# A PRESENTATION ON THE HISTORY OF THE COQUITLAM WATERSHED AND RIVER FROM 1898 - 1914, FOR THE PORT MOODY ECOLOGICAL SOCIETY, ON THE EVENING OF APRIL 6, 1994

RESEARCHED, WRITTEN, AND PRESENTED BY WILL KOOP.



Coquitlam Lake in the late 1910s. B.C. Hydro Archives photo.

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[Note: most references in this report are from internal Vancouver Power Company correspondence files, being a part of The B.C. Electric Railway Co. collection, donated to the U.B.C. Special Collections Library. Footnotes #23 and #24 were mistakenly not included.]



Newly constructed Coquitlam Reservoir water supply intake, around 1912. B.C. Hydro Archives photo.

## **1. INTRODUCTION**

Tonight is really the first occasion that I am addressing the public about some of my continuing research on the history of the Greater Vancouver watersheds. And it is also the first time that I am presenting recent research from the turn of the Century on the history of the Coquitlam watershed and the British Columbia Electric Railway Co. (BCERC), the period that I've been asked to speak about.

There are literally thousands of pages of information from their old files on the Coquitlam watershed and river, and the forgotten stories involve many details, characters, complexities, and even a few controversial episodes. So, tonight I am going to try and boil it all down by telling you about what happened to the Coquitlam Lake and River from about the year 1900 to 1914; what happened to New Westminster City's and their municipal partners' water supply; what happened to the salmon, steelhead, and fresh water fish of the Coquitlam; and what happened to the Coquitlam watershed forests.

I'd like to begin by reading a quotation from a BCERC ad in the Financial Times, dated September 25th, 1909:

"Under rows of industrial stars, and before the passing and repassing city, suburban and interurban trams of the B.C. Electric Railway Co., stood an Indian and an electrical engineer.

That scion of a passing race, yet one of Vancouver's 100,000, there alone in Carrall Square before the home of this first and greatest electric railway and power development company in western Canada, was obviously in dumb amazement at the electrical energy thus displayed in but two of its countless forms, and perhaps reflecting, in his own way, upon the changed industrial and social conditions compared with his papoose days.

The engineer was with a friend. They were also reflecting in their way.

"I'll venture that he knows as much about it, this mighty power of electricity, as we do," observed the friend.

"Hardly," smiled the engineer. "While we have not yet solved the mystery of electrical power, we at least know how to produce it. Our Siwash friend may know, in his native way, that the sun's rays, the primary source of energy, lift the water from the sea level to the clouds and this, falling in rain, gives us our plant and forest growth, and eventually our coal. But there his simple knowledge and imagination ends. He does not realize that there are two forms of coal, black and white."

"White coal! What is that?"

"White coal is the greatest of all British Columbia's great assets, the most plentiful of all its resources, and I will venture the chief element of its vast potential wealth."

"But what is it?"

"It is hydro-electricity or, plainly, snow - the installations where water power, the cheapest and most satisfactory power of to-day, is obtained from accumulated snow on the mountains, and by the sun's rays converted into streams."

"The eternal snow on the mountains up the North Arm of Burrard Inlet is the white coal which is your Coquitlam and your Bunzten Lakes, connected by the longest water power tunnel in the world and, thus harnessed by the B.C. Electric Railway Co., brought down here in light, heat and power."

After the discovery of electricity in the 19th century, it was quickly learned that the movement of water could be 'harnessed' to produce this new and mysterious form of energy. Stock markets began sky rocketing as corporations poured investor-financed capital for ambitious hydro-electrical projects in North America. Competition was fierce, rivalries ensued, and partnerships were developed. But the main problem for these companies was to acquire guaranteed and approved water flows from governments for their projects. Controversies naturally arose throughout the continent because people were learning that building dams, flooding lands, and tampering with rivers had certain consequences. In order to control public opinion the new 'electric' companies devised slick advertisements and campaigns by rationalizing the economic 'benefits' as compared to the 'cost' of the natural consequences.

## 2. THE BRITISH COLUMBIA ELECTRIC RAILWAY CO.

The BCERC, being the predecessor of B.C. Hydro, established itself in B.C. in 1897 and "acquired the electric street railways and electric power facilities which local entrepreneurs had initiated in Vancouver, New Westminster, and Victoria." <sup>1</sup> And unlike previous entrepreneurs this new company, through the influence of its director Horne-Payne, had financial backing from British capitalists in London, which, at the turn of the century, was "the centre of the most extensive financial empire in the world". <sup>2</sup> At the close of the 19th century Greater Vancouver's meagre electrical demands were furnished by the operation of a steam power plant. Prior to the Company's arrival, other local companies had been unsuccessful in attempting to establish hydro-electric power projects, specifically on the local Capilano and Seymour Creeks, because the rights of the Water Works Companies were either too protective of the local population's water supplies or too expensive to purchase.

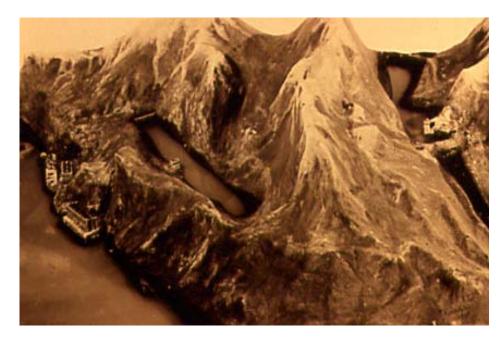
In 1898 the BCERC hired the local engineering firm of Hermon & Burwell, and also a consultant from a San Francisco engineering firm, to search for a hydro-electric facility and a water source close to Vancouver in order to provide a cheaper and more powerful alternative for generating electricity than steam power. Hermon & Burwell devised an ingenious scheme to divert water from Coquitlam Lake via a very long tunnel into Trout Lake, alternatively called Lake Beautiful, and later re-named Buntzen Lake. From there the water would then drop vertically almost 400 feet through a number of large diameter pipes to a generating plant on the south-eastern shore of Indian Arm. The Coquitlam/ Trout Lake proposal was quickly understood to be a great financial prospect for the London-based investors, so they launched an immediate hydrological and

<sup>&</sup>lt;sup>1</sup> The British Electric Railway Company, 1897-1928; A British Company in British Columbia, by Patricia Roy. PhD. Thesis, Department of History, University of B.C., March 1970, p.ii.

