

6120.5900 SUPPLEMENTAL STANDARDS AND CRITERIA FOR FLOODPLAIN MANAGEMENT.

Subpart 1. **In general.** Supplemental measures for floodplain management should be included in local governmental comprehensive floodplain management programs and adopted or provided in addition to local zoning ordinances when sufficient technical data and resources are available for their effectuation. All local governmental units shall provide for control of the development and use of floodplains in flood hazard areas by adopting the following specific regulations and measures where practical to supplement and complement floodplain zoning ordinances and provide comprehensive floodplain management.

Subp. 2. **Subdivision regulations.** Local government floodplain subdivision regulations shall regulate floodplain land subdivision in order to promote the public health, safety, and general welfare; promote wise use of floodplain lands; assure that floodplain lands are suitable for building sites and public improvements; provide for adequate drainage of the subdivided area; provide for ingress and egress to all lands involved; promote proper surveying, legal description, and monumenting of subdivided land; and establish procedures for vacating, correcting, and revising plats. The subdivision regulations shall establish standards for protection of roads, sewers, water supply, and other facilities from floods. In addition the regulations shall provide that:

A. the floodplain, floodway, and flood fringe areas as determined by standards set forth in part 6120.5600, subpart 4, be clearly labeled on the plat;

B. subdivision of lands within floodplain areas may not be approved if the cost of providing governmental services would impose an unreasonable economic burden on the local government unit; and

C. restrictive deed covenants shall be filed with the final plat and shall provide that the floodplain area be left essentially in the state shown on the plat, establish finished elevations of buildings, structures, and private streets and roads, and require that additions or modifications to these facilities will not violate any provisions of the floodplain zoning ordinances or supplemental regulations.

Subp. 3. **Building codes.** Building codes shall provide for the control of the design, construction, addition, and modification of buildings or structures placed in floodplain areas under authorized floodplain management ordinances. Floodplain building codes shall provide for necessary construction measures to protect health, safety, and welfare and to reduce the damaging effects and hazards of floods subject to the following standards:

A. The degree of flood protection required for building construction by building codes shall be based on the flood protection elevation described in part 6120.5700, subpart 5, and on flood velocities and duration of the regional flood for the particular area.

B. Whenever feasible and compatible with floodplain zoning ordinances and other regulations, all new buildings or structures located, constructed, or reconstructed in the floodplain shall conform to the following provisions:

(1) The first floors or basement floors of the buildings or structures shall be at or above the flood protection elevation in accordance with parts 6120.5700, subpart 5 and 6120.5800.

(2) Those portions of buildings, structures, and appurtenances located below the flood protection elevation shall be adequately floodproofed as provided in item D.

C. Alterations or additions to existing buildings or structures may be permitted if such will:

(1) decrease the flood damage potential of the building or structure;

(2) not increase the degree of obstruction to flood flows;

(3) provide for adequate protection of the building or structure to the flood protection elevations where applicable, in accordance with the provisions of part 6120.5700, subpart 5; and

(4) not endanger human life.

D. Where floodproofing is incorporated into new buildings or structures, and into alterations or additions to existing nonconforming structures, floodproofing measures shall be provided to the flood protection elevations described in part 6120.5700, subpart 5, and designed to withstand flood velocities, depths, durations, forces, and any other factors associated with the regional flood. A plan or document certified by a registered professional engineer or architect that the floodproofing measures are adequately designed to withstand regional flood conditions shall be submitted to the local government unit for approval before authorization is granted for the proposed work. Where this is not practical because of the particular circumstances, the commissioner may authorize other methods to determine the adequacy of floodproofing measures. Authorized floodproofing measures may include such provisions as anchorage of structures to prevent flotation, installation of watertight barriers over openings, reinforcement of walls to resist water pressures, use of materials to reduce wall seepage, construction or modification of water supply and waste disposal systems to prevent entry of flood waters, placement of essential utilities above the flood protection elevation, and installation of pumping facilities for internal and subsurface drainage.

Subp. 4. **Sanitary regulations.** In addition to all applicable state rules, regulations, requirements and laws, and local laws, local sanitary regulations shall:

A. Require the floodproofing of proposed water supply systems in floodplain areas to prevent entry of flood waters by means of floodproofing techniques consistent with subpart 3, item D.

B. Control the location, construction, or modification of private and public liquid or solid waste treatment and disposal facilities in floodplain areas so that:

(1) No new construction, addition, or modification to existing sewage, industrial waste, or other waste disposal systems shall be permitted within the floodplain unless emergency plans and procedures for action to be taken in the event of flooding are prepared, filed with, and approved by the state water pollution control agency.

(2) Emergency plans and procedures established consistent with item B, subitem (1) must provide for measures to prevent introduction of any pollutant or toxic material into the flood waters.

