

The Department of Natural Resources (DNR) is seeking public input on our revised *Municipal Dam Grant application scoring criteria*. The DNR is giving potential applicants the opportunity to review and comment on the proposed revisions so that you can better plan your grant application work.

A. Why Are We Making This Change? The revisions are based on suggestions from applicants and department staff with emphasis on enhancing the clarity of the criteria and including additional criteria that should be included for scoring and ranking Municipal Dam Safety grant applications.

B. Background. The municipal dam grant program has been in existence since 1990 and has used the same criteria for ranking applications for that entire time. Time has shown that some of the existing criteria were confusing to applicants and that the criteria were not always helpful in distinguishing one application from another.

A finer definition of the current criteria and the addition of new criteria used for application scoring and ranking will provide grant applicants and Department staff with more reliable information.

C. Summary of Proposed Changes. The focus of the proposed criteria is on a variety of dam safety issues with attention to the impacts to water and land use at the dam project site. Proposed changes include:

- Addition of selected public interest criteria associated with the dam and the waterbody on which the dam is located.
- Additional points to dam owners who are ready to proceed with their projects or are first-time applicants.
- Additional points for dam owners who have instituted proactive safety measures and have been timely in completing compliance directives at their dams.

D. Remaining Steps. Once the 21-day comment period is complete, all comments will be considered, revisions will be made to this draft guidance document as warranted, a *Response Summary* will be prepared, then both the *Response Summary and Final Guidance* will be made available using the existing DNR Program Guidance web page (<http://dnr.wi.gov/news/input/guidance.html>) and will be posted on the Municipal Dam Safety grants web page.

Please forward your comments about this proposed policy no later than March 6, 2015, to:	Name: Kari Beetham, Municipal Dam Safety Grant Manager Email: Kari.Beetham@wisconsin.gov	Phone: 608-264-9207
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MUNICIPAL DAM GRANT PROGRAM
(Ch. NR 335, Wis. Adm. Code)
INSTRUCTIONS FOR COMPLETING APPLICATION FORM 3500-088 (R 01/15)

DUE DATE: _____

All applicants must complete Form 3500-088 (R /2015) in order for the municipality or lake district to be considered for a grant under ch. NR335, Wis. Adm. Code. Municipalities and lake districts that previously applied for funds through this grant program will need to submit a new application form and required attachments.

The instructions below are intended to provide supplemental information to instructions that already appear on Form 3500-088. Please feel free to contact one or more of the staff contacts listed below if you have any questions.

Bill Sturtevant, State Dam Safety Engineer	608-266-8033
Meg Galloway, Dams and Flood Plain Section Chief	608-266-7014
Kari Beetham, Dam Grant Manager	608-264-9207

Chapters NR 333 and NR 335, Wis. Adm. Code apply to Dam Design and Construction and the Municipal Dam Grant Program. Links to these codes are listed on the DNR Municipal Dam grant web page: <http://dnr.wi.gov/aid/dammunicipal.html>

Section 1 –Applicant/Owner Information

Applicant:

A grant may only be awarded for the repair or removal of a dam that is owned by a county, city, village, town, tribe, public inland lake protection and rehabilitation district (lake district), or other municipal entity. **Note: Dams that are inspected, approved and licensed by a federal agency under 18 CFR Part 12 will not be eligible to receive funding. (NR 335.02(2)(b))**

Owner's representative:

The individual authorized by a resolution of the governing body of the municipality to apply for the grant on behalf of the municipality. This representative must be designated by resolution to be able to sign the grant agreement. **Include your resolution with the application package.**

Owner's consultant:

Dam owners will need to hire a professional engineer to design their dam project and perform other analyses that may be required for the grant application. If the owner has retained an engineering consultant the consultant should be identified as the Owner's Consultant. A significant amount of DNR review time can be saved if the DNR Water Management Engineer can pose technical questions directly to the design engineer. **NOTE:** Plans, specifications, and studies required for the grant project must be prepared, stamped, and signed by a professional engineer licensed to practice in the State of Wisconsin. Grant applications submitted with completed construction plans and specifications receive a higher point value. If final construction plans and specifications are not included with the grant application and your project receives priority funding, the final construction plans and specifications will be due to DNR within 6 months of the priority funding list notification.