<sup>&</sup>lt;sup>2</sup> Ibid., p.ii.

engineering investigation to determine the future potential of this proposal. And under an Act of the B.C. legislature, the BCERC then formed a subsidiary to take charge of this project and christened it the Vancouver Power Co. (VPC).

An observation station was constructed in the year 1900 at the mouth of Coquitlam Lake to determine hydrological and meteorological information: maximum and minimum flows from the lake in cubic feet per second; maximum and minimum temperatures each day. Snow levels were also recorded in different portions of the watershed. It was determined that the maximum available run-off was about 36,000 miner's inches, and the minimum about one quarter of that. The conversion to cubic feet per second (cfs) used at that time was a Californian measurement, and 5,000 miner's inches equalled roughly 125 cfs. So, in essence, the maximum volume in cfs is 900. Coquitlam Lake was about 7 miles in length and had a surface area of about 2190 acres. They estimated that 90% of the Coquitlam watershed run-off came into the upper two thirds of the Lake. The difference in altitude between Coquitlam and Trout Lake was estimated to be 32 feet, with Coquitlam Lake at 432 feet above sea level - just enough to divert its waters. And the capacity for the first tunnel was made to transport almost 15,000 miner's inches, or about 375 cfs.



BCERC's clay model of the Coquitlam Lake Diversion to Lake Beautiful, and power house on Indian Arm.

# 3. THE FIRST COQUITLAM DAM AND TUNNEL.

The VPC's only obstacle, in its initial attempts to access water rights from the government, was that Coquitlam Lake was the source of New Westminster City's water supply. The Coquitlam Water Works Company (CWWC), owned by local businessmen, was first established through a legislative Act on April 1st, 1886, along with a long and detailed list of requirements, and had been given certain rights and the responsibility to construct and maintain water works to provide New Westminster City its water from the mouth of Coquitlam Lake. This, however, did not deter the VPC as they tried to buy out the CWWC's Charter in 1898, but were advised not to purchase it, because, it was argued, even if they did acquire the Charter, it would not allow them to use water for water power. But later, in November 1902, the VPC did purchase the Charter for \$6,000, about

25% of the original investment. This gave the VPC not only the responsibility of the water works for New Westminster City, is also provided bargaining power for their special interests.

The VPC took a cautious look at the local political situation and enticed New Westminster City Council to permit them to construct a very small dam that would raise the lake merely five feet, as, they argued, this would give the City a little more water pressure and a steadier supply of water. And besides, they were only going to syphon off a small proportion of the available water flow. The VPC also promised that they would provide cheaper electricity for the City and that its parent, the BCERC, would upgrade their electric railway system in the New Westminster area. This sort of bargaining removed the political opposition for the VPC's application to the provincial government for their power project. So, by an Order-in-Council in February, 1902, the VPC was granted a water licence for 5000 miner's inches, about one half of the minimum flow during the dry season run-off, or about one seventh the flow during high water.



#### (A). THE TUNNEL.

By the summer of 1902, after the Coquitlam/Buntzen project received the go ahead, the VPC started a three year project of building a tunnel 12,776 feet, or some 2.4 miles in length, from the southwest shore of Coquitlam Lake to the northeast shore of Trout Lake. I'm not exactly certain, as I'm still trying to find out, but I believe this was the first tunnel of its kind and length constructed in



North America. It was an engineering marvel, an amazing feat.

In those days jack hammers, operated by steam power, were already in use, and were used by crews of men in three eight-hour shifts, to drive a tunnel in two directions: one from the east and the other from the west. The broken rock was transported by a narrow railway system out of either end as the tunnels were only 9

by 9 feet square. It was very hard work, especially when they hit intermittent sections of blue granite, a denser form of granite. The men were paid an average of 25 cents per hour. Working conditions were cold, wet, and cramped. There were a number of related accidents and fatalities,

and even though the men wanted to take time off to mourn the dead and attend funerals, the company foremen frequently insisted they keep right on working.

On April 27th, 1905, the tunnels met and it was calculated that they "met fair and square, the error in the line being 7/8 of an inch and the levels 3 inches." <sup>3</sup> Two months later the VPC dedicated the tunnel and their generating plant with an official ceremony. There were 200 guests invited to the opening ceremony:





Tunnel construction residential and maintenance buildings.

"The premier, chief justice, several cabinet ministers, mayors of three cities with most of the Aldermen, several leading lawyers, the most prominent business men, bank managers, merchants, city officials, engineers. Some of our largest customers and one or two local shareholders were specially invited."

"After an inspection of the works (at the Power House station on Indian Arm) the water was turned on through the tunnel by the Lieutenant Governor by means of a golden

key bearing a suitable inscription, and the appearance of the water at "Lake Buntzen" portal was greeted by most enthusiastic cheering."<sup>4</sup>

This was also the occasion when the VPC christened Trout Lake Buntzen Lake, after Johannes Buntzen, the Director of the VPC.

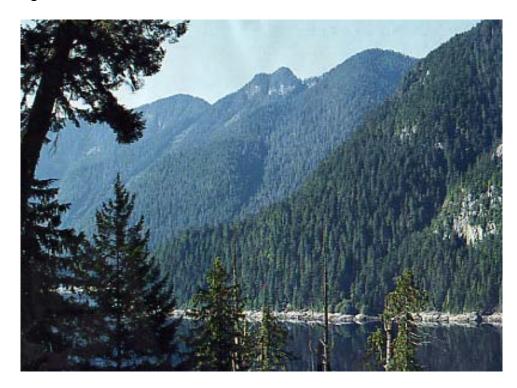
<sup>&</sup>lt;sup>3</sup> May 6, 1905. Sperling to Hugh Cooper.

