

From the foregoing brief descriptions, it can be seen that the costs of diversions from the Columbia River Basin to the Prairies would be among the highest of the various alternatives. It would be of interest to note that some of the irrigation projects in Alberta have been developed in recent years at a capital cost of about \$25 per acre-foot of storage including dam and main canal works. At 3-1/2% interest rate and 60-year amortization period, the annual cost would work out to substantially less than \$2 per acre-foot. It is evident that diversions from the Columbia to the Prairies lie in the realm of economic possibility well in the future when all the available lower cost schemes have been developed.

2. Diversions from the Pend Oreille and Kootenai Rivers in the United States

(a) Pend Oreille Diversion to the Columbia Basin Irrigation Project

Several investigations dating back to 1903 have been carried out to study the possibilities of a gravity diversion from the Pend Oreille River for irrigation of over 1.5 million acres of arable land east of the Columbia River, in South Central Washington. The scheme consisted essentially of a diversion dam on the Pend Oreille River at Albeni Falls, together with a system of canals, tunnels, reservoirs, inverted siphons and a viaduct crossing Spokane River, to carry the water 130 miles from Albeni Falls to the bifurcation works at the head of the irrigable tract.

The gravity diversion scheme from the Pend Oreille River was abandoned in 1932 on recommendation of the Corps of Engineers in favour of a pumping scheme from the Grand Coulee reservoir to supply the necessary irrigation water.