**Operations & Maintenance Manual**



*Type Dam Name Here*

*Choose a county* County, Georgia

State ID: *Type ID Here*

NID: *Type ID Here*

Prepared by:

*Type Author Here*

Prepared For:

*Type Dam Owner Here*

**This O&M Manual is NOT an Emergency Action Plan. You should refer to the Emergency Action Plan if there is a potential failure at the dam.**

**COMMON INDICATORS OF POTENTIAL DAM FAILURE:**

* **Muddy water flowing from the downstream slope or toe.**
* **Significant cracks or depressions forming on the embankment.**
* **Movement or sliding of the surface of the embankment.**
* **Water flowing over the top of the dam, or rapidly approaching overflow.**

**IF DAM FAILURE IS IMMINENT:**

* **Contact 911**
* **Activate the EMERGENCY ACTION PLAN**
* **Call EPD-Safe Dams Program (404-463-2461)**

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# Ownership Information

**Owner Information**

How many owners are there?*Choose a Number*

Owner #1: *Type Owner Name Here*

Address: *Type Address Here*

Daytime Phone #: *Type Number Here*

Emergency Phone #: *Type Number Here*

Primary Operator #1: *Type Operator Name Here*

Address: *Type Address Here*

Daytime Phone #: *Type Number Here*

Emergency Phone #: *Type Number Here*

**Additional Contacts (If Applicable)**

Engineer of Record (if applicable): *Type Name Here*

Address: *Type Address Here*

Daytime Phone #: *Type Number Here*

Emergency Phone #: *Type Number Here*

Name: *Type Name Here*

Address: *Type Address Here*

Daytime Phone #: *Type Number Here*

Emergency Phone #: *Type Number Here*

Association to Dam: *Type Association with Dam Here*

# Revision Tracking

|  |  |  |  |
| --- | --- | --- | --- |
| **Version No.** | **Description of Revision** | **Performed By** | **Date** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# Distribution Tracking

|  |  |  |  |
| --- | --- | --- | --- |
| **Version No.** | **Person/Firm/Agency** | **No. of Copies** | **Date** |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

# Dam Data Sheet

**General Information:**

|  |  |
| --- | --- |
| **Dam Name:** | *Type Dam Name Here* |
| **State ID:** | *Type ID Here* |
| **NID:** | *Type ID Here* |
| **Classification:**  | *Is it Category I, II, or Exempt?* |
| **Purpose of Dam:** | *What is the purpose of the Dam?* *Additional Purpose otherwise Delete* *Additional Purpose otherwise Delete* |
| **Year Constructed:** | *Choose a Year* |
| **Year(s) Modified:**  | *Choose a Year*, *Choose a Year*, *Choose a Year*, *Choose a Year* |
| **Design Engineer/Firm:** | *Who designed the Dam?* |
| **Construction History:** | *What modifications have been performed since it was first constructed?* |
| **GPS Location:** | *Latitude* (North) | *Longitude* (West) |
| **County:** | *Choose a county* |
| **Access to Dam:** | *Describe how to access the dam.* *Does the Dam require keys or have a gate?* |

**Dam Information:**

|  |  |
| --- | --- |
| **Type:** | *What is the Dam constructed of?* *Additional description if needed otherwise delete* |
| **Height:** | *Height* (Feet) |
| **Crest Length:** | *Length* (Feet) | **Crest Width:** | *Width* (Feet) |
| **Upstream Slope:** | *Slope (Ex: 2H:1V)* | **Downstream Slope:** | *Slope (Ex. 3H:1V)* |

**Reservoir Information:**

|  |  |
| --- | --- |
| **Drainage Area:**  | *What is the total area of drainage for the Dam? (Acre)* |
| **Normal Pool:** | *Elevation* (Feet) | *Surface Area* (Acre) | *Storage Volume* (Acre-Feet) |
| **Maximum Pool:** | *Elevation* (Feet) | *Surface Area* (Acre) | *Storage Volume* (Acre-Feet) |