<sup>&</sup>lt;sup>4</sup> June 14, 1905. Hope to Binder.

#### (B). PROTECTION OF THE COQUITLAM FOREST.

A number of months before the completion of the tunnel, a logging company, Ironside, Rennie & Campbell, had proposed a scheme to the Mayor of New Westminster to shoot four foot sections of cedar shingle bolts through the tunnel, and then float the wood to their existing mill beside Buntzen Lake. This very same company had been contracted by tender to build the tunnel, and after living and working for two and a half years on Coquitlam Lake, the logging bosses speculated on the potential of the rich and untouched Coquitlam forest for their mill. Though New Westminster Council were somewhat startled by the proposition, Director Buntzen was passionately opposed to logging in the Coquitlam watershed. F.R. Glover, the VPC's local manager, wrote to the Mayor that:

"I agree with you that it would be a very risky thing to run timber through the tunnel, for the risk of blocking it would be considerable. I understood, however, from Mr. Buntzen that he would object in the strongest possible manner to the timber around Coquitlam being removed, and I feel satisfied that even if the City of New Westminster were agreeable to its removal, it would be a great mistake for our Company to consent, without a hard fight, to the deforestation of that region." <sup>5</sup>



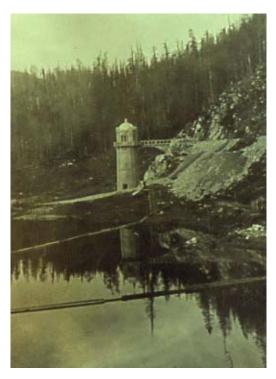
R.H. Sperling, the VPC's General Superintendent, wrote James Leamy, the Crown's Timber Agent, in early May 1905, regarding the concerns of the VPC's responsibility and investment:

"As you are aware, our Company has already spent a million and a half dollars developing this water power, and will continue to expend money from time to time on this enterprise as the towns of Westminster and Vancouver increase in population. It is, therefore, a matter of the

<sup>&</sup>lt;sup>5</sup> February 25, 1905. Glover to Sperling.

greatest importance to us that nothing should be done to diminish the water supply. The City of New Westminster is also interested in seeing that their water supply is not interfered with."<sup>6</sup>

"I consider that the removal of timber would seriously affect the present annual rainfall in the vicinity of Coquitlam Lake. I consider that if logging or shingle bolt cutting were carried on, that the danger from fire sweeping that part of the country, would be very great indeed, owing to the amount of debris left on the ground, as a result of such work and that if a fire were to spread over the area immediately surrounding Coquitlam Lake, destroying the timber thereon, it would undoubtedly affect the storage of the water there, by reason of lessening the precipitation and causing the early melting of the snow which falls in considerable quantities on the hills in that vicinity during the winter months. The snow, if protected by the shade of timber, would run off slowly but if the timber were removed, the snow would go off with a rush, carrying with it all kinds of debris, depositing same in the Lake, thereby defiling the water supply of the Cities which consume it. The removal of the timber would, I consider, lessen the storage of water, by at least 25 per cent."<sup>7</sup>



First water intake just north of the dam.

Sperling also wrote to Hugh Cooper in New York, one of their consulting engineers, about the very subject:

"The City of New Westminster have certain riparian rights on Coquitlam Lake, as they derive their water supply from it, and it is possible that concerted action on the part of the City of New Westminster and our Company might induce the Government to place a reserve on the timber in this valley." <sup>8</sup>

The logging company continued to lobby and pressure New Westminster City Council, and by December 1905 came to some arrangement so that they could apply to the government to log the upper Coquitlam Lake forest. When the government posted notice of this 12,200-acre area for tender in January 1906, the Vancouver Power Company strongly opposed the notice and the government withdrew its consent.

<sup>&</sup>lt;sup>6</sup> May 10, 1905. Buntzen to Leamy.

<sup>&</sup>lt;sup>7</sup> May 13, 1905. James Leamy to Sperling.

<sup>&</sup>lt;sup>8</sup> May 6, 1905. Sperling to Hugh Cooper.

#### (C). THE COQUITLAM DAM AND THE FISHERIES.

Work on the first Coquitlam dam began in April 1904 and was completed by September 1905. The comparatively small dam was built in two stages, western and eastern halves, so that the Coquitlam River could continue to flow during construction without building a diversion channel.

The Federal Department of Fisheries was quite concerned about the dam and the local Fisheries officer, C.B. Sword, had been closely monitoring the effects it would have on the salmon migration route. Thousands of salmon ran the Coquitlam in spawning season. During a public discussion in February 1909 Stott, the Superintendent of the Waterworks, commented that:

"anyone who made the trip around Coquitlam Lake in those days could not see hundreds, but thousands upon thousands, of dead salmon scattered along the beach and floating in the water", ... (and stated that) "it was sometimes necessary in the Fall of the year to send men with pitchforks to clear away the dead and rotting salmon which had accumulated at the intake."<sup>9</sup>

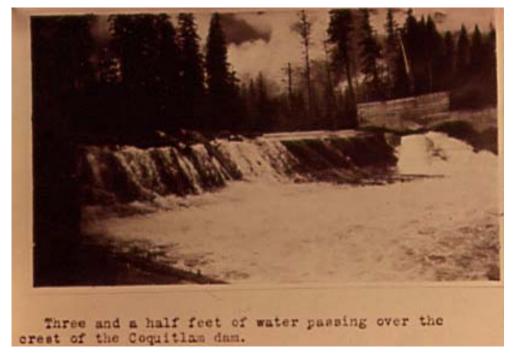


Photo of Coquitlam dam, taken sometime between 1905 and 1911. Fish Ladder on right of dam. B.C. Hydro archives.

