

# NECHAKO FISHERIES CONSERVATION PROGRAM

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

## NECHAKO RIVER TECHNICAL COMMITTEE MEETING (90-6)

DATE: Thursday, September 6, 1990

PLACE: Triton Environmental Consultants Ltd.  
#120 - 13511 Commerce Parkway  
Richmond, B.C.

ATTENDEES: D.L. Deans (Federal Crown)  
D. Hay (Independent Member)  
B.W. Jenkins (Alcan Aluminium Ltd.)  
D. Roberts (Provincial Crown)

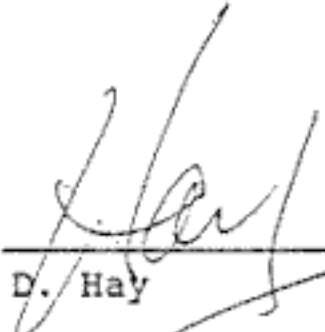
J.S. Mathers (Federal Crown)  
W.O. Rublee (Alcan Aluminium Ltd.)

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### Decision Record

1. Alcan will be instructed to maintain the Skins Lake Spillway release at 30.8 m<sup>3</sup>/s until March 31, 1991. This decision was based on the understanding that this release will fully utilize the water remaining in the 1990/91 Annual Water Allocation.

  
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D.L. Deans

  
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D. Hay

  
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for B.W. Jenkins

  
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P.A. Slaney

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## NECHAKO RIVER TECHNICAL COMMITTEE MEETING (90-6)

DATE: Thursday, September 6, 1990

PLACE: Triton Environmental Consultants Ltd.  
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ATTENDEES: D.L. Deans (Federal Crown)  
D. Hay (Independent Member)  
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W.O. Rublee (Alcan Aluminium Ltd.)

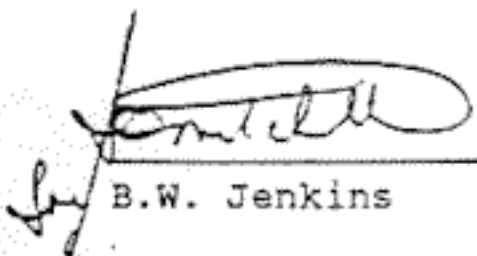
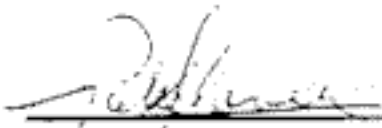
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### Decision Record

2. The Technical Committee approved a proposal from DFO to test dissolved oxygen monitoring equipment in a laboratory and spawning channel. Testing of oxygen monitoring equipment in the Nechako River proposed in Project M90-7 "Substrate Monitoring and Composition" for 1990/91 will be deferred.



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D.L. Deans

  
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D. Hay  
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by B.W. Jenkins  
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P.A. Slaney

# NECHAKO FISHERIES CONSERVATION PROGRAM

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

## NECHAKO RIVER TECHNICAL COMMITTEE MEETING (90-7)

DATE: Thursday, October 4, 1990

PLACE: Triton Environmental Consultants Ltd.  
#120 - 13511 Commerce Parkway  
Richmond, B.C.

ATTENDEES: D.L. Deans (Federal Crown)  
D. Hay (Independent Member)  
A.C. Mitchell (Alcan Aluminium Ltd.)  
P.A. Slaney (Provincial Crown)

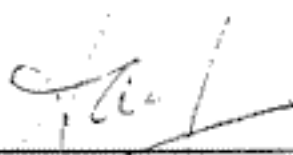
J.S. Mathers (Federal Crown)  
W.O. Rublee (Alcan Aluminium Ltd.)

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### Decision Record

3. The Technical Committee approved modifications to the habitat complexing structures as detailed in the attached table. The purpose of the modifications is to remove those structures that are not being used by chinook and to repair structures that were altered by cooling flows. These modifications will be conducted in late October/early November following completion of the 1990 biological assessment program. The modified structures be assessed for biological utilization and physical stability in 1991.

  
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D.L. Deans

  
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D. Hay

  
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B.W. Jenkins

  
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P.A. Slaney

# NECHAKO FISHERIES CONSERVATION PROGRAM

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Date: October 10, 1990

File: 2059-13

Re: Rationale for recommended modifications of Nechako River habitat complexes.

