

document which was laid on the table of the House some time ago, I refer to the papers relating to the application of the Sanitary District of Chicago for permission to divert 10,000 cubic feet of water per second from lake Michigan. One of the strong arguments in opposition to the Georgian Bay canal is a statement (which is entirely inaccurate but which has been sent abroad throughout this country by opponents of this scheme) by critics living on the St. Lawrence and the Great Lakes, to the effect that there is not sufficient water at the height of land to carry on this project in a feasible manner. I would like some of those critics who have been using this argument, which is entirely untrue, to look over this document to which I have referred and they will find, according to the evidence contained in it, that the city of Chicago, for sanitary purposes, has been diverting 7,000 cubic feet of water per second from lake Michigan, when they were only authorized by the United States Secretary of State to divert 4,167 cubic feet. The facts were brought forward by a special board of engineers, under the chairmanship of General W. H. Bixby, appointed to report on the effects which this diversion at Chicago would have on navigation. This special board reported that the Sanitary District was diverting some 7,000 cubic feet of water per second, thus exceeding the authorized amount by 3,000 cubic feet of water per second. Daniel Mullin, K.C., who was acting on behalf of Canada in opposition to the diversion of this water, says:

The diversion at Chicago is an absolute and irreparable loss to the navigation interests of both countries. It is a permanent diversion. One of the worst features about it, Mr. Secretary, is that it is an insidious effort to get water—I will not say for any other purpose than for sanitary purposes, but there is no question about it, if you will read the preliminary report, that there was another object in view and that was the lakes to the gulf project.

That refers to the waterway which the United States intended to construct from the Great Lakes to the gulf of Mexico in order to give the middle West an outlet to the ocean. The effect which this diversion will have on the Welland canal and on the levels of the Great Lakes is also pointed out on page 24:

The depth in the Welland canal and in the six canals employed to overcome rapids in the St. Lawrence river is now 14 feet, of which every inch is needed.

I ask particular attention to that—the conclusion reached by this commission—'of which

every inch is needed,' and the evidence which will be submitted to show by competent witnesses as to the injury occasioned by the lowering even of one inch, so far as navigation interests are concerned, will be, I think, abundant.

At the head of the Cornwall canal in the St. Lawrence river the abstraction of 14,000 cubic feet of water per second at Chicago will lower the surface about  $6\frac{1}{2}$  inches at mean level, and much more at low water. To restore the depth in these canals involves the reconstruction of all the end locks and deepening the approaches thereto, and is estimated to cost \$2,500,000.

The total cost of restoring the depth in the harbours of the Great Lakes and the channels between the lakes, is therefore, roughly, \$10,000,000, and of restoring it in the Welland, and St. Lawrence canals is \$2,500,000 additional, or \$12,500,000 in all.

The shores of the Great Lakes are very far from being fully developed, and it is highly probable that many harbours not now in existence remain to be created, or if in existence remain to be improved. The lowering of the lakes' surfaces increases the difficulty and cost of such improvements. This consideration is of importance although no money value can now be given it.

At page 26, the effect on Niagara falls is noted:

In the presence of these interests, the effect upon Niagara falls may be simply mentioned with a reference to our former reports upon that subject. The volume of Niagara falls will be reduced by the full amount diverted at Chicago.

And on the same page the 11 p.m. effect on the Great Lakes is noted.

The diversion of 10,000 cubic feet per second will lower the levels of lake Michigan-Huron, St. Clair, lake Erie, lake Ontario, and the St. Lawrence river, besides the important connecting channels, the Detroit and St. Clair rivers, by amounts varying from  $4\frac{1}{2}$  to  $6\frac{1}{2}$  inches for the different waters, and the diversion of 14,000 cubic feet will lower them from 6 to  $8\frac{1}{2}$  inches. The diversion of 20,000 cubic feet will lower lake Michigan-Huron about 13 inches and lake Erie about 11 inches.

According to these statements, which are absolutely reliable, you can see what effect action of this sort by the city of Chicago, or by any of the other American cities on the Great Lakes, would have on the navigation of the Great Lakes and on the St. Lawrence system. This would have no effect at all on the Georgian Bay canal because the height of land is considerably higher than the level of lake Huron. I might also give the opinion of the Dominion Marine Association as to the effect this diversion would have on the Great Lakes. On page 95 they say:

The self-evident fact that the diversion of water from lake Michigan at Chicago must affect the levels of the other lakes and of the