

TITLE V  
FLOODPLAIN DEVELOPMENT

CHAPTER 70

SCOPE OF TITLE—DEFINITIONS—FORMS—RULES OF PRACTICE

[Prior to 7/1/83, see INRC, Chs 2 and 5]

[Prior to 12/3/86, Water, Air and Waste Management[900]]

**567—70.1(455B,481A) Scope of title.** The department has jurisdiction over all floodplains and floodways in the state for the purpose of establishing and implementing a program to promote the protection of life and property from floods and to promote the orderly development and wise use of the floodplains of the state. ~~As part of the program, the department regulates floodplain development by three alternative methods: establishment of regulations for specific stream reaches by issuance of floodplain management orders (see 567—Chapter 75); approval of floodplain management regulations adopted by local governments (see 567—Chapter 75); and approval of floodplain development on a case-by-case basis where areas or projects are not covered by the first two methods (see 567—Chapter 71).~~ Any person who desires to construct or maintain a structure, dam, obstruction, deposit or excavation, or allow the same in any floodplain or floodway has a responsibility to contact the department to determine whether approval is required from the department or a local government authorized to act for the department.

Minimum statewide criteria for most types of floodplain development are listed in 567—Chapter 72. Special requirements for dams are listed in 567—Chapter 73.

**567—70.2(455B,481A) Definitions.** Definitions used in this title are listed in alphabetical order as follows:

*“Agricultural levees or dikes”* means levees or dikes constructed to provide limited flood protection to land used primarily for agricultural purposes.

“*Animal feeding operation*” means the same as defined in 567—65.1(459,459B).

“*Animal feeding operation structure*” means the same as defined in 567—65.1(459,459B).

“*Backwater*” means the increase in water surface level immediately upstream from any structure, dam, obstruction or deposit, erected, used, or maintained in the floodway or on the floodplains caused by the resulting reduction in conveyance area.

“*Base Flood Elevation*” means the elevation floodwaters would reach at a particular site during the occurrence of a flood having a one (1) percent chance of being equaled or exceeded in any given year. (Also commonly referred to as the “100-year flood”).

“*Building*” means all residential housing including mobile homes as defined herein, cabins, factories, warehouses, storage sheds, and other walled, roofed structures constructed for occupation by people or animals or for storage of materials.

“*Channel*” means a natural or artificial flow path of a stream with definite bed and banks to collect and conduct the normal flow of water.

“*Channel change*” means either (a) the alteration of the location of a channel of a stream or (b) a substantial modification of the size, slope, or flow characteristics of a channel of a stream ~~for a purpose related to the use of the stream’s floodplain surface rather than for the purpose of actually using the water itself, or putting the water to a new use.~~ (NOTE: Diversions of water subject to the permit requirements of Iowa Code sections 455B.268 and 455B.269 usually are not channel changes.) Increasing the cross-sectional area of a channel by less than 10 percent is not considered a substantial modification of the size, slope, or flow characteristics of a channel of a stream.

“*Confinement feeding operation*” means the same as defined in 567—65.1(459,459B).

“*Confinement feeding operation building*” or “*confinement building*” means the same as defined in 567—65.1(459,459B).

*“Confinement feeding operation structure”* means the same as defined in 567—65.1(459,459B).

*“Dam”* means the same as defined in rule 567—73.2(455B).

*“Development”* means a structure, dam, obstruction, deposit, excavation or flood control work in a floodway or floodplain.

*“Drainage district ditch”* means a channel located within the boundaries of a drainage district and excavated to establish a design channel-bottom profile for efficient conveyance of water discharged from agricultural tile systems and open drains.

*“Elevating”* means raising buildings by fill or other means to or above a minimum level of flood protection.

*“Emergency Action Plan”* means the plan to adequately evacuate persons or materials from the floodplain. Emergency Action Plan shall include action triggers such as stream levels or flood warnings, responsible parties, and a detailed plan of action.

~~*“Encroachment limits”* means the boundaries of the floodway established in the floodplains and designating the width of the channel and minimum width of the overbank areas needed for the conveyance of Q100.~~

~~*“Equal and opposite conveyance”* means the location of development offsets from stream banks so that floodplain lands on each side of a stream convey a share of the flood flows proportionate to the total conveyance available on each respective side of the stream.~~

~~*“Experienced Iowa flood chart”* means a plot on logarithmic graph paper of points representing floods which have been observed and measured in Iowa and subsequently published by the U.S. geological survey or other agency. Each point on the plot is located with the drainage area in square miles as the abscissa and discharge in cubic feet per second as the ordinate.~~

“*Flood control works*” means physical works such as dams, levees, floodwalls, and channel improvements or relocations undertaken to provide moderate to high degree of flood protection to existing or proposed structures or land uses.