- i) Deep Water Sweeper, complexes 1-6, (km. 10-14.85)  
Recommendation - Relocate in current.  
Rationale - Allow deep water sweeper type habitat to be assessed for chinook utilization during early life history period (May/June, 1991)
- ii) Rail Debris Catcher, complexes 11 & 17 (km. 21.4 & 24.3)  
Recommendation - Add additional debris.  
Rationale - Assure that complexes are fully seeded prior to 1991 emergence to enable assessment of their efficacy.
- iii) Rootwad Sweepers, complex 18 (km24.25)  
Recommendation - Reduce amount of material, - Leave only the upstream sweeper.  
Rationale - Upstream sweeper is the only one that is utilized by juvenile chinook. Water velocities in downstream sweepers are too low.
- iv) Floating Crib, complex 19 (km 24.3)  
Recommendation - Leave in present form.  
Rationale - In spite of poor habitat quality for all life phases of juvenile chinook the complex is the home of a family of beavers and should be left undisturbed.
- v) Pseudo Beaver Lodge complex 21 (km 24.6)  
Recommendation - Remove.  
Rationale - Inadequate velocities for chinook rearing.
- vi) Pseudo Beaver Lodge complex 22 (km 24.8)

Recommendation - Add additional material.

Rationale - Currently is utilized by rearing chinook but is not fully seeded.

- vii) Pseudo Beaver Lodge complex 23 (km 24.9), Channel Jacks complex 24 (km 25), Rootwad Sweepers complexes 25, 26, 27 (km 25.1, 25.15, 26.25)

Recommendation - Remove.

Rationale - Inadequate velocities for rearing chinook due to backwater effect from downstream hydraulic control.

- viii) Floating Crib complex 28 (km 27.4)

Recommendation - Reorient 90 degrees.

Rationale - Reorientation of crib will increase water velocities associated with the complex and will make it more appealing to rearing chinook.

- ix) Pseudo Beaver Lodges 30 & 31 (km 31 & 31.1)

Recommendation - Add additional material.

Rationale - Presently are utilized by rearing chinook but are not completely seeded with debris.

- x) Pseudo Beaver Lodge complex 32 (km 31.3)

Recommendation - Remove.

Rationale - Inadequate velocities for rearing chinook.

- xi) Channel Jacks complex 35 (km 33.7)

Recommendation - Remove.

Rationale - Complex is not collecting debris.

- xii) Side Channel complex 38 (km 17.9-18.6)

Recommendation - add additional material

Rationale - currently is being utilized by rearing chinook but requires additional complexing to increase complexity of the channel and available rearing

