



TOWN OF GRAFTON

Established in 1807

P.O. BOX G, Grafton, New York 12082

(518) 279-3565 (518) 279- 3685 (Fax)

Email: supervisorgundrum@albany.twcabc.com

www.townofgraftonny.org

Alane Ball Chinian

Regional Director

NYS Office of Parks, Recreation and Historic Preservation

19 Roosevelt Drive

Saratoga Springs, NY 12866

Feb. 9, 2024

Dear Alane Ball Chinian:

I am in receipt of copies of four letters from John Smith of the Dam Safety Section of the NYS Department of Environmental Conservation to you where he discusses the conditions of four dams on NYS Park property in the Town of Grafton. Specifically, they are dams on Long Pond, Second Pond, Mill Pond and most importantly, the Martin Dunham Reservoir. The letters indicate that there has not been an annual certification completed since 2022.

Of primary concern to the Town of Grafton is the Martin Dunham Reservoir, where a Jan. 5 inspection conducted by Mr. Smith gives the dam an **Unsound- Deficiency Recognized** condition rating, determined as far back as 2018. Mr. Smith indicates in his letter to you that "the dam deficiencies are of such a nature that the safety of the dam cannot be assured." Mr. Smith further states "the dam poses a potential substantial threat to the public health or the environment."

While Mr. Smith does not indicate a dam failure is imminent, the fact it is considered unsafe is of great concern to my town. Any failure of this dam would have devastating consequences for my town and perhaps some neighboring municipalities as well.

I am also distressed that your agency has taken little or no action to mitigate this identified threat. As Supervisor, it is my responsibility to safeguard the residents of Grafton and their property. I therefore request that you or a representative of your agency answer Mr. Smith within the time frame he has indicated and that I be cc'd on this answer.

I also request that your agency develop a plan to mitigate the concerns about the Martin Dunham Reservoir dam as soon as possible and communicate those mitigation plans to the Town of Grafton.

In service to the Town of Grafton, I remain.

Sincerely

Ingrid Gundrum



Supervisor

Town of Grafton

Cc w/ enc: Senator Jake Ashby

Assemblyman Scott Bendett

Steve McLaughlin, Rensselaer County Executive

Jay Wilson, Director of Emergency Services, Rensselaer County

Phil Herrington, Supervisor, Town of Brunswick

John Smith, P.E. NYS Department of Environmental Conservation,

Dam Safety Section

Bruce Patire, Rensselaer County Legislature, District 5

Jeff Wysocki, Rensselaer County Legislature, District 5

Grafton Town Board members

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Water, Bureau of Flood Protection and Dam Safety
625 Broadway, Albany, New York 12233-3504
P: (518) 402-8185 | F: (518) 402-9029
www.dec.ny.gov

February 1, 2024

Alane Ball Chinian
Regional Director
NYS Office of Parks, Recreation and Historic Preservation
19 Roosevelt Drive
Saratoga Springs, NY 12866

Re: Martin Dunham Reservoir Dam, DEC ID# 243-1430
Grafton (T), Rensselaer County
C Hazard – High Hazard Dam
Condition Rating: “Unsound – Deficiency Recognized”

Dear Alane Ball Chinian:

Ayotunde Adebajo and I conducted a routine inspection of the above referenced dam, a High Hazard Dam, on January 5, 2024 as part of the Department of Environmental Conservation’s (Department) ongoing Dam Safety program. I am writing to you as it is my understanding that you represent the owner of this dam. A copy of my Visual Observations Report is enclosed.

Inspection

The left/right nomenclature used in this letter and in the enclosed Visual Observation Report is based on looking downstream.

Regulations

While State agencies are exempt from these regulations, the environmental audit process in Environmental Conservation Law (ECL) 3-0311 requires compliance with the substantive requirements of the regulations and good engineering practice. The following summarizes this dam's current status for those sections of the regulations that had or have specific deadlines.

