

Ministry of Environment & Parks

- original
File No. 0179602-B Vol 1
- then changed
Sec. No. to 48120-78/KEMAND/F
- now see
76940-70/ALCAN/RF

CLOSED

See Sec. No.

For Further Correspondence

1965 - 1990

Now file for further
info 76940-70/ALCAN/RF

ACCESSION 93-2744 / 06

Alcan Smelters and Chemicals Ltd



P.O. Box 1800, Kitimat, British Columbia, Canada V8C 2H2. Telephone: 804/832-3111
Telefax: 804/832-2280 Purchasing Telefax 804/839-8101

30 March 1990

Province of British Columbia
Ministry of Environment
Water Management Branch
Parliament Buildings
Victoria, B.C., V8V 1X5

Attention: Mr. R. Round
Water Rights - Special

Dear Mr. Round:

Based on the 1 April snow survey measurements, we forecast an April - August inflow to the Nechako Reservoir of 153 b.c.f. which is 105 % of the long term average.

The elevation of the Nechako Reservoir at 1 April is expected to be about 2794.65 feet. This provides storage for 51 b.c.f. to elevation 2800 feet (Full Pool). The Kemano Powerhouse, during April to August run-off period, should consume another 59 b.c.f. thus leaving us with 43 b.c.f. which will have to be discharged through the Skins Lake Spillway, or stored on the Reservoir above elevation 2800 feet.

To draw down our Reservoir to normal level and to help alleviate flooding in the Prince George area we are proposing a plan to spill 10 000 cfs for a 30 day period (as soon as the ice is out of the Nechako River) and then resume normal spills for the rest of the season.

The attached graph shows two curves of what possibly could happen to the Reservoir elevation.

Your comments on this plan would be welcomed.

Yours truly,

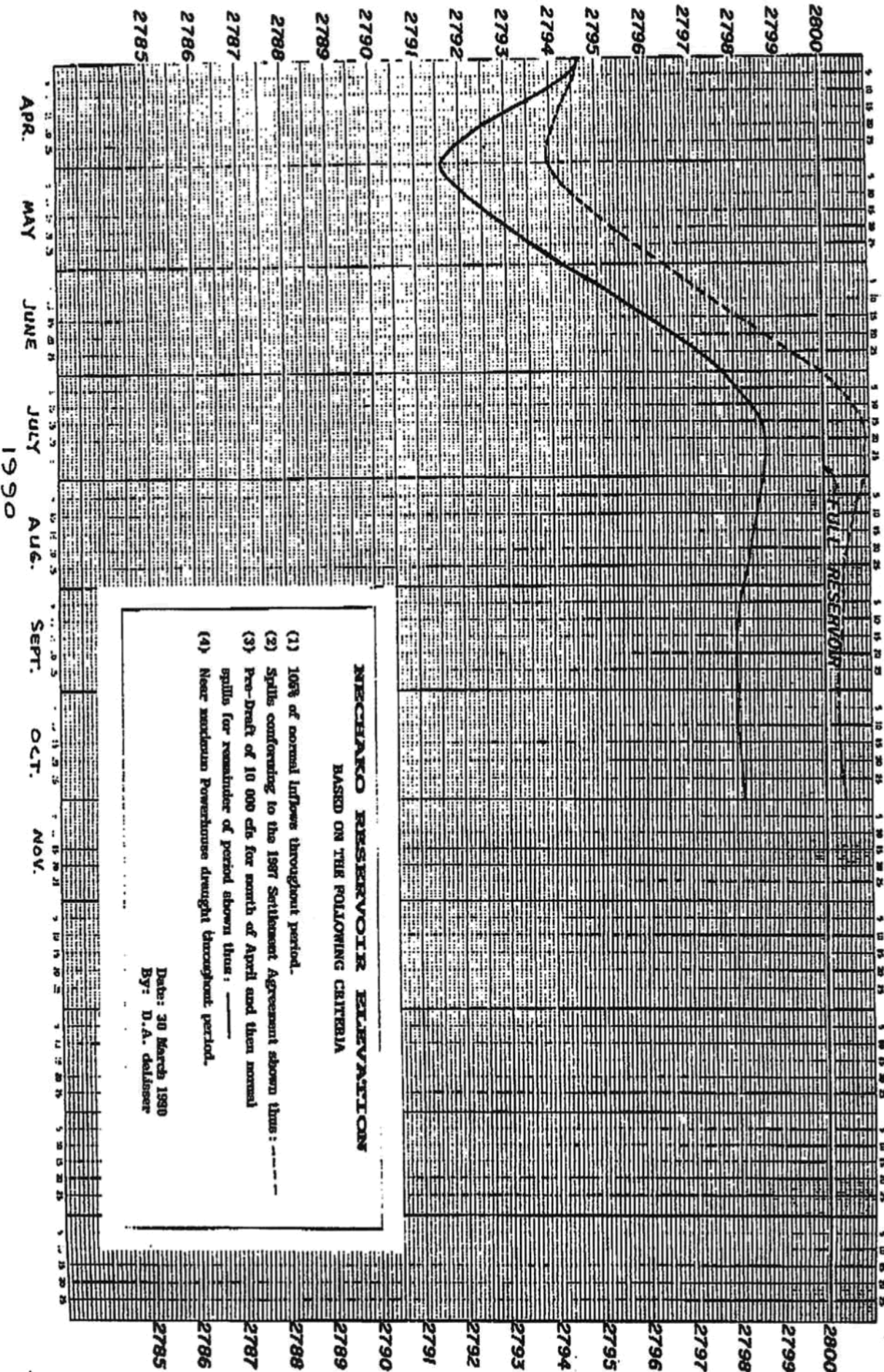
D.A. deLisser
Technician
B.C. Power Operations

DAdel:cw

Copies to: (faxed)

Mr. D. Roberts
Mr. L. Holroyd

ELEVATION IN FEET



NECHAKO RESERVOIR ELEVATION BASED ON THE FOLLOWING CRITERIA

- (1) 106% of normal inflows throughout period.
- (2) Spills conforming to the 1967 Settlement Agreement shown thus: - - - -
- (3) Pre-Draft of 10 000 cfs for month of April and then normal spills for remainder of period shown thus: - - - -
- (4) Near maximum Powerhouse draught throughout period.

Date: 30 March 1990
By: D.A. delisser

NECHAKO FISHERIES CONSERVATION PROGRAM

A Joint Program of the Government of Canada, Alcan and the Province of British Columbia

March 30, 1990

File: NECH-001

Alcan Smelters & Chemicals Ltd.
P.O. Box 1800,
Kitimat, B.C.
V8C 2H2

Attention: Mr. D.A. Delisser

Dear Mr. Delisser

Re: Skins Lake Releases

Thank you for your letter of March 29, 1990 informing the NFCP Technical Committee of the need for a forced spill from the Nechako Reservoir.

This requirement has been discussed with the Committee and the expectation of increased flows has been assessed as it affects the Nechako Fisheries Conservation Program. The Committee has been able to make some adjustments to the timing of program activities planned for the year so as a result we are in agreement with the timing of forced spill release outlined in your letter. We are proceeding with our program on the basis that flows in the upper Nechako will have returned to the short term flow regime by mid-May.

Please inform the Committee as soon as possible if there is a requirement to continue forced spills at Skins Lake passed May 7, 1990.

Yours very truly,

NECHAKO FISHERIES CONSERVATION PROGRAM TECHNICAL COMMITTEE


Duncan Hay, P.Eng.
Chairman

/gs

c.c. NFCP - Technical Committee
Mr. R. Round - Ministry of Environment
Victoria, B.C.



Province of
British Columbia

Ministry of
Environment

Water Management Branch
Parliament Buildings
Victoria
British Columbia
V8V 1X5

January 25, 1990

File: 0179602-B

Mr. D. A. de Lisser
B.C. Power Operations
Alcan Smelters and Chemicals Ltd.
P.O. Box 1800
Kitimat, B.C.
V8C 2H2

Dear Mr. de Lisser:

Re: Nechako Reservoir Elevations

Thank you for your letter of January 9, 1990, advising me of above-normal reservoir elevations during December 1989 - January 1990.

Based on a telephone conversation between Dr. Balachandran of this office and yourself on January 19, 1990, I understand that the situation is due primarily to above-normal temperatures (increases of 4 - 5°C) and above-normal rainfall (increases of 80 - 100%) during the fall. I understand also that the weather in the basin is getting colder and drier and that the situation may return to average conditions in the coming months.

Please keep us informed of any further developments; in particular any arrangements made with B.C. Hydro with regard to alleviating the potential problem.

Yours sincerely,

D. A. Kasianchuk
Comptroller of Water Rights

SEF Jan 25/90
RR
GB/gg

bcc: Mr. Dennis Roberts
Mr. Wilf Dreher
Dr. Jon O'Riordan

Alcan Smelters and Chemicals Ltd



P.O. Box 1800, Kitimat, British Columbia, Canada V8C 2H2. Telephone: 604/632-3111
Telefax: 604/632-2260 Purchasing Telefax 604/639-8101

9 January 1990

Dr. D.A. Kasianchuk
Comptroller of Water Rights
Water Management Branch
Ministry of Environment
Parliament Buildings
Victoria, B.C.
V8V 1X5

Re: Nechako Reservoir Elevations

It seems prudent at this time to advise you of our rather high reservoir level situation.

The attached graph shows the reservoir elevations (solid line) that should result from average inflows to the reservoir for the period 1 November 1989 to 31 October 1990. The Kemano powerhouse consumption has been estimated to meet our existing commitments to B.C. Hydro and Eurocan Pulp and Paper Company as well as our smelter needs. Spillway discharges conform to the amounts set out in the September 1987 Settlement Agreement.

Actual elevations are plotted in broken line on the same graph for comparison.

We are currently discussing a plan with B.C. Hydro to help alleviate this potential problem.

Yours truly,

D.A. deLisse

Bob
Could you review
Alcan's agreement for
discharges and data
submitted to us and
see if there is any
cause for concern re
flooding?
Also pls draft reply.

Robin Roush:

*Please draft response
for Bob's signature
Jeff Jan 16/90*

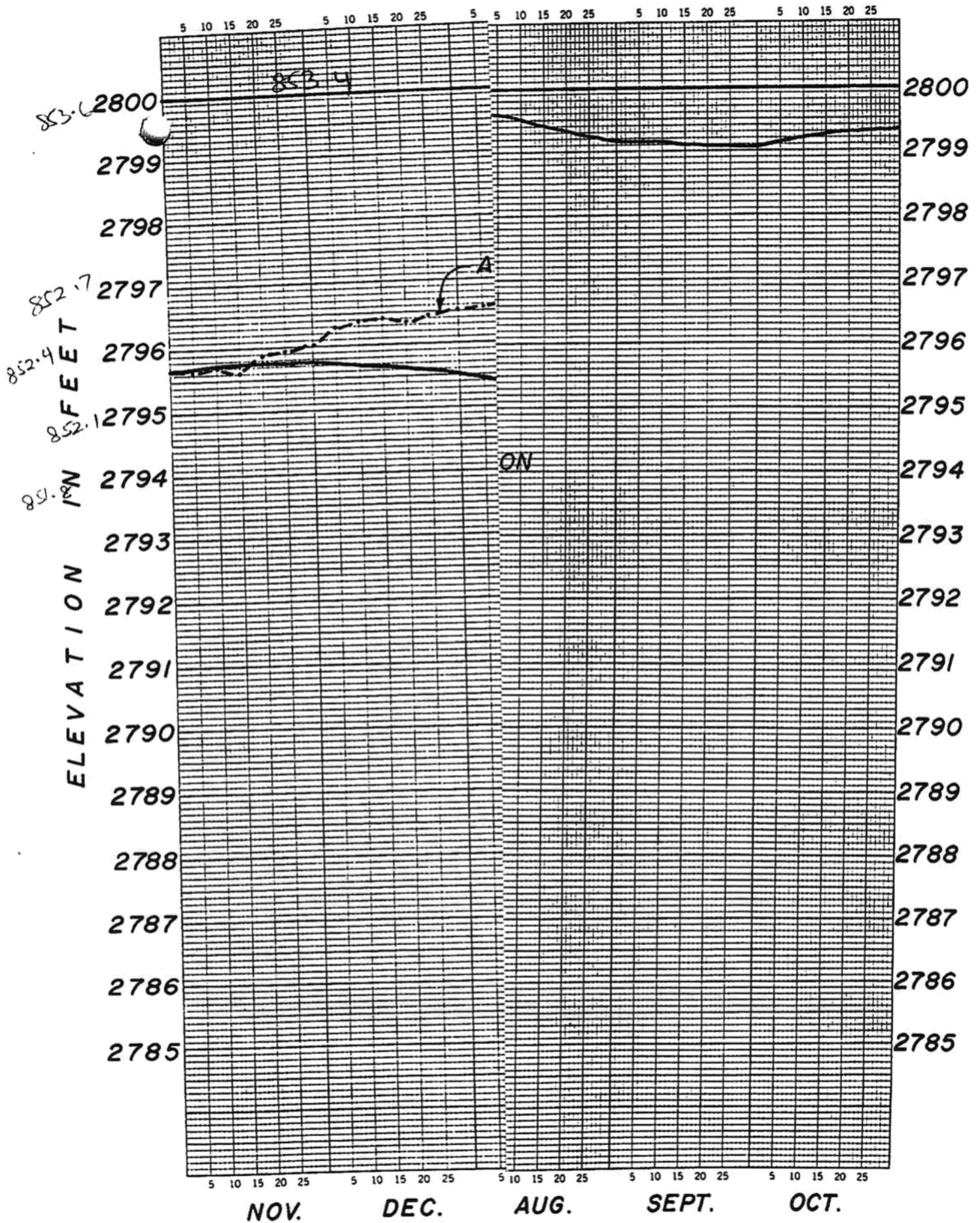
Mr. Bruce Jenkins
(Triton Env. Cons. Ltd.)

File
FA

pl

PR
10/10/17

B.C. POWER OPERATIONS



bulletin



ALCAN DESCRIBES NECHAKO FLOW RATES
FOR KEMANO COMPLETION PROJECT

3 February 1983

VANDERHOOF, B.C. -- Water flow rates for the Nechako River which would remain after construction of Alcan's proposed Kemano Completion Project were described here today by Bill Rich, Alcan's vice president for British Columbia. These flows are designed to protect sockeye and chinook salmon as well as other fish species and other users of this river located in Northwestern B.C.

Alcan's Kemano Completion Project would direct some of the water from the Nechako and Nanika rivers. This water would generate hydro-electric power at a new powerhouse to be built at Kemano. Two new aluminum production plants would be built in northwest B.C. to utilize this power. Alcan has stated that the preferred site for the first plant is near Vanderhoof, 60 miles west of Prince George.

The information on flows is the culmination of more than three years of technical and environmental studies and

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0179602 B



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consultation with area residents. Alcan has been developing and exchanging information on protecting fisheries resources on the two rivers with federal and provincial agencies which have responsibilities for fisheries. The flow figures were recently presented to these agencies.

Rich said that the flows which would continue to be released into the Nechako River combined with water from other natural tributaries would result in an average annual flow rate at Vanderhoof of about 2700 c.f.s. (78 m³ sec.) In early summer, at the gauge at the old Vanderhoof Bridge, the river typically would be more than 350 feet wide and about 11 feet deep.

Residents in other parts of B.C. may not be familiar with the Nechako River. The following rivers, Rich said, have average annual flow rates similar to what the Nechako will be near Vanderhoof: the Chilliwack River at Vedder Crossing, the Adams River, the Campbell River on Vancouver Island and the Bowron River at Hansard.

7 Feb. 83
DBT



A major part of the project design will be control facilities and appropriate water flow rates to protect migrating sockeye salmon from excessively high water temperatures in July and August. To accomplish this, Alcan would construct a cold water bypass tunnel around Kenney Dam, part of the first phase of the Kitimat-Kemano project built in the 1950's. The tunnel would carry cold water from near the bottom of the Nechako reservoir and discharge it into the Nechako River.

Rich said "I am confident that the proposed flows will meet the bio-physical requirements for salmon and the needs of people who have an economic stake in the Nechako River. I think they also reflect the values that people who live near the river have shared with me over the last two years."

Some residual impacts in other resource areas would be unavoidable, Rich said. "At this point I believe any impacts would be relatively small, but they will be thoroughly reviewed in the context of these flows."

