APPENDIX

INSPECTION REPORT FORM
WESTCHESTER COUNTY DEPARTMENT OF PARKS, RECREATION AND CONSERVATION (DPRC)
PINE LAKE DAM AND CAUSEWAY

INSPECTION COMPLETED BY: JF

DATE OF INSPECTION: **3/12/24**

DAM NAME:	**Silver Lake Dam**
COUNTY:	Westchester
NYSDEC #	214-0262
OWNER:	Westchester County DPRC
MAINTENANCE:	Westchester County DPRC
WATER LEVEL RELATIVE TO SPILLWAY AT TIME INSPECTION:	Level-normal to high Spillway steady rapid flow recent rainfall
DEFINITIONS:	*Monitor*: No action necessary yet; continue to observe condition. *Investigate*: Needs attention; notify DRPC Director of Maintenance. *Repair*: Needs to be repaired; notify DRPC Director of Maintenance.

WEATHER AND ACCESS ON DAY OF INSPECTION
Sunny/57

EQUIPMENT CHECKLIST
Inspector should have access to the following equipment to make detailed and meaningful observations:

- ☐ **Maintenance Report Form.**
- ☐ **Clipboard and pencil.**
- ☐ **Camera** – Can be used to document observed conditions and compare past and present conditions.
- ☐ **Hand Level** – May be needed to verify slopes.
- ☐ **Measuring Tape** – Provides accurate measurements so that meaningful comparisons can be made of movements.
- ☐ **Shovel** – Useful in removing debris and investigating wet areas, care must be taken not to cause unnecessary dam maintenance **EMBANKMENT**

AREA INSPECTED	ITEM NO.	CONDITION	OBSERVATIONS	MONITOR	INVESTIGATE	REPAIR
Crest	1	Surface cracking	some	x		
	2	Animal burrows	None seen	x		
	3	Low area (settlement)	none	x		
	4	Horizontal alignment	ok	x		
	5	Ruts and/or puddles	none	x		
	6	Vegetation condition	some	x		
	7	Debris	branches	x		
	8	Erosion/riprap placement	ok	x		
Upstream slope	9	Slide, slough, scarp	ok	x		
	10	Slope protection	ok	x		
	11	Sinkhole, animal burrow	None seen	x		
	12	Embankment-abutment contact	ok	x		
	13	Erosion/riprap placement	ok	x		
	14	Vegetation condition	some	x		
Downstream slope	15	Wet areas (no flow)	none	x		
	16	Seepage (flow present)	some	x		
	17	Slide, slough, scarp	ok	x		
	18	Embankment-abutment contact	ok	x		
	19	Cave-in, animal burrow	none	x		
	20	Erosion/rip-rap placement	ok	x		
	21	Unusual movement	none	x		
	22	Vegetation control	ok	x		

SPILLWAY

AREA INSPECTED	ITEM NO.	CONDITION	OBSERVATIONS	MONITOR	INVESTIGATE	REPAIR
Concrete spillway	23	Sidewalls	Some cracking/weathered	x		
	24	Channel floor	ok	x		
	25	Unusual movement	none	x		

	26	Approach area	ok	×		
	27	Spillway obstructions	debris	×		
	28	Discharge channel	ok	×		

RESERVOIR AREA AND MISCELLANEOUS

AREA INSPECTED	ITEM NO.	CONDITION	OBSERVATIONS	MONITOR	INVESTIGATE	REPAIR
Reservoir area	29	Whirlpooling /vortexing in reservoir	none	×		
	30	Sedimentation	some	×		
	31	Slope stability	ok	×		
	32	Sinkholes/slides/movement	none	×		
	33	Unwanted growth (terrestrial or aquatic)	some	×		
Downstream area	34	Abutment leakage	some	×		
	35	Foundation seepage	some	×		
	36	Slide, slough, scarp	ok	×		
	37	Boils	None seen	×		
	38	Wet areas/seepage (Foundation/abutments)(1)	some	×		
	39	Downstream waterway(2)	debris/ limbs	×		
Causeway	40	Erosion/misalignment	ok	×		
	41	Upstream face	ok	×		
	42	Downstream face	ok	×		
Causeway (continued)	43	Water level(3)	ok	×		
	44	Surface condition	ok	×		
	45	Vegetative condition	ok	×		
Miscellaneous	46	Signs of vandalism/ trespassing	none	×		
	47	Left spillway training wall(4)	____ inches out of alignment	×		

(1) Note any cloudy or colored seepage. Monitor left abutment for unusually wet conditions or presence of flow.
(2) Check that downstream obstructions or vegetation will not cause a backwater effect, causing excess pooling of water at the downstream face of the dam.
(3) Check that the upstream and downstream water levels are the same; make note if causeway is overtopped.