<u>Citation</u>	<u>Requirement</u>	<u>Status</u>
673.6	Implement an Inspection & Maintenance Plan (I&M Plan). Plan does not have to be submitted to the Department.	I&M Plan has not been requested.
673.7	Develop and distribute to the local emergency responders an Emergency Action Plan (EAP).	EAP, last reviewed in 2022 in accordance

	EAP should be updated on an annual basis. To be considered "final" a completed Promulgation and Concurrence (P&C) form must also be submitted indicating that the EAP has been distributed to and coordinated with local emergency responders.	with the 2021 Annual Certification, is still lacking a P&C Form.
673.8	Submit an Annual Certification to the Department January 31 of each year (certification is for the previous year).	No Annual Certification has been received since 2022. Please submit an Annual Certification.
673.13	Complete and submit to the Department an Engineering Assessment (EA) by August 19, 2012. EA must be performed by a New York State professional Engineer. The EA must be updated every 10 years after the initial submittal.	The Final Design Report received February 7, 2013 serves as the first EA. Second EA was due on or before February 7, 2023. Please submit an EA.

Condition Rating

The Department assigned a Condition Rating to the dam of ***"Unsound – Deficiency Recognized"*** via my February 22, 2018 letter. The Condition Rating was due to the dam inadequate spillway capacity and lower than required factors of safety for stability in several loading cases. The Condition Rating is still valid as the dam has not been rehabilitated yet; the EAP is not complete; and the dam needs maintenance. The Condition Rating means that the dam deficiencies are of such a nature that the safety of the dam cannot not be assured.

In the State Agency Environmental Audit, please place an "N2" in Status Box 53A on the Compliance Status Form. This means that the dam poses a potential substantial threat to the public health or the environment. Reservoir lowering should be considered as an interim safety measure.

Your letter dated March 1, 2022 states that NYS OPRHP applied for grant funding from FEMA to conduct a feasibility study for decommissioning the Martin Dunham Reservoir Dam; and that a response would be received in June 2022. **Within 30 days of the receipt of this letter, please provide an update on this.**

Please keep in mind that any repair or construction related to the dam should be reviewed and approved by the Department well before that work is started. Check with the Regional Permit Administrator in the Schenectady office (518-357-2069) to coordinate that review.

If you have any questions, please feel free to contact me by phone at 518-408-0338, or by e-mail at john.smith@dec.ny.gov.

Sincerely,



John Smith, P.E.
Professional Engineer 1 (Environmental)
Dam Safety Section

ec w/ encl: Jennifer Ross, P.E., Region 4, Water, Schenectady Office
Don Canestrari, P.E., Dam Safety Section Chief, Central Office
Ayotunde Adebajo, E.I.T., Dam Safety Central Office
Jay Wilson, Director of Emergency Services, Rensselaer County,
jwilson@rensco.com
Ingrid Gundrum, Supervisor, Town of Grafton,
supervisorgundrum@albany.twcbc.com

Alane Ball Chinian
Regional Director
NYS Office of Parks, Recreation and Historic Preservation
19 Roosevelt Drive
Saratoga Springs, NY 12866
alane.ballchinian@parks.ny.gov

**New York State Department of Environmental Conservation
Bureau of Flood Protection and Dam Safety**



Visual Observations

DAM NAME Martin Dunham Reservoir Dam
STATE ID 243-1430 *SECTION* C *HAZARD CODE* C
COUNTY Rensselaer *INSPECTION DATE* 1/5/2024
NEAREST DS CITY/TOWN Quackenkill *INSPECTOR(S)* JZS/ATA
OWNER'S NAME NYS PARKS, RECREATION & HISTORIC PRESERVATION
DOWNSTREAM HAZARD High *TOWNSHIP* Town of Grafton

WATER LEVEL BEHIND DAM 1/4 inch over the service spillway crest, by eye.

DRAIN OPERATION Unknown

DEFICIENCIES

- | | | |
|---|---|---|
| <input checked="" type="checkbox"/> 1) Seepage | <input type="checkbox"/> 4) Maintenance | <input checked="" type="checkbox"/> 7) Cracking |
| <input type="checkbox"/> 2) Slope Stability | <input type="checkbox"/> 5) Surficial Deterioration | <input type="checkbox"/> 8) Movement/Misalignment |
| <input checked="" type="checkbox"/> 3) Undesirable Growth | <input checked="" type="checkbox"/> 6) Voids | <input type="checkbox"/> 9) Data |

Upstream:

- Vegetative growth along the upstream slope.
- Trees stumps around the left upstream slope.