Section 2 -- Dam Information

“Name of the dam” should include both the common name and/or any other popular name. Information about your dam can be found by going to this website: <http://dnr.wi.gov/topic/dams/damsearch.html> and following these instructions:

Select ***Individual dam***; type in information for your dam in one or more of the search fields then press the ***Search*** button. Once you find your dam click on ***View Dam*** button then click on the ***Report*** button.

“Waterway impounded” is the river or stream that the dam spans or the name of the lake formed by the dam.

“Location” should be indicated by the Section, Township, and Range, which can be determined from a USGS quadrangle map, plat map, or property description of the dam site. Also, include a detailed map with your application.

“Date of Inspection Report” or “Order to Repair” is the **date of the most recent DNR directive** associated with the dam that indicates the safety concerns that need to be addressed by this project. Note: the dam must have deficiencies identified in either an administrative order or an inspection directive in order to be eligible to apply for a grant.

Section 3 – Required Attachments

The DNR must **receive** all required information **on or before the grant application deadline** in order for the application to be complete and considered for funding. Applications received or postmarked after the application deadline will not be eligible for consideration.

Applicants that previously applied for funds through this grant program will need to resubmit an **updated** grant application with the required documentation, in accordance with the requirements specified in the grant application.

A. Required Attachments:

- **Resolution #1 & Resolution #2:** An applicant must adopt a resolution which **1)** designates an authorized representative to apply for and act on behalf of the applicant and **2)** indicates a municipality’s/lake district’s commitment to the “local share” and agrees to pay a share of the eligible costs which are equal to the total project cost minus the state share.

A sample “authorizing” resolution (which covers Resolution #1 & Resolution #2) is available from the following DNR web page: <http://dnr.wi.gov/Aid/DamMunicipal.html>

- **Map:** To show property lines and owners adjacent to dam.
- **Land Use Letter:** This requires the applicant to provide proof of receipt of a letter sent by certified mail to all municipalities that are affected by the dam failure profile, informing the municipality that a change in the land use controls may be necessary to secure the hazard rating for the dam.

The letters to downstream communities with certified mail receipts must be attached to the application. It is acceptable to attach one copy of the letter and certified mail receipt with a list of all recipients. The letters must be sent to all communities (counties, cities, villages) in the inundation area identified by the dam failure analysis.

If appropriate zoning controls have already been adopted by all affected municipalities to secure the hazard rating, this step is not necessary. Check with the DNR Water Management Engineer for your county to make sure.

- Property Deed: "Proof of Property Ownership" must **include a map showing property lines and property owners adjacent to the dam site, and a copy of the property deed for the dam site.** Documentation of dam transfer may be submitted in place of a deed. In order to qualify for a grant under s. NR 335.02(2)(a), the applicant must own or have permanent legal access to the entire dam, including all embankments.
- Emergency Action Plan (EAP) approval letter: approving the predetermined plan of action to be taken to reduce the potential for loss of life and property damage, if points are claimed in Section III.A. of the Criteria Ranking Worksheet.
- Inspection, Operation and Maintenance Plan (IOM) approval letter: that identifies who is responsible for operating, inspecting and maintaining the dam, if points are claimed in Section III.B. or III.C. of the Criteria Ranking Worksheet.

B. Project Type – Choose Either - Dams to be Repaired or Modified OR Dams to be Abandoned and Removed:

Dams to be Repaired or Modified

- A dam failure analysis is required. Your project cannot be considered eligible until this analysis is reviewed by the department and deemed adequate to identify the hazard the dam poses to existing development downstream of the dam.

If a dam failure analysis has previously been submitted to or approved by the Department the submittal or approval date must be provided.

Dams to be Abandoned and Removed

- A permit to abandon or an application for a permit to abandon, and a hydrologic analysis of the floodplain with the dam non-existent is required in order for the project to be eligible for consideration.

Applications for a permit to abandon a dam are available from the Water Management Specialist or the Water Management Engineer in the local DNR office. Their contact information can be found on the following DNR web page:

Water Management Specialists/WMS

http://dnr.wi.gov/topic/Waterways/about_us/county_contacts.html

Water Management Engineers/WME

<http://dnr.wi.gov/topic/dams/regionalContacts.html>

Section 4 – Summary of Estimated Eligible Project Costs Based on the Detailed Description of Eligible and Ineligible Expenses

This section provides the DNR a preliminary estimate of eligible and ineligible project costs as defined by s. NR 335.08, Wis. Admin. Code. List the itemized costs and attach a detailed narrative description for each of the costs.

