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June 22, 2011

Mr. David Stertz, Water Management Engineer
Wisconsin Department of Natural Resources
427 East Tower Drive, Suite 100
Wautoma, WI 54982

Subject: 2011 Mt. Morris Dam Inspection
Rattlesnake Creek, Waushara County
Field File # 69.04, Key Sequence # 93

Dear Mr. Stertz:

Attached is the dam inspection report and checklist for 2011 for the Mt. Morris Lake Dam (Field File # 69.04, Key Sequence # 93) located in the Town of Mount Morris, Waushara County, Wisconsin. The inspection was conducted by myself, Archie C. Becher, P.E. (E-27685) on June 9, 2011. Greg Foster, Treasurer of the Mt. Morris Lakes Management District and Bob Mueller, the Dam Operator were in attendance during the inspection. The inspection was performed in conformance with ss. 31.19(2) and ss. 31.19(4) Wisconsin State Statutes.

The DNR consultant inspection process form was reviewed prior to the inspection. Previous inspection reports, photos, DNR database, aerial photos and owner information were reviewed prior to the inspection. The annual inspection report performed by the Owner in 2010 was also reviewed prior to this inspection.

The June 9 inspection indicates the Mt. Morris Lake Dam is in good condition. No dam safety or public deficiencies were noted that would require immediate attention. The two slide gates/hoists were operated during the inspection and are in good working order. The concrete dam structures are also in good condition.

Please feel free to contact me with any questions or concerns.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Archie C. Becher', is written over the word 'Sincerely,'.

Archie C. Becher, P.E.
Project Engineer

Cc: Tim Dahlstrand, Mt. Morris Lakes Management District

**MT. MORRIS DAM
RATTLESNAKE CREEK, WAUSHARA COUNTY**

**2011 DAM SAFETY INSPECTION REPORT
DAM INSPECTION CHECKLIST
PHOTO DOCUMENTATION**

DESCRIPTION OF THE DAM

The dam was first constructed about 1861 for use as a grist mill. Periodically the dam and flume were modified when owners were granted authority to raise the lake level to provide more power. In the 1920s the mill was modified to generate electric power in addition to the milling of grain. Commercial operation of the mill ceased in the early 1970s. The Wisconsin Department of Natural Resources reauthorized the permit for the Mt. Morris Dam on March 18, 1977. The dam was modified in 1995 in cooperation with the Wisconsin Department of Transportation to pass flows in excess of the 100-year storm. The dam meets the present day standards of the State of Wisconsin for dam safety.

Mount Morris Dam has a structural height of 19 feet and impounds an estimated 1,630 acre-feet of water. The road embankment for State Highway 152 across Rattlesnake Creek serves as the earthen embankment of the Mount Morris Dam. The Mount Morris Dam lies within the Town of Mount Morris. The earthen embankment dam structure includes a sheet pile cutoff wall on the upstream side. Water is discharged through the highway embankment via a concrete bridge directly connected to a reinforced concrete flume. The overall bridge and flume is about 200 feet in length with the two gates located midway. The flume is 12'-8" in width and 8 feet in depth, extending through the old powerhouse of the former Mount Morris grist mill.

A four foot high security fence protects the concrete flume opening downstream of the highway embankment. A gated catwalk provides to access the vertical slide gates and controls.

The following narrative is a brief summary detailing some of the important items covered under the inspection check list and other any other observations made during the

inspection and records review. Photographs of the dam facilities taken during the inspection are attached.

GENERAL - HAZARD

The Mt. Morris Dam is owned and operated by the Mt. Morris Lakes Management District. Tim Dahlstrand, current Chairman of the District (847-609-1380) and Wisconsin Professional Engineer currently provides periodic owner inspections of the dam as specified in the Operation, Maintenance and Inspection Plan for the Mt. Morris Dam dated December 2008.

A USGS aluminum disk benchmark is located in the SW corner of the bridge crossing of STH 152. A staff gauge correlated to the dam permit pool elevation operating range is located on the north side of the inlet flume. Access to the dam is via STH 152 directly adjacent to the dam with parking available between the bridge and the dam along the shoulder of the highway.

During the inspection the staff gauge read between 5.30 and 5.40 within the normal operating range. The north bay discharge gate has stop logs and there is top discharge. The south bay gate has bottom discharge and no stop logs. The south bay gate was closed during the inspection. During the inspection, the gates were opened and closed to verify operation. Flow was briefly shut off to allow inspection of the tailwater area.