Dam Crest:

- The dam crest is slightly uneven.

Downstream:

- Phragmites on the right downstream toe. Sogginess on the right toe. Well mowed.

Service Spillway:

- Deterioration and cracking in the concrete walls. Large void underneath the lower step with seepage emerging from a section.
- Right embankment could not be accessed for inspection. Toe drain headwall is tilting into the downstream direction.

Low Level Valve:

- Valve House: Deterioration and spalling in the concrete.
- Left low level drain (in dike): The left conduit is cracked at its end. Ponded water downstream. The flap valve for the right conduit is partially open and submerged in the water. Deterioration, spalling and vegetative growth in the concrete. Orange floc downstream on the right side.
- Right(auxiliary) low level drain: Spalling and deterioration in the concrete. The flap valve appears to be closed with orange floc around and seepage.



Photo 1 Dam ID# 243-1430 Martin Dunham Reservoir Dam 01/05/2024
Dam crest



Photo 2 Dam ID# 243-1430 Martin Dunham Reservoir Dam 01/05/2024
Valve house



Photo 3 Dam ID# 243-1430 Martin Dunham Reservoir Dam 01/05/2024
Left auxiliary spillway closure embankment



Photo 4 Dam ID# 243-1430 Martin Dunham Reservoir Dam 01/05/2024
Right (auxiliary) low level drain and toe drain



**Photo 5 Dam ID# 243-1430 Martin Dunham Reservoir Dam 01/05/2024
Spillway**



**Photo 6 Dam ID# 243-1430 Martin Dunham Reservoir Dam 01/05/2024
Left spillway wall**



Photo 7 Dam ID# 243-1430 Martin Dunham Reservoir Dam 01/05/2024
Right spillway wall



Photo 8 Dam ID# 243-1430 Martin Dunham Reservoir Dam 01/05/2024
Left auxiliary spillway closure embankment



Photo 9 Dam ID# 243-1430 Martin Dunham Reservoir Dam 01/05/2024
Downstream face of the dam



Photo 10 Dam ID# 243-1430 Martin Dunham Reservoir Dam 01/05/2024
Left downstream face of the dam