“*Flood hazard area*” means the area including the floodplains and the river or stream channel.

“*Regulated Floodplain*” means the land adjacent to a stream which has been or may be inundated by ~~a flood having the magnitude of the regional flood as defined in these rules.~~ the 0.2% annual recurrence chance flood.

“*Flood proofing*” means a combination of structural provisions, changes, or adjustments in construction to buildings, structures, or properties subject to flooding primarily for the reduction or elimination of flood damages.

“*Floodway*” means the channel of a river or stream and the adjacent land areas that must be reserved in order to discharge the base flood event without cumulatively increasing the water surface elevation more than one foot. See Chapter 70.5 for floodway establishment procedures.

“*Floodway fringe*” means those portions of the floodplains located ~~landward of the eneroachment limits~~ outside of the floodway.

“*High damage potential*” means the flood damage potential associated with the following:

1. Habitable residential buildings and building complexes which include seasonal residential buildings; or
2. Industrial, commercial, agricultural, recreational and other similar buildings or building complexes, which, if inundated by flooding, would result in high public damages as determined by the department or which contain high-value equipment or contents that are not easily removed; or

3. Public buildings or building complexes, which, if inundated by flooding, would result in high public damages as determined by the department.

*Hydraulic shadow*” means the areas immediately upstream and downstream of an existing building or other obstruction. It can typically be determined by drawing lines at a 1:1 ratio upstream and downstream of the obstruction.

*Low damage potential*” means all buildings, building complexes or floodplain uses not defined as maximum or high damage potential where such structures are designed in a manner that inundation by flood waters results in minimal damage to the structure and its contents. Such structures include but are not limited to the following: detached residential garages, sheds, park shelters, buildings used for storage of equipment or crops that can be easily removed, and buildings used as temporary shelter for livestock.

*Major water source*” means the same as defined in 567—65.1(459,459B).

*Manure storage structure*” means the same as defined in 567—65.1(459,459B).

*Maximum damage potential*” means the flood damage potential associated with hospitals and like institutions; buildings or building complexes containing documents, data, or instruments of great public value; buildings or building complexes containing materials dangerous to the public or fuel storage facilities; power installations needed in emergency or buildings or building complexes similar in nature or use to those listed above.

*Minimum level of flood protection*” means the elevation corresponding to the water surface profile of the regulatory flood associated with a damage potential classification listed in these rules plus any freeboard specified in these rules.

“*Mobile home*” means a structure, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. It does not include recreational vehicles or travel trailers.

“*Nominated stream*” means the stream or water source named in the petition described in 567—Chapter 72 that seeks designation of a stream as a protected stream.

~~“*Permanent storage*” means the volume of water expressed in acre-feet which is stored upstream from a dam or in an impoundment up the level of the principal outlet works of the structure.~~

~~“*Probable maximum flood*” means the flood that may be expected from the most severe combination of critical meteorological and hydrologic conditions that are reasonably possible in the region, and is derived from probable maximum precipitation, the theoretical greatest depth of precipitation for a given duration that is physically possible over a particular drainage area at a certain time of year. The probable maximum precipitation within designated zones in Iowa has been determined by the National Weather Service. The probable maximum flood for any location within Iowa is determined by the department.~~

“*Protected stream*” means a stream designated by the department as a “protected stream” in 567—Chapter 72.

“*Public damages*” means costs resulting from damage to roads and streets, sewers, water mains, other public utilities and public buildings; expenditures for emergency flood protection, evacuation and relief, rehabilitation and cleanup; losses due to interruption of utilities and transportation routes, and interruption of commerce and employment.

*“Q500,” “Q100,” “Q50,” “Q25,” “Q15,” “Q10,”* et cetera, means a flood having a 0.2, 1, 2, 4, 7, 10, et cetera, percent chance of being equaled or exceeded in any one year as determined by the department.

~~*“Regional flood” means a flood representative of the largest floods which have been observed on streams in Iowa.*~~

*“Repair and maintenance of a drainage district ditch”* means the restoration of the original grade line, cross-sectional area, or other design specifications of a drainage district ditch lawfully established as part of a drainage district formed and operating under the provisions of Iowa Code chapter 468.

*“Road projects”* means the construction and maintenance of any bridges, culverts, road embankments, and temporary stream crossings.

*“Rural areas”* means any area not defined or designated as an urban area.

