

have to take your water down the Columbia, having diverted it down at peak flood periods to get enough to make up 1,500,000 acre feet per year. The winter flow goes down to as low as 200 cubic feet per second, and the summer flow is 7,000, 8,000 or 9,000 cubic feet per second, and if you want to get 1½ million acre feet down at Canal Flats you have to take a big chunk down at flood periods. I have been in Golden when the Kicking Horse river and Columbia river have been in flood, and there has been water on the streets. If you put on top of that water from Canal Flats, you will create a worse situation in Golden. Furthermore, if you increase the water going down the Columbia river by 5,000 or 6,000 feet per second to get it into Golden, you will flood land that presently is under cultivation. There is quite a bit of land in the Windermere valley which is under cultivation or which could be but for the flooding, and you will merely increase the amount of flooded land. I know the country.

Personally, I cannot agree with that diversion. Furthermore, if you divert the water from the Kootenay at Canal Flats into the Columbia during the high water season, you are going to have to come to a decision with regard to efficiency of usage of that water at Mica. To get the benefit of that you should release it more or less the year around and not let it flood down during the flood season. So, I cannot agree with the Montreal Engineering and cannot agree with Crippen Wright.

Mr. MACDONALD: You say you cannot agree with them even though you have not examined their reports and even though they have done detailed studies on the site?

Mr. BARTHOLOMEW: You told me what they say. I have done detailed studies on site, and I disagree with the proposals they make.

Mr. KINDT: What you feel is that the synchronization of the flood crests would make a bigger flood, by bringing the two crests out together, than if you did not do anything at all. If you did not build any structures at all, and let that water get in before the other came down, there would be less flooding?

Mr. BARTHOLOMEW: Because of the fact that the period of flooding of the Kootenay river at Canal Flats is synchronized almost exactly with the Columbia river at Golden; what you need to do is put a retaining dam to the north at Luxor, which is the obvious place, hold the water there and release it when it will be most effective. But, the 2,000 cubic feet per second, which is 1½ million acre feet per year, is too small a quantity to justify the building of a retaining dam and, I say, the whole diversion is a bad one.

Mr. MACDONALD: Mr. Bartholomew, going on to another point, the implication I draw from page 9 of your brief is that Canada should have committed 24.4 million acre feet under the treaty, and you say this commitment would not hinder our generating capacity at Mica and below.

Last week General McNaughton stated:

In the course of the treaty negotiations I had an opportunity to advise the Canadian negotiators that when at site power came to be installed at Mica and downstream therefrom the allocation of 15.5 million acre feet was excessive and damaging to Canadian interests out of all proportion to the benefit credited downstream. I propose that it be reduced to 12.5 million acre feet.

Do you feel the general was wrong in making that recommendation?

Mr. BARTHOLOMEW: That recommendation was perfectly valid in the absence of a co-ordination agreement between Canada and the United States. The development of our resources on the Columbia without that co-ordination agreement does not permit either of us to get the full benefit of the storage;