

APPENDIX G: City of Minnetonka Floodplain District Ordinance

City of Minnetonka Water Resources Management Plan

SECTION 300.24. FLOODPLAIN DISTRICT.

1. Purpose, Authority.

- a) The purpose of the floodplain district is to recognize, preserve, and protect recreational and hydrological resources and functions of the city's creeks and associated lakes and drainageways by regulating the use of the creeks, associated lakes and adjacent properties in order to minimize loss of life and property damage due to flooding. The intent is to apply the regulations and standards of this district as an overlay zone, further regulating the use of land as allowed by the other use districts of this ordinance and to maintain a no net loss of floodplain volume.
- b) This section is adopted pursuant to Minn. Stat. chapters 103F and 462.
- c) This section is adopted to comply with the rules and regulations of the national flood insurance program codified as 44 code of federal regulations (CFR), parts 59 - 78, as amended, to maintain the community's eligibility in that program.

2. Boundaries of Floodplain District.

The boundaries of the floodplain district are those areas designated as lying within the 100-year flood boundary on the most recent flood insurance rate maps dated September 2, 2004, contained in the flood insurance study for the city of Minnetonka titled Hennepin County, MN, All Jurisdictions Volume 1 and Volume 2 dated September 2, 2004, and prepared by FEMA. These maps may also be amended by other studies accepted by the city and that are not less restrictive than the 100-year flood elevation and the floodways as published by FEMA. These maps constitute the official floodplain district map for the city. All notations, references, and data shown on the maps are incorporated by reference into this ordinance.

3. Description of Protected Floodplain.

- a) For purposes of regulating development consistent with this ordinance, the official floodplain includes all floodplain indicated on the official floodplain district map. If the city's water resources management plan or a study conducted by a government agency or other organization, and accepted by the city, indicates a greater 100-year flood elevation than that shown on the official floodplain district map, the official floodplain for the purposes of regulating development will be this greater 100-year flood elevation. The official floodplain also includes the following:
 - 1) the 931.5-foot elevation for the area surrounding Lake Minnetonka westward from the Gray's Bay dam based on the hydrological study conducted by the Minnehaha Creek Watershed District until such time as this study is amended;

2) the flood profiles and floodplain delineations in the Riley Purgatory - Bluff Creek Watershed District's watershed management plan, adopted in 1996 as amended; and

3) the flood profiles and floodplain delineations in the Nine Mile Creek Watershed District's watershed management plan, adopted in 1996 as amended.

b) Protected wetlands districts and "public waters" as classified by the Minnesota department of natural resources are regulated by sections 300.23 and 300.25, respectively, of this ordinance. The official floodplain may contain type 1,2, 3, 4, 5, 6, 7 and 8 wetlands, which are protected by the provisions of section 300.23 of this ordinance. In such instances, the more restrictive regulations apply.

c) Those areas designated by the city's water resources management plan as storm water retention areas are not considered to be within the floodplain district unless also designated on the official floodplain district map.

4. Interpretation of Floodplain Boundaries.

The boundaries of the floodplain district will be determined by scaling distances on the official floodplain district map and by the use of the water surface profile of the 100-year flood as shown in the flood insurance study, or by other approved studies. Where interpretation is needed regarding the exact location of the boundary of the district as shown on the official floodplain district map, or where there appears to be a conflict between the location of the boundary shown on the official floodplain district map and actual field conditions, all decisions will be based on the 100-year flood elevations shown on the flood insurance study and maps, if available. When evidence of fill exists the ground elevations that existed on the site as of September 2, 1974 must be submitted and will be used in this determination. If a 100-year flood elevation is not available on the flood insurance study maps, the city engineer may establish the boundary at the 100-year flood elevation as defined in the city's water resources management plan. The city engineer may also require the submission of a registered survey of the property and such other information as is necessary or convenient to reach a determination. This may include items listed in subdivision 8 in this section.