A 4-foot security fence extends around the entire flume opening with a locked gate at the slide gates. The electrical control panel lies outside the fenced area in a locked control cabinet. It was noted during the inspection that the welds of the fence wire mesh were beginning to show signs of corrosion. It is recommended that the wire mesh welds be coated with a rust inhibitive paint.

Numerous warning signs are posted upstream and downstream of the dam and along the flume. It was noted during the inspection the upstream sign at the flume inlet does not conform to current NR 330 standards and a new sign should be placed upstream of the dam that is visible 300 feet upstream. NR 330 also requires signs be posted directing the portage route around the dam.

Prior to the reconstruction of the dam in 1995, a heavy rain event caused failure of the dam. Flooding during that event was limited due to large storage areas downstream of the dam and no structures were impacted. In 1995, a dam failure analysis was performed and land use zoning adopted to prevent future development downstream of the dam from encroaching into the dam failure flood shadow. A Low Hazard Rating for the dam was approved in 1995 and no known land development has occurred downstream of the dam within the flood shadow that would require reconsidering the hazard rating. An up to date Emergency Action Plan was adopted in December of 2008.

EMBANKMENTS

Vegetation on both the upstream and downstream embankment areas should be cut at least annually to prevent woody plant growth and encourage thicker ground cover to protect the embankment from erosion in the event of heavy rain or overtopping.

The downstream embankment slope has thick brush and small trees that should be cut to the toe of the embankment. Portions of the powerhouse/millhouse property are mowed regularly and in good condition.

No embankment erosion or instabilities were observed during the inspection, however, the thick brush cover made a thorough inspection impossible. It is recommended that

the embankment be re-inspected after the brush on the embankment is cut to ensure no areas of concern exist.

Several wet areas with cattails were noted beyond the toe of the downstream primary embankment which appear to be natural low areas with no flowing water. One very small area of seepage was noted near the left side downstream flume abutment. Seepage flow was barely noticeable and appeared clear, however this area should be monitored for future changes.

One area of concern from the previous annual inspection on October 16, 2010, includes a toe drain located along the left side of the flume outlet along the powerhouse foundation. During the previous inspection, it was noted there was a blockage in the toe drain outfall which presumably resulted in a backup of flow and a discharge out into the embankment from the perforated drain tile that resulted in some erosion of the embankment above the drain along the powerhouse foundation. It is believed pressure within the drain forced flow out the drain slots resulting in a piping failure along the drain with some erosion. Photos of the affected area are shown in the report from last year and this year. A comparison of the two photos does not indicate a noticeable increase in the eroded depression area. The eroded embankment area location should be noted and repaired.

During this inspection, a moderate amount of flow of roughly $\frac{1}{3}$ to $\frac{1}{2}$ of the 4-Inch diameter toe drain pipe was observed discharging. Flow was clear and free of obvious sediment materials. The toe drain is inspected during the annual owners inspection for flow rate in gallons per minute and clarity/sediment. It is recommended the toe drain be inspected regularly to assure this problem does not reoccur.

SPILLWAY

The dam's principle spillway is actually a concrete flume extending across the highway embankment to the old powerhouse. The flume is steel reinforced concrete in good condition. The overall flume length, including the bridge section is about 200 feet with two side by side slide gates located midway between the flume inlet/outlet. The flume is 12'-8" wide and 7'- 6" deep.

GATES

The flow within the flume is regulated by two, side by side, 5-foot wide by 9-foot high, electrically and manually-operated, bottom-opening vertical slide gates. Stop log slots are provided on both upstream sides of the slide gates to control water flow for repair or servicing of the gates. The gates are bottom operated by two electrically and manually operated screw jack hoists. The gates were operated and are in good working order.

OUTLET EROSION CONTROL & UNDERMINING

Flow was briefly shut off during the inspection to allow examination of the outlet area. The tailwater slab within the powerhouse appears to prevent outlet erosion under normal flow conditions. No scour or undermining of the slab was observed during the inspection.

Light to medium riprap protect the downstream tailwater area. Riprap extends approximately 50 feet downstream of the outlet. The downstream channel bank is well defined beyond the tailwater area.

LAKE DRAINS

The dam facilities do not include an independent lake drain. The slide gates operate using bottom flow and are capable of drawing down the impoundment if necessary.

