

ALTERNATIVE OR BEST USES  
OF THE  
COLUMBIA RIVER BASIN IN CANADA

When Canada considered entering into a cooperative undertaking for the development of the Columbia River basin, great care had to be taken to ensure that the alternatives or "best uses" of the river in the national interest of Canada were never lost sight of when considering the international advantages. Accordingly, much study was carried out in Canada over the twenty years subsequent to the original reference to the International Joint Commission in 1944, with the aim of the research being the achievement of the best plan of development for Canada.

Such studies of the Columbia River basin in Canada concentrated on the development of the river for power, not only because of the complexity of this aspect of the problem, but because the development of power appeared as the largest and most valuable benefit from the resource. The studies of the whole of the Columbia River basin which were being carried on simultaneously by the International Columbia River Engineering Board also concentrated on power development. Conclusion "(e)" of the Board's 1959 report to the International Joint Commission stated in part:

"The largest and most valuable benefit to be obtained from water resources developments in the Columbia River basin is the production of hydro-electric power."

In the process of studying the power potential of the basin in Canada the investigations carried out in the reservoir areas of the proposed projects indicated to some extent the beneficial or detrimental effect the various plans of development would have on the use of the river valleys for irrigation, agriculture, forestry, mining, manufacturing, fish and wildlife, recreation and transportation. This chapter briefly reviews the results of those studies as they relate to strictly independent development in the Canadian portion of the basin.

1. The Best Use of the River for Purely Canadian Development - The Concept

In the late 1940's Canadian engineers began a long series of extensive investigations of possible damsites in the Columbia River basin in Canada. These investigations continued throughout the 1950's as the results of the earlier site investigations and associated regulation studies of the river pointed out new and more economical possibilities of development. Altogether more than 20 locations for projects were examined on the main stem of the Columbia River in Canada and over 10 locations on the Kootenay River. Studies were also carried out to