



R3 PG. 100

State of Vermont

AGENCY OF ENVIRONMENTAL CONSERVATION

Department of Fish and Game
Department of Forests, Parks, and Recreation
Department of Water Resources & Environmental Engineering
Natural Resources Conservation Council

Montpelier, Vermont 05602
Department of Water Resources
and
Environmental Engineering

June 7, 1982

CONTINUATION R3 4/16/1991 PG. 9

Mr. John R. Urie, Selectman
West Glover
Vermont 05875

Re: Shadow Lake Dam - Glover

Dear Mr. Urie:

Thank you for your letter of May 24 to the Water Resources Board inquiring about possible State assistance in repairing the fish screen at Shadow Lake Dam. Mr. Bartlett, the Board's Executive Secretary, asked me to reply to you.

Unfortunately, there is no money available from this Department or the Department of Fish and Game to repair the fish screens. Perhaps you could get some help from the local fish and game club.

On May 21, 1980, while on a routine inspection of dams in the area, I had an opportunity to inspect the Shadow Lake Dam. Overall, the dam appeared to be in fairly good condition considering its age and type of construction. No major problems were observed, however, the following maintenance items were noted:

1. There was a large accumulation of debris (logs, oil drum, row boat, etc.) that had collected at the discharge end of the spillway. Perhaps this has already been removed, however, if it hasn't, it should be cleared to provide for unobstructed flows and to prevent a debris blockage at the bridge downstream in the event of flood conditions.

2. The concrete in the spillway appears to be holding up pretty well but there are a number of cracks that should be sealed and repaired to prevent further damage to the concrete. Some of the trees growing next to the spillway walls are getting to a size where they could cause problems if not removed in the near future.

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John Urie

3. The dam is becoming overgrown with brush and trees, some of which are growing close to or out of the upstream stone wall. The brush and trees on the upstream face, crest and downstream face should be cut, the stumps removed and backfilled with suitable material before they become a serious problem.


Trees in dams can be problems for a number of reasons: (1) their root system can provide seepage paths when they rot out; (2) they can be uprooted by heavy winds and damage the earth fill section or walls; (3) the trunk or root system can cause displacement of the stone and concrete walls; (4) they make it difficult to inspect a dam for signs of seepage, settlement, etc.

If the lake is drawn down in the fall, this would be a good time to take care of the trees as the low water level should not cause a problem while stumps are removed and the holes backfilled. It is important that the stumps not be left to rot because they could eventually cause voids to form which might allow seepage to cause internal erosion in the embankment.

4. The upstream stone wall appears to be in good condition but some of the joints could be repointed. This could be done when the lake is drawn down when it would be possible to inspect more of the wall and the concrete in the gate structure.

I would be happy to discuss the above items with you or other members of the Board of Selectmen if you wish. Please get in touch if you have any questions.

Sincerely,



A. PETER BARRANCO, Jr. P.E.
Dam Safety Engineer

APB:j

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