# Applicability and Instructions

## Applicability

This form must be completed to provide information and parameters describing the characteristics of the dam system. This information shall be submitted in the permit application to construct a new dam or alter an existing dam, in accordance with Rule 62-330.301(2), Florida Administrative Code, and Section 8.4.5, *Dam Systems*, and Appendix L, *Dam Systems*, in the Applicant’s Handbook Volume I. The applicant or applicant’s authorized agent, as provided in Form 62-330,060(1), *Application for Individual and Conceptual Approval Environmental Resource Permit, State 404 Program Permit, and Authorization to Use State-Owned Submerged Lands*, must sign this form.

## Instructions

Each parameter is hyperlinked to its definition, listed alphabetically at the bottom of this form. See the definitions for a range of acceptable answers and units of measurement. Do not leave any parameters blank. If a response is unknown, enter “UNK,” or if a parameter is not applicable, enter “N/A”.

Submit the completed form to the permitting agency in the application submittal and preferably email it to DamSafety@FloridaDEP.gov or mail it to the State Dam Safety Officer, Florida Department of Environmental Protection, 2600 Blair Stone Road, Mail Station 3595, Tallahassee, Florida 32399.

# Dam Parameters

## Part 1: General Information

1. [Dam Name](#DamName):        2. [Other Dam Name](#OtherDamNames)s:

3. [Former Dam Name(s)](#DamFormerName):

4. [State Agency / Permit Number](#StateAgencyPermitNo):       5. [NID ID](#NIDID):

6. [Number Separate Structures](#NumberSepStructures):       7. [Other Structure ID](#OtherStructureID):

8. [Longitude:](#Longitude)       9. [Latitude:](#Latitude)

10. [Section](#STR):       [Township](#STR):       [Range](#STR):

11. [County](#County):        12. [River or Stream](#RiverorStream):

13. [Nearest Downstream City/Town](#NearestTown):

14. [Distance to Nearest Downstream City/Town (miles)](#_Distance_to_Nearest):

15. [Dam Owner Name](#DamOwnerName) (add additional sections or sheets to record all dam owners):

Last Name:        First Name:

Address:

City:        State:       Zip:

Landline Number:        Cell Phone Number:

Email Address:

16. [Dam Owner Type](#_Dam_Owner_Type):

17. [Landowner Name](#Landowners) (add additional sections or sheets to record all landowner names):

Last Name:        First Name:

Address:

City:        State:       Zip:

Phone Landline Number:        Cell Phone Number:

Email:

## Part 2: Specific Parameters

18. [Dam Designer](#DamDesigner):

19. [Non-Federal dam on Federal Property](#NonFedDamonFebProperty): **[ ]**  yes **[ ]**  no

20[. Dam Type](#_Dam_Type):

21. [Core](#Core):

22. [Foundation:](#Foundation)

23. [Dam Purpose(s)](#_Dam_Purpose):

24. [Year Completed](#YearCompleted):       25. [Year Modified](#YearModified):

26. [Dam Length (feet)](#DamLength):       27. [Dam Height (feet)](#DamHeight):

28. [Structural Height (feet)](#StructuralHeight):       29. [Hydraulic Height (feet)](#HydraulicHeight):

30. [NID Height (feet)](#NIDHeight):

31. [Maximum Discharge (cubic feet per second)](#MaxDischarge):

32. [Maximum Storage (acre-feet)](#MaxStorage):       33. [Normal Storage (acre-feet)](#_Normal_Storage_(Acre-Feet)):

34. [NID Storage (acre-feet)](#_NID_Storage_(Acre-Feet)):       35. [Surface Area (acres)](#SurfaceArea):

36. [Drainage Area (acres)](#DrainageArea):

37. [Downstream Hazard Potential](#_Downstream_Hazard_Potential):

38. [Emergency Action Plan](#EAP): [ ]  yes [ ]  no [ ]  not required

39. [EAP Last Revision Date](#EAPRevDate):

40. [Inspection Date](#InspectionD):       41[. Inspection Frequency](#InspectionFreq):

42. [Spillway Type](#SpillwayType):       43. [Spillway Width (feet)](#SpillwayWidth):

44. [Outlet Gates](#OutletGates):

45. [Volume of Dam](#VolumeofDam) (cy):

46. [Number of Locks (#)](#NumberSepStructures):       47. [Length of Locks (feet)](#LockLength):

48: [Width of Locks (feet)](#_Lock_Width_(Feet)):

## Part 3: Supplemental Information

50. [State Regulatory Agency](#StateRegAgency):

51. [Federal ID](#_Federal_ID):

51. [Federal Funding](#FedAgencyFund):