5. Permitted Uses.

a) Land may be used in the floodplain district, only for one or more of the following uses, if it does not result in net fill of the floodplain, does not involve placement of a structure in the floodway, does not involve excavation or fill of an area greater than 1,000 square feet, does not involve a volume of excavation, fill or other obstruction greater than 20 cubic yards, and meets the requirements in section 7:

1) agricultural uses such as general farming, pasture and grazing;

2) residential lawns, gardens, landscaped ponds, and play areas and swimming areas such as beaches, if any of the preceding uses is accessory to a low-density residential use on the same site;

3) wildlife and nature preserves;

4) public and private parks, playfields, and picnic grounds; or

5) non-structural pervious hiking, skiing, and horseback riding trails.

b) Land may be used in the floodplain district but outside of the floodway, only for one or more of the following uses, if it does not result in net fill of the floodplain, does not involve excavation or fill of an area greater than 1,000 square feet, does not involve a volume of excavation, fill or other obstruction greater than 20 cubic yards, and meets the requirements in section 7:

1) fences and retaining walls;

2) detached decks and patios located 10 or more feet from the principal use;

3) tennis courts and sport courts;

4) recreational trails and boardwalks;

5) environmental monitoring or control facilities, including those related to water quality and wildlife regulation;

6) residential boat docks and boat ramps;

7) public ponding and drainage facilities, associated appurtenances and approved flood control structures;

8) public utilities that are flood-proofed in accordance with the state building code or elevated to a minimum of two feet above the 100-year flood elevation;

9) overhead utility poles that are less than two feet in diameter, underground utility lines and distribution equipment, light poles, traffic signals, traffic regulatory signs, mailboxes, and other equipment that provides an essential public service; or

10) other uses similar to those permitted by this section if they have no greater impact on the floodplain, as determined by the city.

6. Conditional Uses.

Land may be used within the floodplain district but outside of the floodway, for the following by first obtaining a conditional use permit and conforming with the standards specified in subdivisions 7 and 9 of this section:

- a) outdoor nurseries;
- b) public or private, nonresidential or commercial boat docks and boat ramps, marinas, and boat slip rental;
- c) recreational uses including private and public golf courses, game farms, shooting ranges, public and private swimming pools and spas, and swimming areas such as beaches that are not a permitted use;
- d) a permitted use that involves excavation or fill of an area greater than 1,000 square feet or a volume greater than 20 cubic yards;
- e) railroads, streets, bridges, utility transmission lines and pipelines;
- f) commercial extraction and storage of sand, gravel, equipment, machinery and other materials;
- g) construction of additions to homes built before September 9, 1974, if the construction uses stilts, pilings, parallel walls, above-grade enclosed areas such as crawl spaces or tuck-under garages, or other approved methods that do not obstruct the flow of floodwater;
- h) a use permitted by subdivision 5 that involves moving 1,000 cubic yards of material per acre or more if in compliance with section 300.28 subdivisions 15-18;
- i) private ponding and drainage facilities, associated appurtenances, and approved flood control structures;
- j) a structure placed on fill or flood proofed meeting the flood protection standards of this code; or
- k) other uses similar to those permitted by this section if they have no greater impact on the floodplain, as determined by the city.

No conditional use permit may be granted except in circumstances in which its approval will not have an adverse impact on the intent of this ordinance or the precepts of the comprehensive plan. In addition, no conditional use permit may be issued unless efforts have been made to mitigate to the extent feasible adverse impacts on the subject property and adjacent properties. Granting of a conditional use permit will be conditioned upon review of the request by all other appropriate governmental agencies, including watershed districts, the Minnesota department of natural resources, and the United States federal emergency management agency and army corps of engineers.

7. Performance Standards.

All applicable permits must be obtained before any of the following takes place within the floodplain: erection, addition, modification, rehabilitation (including normal maintenance and repair), or alteration of any part of a building or structure; commencement of the use or change of use of a building, structure, or land; construction of a dam, fence, or on-site septic system; change or extension of a nonconforming use; repair of a structure that has been damaged by flood, fire, tornado, or any other source; or placement of fill, excavation of materials, or the storage of materials or equipment. The necessary permits may not be granted until the applicant has obtained all necessary state and federal permits. The activity allowed by the permit must comply with the provisions of this section 300.24, including the following:

- a) the use must have a low damage potential and must not obstruct flood flows or increase flood elevations in the floodway, and must not result in net fill within the subject floodplain;
- b) fill, dredge, spoil and other similar materials deposited or stored in the floodplain must be protected from erosion by vegetative cover, mulching, riprap or other acceptable method;
- c) if significant trees, wetlands, or public easements exist in the location of the proposed excavation or fill activity, administrative approval is not allowed;
- d) moving of 1,000 cubic yards of material per acre or more requires a separate conditional use permit.

