

ORDINANCE No. 114395

COUNCIL BILL No. 107140

Adopting a Seattle Floodplain Development Ordinance as Chapter 25.06 of the Seattle Municipal Code, amending Sections 23.62.002, 22.900.290, 22.100.010, 22.300.020, and 22.400.010 of and adding a new section 22.804.020 to the Seattle Municipal Code to regulate construction and development in designated areas of special flood hazard with standards established by the National Flood Insurance Program and the Washington State Department of Ecology.

The City of

Honorable President:

Your Committee on _____

to which was referred the within Council report that we have considered the same

DO

COMPTROLLER FILE No. 296940

Introduced: FEB 6 1969	By: <u>Rice</u>
Referred: FEB 11 1969	To: <u>Public Safety</u>
Referred: Feb 14 1969	To: <u>Env. Mgmt</u>
Referred:	To:
Reported: MAR 6 1969	Second Reading: MAR 6 1969
Third Reading: MAR 9 1969	Signed: MAR 6 1969
Presented to Mayor: MAR 7 1969	Approved: MAR 11 1969
Returned to City Clerk: MAR 17 1969	Published:
Vetoes by Mayor:	Veto Published:
Passed over Veto:	Veto Sustained:

The City of Seattle--Legislative Department

Date Reported
and Adopted

REPORT OF COMMITTEE

President:

Committee on

ENV. MGMT

was referred the within Council Bill No.

107140

we have considered the same and respectfully recommend that the same:

DO PASS

Committee Chair

ORDINANCE 114395

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AN ORDINANCE adopting a Seattle Floodplain Development Ordinance as Chapter 25.06 to the Seattle Municipal Code, amending sections 23.62.002, 22.900.290, 22.100.010, 22.300.020 and 22.400.010 of and adding a new section 22.804.020 to the Seattle Municipal Code to regulate construction and development in designated areas of special flood hazard with standards established by the National Flood Insurance Program and the Washington State Department of Ecology.

BE IT ORDAINED BY THE CITY OF SEATTLE AS FOLLOWS:

Section 1. There is hereby added to the Seattle Municipal Code a new Chapter 25.06 to read as follows:

25.06.010. TITLE. This chapter shall be known and may be cited as the "Seattle Floodplain Development Ordinance."

25.06.020. PURPOSE. The purpose of this chapter is to regulate development in areas of special flood hazard in accordance with standards established by the National Flood Insurance Program and the Washington State Department of Ecology. This chapter is intended to promote the public health, safety and welfare and is not intended to protect or benefit any individual or any class or group of persons specifically or to create or form the basis for any liability on the part of the City or its officers, employees or agents in connection with administration of this chapter. This chapter shall be administered by affected City departments and interpreted to accomplish its stated purpose.

25.06.030. DEFINITIONS. Unless specifically defined below, words or phrases used in this chapter shall be interpreted so as to give them the meaning they have in common usage. For purposes of this chapter, the following words or phrases shall be defined as described below.

"Area of Shallow Flooding" means a designated AO or AH Zone on the Flood Insurance Rate Map (FIRM). The base flood depths range from one to three feet; a clearly defined

1 channel does not exist; the path of flooding is
2 unpredictable and indeterminate; and, velocity flow may be
3 evident. AO is characterized as sheet flow and AH indicates
4 ponding.

5 "Area of Special Flood Hazard" means the land subject
6 to a one percent or greater chance of flooding in any given
7 year. Designation on the Flood Insurance Rate Map (FIRM)
8 for areas of special flood hazard always includes the
9 letters A or V.

10 "Base Flood Level" and "Base Flood Elevation" both mean
11 the level or elevation above mean sea level, as calculated
12 by reference to the National Geodetic Vertical Datum (NGVD),
13 of flood waters in a particular area during a flood having a
14 one percent chance of occurring in any given year.

15 "Critical Facility" means a facility for which even a
16 slight chance of flooding might be too great. Critical
17 facilities include, but are not limited to schools, nursing
18 homes, hospitals, police, fire and emergency response
19 installations, nonresidential installations which produce,
20 use or store hazardous materials or hazardous waste.

21 "Development" means any man-made change to improved or
22 unimproved real estate, including but not limited to
23 buildings or other structures, mining, dredging, filling,
24 grading, paving, excavation or drilling operations.

25 "Director" means the Director of the Department of
26 Construction and Land Use. As used in this ordinance, the
27 term includes authorized representatives of the Director of
28 the Department of Construction and Land Use.

"Flood" or "Flooding" means a general and temporary
condition of partial or complete inundation of normally dry
land areas from:

- (1) The overflow of inland or tidal waters and/or

1 (2) The unusual and rapid accumulation of runoff of
2 surface waters from any source.