POWERHOUSE/MILL BUILDING

Hydroelectric power generation ceased in the 1970's when the Powerhouse and Mill Building were purchased by the Mt. Morris Lakes Management District took ownership. The old powerhouse and Mill Building were then sold into private ownership.

All remnants of the hydroelectric equipment have been removed and a coffeehouse is currently operated out of both the buildings. The old powerhouse headrace can be seen from inside the building through a glass top cover.

The rear powerhouse foundation wall and bulkheads have some concrete deterioration above the flume. The 1995 flume reconstruction was designed to be independent of the powerhouse. Concrete repairs should made to the powerhouse foundation walls and support structures should hydroelectric generation ever be reconsidered.

RECOMMENDATIONS

The following recommendations are given based on the dam inspection and generally accepted dam safety standards:

- 1) The dam warning sign at the headwall of the flume should be updated to current NR 330 standards. The dam warning sign should be posted high enough to avoid vegetation growth blocking it and be visible for 300 feet upstream. Portage signs should also be installed to direct traffic around the dam.
- 2) The security fence wire mesh welds should be coated with a corrosion inhibiting coating to prevent further corrosion.

- 3) Vegetation on both the upstream and downstream embankment side slopes should be cut and all trees removed to the toe of the embankment. The embankment vegetation should be cut several times a year to encourage thick surface coverage that will protect the embankment from erosion and make allow for embankment inspection for seepage and instability.
- 4) The toe drain along the powerhouse foundation should be monitored regularly to ensure it is operating properly and does not become plugged with debris and/or is causing erosion along the embankment/foundation.
- 5) The small seepage area near the left downstream abutment should be monitored periodically to assure erosion does not start to occur.

Certification for Dam Inspection

Local Dam Name (Print): Mount Morris Dam

DNR Field File #: 69.04

I certify that I have completed the checklist truthfully and factually:

Certifier's Name (print): Archie C. Becher

Company Name: Becher-Hoppe Associates, Inc.

Signature: *Archie C. Becher*

Date: 6/22/11

Multidisciplinary: I am experienced in the technical disciplines or I am working with other professionals experienced in the technical disciplines to properly inspect the dam and appurtenant works. Technical disciplines, in addition to general civil engineering, may include geotechnical, geological, hydrologic, structural, and mechanical:

Yes No

Engineer's Wisconsin Registration Number: E-27685

Expiration Date: 31-Jul-12

Engineer's Seal (Optional):





Portage (boat landing) U/S Left Enbankment (0009300609201103)



Left U/S Enbankment (0009300609201102)



Flume Headwall (0009300609201101)



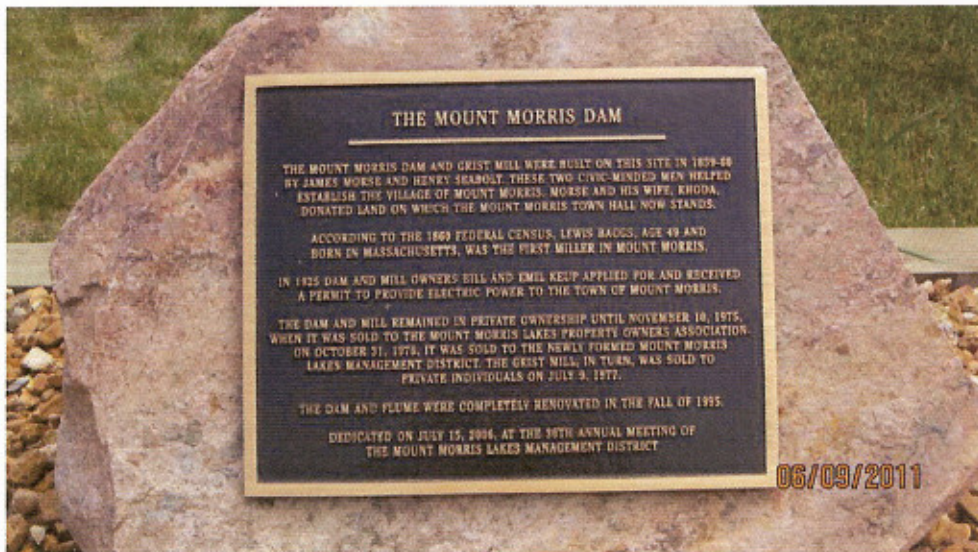
U/S Right Side Headwall Rip Rap (0009300609201104)



STH 153 (0009300609201105)