*“Seasonal homes”* means residential buildings or building complexes which are not used for permanent or year-round human habitation.

*“Stream”* means a water source that either drains an area of at least two square miles or has been designated as a protected stream in 567—Chapter 72.

~~*“Temporary storage” means the volume of water expressed in acre feet which may be stored upstream from a dam or in an impoundment above the level of the principal outlet works.*~~

*“Urban areas”* means incorporated municipalities.

*“Water source”* means the same as defined in 567—65.1(459,459B).

[ARC 2764C, IAB 10/12/16, effective 11/16/16; ARC 5899C, IAB 9/8/21, effective 10/13/21]

~~**567—70.3(17A,455B,481A) Forms.** Any private or public person or agency desiring to secure a permit under this chapter shall file a properly completed application, DNR Form 36. For~~

~~application and supplemental forms, any private or public person or agency should see [www.iowadnr.gov/Environmental-Protection/Land-Quality/Flood-Plain-Management](http://www.iowadnr.gov/Environmental-Protection/Land-Quality/Flood-Plain-Management).~~

~~Application forms may also be obtained from:~~

~~Floodplain and Dam Safety Section~~

~~Iowa Department of Natural Resources~~

~~Henry A. Wallace Building~~

~~502 East Ninth Street~~

~~Des Moines, Iowa 50319~~

[ARC 2764C, IAB 10/12/16, effective 11/16/16]

**567—70.43(17A,455B,481A) Requesting Review and approval of floodplain development.**

70.3(1) Development in FEMA designated floodways. Proposed development in floodways designated on FEMA effective Flood Insurance Rate Maps should be submitted for review by the Department. These submissions should include:

- a. A description of the work involved, the need to place it in the floodway, and an explanation of how the proposed work will not result in any increase in the base flood elevation.
- b. Detailed plans and hydraulic modeling are required for projects that include any obstruction to flow unless the project lies in a hydraulic shadow of an existing obstruction. The following information should be provided for review:

1. Detailed engineering construction plans showing all fill and proposed development.
2. A hydraulic model following the process for “no-rise” certification as outlined in 44 CFR Part 65.



3. In cases where the applicant cannot prevent a rise in the base flood elevation or is changing the boundaries of the floodway due to grading, a conditional letter of map revision (CLOMR) should be submitted to the Department, local community, and FEMA for review and approval.

~~70.43(12) *Development needing approval.* Any development in a floodway or floodplain which exceeds the thresholds in 567—Chapter 71 requires approval. ~~and is not otherwise regulated by a department floodplain management order or a department-approved, locally adopted floodplain management ordinance requires a department floodplain development permit.~~~~

~~70.43(2) *Permit Application Submittal Requirements* Applying for a floodplain development permit. Application should be submitted on forms or an application system provided by the department with required supporting materials as determined by the department describing the work and impacts of the proposed development. Application should include a project description and detailed drawings of proposed development. Certified engineering plans, specifications, and hydrologic and hydraulic analysis are required for complex projects such as bridges, culverts, levees, channel changes and other public infrastructure where the department determines that such materials are necessary to determine impacts of the project and the design's ability to meet criteria for approval. The engineering plans and other engineering information shall be certified by a licensed professional engineer or, if applicable, a licensed land surveyor, as required by Iowa Code chapter 542B. Application for a floodplain development permit shall be made on DNR Form 36 or a reasonable facsimile thereof. The application shall be submitted by or on behalf of the person or persons who have or will have responsibility by reason of ownership, lease, or easement for the property on which the project site is located. The application must be~~

~~signed by the applicant or a duly authorized agent. Completed applications along with supporting information shall be mailed or otherwise delivered to the Floodplain and Dam Safety Section, Environmental Services Division, Iowa Department of Natural Resources, Wallace State Office Building, 502 East Ninth Street, Des Moines, Iowa 50319.~~

~~70.4(3) Engineering plans.~~

~~a. — *General requirement of certified plans.* An application shall not be considered complete until sufficient engineering plans have been submitted to enable the department to determine whether the project as proposed satisfies applicable criteria. The engineering plans shall contain information, as specified by the department, which is needed for the department to conduct a technical review pursuant to paragraph 70.5(3) “b.” The engineering plans shall include specifications, operation procedures and other information relating to environmental impacts. The engineering plans and other engineering information shall be certified by a licensed professional engineer or, if applicable, a licensed land surveyor, as required by Iowa Code chapter 542B. Duplicate copies of certified plans are required so that one copy can be returned to the applicant upon approval or disapproval of the application. An additional copy of the certified plans shall be required if the plans are incorporated as part of an approval or disapproval order which is filed with a county recorder.~~

~~b. — *Waiver of submission of certified plans.* The department may waive the requirement in paragraph “a” of this subrule that the application for approval of a floodplain project be supported by certified engineering plans by making one of the following determinations:~~

~~(1) — Engineering data are not required to determine that the project conforms to all applicable administrative and statutory criteria; or~~

~~(2) Adequate engineering data used to evaluate the dimensions and effects of the project were already available to the engineering staff.~~

~~70.43(43) Application fee.~~ Reserved. No fee is charged at this time.