8. Information to be Submitted.

An applicant for a permit under subdivisions 6 and 7 of this section may be required to furnish the following information as deemed necessary by the city:

- a) a concept plan indicating ultimate utilization of the property;
- b) a survey of existing conditions prepared by a registered land surveyor having, at a minimum, spot elevations or contours of the ground, any existing structures, the 100-year flood elevation and the boundary of the applicable FEMA flood zone (e.g. floodway, Zone A and Zone AE);
- c) a grading plan consistent with 300.28 prepared by a licensed engineer or land surveyor showing existing and proposed spot elevations or contours of the ground, erosion control measures, existing and proposed structures on the site, fill or storage elevations, location and elevations of adjacent streets, photographs showing existing land uses upstream and downstream, and soil type;

- d) supporting drainage calculations for fill, existing storage volumes, compensatory volumes, and flood elevations;
- e) a landscaping or re-vegetation plan;
- f) a review of the proposal by the Minnesota department of natural resources, if applicable, and the appropriate watershed district;
- g) a hydrologic and/or hydraulic analysis if necessary, to determine the 100-year flood elevation, the floodway and or the floodplain boundary. The analysis must include existing channel cross sections, existing and proposed stream profiles, must estimate the peak 100-year flood discharge and designate the floodway without a flood stage increase of more than .1 foot if applicable, and;
- h) other information that may be required by the city.

9. Standards for Floodplain Districts and Neighboring Lands.

The following standards apply to all land within the floodplain district and to neighboring lands:

- a) except as modified or regulated by the standards of the floodplain district, all requirements of the underlying zoning district and section 300.29 will apply;
- b) no structure, fill, deposit, obstruction, storage of materials or equipment, or other use that will cause an increase in the stage of the 100-year flood in the floodway or decrease in existing storage volume in the floodplain is allowed;
- c) parking or driveway areas, except those accessory to single-family dwellings, may not be located within 10 feet of the floodplain district and must be a minimum of one foot above the designated 100-year flood elevation;
- d) driveways accessory to a single family dwelling must be a minimum of one foot above the 100-year flood elevation;
- e) structures must be set back a minimum of 100 feet from the centerline of the waterway for Minnehaha creek, Purgatory creek, Nine Mile creek and their direct tributaries;
- f) new principal structures, attached garages, or additions to existing structures must be set back a minimum of 20 feet upland from the edge of the floodplain district and have a minimum lowest floor elevation not less than two feet above the designated 100-year flood elevation. Any addition above the first floor will be exempt from this setback requirement. For purposes of this section first floor will mean the portion of the principal structure that is above grade;

- g) attached decks and patios, outside stairways, cantilevered building areas, porticos and similar architectural features, may extend a distance not to exceed 10 feet into the required setback and must be 1.5 feet above the 100-year flood elevation and made of flood resistant materials;
- h) accessory structures must:
- 1) not be designed for human habitation and must not contain sanitary facilities;
 - 2) must be setback a minimum of 10 feet upland from the edge of the floodplain district;
 - 3) must have a minimum lowest floor elevation of not less than 1.5 feet above the designated 100-year flood elevation; and
 - 4) structures less than 120 square feet must not be in the floodway, must not be designed for human habitation, must not contain sanitary facilities, must be made out of flood resistant materials and must be anchored.
- i) principal structures must have areas within 15 feet of the structure at least $\frac{1}{2}$ foot above the designated 100-year flood elevation or have an approved evacuation route from the structure directly to land above the designated 100-year flood elevation;
- j) in the floodplain above-grade fully enclosed non-basement areas such as crawl spaces or other uninhabitable spaces within a structure, that are used to elevate a structure's lowest floor to two feet above the 100-year elevation, must be constructed to flood internally and must meet the following standards:
- 1) a minimum of two automatic openings must be included, having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
 - 2) openings must be on at least two sides of the structure;
 - 3) when openings are placed in a structure's wall to provide for entry of floodwater to equalize pressures, the bottom of all openings must be no higher than one-foot above grade;
 - 4) openings may be equipped with screens, louvers, valves, or other covering or devices, provided that they permit the automatic entry and exit of floodwaters without any form of human intervention; and
 - 5) the enclosed area must be constructed of flood-resistant materials in accordance with the state building code and be used solely for building access or storage. The enclosed space cannot be finished;