Because the dam was to raise the Coquitlam Lake by 5 feet there was little concern for the destruction of spawning channels in the tributaries to the Lake. A fishway was installed on the easterly part of the dam in the summer of 1905 which was "well drift bolted to the dam and made to withstand the rough treatment which it (would) be subjected to at freshets." <sup>10</sup> About a half a year after the completion of the dam, Sword had carefully investigated the movement of water through the fish ladder and asked the VPC to modify the fish ladder to improve it by adding two "extra pockets or steps". <sup>11</sup> Sword had noted that:

<sup>&</sup>lt;sup>9</sup> February 8, 1909. 10 page VPC report.

<sup>&</sup>lt;sup>10</sup> Coquitlam dam status report - week ending Sept.3, 1905.

<sup>&</sup>lt;sup>11</sup> May 8, 1906. H.M. Burwell to Sperling.

"the foot coming out of the second apron instead of as anticipated ... into a pool three or four feet deep, [created] quite a different condition of affairs from what was counted on when the Department accepted the plan adopted." <sup>12</sup>

For a short period of time the VPC's dam was accommodating Greater Vancouver's electrical power, New Westminster City's water supply, and the Federal Fisheries Department. But all that was about to change.



Photo of ten salmon caught below fish ladder.



View of the first small dam above the eastern stream channel.

<sup>&</sup>lt;sup>12</sup> April 25, 1906. C.B. Sword to Sperling.

#### 4. THE PROPOSAL AND THE RESPONSES.

In September of 1906 the Coquitlam dam was discovered to be leaking. A few months previous, managing director Sperling had written that he thought the dam to be "the best constructed Dam in the Province, if not in Canada." <sup>13</sup> Word soon got out and the Coquitlam Council threatened legal action should the dam break and jeopardize the lives and property of its District. The leak was fixed but began leaking again in early 1908, and leaking badly. One of the VPC's staff had estimated that the amount of water leaking was equal to that being transported through their tunnel to Buntzen Lake. This time the London office was faced with the expenditure of refitting the entire dam so they decided to implement their internal plans to further raise Coquitlam Lake.

Years back the VPC envisioned raising the Lake in their original plans to about the 30-foot level. But when they hired J.D. Schuyler in the summer of 1908, a renowned engineer with a resume bursting with experience on hydraulic and concrete dams in the United States, he suggested they raise the dam another 70 feet. Schuyler had quickly calculated the potential for more and reliable hydropower from a larger reservoir, a proposal that of course delighted the head office in London. This would almost triple the amount of water flowing into Buntzen Lake. It was this proposal that started a ruckus over the next three years with the Coquitlam and New Westminster municipalities, the provincial, and federal governments.

Coquitlam Council and certain municipal ratepayers had their lawyers advise the VPC that they better not raise the height of the dam. Some logging firms were also opposed to any reduction or danger to their operations that depended on floating wood down the Coquitlam River. A petition was sent to Victoria that stated:

"Two years ago the Municipal Council called the attention of your Department to this dam, but nothing has been done by the Government, and should a disaster happen, who would be to blame?"<sup>14</sup>

The VPC had Schuyler present his authoritative comments to Coquitlam and New Westminster City Council about the safety of the dam, the benefits of more water pressure for the water supply, and proposals to upgrade the water intake. He was quite effective, and the VPC quickly learned to have him present during many future meetings in Victoria and Ottawa.

When the VPC applied to Victoria for a Certificate of Approval, another petition was sent to the Lieutenant Governor from Coquitlam Council. Seven concerns were raised in the petition, three of which I will recite:

"1. The waters of Coquitlam Lake are not within the jurisdiction of the Province, nor are they waters to which the Water Clauses Consolidation Act, 1897 is applicable."

"2. That a grant under the said Act cannot be made so as to effect the vested rights of riparian owners or so as to interfere with navigation and fisheries, and the building of such dam and the diversion of such water would interfere with all such rights."

<sup>&</sup>lt;sup>13</sup> May 10, 1906. Sperling to Hermon & Burwell.

<sup>&</sup>lt;sup>14</sup> November 19, 1908. F.J. Fulton to Glover.

"5. That the construction of the proposed dam would practically dry up the River as the only reservation for the use of the public is 50 miners inches of water." <sup>15</sup>



Housing complex during construction of second dam.

# 5. THE BCERC TAKES ON GOVERNMENTAL BODIES

Pressure was mounting on the VPC. New Westminster City Council obtained an engineering consultant to investigate the feasibility of the new dam proposal regarding its safety and sanitary standpoint. The Federal Justice Department interceded in January 1909, and objected to the proposal as it would interfere with both navigation and the fisheries. And in what was to become one of the more fascinating and documented accounts of political wrangling, the VPC's London secretary wrote:

"It seems that this question of heightening the dam is one of the most important we have before us, and that to achieve this end we should spare neither energy nor money." <sup>16</sup>

The BCERC did have a lot of money and they also had some of the best legal council. It had important and influential friends in high places, both in Victoria and Ottawa, and secretly donated financial contributions to political parties.

The VPC had organized itself to regain support and footing within the Coquitlam and New Westminster Districts. It was largely successful in these matters and got prominent businessmen to back their proposal.

<sup>&</sup>lt;sup>15</sup> December 9, 1908. Petition to the Lieutenant Governor.

<sup>&</sup>lt;sup>16</sup> January 14, 1909. Kidd to Sperling.

