

APC 224  
Brunswick, Me.  
Hydro

Regional Engineer, Newton, Mass. 5/2 April 27, 1977

Ben Rizzo, Hydraulic Engineer  
Newton, Mass.

April 7, 1977 Meeting with CDFG and Maine Fishery Agencies  
regarding proposed fishway at CDFG Brunswick Project on  
Androscoggin River - Brunswick, Maine

On April 7, 1977, I attended a meeting at the Central Maine  
Power Company (CDFG) in Augusta, Maine, to review with State  
Fishery Agencies the conceptual design of fish passage facilities  
proposed at the CDFG Brunswick Hydro-Electric Project on the  
Androscoggin River, in Brunswick, Maine.

Other attendees were as follows:

<u>CDFG</u>	<u>Maine</u>
Edith Bean	Ed Haney, Fish and Game Commission
Gerald Peelin	John Foss, Department of Marine Fisheries
Val Thompson	Bob White, Department of Marine Resources

For the benefit of the Maine Fishery Agencies, I prepared the  
particular features of the fish passage facilities as proposed  
at the subject project. (See attached conceptual plan). Your  
comments are invited.

1. A vertical-slot type fishway constructed adjacent to  
the proposed powerhouse. (8'-0" wide x 10' long fish-  
way with 1/2" x 2" slots). The fishway is designed to  
pass a run of 25,000 American eel and 1 million  
smelt.
2. A side-slope fish counting and trapping facility is  
included at the upstream end of the fishway. This  
facility can trap fish species selectively, or trap  
the entire run.
3. An attraction water will be piped from the head-  
pond through flow diffusion chambers into the fishway,  
where it combines with the 30 cfs + flowing through the  
fishway to provide a total of 100 cfs + attraction  
water at the fishway entrance.



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4. The existing timber crib spillway under the House 201 bridge will be lowered approximately 4' to crest elevation 14. This structure will serve as a fish barrier dam to keep upstream migrants from entering the spillway area during periods of spillway discharge. A fish barrier wall at crest elevation 20 is also required between the main spillway and the powerhouse.
5. A floating downstream migrant fish-screen and trash boom are also provided at the powerhouse intake for future installation if turbine mortality studies deem it necessary.
6. The fishway will operate for river flows up to 30,000 cfs. When flows exceed 30,000 cfs, a sluice gate, located at the fishway exit, will automatically close. This gate will open again when river flows fall below 30,000 cfs.

The State Fishery Agencies gave their informal concurrence with the proposed fish passage facilities. They indicated formal written approval would be forwarded to CDFCO upon receipt of a written request.

Lynn Bond's main concern was the introduction of carp and other rough fish to upstream habitat via spillways. To control the rough fish problem, the Department of Marine Fisheries agreed to trap and sort these fish at the fishway. This will involve considerable man-power and fish handling.