"We sincerely want to be good neighbours and will be mindful of others with an economic stake in the river."



He said the company would soon be making a similar announcement regarding flows in the Nanika-Mo river system. Impact assessment studies will be carried out and an application made to the provincial government based on the water available for power development.

"We expect to file the application about mid-year and then enter a public hearings process on the project," Rich said.

NOTES FOR AN ADDRESS

BY

W.J. RICH

VICE PRESIDENT FOR BRITISH COLUMBIA
ALUMINUM COMPANY OF CANADA, LTD

VANDERHOOF, B.C.
3 FEBRUARY 1983

FIRST, THANK YOU ALL FOR COMING. I REALIZE THAT OVER THE PAST YEAR OR TWO, I'VE ASKED FOR A FAIR BIT OF YOUR TIME FOR MEETINGS LIKE THIS; AND I'M GRATEFUL FOR IT. I HOPE THE INFORMATION I'VE IMPARTED IN THE PAST HAS MADE THE TIME SPENT WORTHWHILE. AND I'M ALSO HOPEFUL THAT THE MESSAGE I BRING TODAY WILL BE RECEIVED AS GOOD NEWS.

I'M HERE TO BRING YOU THE RESULTS OF OVER THREE YEARS OF WORK ON NECHAKO RIVER FLOWS. THESE RESULTS REFLECT, FOR ME, TWO VERY IMPORTANT CORNERSTONES FOR ANY FOUNDATION ALCAN MAY BUILD IN THIS PART OF BRITISH COLUMBIA; FIRST, THE FLOWS ARE BASED ON EXHAUSTIVE ENVIRONMENTAL STUDIES WHICH, SO FAR, HAVE TAKEN SEVERAL YEARS AND HAVE COST MORE THAN FIVE MILLION DOLLARS. BUT THE TIME AND MONEY IS NOT THE MOST IMPORTANT COMPONENT OF THIS WORK. IT'S REAL VALUE LIES IN THE FACT THAT ALL OF US CAN TAKE COMFORT, AS MUCH AS HUMANLY POSSIBLE, FROM THE ASSURANCE THAT THE SALMON RESOURCE WILL CONTINUE TO THRIVE, AND THAT OTHER USERS OF THE RIVER, WITH AN ECONOMIC STAKE, WILL NOT BE ASKED TO SUFFER A LOSS.

THE OTHER CORNERSTONE I MENTIONED HAS TO DO WITH THE VALUES PLACED ON THE RIVER BY THE PEOPLE WHO LIVE HERE. THEY ARE MUCH MORE DIFFICULT TO DEFINE, OR TO DESCRIBE IN ANY QUANTITATIVE TERMS. YOU -- ALL OF YOU -- HAVE CONVINCED ME THAT THE NECHAKO MUST DO MORE THAN SIMPLY MEET THE NEEDS OF ECONOMIC USERS. I BELIEVE THAT THE FLOWS WHICH WE ARE PREPARED TO COMMIT TO IN THE UPPER NECHAKO RIVER, WILL ALLOW

THE RIVER TO REMAIN A VALUABLE, USEABLE AND ENJOYABLE PART OF LIVING IN THE NECHAKO VALLEY. AND I CAN CONFESS TO A BIT OF SELFISHNESS HERE BECAUSE, AFTER ALL, WE'D LIKE TO LIVE HERE TOO.

IT IS IMPORTANT TO POINT OUT THAT THE FLOWS WHICH ALCAN WILL COMMIT TO IN THE UPPER NECHAKO WILL BE SUPPLEMENTED DOWNSTREAM BY OTHER SIGNIFICANT NATURAL INFLOWS FROM BOTH SMALL AND LARGE TRIBUTARIES. I'LL PROVIDE MORE ON ACTUAL FLOWS AT FORT FRASER, VANDERHOOF AND PRINCE GEORGE SHORTLY. FIRST, I'LL DESCRIBE THE KIND OF DISCHARGES INTO THE UPPER NECHAKO WHICH WOULD BE PERMANENTLY IN PLACE AFTER THE PROJECT IS APPROVED AND BUILT.

DURING THE SUMMER MONTHS -- APRIL THROUGH AUGUST -- WHEN THE RIVER IS BEING USED HEAVILY BY RESIDENTS FOR RECREATIONAL PURPOSES, AND WHEN THE WATER IS MOST NEEDED FOR SALMON, THE DISCHARGE WOULD BE 1,100 CUBIC FEET OF WATER PER SECOND, OR C.F.S. DURING JULY AND AUGUST, THIS AMOUNT WOULD BE HIGHER WHEN WEATHER CONDITIONS REQUIRE COOLING WATER FOR SALMON. AS A RESULT, THE EXPOSURE OF MIGRATING SOCKEYE SALMON TO WATER TEMPERATURES EXCEEDING 68° F WOULD BE LIMITED. HOWEVER, THE COOLING FLOWS PROVIDED AFTER THE PROJECT, WOULD BE LESS THAN THOSE EXPERIENCED OVER THE PAST FEW YEARS. I EXPECT THIS WILL BE GOOD NEWS FOR THOSE WHO HAVE EXPERIENCED PROBLEMS WITH EROSION AND FLOODING, WITH PREVIOUS COOLING WATER FLOWS.

WE WILL BE ABLE TO REDUCE THE AMOUNT OF WATER REQUIRED FOR COOLING SINCE, AS PART OF THE PROJECT, WE WOULD BUILD A COLD WATER RELEASE TUNNEL AROUND KENNEY DAM. WILL COST ABOUT \$15 MILLION. THIS WILL PROVIDE WATER TO THE UPPER NECHAKO FROM THE LOWER LEVELS OF NECHAKO RESERVOIR, RATHER THAN TAKING IT FROM THE SURFACE, AS IS NOW THE CASE. THIS COLD WATER WILL ALSO FIND ITS WAY TO THE RIVER MORE QUICKLY, SINCE IT NOW MUST TRAVEL THROUGH SKINS, CHESLATA AND MURRAY LAKES BEFORE ENTERING THE RIVER. THIS ADDITIONAL WATER, WHENEVER NEEDED IN JULY AND AUGUST, WOULD BE IN ADDITION TO THE BASE FLOW OF 1,100 C.F.S.

IN SEPTEMBER AND OCTOBER, THE DISCHARGE WOULD REDUCE SLIGHTLY TO 1,000 C.F.S. THIS SEPTEMBER-OCTOBER COMMITMENT IS HIGHER THAN IS REALLY NECESSARY FOR FISH, BUT THE RIVER IS STILL IN USE; PEOPLE USE IT IN THE FALL FOR HUNTING, AND FLOAT PLANES ARE STILL TAKING OFF AND LANDING. THESE FALL FLOWS WOULD BE SIMILAR TO THOSE EXPERIENCED DURING THE PAST FEW YEARS. WE MADE A COMMITMENT TO TAKE INTO ACCOUNT THE OTHER USERS OF THE RIVER. I BELIEVE WE HAVE LIVED UP TO IT. WE WILL ALSO BE MAINTAINING A DISCHARGE OF 900 C.F.S. THROUGH NOVEMBER FOR THE SAME REASONS. FALL RAINS USUALLY TEND TO AUGMENT THIS FLOW FROM THE TRIBUTARIES.

OVER THE FOUR MONTHS OF WINTER DISCHARGES, WHICH WOULD BE 500 C.F.S., RECREATIONAL ACTIVITIES ARE, OF COURSE, VERY LIMITED DUE TO ICE COVER ON THE RIVER. INCUBATING SALMON EGGS WILL BE PROVIDED SUFFICIENT WATER OVER THE WINTER MONTHS

TO ENSURE THEIR SURVIVAL. WHILE THE FLOWS WOULD BE BELOW SUMMER VOLUMES, ACCURATE SURVEYS OF THE SPAWNING AREAS IN THE UPPER RIVER SHOW THAT AT ALL TIMES THE EGGS WILL HAVE A PROTECTIVE COVER OF WATER OVER THEM. AND, IN TERMS OF RECREATIONAL ACTIVITY, WE HAVE BEEN TOLD THAT LOWER FLOWS DURING THE WINTER WOULD NOT POSE A PROBLEM.

THUS FAR I'VE DEALT WITH DISCHARGES INTO THE UPPER NECHAKO. NOW, PERHAPS, I CAN PROVIDE SOME PERSPECTIVE ON WHAT FLOWS CAN BE EXPECTED AT THE COMMUNITIES DOWNSTREAM.

AT FORT FRASER, THE PLANNED DISCHARGES WOULD BE AUGMENTED BY NATURAL INFLOW FROM GREER CREEK AND OTHER TRIBUTARIES IN THE UPPER NECHAKO ABOVE FORT FRASER. THIS INFLOW HAS AN ANNUAL AVERAGE OF ABOUT 300 C.F.S. MUCH OF THIS, OF COURSE, COMES WITH THE RUNOFF IN THE SPRING AND EARLY SUMMER AND WOULD RESULT IN TYPICAL FLOWS AT FORT FRASER OF MORE THAN 1,500 C.F.S. FOR THIS PERIOD. THESE INFLOWS DROP OFF IN JULY AND AUGUST, BUT WILL BE PARTIALLY OFFSET BY EXTRA COOLING FLOWS WHEN THE WEATHER WARRANTS IT. IN THE FALL, THE FLOWS WOULD BE SIMILAR TO THOSE EXPERIENCED OVER THE PAST FEW YEARS.

AT VANDERHOOF, WITH THE CONTRIBUTION OF OTHER TRIBUTARIES, PARTICULARLY THE DISCHARGE OF THE NAUTLEY RIVER, THE FLOW WOULD, OF COURSE, BE MUCH HIGHER. IN EARLY SUMMER, DURING AN AVERAGE RUNOFF YEAR, THE FLOWS WOULD BE UP AROUND

5,000 TO 5,500 C.F.S. AT VANDERHOOF. LATER IN THE SUMMER, THESE FLOWS AT VANDERHOOF WOULD DECREASE TO THE 3,000 C.F.S. RANGE, AS OTHER NATURAL INFLOWS DECREASED. HOWEVER, THIS DECREASE WOULD BE PARTIALLY OFFSET BY ADDITIONAL DISCHARGE OF COOLING WATER WHICH WOULD BE REQUIRED PERIODICALLY DURING JULY AND AUGUST, DEPENDING ON THE WEATHER, TO PROTECT MIGRATING SOCKEYE SALMON. THESE FLOWS WOULD RESULT IN THE NECHAKO RIVER BEING OVER 350 FEET WIDE AND ABOUT 11 FEET DEEP AT THE OLD VANDERHOOF BRIDGE DURING AVERAGE, EARLY SUMMER CONDITIONS. BASED ON THE WETTEST AND DRIEST YEARS WHICH HAVE OCCURRED DURING THE LAST THREE DECADES, THE COMPARABLE RIVER DEPTHS, FOLLOWING KEMANO COMPLETION, WOULD BE IN THE ORDER OF 13 FEET AND 9 FEET, RESPECTIVELY.

AT PRINCE GEORGE, FLOWS WOULD BE SIGNIFICANT BECAUSE OF THE INFLOW OF THE STUART RIVER AND OTHER TRIBUTARIES. UNDER AVERAGE CONDITIONS, FLOWS DURING THE SUMMER WOULD BE IN THE 11,000 TO 16,000 C.F.S. RANGE.

I HONESTLY BELIEVE THAT THESE FLOWS CAN BE "THE BEST OF BOTH WORLDS"; AN ACCEPTABLE SHARED RESOURCE PLAN. THEY PRESERVE THE RIVER, FOR NOW AND FOR THE FUTURE. AND THEY ALSO WILL FORM THE BASIS OF AN APPLICATION TO THE PROVINCIAL GOVERNMENT, ABOUT MID-YEAR, TO PROCEED WITH THE KEMANO COMPLETION PROJECT. THAT APPLICATION, OF COURSE, WILL IDENTIFY THE VANDERHOOF, FORT ST. JAMES, FORT FRASER AREA AS THE SITE FOR THE FIRST OF TWO ALUMINUM PLANTS.

BEFORE WE DO THAT, OF COURSE, WE MUST IDENTIFY AND MAKE KNOWN SIMILAR INFORMATION ON FLOWS IN THE NANIKA RIVER. THESE, TOO, WILL BE A PART OF THE APPLICATION. I EXPECT WE'LL BE ABLE TO MAKE THIS INFORMATION KNOWN SHORTLY -- IT WILL BE IN WEEKS RATHER THAN MONTHS.

WE MUST ALSO COMPLETE IMPACT ASSESSMENTS ON THE PROJECT. THEY, TOO, WILL BE A PART OF THE APPLICATION.

I EXPECT THAT PUBLIC HEARINGS WILL FOLLOW THE APPLICATION, AND BEGIN SOMETIME LATER THIS YEAR.

I ALSO EXPECT THAT THE IMPACT ASSESSMENT STUDIES WILL IDENTIFY SOME PROBLEMS. SOME RESIDUAL IMPACTS ARE NO DOUBT UNAVOIDABLE. AT THIS POINT, I BELIEVE THEY'LL BE RELATIVELY SMALL, BUT THEY WILL BE THOROUGHLY STUDIED AND OUTLINED IN THE CONTEXT OF THESE FLOWS. MANY IMPORTANT ISSUES SUCH AS THE EFFECT ON WELLS NEAR THE RIVER, AND RIVER FENCING, HAVE BEEN RAISED DURING THE COURSE OF OUR CONSULTATIONS WITH THE PEOPLE HERE, AND THEY WILL BE FULLY ADDRESSED. WE SINCERELY WANT TO BE GOOD NEIGHBOURS AND WILL BE MINDFUL OF OTHERS WITH AN ECONOMIC STAKE IN THE RIVER.

I AM CONFIDENT THAT THE FLOWS I HAVE DESCRIBED WILL MEET THE BIOPHYSICAL REQUIREMENTS FOR SALMON AND THE NEEDS OF PEOPLE WHO HAVE AN ECONOMIC STAKE IN THE NECHAKO RIVER. I THINK THEY ALSO REFLECT THE VALUES THAT PEOPLE WHO

LIVE NEAR THE RIVER HAVE SHARED WITH ME OVER THE LAST TWO YEARS.

I KNOW THAT ALCAN EMPLOYEES IN KITIMAT VALUE HIGHLY THEIR ACCESS TO THE MANY IRREPLACEABLE FACETS OF THE ENVIRONMENT IN THE AREA. I SAY THAT WITH CONVICTION BECAUSE I DID TOO WHEN I LIVED THERE, AND STILL DO. AND SO DO MY COLLEAGUES HERE TODAY.

IF THAT ENVIRONMENT HAD BEEN DESTROYED, OR SERIOUSLY DAMAGED, I KNOW WE WOULD NOT HAVE THE SAME KIND OF VALUABLE WORKFORCE WE ENJOY TODAY. WE WOULD NOT ENJOY THE GOOD RELATIONSHIP WE HAVE WITH OUR NEIGHBOURS, EITHER. THE KINDS OF VALUES HELD BY OUR NEIGHBOURS AND EMPLOYEES -- BOTH PRESENT AND FUTURE -- ARE EXTREMELY IMPORTANT TO ME, AND TO THE COMPANY.

I HOPE I HAVE UNDERSTOOD YOUR VALUES WELL; AND YOUR ASPIRATIONS, BOTH ECONOMIC AND IN TERMS OF QUALITY OF LIFE. AND I HOPE BEFORE TOO MUCH LONGER, WE WILL UNDERSTAND EACH OTHER EVEN BETTER -- AS NEIGHBOURS.

THANK YOU.

3 February 1983

BACKGROUND RE FISHERIES IN THE NECHAKO RIVER

In 1980, a year of low inflow into Alcan's Nechako Reservoir, the company and the Department of Fisheries and Oceans disagreed on discharge rates into the Nechako River. DFO requested more water to achieve cooler temperatures than Alcan felt was needed.

As a result, DFO took Alcan to court to secure additional water flows for the protection of migrating sockeye salmon. The view of DFO's technical specialists was that the risk to the salmon increased significantly when they were subjected to water temperatures above 68°F, and that action needed to be taken to limit exposure above that temperature. Alcan, on the advice of its environmental consultants, had a different opinion as to the amount and timing of cooling water required for sockeye protection.