(4) The masonry section downstream of the left concrete training wall is becoming misaligned. Measure how far out of alignment it is at the maximum section.

CONCRETE CONDITION

Fill out the following table for specific areas of concern in the concrete condition. This will help early detection of progressive deterioration. It is not necessary to track every crack and surface defect in the structure; only those that may compromise the integrity of the dam, are believed to be progressively deteriorating, or are otherwise of concern.

CONCERN	LOCATION	ORIENTATION	LENGTH	WIDTH	DEPTH
	Top side walls				
Spalling	Top side walls				

SUMMARY OF MAINTENANCE AND REPAIR ACTIVITIES PERFORMED SINCE LAST INSPECTION

(List date, maintenance activity performed, and whether it has been successful to date. Areas should receive enhanced monitoring for at least six months following completion of repair activities.)

ADDITIONAL COMMENTS (Refer to Item No. if applicable)
(Include detailed observations for items requiring enhanced observation, such as areas of recent construction)

Inspection also taken with Trimble device

PHOTOS

(Annually photograph conditions at the dam. Take additional photos as necessary to highlight specific concerns. Attach photos to the corresponding inspection report.

INSPECTION REPORT FORM

TIBBETTS LAKE DAM #1

INSPECTION COMPLETED BY: **JF** DATE OF INSPECTION: **3/12/24**

DAM NAME ..... Tibbetts Lake Dam #1

COUNTY..... Westchester

NYSDEC I.D. NUMBER ..... N/A

OWNER/OPERATOR ..... Westchester County, NY

WATER LEVEL RELATIVE TO SPILLWAY AT TIME OF INSPECTION… Normal to high /steady rapid flow recent rainfall

WEATHER AND ACCESS ON DAY OF INSPECTION— sunny/44

The inspector should have access to the following equipment to make detailed and meaningful observations:

- Blank Inspection Report Form.
- Clipboard and pencil.
- Camera – Can be used to document observed conditions and compare past and present conditions.
- Hand Level - May be needed to verify slopes.
- Measuring Tape - Provides accurate measurements so that meaningful comparisons can be made of movements.
- Shovel – Useful in removing debris and investigating wet areas, care must be taken not to cause unnecessary damage.
- Inspector's copy of Tibbetts Lake Dam #1 I&M Plan.

INSPECTION GUIDELINES

To maximize the effectiveness of routine dam maintenance inspections, all portions of the dam and its appurtenant works must be observed. It is recommended that a methodical inspection procedure be followed to ensure that nothing is overlooked. A suggested inspection would cons of the following steps:

Walk along the entire crest of the dam, looking for deficiencies including but not limited to, erosion, settlement, and movement or misalignment. Make note of the vegetative condition and look for signs of seepage.

1. Walk along the entire length of both abutment contacts looking for deficiencies including but not limited to, movement of the abutment or embankment, animal activity, and seepage or excessive wetness. Observe both the embankment and the dam.

2. Walk along the downstream toe of the dam, looking for deficiencies including, but not limited to, those noted in #2 above. Look for misaligned or missing stones in the masonry face.

3. Inspect the spillway for obstructions and evidence of deterioration. Remove logs and debris from the spillway and downstream channel.

Observed conditions should be recorded on the Inspection Report Form.

DEFINITIONS

Monitor: Observe condition for continued degradation.

Investigate: Cause of observed conditions, such as areas of new seepage, must be identified.

Repair: Needs to be repaired.

EMBANKMENT

Area Inspected	Item No.	Condition	Observations	Monitor	Investigate	Repair
Crest	1	Surface cracking	some	×		
	2	Low area (settlement)	some	×		
	3	Horizontal alignment	ok	×		
	4	Vegetation condition	ok	×		
	5	Debris	some	×		
	6	Erosion	some	×		
Upstream face	7	Vegetative condition	ok	×		
	8	Erosion/movement	None seen	×		
	9	Animal activity	None seen	×		
Downstream face	10	Stonework condition	weathered	×		
	11	Vegetative condition	ok	×		
	12	Erosion/movement	walkway	×		
	13	Animal activity	None seen	×		

SPILLWAY

Area Inspected	Item No.	Condition	Observations	Monitor	Investigate	Repair
Spillway	14	Sidewalls	weathered	×		
	15	Channel floor	ok	×		
	16	Unusual movement	none	×		
	17	Approach area	ok	×		
	18	Spillway obstructions	some	×		
	19	Discharge channel	ok	×		