- k) before issuance of the certificate of occupancy, the applicant will be required to submit as-built drawings and certification by a licensed professional engineer or registered land surveyor that the finished fill and lowest floor elevation of all structures were accomplished in compliance with the provisions of this ordinance;
- l) hard surface runoff must be treated in accordance with the requirements of the city and appropriate watershed district. Treatment may include site retention, skimmers, weirs, infiltration basins, or storm water ponds of appropriate scale. Structures and ponds serving this purpose must be properly maintained and serviced by the property owner;
- m) discharge into the floodplain must not occur at a rate greater than allowed by the city engineer in accordance with the city's water resources management plan and appropriate watershed district requirements;
- n) development proposals must be designed in compliance with the city's water resources management plan and must incorporate the requirements of the appropriate watershed district, the Minnesota department of natural resources and other governmental agencies;
- o) in areas with land-locked basins that have no outlet, the minimum lowest floor elevation of new principal structures or additions to existing structures must be a minimum of two-feet above the flood elevation of two back-to-back 100-year storm events as calculated by a licensed professional engineer, or a minimum of two feet above the natural overflow elevation of the basin, as directed by the city engineer;
- p) the 100-year flood elevation will be based on the following criteria; in floodplain areas where the 100-year flood elevation is not readily available, the minimum lowest floor elevation of new principal structures or additions to existing structures must be a minimum of three-feet above the Minnesota department of natural resources' ordinary high water level or two feet above the highest known water level, which ever is more restrictive and is acceptable to the city engineer;
- q) no development may adversely affect the hydraulic capacity of the channel and adjoining floodplain of any tributary watercourse or drainage system where a floodplain or other encroachment limit has not been specified on the official zoning map;
- r) all recreational vehicles that are not travel-ready must meet the same standards as any other single family dwelling unit. For purposes of this section "travel-ready" means that the unit must be ready to travel on a roadway, including that it:
 - 1) have a current, valid license to operate on public roads;
 - 2) rest on inflated tires or an internal jacking system that can quickly return the unit to its inflated tires;

3) be attached to the site by no more than the quick-disconnect type of utilities commonly used in transitory campgrounds; and

4) have no permanent structures attached to it;

s) all manufactured homes must be securely anchored to an adequately anchored foundation system that resists flotation, collapse, lateral movement, and they must meet the same standards as any other single family dwelling unit. Methods of anchoring may include use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable state or local anchoring requirements for resisting wind forces;

t) no land may be subdivided that is unsuitable because of flooding or inadequate drainage, water supply or sewage treatment facilities. Lots within the floodplain district must be able to contain a building site outside of the floodplain overlay district or above the 100-year flood elevation and comply with the requirements of this code. Subdivisions must have water and sewage treatment facilities that comply with city standards and have road access to the subject property that complies with the requirements of this code. For subdivisions in the floodplain district, all access roads must be clearly labeled on all subdivision drawings and platting documents. An applicant for a subdivision must provide the information required in section 300.24 (8) to determine the 100-year flood elevation and the floodplain district boundaries for the subdivision site;

u) public utilities and facilities such as gas, electrical, sewer, and water supply systems to be located in the floodplain must be flood proofed in accordance with the state building code or elevated to one foot above the 100-year flood elevation;

v) railroad tracks, roads, and bridges to be located within the floodplain must comply with section 300.24, subdivision 9. Elevation to a minimum of one foot above the 100-year flood elevation must be provided where failure or interruption of these transportation facilities would result in danger to the public health or safety or where such facilities are essential to the orderly functioning of the area. Minor or auxiliary roads or railroads may be constructed at a lower elevation where failure or interruption of transportation services would not endanger the public health or safety; and

w) where public utilities are not provided:

1) on-site water supply systems must be designed to minimize or eliminate infiltration of flood waters into the systems; and

2) new or replacement on-site sewage treatment systems must be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters, and they must not be subject to impairment or contamination during times of flooding. A sewage treatment system designed in accordance with the state's current statewide standards for on-site sewage treatment systems is deemed to be in compliance with this provision.