D/S Embankment / Flume (0009300609201106)



Historical Monument (0009300609201107)



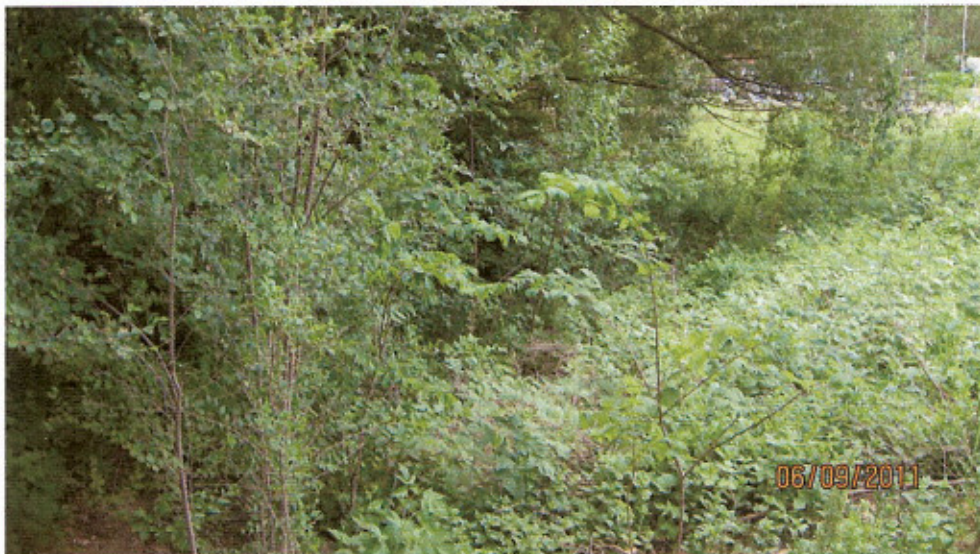
Left Side D/S Embankment (0009300609201108)



Left Side D/S Embankment - North (0009300609201109)



Left side D/S Embankment - Southwest (0009300609201110)



Left Side D/S Embankment - Southeast (0009300609201111)



Left Side D/S Embankment - South (0009300609201112)



Left Side D/S Embankment (0009300609201113)



Left Side D/S Embankment / Powerhouse (0009300609201114)



Left Side D/S Embankment (0009300609201115)



Flume Inlet (0009300609201118)



Flume (0009300609201119)



Powerhouse / Flume (0009300609201120)



D/S Left Side Toe Drain (0009300609201121)



D/S Left Side Abutment / Bulkhead (009300609201122)



D/S Left Side Abutment / Rip Rap (0009300609201123)



D/S Left Abutment (0009300609201124)



D/S Right Abutment (0009300609201125)



Rear Powerhouse Foundation (0009300609201126)



Rear Powerhouse Foundation Wall (0009300609201127)



Rear Powerhouse Foundation Wall (0009300609201128)



Rear Powerhouse Foundation Wall (0009300609201129)



Rear Powerhouse Foundation Wall (0009300609201130)



Tailwater Slab (0009300609201132)



D/S Tailwater Channel Left Side (009300609201133)



D/S Left Side Embankment (0009300609201134)



D/S Tailwater Channel Right Side (0009300609201135)



Tailwater (0009300609201136)



D/S Right Tailwater Rip Rap (0009300609201138)



D/S (0009300609201140)



Minor Seepage Area D/S Left Side (0009300609201143)



D/S Right Side Rip Rap (0009300609201151)



Toe Drain Erosion Area (0009300609201153)



Slide Gates - Upstream (0009300609201154)



Flume Construction Joint (0009300609201156)



Powerhouse Head Race Rear Foundation Wall (0009300609201157)



Flume / Gate Controls (0009300609201158)



Right Side D/S Embankment (0009300609201159)

Name of Dam:	Mount Morris Lake Dam	Date:	9-Jun-11
Inspectors:	Archie C. Becher, P.E.	F.F.#:	69.04
Owner's Name:	Mt. Morris Lakes Management District	Key Seq #:	93
Street:	STH 152		
City, State, Zip Code:	Mt. Morris	Tim Dahlstrand	
County:	Waushara Co	Phone:	847-609-1380
Weather and Site conditions:	Cool 60's, Partly Cloudy	Email:	tdahlstand@aesdd.com