"As we have been unable to make any amicable arrangement with Mayor Lee of New Westminster, we have endeavoured to bring pressure to bear on him through influential citizens, and through the medium of the Press, to force him to make a reasonable stand."<sup>17</sup>

The VPC even negotiated with the timber bosses to promise flows for their river runs at two times in the year, during spring and fall run-off (a deal which they later withdrew). The VPC were also able to obtain leaked copies or inside information on draft agreements and draft legislation from Victoria and Ottawa. They kept close watch on key players from local municipalities, from Victoria, and from Ottawa. The BCERC also arranged to silence the newspapers during critical periods. Confidential cabled correspondence was sent in secret code, what was known as Bentley's Code. And when it came to dealing with Ottawa they had the cunning influence of their lawyer Andrew Thompson, a former M.P., who played the key role in the VPC's pursuits to succeed in raising the dam. Managing Director Sperling wrote Thompson in February of 1909:

"... the fact remains that the Dominion Government has taken a hand in the game now and must be gotten rid of if at all possible, and the Company invokes your assistances for this purpose, and expects you to leave no stone unturned to accomplish this." <sup>18</sup>



Beginning of construction period of second dam.

Thompson's big task was to work on the Federal minister of the Interior, Frank Oliver. He got Oliver to re-interpret the original Orders-in-Council for water flow rights to mean that the VPC was entitled to use "ALL the water from Coquitlam Lake, and that there would be none to "spill" down (their) spillway."<sup>19</sup> He also got Oliver to cancel the 1901 Order-in-Council land grant which

<sup>&</sup>lt;sup>17</sup> August 31, 1910. Sperling to Kidd.

<sup>&</sup>lt;sup>18</sup> February 24, 1909. Sperling to Andrew Thompson.

<sup>&</sup>lt;sup>19</sup> March 9, 1909. Thompson to Sperling.

protected the immediate forest around Coquitlam Lake for New Westminster City's water supply, so that the VPC could apply for certain lands on the Lake. This move later launched a supreme court action by New Westminster City in April 1910, an action which remained unsettled until 1913. And during these court proceedings the minister of the Interior actually provided confidential government documents to the VPC:

"Mr. Oliver tells me that these constitute the whole of the material upon which Council acted in reaching its decision. Permit me to call your attention to the fact that these documents are extremely confidential, and have been so marked by Mr. Oliver himself. Make all the use you like of the material therein contained, but do not let them out of your possession, and above all do not quote from them or refer to them in framing your defence. I a quite sure you would not think of doing either, but the Minister was so very particular in handing them over to me that I think it best to be very definite."<sup>20</sup>



Diverson tunnel outlet at Buntzen Reservoir.

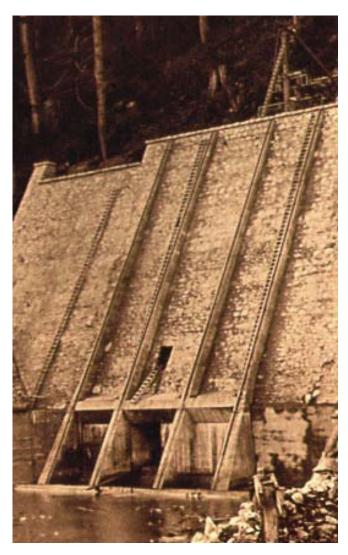
### (A). WATER DIVERSION LEGISLATION.

Now that all kinds of matters were being investigated by the federal Justice Department it was discovered that when the VPC built its first tunnel and diverted some of the Coquitlam flow, they were in contravention of federal legislation. The London secretary wrote in a letter marked "Private":

"Mr. Oliver stated that there is a Dominion Act providing that any water taken from a river must return to the river. This, of course, would be impossible in our case as the water will flow through Lake Buntzen into Burrard Inlet. If this is so it has presumably been illegal for us in the past to take water from the Coquitlam River."<sup>21</sup>

<sup>&</sup>lt;sup>20</sup> April 30, 1910. Thompson to Sperling.

<sup>&</sup>lt;sup>21</sup> July 29, 1909. Kidd to Sperling.



"In view of the fact that your present diversion is illegal, as stated in your cable, and the present diversion is only "condoned", I certainly think that Oliver should be pressed to pass amending legislation at the next session of Parliament of such a nature as will make your property rights secure in the future, when a new Minister or a new government will arise." <sup>22</sup>

So, in order to protect their interests, the BCERC got the legislation altered. It is important to note that had this legislation stood the test of time it would also have prevented the BCERC's Bridge River power project in the 1920s, which diverts water to Seton Lake and, and the controversial Alcan project on the Nechako, from ever occurring.

Photo. Intake wall construction on west side of Coquitlam Lake. Intake at bottom middle of structure.

### (B). FISHERIES.

The federal government had tough laws within its mandate to protect rivers regarding navigation and fisheries. On navigation concerns the VPC had already negotiated with the logging companies to float their timber in spring and fall, but they were weren't as easily fortunate facing the Fisheries department.

Because the VPC had secretly planned to shut off the entire flow at the Coquitlam dam, it realized that should a long fish ladder be installed it would lose out on the extra supply of water for its dam. It then began to reason to the three levels of government that fish were detrimental to New Westminster's water purity and that its hydro project was of more economic benefit to the Lower Mainland than the fish could ever hope to be. Oliver, the federal minister of the Interior, sent the following memo to the B.C. Governor General:

<sup>&</sup>lt;sup>22</sup> August 3, 1909. Thompson to London.