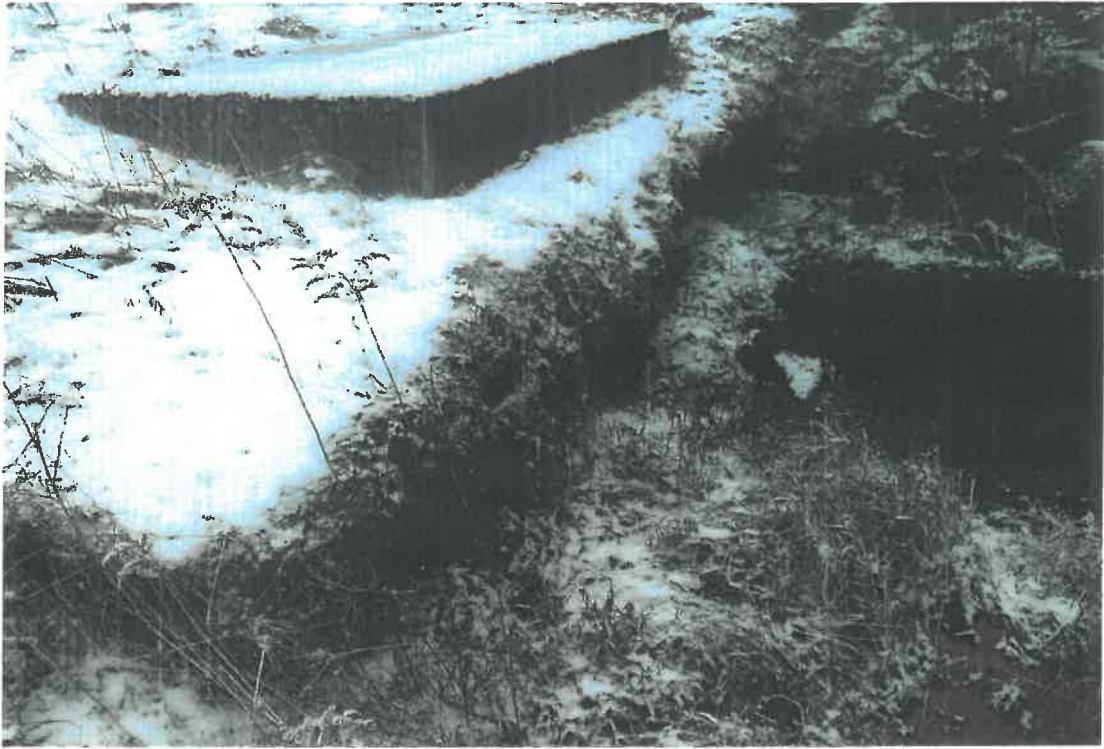


Photo 11 Dam ID# 243-1430 Martin Dunham Reservoir Dam 01/05/2024
Left low level drain

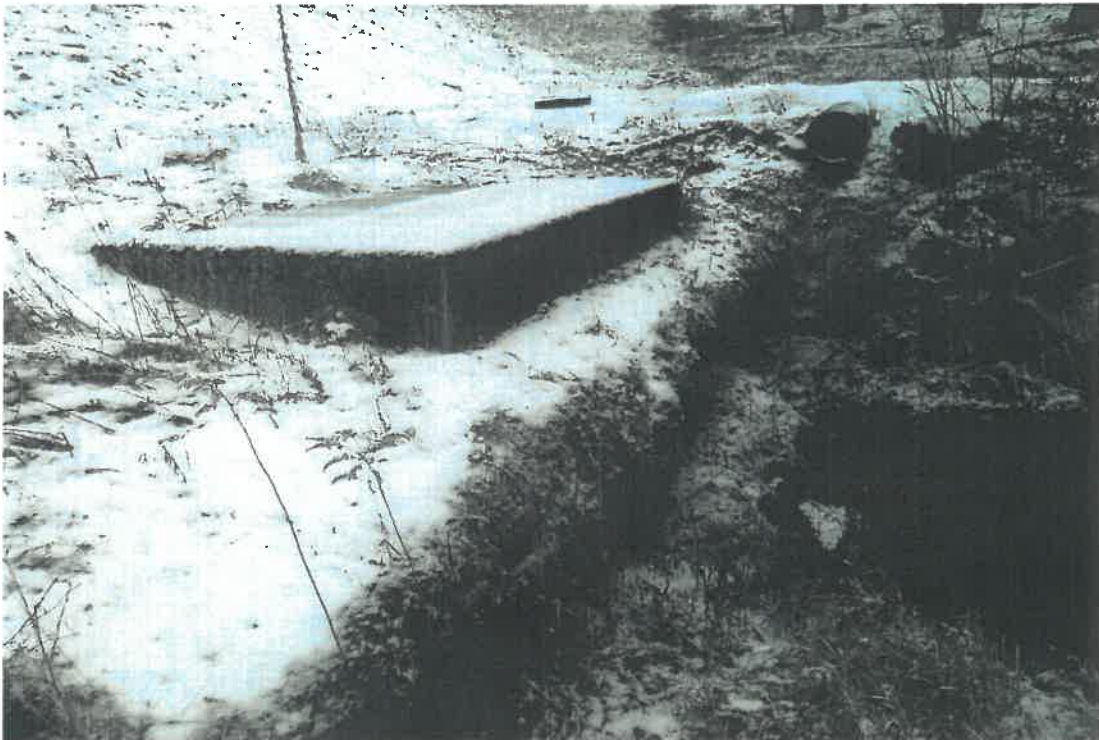


Photo 12 Dam ID# 243-1430 Martin Dunham Reservoir Dam 01/05/2024
Left low level drain



Photo 13 Dam ID# 243-1430 Martin Dunham Reservoir Dam 01/05/2024
Right downstream face of the dam



Photo 14 Dam ID# 243-1430 Martin Dunham Reservoir Dam 01/05/2024
Left downstream face of the dam