- Costs for engineering services should be based on signed contracts or engineer’s estimates.
- Construction estimates should be based on completed plans and specifications or on a conceptual design or project description. Grant applications with estimates based on completed plans and specifications receive a higher point value.
- Construction estimates should not include general contingencies.

Dam owners should be aware that project costs often change between initial estimates, final design and bidding. Costs can even change during construction due to unforeseen conditions.

Section 5: Estimated State Share of Eligible Project Costs and Sponsor Share of Costs

After you have entered the line item budget amounts in Section 4 the State Share and Sponsor Share of costs will auto-calculate and fill in the appropriate fields.

The State share is calculated as prescribed in NR 335.05, as follows:

Dam to be Repaired or Modified

- 50% of the first \$400,000
- 25% of the next \$800,000

Dam to be Abandoned and Removed

- 100% up to a maximum of \$400,000

Note: The Department is allowed to include a 10% contingency amount at the time a grant award is issued as long as the total award amount does not exceed \$400,000. This is in order to reduce the risk of project funding deficiencies due to unforeseen costs and to limit the need for grant award amendments.

Section 6 -- Criteria for Priority Ranking

The DNR will check this section for accuracy and contact the applicant if a discrepancy is found.

- Enter all answers as a ‘Y’ for yes or an ‘N’ for no.
- Points will auto-fill in the Generated Points column depending on where you enter a ‘Y’.
- For Question IV.B. follow instructions provided on the worksheet and on Page 6, Financial Considerations.
- For Question V. enter a ‘Y’ for all that apply.

I. Hazard Potential -- Based on the Dam Failure Analysis and criteria in NR 333.06.

A. The Dam Hazard Potential used in the priority rankings will be assigned based on the current land use downstream of the dam (consequence of dam failure on current development). The dam

failure analysis must include a determination of the hazard rating, however, this rating could change based on the department's review, and is also dependent on land use controls downstream of the dam.

High hazard potential = Dams that have existing development in the hydraulic shadow that will be inundated to a depth greater than 2 feet or do not have land use controls in place to restrict future development in the hydraulic shadow. Loss of human life during failure or mis-operation of the dam is probable.

Significant hazard potential = Dams that have no existing development in the hydraulic shadow that would be unundated to a depth greater than 2 feet and have land use controls in place to restrict future development in the hydraulic shadow. Potential for loss of human life during failure must be unlikely. Failure or mis-operation of the dam would result in no probable loss of human life but could cause economic loss, environmental damage, or disruption of lifeline facilities.

Low hazard potential = Dams that have no existing development in the hydraulic shadow, minimal potential for loss of life and minimal potential for property damage.

B. Is this a large dam as defined by NR 333?

Large dam = Structural height of more than 6 feet and a maximum storage capacity of 50 acre-feet or more of water. OR has a structural height of 25 feet or more and impounds more than 15 acre-feet of water.

This document can help identify if you have a large dam: [Large Dam Design.pdf](#)

C. Land use controls currently in effect downstream of the dam (NR 333.03(9)).

Land Use Controls = Floodplain zoning ordinance adopted and approved per s. 87.30, Stats. or restrictive covenants, easements or other appropriate legal arrangements between the owner of the dam and owners of all land within the dam's hydraulic shadow.

Land use controls for the area downstream of the dam must be determined for dams that are being repaired/reconstructed. The effect of the 100-year floodplain or hydraulic shadow may cross municipal boundaries, so all affected municipalities must be contacted (see land use letter under Attachments) and land control must be adopted in all impacted communities in order to receive the priority ranking points. Municipal jurisdictions associated with the downstream floodplain should be indicated on the Flood Insurance maps or Dam Failure maps.

Compliant Dams = Per [NR 116.08\(3\)](#)

(a) A dam is considered compliant if all the following requirements are met:

1. The dam is structurally adequate to meet the conditions in ss. [NR 333.05 \(2\) \(k\)](#) and [NR 333.07 \(3\) \(b\)](#).
2. The dam is hydraulically adequate to meet the standards in s. [NR 333.07 \(1\)](#).
3. The dam has been certified by a professional engineer, registered in Wisconsin, to meet the requirements of subds. 1. and 2.
4. Written assurance of the dam owner's ability to operate and maintain the dam in good condition is obtained from the dam owner.