GENERAL

Item	N	P	Notes/ Observations	Action		
				M	I	R
1 Monuments/Benchmarks	X					
Location: USGS Aluminum Disk in SW corner of the bridge/culvert crossing STH 152 Elevation: 868.99 (USGS) Datum: North American Vertical Datum 1929						
2 Pool Level		X		M		
Normal/Operating: Maximum: 86.5 (DNR); 866.1 (USGS); 5.49 (staff gauge) Minimum: 85.5 (DNR); 865.1 (USGS); 4.49 (staff gauge) Staff Gage: Staff gauge located on north side of flume upstream of gates						
3 Access Road		X				
Access via STH 152						
4 Signage/ Security						2
Portage/route: X Dam Warning: X Downstream Hazard: X Fencing/Railings/Catwalks: X Portage route around north side via boat landing, mowed trail Warning Signs posted U/S & D/S and along the flume. Warning signs are post D/S of the dam. 4.0' rail fence w/max. 6"x6" grid screen, locked gate w/catwalk						

Additional Comments: The dam warning sign above the dam does not conform to current NR 330 standards. A "portage" sign should also be posted U/S and D/S, directing traffic around the dam along the portage route.

N= Noted; P= Photo; M= Monitor
 I= Investigate; R= Repair
 F.F.= Field File; RT = Right; LT = Left
 U/S = Upstream; D/S = Downstream

Action Suggestion

1. Requires immediate action
2. Plan to do soon
3. Do when convenient

Dam Inspection Checklist

GENERAL (Cont.)

5 Hazard Section						
A. D/S Development	<input checked="" type="checkbox"/>		Density: Distance: Type (Residential, Commercial, Industrial):	Undeveloped forest and very low density rural residential development D/S.		
B. Channel Crossing	<input checked="" type="checkbox"/>		Type: Dimensions: D/S distance: Traffic Level (Local, CTH, Rail Road, STH, Interstate, etc):	Bridge, Ford, Culvert, Trestle, Other (Explain) (Circle One) 12'wide X 8' high X 200' long concrete flume (inlet headwall to powerhouse) Bridge/Culvert U/S of the dam flume serves as a bridge for STH 152. light traffic STH 152	M	
C. Distance to nearest D/S community/impoundment:	<input checked="" type="checkbox"/>		Name:	1/4 mile to Little Lake, 18 miles to Aurora Millpond Auroraville, WI		
D. Anticipated Hazard (based on landuse and zoning):	<input checked="" type="checkbox"/>			Low Hazard Rating approved in 1995.		
E. Dam Failure Analysis	<input checked="" type="checkbox"/>		Date Completed/Approved Is map available? Are map & profile adopted? List adoption date: Verify validity of failure mode: Verify validity of DFA conclusions:	1995 Yes Yes 1995 N/A N/A		
F. Emergency Action Plan	<input checked="" type="checkbox"/>	<input type="checkbox"/>		Comments, Explanation, and Description	M	I
1. Current plan posted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
2. Understood by Operator?	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
3. Warning systems?	<input type="checkbox"/>	<input checked="" type="checkbox"/>				
4. Certification of last test?	<input type="checkbox"/>	<input checked="" type="checkbox"/>				
5. Remote operation?	<input type="checkbox"/>	<input checked="" type="checkbox"/>				
6. Revision Date?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Dec-08			
7. Habitable structures?	<input type="checkbox"/>	<input checked="" type="checkbox"/>				
8. Recreation areas?	<input type="checkbox"/>	<input checked="" type="checkbox"/>				
9. Changed hazard potential?	<input type="checkbox"/>	<input checked="" type="checkbox"/>				
10. New development?	<input type="checkbox"/>	<input checked="" type="checkbox"/>				
11. Other comments?	<input type="checkbox"/>	<input checked="" type="checkbox"/>				
Additional Comments: The dam failed prior to the 1995 reconstruction resulting in limited D/S flooding due to existing large undeveloped storage areas D/S.						
N= Noted; P= Photo; M= Monitor		Action Suggestion		1. Requires immediate action		
I= Investigate; R= Repair				2. Plan to do soon		
F.F.= Field File; RT = Right; LT = Left				3. Do when convenient		
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Dam Inspection Checklist						
Dam Name: Mt. Morris Dam		F.F. #: 69.04		6/9/2011 Page 3 of 10		

