

Of this total, 69 million were incubated in artificial containers while the remainder, all of which are chum or sockeye, were developed in regulated stream or spawning environments. The projected production of salmon and steelhead trout to the fisheries, plus escapement, from the 1980 brood is in excess of 3,200,000 pieces. In a year when winter floods may have devastated large areas of natural spawn, it is reassuring that such large quantities of stocks are protected in hatcheries and other facilities. Looking ahead to 1984, the concluding year of phase one of the salmonid enhancement program, it is predicted that department-staffed facilities will have the capacity to provide additional adult returns of about 383,000 chum, 307,000 chinook, 243,000 coho, 1,010,000 pink, 4,000 sockeye, 5,000 cutthroat trout and 7,000 steelhead trout, or 1,959,000 pieces in all.

One of the very satisfying aspects of the program operation is the amount of solid support it has been given by the public at large in British Columbia. The federal and provincial governments' rallying cry to protect and enhance the salmon stocks has been taken up with great enthusiasm by young and old throughout the province, and at the present time there is a force of more than 6,000 volunteers working on various salmonid enhancement projects.

An economic analysis has predicted a cost-benefit ratio of about 1.3/1.0 for phase 1 of the salmonid enhancement program, with net national income benefits of around \$120 million, in terms of 1980 dollars. In addition to these monetary advantages, one must also include other benefits in terms of employment, particularly benefiting native people, regional development and resource and environmental preservation, for which it is almost impossible to assess a value in dollar terms.

Some people may ask: why are you expending so much money and effort on salmon enhancement projects in B.C. when industrial concerns continue to pollute salmon rivers, such as the Fraser, or in one way or another destroy the habitat on which fish depend to breed and grow? That is a good question, and I hope people will not stop asking it.

The answer, however, is not a simple one. It involves complex and sensitive issues concerning levels of jurisdiction and the priorities one should accord to competing users of the water resource. As far as the Minister of Fisheries and Oceans (Mr. LeBlanc) is concerned, his mandate is quite clear: his responsibility, which, I might add, was decided by the Fathers of Confederation when Canada's statutes were first put together more than a century ago, is to protect and manage the fishery resource. And to further explain how he and his department views these obligations, I feel I could do no better than quote from a speech which the minister presented at the official opening a week or so ago of a \$3.6 million hatchery at Puntledge on Vancouver Island, one of the salmonid enhancement program facilities to which I was referring a little earlier.

The minister made these remarks:

What we are discussing here is a renewable resource—one might say an eternal resource—belonging to the people of B.C. and Canada, and I feel it is a time to get tough. There must be a tougher approach on the part of the federal government to protect fish habitat and restore the salmon stocks to their previous

levels of abundance. How tough should we get? My answer is tough enough to ensure proper planning to avoid disaster, to repair damaged areas, and the acceptance by all concerned of the real cost of development—to mitigate negative impact and restore to the fish and other wildlife a decent environment.

The Minister went on to say:

I am aware that in some quarters the department's resolve to fulfil its habitat protection obligations is viewed with some skepticism. Certainly we have not done all that we could or perhaps should have done, but for the record I should point out that over the past three years the department has laid some 74 charges in B.C. under the habitat sections of the Fisheries Act. These charges covered such abuses as the deposit of toxic contaminants, sedimentation, landfilling, gravel removal, oil spills and destructive logging practices.

Apart from instituting legal action, we have also taken firm positions on various environmental issues where fish are involved. One is the Quinsam coal development proposal. My officials are advising the company of our concerns regarding the possible impact of the mining operation on the Quinsam River and will identify three serious potential problem areas. Unless I can be fully assured that the fishery resources of the Quinsam will be adequately protected, I am not prepared to grant approval under the Fisheries Act for this development.

Another controversial issue on Vancouver Island concerns the discharge of toxic mine effluent into Buttle Lake, headwaters of the Campbell River. In this instance we have laid three charges against Western Mines and are insisting that the company clean up its mine disposal methods to safeguard the salmon resources of the Campbell River.

At this point it might be useful if I reiterated the department's objectives on fish habitat matters. They can be stated quite simply. First, there must be no net loss of productive fish habitat in locations where the federal government manages the fisheries. Second, where feasible, we will restore and develop areas to provide a net gain in the total amount of fish habitat. Third, we intend to be firm in the use of the federal statutory powers to protect fish habitat when and where necessary, tempered by co-operative, fair and reasonable dealings with those who seek to use the water resources for other purposes.

Certainly the department prefers to use the consultative, co-operation route to achieve results rather than wielding the big stick with the inevitable confrontations and court proceedings. However this is not an area where we can afford to procrastinate. Once a fish habitat is destroyed or a salmon stock wiped out, they cannot be magically replaced overnight just because we have been successful in a court prosecution, however heavy the fine. Even with everything working in our favour, it could take years to offset the damage caused by a careless river diversion, the building of a dam, the thoughtless dumping of fill in a marsh or spawning bed or the discharge of pollutants into fish-bearing waters. Often the damage is irreversible and valuable spawning or breeding areas may be lost forever.

It is ironic that it is in the mighty Fraser River, which has the greatest potential as a salmon producer of any river system in British Columbia and possibly in the world, that we are experiencing the most serious fish habitat losses. I suppose it is easy to say that those agencies which should have been looking out for the fish, whether they fall in the federal or provincial domain, have been lax in not living up to their responsibilities. Be that as it may, fish habitat continues to be lost and the Department of Fisheries and Oceans is determined, one way or the other to reverse that trend. We cannot afford to wait.

It is not difficult to predict where the pressures on the fisheries resource will originate in British Columbia in the near