5. An emergency action plan to minimize loss of human life has been developed for the area downstream of the dam based on the assumption that the dam fails during the regional flood.
 6. The department reviews and approves the material submitted under subds. 1. to 5.
- (b) Developed areas downstream of compliant dams shall be zoned and regulated as follows:
1. For high hazard dams, assuming that the dam is nonexistent during the regional flood.
 2. For significant or low hazard dams, assuming the dam fails during the regional flood.
- (c) Undeveloped areas downstream of a compliant dam shall be zoned and regulated assuming that the dam fails during the regional flood.

Dam removal projects do not need to determine land use controls in the hazard area downstream of the dam.

If you do not know whether your dam is considered a complaint dam or what zoning had been adopted downstream of your dam, please work with the DNR Water Management Engineer for your county early in the application process.

II. Purpose of the project

Enter 'Y' (yes) or 'N' (no).

III. Proactive Safety Measures

If you answer yes to questions A and B attach approval letter or cover letter.

If you answer yes to question C attach copies of completed IOM check lists, water level readings, or self-inspections.

IV. Financial Considerations

A. Enter 'Y' or 'N'

B. Please refer to the Department of Revenue publication found at the following website:

Wisconsin Municipal Income per Return at: <http://www.revenue.wi.gov/report/i.html>
Look under Reports – I at Income

Lake Districts: When determining financial need points for lake districts, the point totals are to equal the weighted average of the income for the individual municipalities making up the district, based on the percent of the district lying within each municipality.

If your municipality is in more than one county, refer to the table at the end of the publications where the numbers are combined.

You may use this Excel spreadsheet to assist you with the calculations. The Excel spreadsheet is set up so that you can enter your municipality information and Excel will auto calculate the PCI of your municipality and the municipality PCI as a % of the State PCI. Note: color shaded columns auto-calculate.

Point conversion: After filling in the Excel spreadsheet, the per capita income to the state average will be reflected in Column F. Find your percentage range in the Point Conversion Table and enter the point value into Column G of the spreadsheet.

Point Conversion Table

*Per Capita Income, percent of State Average	Points Applicable
135% and over	2
100% to less than 135%	4
89% to less than 100%	6
80% to less than 89%	8
72% to less than 80%	10
65% to less than 72%	12
59% to less than 65%	14
54% to less than 59%	16
50% to less than 54%	18
Less than 50%	20

*Based on the most recent department of revenue publications

V. Public Interest – Navigability of the stream, stream classification, and the type of project.

Refer to the [WDNR data base](#) for navigability rating and to Administrative Codes [NR 102](#) and [NR 104](#) for stream classifications downstream of the dam, if not listed, it is a warm water fishery.

[Surface Water Data Viewer \(SWDV\)](#) provides interactive web-mapping tools for water quality, sediment, biological data, and aquatic invasive species.

A. Repair/Reconstruction

Enter 'Y' (yes) for all that apply or 'N' (no) for each of the 6 questions.

B. Dams to be Abandoned and Removed

Enter 'Y' (yes) for all that apply or 'N' (no) for each of the 4 questions.

VI. Inspections and Orders – Large Dams

A. Have you met the owner required inspection requirements in ss. [Chapter 31.19](#)?

- ✓ Inspection of high hazard dams – 4 times per WDNR schedule.
- ✓ Inspection of significant hazard dams – 2 times per WDNR schedule.
- ✓ Inspection of low hazard dams – once every 10 years per WDNR schedule.

Enter 'Y' (yes) or 'N' (no).

B. Have you met the time frames or completed the directives listed in the WDNR dam inspection or concurrence letter or WDNR issued order?

Enter 'Y' (yes) or 'N' (no).

VII. Ability to Proceed

A. Do you have WDNR approved plans and specifications for your dam project? Enter 'Y' (yes) or 'N' (no).

- If yes, attach the plans and specifications approval letter.

VIII. Other Considerations

Enter 'Y' (yes) or 'N' (no) to each question.

- If the total eligible project cost is estimated to be greater than \$500,000 **attach bid estimates.**

Grand Total Priority Points: The sum of the points for the eight criteria topics is the score we will use for priority ranking purposes.

Certification – The application (Form 3500-088 (R /2015)) must be signed and dated by the authorized representative listed in the "Owner Information" section of the application and identified in the authorizing resolution.