52. [Federal Design](#FedAgencyDes):

53. [Federal Construction](#FedAgencyConst):

54. [Federal Regulatory](#FedAgencyReg):

55[. Federal Inspection](#FedAgencyInsp):

56[. Federal Operation](#FedAgencyOp):

57[. Federal Owner](#FedAgencyOwner):

58. [Federal Other](#FedAgencyOther):

## Part 4: Condition Assessment

59. [Condition Assessment](#ConditionAssessment):

60. [Condition Assessment Date](#ConditionAssessmentDate):

61. [Operational Status](#OperationalStatus):

62. [Operational Status Date](#OperationalStatusDate):

## Part 5: Applicant or Applicant’s Authorized Agent

I certify that all above information has been completed to the best of my knowledge.

Typed/Printed Name

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_

Signature Date

# Dam Parameter Definitions

## Condition Assessment

Assessment that best describes the condition of the dam based on available information.

Satisfactory

Fair

Poor

Unsatisfactory

Not Rated

A dam safety deficiency is defined as a load capacity limit or other issue that can result in a failure of the dam or appurtenant structure. It is a characteristic or condition that does not meet the applicable minimum regulatory criteria.

Normal operations are defined as loading on the dam resulting from day-to-day pool operations to achieve authorized purposes in accordance with minimum state or federal criteria.

Condition Assessment definitions are as follows:

SATISFACTORY

No existing or potential dam safety deficiencies are recognized. Acceptable performance is expected under all loading conditions (static, hydrologic, seismic) in accordance with the minimum applicable state or federal regulatory criteria or tolerable risk guidelines.

Typical Circumstances:

* No existing deficiencies or potentially unsafe conditions are recognized, with the exception of minor operational and maintenance items that require attention.
* Safe performance is expected under all loading conditions including the design earthquake and design flood.
* Permanent risk reduction measures (reservoir restrictions, spillway modifications, operating procedures, etc.) have been implemented to eliminate identified deficiencies.

FAIR

No existing dam safety deficiencies are recognized for normal operating conditions. Rare or extreme hydrologic and/or seismic events may result in a dam safety deficiency. Risk may be in the range to take further action. Note: Rare or extreme event is defined by the regulatory agency based on their minimum applicable state criteria.

Other Circumstances:

* Lack of maintenance requires attention to prevent developing safety concerns.
* Maintenance conditions may exist that require remedial action greater than routine work and/or secondary studies or investigations.
* Interim or permanent risk reduction measures may be under consideration.

POOR

A dam safety deficiency is recognized for normal operating conditions which may realistically occur. Remedial action is necessary. This rating may also be used when uncertainties exist for critical analysis parameters used to identify a potential dam safety deficiency. Investigations and studies are necessary.

Other Circumstances:

* Dam has multiple deficiencies or a significant deficiency that requires remedial work.
* Lack of maintenance (erosion, sinkholes, settlement, cracking, unwanted vegetation, animal burrows, inoperable outlet gates) has affected the integrity or the operation of the dam under normal operational conditions and requires remedial action to resolve.
* Critical design information is needed to evaluate the potential performance of the dam. For example, a field observation or a review of the dam’s performance history has identified a question that can only be answered by review of the design and construction history for the dam. Uncertainty arises when there is no design and/or construction documentation available for review and additional analysis is needed to better understand the risk associated with operation under normal operational conditions.
* Interim or permanent risk reduction measures may be under consideration.

UNSATISFACTORY

A dam safety deficiency is recognized that requires immediate or emergency remedial action for problem resolution.

Typical Circumstances:

* A critical component of the dam has deteriorated to unacceptable condition or failed.
* A safety inspection indicates major structural distress (excessive uncontrolled seepage, cracks, slides, sinkholes, severe deterioration, etc.), advanced deterioration, or operational deficiencies which could lead to failure of the dam or its appurtenant structures under normal operating conditions.
* Reservoir restrictions or other interim risk reduction measures are required.
* A partial or complete reservoir drawdown may be mandated by the state or federal regulatory agency.

NOT RATED

The dam has not been inspected, is not under state or federal jurisdiction, or has been inspected but, for whatever reason, has not been rated.

## Condition Assessment Date

Date of the most recent condition assessment of the dam.

## Core

Indicates the position, type of watertight member and certainty.

Position: Upstream Facing

Homogeneous

Core

Unlisted/Unknown

Type: Bituminous Concrete

Concrete

Earth

Metal

Plastic

Unlisted/Unknown

Certainty: Known

Estimated

## County

The name of the county in which the dam is located.