**Spillway (Principal/Primary):**

|  |  |
| --- | --- |
| **Spillway/Conduit:** | *Describe the Primary Outlet for the Dam. (i.e. The primary spillway consists of an 18” CMP, slip lined with a 12”HDPE conduit.* |

**Spillway (Emergency/Auxiliary):**

|  |  |
| --- | --- |
| **Spillway/Conduit:** | *Describe the Auxiliary Outlet for the Dam. (i.e. The auxiliary spillway is a 10’ earthen spillway covered with articulated concrete blocks.* |

**Control Gates/Drains:**

|  |
| --- |
| *Describe any control gates/lake drains located on the dam.* |

#  Aerial Imagery



# Dam Layout/Drawings



# General Information

This document is the Operations and Maintenance Manual for *Type Dam Name Here* and it provides operational procedures, recommendations, and standard forms to be utilized during normal operation and maintenance of the dam. The objective of this document is to provide a record-keeping template for current and past owners and/or operators of the dam. It enables anyone (operators, owners, HOA officers, etc.) new to the dam to easily incorporate into the operations of the dam.

**Location and Directions**

**Attendance and Communications**

**Safety and Health**

# Operation Procedures

Proper operational procedures are highly important to maintaining the safety of the embankment, spillways, gates, etc. The following sections detail in specific language how to properly perform daily operations at the dam. These sections allow those not knowledgeable about the dam’s operational procedures to appropriately perform daily operations.

**Routine Operation**

**Drains/Gates/Valves**

**Instrumentation**

# Periodic Maintenance Procedures

Dam owners and operators are responsible for conducting routine maintenance of the dam. This includes, but is not limited to, the sections provided below. If you need any assistance with this section, please contact your retained Engineer of Record or the Safe Dams Program.

**Toe/Chimney Drains**

**Embankment/ Vegetation Control**

**Outlet Structures**

**Instrumentation**

# Monitoring & Inspections

**Owner Quarterly Inspections**

The Rules for Dam Safety states, “Dam owners are required to inspect their dam each calendar quarter. The four calendar quarters are January 1st – March 31st, April 1st – June 30th, July 1st – September 30th, and October 1st – December 31st. This inspection may be conducted by the dam owner or the dam owner may hire someone with dam safety experience to do the inspection on their behalf.” These inspections are performed based on techniques provided by the Safe Dams Program. The inspection form and instructions for performing the inspection can be found towards the bottom of the following web page: <http://epd.georgia.gov/watershed-protection-branch>. The inspection reports are to be sent to the Safe Dams Program as one package for the entire year. The entire yearly package including April 1st of the prior year through March 31st of the current year must be mailed in by April 30th. The mailing address for the Safe Dams Program is: 2 Martin Luther King Drive, S.E., Suite 1362, Atlanta, Georgia, 30334. These reports can also be hand delivered to the above address if a meeting is set with the Safe Dams Program.

**Engineer Inspections**

The dam owner shall have the dam inspected by a professional engineer (P.E.) at least every two years. This inspection shall be conducted between October 1 and March 31, commencing with October 1, 2017. This inspection shall satisfy the inspection requirement for the October 1 through December 31 and January 1 through March 31 quarterly inspections. For any dam that is less than 50 feet tall and the dam owner has conducted at least four consecutive quarterly inspections as outlined above, the owner may submit to the Division a waiver request by October 1 for one two-year cycle of the engineer inspections. The waiver request shall be approved unless the Division denies the request in writing within 30 days of receipt of the waiver request. Reasons to deny the waiver request include, but are not limited to, inspection reports showing deficiencies or Division enforcement actions within the past twenty-four (24) months. There is no waiver for dams 50 feet and taller. The engineer’s inspection can be completed on the same inspection form used by the owner or they can use an equivalent form. The engineer’s inspection report must have a summary of findings including outlining areas that need additional maintenance and those areas requiring additional investigation or design by an engineer.

# Appendix A

# Appendix B

# Appendix C

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