Application Submittal -- To be considered for grant funding, the completed application and ALL REQUIRED ATTACHMENTS MUST BE RECEIVED BY THE DEPARTMENT by **close of business (4:30 p.m.) on the application due date.**

Please allow ample time for documents to reach the DNR by the deadline date.

Mail applications to: WI Department of Natural Resources
Municipal Dam Grant Program – CF/2
101 South Webster Street
P.O. Box 7921
Madison, WI 53707-7921

NOTE: If the application is hand-carried to the Department, deliver it to the DNR Customer Service Center, 1st floor, State Natural Resources Building, 101 S. Webster Street, Madison, WI. Make sure the application gets stamped with the date of delivery.

Faxed or emailed applications will not be accepted – due to the generally large size of the dam grant application attachments.

Please contact the following DNR staff for additional information:

Bill Sturtevant, State Dam Engineer	608-266-8033
Meg Galloway, Dams and Flood Plain Section Chief	608-266-7014
Kari Beetham, Dam Grant Manager	608-264-9207

**Municipal Dam Grant Criteria Ranking Worksheet
(Revised February 2015)**

Instructions

The Municipal Dam Grant ranking criteria is based on NR 335. The questions below are based on requirements in Wisconsin State Statutes Chapter 30 and 31, Wisconsin administrative codes, NR 1, NR 5, NR 102, NR 104, NR 116, and NR333. Most of the information needed to answer the questions for the ranking criteria should be available in your dam files. Definitions to terms are found in the administrative codes. Municipal per capitl income information is available from the Department of Revenue (DOR) report called Wisconsin Municipal Income per Return. The report is available on the DOR website: <http://www.revenue.wi.gov/report/i.html>

A "Yes" response to the questions generates points. A "No" response generates zero points. Place a "Y" in the Answer Column to accumulate points.

I. Hazard Potential (maximum points 70) Refer to the grant application instructions pages 4 & 5.

A. Hazard potential based on current land use downstream of the dam.

1. High hazard ?
2. Significant hazard?

Answer	Available Points	Generated Points
y	30	30
n	20	0

B. Is this a large dam as defined by NR 333?

y	20	20
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C. Land use controls currently in effect downstream of the dam.

1. Land use controls (zoning) that includes the hydraulic shadow of the or a compliant dam as defined by NR 116.08(3)?
2. Land use controls (zoning) that is based on FIRM's 100yr flood event mapping.

y	20	20
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n	10	0
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Part I. Total Points

70

II. Purpose of the Project (maximum points 30)

A. Is this a dam removal project?

Answer	Available Points	Generated Points
n	30	0
n	30	0

B. Is this a project to increase spillway capacity to meet NR 333 requirements?

n	30	0
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Part II. Total Points

0

III. Proactive Safety Measures (maximum points 50)

A. Is there a written Emergency Action Plan for the dam on file the WDNR?

Answer	Available Points	Generated Points
y	20	20
y	15	15
n	15	0

B. Is there a written Inspection, Operation, and Maintenance(IOM) Plan for the dam on file the WDNR?

n	15	0
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C. Have you implemented the approved IOM? (Attach copies of completed check lists.)

Part III. Total Points

35

**Municipal Dam Grant Criteria Ranking Worksheet
(Revised February 2015)**

IV. Financial Considerations (maximum points 40)

A. Do you have a segregated or dedicated fund or a special assessment district to cover maintenance and operations?

Answer	Available Points	Generated Points
n	20	0

B. What is the capita income as a percentage of the State average for the municipality where the dam structure is located?

Use the % to points Conversion Table below and enter the point value (2 - 20) into the Answer column.

135% and over	2 points
100% to less than 135%	4 points
89% to less than 100%	6 points
80% to less than 89%	8 points
72% to less than 80%	10 points
65% to less than 72%	12 points
59% to less than 65%	14 points
54% to less than 59%	16 points
50% to less than 54%	18 points
Less than 50%	20 points

n	2	0
n	4	0
n	6	0
n	8	0
y	10	10
n	12	0
n	14	0
n	16	0
n	18	0
n	20	0
		10

Part IV. Total Points

V. Public Interest (maximum points 185)

The next questions are based on the navigability of the stream, the stream classification, and the type of project.

Answer 'Y' to all that apply.

1. Is this a dam repair or reconstruction

- on a warm water forage fish stream?
- on a limited forage fish stream?
- on a limited aquatic life stream?
- on a non-navigable stream?
- where there is public access to the impoundment?
- where there is a boat landing on the impoundment meeting NR 1.91(4.)?

