

## British Columbia Aluminum Brings New Industrial Age to Prince Rupert Area

(By LARRY STANWOOD)

In the next few years what may vie with Prince Rupert as British Columbia's third largest city is expected to mushroom out of a dense wilderness, 100 miles south of Prince Rupert, and already ramifications of the greatest industrial move in this province are gaining increasing momentum.

The Aluminum Company of Canada announced early this month it proposed to build a smelter plant at Kitimat, a mountain village at the head of the Douglas Channel, it came as a surprise to most. There are a host of problems to iron out, Alcan President R. E. Alcan said, but eventually the smelter would lead to an establishment worth half a billion dollars.

In spring, Hon. E. T. B.C. minister of lands and forests, signed an agreement turned over to the big water rights it required, and the green light to go as far as B.C. was concerned.

Alcan announced it was ready to go ahead with its plan that aluminum ingots be poured at Kitimat by

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plant will be built, one-quarter mile inside a mountain cavern, 10 miles from the head of Kemano Bay, Gardner Canal.

In this plant, Alcan states a firm output of 1,600,000 horsepower can be developed.

The smelter will be built at Kitimat, fifty miles north of the power plant, at the head of another long fjord in Douglas Channel, and here eventually is to grow a city of 50,000. The smelter, in its initial stage, will produce 330,000,000 pounds of aluminum annually, and when finally completed, 1,100,000,000 pounds.

To Kitimat will be shipped the raw product, alumina, from the company's developments in the Caribbean, of which 2.6 pounds will be required to produce one pound of aluminum.

Power for the smelter will be transferred from the Kemano plant over 50 miles of transmission lines, running over high mountains and through deep ravines. Alcan estimates that a total of 1½ million horsepower delivered at the smelter will cost one mill per kilowatt-hour.

"This is the most economical large power site to be found anywhere in the world," said the aluminum company's president when he first announced the project.

Supplies of petroleum coke used for aluminum smelting should present no problem, either, he said. Due to recent important petroleum discoveries in Alberta, coke could be obtained close at

hand from refineries in Alberta or B.C.

But what effect will this power development have on fisheries? Would the project hurt the salmon runs? What, if anything, was Alcan prepared to do to protect the fisheries? These questions formed the dynamite-charged subject presented to the fourth B.C. natural resources conference a month after Alcan's plans were announced.