"The undersigned is advised that salmon have in the past ascended this river in large numbers to spawn in the Lake but that they afterwards die and consequently prove detrimental to the waters as a source of domestic supply. The undersigned is of the opinion that no provision for the passage of fish is necessary in the new works, and that such provision may be dispensed with, subject to the approval of the proper officers of the Marine & Fisheries Department."<sup>23</sup>

Despite the fact that federal government bureaucrats were bowing to the VPC's persistent arguments, the Fisheries Department had come up with a report criticizing the hydro project that the bureaucrats had to initially recognize. Thompson wrote after a meeting:

"The Dep. Min. intimated that his official would report solely with respect to the effect on the Fisheries, and personally he thought there could be no doubt that the building of so high a dam would practically destroy the run of fish up to the Lake. He said further that you might be able to make it appear that the fulfilment of the Company's project would be much more beneficial than would the loss to the Fisheries be detrimental, in which case consent would probably be given."<sup>24</sup>

The problem the Fisheries Officer faced, and still faces today, was that despite his critique and concerns someone back in Ottawa had the power to re-interpret his recommendations. Thompson had been ordered by the BCERC to watch for the Fisheries Department report:

"The attitude of the Fishery Board is now the only thing that is causing us any anxiety, and I shall be obliged if you will wire me at once the substance of the inspector's report when it is received in Ottawa."<sup>25</sup>

On October 28, 1909, Thompson, after failing to meet with the Minister of Fisheries, met with the Deputy Minister and wrote the following to the Vancouver office:

"He told me that it was against the Custom of the Department to show the reports received from its officers, but he was good enough to say that this particular report was somewhat noncommittal in character, and that while their officer did not specifically recommend the granting of our application, still he did not take very strenuous ground against it." "He certainly gave me the impression that we need expect no serious opposition from him, but he advised me to see the Minister, which I will certainly do." <sup>26</sup>

Three days later local manager Glover wrote back to Thompson directing him to take stern measures:

"I have reason to believe that this report will not be favourable to our proposition ... For this reason it will be necessary for you to use your very best influence with the Minister, pointing out to him that it cannot be shown that the Coquitlam River is now, or ever was, of any special value to the fisheries in British Columbia, and as a matter of fact, such salmon as did enter the Lake at one time, have since been excluded by the erection of the Dam which was placed there

<sup>23</sup> 

<sup>24</sup> 

<sup>&</sup>lt;sup>25</sup> October 6, 1909. Glover to Thompson.

<sup>&</sup>lt;sup>26</sup> October 28, 1909. Thompson to Glover.

in 1904. Further, to permit the salmon (which are largely of an inferior species) to enter the Lake, would mean serious injury to the New Westminster water supply."<sup>27</sup>

Thompson returned a letter that same day after meeting with Marine and Fisheries Minister Brodeur and happily concluded, "we would be experiencing no further interference from his Department". <sup>28</sup>

#### (C). WATER RIGHTS.

After the VPC got its first water licence for 5,000 miner's inches in early 1902 it was privately eager to get approval for more. Director Buntzen wrote in March 1902:

"... any such move would be sure to meet with much determined resistance on the part of New Westminster and the other Municipalities interested as it would mean that if ever they wished to take more water from the lake we could prevent them from doing so or claim compensation."<sup>29</sup>

After receiving advice "with someone in close touch with the Government", <sup>30</sup> Buntzen requested an Interim water record for 10,000 miner's inches in March 1903, and obtained Victoria's approval on April 30, 1903. An interim licence could bypass the provincial government's water reserve in the Coquitlam watershed, which was passed to protect New Westminster's water supply, "thereby allowing the Vancouver Power Co. to use the water so long as the City of New Westminster does not need it." <sup>31</sup>

In 1909 a federal court case regarding jurisdiction over Lilloet Lake (later renamed Alloette Lake) concluded that the federal government retained jurisdiction as it fell within the 20-mile limit of the federal Railway Belt lands. The reason I mention this case is that it meant that the federal government now had rights over the Coquitlam Lake area. In March of 1909 Andrew Thompson wrote the following:

"The Minister of Justice is down with erysipelas, has been confined to his house all week, and is likely to remain there an indefinite time. His Deputy is, however, an old and trusted official, and I have got him to withdraw the very unfounded plea that our case has anything to do with the conflict of jurisdiction re certain B.C. waters now being tried in the Courts. This is a big step in advance." <sup>32</sup>

<sup>31</sup> Ibid.

<sup>&</sup>lt;sup>27</sup> November 1, 1909. Glover to Thompson.

<sup>&</sup>lt;sup>28</sup> Ibid.

<sup>&</sup>lt;sup>29</sup> March 22, 1902. Buntzen to McPhillips & Co.

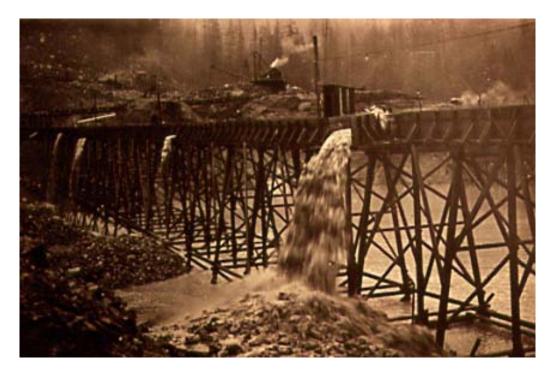
<sup>&</sup>lt;sup>30</sup> March 10, 1903. Sperling to McPhillips.

<sup>&</sup>lt;sup>32</sup> March 13, 1909. Thompson to Sperling.

And during the skirmish between Coquitlam, New Westminster City and the VPC, the federal government cancelled the provincial government's water licences and then granted almost the entire water supply to the VPC. Local Manager Glover reported in August 1909, that:

"With reference to the water rights the Minister stated that in the erection of the dam be believed that we would be rightfully entitled to all the water stored, and he would be inclined to give us a grant of the whole, reserving only the water which would be withdrawn through the pipe of the Westminster water system. The grant, he said, would be made under the provisions of the Dominion Water Power Act and would continue in force for some 84 years." <sup>33</sup>

In essence the federal government, being constantly lobbied by the VPC, usurped New Westminster City's future rights granted by the B.C. government and re-drafted legislation giving the VPC rights to the water within the new reservoir and almost the entire Coquitlam run-off.