# HABITAT COMPLEX INVENTORY AND ASSESSMENT (at 1000 c.f.s.)

Complex No.	Type of Complex	Location (km)	Present Condition	Water Velocity (m/sec) (vel. within complex/vel. at shear)	Fish Usage ( Chinook usage S-spring, F-fall) Rbt/Rmw	Recommendation
1	Deep Water Sweeper	10	Shifted downstream, reduced in size	.3/.4		Relocate in current
2	Deep Water Sweeper	10.3	Partially dewatered	0	N/A	Relocate in current
3	Deep Water Sweeper	12.2	Totally dewatered	N/A	N/A	Relocate in current
4	Deep Water Sweeper	12.25	Partially dewatered	0	0	Relocate in current
5	Deep Water Sweeper	13.7	Watered/in reduced velocity	0-0.5	Rss (0+)	Relocate in current
6	Deep Water Sweeper	14.85	Totally dewatered	N/A	N/A	Relocate in current
7	Deep Water Sweeper	14.9	No longer present	N/A	N/A	leave in present form
8	Point bar	17	Water covers at 2000 c.f.s.	.4/.5	S/F All species	leave in present form
9	Point bar	17.15	Water covers at 6000 c.f.s.	.3/.4	S/F All species	leave in present form
10	Point bar	17.3	Water covers at 3000 c.f.s.	.3/.4	S/F All species	leave in present form
11	Rail Debris Catcher	21.4	Very little debris	.13/.56	All species (night only)	add additional material
12	Rail Debris Catcher	21.5	Large log jam	.09/.53	F All species	leave in present form
13	Rail Debris Catcher	22.6	Large log jam	.04/41	F All species	leave in present form
14	Rail Debris Catcher	22.7	Large log jam	0/.52	F All species	leave in present form
15	Rail Debris Catcher	22.8	Some debris collected	.04/.38	F All species	leave in present form
16	Rail Debris Catcher	24.2	Large log jam and beaverlodg.	01/.47	F All species	leave in present form
17	Rail Debris Catcher	24.3	No debris collected	.09/.54	F All species	add additional material
18	Roofwad Sweepers	24.25	Stable from 1989	.04/41	S/F All species	reduce amount of material
19	Floating Crib	24.3	Beaverlodg	0/.28	S All species	leave in present form
20	Pseudo Beaver Lodge	24.4	Large log jam	.16/.56	S/F All species	leave in present form
21	Pseudo Beaver Lodge	24.6	Lost debris	0/.14	Coarse fish only	remove
22	Pseudo Beaver Lodge	24.8	Lost debris	.02/.3	S/F All species	add additional material
23	Pseudo Beaver Lodge	24.9	Lost debris	.04/.21	Coarse fish only	remove
24	Channel Jacks	25	Virtually no debris	.04/.25	Coarse fish only	remove
25	Roof Wad Sweepers	25.1	Stable from 1989	.04/.23	Coarse fish only	remove
26	Roof Wad Sweepers	25.15	Stable from 1989	.03/.1	Coarse fish only	remove
27	Roof Wad Sweepers	26.25	Stable from 1989	0/.25	S All species	remove
28	Roofing Crib	27.4	Stable from 1989	.08/.28	S All species	reorient 90 degrees
29	Roof Wad Sweepers	30.7	75m below original position	0/.08	Coarse fish only	remove
30	Pseudo Beaver Lodge	31	Lost most debris	.02/.35	S/F All species	add additional material
31	Pseudo Beaver Lodge	31.1	Lost most debris	.13/.34	S/F All species	add additional material
32	Pseudo Beaver Lodge	31.3	Lost all debris	.12/.25	Coarse fish only	remove
33	Bushpile	31.4	Stable from 1989	0/.22	S/F All species	leave in present form
34	Channel Jacks	32	Log jam collected 1990	.07/.65	S/F All species	leave in present form
35	Channel Jacks	33.7	Tipped over 1990 no debris	.23/.34	N/A	remove
36	Pipe-Pile Debris Catcher	34.7	Large log jam	0/.7	All species	leave in present form
37	Pipe-Pile Debris Catcher	35.4	Large log jam	0/.37	All species	leave in present form
38	Side Channel	17.9-18.6	Recomplexed June 1990		All species	add additional material

# NECHAKO FISHERIES CONSERVATION PROGRAM

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

## NECHAKO RIVER TECHNICAL COMMITTEE MEETING (90-8)

DATE: Thursday, October 25, 1990

PLACE: Department of Fisheries & Oceans  
555 West Hastings Street  
Vancouver, B.C.

ATTENDEES: D.L. Deans (Federal Crown)  
D. Hay (Independent Member)  
B.W. Jenkins (Alcan Aluminium Ltd.)  
P.A. Slaney (Provincial Crown)

W.O. Rublee (Alcan Aluminium Ltd.)

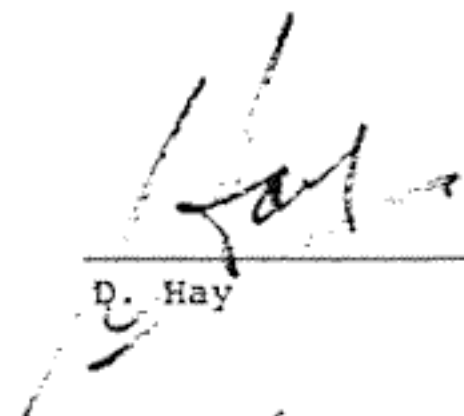
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### Decision Record

4. To provide protection for migrating sockeye salmon stocks the Technical Committee concluded that the frequency of occurrence of mean daily water temperatures above 21.7 C in the Nechako River upstream of the Stuart River confluence should have a return period of not less than 200 years on average. A detailed rationale for selecting this return period is attached.

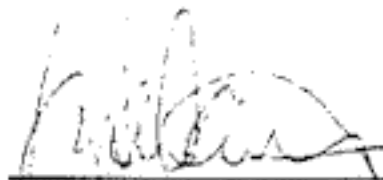


D.L. Deans



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D. Hay



B.W. Jenkins



P.A. Slaney

# NECHAKO FISHERIES CONSERVATION PROGRAM

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

## NECHAKO RIVER TECHNICAL COMMITTEE (90 - 14)

DATE: February 21, 1991

PLACE: Hay & Company  
1 West 7th Avenue  
Vancouver, B.C.