An injunction was subsequently granted to DFO. Studies since then have produced new information enabling development of new control procedures. The procedures proposed are aimed at limiting exposure above 68°F and with improvements in weather forecasting, they will limit the temperature exposure even

- 2 -

further, to the benefit of these particular sockeye runs.

It should be noted that in the Nechako River drainage, the migrating sockeye are close to the extreme range of the migration routes for Fraser River stocks, and are also encountering high water temperatures in the natural uncontrolled rivers. Alcan's proposal would reduce significantly the exposure to higher temperatures from what it has been over the last 30 years in the Nechako River, and would also result in a temperature regime that is better than that of the Stuart River, a natural uncontrolled river into which most of these same sockeye pass.

The facility that Alcan would construct to regulate the temperature will be a by-pass tunnel around the Kenney Dam. This would permit cold water from the depths of the Nechako reservoir to be discharged into the river during periods of hot weather. This is a solution that the DFO recommended to Alcan thirty years ago when the initial phases of the power project were first undertaken.

The basic flows in the upper river during the adult salmon life phases - that is during migration and spawning - are in the 1000-1100 c.f.s. range in the Alcan proposal. This is the basic flow that was identified by DFO in a 1979 report.

There are two salmon life phases in the river -- chinook rearing and incubation -- for which the proposed flows are different from those that the DFO requested in 1980. This deserves some explanation.

While the thrust of the court case in 1980 was the temperature control issue (which is limited to the July-August period), it was necessary to prescribe a flow regime covering the entire 12-month period of the year so that Mr. Justice Berger could issue an appropriate order to Alcan. Field research was still being undertaken, however, both by the DFO and Alcan (Mr. Justice Berger urged collaboration and joint effort in this work).

At that time, for juvenile chinook rearing and for chinook egg incubation much was still unknown. Understandably, the DFO took a conservative approach. For juvenile rearing, a flow of 2000 c.f.s. was prescribed for the period April to August. Subsequent rigorous habitat evaluation work has shown that virtually the same amount of rearing habitat is available at a flow of 1000-1100 c.f.s., the same basic flow that the DFO has viewed as necessary for migrating and spawning adults. Alcan has proposed this flow for the entire spring and summer and early fall months, through to the end of chinook salmon spawning in September.

With regard to egg incubation, the DFO again appeared to take a conservative approach. It requested the same low flow for egg incubation as for spawning. This is better than natural rivers, where there is typically a significant flow reduction during the winter, with the attendant risk of eggs freezing if spawning redds dry out and become exposed to cold air. Until an accurate survey of the specific spawning areas could be carried out, the only way to ensure that there was no chance of any redd being exposed was to maintain the same spawning flow throughout the winter. Since chinook salmon in the Nechako River typically spawn in at least 2-3 feet of water, there would be no question of any risk.

An accurate survey of the spawning areas has been carried out as part of the study programme, and it is now known how much water is needed to keep the redds well covered during incubation. The proposed flow of 500 c.f.s. from December through March will accomplish this handily. It should be noted that the resulting spawning/incubation flow ratio of 2:1 is still a significantly better ratio than that achieved by unregulated rivers in that part of British Columbia.

In his judgment, Mr. Justice Berger said there must be a free exchange of information to avoid a return to court. DFO, in the evidence it submitted to him, said it "recognizes that in

- 5 -

principle flows regulated in accordance with salmon life cycle requirements have the potential to stabilize salmon production and will co-operate with Alcan to reach and form decisions respecting the protection of these fish stocks."

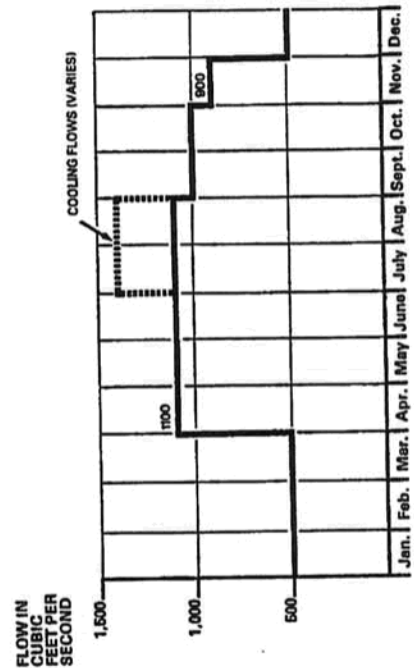
Within this recommendation made by Mr. Justice Berger and in the spirit shown by DFO, Alcan feels the temperature control facilities and regulated flow program can make a very positive contribution to salmon propagation.

- 30 -

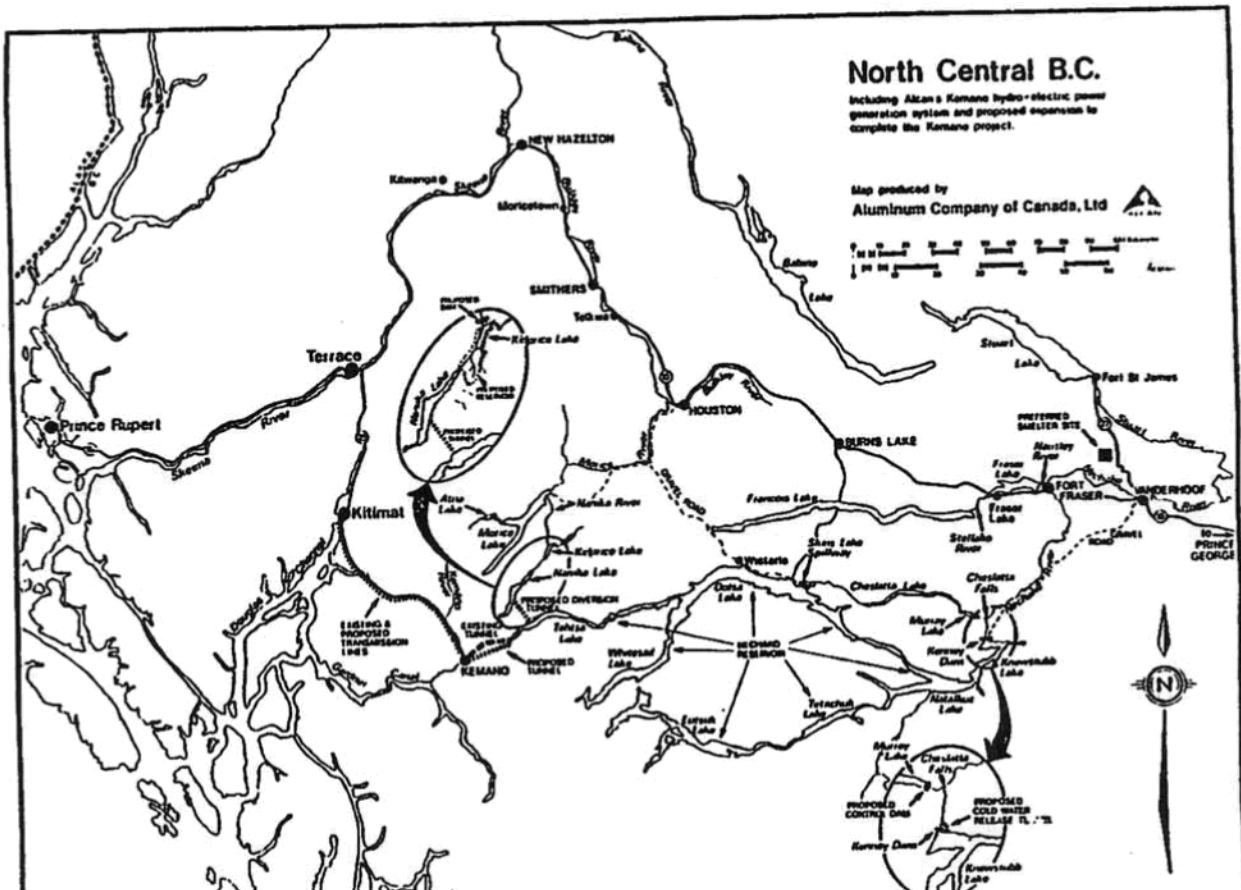
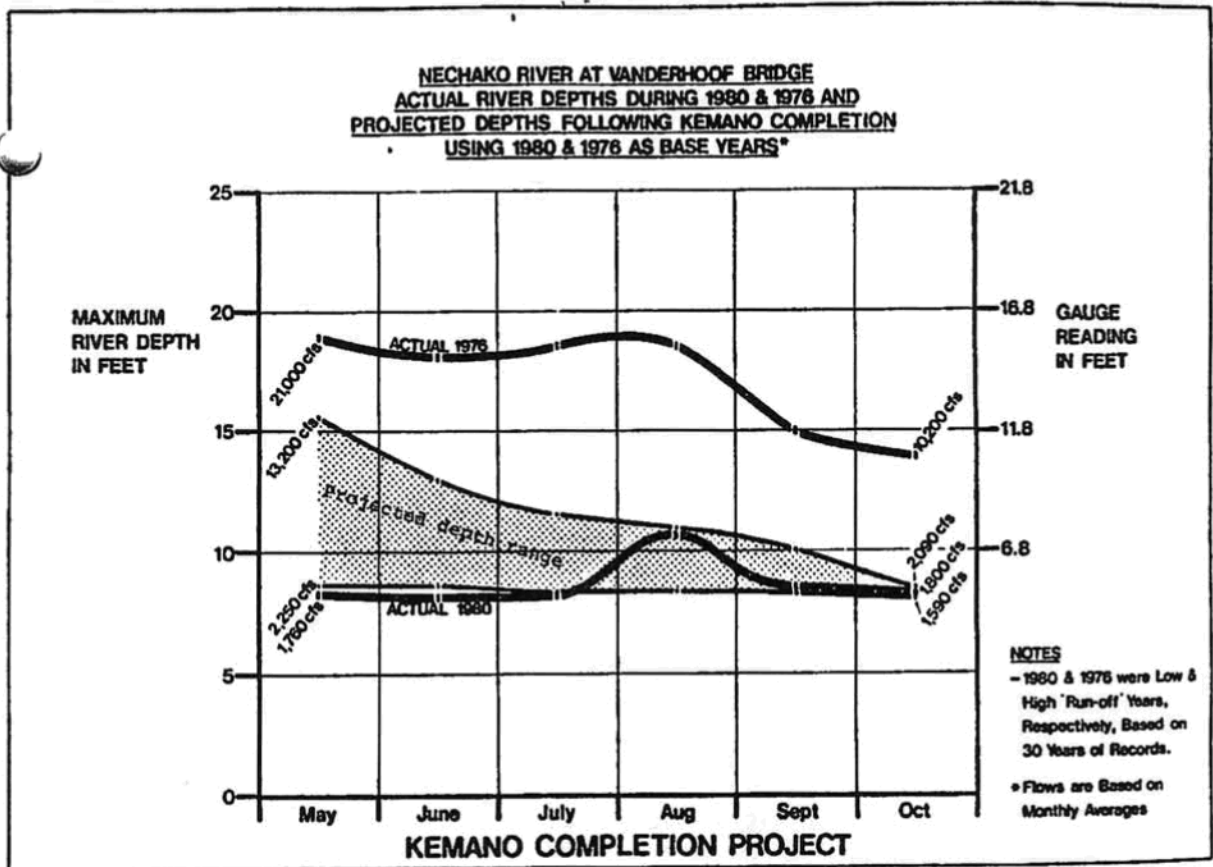
Brian Hemingway for:
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CONTROLLED DISCHARGES
INTO UPPER NECHAKO RIVER
(BELOW CHESLATA FALLS)



KEMANO COMPLETION PROJECT



Mr. Jack Hall,
Regional Director,
Skeena Regional Office.

August 24, 1982

Files: 0260600-A
0179602-B✓

Re: Reservoir Clearing Program by ALCAN.

In a recent discussion with Bert Ralfs, chairman of the Industrial Township Commission of which I understand you are a member, I was advised to write you for copies of the Commission's Annual Report.

In my function as current chairman of the B. C. Reservoir Clearing Review Committee I would be most interested to have an update of ALCAN's reservoir clearing program and to receive back up copies since your 1980 inspection.



Hugh M. Hunt,
Head of Power and Special Projects.

HUNT/hjg

ALUMINUM COMPANY OF CANADA, LTD.

ALCAN

CLY HOUSE, P.O. BOX 1900, KITIMAT, B.C. • TELEPHONE 632-7131 AREA CODE 604

21 February 1975

Mr. J.W.L. Duncan:

Report on Nechako Reservoir 1974

During the period of September 10 to 18th, the annual West Tahtsa fuel haul and reservoir inspection trip was carried out by s.22 and H.R. McKone. The Alcan owned barge "Tahtsa 2"; an 18 ft. cabin cruiser owned by s.22 and a helicopter were used for transportation.

Messrs. MacKenzie, Ruddell and Drover joined the barge at Kenney Dam on the evening of September 12th and jumped ship at West Tahtsa on the afternoon of September 16.

The Knewstubb, Nataalkuz, Intata, Ootsa and Tahtsa Lakes were viewed from the barge. The Big Bend Creek, Euchu, Chelaslie and Tetachuck Lakes as well as the Bear Lake and Cut-Off Creek dams were inspected by boat. The small boat was also used for obtaining close-up views of shoreline development in numerous locations along the travelled route not easily accessible by barge. The helicopter was used for one day (September 15) when Messrs. MacKenzie, Ruddell and McKone flew from Skins Lake Spillway south over Eutsuk, Tetachuck Lakes to the Dean River and then back along the Entiako River and Lake to Skins Spillway, thence west to Kidprice and Nanika Lake, and finally rendezvoused with the barge along the Tahtsa River. It was not convenient to inspect the Whitesail-Eutsuk portage and lakes as engine trouble was being experienced with the boat and a detailed inspection of this area will become a priority trip in 1975.

Weather during the 10 day trip was excellent. Warm, sunny days and light winds made boat travel on the lakes fast and pleasant, consequently, no travel time was lost.

The elevation of the Nechako Reservoir was 2797.56 feet on the 11th of September. This was the highest reservoir elevation attained in 1974. The abnormally cool weather experienced in May, June and part of July, resulted in a spring and summer run-off significantly lower than forecast.

Beach development along the reservoir periphery continues at a satisfactory rate. Floating debris on the lake surfaces is not normally a problem to boat traffic. There are times however, and particularly so during or following a prolonged spell of calm water that keeping a close watch for floating debris is advisable. A period of no wind gives floating logs an opportunity to work loose from shorelines and standing flooded timber. The natural currents in the lake then take over and float these logs and sticks out into the open and more travelled parts of the lake.

.../2

Mr. J.W.L. Duncan:

- 2 -

The general appearance of the reservoir is satisfactory and considerable annual improvement can be noted. This improvement should continue and should in fact, increase over the next few years. The natural removal of standing flooded timber and of beach development is mainly contingent on wind and wave action. There appears to be little or no tree clearing benefits derived from the forming over, or the moving out of the annual ice cover on the reservoir.

Wildlife:

The wildlife situation and population in the reservoir area has been relatively stable for the past three or four years. There has been no noticeable changes in the numbers of animals inhabiting the region or in their feeding and migration habits.

Most species of big game animals, i.e., bear, moose, cariboo, goat and deer have over the past years, been subjected to ever increasing hunting pressures. With the exception of the deer, these animals have withstood the pressures and appear to have maintained their numbers. A portion of the reservoir drainage area is to become a "Nature Conservancy Area" in 1975, which should do much to alleviate hunting pressures and assure an undisturbed habitat for many of these animals.

Fur bearing animals continue to show population increases with the beaver being the most abundant. Wolves and coyotes are plentiful and are suspected by many as being the major factor in the decrease to the deer herds. The higher prices being offered for pelts of most fur bearing animals has done little to entice trappers to the region and it is expected that these animals will continue to increase in numbers.

The reservoir area, in its flooded state, has not been an attractive nesting and rearing area for ducks and geese and only on rare occasions is a family seen. The opposite can be said for loons, mergansers and other fish ducks. The reservoir environment seems ideally suited to these birds and their numbers are steadily increasing.

The bald eagle and the osprey are present through-out the watershed. In the Fall of the year when the "Kokanee" move up into the small creeks and rivers for spawning, eagles congregate and can be seen by the dozens.

Upland game birds are relatively scarce. These birds took a downward turn in numbers some years ago and as yet there is no indication that they may make a return to their former abundance.

