Alleged Lack of Action to Combat Pollution

The people in the Shuswap-Thompson area are not looking at the matter from an isolationist point of view. They are not isolationists. They believe in the development of resources to the fullest, and that there should be sharing of resources for the benefit of all our people. But a resource should not be tampered with in a way to benefit one group of people and take benefits away from another.

Some of the objections to the proposed diversion from many of the groups are:

- (1) Concern that diverting Shuswap water to the Okanagan and thus into the Columbia system could in some respects lead to international control of the Shuswap, Thompson and Fraser rivers. Many feel that the international ramifications of such a project should be fully studied.
- (2) Many people have pointed out that the study done by ARDA is too narrow because it deals only in a physical sense with the diversion of water from one area to another without assessing all of the implications in all of the areas concerned. Another important point is that once water has been diverted and committed to the well-being of thousands of people it is very difficult to uncommit it.

For a few moments I would like to deal with the importance of the water resource in the Shuswap-Thompson area. It has been said many times, and I think hon. members who have seen the area will agree, that it is one of the most beautiful vacation spots in the country. It has many lakes that are beautiful and important, but one of the most important in the whole system is Shuswap Lake itself.

Thousands of tourists visit the area each summer. We will have even more tourists this year as a result of the opening of the new Yellowhead highway. There are some 700 to 1,000 miles of good beaches along the Shuswap lakes, much of them taken up by cottage owners, and with some allocated for public use. Any appreciable change in the water levels of these lakes could greatly damage this most important industry and start a pollution problem, that is now non-existent, through increased silt deposit and lack of flushing action which is presently afforded every year by an abundant passage of fresh water through the system.

Another important resource is fisheries. The Shuswap river and its tributaries annually support 2,000 to 5,000 Chinook, 1,000 to 3,000 Cohoe, and 20,000 to 30,000 Sockeye Chinook, 30 per cent of the Cohoe and virtually the entire Sockeye population utilize the section of the Shuswap between Mabel Lake and the mouth of Fortune Creek. Adult migration commences in July and continues until November. Spawning is confined primarily to September and October. Following incubation, the young fish emerge from the spawning gravel in April and May.

• (9:50 p.m.)

Chinook and Cohoe fry remain in the river throughout the year and or migrate downstream soon after emergence from the spawning gravel to take up residence in the lower river and lakes. Sockeye fry migrate to lake rearing areas immediately upon emergence from the spawning gravel. Sockeye, Cohoe and an undetermined portion of the Chinook salmon juveniles maintain fresh water residence until the following spring whereupon they migrate seaward coincident with the annual fry migration.

The observed distribution of spawning salmon in the Shuswap River reveals that the entire spawning population must traverse the section of river occupied by either of the proposed diversion dams, and those fish destined for spawning areas tributary to Mabel Lake must pass the Mabel Lake storage dam site. Conversely, the entire downstream migrant population must pass through the diversion dam area. Thus there is the problem of adult fish passage over the dams as well as the more complex problem of preventing downstream migrants from entering the gravity canal or pumphouses. It is also apparent from the outset that the low velocity impoundments resulting from dam construction will effectively eliminate spawning areas currently utilized by a small percentage of the Chinook and Sockeye salmon populations.

Agriculture is the third resource in my riding that could be detrimentally affected by the diversion. The cattle population of British Columbia is up to some 400,000 during peak times of the year and Kamloops is the centre of the ranching industry in the province. In our type of climate one of the most important limiting factors in the ranching industry is the provision of adequate winter feed. I do not think I need tell you how important water is in an area that has a total annual precipitation of about 9.5 inches. Alfalfa hay is the most important cattle feed grown in the area. Under irrigation, which most of the ranchers are now using, we can usually cut three crops and obtain up to six tons per acre salmon. Approximately 80 per cent of the of hay on a dry matter basis. On dry land we

[Mr. Marchand (Kamloops-Cariboo).]