~~70.43(54) Modification of application or plans.~~ Applicants and prospective applicants are encouraged to communicate with the department's staff before submitting plans to identify the data required for review of a project and to discuss project modifications reasonably required to make the project conform to applicable criteria. When staff review of submitted plans discloses need for plan modification to conform to one or more criteria, the applicant is encouraged to submit revised plans.

[ARC 2764C, IAB 10/12/16, effective 11/16/16]

~~**567—70.4(455B) Establishment of a floodway.** Review and approval of floodplain projects will often depend on the location of the project relative to the floodway. When available, floodways calculated and published by FEMA on community adopted flood insurance rate maps may be used by the Department. Delineation of the encroachment limits defining the outer limits of the floodway must conform to the following criteria insofar as possible.~~

~~70.4(1) Increase in water surface elevation. The increase in the water surface elevation of Q100 (100 year discharge) which would result from confining flood flows to the floodway shall not exceed one foot.~~

~~70.4(2) Equal and opposite conveyance. Floodway boundaries shall be located such that the floodway areas on each side of a stream convey a share of the flood flows proportionate to the total conveyance available on each respective side of the stream.~~

70.4(3) Protection of existing development. To the extent feasible, floodway boundaries shall be located as follows:

a. To avoid the need to seek removal of a lawful existing structure in order to safely convey Q100;

b. To minimize any increase in the level of Q100 in an area where such increase would adversely affect an existing lawful structure;

c. To avoid the need to place an existing lawful structure in a delineated floodway if the placement would result in additional restrictions on improvements or reconstruction or replacement of the structure.

70.4(4) When acquisition of property interest required. Where protection of an existing structure necessitates prohibition of development in an area which could otherwise be developed under the criteria in 70.4(1) and 70.4(2), the department or local governmental designee may require that the owners of land benefited by the application of criteria in this subrule acquire property interests as needed to provide an adequate alternative floodway.

**567—70.5(17A,455B,481A) Procedures for review of applications.**

**70.5(1) Initial screening of applications.** Each application upon receipt shall be promptly evaluated by the department to determine whether adequate information is available to review the project. The department shall advise the applicant of any additional information required to review the project. If the requested information is not submitted within 60 days of the date the request is made, the department may consider the application withdrawn.

**70.5(2) Order of processing.** In general, complete applications including sufficient plans and specifications shall be reviewed in the order that complete information is received. However,

when there are a large number of pending applications, which preclude the department from promptly processing all applications, the department may expedite review of a particular application out of order if the completed application and supporting documents were submitted at the earliest practicable time and any of the following conditions exist:

*a.* Relatively little staff review time (generally less than four hours) is required and delay will cause the applicant hardship;

*b.* The applicant can demonstrate that a delay in the permit will result in a substantial cost increase of a large project;

*c.* Prompt review of the permit would result in earlier completion of a project that conveys a significant public benefit;

*d.* The need for a permit is the result of an unforeseen emergency or catastrophic event; or

*e.* A permit is needed to complete a project that will abate or prevent an imminent threat to the public health and welfare.

**70.5(3) *Project investigation.*** The department shall make an investigation of a project for which an application is submitted. The following are standard procedures for an investigation of an application.

*a. Inspection.* Agency personnel may make one or more field inspections of the project site when necessary to obtain information about the project. Submission of the application is deemed to constitute consent by the applicant for the agency staff and its agents to enter upon the land on which the proposed activity or project will be located for the sole purpose of collecting the data necessary to process the application, unless the applicant indicates to the contrary on the application.

b. *Technical review.* The department staff shall conduct a technical review using appropriate analytical techniques such as application of hydrologic and hydraulic models to determine the effects and impacts of a proposed project.

c. *Solicitation of expert comments on environmental effects.* For channel changes or other development which may cause significant adverse effects on the wise use and protection of water resources, water quality, fish, wildlife and recreational facilities or uses, the department shall request comments from the fish and wildlife division of the department or other knowledgeable sources.