Answer	Available Points	Generated Points
n	25	0
n	50	0
n	75	0
n	100	0
y	5	5
y	5	5

2. Is this a dam removal project on a

- outstanding resource water?
- exceptional resource water?
- a cold or cool water stream?
- a warm water sport fish

n	125	0
n	100	0
n	75	0
n	50	0
		10

Part V. Total Points

**Municipal Dam Grant Criteria Ranking Worksheet
(Revised February 2015)**

VI. Inspections and Orders (maximum points 40)

- A. Have you met the owner required inspection requirements of ss 31.19?
- B. Have you met the time frames or completed the directives listed in the WDNR dam inspection or concurrence letter or WDNR issued order?

Part VI. Total Points

Answer	Available Points	Generated Points
y	15	15
y	25	25
		40

VII. Ability to Proceed (maximum points 20)

- A. Do you have WDNR approved plans and specifications for your dam project?

Part VII. Total Points

Answer	Available Points	Generated Points
n	20	0
		0

VIII. Other Considerations (maximum points 30)

- A. Is this the first time your municipality has applied for a NR 335 Dam grant?
- B. Is the total eligible project cost estimated to be greater than \$500,000?

Part VIII. Total Points

Answer	Available Points	Generated Points
y	10	10
y	20	20
		30

Grand Total Point Score	195
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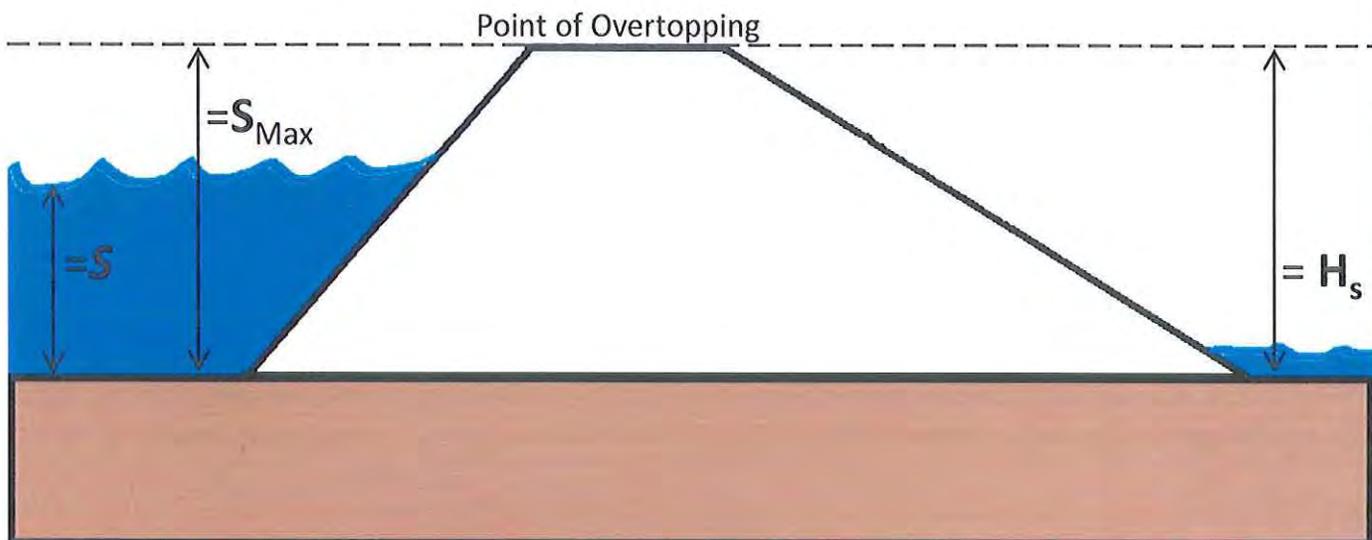
Large Dam



H_s = Height (structural) difference between design elevation and the stream channel elevation at the downstream toe

S = Storage Volume (planned) from bottom of impoundment to planned pool

S_{Max} = Storage Volume from bottom of impoundment to design elevation



A dam is considered a large dam if :

H_s = Height (structural) > 6 feet...and

S_{Max} = Storage Volume \geq 50 acre feet

or

H_s = Height (structural) \geq 25 feet...and

S_{Max} = Storage Volume > 15 acre feet