(3) Public or municipal collection and treatment facilities are used where available and where feasible.

(4) There shall be no disposal of garbage or solid waste materials within any floodplain areas, except at those disposal sites approved by the state water pollution control agency provided there will be no further encroachment on the floodway.

Subp. 5. **Warning signs and public information regulations.** Local governmental regulations shall provide for adequate floodplain warning and public informational services as follows:

A. In urban areas the limits of the areas which have been or would be inundated by the regional flood or by experienced floods of greater magnitude shall be delineated in the field at reasonable intervals by means of firmly placed markers of a sufficient size to be easily read from a distance of 20 feet.

The markers shall record the maximum known depth of flooding or height to the flood protection elevation, whichever is greater, as well as the zoned land use classification of the area involved.

The local government unit may prescribe the shape, size, lettering, and installation instructions for floodplain markers.

The cost of preparing and installing floodplain markers in future subdivided areas should be borne by the subdivider and the markers shall be installed prior to the sale of lots and construction of any buildings or structures.

Provisions should be made to monument bench marks for vertical control data as provided in part 6120.5600, subpart 4.

B. To fulfill the intent of Minnesota Statutes 1969, section 104.03, every local governmental unit with flood hazard areas and a floodplain management program shall submit to the commissioner by March 30 an annual report outlining and summarizing the

previous year's activity and progress in floodplain management activities on a form to be provided by the commissioner. The report shall include information as to:

(1) progress in the acquisition of technical floodplain information, including a summary of any flood crest elevations, cross sectional data and maps or illustrative material prepared by or for the local governmental unit;

(2) progress in floodplain management program administration, including a summary of zoning permits issued, subdivision plats approved, building permits issued, variances granted, enforcement action, etc.; and

(3) flood warning and information sources, including a summary of flood warning systems established or implemented, emergency plans prepared, and public informational reports and studies concerning various aspects of local floodplain management.

Subp. 6. **Measures for flood control.** When local floodplain management plans provide for structural works for flood control, such as levees, floodwalls, channel improvements, and reservoirs, all structural works or land treatment practices shall be consistent with the following statewide standards and criteria for floodplain management practices:

A. Any proposed work in the beds of public waters, as defined in Minnesota Statutes 1969, chapter 105, which will change the course, current, or cross-section of public waters of the state shall be subject to the provisions of Minnesota Statutes 1969, chapter 105, and other applicable statutes.

B. The minimum height and structural design of any dikes, levees, floodwalls, or similar structural works in place, or proposed to be placed in the floodplain shall be based on the flood profile of the regional flood confined between the structures subject to the following:

(1) The minimum authorized height and design of proposed structural works to remove an area from the regulatory floodplain shall meet or exceed the design, operation, and maintenance standards contained in Federal Emergency Management Agency Regulations, Code of Federal Regulations, title 44, section 65.10. If at that elevation, the commissioner determines that there is still a high risk of loss of life or property damage, then the commissioner, in accordance with subpart 7, may require a higher elevation, not to exceed the elevation of the standard project flood, as the commissioner determines is economically feasible and reasonable in cost for the extra protection provided.

(2) Increases in upstream flood stages which would result from construction of dikes, levees, floodwalls, or similar structures for protection of urban areas and for agricultural uses in rural areas shall not increase the stage of the regional flood in excess

of amounts listed in part 6120.5700, subpart 4, item A, and shall be reflected in the flood protection elevations for the upstream reach.

(3) Modifications and additions to existing structural works shall be regulated to assure that the proposed work will provide a means of decreasing the flood damage potential in the area and will provide the most reasonable protection of properties in heavily populated floodplain areas consistent with these standards and criteria. Any existing structural work which potentially threatens public health or safety shall be modified or reconstructed in order to meet the standards contained herein within a reasonable period of time based on agreement between the local government unit and the commissioner.

C. Flood protection elevations and floodway limits which reflect proposed measures for flood control shall not be effective until such measures are constructed and operative unless the proposed measures will increase flood heights in a given reach.

D. Floodplain development landward of any levee or floodwall shall provide for interior drainage including designation of ponding areas to protect against flooding from interior drainage.

Subp. 7. **Criteria for commissioner's determination.** The criteria for the commissioner's determination of potential for high loss of life or property damage and requirement for higher levee elevation is as follows:

A. when the elevation of the standard project flood is more than three feet above the elevation of the 100-year flood;

B. when it is not possible to provide sufficient flood warning to evacuate the structures below the 100-year flood elevation during a flood predicted to be at or above the 100-year flood elevation; or

C. for Army Corps of Engineers flood control projects, the plan providing a higher level of flood protection is the recommended plan.

Statutory Authority: *MS s 103F.135; 103F.141; 103F.155; 104.05*

History: *20 SR 2287*

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