EMBANKMENTS

Description:				Action		
Item	N	P	Location on Embankment and Deficiency	M	I	R
1 Vegetation:			No problem			
A. Trees Quantity (<5, sparse, dense): Diameter: Location:		<input checked="" type="checkbox"/>	All trees along the D/S side of the dam embankment should be cut/removed.			2
B. Brush Quantity (sparse, dense): Location:		<input checked="" type="checkbox"/>	Brush along the D/S side of the embankment should be cut/mowed.			2
C. Ground cover Type (grass, crown vetch, other): Quantity (bare, sparse, adequate, dense): Appearance (too tall, too short, good):		<input checked="" type="checkbox"/>	Turf areas along the D/S embankment around the powerhouse/millhouse were mowed. Turf areas looked good.	M		
2 Erosion	<input checked="" type="checkbox"/>	No problem	Not applicable			Could not inspect
A. Wave erosion (Beaching): Scarp: Length/ Width: Location:		<input checked="" type="checkbox"/>	No wave erosion was observed. The U/S embankment shoreline area was recent rehabilitated. N/A	M		
B. Runoff Erosion (Gullies) Quantity: Length/ Width/ Depth: Location:		<input checked="" type="checkbox"/>	No runoff erosion was observed on the embankment. The U/S and D/S embankment areas generally have well established vegetation. N/A	M		
3 Instabilities	<input checked="" type="checkbox"/>	No problem	Not applicable			Could not inspect
A. Slides Transverse: Longitudinal: Scarp: Length/ Width: Crack Length/ Width:			No embankment slides or instabilities were observed. N/A N/A N/A	M		
B. Cracks: Transverse: Longitudinal: Length/ Width/ Depth: Location: Other:			No cracks were observed. N/A N/A N/A	M		
C. Bulges/ Depressions Size: Height/ Depth:		<input checked="" type="checkbox"/>	No bulges or depressions were observed. N/A	M		
D. Slope (Too Steep) U/S, D/S		<input checked="" type="checkbox"/>	Embankment slope appears adequate.			

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2. Plan to do soon
3. Do when convenient
3. Do when convenient

Additional Comments:

Dam Inspection Checklist

Dam Name: Mt. Morris Dam

F.F. #: 69.04

Date: 6/9/11

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EMBANKMENTS (Cont.)

Item	N	P	Notes/ Observations	Action		
				M	I	R
4 Slope Protection	X		No problem Not applicable Could not inspect			
A. Type (none, riprap, wave berm, concrete slabs, loose formed concrete/asphalt):		X	Medium riprap in good condition was observed along the U/S embankment shoreline. Medium riprap in good condition was observed along the D/S tailwater channel shoreline.	M		
B. Condition:			Embankment slope protection is in good condition.			
5 Other	X		No problem Not applicable Could not inspect			
A. Rodent burrows (few, many) Location:			None observed.	M		
B. Ruts Length/ Width/ Depth: Location:			None observed.	M		
C. Other						
6 Alignment	X		No problem Not applicable Could not inspect			
A. Vertical Low area: Elevation Difference: Location:			No vertical displacement observed.			
B. Horizontal			No horizontal displacement observed.			
C. Width Too narrow: Location:			N/A			
7 Toe	X		No problem Not applicable Could not inspect			
Cracks/Slumps:			None observed.			
Embankment drains: Type/Flow: Location:			There is one 4-Inch diameter toe drain the extends across the embankment. Clear flow of 1/3 to 1/2 the toe drain 4-Inch diameter. Along the north side of the powerhouse foundation.			
Seepage/ Wetness: Large undeveloped storage areas D/S.			Several wet areas with cattails were observed D/S of the embankment toe.			
8 Seepage	X		No problem Not applicable Could not inspect			
Wet area:		X	Several wet areas with cattails observed beyond the toe of the embankment.			
Boil:			None observed.			
Sinkhole:		X	None observed.		M	
Aquatic vegetation:			N/A			
Rust colored deposits:			None observed.			
Other:						
Sediment in Flow:		X	None observed.			
Flowrate:		X	The seepage rate of flow in wet areas was clear and of insignificant flow rate.			
Location:		X	North side of D/S embankment near powerhouse tailwater abutement.			M

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 I= Investigate; R= Repair 2. Plan to do soon
 F.F.= Field File; RT = Right; LT = Left 3. Do when convenient
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Additional Comments:

Dam Inspection Checklist

Dam Name: Mt. Morris Dam

F.F. #: 69.04

Date: 6/9/11

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SPILLWAY--PRINCIPAL - FIXED CREST						Action		
Item	N	P	Notes/ Observations			M	I	R
I Fixed Crest			No problem	X	Not applicable			
A. Dimensions		X						
Top Width:	The principle spillway is a 200 long concrete flume, 12-foot wide and 10-feet deep that carries flow across STH 152 through the powerhouse.							
B. Materials		X				M		
The flume was reconstructed in 1995 of reinforced concrete.								
C. Shape (sharp-crested, broad-crested, ogee, chute, gated, overflow, morning glory, dropbox, labyrinth)			See photos.			M		
D. Debris		X				M		
Prevention (racks, booms, etc.):	None observed.							
E. Concrete Condition *		X				M		
The concrete flume is in good condition.								
F. Flashboards (none, number):								
Type (Metal, wood):	N/A							
Dimensions:								
Operability:								
G. Abutments		X				M		
Condition: *	All abutments are in good condition.							
Seepage/wetness:								
H. Drains			No problem	X	Not applicable			
Type: Weep holes, Relief drains, Other:	N/A							
Flow Rate:								
I. Other								

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Action Suggestion

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Controlled = Gated

Uncontrolled = Overflow

Additional Comments: The reinforced concrete outlet flume is generally in good condition with no significant concrete deterioration observed.

* Type of Concrete Problems: Spalling, cracks, exposed rebar, misalignment, joints, bug holes, efflorescence, popouts, honeycombing, scaling, craze/map cracks, isolated crack, disintegration, other

Dam Inspection Checklist

Dam Name: Mt. Morris Dam

F.F.#: 69.04

Date: 6/9/11

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SPILLWAY-PRINCIPAL - GATES					Action		
Item	N	P	Notes/ Observations		M	I	R
1 Gates			No problem	Not applicable	Could not inspect		
A. Types (lift/slide, tainter(radial), stoplogs, leaf, roller, flashboards, needles, other): Number and Size:		<input checked="" type="checkbox"/>	Two (5-foot wide by 9-foot high) side by side aluminum slide gates.			<input type="checkbox"/>	<input type="checkbox"/>
B. Stoplogs Dimensions: Condition:	<input type="checkbox"/>	<input type="checkbox"/>	12'wide X 8' high X 200' long concrete flume (inlet headwall to powerhouse)			<input type="checkbox"/>	<input type="checkbox"/>
C. Abutments Condition: * Seepage/wetness:		<input checked="" type="checkbox"/>	All abutments appear to be in good condition. None observed.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D. Piers (number, shape) Condition: *	<input type="checkbox"/>	<input type="checkbox"/>	N/A			<input type="checkbox"/>	<input type="checkbox"/>
E. Operability Type of Operator: Condition(chain, cables,hoists): Security(locked?): Backup Operator:		<input checked="" type="checkbox"/>	Gates are operated by two electrically and manually operated screw jack hoists. The gate hoists appeared to be lubricated and in good working condition. Locked gate and control panel.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F. Access	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Access through locked gate/control panel.			<input type="checkbox"/>	<input type="checkbox"/>
G. Condition Rust: Seals (leakage):		<input checked="" type="checkbox"/>	The slide gates are aluminum in good condition and show minimal, if any seal leakage.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H. Ice protection Type (Heaters, Bubblers, Barriers, Other)	<input type="checkbox"/>	<input type="checkbox"/>	None observed.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I. Debris Prevention (Rack, boom, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	None observed.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
J. Condition of Flowway		<input checked="" type="checkbox"/>	Flume area in good condition.		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
K. Drains Type (Weep holes/ Relief drains/ Other): Flow rate: Location:	<input type="checkbox"/>	<input type="checkbox"/>	Other than the foundation/toe drain mentioned earlier, no other drains were observed.			<input type="checkbox"/>	<input type="checkbox"/>
L. Other	<input type="checkbox"/>	<input type="checkbox"/>				<input type="checkbox"/>	<input type="checkbox"/>

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Action Suggestion 1. Requires immediate action

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Uncontrolled = Overflow

Additional Comments and/or Sketch:

* Type of Concrete Problems: Spalling, cracks, exposed rebar, misalignment, joints, bug holes, efflorescence, popouts, honeycombing, scaling, craze/map cracks, isolated crack, disintegration, other

Dam Inspection Checklist

Dam Name: Mt. Morris Dam

F.F.#: 69.04

Date: 6/9/11

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