ATTENDEES: D. Hay (Independent Member)  
B.W. Jenkins (Alcan Aluminium Ltd.)  
P.A. Slaney (Provincial Crown)

K.C. West (Federal Crown)  
G. Faulkner (Federal Crown)  
W.O. Rublee (Alcan Aluminium Ltd.)  
A. C. Mitchell (Alcan Aluminium Ltd.)  
D.W. Roberts (Provincial Crown)  
A. Martin (Provincial Crown)

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### Decision Record

5. Alcan will be instructed by the Water Comptrollers Branch to increase the Skins Lake Spillway release to 50 m<sup>3</sup>/sec on February 22, 1991. This release, plus any additional releases required for flood control will be maintained until the Water Comptrollers Branch indicates otherwise.

  
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D. L. Deans

  
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B.W. Jenkins

  
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D. Hay

  
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P. A. Slaney



# NECHAKO FISHERIES CONSERVATION PROGRAM

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

## NECHAKO RIVER TECHNICAL COMMITTEE (90 - 16)

DATE: March 19, 1991

PLACE: Hay & Company  
1 West 7th Avenue  
Vancouver, B.C.

ATTENDEES: D.L. Deans (Federal Crown)  
D. Hay (Independent Member)  
B.W. Jenkins (Alcan Aluminium Ltd.)  
P.A. Slaney (Provincial Crown)

K.C. West (Federal Crown)  
G. Faulkner (Federal Crown)  
W.O. Rublee (Alcan Aluminium Ltd.)

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### Decision Record

6. Alcan will be instructed by the Water Comptrollers Branch to increase the Skins Lake Spillway release to 85 m<sup>3</sup>/sec on March 21, 1991. This release, plus any additional releases required for flood control will be maintained until the Water Comptrollers Branch indicates otherwise.



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D. L. Deans



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B.W. Jenkins

  
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D. Hay  
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P. A. Slaney

# NECHAKO FISHERIES CONSERVATION PROGRAM

A Joint Program of the Government of Canada, Alcan and the Province of British Columbia  
NECHAKO RIVER STEERING COMMITTEE (SC90-1)

DATE: March 27, 1991

TIME: 1330 hours

PLACE: Alcan Aluminium Ltd.  
1285 W. Pender Street  
Vancouver, B.C.

ATTENDEES: P.S. Chamut (Federal Crown)  
J.A. Walker (Provincial Crown)  
W.J. Rich (Alcan Aluminium Ltd.)

D.L. Deans (Federal Crown)  
P.A. Slaney (Provincial Crown)  
B.W. Jenkins (Alcan Aluminium Ltd.)  
D. Hay (External Member)

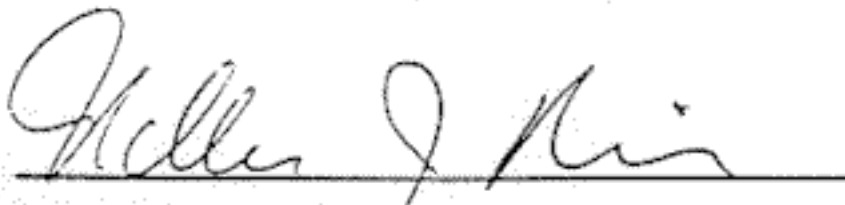
K.C. West (Federal Crown)  
D.W. Roberts (Provincial Crown)  
W.O. Rublee (Alcan Aluminium Ltd.)  
A.C. Mitchell (Alcan Aluminium Ltd.)

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1. The Steering Committee approves the 1991/92 program and budget as presented by the Technical Committee.

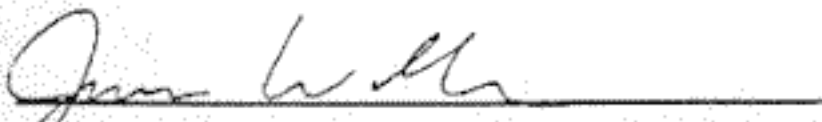


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P.S. Chamut, Director General  
Pacific Region Department of Fisheries and Oceans



William J. Rich, P. Eng.  
Vice President for B.C.  
Alcan Smelters and Chemicals Ltd.



J.H.C. Walker, Assistant Deputy Minister  
Fisheries, Wildlife and Integrated Management  
B. C. Environment