

# NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Division of Water, Bureau of Flood Protection and Dam Safety  
625 Broadway, Albany, New York 12233-3504  
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## **Electronic Transmittal Only**

January 14, 2022

Honorable David McFadden, Mayor  
Village of Tuxedo Park  
80 Lorillard Rd., PO Box 31  
Tuxedo Park, New York 10987

Re: Lower Wee-Wah Lake Dam  
DEC Dam ID#: 196-0361, Class C – High Hazard  
Village of Tuxedo Park, Orange County  
**Condition Rating: No Deficiencies Noted**

Dear Mayor McFadden:

I conducted a routine visual inspection, along with Mr. Joshua Johnson and Mr. Berhanu Gonfa, of the Lower Wee-Wah Dam on October 14, 2021 as part of the Department of Environmental Conservation's (Department) ongoing Dam Safety program. I am writing to you because it is my understanding that, as the Chief Executive Official for the Village, you represent the owner of this structure. A copy of the visual observations generated from the inspection is enclosed. The left/right nomenclature used in this letter and in the enclosed Visual Observation Report is based on looking downstream from the middle of the dam.

## **Inspection**

The inspection revealed that the dam is generally in good condition however it was noted during our inspection that grass and weeds are growing from between the stones along the upstream slope and also the downstream slopes are becoming overgrown with taller grass and weeds. The Village should stay on top of maintaining/mowing the downstream slopes to not allow taller woody vegetation to re-establish on the slope. It was also observed during the inspection that the toe drain v-notch weir box is beginning to fill with sediment. This should be cleaned out periodically as part of the routine maintenance on the dam. Build up behind the v-notch will not give you an accurate representation of the flow from the drains.

## **Regulations**

The Lower Wee-Wah Lake Dam has a hazard classification of "Small, Class C - High Hazard." The following table summarizes the current status of compliance for this dam for those sections of the regulations that have specific deadlines for compliance.

*Compliance Status Table*

<u>Citation</u>	<u>Requirement</u>	<u>Status</u>
673.6	Develop and implement an Inspection & Maintenance (I&M) Plan.	A draft I&M Plan date July 2018 is on file.
673.7	Develop and submit to the Department an Emergency Action Plan (EAP), and review and update annually thereafter.	The EAP on file is for all three dams, was last revised 2/1/2021.  <b><u>See Note Below</u></b>
673.8	Submit an Annual Certification (AC) to the Department by January 31 <sup>st</sup> of each year (covering the previous calendar year).	The AC for 2020 was received.
673.13	Develop and submit an Engineering Assessment (EA), with a full EA every 10 years thereafter.	The Engineering Design Report, last revised 2/14/2017, serves as the latest EA.

**EAP Comments**

As part of the next revision and review of the EAP, please update the NYSDEC Dam Safety contact information on the Notification Flow Charts to:

Dam Safety Dispatch (24 hour), (518) 486-4326 (486-4DAM)  
 Dam Safety (business hours), (518) 402-8185  
 Dam Safety (business hours backup), (518) 402-8130

Please keep in mind that any other repair or construction activities related to the dam may require permits from Department. Well before beginning work on the dam, please check with the Regional Permit Administrator at the Department's Region 3 – New Paltz office at (845) 256-3054 to see if any permits are required.

If you have any questions regarding the above or the Dam Safety program in general, please contact me at 518-402-8252 or by e-mail at [Warren.Shaw@dec.ny.gov](mailto:Warren.Shaw@dec.ny.gov).

Sincerely,



Warren Shaw, P.E.  
 Professional Engineer 1 (Environmental)  
 Dam Safety Section

ec w/ enc: David McFadden, Mayor, Tuxedo Park, [dmcfadden@tuxedopark-ny.gov](mailto:dmcfadden@tuxedopark-ny.gov)  
Kenneth English, Supervisor, Town of Tuxedo, [townsupervisor@tuxedogov.org](mailto:townsupervisor@tuxedogov.org)  
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Alon Dominitz, Section Chief – Dam Safety  
Natalie Browne, NYSDEC Region 3 Water  
Doug Upright, NYSDEC Region 3 Water  
Berhanu Gonfa, P.E., DEC Region 3, Dam Safety Representative

ec w/ enc: Project file  
Daybook



**Visual Observations**

<i>DAM NAME</i>	Lower Wee-Wah Lake Dam		
<i>STATE ID</i>	196-0361	<i>SECTION</i>	A
		<i>HAZARD CODE</i>	C
<i>COUNTY</i>	Orange	<i>INSPECTION DATE</i>	10/14/2021
<i>NEAREST DS CITY/TOWN</i>	Tuxedo Park	<i>INSPECTOR(S)</i>	WTS/JWJ/BXG
<i>OWNER'S NAME</i>	VILLAGE OF TUXEDO PARK		
<i>DOWNSTREAM HAZARD</i>	High	<i>TOWNSHIP</i>	Village of Tuxedo Park

