



Iowa Department of Natural Resources
Flood Plain Management Program

FPID# _____

Determining if a Flood Plain Permit is Required –
Miscellaneous Structures, Obstructions or Deposits

This form has been developed to help you determine if a flood plain permit will be required from the Iowa DNR for a project on or near a river or stream. You must also obtain approval from the Iowa DNR Sovereign Lands Program (515) 725-8464, the U.S. Army Corps of Engineers (309) 794-5371, and your local flood plain manager (if applicable) before beginning construction. You are legally responsible if you proceed with a project without obtaining all required permits.

What is a Miscellaneous Structure, Obstruction or Deposit?

Flood plain projects that are not otherwise covered under Department rules, Iowa Administrative Code 567-71.1 through 71.13 are considered miscellaneous structures, obstructions and deposits. Projects or activities such as aggregate stock piles, spoil piles from dredging or other such projects, general flood plain fill, plank fencing, utility poles and towers with associated fill, boat ramps, stormwater and sanitary sewer outfalls structures and some wetland development dikes are some examples of this type of project.

When is a DNR Flood Plain Permit Required?

- Rural areas. In rural areas, any miscellaneous structures, obstructions, or deposits on the floodway or flood plain of any river or stream draining more than 10 square miles where such works obstruct more than 3 percent of the cross-sectional area of the stream channel at bankfull stage or where such works obstruct more than 15 percent of the total cross-sectional area of the flood plain at any stage. In determining a 15 percent obstruction of the flood plain, the concept of equal and opposite conveyance as defined in 567—Chapter 70 shall apply.
Urban areas. In urban areas, miscellaneous structures, obstructions, or deposits on the floodway or flood plains of any river or stream draining more than 2 square miles.

The following information must be completed to make the determination:

Form with fields for Location (in Quarter-Section-Tier-Range format), County, Stream(s), Located within a corporate limit?, If Yes, provide street address, Drainage Area, and How was the drainage area determined? Includes a note about drainage area determination.

To determine if a DNR flood plain permit is required for your project, please answer the following questions and proceed as instructed:

- 1. Is the project located within a detailed Flood Insurance Study area?
- If you answered "Yes" to question 1, a DNR Flood Plain permit is required for your project. Please proceed to "Submitting the Information", Part B at the end of this form.

If you answered "No" to question 1, please proceed to the questions below.

- 2. Is the project located within an urban area with a drainage area at the project site of more than two square miles?

- If you answered “Yes” to question 2, a DNR Flood Plain permit is required for your project. Please proceed to “Submitting the Information”, Part B at the end of this form.
- If you answered “No” to question 2, please proceed to the questions below

3. Is the project located within a rural area with a drainage area at the project site of more than ten square miles?
 Yes No

- If you answered “No” to questions 1, 2, and 3, a DNR Flood Plain permit is not required for your project. Please proceed to “Submitting the Information”, Part A at the end of this form.
- If you answered “Yes” to question 3, please note that the determination of whether a DNR flood plain permit is required depends upon the amount of obstruction caused by the project (assuming the project is NOT located within a detailed Flood Insurance Study area). Please proceed to the paragraphs below.

As noted above, a Flood Plain Permit is required for a miscellaneous obstruction if more than 3% of the cross sectional area of the channel at bankfull stage is obstructed by the project. To make this determination, calculate the cross-sectional area of the stream channel and the cross-sectional area of the channel obstruction. Divide the cross-sectional area of the obstruction by the total cross-sectional area of the channel and multiply by 100 to determine the percent of the channel that would be obstructed.

Note: If you need assistance to determine the percent reduction in cross-section of the channel, please call (866) 849-0321.

4. Does the project obstruct more than 3% of the cross sectional area of the channel? Yes No
- For obstructions that are not located in the channel, a Flood Plain Permit is required for a miscellaneous obstruction if the project obstructs more than 15% of the cross sectional area of the flood plain as determined by the concept of equal and opposite conveyance. If you are unable to determine conveyance, you may estimate the percent obstruction by area using the following procedure.

Estimated cross sectional area of the flood plain at the elevation of the 100-year flood or the top elevation of the obstruction, whichever is less: _____ sq. ft. (a)

15% of that area _____ sq. ft. (b)

For asymmetrical flood plains estimate total overbank area at the 100-year flood elevation or the top of the obstruction, whichever is less: _____ sq. ft.

Estimated percent of overbank area on: Right overbank _____ %(c)

Left overbank _____ %(d)

Using the overbank percentages above, calculate the obstruction threshold for each overbank.

Right overbank area b x c = _____ sq. ft. (e)

Left overbank b x d = _____ sq. ft. (f)

Total proposed obstructed area at the 100-year flood elevation or at the top of the obstruction, whichever is less:
 _____ sq. ft. (g)

Note: If you need assistance to determine the percent reduction in cross-section of the flood plain, please call (866) 849-0321.

5. Does the proposed obstructed area (g) exceed the threshold area (e) or (f), whichever applies Yes No
- If you answered “No” to questions 4 and 5, a DNR flood plain permit is not required for your project. Please proceed to “Submitting the Information”, Part A at the end of this form.
 - If you answered “Yes” to either question 4 or question 5, a DNR flood plain permit is required for your project. Please proceed to “Submitting the Information”, Part B at the end of this form.

Note: If it is unclear as to whether your project will require a Flood Plain Permit from this department, please call (866) 849-0321 for assistance with the determination. This determination will have a significant effect on the type and amount of information that you will need to include with your application.

Submitting the Information:

- If you have determined that you do not need a permit AND you wish to have written confirmation from this Department that a DNR Flood Plain Permit is not required, you must submit copies of a completed and signed Joint Application Form (Form #36 - *Protecting Iowa Waters*) to the DNR Flood Plain Management Program, to the DNR Sovereign Lands Program, and to the U.S. Army Corps of Engineers, according to the instructions for the Joint Application Form (can be found at <http://floodplain.iowadnr.gov/>).
 - For the Flood Plain Management Program, the required submittals (in addition to the Joint Application Form) are this form and a project location map.
 - Please note that the DNR Sovereign Lands Program and the U.S. Army Corps of Engineers may require additional information to determine if their permits are required.
 - Your project may also need a permit from your local (city or county) permit authority. The local permit may require technical concurrence from the DNR Flood Plain Management Program.

- If you do need a permit, you will be required to secure a flood plain permit from the DNR Flood Plain Management Program prior to constructing the project. To apply for a DNR flood plain permit, please reference form 542-1029 titled "Applying for a Flood Plain Permit – Miscellaneous Structures, Obstructions or Deposits" (can be found at <http://floodplain.iowadnr.gov/>) and follow all directions contained within. All required information in the referenced document must be submitted along with the completed Joint Application Form at the time of application. **Applications submitted without this information will be considered incomplete.**