## Dam Designer

Name of the principal firm(s) or agency accomplishing design of dam and major appurtenant operating features, and major modifications. Original designer is listed first, then modification designers (if applicable). If an Architect-Engineer Firm designed the dam under a state or federal government contract, the state or federal agency name is listed first, then the company name.

## Dam Name

The official name of the dam. No abbreviations unless the abbreviation is a part of the official name. For dams that do not have an official name, the popular name is used.

## Dam Height (Feet)

Height of the dam, in feet to the nearest foot, which is defined as the difference between the lowest elevation on the crest of the dam and the lowest elevation in the original streambed; or if not present, the lowest elevation of the downstream toe of the embankment.

## Dam Length (Feet)

Length of the dam, in feet, which is defined as the length along the top of the dam. This also includes the spillway, powerplant, navigation lock, fish pass, etc., where these form part of the length of the dam. If detached from the dam, these structures should not be included.

## Dam Owner Name (Alphanumeric)

Name(s) of the dam owner(s). If multiple owners, duplicate and complete this section for all other owners.

## Dam Owner Type

Category describing the dam owner(s). List all dam owner types.

Federal

State

Local Government

Public Utility

Private

Tribe

Not Listed

Local Government should have taxing authority or is supported by taxes. A Lake District is supported by taxes and considered Local Government. A lake association that is supported by association dues, would be Private.

## Dam Purpose

Category describing the current purpose(s) for which the reservoir is used. List the most important purpose first.

Debris Control

Fire Protection, Stock, or Small Farm Pond

Fish and Wildlife Pond

Flood Risk Reduction

Grade Stabilization

Hydroelectric

Irrigation

Navigation

Recreation

Tailings

Water Supply

Other

## Dam Type

Category describing the main type of dam. If more than one type, the most dominant used is listed first.

Arch

Buttress

Concrete

Earth

Gravity

Masonry

Multi-Arch

Rockfill

Roller-Compacted Concrete

Stone

Timber Crib

Other

## Date of Last Revision of Emergency Action Plan

Date of the most recent revision of the Emergency Action Plan.

## Distance to Nearest City/Town (Miles)

Distance from the dam to the nearest affected downstream city/town/village (listed in the Nearest Downstream City/Town), to the nearest mile (and tenth, if appropriate).

## Downstream Hazard Potential

Category indicating the potential hazard to the surrounding and downstream areas of a dam and its appurtenant structures should they fail or be mis-operated. The categories reflect probable loss of human life and impacts on economic, environmental, lifeline interests, and other concerns, such as water quality degradation. The hazard potential does not indicate the current condition of the dam or the risk of it failing.

The four categories are listed below and their definitions follow.

## Low Hazard Potential

Significant Hazard Potential

High Hazard Potential

Undetermined

LOW HAZARD POTENTIAL

Failure or mis-operation is not expected to result in loss of human life and may result in low economic and/or environmental losses, that are largely limited to the owner’s property.

SIGNIFICANT HAZARD POTENTIAL

Failure or mis-operation would not be expected to probably result in loss of human life, but can cause economic loss, environmental damage, disruption of lifeline interests, or impact other concerns, such as water quality degradation.

HIGH HAZARD POTENTIAL

Failure or mis-operation of the dam will probably cause the loss of human life. Economic, environmental, and lifeline losses may also occur, but they are not necessary for this classification.

|  |  |  |
| --- | --- | --- |
| **Downstream Hazard Potential**  | **Loss of Human Life**  | **Economic, Environmental, & Lifeline Losses**  |
| High  | Probable  | Yes, but not necessary  |
| Significant  | None expected  | Yes  |
| Low  | None expected  | Low and generally limited to owner’s property  |

UNDETERMINED HAZARD POTENTIAL

Dams for which a Downstream Hazard Potential, as defined above, has not been designated or is not provided.

## Drainage Area (Square Miles)

Drainage area of the dam, in square miles, which is defined as the area that drains to the dam reservoir(s).

## Emergency Action Plan

Indicates whether this dam has an Emergency Action Plan (EAP). An EAP is defined as a plan of action to be taken to reduce the potential for loss of human life and impacts to economic, environmental, and lifeline interests, and other concerns, such as water quality degradation, from failure or mis-operation of a dam or its appurtenant structures.

Yes

Not Required (because the dam is a Low Hazard Potential dam)

## Federal Agency Involvement in Construction

Name(s) of federal agency involved in the construction of the dam.

## Federal Agency Involvement in Design

Name(s) of federal agency that was involved in the design of the dam.

## Federal Agency Involvement in Funding

Name(s) of federal agency that was involved in funding the dam.

## Federal Agency Involvement in Inspection

Name(s) of federal agency that is involved in the inspection of the dam.