10. Alteration of the Floodplain.

- a) No alteration of the floodplain district is allowed without a floodplain alteration permit, except that only a grading permit approved by the director of planning is required for permitted uses that do not involve excavation or fill of an area greater than 1,000 square feet or a volume greater than 20 cubic yards. Activities that constitute an alteration regulated by this section include the physical alteration of the size, depth and contour of the floodplain. The alteration permit is subject to recommendation by the planning commission and approval of the city council. In determining the appropriateness of an alteration request, the city council will consider the size of the floodplain district, the magnitude of the area proposed for alteration and the hydrologic effect.
- b) Alterations to the floodplain, or creation of compensatory water storage will not be allowed if significant trees, wetlands or public easements exist in the location of the proposed fill or excavation, unless approved by the city council.
- c) Alterations will only be allowed if water storage is maintained and provided in an amount compensatory to that removed or if acceptable hydrologic engineering data is presented that indicates how conditions have changed so that the floodplain characteristics can be maintained.
- d) An application for floodplain alteration must be accompanied by such information as required by the city and may include those items listed under subdivision 8 in this section.

11. Removal of Lands from the Floodplain District.

This subsection applies to new principal structures or additions to existing principal structures constructed in accordance with section 300.24 (6) and (9). It does not apply to accessory structures or other uses.

- a) Land may be removed from the floodplain district only by a zoning map amendment pursuant to the provisions of section 300.09 of this ordinance. The floodplain designation on the official floodplain district map will not be removed from a floodplain area unless it can be shown that the designation is in error or that the area has been filled to one foot above the elevation of the 100-year flood and stage increase, and is contiguous to land outside of the floodplain per state standards.
- b) Changes in the official floodplain district map must meet FEMA technical conditions and criteria and must receive prior FEMA approval before adoption by the city. The applicant must obtain a conditional letter of map revision from FEMA before the city council considers the request, and a subsequent letter of map revision from FEMA within 90 days after issuance of the certificate of occupancy. The FEMA standards should be considered before initiation of site preparation if a change of special flood hazard area designation will be requested.

c) All amendments to this ordinance, including amendments to the official floodplain district map, must be submitted to and approved by the commissioner of the Minnesota department of natural resources before adoption by the city. The commissioner must be given 10-days written notice of the hearing to consider an amendment to this ordinance, and the notice must include a draft of the ordinance amendment or technical study under consideration.

d) When land is removed from the floodplain district, water storage must be provided in an amount compensatory to that removed or acceptable hydrologic engineering data must be presented which indicates how conditions have changed so that the floodplain characteristics can be maintained without compensation. Removal of land from the flood plain or creation of compensatory water storage cannot be located where there are any significant trees, wetlands or public easements, unless approved by the city council. In addition to other application requirements, the city may require submission and approval of information listed under subdivision 9(b) in this section.

12. Public Control of Floodplains.

The proponents of development on properties containing a floodplain district may be required to dedicate all or a part of the floodplain or to convey an easement over all or a part of the floodplain to the city if consistent with the intent and procedures of this ordinance.

13. Administration.

a) A person who has obtained a permit pursuant to section 300.24, subdivision 7 must submit certification by a registered professional engineer, registered architect, or registered land surveyor that the finished fill and building elevations were accomplished in compliance with the provisions of this section 300.24. Flood-proofing measures must be certified by a registered professional engineer or registered architect.

b) The director of planning must maintain a record of the elevation of the lowest floor (including basement) of all new structures and alterations or additions to existing structures in the floodplain. The director must also maintain a record of the elevation to which structures or alterations and additions to structures are flood-proofed.