Fishing and Hunting:

Trolling for the larger rainbow trout is still the most popular sport of the reservoir region. The areas known to produce fair catches are Knewstubb Lake, Ootsa Lake and Eutsuk Lake. Ootsa Lake near the spillway is the most popular and heavily fished area and it continues to produce trout in the eight and ten pound class. Sport fishermen who are on vacation usually take the time to cross the portage into Eutsuk Lake where they can combine scenery and remoteness with their fishing.

.../3

Mr. J.W.L. Duncan:

- 3 -

Fly fishing and spin casting for the smaller rainbow trout is a popular pastime in the easily accessible reaches of the spillway channel. At most times, fishing success is good and the allowable daily limit is often attained.

When one considers the reservoir size and the abundant food supply therein, it is reasonable to expect fishing success to continue and possibly improve with the passing of the years.

Most registered guides, as well as residents of British Columbia, found that big game hunting in the reservoir area in 1974 was one of the more non-productive years of record. The low harvest of big game, and moose in particular, could in part be attributed to the well above normal temperatures and the corresponding lack of snowfall at the higher elevations. Contact was made with six registered guides in the region, and assuming their responses to be accurate, the combined take of these guides and their parties was 35 moose, 8 cariboo, 4 goats and one grizzly bear.

However, reports received from the area late in the year (after hunting season was closed), indicate that moose were then plentiful. Snowfall in the mountains was by that time of a sufficient depth to drive the animals down to the valley floors or out into the plateau country. The B.C. Game Department in 1974 imposed a very short "antlerless" season and a shorter than normal "bull" season. This, no doubt, added considerably to the reduced harvest of moose and cariboo.

Fire Season:

The abnormally cool temperatures experienced during the spring and summer months of 1974 delayed mountain snow melt and kept forests damp and green, resulting in another year free from major forest fires.

Camping and Related Facilities:

Man-made facilities for picnickers and campers in the greater portion of the reservoir area are practically non-existent. This lack of developed campsites is offset to a great extent by the presence of many good natural camping areas. In an uncrowded region such as this, many people prefer finding and setting up camp at a site of their own choosing.

It has been the writer's opinion that good boat launching ramps are a long overdue and sorely needed facility. A boat launching ramp near Kenney Dam would accommodate residents of the Prince George-Vanderhoof area and another ramp on Ootsa Lake (probably in the Westarlaneighborhood), would serve the Burns Lake-Houston people. In the absence of a public facility, many people launch boats at our caretaker's residence at the Spillway. Should their boat trailers become stuck in the sand or loose gravel, assistance is readily available. This has been acceptable to date but should boat traffic on the reservoir increase appreciably, our caretaker would not be able to continue providing help.

.../4

MR. J.W.L. Duncan:

- 4 -

Little was done by way of actual reservoir clearing in 1974. The Forest Service devoted most of the year to the erection of a camp, construction of a dock and overhaul and modifications to their underwater logging equipment. It is not yet known how successful these equipment modifications were or will be.

The hazardous situation created by the underwater logging program at Chickamin Bay in 1972 has not as yet been corrected. Many trees were cut off at an insufficiently low depth, and these tree stumps left standing just below the water surface present a real danger to motor boat travellers.

During the winter of 1973-74, the Forest Service undertook a shoreline clearing operation on the north shore of Ootsa Lake. This clearing operation was suspended after a very short term, however, the program is being re-activated and a fairly extensive operation is planned for the spring of 1975.

No major improvements were made to any of the established resorts on the reservoir. Redfern Lodge on Tatashuck Lake remains as a private fishing and hunting lodge, with ^{s.22} an American, having the controlling interest.

The Nechako Lodge near Kenney Dam is now owned and operated by a group of businessmen from the Vanderhoof-Prince George area. This complex, consisting of lodge, cabins and camping sites, appears to be a well-managed and attractive tourist facility. Hunting, fishing, boating, camping and trail rides are offered to their summer clientele. The management was considering staying open for the winter to see if there is sufficient public interest in skiing, snowmobiling and ice fishing to warrant a year round operation.

Logging:

Eurocan Pulp & Paper Company have on the reservoir, two well-established logging camps, and log dumping sites. The Andrew Bay camp was established near the western end of Ootsa Lake, and has been in operation since 1969. The East Ootsa camp located between Ootsa and Intata Lakes was established in 1973. There were no other active logging shows in the area in 1974.

Eurocan's logging operation has generally over the years, been well conducted. No appreciable amount of floating debris can be seen around either of their Ootsa Lake dump sites. Unfortunately, this control of debris has not been as good at their log load-out station at the western end of Tahtsa Lake. During the summer of 1973 and for part of 1974, loose logs created an almost intolerable situation for our gate keeper at West Tahtsa. To help control the problem, Eurocan in 1974, installed a standing boom across the tunnel intake channel. This boom has done much to prevent logs from building up against the trash-racks but has not entirely solved the problem. Eurocan's logging superintendent has said that plans for 1975 include building a boom to contain loose logs at the load out site and making a thorough sweep of the Tahtsa Lake shoreline to reclaim logs lost over the past years of operation. If these plans are carried out, a very marked improvement should be seen in the amount of logs and debris floating loose in the upper reaches of Tahtsa Lake.

.../5

Mr. J. L. Durican:

Bond Brothers underwater logging operation was generally non-productive in 1974. The greater part of the summer season was spent in equipment overhaul and replacement. Their cutting barge is now equipped with new winches, new power plant and an improved cutting system. Bond Brothers propose continuing their underwater logging in 1975.

Mining:

There was no evidence of any mineral exploration in the reservoir area in 1974.

General:

The gravel-fill-rock faced dam built on a break out channel of our spill system in the fall of 1973 has performed satisfactorily. The dam withstood discharges in excess of 9,000 cfs with no appreciable increase in leakage.

In response to a request from the Comptroller of Water Rights, reservoir spills in the spring and summer of 1974 were so regulated as to give the most benefit to flood control in the Fraser River System.

A further request was received which asked us to maintain a low spillway discharge for the latter part of August and all of September. This low spill was to assist Department of Fisheries and Wildlife and Conservation officers in carrying out environmental studies on the Upper Nechako River. We were able to comply with this request.

In general, another good year was experienced in reservoir operation. Complaints from residents along the spill system and residents bordering on the reservoir proper were minimal.

H.R. McKone

HRMcK:jm

Copies to:

Mr. J.W. Drover
Mr. J.T. Madill: Montreal

Mr. H.D. DeBeck
Comptroller of Water Rights
Parliament Buildings
Victoria, B.C.

File Copy Routed to:

Mr. A.W. Handford
Mr. J.S. MacKenzie



MINISTER OF LANDS, FORESTS AND WATER RESOURCES

VICTORIA
BRITISH COLUMBIA
CANADA

January 2, 1974

Mr. H.D. DeBeck,
Comptroller of Water Rights,
Water Resources,
Bldgs.

Re: Your memo Nov. 27th.
Alcan Agreement

I have noted your comments on the
above with interest.

It is a good summary and review of
options.

for: M. Luggan
Robert Williams,
Minister.

0179602 - B

18-12

ALUMINUM COMPANY OF CANADA, LTD



CENTURY HOUSE, P.O. BOX 1900, KITIMAT, B.C. • TELEPHONE: 632-7131 AREA CODE 604
V8C 2G9

13 December 1973

Mr. H.D. DeBeck
Comptroller of Water Rights
Water Rights Branch
Dept. of Lands, Forests, & Water Resources
Parliament Buildings
Victoria, B.C.

DEPT. OF LANDS FORESTS
AND WATER RESOURCES
WATER RES.

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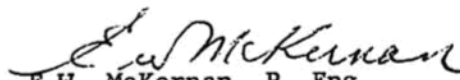
MAIL ROOM
VICTORIA, B. C.

Dear Mr. DeBeck:

We are enclosing herewith a copy of our Annual Report on the Nechako Reservoir for 1973.

We think this report will be of interest to you and your department.

Yours very truly,


E.W. McKernan, P. Eng.
Manager,
B.C. Power Operations

EWMcK:lap
Encl.

Handwritten notes:
- 18-12
- 19/13
- [Signature]
- 185

V8C 2G9

30 November 1973

Mr. E.W. McKernan:

REPORT ON NECHAKO RESERVOIR - 1973

During the month of September the combined reservoir inspection and Tahtsa fuel delivery trip was carried out by barge and boat. The main parts of the reservoir, i.e. the Kenney Dam-West Tahtsa-Lower Whitesail reaches, were viewed from the barge, side trips up Big Bend Creek and the upper portion of Eutsuk Lake were made by boat. Engine trouble was experienced with the boat and this prevented inspection of the upper reaches of Whitesail Lake and all of the lower part of Eutsuk Lake. An inspection of the Tetachuk-Euchu-Chelaslie arm was re-scheduled for early November, but cold weather accompanied by strong north-easterly winds and severe icing conditions forced its cancellation. A greater effort will be made to inspect all parts of the reservoir during the summer of 1974.

Weather during the period of inspection was generally good. One day's travel time was lost when very strong west winds prevented travel in the larger lakes. Elevation of the Nechako Reservoir for the month of September was approximately 2796 ft. The cool weather experienced during the entire spring and summer seasons of 1973 retarded snow melt to the extent that reservoir run-off was not as great as forecast. The highest reservoir elevation attained was 2796.08 ft. on 10 October.

Development of beaches around the reservoir perimeter continues at a satisfactory pace. The improvement to beaches and shoreline is particularly noticeable when reservoir elevation during summer months is below the full pool elevation of 2800 ft., as was the case this year.

The volume of floating debris on the reservoir in most areas is negligible. The clearing of water-killed timber from exposed points, islands and shorelines shows continued improvement. Wind and wave action certainly seems to be the major contributor to the removal of standing dead trees. Areas protected from this wind and wave action are slow in showing improvement. Ice cover on the reservoir in cold winters reaches a depth of several feet, but from our observation this ice formation does very little in improving reservoir appearance.

WILDLIFE

The wildlife situation in the reservoir area has remained virtually unchanged for the past few years. The hunting pressure on big game animals has been increasing yearly and the year 1973 was certainly no exception. Higher prices for all domestic meats resulted in record numbers of hunters taking to the bush in the hope of supplementing their meat supply. Preliminary reports from the Provincial Government game check-points indicate the harvest of deer and moose will far exceed that of 1972 or of any other year.

WILDLIFE (contd.)

The deer population in the reservoir region remains at a low ebb. No increase in their numbers is likely to occur until some steps are taken to control the rapid growth in the timber-wolf population.

On our trip around the reservoir the following animal species were sighted: moose, deer, caribou, goat, black bear, fisher, wolverine, mink, beaver, marten, coyote and lynx. Prices for the pelts of fur-bearing animals have risen considerably in the last few years. Most species of fur-bearing animals have shown population increases, but even with the increase in numbers and the attractive prices offered for pelts there is still little or no trapping being done. The beaver population will possibly become so dense in a few years that a food shortage for these animals could result.

Numerous large flocks of Canada geese can be seen in the Ootsa Lake region in the early fall. Lesser numbers of these birds can be seen around Kenney Dam and Eutsuk Lake. The reservoir with its abundance of small fish (particularly kokanee) is apparently very attractive to fish ducks and loons and their numbers increase annually. The upland game birds (namely, the grouse family) had another poor season and were scarce in all areas.

FISHING & HUNTING

The numbers of people trolling for the large rainbow trout in Ootsa and Knewstubb Lakes is on the increase. Trolling success in Ootsa Lake becomes better every year and there is little doubt that this popular sport will bring about a very marked increase in boat traffic on the reservoir generally, and Ootsa Lake in particular. At Skins Lake Spillway on weekends during the summer months it was not unusual to see from four to six boats at one time all trolling for the "big ones". The section of Ootsa Lake near the spillway presently enjoys the reputation of being the "hottest" fishing spot in the reservoir. Catches are not great in numbers, but most fish taken weigh in excess of 4 lbs. and there are reports of some weighing as much as 12 lbs.

Spin-casting for smaller rainbow in the spillway channel remains good. There are many weekend anglers from Prince George and Vanderhoof who fish the spillway channel near its confluence with the Nechako River and usually have little difficulty in taking the allowable catch. The spillway channel immediately downstream of the gates and a few accessible pools near Cheslatta Lake are heavily fished and continue to produce well.

Mr. Jim Van Tine was the only registered hunting and fishing guide encountered on the trip. At the time of our visit he was guiding six American hunters. All six of these hunters had been successful in taking bull caribou and three of them had their moose. Another party of five Americans were at his camp waiting the departure of the first group. The second party had apparently arrived several days early to treat themselves to the good fishing of Eutsuk Lake. With eleven American hunters, three guides and a cook, the Van Tine camp was full to capacity -- and then some. In conversation with Van Tine we learned that hunting in the Eutsuk area had been good and his parties to date were very happy with results. Eutsuk Lake now forms part of a Nature Conservancy Area and all registered guides have been notified that they must move out of the area by 1 January 1975.

FIRE SEASON

The generally cool temperatures and frequent rain showers experienced during summer months produced another fire-free season. The reservoir area has been fortunate in not having had a major fire since the summer of 1961.

CAMPING & RELATED FACILITIES

Good natural campsites are available in all areas of the reservoir. These natural campsites improve yearly in appearance and ease of access. Very little use is made of the camp areas cleared prior to the reservoir reaching its full capacity.

In several locations in the Kenney Dam and Ootsa Lake regions the Forest Service have cleaned up, installed garbage containers and made other improvements to picnic areas heavily patronized by tourists and local residents. These sites are then serviced on a regular basis. The collection and removal of garbage has made picnicing in these favourite spots enjoyable for everyone.

Boat launching pads at Kenney Dam, Ootsa Wharf and Wistaria are a badly needed facility and as boat traffic increases the need becomes more acute. There are now many people (local and tourists) who launch their boats in Alcan's yard at Skins Lake Spillway. Assisting people in launching and loading their boats can be very time-consuming, and in addition there is no adequate parking area in which to leave vehicles and trailers. A complete stop to boat launching at the spillway may be necessary in the near future.

The 1972 experimental program of clearing flooded timber in Chickamin Bay under the direction of the Department of Recreation and Conservation was not a successful operation. The general appearance of the bay was somewhat improved, but a very hazardous situation was created by not cutting trees at a sufficiently low level. Realizing the seriousness of the situation, the Forest Service visited the area in the spring of 1973 and affixed floating markers to all snags and stumps then above the water surface. This has been a great help and the Forest Service are to be commended for their actions, but with so many unmarked snags just below water, and markers coming loose from trees that had been located earlier in the season, we found the area difficult and dangerous for boat travel. No serious accidents occurred in 1973 and it is hoped that steps will be taken to improve conditions before another season passes.

The Forest Service have now taken over the underwater logging equipment and the two barges used at Chickamin Bay by the Ootsa Lake Clearing Company in 1972. Experimental clearing operations are presently being conducted along the north shore of Ootsa Lake in the vicinity of Ootsa Lake wharf. The Forest Service also had Bond Bros. barge and equipment assisting in this experimental clearing program. A continuation of underwater reservoir clearing under the direction of the Forest Service is expected next year. The Forest Service is also gearing-up for a shoreline clearing and burning operation to begin this coming winter and spring when ice cover is good and reservoir elevations are low.

The condition of the causeway and float at the Whitesail end of the Whitesail-Eutsuk Portage deteriorates yearly. The major cause of deterioration is of course caused by being completely inundated at the higher reservoir elevations. Major remedial measures will be required before many more years elapse. The portage

repair work will, of course, become unnecessary if the present B.C. Government proposal to ban motor boats on Eutsuk Lake is implemented.

Redfern Lodge Resort on Tetachuck Lake was not visited in 1973 because of the adverse weather conditions mentioned earlier. I did however make enquiries from local people and to their knowledge no major building program has taken place over the past year.

The hunting and fishing resort located on the shore of Knewstubb Lake and owned by s.22 continued its rapid growth. This past summer saw the building of a main lodge. The lodge has eight rooms upstairs and complete kitchen and dining facilities on the main floor. The lodge was to have been operated on a year-round basis -- hunting, fishing and boating in the summer and skiing and snowmobiling in the winter. We were indeed sorry to learn that in October of this year the owner, s.22, had worked hard in planning and developing an attractive resort that would certainly have been an asset to the area. It is to be hoped that the new owner will carry on with the foresight and enthusiasm shown by s.22.