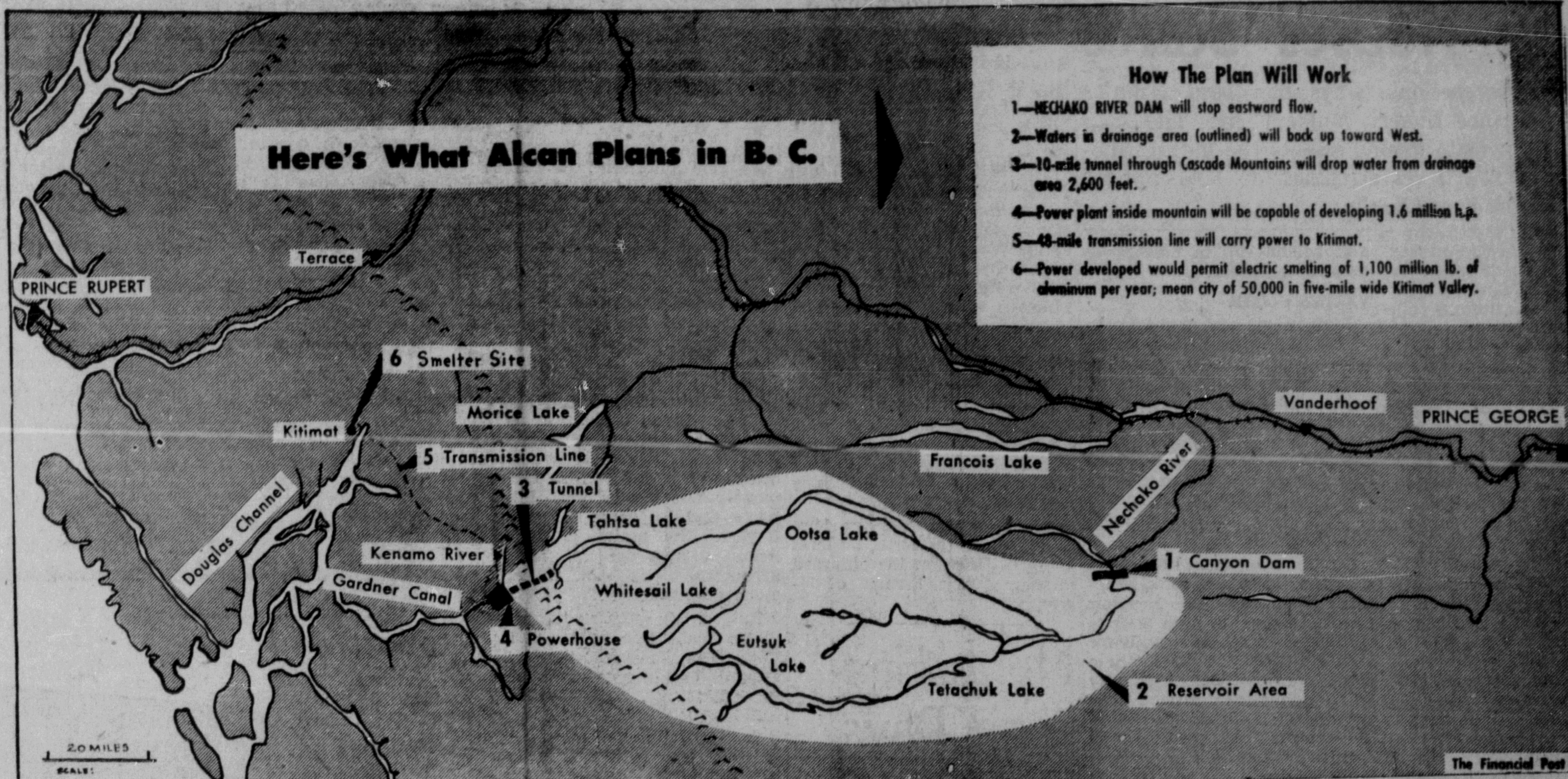
It was proven that the Tweedsmuir Park area, partial headwaters of the Fraser river, was the spawning ground of sockeye salmon. The debate on this topic ran heavy, but the final result ended in agreement that power development and fisheries could survive side by side through careful planning.

The company was forced to listen to the strong demands of both government and commercial fisheries officials and a system biologically feasible and economically practical was adopted. Briefly, the solution is this: Alcan will install necessary engineering methods by which it can make regulated releases of water to the salmon streams, thus saving an annual value to fisheries of \$1,870,000.

To the end of April (the half-billion dollar venture had cost \$10,000,000 in initial surveys and preliminary construction. The company is spending \$500,000 weekly, according to the Provincial government, and this figure is expected to be stepped up sharply.

From the head of Kemano Bay, a 10-mile road to the power site has been completed. The grade is such that it will be adaptable to railway construction.

### Here's What Alcan Plans in B. C.



#### How The Plan Will Work

- 1—NECHAKO RIVER DAM will stop eastward flow.
- 2—Waters in drainage area (outlined) will back up toward West.
- 3—10-mile tunnel through Cascade Mountains will drop water from drainage area 2,600 feet.
- 4—Power plant inside mountain will be capable of developing 1.6 million h.p.
- 5—48-mile transmission line will carry power to Kitimat.
- 6—Power developed would permit electric smelting of 1,100 million lb. of aluminum per year; mean city of 50,000 in five-mile wide Kitimat Valley.

## THE "KITIMAT PACT"

For the right to establish its \$550,000,000 aluminum plant at Kitimat, British Columbia, Aluminum Company of Canada will pay the B.C. government as follows:

1. An annual fee of \$225,000 a year for hydro-electric power.
2. The company will pay 10 cents an acre for land flooded by power storage reservoirs.
3. The company may establish townships and will pay land and school taxes on its land.
4. Company will pay municipal taxes on company property, and franchise, income and corporation taxes.



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