RESERVOIR AREA AND MISCELLANEOUS

Area Inspected	Item No.	Condition	Observations	Monitor	Investigate	Repair
Reservoir area	20	Whirl pooling/overtaxing in reservoir	none	×		
	21	Sedimentation	some	×		
	22	Sinkholes/slides/movement along reservoir banks	None seen	×		
	23	Unwanted growth (terrestrial or aquatic)	some	×		
Downstream area	24	Abutment seepage/wet areas	some	×		
	25	Foundation seepage/wet areas	some	×		
	26	Boils	None seen	×		

SUMMARY OF MAINTENANCE AND REPAIR ACTIVITIES PERFORMED SINCE LAST INSPECTION

(List date, maintenance activity performed, and whether it has been successful to date. Areas should receive enhanced monitoring for at least six months following completion of repair activities.)

Signs of stress on asphalt walkway see photo below

ADDITIONAL COMMENTS (Refer to Item No. if applicable)
(Include detailed observations for items requiring enhanced observation, such as areas of recent construction)

Inspection also taken with Trimble device

PHOTOS
(Photograph conditions at the dam as necessary to highlight specific concerns and attach photos to the inspection report. Photograph the overall site annually for the permanent record.)

INSPECTION REPORT FORM

PELHAM LAKE DAM

INSPECTION COMPLETED BY: **JF** DATE OF INSPECTION: **3/12/24**

DAM NAME ..... Pelham Lake Dam

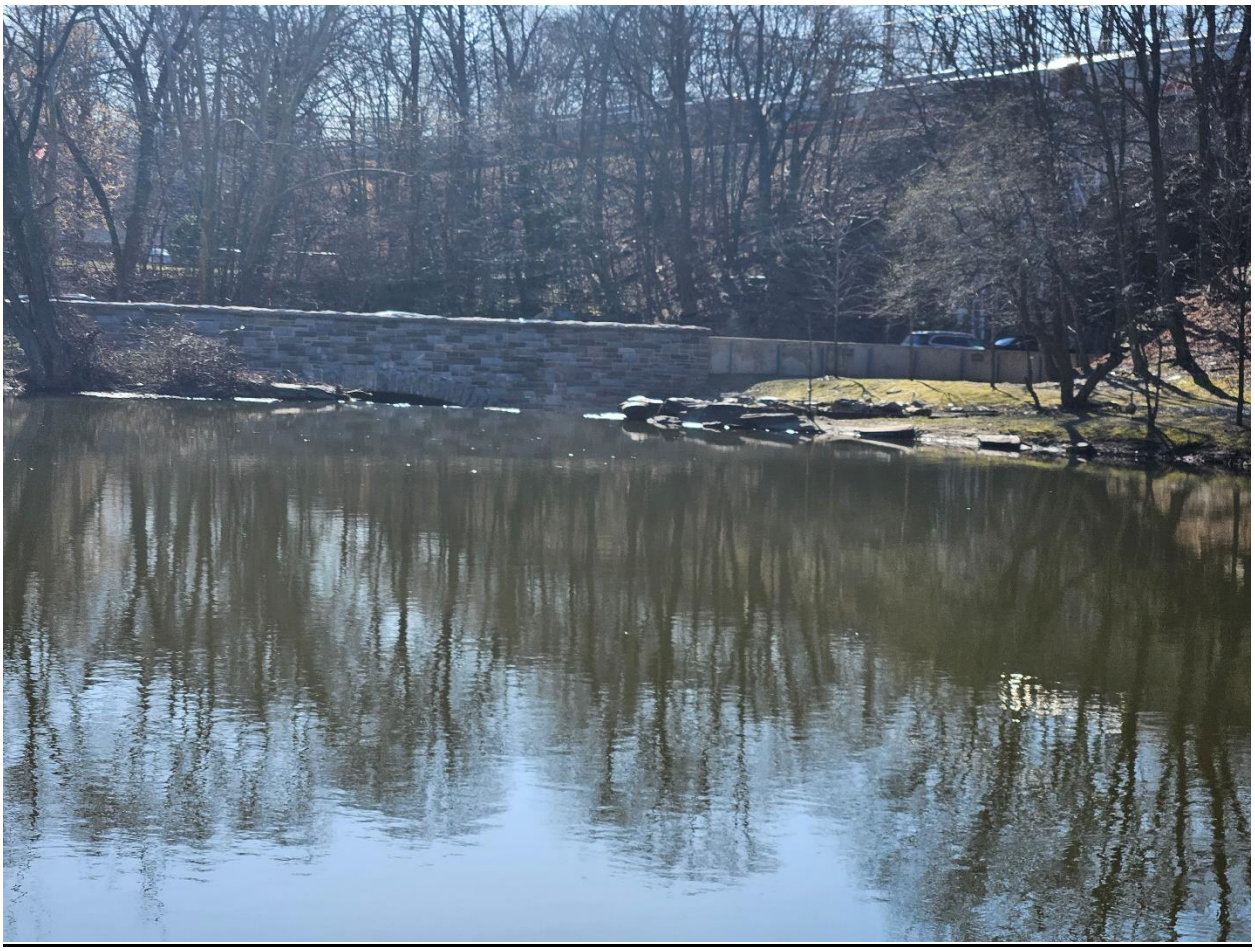
COUNTY..... Westchester

NYSDEC I.D. NUMBER ..... N/A

OWNER/OPERATOR..... **Westchester County, NY**

WATER LEVEL RELATIVE TO SPILLWAY AT TIME OF INSPECTION... **Level normal to above/ steady rapid flow /recent rainfall**

WEATHER AND ACCESS ON DAY OF INSPECTION sunny/53



EQUIPMENT CHECKLIST

The inspector should have access to the following equipment to make detailed and meaningful observations:

- Blank Inspection Report Form.
- Clipboard and pencil.
- Camera – Can be used to document observed conditions and compare past and present conditions.
- Hand Level - May be needed to verify slopes.
- Measuring Tape - Provides accurate measurements so that meaningful comparisons can be made of movements.
- Shovel – Useful in removing debris and investigating wet areas, care must be taken not to cause unnecessary damage.
- Inspector's copy of Pelham Lake Dam I&M Plan.

INSPECTION GUIDELINES

To maximize the effectiveness of routine dam maintenance inspections, all portions of the dam and its appurtenant works must be observed. It is recommended that a methodical inspection procedure be followed to ensure that nothing is overlooked. A suggested inspection would consist of the following steps:

4. Walk along the entire crest of the dam, looking for deficiencies including but not limited to, erosion, settlement, and movement or misalignment. Make note of the vegetative condition and look for signs of seepage.

5. Walk along the entire length of both abutment contacts looking for deficiencies including but not limited to, movement of the abutment or embankment, animal activity, and seepage or excessive wetness. Observe both the embankment and the dam.

6. Walk along the downstream toe of the dam, looking for deficiencies including, but not limited to, those noted in #2 above. Look for misaligned or missing stones in the masonry face.

7. Inspect the spillway for obstructions and evidence of deterioration. Remove logs and debris from the spillway and downstream channel.

Observed conditions should be recorded on the Inspection Report Form.

DEFINITIONS

Monitor: Observe condition for continued degradation.

Investigate: Cause of observed conditions, such as areas of new seepage, must be identified.

Repair: Needs to be repaired.

EMBANKMENT

Area Inspected	Item No.	Condition	Observations	Monitor	Investigate	Repair
Crest	1	Surface cracking	some	×		
	2	Low area (settlement)	some	×		
	3	Horizontal alignment	ok	×		
	4	Vegetation condition	some	×		
	5	Debris	some	×		
	6	Erosion	some	×		
Upstream face	7	Vegetative condition	ok	×		
	8	Erosion/movement	none seen	×		
	9	Animal activity	none seen	×		
Downstream face	10	Stonework condition	ok	×		
	11	Vegetative condition	ok	×		
	12	Erosion/movement	None seen	×		
	13	Animal activity	none seen	×		

SPILLWAY

Area Inspected	Item No.	Condition	Observations	Monitor	Investigate	Repair
Spillway	14	Sidewalls	ok	×		
	15	Channel floor	ok	×		
	16	Unusual movement	none	×		
	17	Approach area	ok	×		
	18	Spillway obstructions	some	×		
	19	Discharge channel	ok	×		

RESERVOIR AREA AND MISCELLANEOUS

Area Inspected	Item No.	Condition	Observations	Monitor	Investigate	Repair
Reservoir area	20	Whirl pooling/overtaxing in reservoir	none	×		
	21	Sedimentation	some	×		
	22	Sinkholes/slides/movement along reservoir banks	none seen	×		
	23	Unwanted growth (terrestrial or aquatic)	some	×		
Downstream area	24	Abutment seepage/wet areas	some	×		
	25	Foundation seepage/wet areas	some	×		
	26	Boils	none seen	×		

SUMMARY OF MAINTENANCE AND REPAIR ACTIVITIES PERFORMED SINCE LAST INSPECTION

(List date, maintenance activity performed, and whether it has been successful to date. Areas should receive enhanced monitoring for at least six months following completion of repair activities.)

ADDITIONAL COMMENTS (Refer to Item No. if applicable)

(Include detailed observations for items requiring enhanced observation, such as areas of recent construction)

Inspection also taken with Trimble device