There have been no other major changes to hunting and fishing camps along the reservoir periphery. The year of 1974 will apparently see guides Van Tine and S. Ford move their camps out of the Eutsuk Lake Conservancy Area and possibly re-establish elsewhere in the reservoir.

In a Government-sponsored youth work program (L.I.P.) the horse-trail along the north shore of Intata and Natalkuz Lake (most often referred to as Henson's Trail) was re-cut and blazed. This was probably the only time the trail has been used since it was originally cleared in the early 1950's.

LOGGING

Eurocan Pulp and Paper Company were the only active logging group in the reservoir area in 1973. Their logging to date has all been carried out in the area north of Tahtsa Reach and Andrew Bay on Ootsa Lake has been the only log dump site. Rivtow Marine has had the contract for towing logs from Andrew Bay to the load-out facility at West Tahtsa.

Generally speaking Eurocan's logging operation has appeared to have been well planned and executed, and up until the fall of 1973 created no problem for the reservoir operation. The problem in 1973 seems to have originated at the Andrew Bay dumpsite where the individual truck-loads are banded with cables before being dumped into the lake. The cables were not tightened sufficiently to prevent some single logs from slipping loose during the long tow to West Tahtsa. These single logs, though loose from the load, were still carried along in the main boom. The problem occurs at West Tahtsa when the booms are broken up prior to being loaded out and the individual logs are allowed to float free. These logs are of sufficient numbers as to create a major problem for our caretaker in keeping them away from the intake structure. Eurocan has been advised of the problem and has given us assurance that preventative measures will be introduced in 1974.

During the summer months of 1973 Eurocan completed the access road, trailer camp and log dump facilities for their new logging site on the extreme eastern end of Ootsa Lake. Logging will begin this winter and an estimated 40% of Eurocan's interior logging requirements will come from the new area.

LOGGING (contd.)

Bond Bros. were not active in their underwater logging enterprise in 1973. The Forest Service had this equipment under contract for most of the summer conducting an experimental clearing program along the shore of Ootsa Lake.

MINING

Mineral exploration in the reservoir area remains at a low level. There was some activity in the East Tahtsa area and a summer tent camp was established on the shore of Twinkle Lake. A small exploration was also undertaken by Noranda, somewhere in the eastern part of the circle.

GENERAL

In September of this year Alcan had a contractor from Prince George construct a small gravel-filled, rock-faced dam on a break-out channel of our spill system. This structure is located at a point mid-way between Murray Lake and the Nechako River. Spillway discharges up to 25,000 cfs can now be confined to the original stream bed. Erosion of the sandy material in the side channel and the resultant deposition of this material in the Nechako River bed will cease.

HRMcK:lap

Copies to:

Mr. J.W. Drover

Mr. J.T. Madill: Montreal

Mr. H.D. DeBeck

Comptroller of Water Rights
Parliament Buildings
Victoria, B.C.

File copy routed to:

Mr. A.W. Handford

Mr. J.S. MacKenzie

Mr. R.A. Ruddell

Figure of 25,000
is for high-NF
smaller discharges
H.R. McKone a section slightly
upstream of the
old side channel is habi-
the ends and from a
new side channel - bucket
how an inspection by
Dave Gannon & Jay on
8th May 1974.

Jay
9 June 1974.

B

7 March, 1972.

s.22

Thank you for your letter of 24 February, 1972, giving your views on the possible diversion of water from the Nanika, Kidprice and Morice Lake areas.

I would like to point out that the future expansion of the generating plant at Kemano is only a proposal at present. The scheme is one of a Province wide study of potential hydro-electric sites by the B. C. Energy Board, whose report will be published in May 1972. Discussions are under way to review the environmental and engineering aspects of this proposal, but these are in a preliminary stage and no conclusions are available at this time. Should the scheme go ahead, however, I can assure you that clearing standards will be much higher than when the Kenney dam was constructed.

Yours very truly,



Ray Williston,
Minister.



A JMT.
JMT/hjg

8/3/72
P.C.

B

Assigned to Mr. De Been

Date March 1, 1972 File 0179602

SUBJECT: letter of Feb. 24th from ^{s.22}

- ☐ To reply direct.
- ☐ To reply on behalf of inquiring if there are any plans for future
- ☐ daming of Nanika Lake and Morice R.
- ☒ Prepare reply for Minister's signature. (as he has heard)
- ☐ Prepare reply for Deputy Minister's signature.
- ☐ Investigate and report to me.
- ☐ Investigation and such direct action as is necessary.

Remarks:

R Mar 1/72

13



Dear

Sir,

I am a thirteen year old boy that is intrested in the Canadian frontier. I read in the Citizen newspaper that Nanika lake and the Morice R. could ~~not~~ possibly be ~~dammed~~ dammed up in the next 30 years without anybody really ~~being~~ worrying about destroying beautiful lakes and Rivers. I flew up to Nanika lake with my dad and ^{s.22} ~~at~~ The

lake was the nicest lake I have ever seen. I would hate to see this beautiful lake destroyed just for power. I have seen the Kenney dam and saw how ugly all the dead trees look poking up from the water. If this lake is dammed up there will be an awful mess, just like ~~at~~ the Kenney dam. I would like

to hear what you think about it and would like
to have a little more information about all this. Maybe
you could tell me what I could do to stop
this, if it truly will happen.

Truly Yours

s.22

Comment		Reply Direct In Minister's Absence	
Discuss		Attention & File	
Report		Information & File	
Draft Reply	<input checked="" type="checkbox"/>		

31 January, 1972.

Mr. E. W. McKernan,
Manager, B. C. Power Operations,
Aluminum Company of Canada, Ltd.,
Century House,
P. O. Box 1900,
Kitimat, British Columbia.

Dear Sir:

Thank you for your letter of 4 January, 1972 and copies of
your Annual Report on the Nechako Reservoir for the years 1967 to
1970, inclusive.

Your courtesy in placing us on your mailing list is greatly
appreciated.

Yours very truly,

G. Z. Cox

For

H. D. DeBeck,
Comptroller of Water Resources.

GFC/hjg

ALUMINUM COMPANY OF CANADA, LTD



CENTURY HOUSE, P.O. BOX 1900, KITIMAT, B.C. • TELEPHONE: 632-7131 AREA CODE 604

4 January 1972

Your File: 0179602 - B

Mr. V. Raudsepp,
Deputy Minister,
Water Resources Service,
Parliament Buildings,
Victoria, B. C.

DEPT. OF LANDS FORESTS
AND WATER RESOURCES
WATER RES.

JAN 7 1972

MAIL ROOM
VICTORIA, B. C.

Dear Sir:

As requested by Mr. H. D. DeBeck in his letter of 23 December, we are pleased to enclose our annual report on the Nechako Reservoir for the years 1967 to 1970, inclusive. Prior to 1967, reports on reservoir conditions were prepared annually by one of our consultants. These earlier reports are in our storage files and if you should wish to see them at any time they also could be produced.

We will be pleased to send you copies of our future reports.

Yours very truly,

H. R. McKone

H. R. McKone a/c E.W. McKernan,
Manager,
B.C. Power Operations.

HRMcK: EH

Jan 10/72
Mr. Raudsepp
File
Jan 18/72

DB

Mr. DeBeck

ALUMINUM COMPANY OF CANADA, LTD

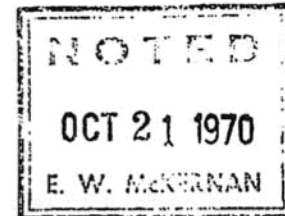


CENTURY HOUSE, P.O. BOX 1900, KITIMAT, B.C. • TELEPHONE: 632-7131 AREA CODE 604

20 October 1970

Mr. E. W. McKernan:

Handwritten initials: E.W.M.



REPORT ON NECHAKO RESERVOIR - 1970

A combined reservoir inspection trip and West Tahtsa fuel haul was carried out in Late September. The main reaches of the reservoir were traversed in the company-owned barge, Tahtsa II, with side trips being made with the 18-foot cabin cruiser owned by s.22. The elevation of the reservoir during the inspection period ranged from 2797.30 feet to 2797.17 feet.

The overall appearance of the reservoir improves yearly. This improvement is particularly noticeable in the exposed areas where wind and wave action has the greatest effect on the clearing of standing, flooded timber. Development of beaches along the shoreline in exposed areas is progressing satisfactorily.

The water year of 1969-70 was the third lowest in the 40 years of record on the Nechako Reservoir. This low inflow prevented the reservoir reaching the full elevation of 2800 feet. The highest elevation attained in 1970 was 2797.57 feet on September 5.

Wildlife:

All species of wild animals, with the possible exception of mule deer and muskrat, would appear to be thriving in the environment created by the Nechako Reservoir.

The number of beaver has increased many-fold and their workings and homes can be seen in almost all areas of the reservoir. On a two-day trip on Eutsuk Lake in September, the following animals were seen along the lake-shore: moose, caribou, goat, black bear, fisher, wolverine and mink.

The number of mule deer on the eastern portion of the reservoir appears to have decreased over the past few years. There is no apparent reason for this decline in deer population as there certainly does not appear to be any shortage of food in the region. Most of the muskrat habitat was destroyed with the flooding of small lakes and meadows, and it is expected that it will be many more years before there is any appreciable increase in muskrat population.

Handwritten initials: E.W.M.

Mr. E. W. McKernan:

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20 October 1970

Fishing and Hunting:

Fishing in the reservoir and, in particular, in Eutsuk Lake is a great attraction for tourists and local residents alike. Very good catches of rainbow trout were reported from Eutsuk Lake in the early summer but this was offset by rather poor catches in the fall.

Large trout (8 pound class) were again taken in Ootsa Lake, Knewstubb Lake and in the spillway channel. Good spin casting or fly fishing can be had where creeks enter the main reservoir. The most popular of these are Blue Creek on Tahtsa Reach, Coles Creek and Falls Creek on Whitesail Lake, Chelaslie Creek on Chelaslie Lake and on the spillway channel.

The number of hunters on the reservoir in September indicates an increase in the sport. Although most of the hunters are from B. C., there are enough Americans and others to keep several licensed guides busy. We met one party being guided by Jim Van Tine in which there were eight Spaniards, one of whom we were told was Spain's Ambassador to Canada. From reports we have received, hunting success was good and most guided parties were getting their limits of moose and caribou.

Tourism:

The number of boats and people on the reservoir increases yearly. The majority of these people are sportsmen, either hunting or fishing. The use of the reservoir as a family vacation area has not been popular as the lakes, fed from mountain snow and glaciers, are too cold for pleasant swimming and water skiing. For this reason it is rather doubtful whether the reservoir will ever become a popular vacation area like the Okanagan and Kootenay Lakes.

Fire Season:

No fires of any consequence were reported. Weather during the mid-summer months was generally cloudy and cool with frequent rain storms. Any fires left by campers, etc., were quickly extinguished by nature.

Camping and Related Facilities:

No new camping or boat launching facilities were installed during the year. It is my opinion that there are adequate campsites available but there is a need for several good boat launching sites. So far, there has not been any pressure from local organizations for the Parks Branch to provide these facilities.

The Parks Branch did have members of their organization visit the portage area where they inspected and straightened the track, put up new signs, and provided a new garbage disposal pit and toilet. These improvements, although minor, did help the general appearance of the area.

Mr. E. W. McKernan:

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20 October 1970


General:

Although the Company has not received any direct complaints or correspondence regarding the general appearance and condition of the Nechako Reservoir, there has been a considerable amount of adverse publicity on this particular subject during the year. The ball seemed to get rolling with the showing on television of a film on Tweedsmuir Park before and after flooding. This film was produced by s.22, a former employee of the Parks Branch and now a free-lance photographer. s.22 portrayed the reservoir at its worst and had nothing good to say about the project. Subsequently, articles have appeared in sports magazines and newspapers and all are critical of the Government and of Alcan for not having cleared the shoreline prior to flooding. Some of the present criticism of the Nechako Reservoir can also be attributed to publicity about the Peace and Columbia Reservoirs which are probably at their worst stage now with floating debris, flooded timber, and sloughing banks.

No complaints were received from downstream residents regarding spillway discharges, nor were there any complaints from people resident along the reservoir regarding reservoir elevation.

Logging in the reservoir area is expected to increase yearly. A close watch will be kept on these operations and, in particular, the underwater logging being done by Bond Brothers.

H. R. McKone

HRMcK: EH

ALUMINUM COMPANY OF CANADA, LTD



CENTURY HOUSE, P.O. BOX 1900, KITIMAT, B.C. • TELEPHONE: 632-7131 AREA CODE 604

5 December 1969

Mr. J. W. Drover:

Re: 1969 Report on Nechako Reservoir

As several boat trips on the Nechako Reservoir were made by the writer over the course of the summer, a special reservoir inspection trip seemed unnecessary and was not carried out. These trips were made in June, July, August and September so conditions were noted at various elevations ranging from a low of 2796.00 feet in June to a high of 2799.50 feet in July.

The trips were made by either the Company-owned barge (Tahtsa 2) or an 18-foot cabin cruiser owned by S.22

General reservoir conditions continue to show improvement. Beaches are slowly developing along much of the exposed reservoir shore-line, and this desirable development is expected to accelerate over the next few years as the standing flooded timber falls and sinks, leaving more shore-line exposed to wind and wave action.

Full reservoir elevation of 2800 feet was not attained. The highest reading was 2799.70 which was reached on August 1st.

Floating debris on the reservoir was not nearly as prevalent as in 1968 when the higher than usual reservoir elevation appeared to float an abnormal quantity of driftwood into the open reaches.

Wildlife:

No lessening of the numbers of big game animals is evident. In fact, there appears to be an increase in many of the species using the area in and around the reservoir. Mr. R. N. Estabrooks of the Power Operations staff in Kitimat counted approximately 160 caribou and several moose on one helicopter flight between Ootsa and Eutsuk Lakes in late September of this year. The caribou were in high plateau country around Mount Wells and in Tweedsmuir Park. Mountain goats are plentiful and can be seen grazing on the mountain slopes adjoining Eutsuk, Whitesail and Tahtsa Lakes.

Fishing and Hunting:

Fishing continues to be the major attraction for local people and tourists visiting the reservoir. Most fishermen head for Eutsuk Lake, but trolling on the flooded portion of the reservoir is on the upswing and large trout have been caught in Ootsa Lake and near Kenney Dam. Fishing in the spillway channel remains good and at least one 8-pound trout was taken there during the past summer.

Handwritten: Jan 18/72

Mr. J. W. Drover:

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5 December 1969

Hunting pressure, although not great, is increasing yearly. Many American tourists visit the area in the fall months and the three or four licensed guides in the area are kept busy. A grizzly bear, which may be a world record, was taken by an American guided by s.22. This will no doubt be given much publicity in the American sports magazines and could result in an increased number of bear hunters in the next few years.

No new fishing or hunting lodges have been developed over the past year.

Tourism:

Boat traffic on the reservoir increases yearly. An example of this was demonstrated on the July 1st weekend when eight boats were lined up waiting their turn to cross the portage into Eutsuk Lake.

During mid-July, a fishing, sight-seeing trip was arranged by B.C.'s Minister of Agriculture for a few members of the press from the Lower Mainland. The purpose of the trip was to promote the scenic and recreational possibilities of Tweedsmuir Park.

It was also interesting to hear that s.22, a former employee of the B.C. Parks Branch, spent considerable time on the reservoir early this fall making a film which he hopes will be shown on television, etc. As s.22 is a devout conservationist, this film could well depict some aspects of the reservoir not complimentary to Alcan. s.22 is no longer a government employee but works as a free lance photographer and strongly advocates the preservation of our parks.

We can, I am sure, look forward to an ever-increasing number of tourists in the reservoir area.

Fire Season:

Another favorable fire season was experienced. An electrical storm in mid-June started a fire north and west of Tetachuck Lake. Fortunately, it was quickly brought under control with little loss of timber.

Camping and Related Facilities:

No improvements were made to camping or boat launching facilities during the year.

Many good natural campsites are accessible to the travellers and, in the writer's opinion, nothing need be done in this regard.