3 "Flood Insurance Rate Map (FIRM)" means the official
4 preliminary map dated September 23, 1988, on which the
5 Federal Insurance Administration has delineated both the
6 areas of special flood hazards and the risk premium zones
7 applicable to the City of Seattle.

8 "Flood Insurance Study" means the official preliminary
9 report, entitled "The Flood Insurance Study for King County,
10 Washington and Incorporated Areas," dated September 23,
11 1988, provided by the Federal Insurance Administration that
12 includes flood profiles, the Flood Boundary-Floodway Map,
13 and the water surface elevation of the base flood.

14 "Floodway" means the channel of a river or other
15 watercourse and the adjacent land areas that must be
16 reserved in order to discharge the base flood without
17 cumulatively increasing the water surface elevation more
18 than one foot.

19 "Lowest Floor" means the lowest floor of the lowest
20 enclosed area (including basement). An unfinished or flood
21 resistant enclosure, usable solely for parking of vehicles,
22 building access or storage, in an area other than a basement
23 area, is not considered a building's lowest floor, provided
24 that such enclosure is not built so as to render the
25 structure in violation of applicable non-elevation design
26 requirements of Section 25.06.110(a)(2).

27 "Manufactured Home" means a structure, transportable in
28 one or more sections, which is built on a permanent chassis
and is designed for use with or without a permanent
foundation when connected to the required utilities. The
term "manufactured home" also includes travel trailers and

1 other similar vehicles placed on a site for greater than 180
2 consecutive days.

3 "Manufactured Home Park" or "Manufactured Home
4 Subdivision" means a parcel (or contiguous parcels) of land
5 divided into two or more manufactured home lots for rent or
6 sale.

7 "New Construction" means structures for which the
8 "start of construction" commenced on or after the effective
9 date of this ordinance.

10 "Start of Construction" includes substantial
11 improvement, and means the date the building permit was
12 issued, provided the actual start of construction, repair,
13 reconstruction, placement or other improvement was within
14 180 days of the permit date. The actual start means either
15 the first placement of permanent construction of a structure
16 on a site, such as the pouring of slabs or footings, the
17 installation of piles, the construction of columns, or any
18 work beyond the stage of excavation, or the placement of a
19 manufactured home on a foundation. Permanent construction
20 does not include site preparation, such a clearing, grading
21 and filling; nor does it include the installation of streets
22 and/or walkways; nor does it include excavation for a
23 basement, footings, piers, or foundation or the erection of
24 temporary forms; nor does it include the installation on the
25 property of accessory buildings, such as garages or sheds
26 not occupied as dwelling units or not part of the main
27 structure.

28 "Structure" means anything that is built or
constructed, an edifice or building of any kind, or any
piece of work artificially built up or composed of parts
joined together in some definite manner.

1 "Substantial Improvement" means any repair,
2 reconstruction, or improvement of a structure, the cost of
3 which equals or exceeds 50 percent of the market value of
4 the structure either:

- 5 (1) before the improvement or repair is started, or
- 6 (2) if the structure has been damaged and is being
7 restored, before the damage occurred.

8 For the purpose of this definition, a "substantial
9 improvement" commences when the first alteration on any
10 wall, ceiling, floor, or other structural part of the
11 building is made, whether or not that alteration affects the
12 external dimensions of the structure. The term does not,
13 however, include either:

- 14 (1) any project for improvement of a structure to
15 comply with existing state or local health,
16 sanitary, or safety code specifications which are
17 solely necessary to assure safe living conditions,
18 or
- 19 (2) any alteration of a structure which is listed on
20 the National Register of Historic Places or a
21 State Inventory of Historic Places, which is
22 designated as a landmark pursuant to SMC Chapter
23 25.12 or which is included in a landmark or
24 historic district.

25 25.06.040. APPLICABILITY. This chapter shall apply to all
26 areas of special flood hazards within the jurisdiction of
27 the City of Seattle.

28 25.06.050. IDENTIFICATION OF AREAS OF SPECIAL FLOOD HAZARD.
Areas of special flood hazard in the City of Seattle are
identified by the Federal Insurance Administration in a
scientific and engineering preliminary report entitled "The
Flood Insurance Study for King County, Washington and

1 Incorporated Areas," dated September 23, 1988, with
2 accompanying Flood Insurance Rate Maps. The study and maps
3 are filed in C.F. 296948 and are hereby adopted by reference
4 and declared to be a part of this chapter. The study and
5 maps shall be maintained on file at the Department of
6 Construction and Land Use and the Seattle Engineering
7 Department and may be maintained on file at the Seattle Park
8 Department, the Seattle-King County Department of Public
9 Health and other City offices.

9 25.06.060. FLOODPLAIN DEVELOPMENT APPROVAL REQUIRED.