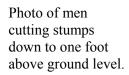
Sluicing platform and delivery of sluicing material for new dam. This period created many long periods of extreme turbidity in Coquitlam River, which residents often complained about.

# 6. CLEARING COQUITLAM LAKE

There was also great concern for the area which was to be flooded and the effects it would have on causing floating debris and the quality of the water. The Lakeshore was surveyed and they found that about 900 acres were to be flooded, including the land originally flooded by the first dam. It was later ordered by the federal government that the VPC had to cut all stumps down to one foot above the ground to address water quality and sanitation concerns. This was an enormous cost to the VPC both monetarily and in terms of time. The VPC protested to the federal engineer after the first year and managed to persuade him to alter the guidelines regarding stump height on the upper

<sup>&</sup>lt;sup>33</sup> August 25, 1909. Glover to Sperling.

areas of the new reservoir. And this is why, if you ever get the opportunity to visit the reservoir at low water, as I have, there are so many trees and high stumps sticking out of the water.







Clearing of forest for new Reservoir level.



Burning piles of wood debris just north of dam. Steamboat to right of center.

## 7. THE NEW FOREST RESERVE

As was mentioned earlier, the VPC was ardently opposed to logging in the Coquitlam. In September 1909, three years after they had requested Victoria withdraw the area from cutting, the federal government was about to cancel the reserve. The VPC's local manager Glover wrote to Frank Oliver:

"In the event of the Government ever deciding to sell the timber in question we desire the first right to purchase it in order to preserve the watershed in its natural condition and also enable us to maintain the purity of the City of New Westminster water supply. This application is made at the present time in order to anticipate any other application which might be made by loggers or others when the cancellation of the reserve becomes public." <sup>34</sup>

On March 3rd, 1910, the federal government passed an Order-in-Council creating a 56,000 acre forest reserve in the Coquitlam.

In March 1913, Challies, the superintendent of the Water Power Branch, confidentially suggested to Conway, the VPC's chief engineer, that the government consider making a new National Park:

"If the Coquitlam Reserve were made a Dominion Park, under the Dominion Forest Reserves and Parks Act, and placed under the control of the Commissioner of Dominion Parks, that the

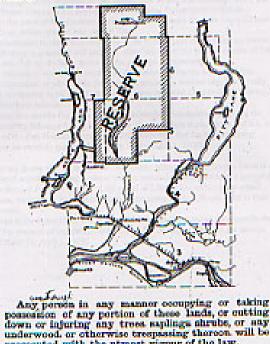
<sup>&</sup>lt;sup>34</sup> September 8, 1909. Glover to Frank Oliver.

desire of the City of New Westminster for a permanent reservation under proper sanitary control would be consummated. I have discussed the matter informally with Mr. Maber, Superintendent of the British Columbia Lands Branch, and with Mr. Harkin, Commissioner of Dominion Parks, of this Department. Mr. Haber had no objection to the suggestion, and I think stated he would discuss the matter with Mr. Taylor, the local member, and with Mr. Lee, Mayor of N. West.... which would include at least the land now known as the Coquitlam Reserve and probably most of the land between the North Arm and the northern limit of the Railway Belt and Pitt Lake. Such a park would not only be an attraction to the people at the coast, but could be used to great advantage in propagating bird life and wild animals that inhabit that district." "It would appear to me that the final visit of Mr. Freeman to the dam would be would be an opportune time for all those interested in the Coquitlam Dam and Coquitlam Lake waters to get together and suggest to the Government that the whole Reserve be included in a new Dominion Park, to be known as Coquitlam Park, all of which is respectfully submitted." <sup>35</sup>



#### PUBLIC NOTICE

PUBLIC NOTICE is hereby given that the Government of Ganada has reserved for special purposes the lands surrounding and in the neighborhood of Goquitlam Lake as shown within the heavy lines on map below.



down or injuring any trees saylings abrube, or any underwood or otherwise treepassing thereon will be presecuted with the utmost vigour of the law. By Order. FRANK OLIVER Malar et the interior of ConstaIn a report to superintendent Challies dated November 4, 1913, federal engineering consultant Freeman described a recent government decree:

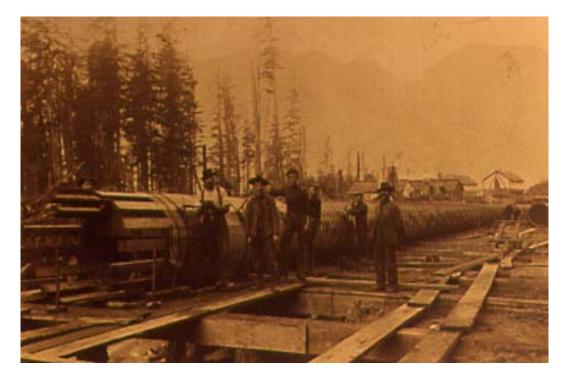
"The Government, by recent action, has set aside as a National Forest Reserve, a tract of land embracing substantially the entire watershed tributary to Coquitlam Lake, and by this means has safeguarded it against pollution that might come from future human habitation or from promiscuous lumbering operations. The area now within the reservation is thus more than three times the area contained in the original reservation, which was confined to the immediate surroundings of the Lake. The extent of the original reservation as compared to the present reservoir is shown upon the accompanying photograph from a Government map." <sup>36</sup>

Bulletin to right. Official 1910 No Trespassing Declaration Notice by Frank Oliver, Minister of the Interior, regarding the Coquitlam Watershed Reserve:

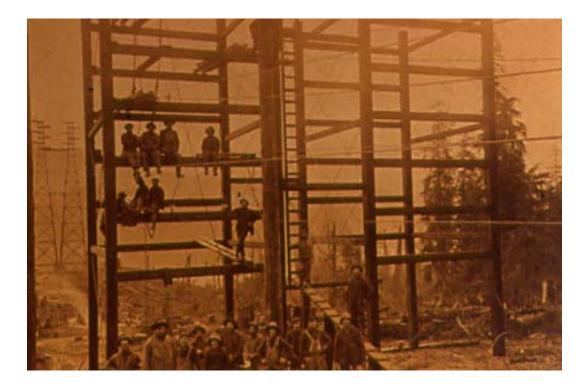
"Any unauthorized person in any manner occupying or taking possession of any portion of these lands, or cutting down or injuring any trees, saplings, shrubs or any underwood, or otherwise trespassing thereon, will be prosecuted with the utmost vigour of the law."