Mr. J. W. Drover:

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5 December 1969

Boat launching facilities are, however, very poor. Wistaria harbor, one of the main launching areas, has a muddy lake bottom and many vehicles become stuck when attempting to pull boat and trailer from the water. Kenney Dam has a somewhat better launching area but, as this is immediately adjacent to the dam and within our Industrial Township, it should not be considered a public boat launching site. Many people launch boats at Skins Lake Spillway where, if difficulties are encountered, they can usually obtain assistance from our gatekeeper. The need for better boat launching sites at several points along the reservoir is urgent.

The causeway built by the Department of Recreation at the Whitesail end of the portage was again flooded during the summer months. Raising the level of the cause way to at least 2801 feet is a step that will have to be taken. At the present time, both causeway and float are of little or no use during the busiest part of the tourist season.

Logging:

Eurocan Pulp and Paper Company have established their main log dump at Andrews Bay on Ootsa Lake. The bay has been cleared of standing and floating timber and is used as a booming and holding area. A 150-man camp has been established well back from the shore. Facilities for weighing, banding and unloading truckloads of logs have been installed and are in use.

A channel was dredged in the Tahtsa River at the outlet of Tahtsa Lake. This deepened the existing river channel to elevation 2780 over a length of approximately 1,300 feet. Booms of logs are now being hauled from Andrews Bay to their loading-out facilities at West Tahtsa. Rivtow Marine Ltd. has the towing contract.

The loading-out facilities at West Tahtsa are virtually complete. Rock-filled timber cribs have been used to support the loading gantry and A-frame. Timber cribs or pile dolphins have been used to enclose the log-holding area. The timber cribs were used in areas where bedrock prevented driving of piles.

The road from West Tahtsa to Kemano is near completion and hauling of logs is expected to begin early next summer.

To date, all work carried out on the reservoir by Eurocan appears to have been well planned and has generally improved existing conditions.

Bond Bros. Sawmill Ltd., of 100 Mile House, B.C., has become interested in the possibilities of salvaging flooded timber along the reservoir periphery. They have launched a barge at Kenney Dam and are at present doing some experimental logging. Should they decide to start a full-scale logging operation, we should observe conditions closely as an operation of this nature could add considerable debris to the reservoir. On the other hand, if the operation were well planned and executed, it could do much for improving reservoir conditions.

Mr. J. W. Drover:

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5 December 1969

Durban Bros. are logging on the south shore of Ootsa Lake, opposite Henson's ranch. Logs are taken to Scheck's Mill at Ootsa Lake where they are sawed into rough lumber.

Logging activities on the reservoir are expected to increase sharply over the next few years.

Mining:

The Phelps-Dodge Mining Company, who have been carrying out quite an extensive exploration program in the Haven Lake area for the past few years, have now apparently decided to abandon their claim. All equipment has been moved out, including the steel barge they had on Eutsuk Lake.

Mining exploration is still continuing on Chikamin Range; access is from Zinc Bay on Whitesail Lake.

The Emerald Glacier Mine, near Tahtsa Lake, was not in operation this past summer. Buildings and equipment, however, are still at the site.

During the summer months there were several prospecting camps active in the area.

General:

Durban Bros. have been exceptionally busy all summer hauling supplies and equipment with their barge. The bulk of their business has been with Eurocan or related contractors; some hauling of equipment was also done for mining companies.

No complaints were received regarding reservoir elevation. We did, however, receive several complaints from downstream residents about low flows in the Nechako River during the months of July and August. Discharges through the Skins Lake Spillway were low as we were at this time still attempting to bring the reservoir elevation up to the 2800 foot level. When it became obvious that we were not going to attain this elevation, due to well below average reservoir inflows, the rate of spill was increased. The complaints received were from the Nechako Valley Wildlife Conservation Association of Vanderhoof, and a member of the Fort Fraser Board of Trade. The Conservation Association was worried about low flows stranding fish, and the Village of Fort Fraser was concerned about their water supply.

Channel conditions below the Skins Lake Spillway remain relatively stable. Some deepening of the scour hole immediately below the spillway apron is taking place, but this is not excessive and is not expected to create any problem.

Mr. J. W. Drover:

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5 December 1969



The next few years will require us to keep a close watch on logging operations, particularly that of the salvaging of flooded timber.

Alcan has not, for the past several years, been pressured with exorbitant demands as to reservoir improvement and this condition is expected to continue.

H. R. McKone

HRMcK:EH

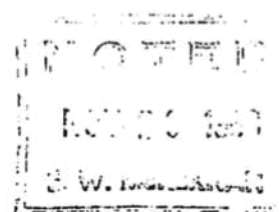
ALUMINUM COMPANY OF CANADA, LTD



Kitimat
25 November 1968

Mr. J. W. Drover:

1968 Report on Nechako Reservoir



An inspection trip of the Whitesail-Eutsuk portion of the Nechako Reservoir was made in mid-July and on the remainder of the reservoir in mid-September. The reservoir elevation in July was approximately 2800.20 feet and in September 2799.20 feet.

An 18 ft. cabin-cruiser, powered by a 100 H.P. Mercury outboard engine was used for most of the inspection. The combination of comfort and speed makes it an ideal vehicle for inspecting a body of water as large as the Nechako Reservoir.

The reservoir was maintained at an elevation of 2800 feet plus for a period of approximately 7 weeks during July and August. This was the first time the reservoir has actually been brought up to and above the 2800 foot level. As a result of this above-normal elevation, floating logs and other debris were more plentiful and presented more of a hazard to boat traffic than has been the case for several years.

Perimeter and channel conditions continue to improve. Aerial photography secured by Lockwood Survey Corporation in July of this year, when compared with photographs taken in August of 1957 show many improvements which have taken place over the 11-year span.

Some sloughing off of banks along the Natahkuz, Chelaslie and Knewstubb Lakes still occurs. This is minor and is mostly confined to the open, grassy hillside and, as such, does not add any appreciable amount of debris to the reservoir.

Wildlife:

Big game and, in particular, the moose continue to thrive. Moose can be found anywhere from Kenney Dam to West Tahtsa and Eutsuk Lake and, in spite of increased hunting pressure, their numbers appear to be on the increase.

Deer, caribou, black and grizzly bear, and mountain goat are other big game animals present; although they are not as plentiful as the moose, they continue to maintain their numbers, and some reports do give an increase in the caribou population.

WR
Jan 18/72 -

Mr. J. W. Drover:

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25 November 1968

Fishing:

Fishing continues to be popular and some good catches of large trout (8 pound class) were again recorded in Ootsa Lake. Eutsuk Lake still remains the favorite spot for trolling for the larger trout and many boats make the trip over the portage to partake of this sport. Spin casting for the 1 to 2 pound trout is good in many areas and the best of these are the creeks tributary to Whitesail Lake and Tahtsa River where, when conditions are right, bag limits can be easily achieved. One of the most heavily fished spots is the spillway channel between Ootsa Lake and Skins Lake. It is readily accessible and results over the years have been good.

Tourism:

Tourism in the reservoir area, as throughout the province, is on the increase. The number of American hunters in the area during the early part of the fall exceeded that of 1967. Fishing maintained its popularity with many locals as well as American tourists participating.

Fire Season:

No prolonged stretches of hot dry weather were experienced and, as a result, no significant forest fires occurred.

Logging:

The only logging being done in the reservoir area is by Eurocan Pulp and Paper Company. They are at present logging on the Tahtsa River and booming the logs to the Scheck mill near Ootsa Landing where they are sawn into lumber.

A contractor for Eurocan is also building a logging road from Wistaria to their logging site on the Tahtsa River, a distance of approximately 20 miles. This road was reported to be about 60 per cent complete. Eurocan has also let the contract for the construction of a road from the west end of Tahtsa Lake toward Kemano and the contractor has a trailer camp established at the lake shore and several miles of road built.

Camping and Related Facilities:

No improvements have been made to the camping areas or boat landings along the reservoir perimeter. Many of the campsite markers put up in 1956 and 1957 have fallen down and are no longer visible from out in the lake. This is of little consequence as very few of these sites are used.

Mr. J. W. Drover:

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25 November 1968

The boat landing on the Whitesail end of the Whitesail-Eutsuk Portage was inundated for most of the summer.

The Department of Recreation designed and supervised the construction of a new rail car portage, campsite and boat landing facilities in 1961. The mole extending into Whitesail Lake was not built up to full reservoir level and was overtopped by some two feet of water during July and August. This made loading of boats on the hand-car much more difficult and the results were many pairs of wet feet.

The Department of Recreation will no doubt receive many requests asking that the mole be raised to, or above, the 2800 foot elevation.

Mining:

The Phelps-Dodge Company was once again active in the Haven Lake area after being idle in 1967. Another mining company carried out exploratory work on the Chikamin Range and used Zinc Bay on Whitesail Lake as their supply base.

Emerald Glacier Mining Company near Tahtsa Lake continued their small operation. Exploratory work was also being done by another company in the Nanika Lake area. In addition to the above, numerous prospecting crews were roaming the area.

Mining activity in the reservoir area is definitely on the upswing.

Fishing and Hunting Resorts:

Red Fern Lodge on Tetachuck Lake, now owned by ^{s.22} (an American) no longer caters to hunting and fishing parties but instead is used as a private lodge. On our visit, the only people present were an American couple who are employed as caretakers for the summer months.

In addition to Red Fern Lodge, there are two small hunting cabins on Bryan Arm (Tetachuck Lake), 3 tent camps on Eutsuk Lake, 1 tent camp on Chelaslie Lake and a hunting site with a cabin being developed by a Mr. Adams approximately one mile south of Kenney Dam.

General:

Traffic on the reservoir increases yearly. Durban Bros., of the Ootsa Lake district, have a tug and barge on the reservoir and were kept busy throughout the summer hauling supplies to the mines and road contractors and towing booms of logs to the one mill site.

A topographic survey crew were working in the Ootsa-Tahtsa area most of the summer.

Mr. J. W. Drover:

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25 November 1968

Only one complaint was received from local persons regarding the high reservoir elevation in 1968. This one complaint was from a s.22 of Wistaria, who somehow connected high reservoir elevation with the starving of baby eagles. We didn't share his concern.

With the increase in mining activity, and the expected increase in logging by Eurocan and other companies, a closer check on reservoir conditions may become necessary in future years.

At present there is no pressure being put on our company to improve facilities in the reservoir area.

H. R. McKone

HRMcK:EH

ALUMINUM COMPANY OF CANADA, LIMITED

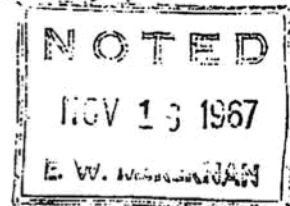
INTERNAL CORRESPONDENCE
CENTURY HOUSE, BOX 1900, KITIMAT, B.C. TEL. 540



16 November 1967

Mr. J. W. Drover:

1967 Report on Nechako Reservoir



A reservoir inspection trip, as such, was not made during the summer of 1967. The writer did, however, by making the annual West Tahtsa Fuel haul and one fishing trip to Eutsuk Lake, manage to see most of the reservoir. The areas not visited were Tetachuck Lake and the upper half of Whitesail Lake.

The elevation of the reservoir reached a maximum of 2796.95 feet in late July. The 1967 reservoir elevation was kept as low as practical to assist the Contractor in the installation of permanent stop logs at Skins Lake Spillway.

A marked improvement in perimeter and channel conditions is evident year by year. In the first few years following full reservoir, floating debris and standing timber made boat landings almost impossible except at locations which were cleared or were open hillsides. The reverse is now true and, with few exceptions, boats can get into shore without too much difficulty.

Areas protected from wind and wave action show the least improvement, as has been the case since the reservoir development and such areas will be unsightly for years to come. In making the circle tour of the reservoir, three such spots are encountered. They are the upper end of the Tahtsa River, upper end of the Tetachuck River and portions of the old Whitesail River.

Floating debris does not present any problem to navigation. The prevailing westerly winds drive the floating logs into bays or standing fringe timber where they become lodged and eventually sink. There is a noticeable increase of debris on the reservoir following a period of relative calm or easterly winds.

There is some continuation of bank erosion along the lake shore. Most bank erosion is confined to the eastern part and mainly along the open grassy slopes.

Wildlife:

There has been no noticeable decline in big game population. Moose population has probably increased over the past 15 years while deer and caribou herds have, at the least, been holding their own.



Mr. J. W. Drover:

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16 November 1967

Waterfowl (geese and ducks), prior to flooding, used the marshy open areas at the upper end of Ootsa Lake for a resting and feeding place during migration, and to a limited extent for nesting. Since flooding, these marshy areas became inundated and unsuitable and there are now relatively few of these birds on the reservoir.

Fur-bearing animals appear to be as plentiful as ever. A marked increase has taken place in the beaver population but to offset this the flooding of marshy areas has practically eliminated the muskrats.

Fishing:

Fishing on the flooded portions of the reservoir is on the increase. During the past summer, sport fishermen for the first time since flooding deep trolled in Ootsa Lake. Results were good and rainbow trout in the 8 to 10 pound class were taken. Smaller trout in the 1 to 2 pound class are numerous, as are the kokanee.

Tourism:

Fishing and hunting parties represent the majority of travel on the reservoir. In 1967, fishing was up but the number of hunters appeared to decline as many Americans and Lower Mainland hunters were encouraged to hunt in the Rocky Mountain Trench where increased bag limits were offered.

Fire Season:

No fires of any consequence were reported during the 1967 season.

Logging:

Eurocan Pulp and Paper Company have bought out most of the small operators' holdings along the reservoir's perimeter. Logging is at present being carried out at two locations, the east end of Ootsa Lake by Durban Bros. and along the Tahtsa River by B. Ginter. These outfits are contract logging for Eurocan and the logs are being sawed into lumber at Scheck's mill near Ootsa Landing. It was also reported that Eurocan bought out Babine Lumber Company, who had headquarters in Burns Lake.



Mr. J. W. Drover:

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16 November 1967

Camping and Related Facilities:

As previously reported by ^{s.22} most of the cleared campsites and boat landings along the reservoir perimeter get very little use. Nature, over the past ten years, has provided better camping sites than those selected by the Department of Recreation immediately following full reservoir.

Most persons travelling the reservoir launch their boats either at Kenney Dam or Wistaria harbor and proceed to Eutsuk Lake via the Whitesail-Eutsuk Portage. Some difficulty was experienced with the rail car in September and the Parks Branch had it removed and taken to Prince George for overhaul. With this one exception, the car has performed well since its last modification and people appear to be reasonably well satisfied.

Mining:

The Phelps-Dodge mining development in the Haven Lake-Pandosy Bay area, reported on by ^{s.22} has been inactive in 1967. All major equipment was moved out in the spring of 1967 and everything is at a standstill.

The Emerald-Glacier Mining Company, near Tahtsa Lake, continues to operate on a small scale.

Several mining companies had prospecting crews in the area for the summer months.

Fishing and Hunting Resorts:

Red Fern Lodge on Tetachuck Lake is the only permanent resort established on the reservoir to date. ^{s.22}, owner and manager of the lodge since its inception in 1959, has reportedly sold his interests and the lodge is now under new management.

New hunting camps have gone up on Chelaslie Lake, Bryan Arm (Tetachuck Lake) and Eutsuk Lake. These camps consist of two or more buildings, 2 x 4 frame and plywood covered. They are temporary buildings and will be used only during hunting seasons. All are below elevation 2820 feet.

General:

In 1968 a general reservoir inspection trip should be made and particular attention paid to Red Fern Lodge and its new owners and any other new developments which may take place in either tourism, mining or logging.

H. R. McKone

HRMcK:EH

23 December 1971

Mr. E. W. McKernan,
Manager, B. C. Power Operations,
Aluminum Company of Canada, Ltd.,
Century House,
P.O. Box 1900, Kitimat,
British Columbia.

Dear Sir:

In the absence of the Deputy Minister, this will acknowledge receipt of your letter of December 15th and the attached report of your annual inspection trip on conditions at the Nechako reservoir.

The report of your observations is very interesting and we would be pleased to be placed on the mailing list for subsequent reports of a like nature and would also appreciate receiving copies of reports made for previous years.

Your courtesy in making this information available to us is greatly appreciated.

Yours truly,



H. D. DeBeck,
Comptroller of Water Rights.

HDdeB/dc

ALUMINUM COMPANY OF CANADA, LTD



CENTURY HOUSE, P.O. BOX 1900, KITIMAT, B.C. • TELEPHONE: 632-7131 AREA CODE 604

15 December 1971

Mr. V. Raudsepp,
Deputy Minister,
Water Resources Service,
Parliament Buildings,
Victoria, B. C.