c) The director of planning must notify, in riverine situations, adjacent communities and the commissioner of the department of natural resources before the city authorizes an alteration or relocation of a watercourse. If the applicant has applied for a permit to work in the beds of public waters pursuant to Minn. Stat. chapter 103G, this will suffice as adequate notice to the commissioner of natural resources. The director must also send a copy of the notification to the Chicago regional office of FEMA.

d) As soon as is practicable, but no later than six months after the date the supporting information becomes available, the director of planning must notify the Chicago regional

office of FEMA of the physical changes that increase or decrease the 100-year flood elevation by submitting a copy of the technical or scientific data.

e) When granting variances to the provisions of section 300.24, the following additional variance criteria of FEMA must be satisfied:

1) Variances may not be issued within a designated regulatory floodplain if an increase in flood levels during the 100-year flood discharge would result.

2) Variances may only be issued upon (a) a showing of good and sufficient cause, (b) a determination that failure to grant the variance would result in exceptional hardship to the applicant, and (c) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

3) Variances may only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.

f) The director of planning must notify the applicant for a variance that (1) the issuance of a variance to construct a structure below the 100-year flood elevation will result in significantly increased premium rates for flood insurance, (2) construction below the 100-year flood elevation increases risks to life and property. This notification must be maintained with a record of the variance action. The director must maintain a record of all variance actions, including justification for their issuance, and report the variances issued in its annual or biennial report submitted to the administrator of the national flood insurance program.

g) Before the hearing on a conditional use permit or variance for a use or activity in the floodplain, the director must mail a copy of the application to the commissioner of natural resources sufficiently in advance so that the commissioner will receive at least ten days notice of the hearing. The director must mail a copy of all decisions granting a conditional use permit or a variance to the commissioner within ten days after the action.

14. Non-Conforming Uses.

a) This subdivision 14 applies to all legal non-conformities defined in section 300.29, subd. 2. Those legal non-conformities that are in the floodplain are also subject to the provisions in section 300.29.

b) A legal non-conformity in the floodplain may not be expanded, changed, enlarged, or altered in a way that increases its non-conformity. A non-conforming use or structure in a floodplain may only be changed, repaired, replaced, maintained, improved, or expanded to the extent that it would qualify for eligibility in the National Flood Insurance Program and would not increase flood damage potential or increase the degree of

obstruction to flood flows in the floodway. No variance may be granted to this requirement.

c) A structural alteration or addition to a non-conforming structure or non-conforming use that would result in increasing the flood damage potential of that structure or use must be protected to the regulatory elevation in accordance with the flood protection standards as defined in subdivisions 7 and 9 of this code or flood-proofing techniques (i.e., FP-1 thru FP-4 flood-proofing classifications) must be implemented as allowable in the state building code, except as further restricted in (d) and (f) below.

d) The cost of all structural alterations or additions to a non-conforming structure over the life of the structure must not exceed 50 percent of the market value of the structure unless the conditions of this paragraph are satisfied. The cost of all structural alterations and additions constructed after the adoption of the city's initial floodplain controls must be calculated into today's current cost, including all costs such as construction materials and a reasonable amount for labor. If the current cost of all previous and proposed alterations and additions exceeds 50 percent of the current market value of the structure, then the structure must meet the standards of this section 300.24 for new structures.

e) If a non-conforming use or structure is substantially damaged, as defined in section 300.02, it may be reconstructed only in conformity with the provisions of this section 300.24 for new structures.

f) If a substantial improvement occurs, as defined in section 300.02, from any combination of an addition to the outside dimensions of the existing building or a rehabilitation, reconstruction, alteration, or other improvement to the inside dimensions of an existing non-conforming building, then the building addition and the existing non-conforming building must meet the requirements of this section 300.24 for new structures.

15. Exception for Compensatory Flood Storage Provisions.

Activities undertaken by a government unit to eliminate or minimize the flooding of existing roadways that are located in the floodplain district are exempt from the provisions of section 300.24 as long as the work to eliminate or minimize flooding does not occur in the floodway, cause an increase in the flood stage by more than .1 foot, or cause flooding impacts on neighboring properties.

(Amended by Ord. #2007-17, adopted May 7, 2007; Ord. #2004-24, adopted August 23, 2004)