

Connecticut Department of Energy & Environmental Protection Bureau of Water Protection & Land Reuse Inland Water Resources Division



DAM SAFETY PROGRAM DAM INSPECTION REPORT FORM – FOR REGULATORY INSPECTION

Please complete this form in accordance with the instructions (DEEP-DAM-INST-002).

Part I: Summary of Dam Inspection

Dam Name:	Inspection Date(s):
Alternate Dam Name(s):	CT Dam ID #:
Location (Municipality):	Temperature / Weather:
Registered?: Yes or No If yes, provide the 9 digit registration number found on the notification letter.	Pool Level: See Instructions
Emergency Action Plan?: Yes or No If Yes, see instructions	Impoundment Use: use options listed in instructions
Hydraulic and Hydrologic Analysis?: Yes or No If Yes, see instructions	Stability Analysis?: Yes or No If Yes, see instructions
Overall Condition: (refer to Appendix A located at the end of this form)	

[Insert Dam Name]

Persons present at the inspection (select the tab button in the last cell to the right to create another row)		
Name	Title/Position	Representing

Owners and Operators: If there is more than one owner or operator, copy the empty table below for each owner or operator and paste right below the previous table, then complete the information for each

*By providing this e-mail address you are agreeing to receive official correspondence from DEEP, at this electronic address, concerning the subject report. Please remember to check your security settings to be sure you can receive e-mails from "ct.gov" addresses. Also, please notify DEEP if your e-mail address changes by email via deep.damsafety@ct.gov.

Indicate if Owner or Operator:		
Name:		
Mailing Address:		
City/Town:	State:	Zip Code:
Phone:	ext.:	
Emergency Phone:		
*E-mail:		

Part II: General Dam Information

General Description:	
Hazard Classification:	Dam Height (ft):
Dam Length (ft):	Spillway Length (ft):
Spillway Type:	Normal Freeboard (ft):
Drainage Area (square miles):	Impoundment Area (at principal spillway crest, in acres):
Watercourse(s):	

OTHER INFORMATION: (see instructions)

Part III: Aerial Photo/Location Map (insert the aerial photo and location map under this Part. See instructions for details.)

Part IV: Dam/Embankment/Dike Information

Number of Dam/Embankments/Dikes: (if there is more than one dam/embankment or dike, reproduce this section and paste right below the previous section)

Dam/Embankment/Dike Name (see instructions):

General Description:

General Condition:

Concrete Condition:

Stone Masonry:

Settlement/Alignment/Movement:

Seepage/Foundation Drainage:

Riprap:

Erosion/Burrows:

Vegetative Cover:

Other:

Photos/Graphics/Sketches (insert either below this Part or in Parts XIII and XIV, refer to the instructions under Parts XIII and XIV for additional details)

Part V: Principal Spillway, Training Walls, Apron

Number of Principal Spillways: (if there is more than one principal spillway, reproduce this section and paste right below the previous section)

Spillway Type (see instructions):

General Description:

General Condition:

Concrete Condition:

Stone Masonry:

Settlement/Alignment/Movement:

Cracks:

Scouring/Undermining:

Seepage/Foundation Drainage:

Other:

Photos/Graphics/Sketches (insert either below this Part or in Parts XIII and XIV, refer to the instructions under Parts XIII and XIV for additional details)

Part VI: Auxiliary Spillway, Training Walls, Apron

Number of Auxiliary Spillways: (if there is more than one auxiliary spillway, reproduce this section and paste right below the previous section)

Auxiliary Spillway Type (see instructions):

General Description:

General Condition:

Concrete Condition:

Stone Masonry:

Settlement/Alignment/Movement:

Cracks:

Scouring/Undermining:

Vegetative Cover:

Riprap:

Seepage/Foundation Drainage:

Other:

Photos/Graphics/Sketches (insert either below this Part or in Parts XIII and XIV, refer to the instructions under Parts XIII and XIV for additional details)

Part VII: Downstream Channel

Number of Downstream Channels: (*if there is more than one downstream channel, reproduce this section and paste right below the previous section*)

Channel Name (see instructions), include Watercourse Name:

General Description:

General Condition:

Debris:

Riprap:

Other:

Photos/Graphics/Sketches (insert either below this Part or in Parts XIII and XIV, refer to the instructions under Parts XIII and XIV for additional details)

Part VIII: Intake Structure(s)

Number of Intake Structures: and paste right below the previous section) (if there is more than one intake structure, reproduce this section

Intake Structure Type (see instructions):

General Description:

General Condition:

Concrete Condition:

Stone Masonry:

Settlement/Alignment/Movement:

Cracks:

Other:

Photos/Graphics/Sketches (insert either below this Part or in Parts XIII and XIV, refer to the instructions under Parts XIII and XIV for additional details)

Part IX: Outlet Structure(s)

Number of Outlet Structures: and paste right below the previous section) (if there is more than one outlet structure, reproduce this section

Outlet Structure Type (see instructions):

General Description:

General Condition:

Concrete Condition:

Stone Masonry:

Settlement/Alignment/Movement:

Scouring/Undermining:

Other:

Photos/Graphics/Sketches (insert either below this Part or in Parts XIII and XIV, refer to the instructions under Parts XIII and XIV for additional details)

Part X: Miscellaneous Features

List miscellaneous features: (e.g., access roads, bridges, etc.):

Photos/Graphics/Sketches (insert either below this Part or in Parts XIII and XIV, refer to the instructions under Parts XIII and XIV for additional details)

Part XI: Downstream Hazard Classification Reassessment

Downstream Hazard Classification: (provide recommendation for the hazard class based on the Dam Safety regulation. See Instructions and <u>Appendix B</u>.)