d. *Summary report of project review.* The department staff may, if indicated, prepare a project summary report which summarizes the results of the review with respect to relevant criteria, the analytical methods used in the review and other project information. Typical indications of when project summary reports will be prepared are for those projects for which negative comments have been received from potentially affected landowners, those projects which are not approvable, and those projects which are complex in nature. Project summary reports will not normally be prepared for routine, noncontroversial projects.

e. *Notice to landowners who might be affected.* ~~Before an application for approval of a levee or channel change is approved t~~The department shall require the applicant to provide the names of the owners and occupants of land located immediately upstream, downstream, and across from the project site, and owners of any other land which the agency staff determines may be adversely affected by the project. The department shall then notify the landowners that the project is under consideration and provide a reasonable opportunity for submission of comments. ~~The requirements of this paragraph also apply to other types of floodplain development when the~~

~~project review discloses that lands not controlled by the applicant may be adversely affected by the project.~~

*f. Notice to the applicant that project does not conform to criteria.* If the project review discloses that the project violates one or more criteria and that the project should be disapproved, or approved only subject to special conditions to which the applicant has not agreed, the department shall notify the applicant and, when practical, suggest appropriate project modifications. The department shall offer the applicant an opportunity to submit comments before an initial decision is made.

**70.5(4) Initial decision by the department.** The initial decision by the department on an application for a floodplain development permit shall be either approval or disapproval. The initial decision shall include a determination whether the project satisfied all relevant criteria and may incorporate by reference and attachment the summary report described in 70.5(3) “d.”

*a. Approval.* Issuance of a floodplain development permit shall constitute approval of a project. The permit shall include applicable general conditions listed in 567—Chapter 72 and may include one or more special conditions when reasonably necessary to implement relevant criteria.

*b. Disapproval.* A letter to the applicant denying the application shall constitute disapproval of a project.

*c. Notice of initial decision.* Copies of the initial decision shall be mailed to the applicant, any person who commented pursuant to 70.5(3) “e,” and any other person who has requested a copy of the decision. The decision may be sent by ordinary mail, first class, and shall be accompanied by a certification of the date of mailing. An initial decision becomes the final decision of the department unless a timely notice of appeal is filed in accordance with 567—

70.6(17A,455B,481A). The final decision may be filed with the appropriate county recorder to give constructive notice to future landowners of any conditions or requirements imposed by the final decision.

**567—70.6(17A,455B,481A) Appeal of initial decision.** Any person aggrieved by an initial decision issued under 567—70.5(17A,455B,481A) of these rules may file a notice of appeal with the director. The notice of appeal must be filed within 30 days following the certified date of mailing of the decision unless the appellant shows good cause for failure to receive actual notice and file within the allowed time. The form of the notice of appeal and appeal procedures are governed by 567—Chapter 7.

The department shall mail a copy of the notice of appeal to each person who was sent a copy of the initial decision. The department shall attach an explanation of the opportunity to seek intervention in the contested case.

These rules are intended to implement Iowa Code sections 17A.3, 455B.105, 459.102, 459.301 and 481A.15 and Iowa Code chapter 455B, division III, part 4.

[Filed emergency 6/3/83—published 6/22/83, effective 7/1/83]

[Filed 12/2/83, Notices 6/22/83, 7/20/83—published 12/21/83, effective 1/25/84]

[Filed emergency 9/20/85—published 10/9/85, effective 9/20/85]

[Filed 11/1/85, Notice 6/19/85—published 11/20/85, effective 12/25/85]<sup>1</sup>

[Filed emergency 11/14/86—published 12/3/86, effective 12/3/86]

[Filed 7/22/88, Notice 5/18/88—published 8/10/88, effective 9/14/88]

[Filed 2/1/91, Notice 11/14/90—published 2/20/91, effective 3/27/91]

[Filed 10/22/93, Notice 8/18/93—published 11/10/93, effective 12/15/93]

[Filed 3/19/99, Notice 12/30/98—published 4/7/99, effective 5/12/99]



[Filed 4/24/03, Notice 1/8/03—published 5/14/03, effective 6/18/03]

[Filed ARC 2764C (Notice ARC 2629C, IAB 7/20/16), IAB 10/12/16, effective 11/16/16]

[Filed ARC 5899C (Notice ARC 5677C, IAB 6/16/21), IAB 9/8/21, effective 10/13/21]

<sup>1</sup> Effective date of definitions (channel change, drainage district ditch, repair and maintenance of a drainage district ditch) in rule 70.2 delayed 70 days by the Administrative Rules Review Committee.