

# CONSERVATION

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## Canada's Supply of Coal

**Depending on Uncle Sam to large extent, especially for Anthracite—Peat and Electricity as Substitutes.**

Central Canada is constantly within measurable distance of a coal famine; nor are the conditions which may precipitate such a famine in any considerable degree within the country's control. This is due to the fact that all Eastern and Central Canada is dependent on the Pennsylvania fields for their supplies of anthracite coal. In view of the threatened strike of the Pennsylvania miners, this situation is of unusually great importance to Canadians. It is only when such strikes occur that the public actually realizes how dependent it is upon supplies of United States coal. Again, very few seem to realize the fact that the supplies of United States coal, both anthracite and bituminous, may be entirely denied us at any time. Mr. George Otis Smith, of the U.S. Geological Survey, says: "Let us keep our coal at home, and with it manufacture whatever the world needs". Should this happen, can we say that we are prepared to get along without it?

### Dependence on United States for Anthracite

According to a recent estimate, anthracite coal in the United States will be exhausted in less than two hundred years. Long before that time the cost will increase and the United States Government will see to it that the coal is not exported, but kept at home for its own needs. Let us see to what extent United States coal is sold in Canada. Enquiries sent out by the Commission of Conservation show that the following provinces are supplied with anthracite coal from the United States:

Province.	COST TO CONSUMER.
Nova Scotia.....	\$0.50 to \$7.00
Cape Breton.....	6.50 to 8.00
Prince Edw. Island..	6.00 to 6.50
New Brunswick.....	7.00 to 8.00
Quebec.....	6.50 to 7.50
Ontario (East of Port Arthur).....	6.00 to 7.75
Ontario (West of Port Arthur).....	8.00 to 11.00
Manitoba.....	11.00 to 12.50
Saskatchewan.....	12.50 to 15.00

### Our Bituminous Coal Supply

With regard to bituminous coal, Ontario, west of Cornwall, is supplied entirely from the United States. Owing to the low freight

rate on United States coal, Nova Scotia cannot compete with United States coal west of Cornwall. The bituminous coal consumed in Manitoba is almost entirely from the United States, although coal mined in the Crowstnet and Lethbridge districts finds a ready market in western Manitoba.

From the above, it can be seen that one of the most important questions we have in Canada, at least in the Province of Ontario and the Prairie Provinces, is the question of fuel. The fuel for the Prairie Provinces will necessarily be supplied in the form of coal and

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## Railways Liable for Fires Set

**New Legislation Passed at Instance of Commission of Conservation Holds Them Liable—Provision Made for Use of Fire Prevention Appliances—Railway Commission Now Drafting Regulations.**

At the instance of the Commission of Conservation and other organizations the Federal Government last year passed an Act with respect to the prevention of fires along lines of railways. (1-2 George V, chap. 22). By it, the railways, whether guilty of negligence or not, are made liable for damages from fires set by their locomotives. It is provided, however, that the amount of damages is not to exceed \$5000 if the most modern and efficient fire prevention appliances have been used. The Act took the form of an amendment

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## Protest Against Chicago Diverting Water from the Great Lakes

**Commission of Conservation Urges on U.S. Secretary of War Not to Allow Chicago to Divert 10,000 Second Feet from Great Lakes—65,000,000 Tons of Shipping Affected—Power Development at Niagara Would be Decreased—Chicago Should Purify her Sewage and Use Less Water.**

A strong protest was registered by the Commission of Conservation before the United States Secretary of War, at Washington on March 27, against allowing the Sanitary District of Chicago to divert additional water from lake Michigan. Hon. Clifford Sifton, Chairman, and James White, Secretary, presented the case for the Commission. Chicago now has permission to divert 4167 cubic feet per second from the Great Lakes system for sanitary purposes and wishes to increase this amount to 10,000 cubic feet per second. Such a diversion would seriously affect the levels of the Great lakes and of the St. Lawrence canals. This would decrease the amount of power generated at Niagara and on the St. Lawrence, and would affect most adversely the shipping of the Great lakes, which annually carries freight valued at over \$650,000,000. In view of these facts, and also because the increased diversion is unnecessary for sanitary purposes and is clearly in violation of the Boundary Waters Treaty of 1909, the Commission of Conservation placed itself on record as being strongly opposed to the granting of the application.

### Effect on Lake Levels

Although Chicago has permission to divert only 4167 cubic feet per second, she has taken it upon her-

self to use 10,000 cubic feet per second. When the waters of the Great lakes are at an average level, diversions of 7000, 10,000, and 14,000 cubic feet per second, would lower the waters of the various lakes (in inches) as shown in the following table:

LOWERING OF LAKE LEVELS BY DIVERSION AT CHICAGO

	7000 c.f.s.	10000 c.f.s.	14000 c.f.s.
Huron-Mich.	4.25	6.25	8.5
Erie.....	3.87	5.5	7.75
Ontario.....	3	4.25	6
St. Lawrence	3.37	4.75	6.75

That is under average conditions. For low-water conditions, these reductions in level would be larger, thus increasing the injury to navigation. In 1911, for example, when lakes Huron and Michigan were at a lower level than usual, a diversion of 10,000 cubic feet per second would lower the level 7.25 inches. The average annual range of these lakes is 1.21 feet, and the proposed diversion would thus affect their levels to the extent of 50 per cent. of the annual range. The Commission of Conservation contended, therefore, that such a diversion was in contravention of Article VIII of the Boundary Waters Treaty of 1909, which forbids the construction of works that "materially" affect the level of international boundary waters.

### Would Decrease Cargo Capacity

How such a lowering of levels would affect shipping is evident from the fact that the United States Board of Engineers estimates that a loss of draught of 6 inches will decrease the cargo capacity of a vessel of 20 feet draught by 6 per cent., and of a vessel of 12 feet draught by 8 per cent. About 65,000,000 tons of freight annually pass over the Great lakes and the effect on navigation of a diversion of 10,000 cubic feet per second at Chicago would thus be enormous. Furthermore, the Canadian Government, at great expense, has completed a waterway for vessels of 14 feet draught at low water from Fort William to Montreal, and for vessels of 30 feet draught, from Mon-

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## In Explanation

Leading Canadian journalists have stated that there is a dearth of authentic news on conservation matters. Although reports on various natural resources have been published, yet much of the material thus compiled is not in sufficiently available form for the busy newspaperman. With a view, therefore, to satisfying this want, the Commission of Conservation has decided to issue a monthly bulletin to the press of Canada. Only the most authentic information will be used, the articles will be short and to the point, and as far as possible, suitable for republication in whole or in part. Briefly, CONSERVATION is designed to assist especially the busy editor, who has not the time to study lengthy reports. If this end can be attained, then a real step forward will have been made in establishing a true conception of conservation in the minds and hearts of the people.

The Commission of Conservation is a purely advisory body, and is dependent to a large extent for the adoption of its recommendations on the support of the press and public opinion in general. In the past, this support has not been found wanting, and it is hoped that the Commission may receive in future the same generous assistance.