*WATER LEVEL BEHIND DAM*                      1-2 inch flow over primary spillway weir (by eye)  
(approx. pool EL. 492.1 +/-)

*DRAIN OPERATION*                              not observed

*DEFICIENCIES*

- |                                     |                       |                          |                            |                          |                          |
|-------------------------------------|-----------------------|--------------------------|----------------------------|--------------------------|--------------------------|
| <input type="checkbox"/>            | 1) Seepage            | <input type="checkbox"/> | 4) Maintenance             | <input 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 type="checkbox"/> | 6) Voids                   | <input type="checkbox"/> | 9) Data                  |

General:

–Accompanied by Natalie Browne and Doug Upright from Region 3 Water during the inspection

Upstream:

–Tall grass and weeds growing from between the stones on both the left and right upstream slopes

Dam Crest:

–Dam crest is access road. Road and upstream parapet wall appear OK

Downstream:

–Both left and right downstream slopes are overgrown with tall grass and weeds. Grass obscured slopes so that a visual inspection could not be completed  
–V-notch weir box for right side downstream toe drain reading was approx. 2-inches (gauge hard to read from staining).

Service Spillway:

–Boards in place. No noted deficiencies

Auxiliary Spillway:

–Several locations of seepage through the base of the spillway face and on the spillway floor with orange staining.

Low Level Valve:

–Valve stem and operator on left side out spillway channel. Appears operational.



**Photo 1 Dam ID# 196-0361 Lower Wee-wah Lake Dam 10/14/2021**  
Left upstream slope  
View looking right from left end of dam



**Photo 2 Dam ID# 196-0361 Lower Wee-wah Lake Dam 10/14/2021**  
Right upstream slope  
View looking right from spillway channel



**Photo 3 Dam ID# 196-0361 Lower Wee-wah Lake Dam 10/14/2021**  
Dam crest  
View looking right from left side of dam



**Photo 4 Dam ID# 196-0361 Lower Wee-wah Lake Dam 10/14/2021**  
Dam crest  
View looking left from right end of dam



**Photo 5 Dam ID# 196-0361 Lower Wee-wah Lake Dam 10/14/2021**  
Right downstream slope  
View looking downstream from crest



**Photo 6 Dam ID# 196-0361 Lower Wee-wah Lake Dam 10/14/2021**  
Left downstream slope  
View looking left from right side of spillway



**Photo 7 Dam ID# 196-0361 Lower Wee-wah Lake Dam 10/14/2021**  
Weir box for right downstream toe drain



**Photo 8 Dam ID# 196-0361 Lower Wee-wah Lake Dam 10/14/2021**  
Inside weir box for right downstream toe drain  
Gauge reads 2-inches +/-





**Photo 9 Dam ID# 196-0361 Lower Wee-wah Lake Dam 10/14/2021**  
Primary spillway inlet with stop logs  
View looking upstream from left side



**Photo 10 Dam ID# 196-0361 Lower Wee-wah Lake Dam 10/14/2021**  
Spillway channel  
View looking downstream from spillway inlet



**Photo 11 Dam ID# 196-0361 Lower Wee-wah Lake Dam 10/14/2021**  
Secondary spillway on right side of spillway channel  
View looking right from left side



**Photo 12 Dam ID# 196-0361 Lower Wee-wah Lake Dam 10/14/2021**  
Spillway outlet channel  
View looking upstream from left side of channel



**Photo 13 Dam ID# 196-0361 Lower Wee-wah Lake Dam 10/14/2021**  
Spillway outlets  
View looking upstream from downstream right side



**Photo 14 Dam ID# 196-0361 Lower Wee-wah Lake Dam 10/14/2021**  
Downstream spillway outlets  
View looking downstream from dam crest



**Photo 15 Dam ID# 196-0361 Lower Wee-wah Lake Dam 10/14/2021**  
Auxiliary spillway  
View looking right from the left side



**Photo 16 Dam ID# 196-0361 Lower Wee-wah Lake Dam 10/14/2021**  
Downstream face of auxiliary spillway  
View looking upstream to the right from dam crest  
Note: seepage through spillway floor