DEPT. OF LANDS FORESTS
AND WATER RESOURCES
WATER RES.

DEC 17 1971

MAIL ROOM
VICTORIA, B. C.

Dear Sir:

For the past few years, Alcan's Power Operations have made an annual inspection trip and report on conditions of the Nechako Reservoir. A copy of the 1971 report is included herewith. If this type of report is of interest to you or your office, a copy of reports for previous years, and any subsequent reports of a like nature, could be made available.

Yours very truly,

H.R. McKone a/c E.W. McKernan,
Manager,
B. C. Power Operations.

HRMcK: EH

Mr. DeBevoise

Please acknowledge receipt in
the absence of Deputy Minister.
This summary of pragmatic
observations is quite interesting
and we would indeed appreciate
if ALCAN would send us
copies of past reports and would
make available future reports

R. Dec 17/71

R.
Dec 17/71

ALUMINUM COMPANY OF CANADA, LTD



CENT HOUSE, P.O. BOX 1900, KITIMAT, B.C. • TELEPHONE: 632-7131 AREA CODE 604

25 November ~~1971~~

Mr. E. W. McKernan:

REPORT ON NECHAKO RESERVOIR - 1971

The annual reservoir inspection trip was carried out during the period of September 15 to 24, and was made in conjunction with the delivery of fuel oil to West Tahtsa. The major part of the reservoir was travelled by using the Company-owned barge (Tahtsa 2). Side trips up Big Bend Creek, Tetachuck Lake, Chelaslie Lake, Little Whitesail and Eutsuk Lake were made in s.22 18-foot cabin cruiser, powered by a 125 H.P. Mercury outboard motor.

Weather was generally good, with only the occasional light wind being encountered. Rain fell on the last day of the trip. Elevation of the Nechako Reservoir was approximately 2799 feet during the period of inspection.

For the first two weeks of August the level of the Nechako Reservoir exceeded the 2800 foot level. This marked the second time since closure of Kenney Dam in 1952 that full reservoir elevation has been attained. In the summer of 1968, the elevation rose above the 2800 foot mark.

High water is somewhat detrimental to reservoir appearance as beaches become completely inundated and a greater than normal amount of floating debris is seen during boat travel. Wind, wave and ice action continue to make inroads on the remaining standing flooded timber, and general reservoir appearance improves yearly. Improvement is most noticeable in the eastern half of the reservoir.

Wildlife:

The wildlife picture throughout the reservoir area appears satisfactory. The numbers and species of big game animals seen on the trip this year was not as great as in 1970, but this could possibly be attributed to the unseasonably warm weather experienced during the third week of September.

One very noticeable change in the local wildlife situation is a marked increase in wolf population. This increased wolf population, in my opinion, may well account for the decrease in the deer herds. It seems more than coincidence that in the 1950's and early 1960's, when wolves were at a very low point, deer were plentiful; now with the wolves plentiful, deer are extremely scarce. It would be very hard, however, to convince biologists and conservationists of this as they insist that wolves and deer can and do live together harmoniously.

Mr. E. W. McKernan:

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25 November 1971

Species of big game seen on the trip were--moose, deer, black bear, wolf and goat. The beaver colonies along the shoreline were numerous. Squirrels and rabbits seem to be at the peak of their cycle and are found in great abundance. Several large flocks of Canada Geese were seen along Ootsa Lake but ducks and grouse were very scarce.

Fishing & Hunting:

Fishing remains popular and particularly so in Eutsuk Lake. Trolling for the large rainbow trout is the number one pastime, with spin-casting in creek mouths running a close second. There does not seem to be any great interest in fly fishing even though conditions in many locations seem to be ideal.

During this inspection trip we went into Falls Creek, Blue Creek and Coles Creek. In all of these locations, numerous trout in the 1 to 1½ pound class could be seen lazing around in the clear water of these streams. As we had neglected to bring either fly or spin-casting equipment with us, the opportunity of having a fresh trout dinner was missed.

Trolling in the flooded portions of the reservoir and, in particular Ootsa Lake, is becoming increasingly popular. Large rainbow trout are no longer a rarity but are caught with increasing regularity and some people insist they have caught trout weighing as much as 12 pounds. I personally had the pleasure of catching a trout in excess of 8 pounds while trolling in Ootsa Lake near the spillway.

I found it very interesting to discover, when in conversation with two gentlemen from Vancouver Island whom we met at the Portage, that they were on their fourth fishing trip to Eutsuk Lake in 1971, and that they had made three trips to the area in 1970. In their opinion, Eutsuk Lake was British Columbia's number one recreational area.

In the fall months, hunters are to be found almost everywhere. On our tour we met or saw 6 licensed guides: Frank Henson, Jim Van Tine, Alan Blackwell, Sy Ford, Fred Adams and Bert Irvine. Van Tine had a party of 10 at his camp on Eutsuk Lake, all Americans, and both men and women. Many of the hunters come back year after year. As far as we could ascertain, all of the registered guides have full bookings and are expecting a very successful season.

Tourism:

A visitor of note to Tweedsmuir Park in 1971 was British Columbia's Lieutenant-Governor, the Hon. J.R. Nicholson. He was accompanied by his Aide-de-Camp and the Hon. Cyril Shelford. The party was on a sight-seeing, familiarization tour with some trout fishing being done as a side line. This trip took place in early August and the Van Tine camp on Eutsuk Lake was used as headquarters. Weather at the time was excellent and, according to Mr. Shelford, the Lieut.-Governor had a very successful and enjoyable trip.

Although some people undoubtedly visit the area just for the wilderness scenery it provides, there is little doubt that it is essentially the haunt of the hunter and angler.

Mr. E. W. McKernan:

- 3 -

25 November 1971

Fire Season:

Another excellent fire season was experienced in 1971. To my knowledge, there were no outbreaks of fire in the reservoir area even though there was a prolonged stretch of dry, hot weather in July and August. Campers appear to have become more aware of the hazards of leaving smoldering campfires, etc. The absence of severe electrical storms during the long dry period is probably the greatest factor in having a fire-free season.

Camping and Related Facilities:

The need for several good boat-launching ramps in the Kenney Dam, Ootsa Lake, Wistaria area is probably the most urgently required facility along the reservoir periphery today. This complete lack of adequate boat-launching facilities has been and still is one of the greatest drawbacks to boat travel on the reservoir. There appears to be no immediate plans by the Parks Branch or any other group for installing these facilities and, furthermore, there appears to be very little pressure being exerted by clubs or individuals to have this problem rectified.

During the period of May to October, the Parks Branch had employees stationed at the Whitesail-Eutsuk Portage. These employees kept a daily record of the number of boats, type of boat, number of people and their fishing and hunting success. In addition to the above, everyone was asked to fill out a questionnaire as to what ultimate use they would like to see made of Eutsuk Lake and if they felt the Lake should be retained for canoeists only. I understand that on the 'canoe only' question, they received so many definite no's that later on in the season it was deleted from the questionnaire.

One of the Parks Branch employees told us that periodically during the season they had taken water samples from Eutsuk and Whitesail Lake and sent them out for analysis. He did not disclose the reason behind the sampling but I assume they are for determining plankton levels in these lakes.

The causeway-float approach to the Whitesail end of the Portage was once again completely inundated for the greater part of the summer. Certainly people are becoming increasingly unhappy with this situation and there is some talk of the Parks Branch having this improved. To date, however, there is no actual work being done.

Logging:

Logging in the reservoir area is at present confined to two companies, these being Eurocan Pulp and Paper Co. and Bond Bros. Logging.

Bond Brothers have continued with their underwater logging operation throughout the summer months and are at the present time stock-piling logs in the old rock quarry near Kenney Dam. Work on construction of their saw-mill at Vanderhoof is apparently nearing completion and trucking of logs from Kenney Dam to Vanderhoof should commence this winter.

Bond Brothers had intended to add at least one more underwater logging unit in 1971 but I suspect the somewhat suppressed lumber market and difficulty

Mr. E. W. McKernan

- 4 -

25 November 1971

Obtaining financing has temporarily curtailed these plans. Mr. Richard Bond told us that they have applied to the B.C. Forestry Department for permission to cut all standing green timber along the reservoir shoreline which may be endangered by erosion. He says these trees would be very beneficial to them in adding bouyancy to their log bundles.

Eurocan's logging operation at Andrew Bay on Ootsa Lake continues to operate smoothly. No appreciable amount of debris is being added to the reservoir due to their operation.

The towing of log booms through the Tahtsa River and up Tahtsa Lake to their load-out facilities at West Tahtsa has caused little or no problem to the towing contractor. This operation has resulted in improved boat travel conditions in the upper reaches of the Tahtsa River and in this regard has been beneficial to the public.

Eurocan are at present surveying roads and an off-loading site in preparation for the building of another log dump comparable to their existing facility at Andrew Bay. This new log dump will apparently be located on the upper end of Intata Lake and when in operation is expected to supply 40% of Eurocan's interior timber requirements; the remaining 60% will continue to come from the Andrew Bay installation.

Mining:

Mining activity in the reservoir area has decreased considerably over the past few years. To my knowledge, only two exploration parties were in the reservoir area in 1971. One had a base camp at East Tahtsa and conducted mineral surveys in the Troitsa Lake region. The other company was core-drilling on their claims in the mountain range between Tahtsa and Nanika Lakes.

General:

Over the past year, Alcan has been the target of considerable criticism. Much of this comes from conservation groups such as the Vanderhoof Wildlife Association, the Smithers branch of S.P.E.C., and a few vociferous individuals. The development of Kemano Second Stage, which includes damming of the Nanika River, apparently causes these groups much concern and the prevention of this development seems to be their main objective. These groups point to the present condition of our reservoir and say that any future flooding of land simply cannot be tolerated if the ecology of the area is to be preserved.

E. W. McKernan:

- 5 -

25 November 1971

Direct complaints were received from people residing around the reservoir periphery as to the high reservoir elevation, nor from downstream residents regarding our spill pattern. It would appear that people have become adjusted to our present system of reservoir control and, until such time as we need to deviate from this pattern, all should go well.

H. R. McKone

HRMcK:EH

Copy sent to:

Mr. G. W. Whitehead

Mr. C. E. Webb: Vancouver

Mr. J. T. Madill: Montreal

ALUMINUM COMPANY OF CANADA, LTD



CENTRAL HOUSE, P.O. BOX 1900, KITIMAT, B.C. • TELEPHONE: 632-7131 AREA CODE 604

3 September 1971

DEPT. OF LANDS FORESTS
AND WATER RESOURCES
WATER RES.

SEP - 7 1971

MAIL ROOM
VICTORIA, B. C.

Mr. V. Raudsepp,
Deputy Minister,
Water Rights Branch,
Department of Lands, Forests and Water Resources,
Parliament Buildings,
Victoria, B. C.

Dear Mr. Raudsepp:

I understand that Mr. Handford spoke with you last night with regard to a release in connection with the possible expansion of the present installed capacity of the Kemano Powerhouse and the radio and television comment that has been carried on during the past two weeks throughout our north-central area.

It became obvious that it was time for us to make a release and I therefore provided Mr. Handford with the statement, which I understand he read to you, and subsequently discussed and went over with you. I believe that you felt that this release was quite appropriate. A copy is enclosed for your file.

For your information, it was released to Station CFTK in Terrace last night--they are connected with Broadcast News and the text of the release could well be in the Mainland area by today.

I had hoped to be able to take your telephone call myself as I wanted to go into the subject in more detail with you; however, I feel quite certain that Mr. Handford explained it in all its major aspects.

It was my basic desire to check the release material out with you prior to it being given to the media, just to ensure there was nothing that would be embarrassing to yourself or the Government and, as I am sure Mr. Handford explained, we were prepared to add additional material should it, in your opinion, have been appropriate to do so.

MR
Sept 7/71

Mr Handford
Mr DeBeek & file

R. Sept 7/71

J.T. 24 Sept / 71

Mr. V. Raudsepp:


- 2 -

3 September 1971

Thank you for your time and efforts in this regard. I am sending a copy of this letter and the release to Mr. Williston for his information. I spoke to him previously when this matter first arose in the local media, but was not able to reach him yesterday.

I trust that you will find this satisfactory.

Yours very truly,


E. W. McKernan, P. Eng.,
Manager,
B. C. Power Operations.

EWMcK:EH

Copy to:

Hon. R. C. Williston,
Minister of Lands, Forests and Water Resources,
Parliament Buildings,
Victoria, B. C.

Release-Communiqué



FOR IMMEDIATE RELEASE

Kitimat, B.C., Canada - 2 September 1971 - Mr. E. W. McKernan, Manager of Alcan's Power Operations in British Columbia, said in a prepared statement released in Kitimat today: "Over the past two weeks there have been a number of articles appearing in the press and over radio and television outlets concerning the possible effects that would occur to certain rivers with regard to - wildlife - community water supplies, etc., in the area of the Nechako Reservoir should Alcan decide to expand it's Kemano power generating station."

"In order to allay any such concerns, and to put this whole matter in its proper perspective, it seems appropriate at this time to outline Alcan's foreseeable intent and policy with regard to this matter.

"First there is not now, and there never has been, any plan to raise the presently licensed operating levels of the Nechako Reservoir.

"In brief, I can say that the Aluminum Company of Canada at the present time has no intention of increasing the installed capacity of the Kemano generating station for aluminum production.

"In fact an appreciable increase to Alcan's Kitimat smelting capacity would not require expansion of the present installed capacity of the Kemano Powerhouse.

...2

NR
Sept 7/71
ALUMINUM COMPANY OF CANADA, LTD,
A. W. Handford, District Manager,
Public Relations Department,
P.O. Box 1900, Kitimat, B.C.
2 September 1971 JP



FOR IMMEDIATE RELEASE

Kittimat, B.C., Canada - 2 September 1971 - Mr. E. W. McKernan, Manager of Alcan's Power Operations in British Columbia, said in a prepared statement released in Kittimat today: "Over the past two weeks there have been a number of articles appearing in the press and over radio and television outlets concerning the possible effects that would occur to certain rivers with regard to - wildlife - community water supplies, etc., in the area of the Nechako Reservoir should Alcan decide to expand it's Kamano power generating station."

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...S

ALUMINUM COMPANY OF CANADA, LTD.
A. W. Handford, District Manager,
Public Relations Department,
P.O. Box 1900, Kittimat, B.C.
7P

- 2 -

"However, in view of the studies being carried on by Government, Alcan was requested to prepare a submission outlining in broad general terms what would be involved in expanding the Kemano Power Development.

"This study was given to Government earlier this year."

- 30 -

*will be
a part
of B.C.
Energy
Board's
report on
future power
planning
K.*

(30)

file: 0179602-B

ALUMINUM COMPANY OF CANADA, LTD



CENTURY HOUSE, P.O. BOX 1900, KITIMAT, B.C. • TELEPHONE: 632-7131 AREA CODE 604

Tennant
24 March 1971

Mr. V. Raudsepp,
Deputy Minister,
Water Resources Service,
Parliament Buildings,
Victoria, B. C.

Dear Sir:

We enclose for your information copies of letters we received from the Varsity Outdoor Club, U.B.C., Vancouver, and SPEC Action Group, Smithers, along with copies of our replies.

These letters concern our future plans in regard to the Nechako Reservoir.

Yours very truly,

E. W. McKernan
E. W. McKernan, P. Eng.,
Manager,
B. C. Power Operations.

:EH

*R
mar 29/71*

ALUMINUM COMPANY OF CANADA, LTD

VANCOUVER WORKS: 1260 VULCAN WAY, RICHMOND, B. C. -- TELEPHONE:

15 March 1971

Mr. H. Kruisselbrink, Secretary,
SPEC Action Group,
Smithers, B.C.

Dear Mr. Kruisselbrink:

Further to my night letter of today, the first two paragraphs of your letter of February 12th referring J. to the Water Licence granted by the Government of B.C. to the Aluminum Company of Canada, Limited are substantially correct.

In paragraph 3 you ask a number of questions which really depend on detailed plans and since, as of now, the Aluminum Company has no definite program or detail plan to proceed with this project we do not think we are in a position to answer your questions. The only exception is that, as we have stated elsewhere, there is no plan to raise Tahtsa Lake above the present established limits.

