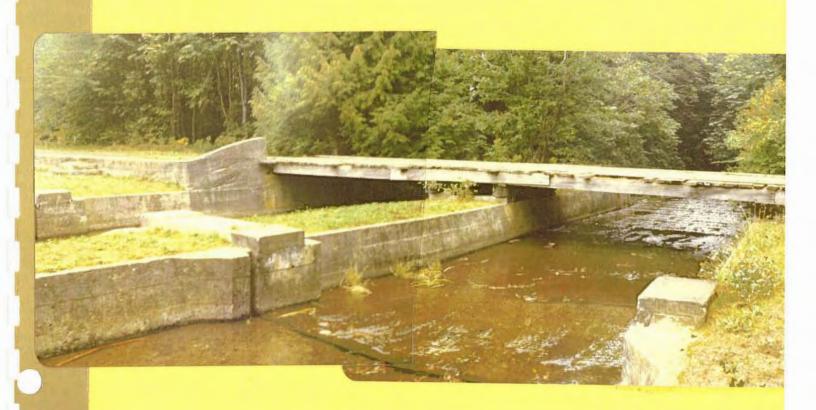


Spillway bridge. Note repairs needed.



Spillway bridge on Dam centreline.



Spillway chute downstream of bridge.



Sluice gates and area where dam crest fill has eroded away.

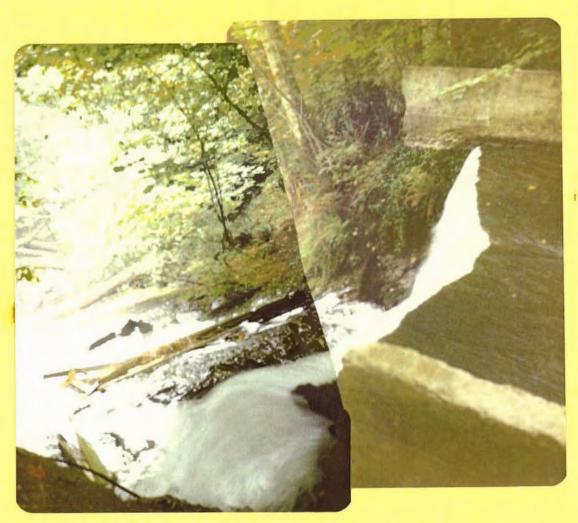




Crest of dam and reservoir. Note heavy growth on downstream face of dam.



Spillway chute and plunge pool from downstream.



End of spillway chute showing concrete erosion water falls on sound rock.



Howard Reservoir # 44
- HAREWOOD DAM #2 Se ptember 1, 1976.



Two level sluice and plunge pool.



Typical overgrowth on downstream face of dam.

Stabilizing berm viewed from left abutment area.





Filter material placed along abutment contact.

Diversion of spillway flows while undertaking spillway repairs.



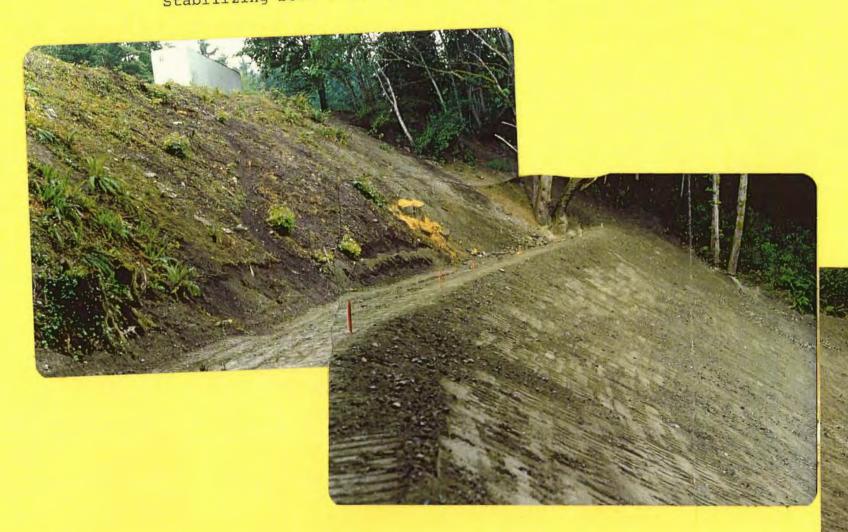


Sandbagging employed to divert water through 2-12" C.M.D. culverts while spillway repairs are undertaken.

