partner in such a development.

Future Report of Fish and Wildlife Aspects of Project

Missouri River Basin Studies, Bureau of Sport Fisheries and Wildlife, is preparing a report on the Jefferson and Whitehall Units (Reichle Dam project) which will describe project features, water flows in streams, etc. in considerable detail and will evaluate the fish and wildlife aspects. We will be asked to review and concur with the report. After this it will be published and be available for public distribution.