

some 10,000 people. The hon. member for Swift Current-Maple Creek (Mr. McIntosh) will be able to tell us more about this. A plan has also been prepared for the city of Regina to replace the Regina sewage treatment plant with a lagoon.

My acquaintance with this subject, I must confess, is largely confined to an excellent article entitled, "The Treatment of Sewage by Lagooning", written by Dr. J. G. Schaeffer, the director of the sanitary division of the Saskatchewan department of public health in Regina, and which appeared in the October, 1956 issue of the *Canadian Journal of Public Health*. For smaller municipalities, and probably for some of the municipalities in this area, this technique might well offer new and sound possibilities for sanitary disposal at low cost, thus providing relief for the contaminated and polluted rivers and streams from which we are suffering today.

I believe that leadership in the matter should be given by our federal district commission and I believe that the federal government itself must also give leadership on the whole question. Private industry, particularly the pulp and paper industry, having done so much, parliament must surely be prepared to encourage the national research council and other organizations of research in this government to pursue every possible remedy for what is unquestionably a grave national health problem.

While I support the resolution of the hon. member for Selkirk I do so with this qualification—a one front attack upon this grave problem will not be sufficient. But, by research, by dominion, provincial, municipal and industrial co-operation and by proper penalties, as proposed in this resolution, for the breach of accepted standards governing pollution, the proper control of the problem, I submit, can be provided and the problem can be solved within a comparatively reasonable period of time.

The cost of preserving the purity of our fresh water is one for which we as a nation, and all the governments of this country must pay. Our industries and our municipalities must recognize the paramount right of all Canadians to pure and uncontaminated water. I venture to say that we must call a halt to the excuse that industry and the municipalities cannot afford to dispose of their wastes except by invading the downstream rights of others. One of the ways, in my view, by which to bring this matter to a climax is that which is suggested by the hon. member for Selkirk and for that reason I submit this resolution deserves the support of this house.

**Mr. E. J. Broome (Vancouver South):** Mr. Speaker, in rising to take part in this debate I would like to say to the hon. member for Carleton (Mr. Bell) that he has made a very tremendous contribution to this debate in the speech to which we have just listened and that there is very little in the way of other fields which could be explored because of the thoroughness of the research and the presentation of that hon. member.

We do, however, have on the statute books at the present time at least one act—the Fisheries Act—which in essence is supposed to protect navigable streams in which the fisheries department has an interest and in that regard I would like to go into a few details as to the present regulations and to point out what has happened with respect to those regulations.

The hon. member for Carleton spoke about the biochemical oxygen demand of water with respect to industrial wastes and he pointed out that those wastes have a high demand while human effluent has a very low demand. I believe the example was given that the discharge from the Eddy plant was equivalent to that of a city of some 500,000 or 600,000 people. Along the Fraser river industrial wastes have a much greater adverse effect on fisheries than has the disposal of sewage from the upstream municipalities or from the metropolitan area of Vancouver. This adverse effect is particularly serious with respect to the small fingerlings as they come downstream on their way to the ocean because the industrial waste takes up the oxygen content of the water and literally suffocates the fish, causing the death of the small fingerlings, and thus reducing the run.

The penalties for discharging industrial waste into streams protected under the Fisheries Act are rather modest and under section 61 it states that every person who causes or knowingly permits to pass into or puts or knowingly permits to be put lime, chemical substance or drugs or poisonous matter, et cetera, is liable to, on the first offence, a penalty of \$20 and costs and on the second offence a penalty of not less than \$20 and costs and not more than \$80 and costs, and also in addition thereto a further penalty of not less than \$10 and not more than \$20 for every day during which such offence is continued.

This means that after the department has taken an industrial company to court that company by paying \$20 per day can evade the law with respect to whatever kind of waste they wish to place in the stream. On the other hand, if you happened to be a farmer and were taking irrigation water from a fishing stream and you left out the screen