

State of New Hampshir 'ARTMENT OF ENVIRONMEN' - SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0(n), (603) 271-3503 FAX (603) 271-2867



July 25, 2000

Letter of Deficiency

Mr. Keith Noyes Town of Exeter Public Works Dept. 10 Front Street Exeter, NH 03833

RE: Exeter River Dam, Exeter

Dear Mr. Noyes:

The Department of Environmental Services, Dam Bureau (DES) consistently strives to enhance the safety of dams in New Hampshire through its dam safety program. One of the many instruments that play a part in reaching this goal is our inspection program. DES is forwarding this correspondence to you to advise you that in accordance with RSA 482:12 and Env-Wr 502.02, an inspection of the subject dam was conducted on September 28, 1999. During this visual inspection and/or file review, the following deficiencies were observed:

1. The dam cannot pass the routed 50-year design storm event with one foot of freeboard and no operations.

Upon review of the hydrology and hydraulics for the dam, it was concluded that the dam could only pass 43% of the routed 50-year storm event with one foot of freeboard and no operations. Should the town seek an upgrade to the discharge capacity of the dam, the 100-year storm would be the required design storm event. The dam is capable of passing 38% of the estimated 100-year storm flow. It should be noted that the Route 101C (Clifford Road) bridge crossing located 225 feet upstream might reduce the storm flow over the dam by serving as an upstream control point. The town may want to investigate removing the upper portion of penstock to allow use of the gates. Removal of the concrete weir at the spillway lip would also increase the discharge capacity of the dam. It has been estimated that with operation of the penstock gates and removal of the concrete weir, the dam would be able to pass 96% of the 100-year storm event with one foot of freeboard.

- 2. There is no operation and maintenance plan on file with the DES; and
- 3. There was minor brush within 15 feet of the concrete abutments.

DES believes that the above deficiencies can be corrected by performing the following items by the indicated schedule:

September 1, 2000:

Prepare and submit a written operational procedure plan. The plan should describe the control of impoundment levels, monitoring and maintenance procedures, and identify emergency contact
 personnel;

http://www.state.nh.us

TDD Access: Relay NH 1-800-735-2964

Letter of Deficiency Dam #082.01 July 25, 2000 Pg. 2

2. Remove brush within 15 feet of the concrete abutments; and

December 1, 2000:

3. Provide a plan and schedule to upgrade the discharge capacity of the dam to meet the 100-year design storm flow with one foot of freeboard remaining on the dam.

DES recommends that the Town of Exeter apply for grant money under the FEMA Hazard Mitigation Grant Program. Since this dam has experienced flooding in the past and currently has inadequate discharge capacity, any upgrades to improve discharge capacity may be eligible for funding under this program.

DES is requesting that you complete and submit the attached "Intent to Complete Repairs" form, within 30 days of receipt of this letter, that will provide for correction of the identified deficiencies by the date(s) indicated above. If you believe changes to the items of work or dates are necessary, please make the changes directly on the form and provide a brief explanation. We have enclosed a self addressed stamped envelope for you to return this form.

Our intent in sending you this correspondence is to make you aware of items that DES believes warrant your attention to insure the continued safe operation of your dam. It is our hope that, through the submittal of the attached form and a commitment to keeping a well-maintained dam, you will voluntarily comply with the requested items of work. If we do not receive the intent form or a similarly adequate written reply, we will assume that you are in agreement with our findings and recommendations and DES will carry out follow-up inspections accordingly.

If you have any questions or comments regarding this Letter of Deficiency or would like to be present at future inspections, please contact me at 271-3406, or write to the Water Division at the address listed on the top of the previous page.

Sincerely.

Grace E. Levergood, P.E

Dam Safety Engineer

Attachments Guideline for an O&M plan, DB13

cc: Gretchen Rule

Certified # 1099 3400 0002 9 772 3422

GEL/was/h:/safety/wendy/lod/082-01lod.doc



State of New Hampshir ARTMENT OF ENVIRONMEN'A SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095 (603) 271-3503 FAX (603) 271-2867



Intent to Complete Repairs
DAM #082.01
DAM Exeter River Dam

Department of Environmental Services State Dam Safety Program Dam Bureau P.O. Box 2008 64 N. Main Street Concord, NH 03302-2008

RE:

Letter of Deficiency:

Issued on July 25, 2000

Dear Dam Safety Program:

In response to the above referenced Letter of Deficiency (LOD), I concur with the Department of Environmental Service's recommendations, and specifically agree to complete the following items by the indicated schedule.

DATE: September 1, 2000

- 1. Prepare and submit a written operational procedure plan. The plan should describe the control of impoundment levels, monitoring and maintenance procedures, and identify emergency contact personnel;
- 1. Remove brush within 15 feet of the concrete abutments; and

DATE: December 1, 2000

3. Provide a plan and schedule to upgrade the discharge capacity of the dam to meet the 100-year design storm flow with one foot of freeboard remaining on the dam. If this plan includes the installation of flashboards designed to fail, DES will require approval of the flashpin design.

In lieu of the above, you may propose adjustments to the content or schedule associated with the requested repairs/work. (please state reasons for proposal and use reverse side if more space is needed).

Signature of Owner:	
	(print name)
Date:	

Engineer: GEL

Section of the second section of the second section second section sec		ervice MAIL RECI nly; No Insurance C	EIPT cov Provided)
	Article Sent To:		
#	WHE	n am a	ET .
7	Postage	\$	CAM
477	Certified Fee		Postmark
디	Return Receipt Fee (Endorsement Required)		Here
	Restricted Delivery Fee (Endorsement Required)		13ACIL-
001	Total Postage & Fees	\$	PUT CONTERP
H	Name (Blease Print Clear	y) (to be completed by ma	iler)
7099	Street, Apt. No. or P9 8	EXETER O	0383
	PS Form 3800 July 1999		See Reverse for Instructions

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired. Print your name and address on the reverse so that we can return the card to you. Attach this card to the back of the mailpiece, or on the front if space permits. 1 Article Addressed to:	A Received by (Please Print Clearly) B. Date of Delivery 2 100 Agent Addressee Addressee Yes If YES, enter delivery address below: No
PUBLIC WANG DEAT L 10 FRONT ST 03833 EXETER NH 03833	3. Service Type
2. Article Number (Copy from service label) PS Form 3811, July 1999 Domestic Re	772 3422