# HAREWOOD RESERVOIR

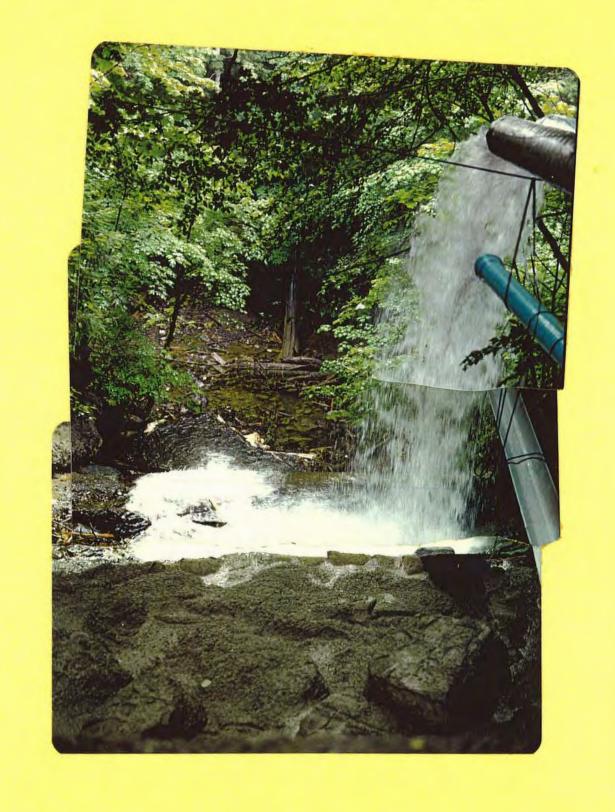
15 July, 1980

Stabilizing berm viewed from the right abutment contact.





Repairs to the end of the spillway chute.

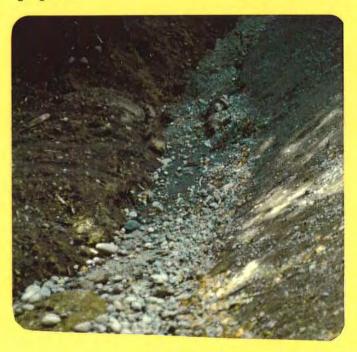


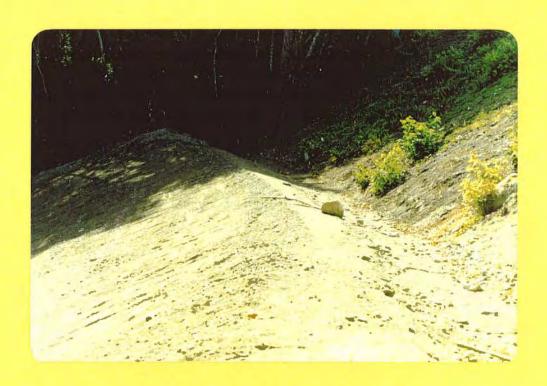
HOWARD #4
August, 1980

Downstream face of recent rehabilatation including a filter blanket and toe drain.



Drain rock toe drain used to pick up embankment seepages.





Top of filter blanket berm from left abutment.

August, 1980

HOWARD #4

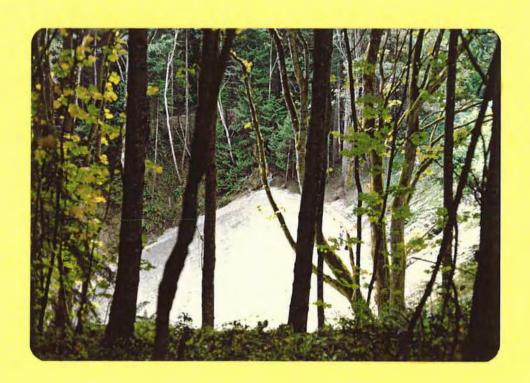
Toe of spillway patched during recent rehabilatation.





Repaired concrete spillway channel. Note right wing wall raised 8".

View of Downstream face from left abutment showing line of alignment points set to monitor cracking filter material.



Closeup of crack in downstream berm.
Note - crack just below break is approximately 1/10' in width.





Cracking in berm observed from dam toe.

## HOWARD DAM #4

August 1980

View of completed berm placed downstream of existing dam.



### HOWARD #4 DAM



Erosion on left abutment.

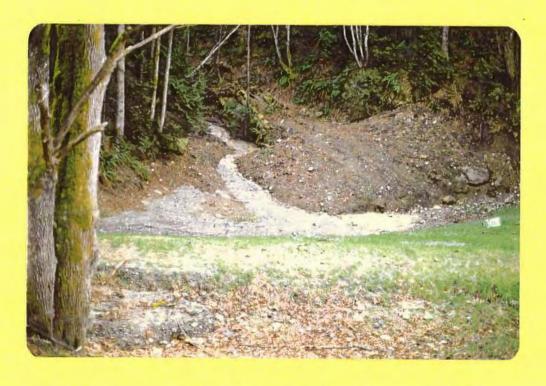
Seep causing sluff in area of left abutment.



#### HOWARD #4 DAM

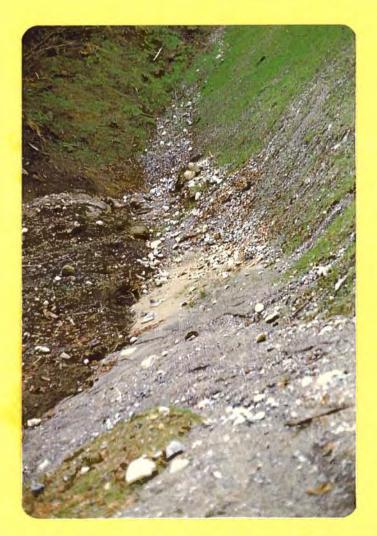


Left abutment washout.



Infilling of toe drain from left abutment sluff.

### HOWARD #4 DAM



Downstream toe.



Run-off pooling on filter blanket.