## Federal Agency Involvement in Operation

Name(s) of federal agency that is involved in the operation of the dam.

## Federal Agency Involvement – Other

Name(s) of federal agency that is involved in other aspects of the dam.

## Federal Agency Involvement in Regulatory

Name(s) of federal agency that is involved in the regulation of the dam.

## Federal Agency Owner

Name(s) of federal agency that partly or wholly owns the dam.

## Federal ID

The unique identifier for each dam record. For saddle dams, dikes or other separate structures associated with the dam project, it is a concatenation of the primary dam’s NID ID and the Other Structure ID. For all other dams, it is the NID ID.

## Former Dam Name

Previous reservoir or dam name(s), if changed or combined into one dam system.

## Foundation

The material upon which the dam is founded, and certainty.

Foundation: Rock

Rock and soil

Soil

Unlisted/Unknown

Certainty: Known

## Estimated

## Hydraulic Height (Feet)

Hydraulic height of the dam, in feet to the nearest foot, which is defined as the vertical difference between the maximum design water level and the lowest point in the original streambed or if not present, the lowest elevation of the downstream toe of the embankment.

## Inspection Date

Date of the most recent inspection of the dam.

## Inspection Frequency

The scheduled frequency interval for periodic inspections, in years.

## Landowner Name(s)

Name(s) of the owner(s) of the land where the dam is located, if different than the dam owner. If multiple owners, duplicate and complete this section for all other owners.

## Latitude

Latitude at dam centerline as a single value in decimal degrees, as measured by the North American Datum of 1983 (NAD83).

## Length of Locks (Feet)

Length of the primary navigation lock to the nearest foot.

## Lock Width (Feet)

Width of the primary navigation lock to the nearest foot.

## Longitude

Longitude at dam centerline as a single value in decimal degrees, as measured by the North American Datum of 1983 (NAD83).

## Maximum Discharge (Cubic Feet/Second)

Spillway discharge rate, in cubic feet per second, when the reservoir is at its maximum designed water surface elevation.

## Maximum Storage (Acre-Feet)

Maximum storage is defined as the total storage space in a reservoir below the maximum attainable water level, including any surcharge storage (storage between the emergency spillway crest and top of dam). Maximum storage shall be calculated by using one of the two methods shown below that is most representative of the actual storage volume. The dam height may be used as a surrogate for maximum depth if the depth is unknown.

* Using the Average End Area Method (volume (acre-feet) = length (feet) x (A1 + A2 (end areas (acre)) /2))
* Multiplying the maximum depth of the waterbody times the surface area of the waterbody times four tenths (impoundment storage (acre-feet) = depth (feet) x surface area (acre) x 0.4) (as provided in Title 210 – National Engineering Handbook, Part 650 Engineering Field Handbook, Chapter 11, *Ponds and Reservoirs*, United States Department of Agriculture Natural Resources Conservation Service).

## Nearest Downstream City/Town

Name of the nearest downstream city, town, or village that is most likely to be affected by floods resulting from the failure of the dam.

## NID Height (Feet)

Maximum value of either Dam Height, Structural Height, or Hydraulic Height. Accepted as the general height of the dam.

## NID ID

The official National Inventory of Dams (NID) identification (ID) number for the dam. If the dam meets the NID criteria and it does not already have a NID ID, it will be assigned one by the State Dam Safety Officer. This field is used as the unique identifier for each NID dam.

## NID Storage (Acre-Feet)

Maximum value of either Normal Storage or Maximum Storage. Accepted as the general storage of the dam.

## Non-Federal Dam On Federal Property

Indicate yes or no whether this dam is a non-federal dam located on federal property.

## Normal Storage (Acre-Feet)

Normal storage, in acre-feet, is defined as the total storage space in a reservoir below the normal retention level, including dead and inactive storage and excluding any flood control or surcharge storage. For normally dry flood control dams, the normal storage will be zero. If unknown, enter *UNK* and not zero.

## Number of Separate Structures

Number of separate structures associated with this dam project. Include saddle dams (or dikes), which are subsidiary dams of any type constructed across a saddle or low point on the perimeter of a reservoir, as defined in FEMA 148: *Federal Guidelines for Dam Safety*, Glossary of Terms. Do not include the number of appurtenant works which are defined as, but not limited to, such structures as spillways, either in the dam or separate there from; the reservoir or its rim; low level outlet works; and water conduits, such as tunnels, pipelines or penstocks, either through the dam or its abutments.

## Number of Locks

Number of existing navigation locks for the project.

## Operational Status

The category that best describes the operational or remediation activities of the dam based on available information.