<sup>&</sup>lt;sup>35</sup> March 27, 1913. J.B. Challies to Conway.

<sup>&</sup>lt;sup>36</sup> November 4, 1913. Freeman to Challies.



Wood-stave water pipe under construction from Coquitlam Lake.



Hydroelectric transmission line construction from Buntzen power plant at Indian Arm to Greater Vancouver.

#### 8. CONCLUSION

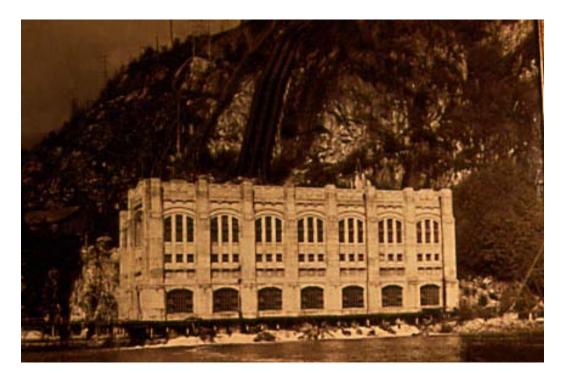
So, in conclusion, I have told you how almost all the water rights from the Coquitlam watershed had been questionably transferred by a vested interest out of the public's use for hydro power. B.C. Hydro has inherited rights to 94% of the Coquitlam Reservoir water flow and the rest to us. The GVRD has an agreement in place to rent up to 12% more of Hydro's rights. Recently the Greater Vancouver Regional District has proposed to purchase all the water rights from B.C. Hydro to supply needed water to Greater Vancouver's growing population. It is a very good proposal, in that there is a lot of water available, so much so that the proposal to raise the Seymour dam may be put aside for quite a long time. The question must be asked though, historically, who really has the legal water rights to the Coquitlam watershed and, consequently, does the Greater Vancouver Regional District have to pay B.C. Hydro at all?

Secondly, we have seen how the salmon run into the Coquitlam Lake was knowingly devastated. Over the past 20 years the Department of Fisheries and Oceans have been trying to restore and protect a portion of the historic Coquitlam salmon run. The federal fisheries staff encountered problems regarding inadequate flows from the Coquitlam reservoir and serious sedimentation loading from the gravel pit operations just south of the Coquitlam watershed gate. At the end of last November B.C. Hydro had an important ceremony at the Coquitlam dam whereby they announced the release of some additional water run-off to provide for the salmon in what used to be the Coquitlam River, and which should really be renamed the Or Creek River. I think that was an important ceremony, not only for B.C. Hydro, but also for some of the fish.

Thirdly, and most importantly, we owe an immense debt of gratitude to B.C. Hydro's predecessor, the BCERC, for having the courage and wisdom to set aside and protect the Coquitlam watershed forests. In my earlier research it had always troubled me why, out of the three watersheds, the Coquitlam was undeveloped. Not only did the BCERC ensure us a fully functioning and pristine watershed for the public's water supply, but they also left us a sanctuary for our heritage, one of the only remaining portions of Lower Mainland's magnificent old growth forests. Unfortunately, much of the BCERC's foresight came to ruin when the Greater Vancouver Water Board and local politicians consented to commercially log the Coquitlam watershed, which began in 1973, just 21 years ago. It has been an enormous tragedy for Greater Vancouver, as I have tried to explain some of this in my April manuscript, Wake Up Vancouver. Because of the Greater Vancouver Water District's tight and almost secretive control over public access, concerned members of the public have not been allowed access to scrutinize and comprehend what has been going on in the Coquitlam and the other two watersheds, the Capilano and Seymour. Because of my research and lobbying the Water District, they were kind enough to provide a tour for me into the Coquitlam last October. It was a good and an important visit for me and I hope that I can continue to return to learn more about the area and its forests and to also learn more about the Seymour and Capilano watersheds.



Final phase of Coquitlam dam construction. Photo taken May 20, 1913.



Power House station at Indian Arm. Intake pipes from Buntzen Reservoir provide water pressure for turbines.

## 9. EPILOGUE

I'd like to end by getting back to the "Siwash" Indian referred to in the quote at the beginning. What he was no doubt contemplating was "what is really going on here, and how can I get my land back which was stolen from me and my people?"

At the end of the 1970s, when B.C. Hydro was doing repairs on the Coquitlam dam, they had to draw down the Reservoir to a very low level, and two student archeologists conducted a brief study on old Salish Nation occupation sites during this time. They discovered that the sites were between 5,000 and 7,000 years old. In a chapter devoted to this topic, now in press, it states:

"The primary significance of the Coquitlam Lake sites remain their location, and the fact that they represent the first substantive prehistoric site discoveries from the coastal mountain lakes north of the Lower Mainland." <sup>37</sup>

These 6 sites are all on the Cedar Creek mouth area, a sub-drainage system in the southeast portion of the watershed, photos of which I have on my display marked in yellow. This was once an extensive flat area, and one of the only ones alongside the original Lake. It was an area that could be described as an idyllic village site, right next to Cedar Creek.

<sup>&</sup>lt;sup>37</sup> Early Human Occupation in British Columbia, ed. by Roy L. Carlson, in press. Chapter 16, Coquitlam Lake: An Early Lithic Component in the Lower Mainland, by Milt Wright.