We are fully aware of the environmental questions of today and I am sure you will have seen a great deal of material which has been released by the Aluminum Company and by Aluminium Limited (the enclosed copy of our Montreal office paper being an example) outlining the efforts, at very large expenditures, which are being made in many segments of our Company to further ensure that all of our operations meet with sound and equitable standards.

Yours very truly

L. Holroyd
District Manager
Public Relations

LH:MR
Encl.

Copies to: (n.i.o.o.) (without encl.)

Mr. H. Hutton: Kitimat

Mr. R.T. Rudd: Montreal

Mr. E.W. McKernan: Kitimat



P.O. Box 806, Smithers, B.C.

February 12, 1971.

The Aluminum Company of Canada,
1260 Vulcan Way,
RICHMOND, B.C.

Gentlemen:

We understand that under Conditional Water License 19847, issued on December 29th, 1950, you hold the rights to divert and use 9,500 cubic feet per second of water for power purposes and the storage of 35,000,000 acre-feet of water, the sources of which are: The Nechako River above Grand Canyon and all the streams and lakes tributary thereto, Skins Lake, and the Nanika River and all the streams and lakes tributary thereto except the tributaries which join the Nanika River more than two miles below Kidprice Lake.

We also understand that it is your intention to create a tunnel between Nanika Lake and Tahtsa Lake and to place a dam on the Nanika River just downstream from Kidprice Lake for the purposes of increasing power production at your Kemano plant.

We would like to know when you intend to go ahead with this project. We have been given to understand that it may be in the next two or three years. Is this correct? Also, could you provide us with the details of this operation such as: Will the Nanika River be totally blocked at the dam-site? If not, how much water will be allowed to escape. How much will the levels of Nanika and Tahtsa Lakes be raised by the placing of the dam. How will you dispose of the trees, etc., in the affected area. We realize that you are authorized to "use or destroy the timber by submerging it" but will you, in this day of environmental consciousness, exercise that option? How many acres will be submerged at Nanika Lake by this operation, and how many additional acres at Tahtsa Lake?

We would appreciate hearing from you as soon as possible. We thank you very much.

Yours truly,

SPEC ACTION GROUP.

A handwritten signature in dark ink, appearing to read "H. Kruisselbrink".

H. Kruisselbrink,
Secretary.



Varsity Outdoor Club

University of British Columbia
VANCOUVER 8, B.C.

NOV 13

November 16, 1970.

Public Relations Officer,
Aluminum Company of Canada Ltd.,
Kitimat, B.C.

Dear Sir:

A matter which our Outdoor Club considers to be an item of concern has come to the attention of myself, and I would therefore, on the club's behalf, appreciate some information from you.

Before continuing, I would like to add that when this letter was first being composed, several excuses were thought of for writing, to be used as fronts in attempting to hide the reasons behind our request of information; several individuals felt that should true reasons be known, this could possibly create reluctance on your part to help us out. However, it was wisely decided, I feel, that since we are seeking straight, honest answers, that we should also therefore be honest and open ourselves.

While working throughout the Ootsa Lake-Burns Lake-Bulkley Valley-Terrace segment of B.C. this past August, I personally on several occasions heard rumors regarding plans to a. raise the present level of the Ootsa Lake reservoir system to utilize its present capacity, and b. possibly increase the future capacity of the entire system. from
info

Our club's concern has thereby been raised to the point that we desire to find out more information if possible from factual sources rather than local rumors; our concern is not so much for the areas already affected by the present reservoir and its level as of August this year (namely the Tahisa-Whitesail-Ootsa Lake system), but for those areas not yet affected. More precisely, our concern is for the fate of Eutsuk Lake in the north end of Tweedsmuir Park.

As an avid outdoor recreationalist and from various summer field employments, I have personally seen a very large and extensive portion of B.C. in good detail and I consider Eutsuk Lake to be one of the most beautiful and scenic lakes by appearance, shoreline, size, and setting that we have in this province.

National Topographic System maps presently available from the B.C. Government, published in 1966 and based on older data, show the elevation level of Ootsa Lake and the reservoir system to be 2800 feet above sea level and that of Eutsuk Lake to be 2817 feet above sea level. Thus as of August of this year there could have been no more than 17 feet difference between the two levels; by the dating of this data, it may well have been much less.



Varsity Outdoor Club

University of British Columbia

VANCOUVER 8, B.C.

-2-

Visually also, on the actual site, the difference in levels does not appear to be very great.

Accordingly, could you please supply the following information:

- What is the present elevation above sea level being maintained of the Ootsa Lake reservoir system; or what is the present difference being maintained between the levels of Ootsa and Eutsuk Lakes?
- Are there any proposals to raise the Ootsa Lake level from what it is to utilize the system's present capacity? If so, how much higher than the last figure will the proposed high level be?
- If the new level should show signs of affecting Eutsuk Lake due to loss of existing elevation differences, are there any plans proposed to protect Eutsuk Lake at its two vulnerable spots, namely at the current hand-car portage between Chikamin Bay of Whitesail Lake and St. Thomas Bay of Eutsuk Lake and at the Tetachuk Lake end of Eutsuk Lake? Should Eutsuk Lake be feared to flooding, are there any proposals to clear shoreline timber and prevent recurrence of what happened to the shoreline of the Ootsa Lake reservoir system?
- Are there any long range plans being considered to increase the total capacity of the existing reservoir system that would ultimately affect Eutsuk Lake?
- Any additional remarks that you wish to include would be most appreciated.

Should you not be the person who is able to answer these questions, could you please forward this letter onto the proper person(s), or at least forward onto us those persons' names and addresses.

We would very much appreciate any efforts to help us out. The questions we raise here we feel are important, and therefore knowledge of the facts rather than rumors is essential.

We are not witch-hunting conservation issues, but rather feel that there may be a real issue for concern, possibly involving factors overlooked by one or both of us, which can be dealt with to the satisfaction of all parties concerned.



Varsity Outdoor Club

University of British Columbia
VANCOUVER 8, B.C.

-3-

Would you please direct any correspondence to:

Varsity Outdoor Club,
Alma Mater Society,
University of B.C.,
Vancouver 8, B.C.

Attention: P.A.R.C. Committee.

Thank you for your time and any help you can give us.

Yours truly.

s.22

FILE: 0179602

MEMO FOR FILE

KEMANO PLANT

This file has been subdivided and now consists of a main file and four sub-files. The main file should be reserved for matters concerning licensing while the sub-files are as follows;

- A - Planning for second tunnel and power plant.**
- B - Flooding problems in reservoir area.**
- C - Consultants retained by Comptroller.**
- D - Downstream effects of reservoir operation.**

Page 71

Withheld pursuant to/removed as

DUPLICATE

c179602

PROVINCE OF BRITISH COLUMBIA	FOREST SERVICE	DEPARTMENT OF LANDS, FORESTS, AND WATER RESOURCES
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DATE: April 16, 1970

FILE NO. 0233780

SUBJECT: Meeting re clearing of proposed
Nanika Reservoir

ATTENTION OF: F I L E N O T E

REMARKS:

Present: H.M. Hunt, G. Cox - Water Resources
P.J.J. Hemphill, R.D. Thomas, and H. Waelti - Forest Service

1. 1:50,000 manuscript maps with 100' contours were shown to Hunt and Cox and discrepancies in elevation datum between these maps and National Topographic Map Sheet 93E were pointed out. Extra copies of these manuscripts will be obtained by Engineering for Water Resources.
2. Waelti summarized results of an airphoto recce of area to be flooded. Three major clearing conditions were found: (a) steep, rocky sidehill around most of Nanika Lake and along east slope of Kidprice Lake, (b) gentle slopes with merchantable timber on west side of Kidprice Lake and on west side of Nanika River between Kidprice and Nanika Lakes, (c) swampy flood plains between the two lakes and at the mouth of Fenton Creek.
3. After some discussion it was agreed that felling of all trees prior to flooding with salvage and disposal some time in the future would satisfy both immediate and long term requirements.
4. A preliminary review indicated an average cost of \$150.00/acre for felling; this unit price would result in a total cost of somewhat less than 1 million dollars. Post-flooding cleanup may result in an additional expense of similar magnitude, but which could be spread over many years as a reservoir operating cost.
5. Access: The project calls for a dam below the outlet from Kidprice Lake and a tunnel from Nanika Lake to Tahtsa Lake. Access roads therefore will be required from the Morice River F.R. to the dam site and from the Tahtsa Lake Road to both terminals of the tunnel.

c.c. Water Resources Service

H. Waelti
Forest Management Engineer
Engineering Division

MEMORANDUMTO FileFROM G. F. Cox, Senior Hydraulic Engineer,
Power & Major Licences Division,April 15, 1970SUBJECT Clearing Nanika & Kidprice LakesOUR FILE 0179602

YOUR FILE

A meeting was convened by Mr. P.J. J. Hemphill in his office with the following people present:

Mr. P. J. J. Hemphill	Forest Service
Mr. R. D. Thomas	Forest Service
Mr. H. Waelti	Forest Service
Mr. H. M. Hunt	Water Resources Service
Mr. G. F. Cox	Water Resources Service

Mr. Waelti produced a 1:50,000 scale map of part of the Nanika-Kidprice Lakes area showing that most of the shore of Nanika Lake is steep and rocky as well as the east side of Kidprice Lake. The flats between the two lakes as well as the West side of Kidprice Lake have considerable merchantable timber which could be logged prior to flooding.

Mr. Hemphill recommended that in view of the small area involved, 5000 to 6000 acres, and the type of terrain, Forest Service felt that a clear cutting operation in the year immediately prior to flooding would be the most suitable method of clearing. Burning of debris and salvage of merchantable timber could be conducted off the flooded reservoir.

In answer to Mr. Hunt's question, Mr. Waelti explained that the map being used was a provisional map prepared for A.R.D.A. purposes and that copies of this map would be forwarded to Water Resources shortly. Mr. Hemphill inquired what drawdown below normal water level was expected and also, what was the expected range of reservoir elevations? Mr. Hunt replied that a drawdown of 45 feet could be expected and the total range of elevation was 115 feet. These figures were calculated based on the storage required for power purposes.

In answer to a question, Mr. Hemphill replied that no roads should be necessary into the areas except for the construction access roads. Mr. Waelti estimated that clear cutting of this area could be done for approximately \$150.00 per acre for a total cost of \$900,000 for

the 6000 acres involved. Mr. Thomas pointed out that this was the cost for clear cutting and another like amount would be needed to finance the cleanup operation. Mr. Thomas also pointed out that the initial \$900,000 should be regarded as a capital cost while the \$900,000 for cleanup would be regarded as an operating cost. Some discussion ensued on clearing costs on other reservoirs and attitudes toward clearing in general.

G. F. Cox

Notes Taken By:
G. F. Cox,
Senior Hydraulic Engineer,
Power & Major Licences Division,
Water Resources Service.

December 8, 1965.

PERSONAL

Mr. G.W. Whitehead,
Manager,
Property Department,
Aluminum Company of Canada, Limited,
Century House, P.O. Box 1900,
Kitimat, B.C.

Dear Geoff:

Thank you for your personal letter of November 29th concerning apparent discrepancies between information that we have been supplying with regard to reservoir elevations and your views on the matter.

In the letter of November 26th to Alcan from Howett and Segnitz, a single sentence from our letter of November 8th to Perry and Hewitt has been quoted without any regard to the remainder of the letter. A copy of this letter is attached for your information. I believe that the contents of our letter are substantially correct. Although the flooding permit protects you against damages due to flooding up to elevation 2820', the water licence only authorizes storage up to 2800', which I believe is the maximum possible with the present dam. The additional 20' allowance is for wave action and erosion damage.

I would be pleased to have your comments if you are not in complete agreement with this.

Yours truly,



H.D. DeBeck,
Comptroller of Water Rights.

Encl.

HDDeB:fld

ALUMINUM COMPANY OF CANADA, LIMITED

ALUMINUM COMPANY OF CANADA, LIMITED

29 November 1965

PERSONAL

Mr. H. D. DeBeck,
Comptroller of Water Rights,
Department of Lands, Forests & Water Resources,
Water Rights Branch,
Victoria, B. C.

Dear Howard:

Enclosed is a copy of a letter we have received from some surveyors in Burns Lake, with respect to a piece of property abutting the reservoir, which you will note, your office has been quoted as saying that the maximum reservoir level is '2800' ft., with '2810' as the extreme maximum.

I am also enclosing my reply.

This is no doubt confusion in verbal transmittal of figures from Mr. Paine to the surveyor, but I thought you might wish to check it, this is why I am sending it to you in this unofficial way.

Sincerely,

A handwritten signature in dark ink, appearing to read "Geoff.", with a long horizontal stroke extending to the left.

Mr. H. D. DeBeck, Comptroller of Water Rights.

29 November 1965

Howett & Segnitz,
Box 255,
Burns Lake, B. C.

Attention: Mr. Werner Segnitz

Dear Sirs:

Re: Your File: 1559

This refers to your 26 November letter to the attention of Mr. J. McLachlan, with respect to the flood elevations for this company's reservoir.

This company has not changed its policy in this respect, as a matter of fact, it is not a question of policy, but an established right that we have to flood to Elevation '2820'.

With respect to the lot in question, this company purchased an easement to flood to the '2820' contour line, and this is accordingly registered at the Land Registry Office in Prince Rupert.

Yours very truly,

G. W. Whitehead
Manager
Property Department

GW:JMC

Copy to: (n.i.o.o.)

Mr. H. D. DeBeck,
Comptroller of Water Rights,
Department of Lands, Forests & Water Resources,
Water Rights Branch,
Victoria, B. C.

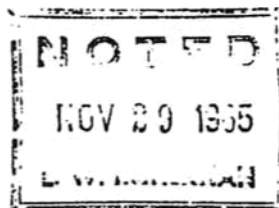
HOWETT & SEGNITZ

BRITISH COLUMBIA LAND SURVEYORS

F. JAMES HOWETT, B.C.L.S.
WERNER SEGNITZ, B.C.L.S.

Aluminum Company of Canada, Limited
Property Department
P.O. Box 1900
KITIMAT, B.C.

Attention: Mr. J. McLachlan



BOX 255
BURNS LAKE, B.C.

26 November 1965

Our File 1559

Dear Sir ,

Re : The West Half of D.L. 467 , Range 4 , Coast District
(Certificate of Title No. 50990-I) subject to an easement
as contained in D.D. 43859-I in favour of Aluminum Company
of Canada Limited.

Our client, ^{s.22} is in the process of purchasing
the above property. I have drawn a sketch plan of the W.½ D.L.467
based mainly on reference Plan 3182. According to this plan only
approx. 32 acres are above the 2820' Contour Line , while the remainder
of 128 acres is eventually subject to flooding.

Today I got word from ^{s.22} that the Comptroller of Water
Rights stated

" Normal maximum reservoir level is 2,800 feet, but it is
possible, although highly improbable, that water levels
of 2,810 might be reached in the event of a major flood."

I am quite surprised by this statement. We have recently done
several surveys of Crown land on Tetachuck and Ootsa Lakes. On all
surveys we had to establish the 2820 contour, in the case of the
Tetachuck Lake surveys the Dept. of Lands would not even allow a
lease below the 2820 line, so that two summer home leases are
situated some 700 feet away from the present shore line at water
level 2797.8 feet. I understand further that a clause in the lease
agreement forbids any permanent improvements below the 2820 contour
and that the whole lease might be cancelled by the Lands Branch if
the lessee contravenes this clause.

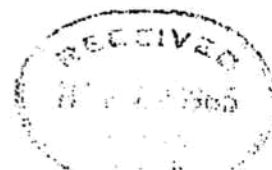
I was always under the impression that the reservoir level
will be raised ultimately to 2820 feet if and when Kemano is
developed to full capacity.

I would appreciate to hear from you whether or not ALCAN has
changed its policy , and particularly if ALCAN does agree with the
statement of the Comptroller of Water Rights .

Yours very truly

HOWETT & SEGNITZ

L. W. McLachlan
L. W. McLachlan



File No. 0179602 - B
Vol 1

SUBJECT

*Alcan
Reservoir Flooding*

1965-90

NAME ALUMINUM Co. of
CANADA

SUBJECT

RESERVOIR FLOODING

CROSS REFERENCES

W.R.B.-0

Water Resources Service