 Normal Operations

 Under Investigation, Planning, Permitting, or Design for Remediation

 Under Remediation

 Enforcement Pending/Ongoing

 Not Applicable.

A dam safety deficiency is defined as a load capacity limit or other issue that can result in a failure of the dam or appurtenant structure. It is a characteristic or condition that does not meet the applicable minimum regulatory criteria.

Operational Statusdefinitions are as follows:

NORMAL OPERATIONS

No existing or potential dam safety deficiencies are recognized. Dam is operating without restrictions. Applies to dams with a Satisfactory or Fair Condition Assessment.

The Operational Status categories below apply to dams with a Fair, Poor, or Unsatisfactory Condition Assessment.

UNDER INVESTIGATION, PLANNING, PERMITTING, OR DESIGN FOR REMEDIATION

A dam safety deficiency is recognized but uncertainties may exist. Dam remediation plan is currently under investigation, planning, permitting or design review. Temporary risk reduction measures, such as reservoir restrictions or early warning systems, may be in place to decrease the risk caused by the known deficiencies.

UNDER REMEDIATION

A dam safety deficiency is recognized. Temporary risk reduction measures, such as reservoir restrictions, may be in place to decrease the risk caused by the known deficiencies. Active remedial measures or construction are occurring to correct the known deficiencies.

ENFORCEMENT PENDING / ONGOING

A dam safety deficiency is recognized. Dam owner is unresponsive and not taking risk reduction or remediation measures to make the dam meet applicable regulatory criteria. Regulatory agency may be already taking enforcement action against the dam owner.

NOT APPLICABLE

The dam has not been inspected, is not under state or federal jurisdiction, or has been inspected but has not been assigned a condition assessment. Applies to dams with no Condition Assessment.

## Operational Status Date

Date of the most recent assessment of the operational status.

## Other Dam Names

Names other than the official name (for example, reservoir name), of the dam in common use.

## Other Structure ID

The identification number (S001, S002, etc.) of a separate structure, such as a saddle dam or dike, associated with the dam project. This field only applies to saddle dams, dikes or other separate structures associated with a primary dam.

## Outlet Gates

Category describing the type of (1) spillway and (2) controlled outlet gates, if any. List outlet gates in decreasing size order, followed by number of gates.

None

Uncontrolled

Tainter (radial)

Vertical Lift

Roller

Bascule

Drum

Needle

Flap

Slide (sluice gate)

Valve

Other controlled

## River or Stream

The official name of the river or stream on which the dam is built. If the stream is unnamed, identify it as a tributary (-TR) to a named river or stream, e.g., *Snake-TR.* If the dam is located offstream, enter the name of the river or stream plus “-OS”, e.g., *Snake-OS.*

## Section, Township, Range Location

This information provides the dam location identified in the Public Land Survey System, such as, *S05 T01S R01E.* If the prime meridian location is needed to locate the dam within the state, include it in the field, e.g., *S05 T01S R01E (Sixth Prime Meridian)*.

## Spillway Type

Category describing the type of spillway.

Controlled

Uncontrolled

None

## Spillway Width

The width of the spillway, to the nearest foot, available for discharge when the reservoir is at its maximum designed water surface elevation. Typically for an open channel spillway, this is the bottom width. For pipe spillways or drop inlets that have diameters, use the diameter of the pipe.

## State Agency / Permit Number

Name of State permitting agency and permit number, if permitted.

## State Regulatory Agency

Name of the primary state agency with regulatory or approval authority over the dam. In most cases, this is the Water Management District where the dam is located or a specific Florida Department of Environmental Protection program.

## Structural Height (Feet)

Structural height of the dam, in feet to the nearest foot, which is defined as the vertical distance from the lowest point of the excavated foundation to the top of the dam. Top of dam refers to the parapet wall and not the crest.

## Surface Area (Acres)

Surface area, in acres, of the impoundment at its normal water level.

## Volume of Dam (Cubic yards)

Total number of cubic yards occupied by the materials used in the dam structure. Portions of powerhouse, locks, and spillways are included only if they are an integral part of the dam and required for structural stability.

## Year Completed

Year (four digits) when the original main dam structure was completed. If unknown, and a reasonable estimate is unavailable, enter *UNK*.

## Year Modified

Year (four digits) when major modifications or rehabilitation of dam or major control structures were completed. Major modifications are defined as a structural, foundation, or mechanical construction activity which significantly restores the project to original condition; changes the project’s operation; capacity or structural characteristics (for example, spillway rehabilitation); or increases the longevity, stability, or safety of the dam and appurtenant structures.

Follow the year with the category describing the type of modification.

Foundation

Hydraulic

Mechanical

Seismic

Structural

Other