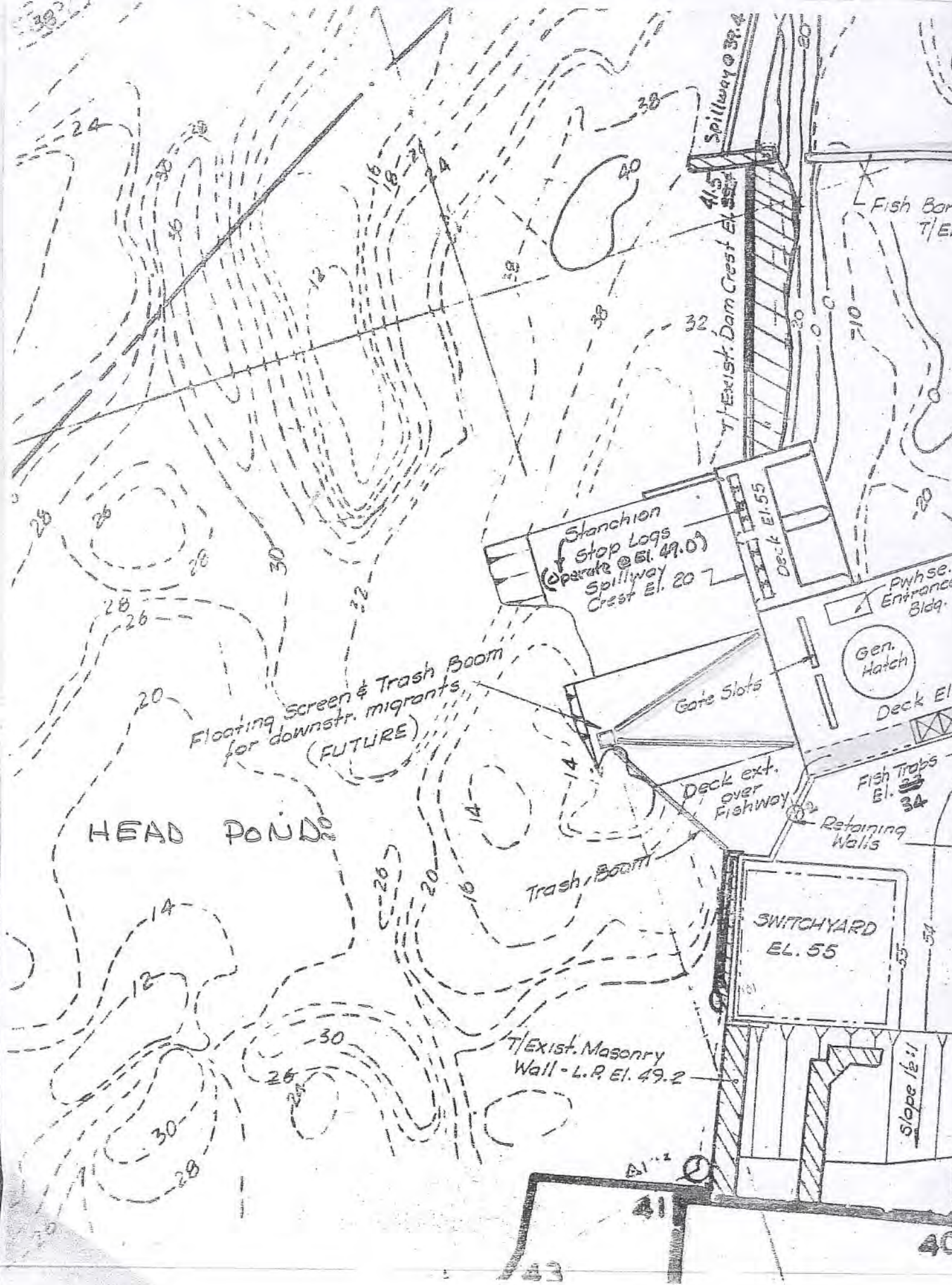
Al Meister indicated that due to the numerous upstream dams, the Ambroseoggin has a very low priority as far as scientific salmon management; however, any salmon trapped at Damchester will be held and utilized for artificial spawning.

CDFCO is planning a public hearing regarding the proposed project, to be held in Damchester, sometime in May 1977.

Attachment  
as specified

DLR/ao/epd

CC: ASB  
 ASB  
 WSO  
 WJ  
 S  
 Charles S. Haley - Concord, N.H.  
 Area Manager  
 Inspection & Trip Reports



HEAD POND

Floating Screen & Trash Boom  
for downstr. migrants  
(FUTURE)

Trash Boom

Stanchion  
Stop Logs  
(operate @ El. 49.0)  
Spillway  
Crest El. 20

Spillway @ 39.4  
41.5  
T/Exist. Dam Crest El. 55.2

Gate Slots

Deck ext.  
over Fishway

SWITCHYARD  
EL. 55

T/Exist. Masonry  
Wall - L.R. El. 49.2

Fish Barr.  
T/El.

Pwhse.  
Entrance  
Bldg.

Gen.  
Hatch

Deck El.

Fish Traps  
El. 34

Retaining  
Wall

Slope 1/2:1

41.2

41

40

12

Bench Rock to El. 16

Normal tailwater = +2.5'  
Tailrace Channel (Tidal)  
Slope 8:1

FLOW →

16  
14  
10  
12

El. -10  
El. -5

El. -5  
Draft Tube  
Inv. El. -30  
Fish Counting Station (El. 30)

PROPOSED FISHWAY

El. 12

El. 32

OIL STORAGE BLDG.

Exist. Retaining Wall

Counting Station Access (Ramp & Stairs)

Exist. El. 46±

Portion of Boiler House to be removed

Exist. Retaining Wall 3

Lewis Indus. Conn.

Exist. Driveway

24

26

27

28

31

29

30

32

38

BOILER HOUSE