Part XII: Recommendations (See instructions for identifying recommendations)

Recommendations: (Each item should be numbered)

1.

Part XIII: Photographs/Graphics (see instructions and <u>Appendix C</u>)

[insert photos/graphics here if not included in each part above]

Part XIV: Sketches

This completed report must include a sketch of the plan view of the dam to aid in the description of its condition. Refer to the instructions for more detail and an example.

[insert sketches here if not included in each part above].

Part XV: Professional Engineer Certification

The following certification must be signed by a Professional Engineer

"I hereby certify that the information provided ir correct in my professional judgment."	n this report has bee	en examined by me and found to be true and
Signature of Professional Engineer		Date
Printed Name of Professional Engineer	Title	CT P.E. Number
Name of Firm		
		Affix P.E. Stamp Here

Part XVI: Owner Signature

The following statement must be signed by the Owner(s) of the subject Dam.

"The information provided in this report has been examined by me."	
Signature of Owner	Date
Name of Owner (print or type)	Title (if applicable)
Signature of Owner	Date
Name of Owner (print or type)	Title (if applicable)
Signature of Owner	Date
Name of Owner (print or type)	Title (if applicable)
Signature of Owner	Date
Name of Owner (print or type)	Title (if applicable)

Note: Mail the completed inspection report to:

DAM SAFETY PROGRAM INLAND WATER RESOURCES DIVISION CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION 79 ELM STREET HARTFORD, CT 06106

In addition, please send this completed report converted to Adobe portable document format (pdf) including a scan of the signature page via email to: <u>DEEP.DamSafety@ct.gov</u>

Appendix A: Overall Dam Condition Selection Standards

Condition	Definition
Good	Through file research and after a thorough visual inspection it has been determined that the dam is well maintained and no existing dam safety deficiencies are recognized. Only continued routine maintenance is required.
Satisfactory	Through file research and after a thorough visual inspection it has been determined that no significant deficiencies are recognized. Only minor maintenance is required and only minor flaws are noted.
Fair	Through file research and after a thorough visual inspection it has been determined that there are no critical deficiencies with the dam that would require engineering analysis with the following exception: the engineer may recommend that a hydrologic and hydraulic analysis be conducted due to the lack of adequate freeboard and/or the lack of spillway capacity documentation. A condition exists at the dam that may require some sort of additional monitoring.
Poor	Through file research and after a thorough visual inspection it has been determined that deficiencies are recognized that require engineering analysis and/or remedial action.
Unsatisfactory	Through file research and after a thorough visual inspection it has been determined that a deficiency is recognized that requires immediate or emergency action. Administrative/Enforcement action may be required as determined by the Dam Safety Program. Reservoir level restrictions may be necessary until the problem is resolved.

Appendix B - Hazard Classification of Dams

I. A Class AA dam is a negligible hazard potential dam which, if it were to fail, would result in the following:

- (i) no measurable damage to roadways;
- (ii) no measurable damage to land and structures;
- (iii) negligible economic loss.

II. A Class A dam is a low hazard potential dam which, if it were to fail, would result in any of the following:

- (i) damage to agricultural land;
- (ii) damage to unimproved roadways (less than 100 ADT);
- (iii) minimal economic loss.

III. A Class **BB** dam is a moderate hazard potential dam which, if it were to fail, would result in any of the following:

- (i) damage to normally unoccupied storage structures;
- (ii) damage to low volume roadways (less than 500 ADT);
- (iii) moderate economic loss.

IV. A Class B dam is a significant hazard potential dam which, if it were to fail, would result in any of the following:

- (i) possible loss of life;
- (ii) minor damage to habitable structures, residences, hospitals, convalescent homes, schools, etc;
- (iii) damage to or interruption of the use of service of utilities;
- (iv) damage to primary roadways (less than 1500 ADT) and railroads;
- (v) significant economic loss.

V. A Class C dam is a high hazard potential dam which, if it were to fail, would result in any of the following:

- (i) probable loss of life;
- (ii) major damage to habitable structures, residences, hospitals, convalescent homes, schools, etc;
- (iii) damage to main highways (greater than 1500 ADT);
- (iv) great economic loss.

Appendix C - PHOTOGRAPH INSTRUCTIONS

All photographs shall be color photographs. Photographs shall be clear and include scale references where applicable. Photographs shall include, but not be limited to the following:

- **1.** Overview of dam(s)/dike(s) from upstream
- 2. Overview of dam(s)/dike(s) from downstream
- **3.** Overview of upstream face from right abutment
- 4. Overview of upstream face from left abutment
- 5. Overview of dam crest from right abutment
- **6.** Overview of dam crest from left abutment
- 7. Overview of downstream face from right abutment
- 8. Overview of downstream face from left abutment
- **9.** Overview of spillway(s) from upstream
- **10.** Overview of spillway(s) from downstream (tailrace or channel area)
- **11.** Overview of right training wall(s)
- **12.** Overview of left training wall(s)
- **13.** Overview of weir
- **14.** Overview of stilling basin
- **15.** Overview of downstream channel
- **16.** Overview of gatehouse exterior
- **17.** Overview of gatehouse interior
- **18.** Overview of operators
- **19.** Outlet inlets and discharge points
- **20.** Overview of reservoir area
- 21. Areas of specific deficiencies (e.g., cracks, erosion, displacement, seeps, deterioration, etc.)