10 Construction or development shall not be undertaken within
11 any area of special flood hazard established in Section
12 25.06.050 without approval under this chapter. For
13 development where no other permit or authorization from The
14 City of Seattle or its departments or agencies is necessary
15 to begin or to accomplish the work, the approval shall be
16 documented by issuance of a Floodplain Development License.
17 For development where some other permit or authorization
18 from The City of Seattle or its departments or agencies is
19 required to begin or to accomplish the work, including but
20 not limited to development performed by City departments,
21 the floodplain development approval shall be incorporated in
22 such other permit or authorization.

21 25.06.070. APPLICATION FOR FLOODPLAIN DEVELOPMENT APPROVAL
22 OR LICENSE. Application for a Floodplain Development
23 License or for floodplain development approval shall be made
24 on forms furnished by the Administrators. The application
25 shall include, but shall not be limited to, the following
26 information:

- 26 (1) Elevation prepared by a licensed surveyor or a
27 registered professional civil engineer in relation
28 to mean sea level, as calculated based on the

1 National Geodetic Vertical Datum (NGVD), of the
2 lowest floor (including basement) of all
3 structures;

4 (2) Elevation prepared by a licensed surveyor or a
5 registered professional civil engineer in relation
6 to mean sea level, as calculated based on the
7 National Geodetic Vertical Datum (NGVD), to which
8 any structure has been or will be floodproofed;

9 (3) Certification by a registered professional civil
10 engineer that the floodproofing methods for any
11 nonresidential structure meet the floodproofing
12 criteria in Section 25.06.110; and

13 (4) Description of the extent to which any watercourse
14 will be altered or relocated as a result of the
15 proposed development.

16 25.06.080. DESIGNATION OF ADMINISTRATORS. Each City
17 department which has responsibility for review and approval
18 of any development or which performs any development in
19 areas of special flood hazard in The City of Seattle is
20 designated as an Administrator of this chapter and shall
21 approve or deny floodplain development proposals only in
22 accordance with the provisions of this chapter. Each
23 Administrator shall be responsible for enforcing the
24 provisions of this chapter as they apply to that
25 Administrator's jurisdiction. The Director shall approve or
26 deny applications for Floodplain Development Licenses in
27 accordance with the provisions of this chapter.

28 25.06.090. FUNCTIONS OF THE ADMINISTRATORS. Functions of
the Administrators under this chapter shall include the
following:

- a. Review development proposals to determine that the requirements of this chapter have been satisfied;

- 1 b. Review development proposals to determine that all
2 necessary permits have been obtained from those
3 Federal, State, or local governmental agencies
4 from which prior approval is required;
- 5 c. When base flood elevation data has not been
6 provided in accordance with Section 25.06.050,
7 obtain, review, and reasonably utilize any base
8 flood elevation and floodway data available from a
9 federal, State or other source, in order to
10 administer Sections 25.06.110 and 25.06.120.
- 11 d. Where base flood elevation data is provided
12 through the Flood Insurance Study or required and
13 obtain through subsection c above, obtain and
14 record the actual (as-built) elevation (in
15 relation to mean sea level as calculated based on
16 the National Geodetic Vertical Datum) of the
17 lowest floor, including basement, of all new or
18 substantially improved structures, and indicate
19 whether or not the structure contains a basement.
- 20 e. For all new or substantially improved floodproofed
21 structures:
22 (i) verify and record the actual elevation (in
23 relation to mean sea level as calculated
24 based on the National Geodetic Vertical
25 Datum), and
26 (ii) maintain the floodproofing certifications
27 required in Section 25.06.070(3).
- 28 f. Maintain for public inspection all records
 pertaining to the provisions of this chapter.
- g. Notify affected communities and the Washington
 State Department of Ecology prior to any
 alteration or relocation of a watercourse, and

1 submit evidence of such notification to the
2 Federal Insurance Administration.

3 h. Require that maintenance is provided within the
4 altered or relocated portion of said watercourse
5 so that the flood carrying capacity is not
6 diminished.

7 i. On or about January 31 of each calendar year,
8 provide to the Director a report of all floodplain
9 development approvals issued by such Administrator
10 during the preceding calendar year. Such annual
11 report shall include the address or location of
12 each approved development, the nature of the
13 approval.

14 25.06.100. GENERAL STANDARDS. In all areas of special
15 flood hazards, the following standards are required:

16 a. Anchoring

17 (1) All new construction and substantial
18 improvements shall be anchored to prevent
19 flotation, collapse, or lateral movement of
20 the structure.

21 (2) All manufactured homes must likewise be
22 anchored to prevent flotation, collapse or
23 lateral movement, and shall be installed
24 using methods and practices that minimize
25 flood damage.

26 b. Construction Materials and Methods

27 (1) All new construction and substantial
28 improvements shall be constructed with
materials and utility equipment resistant to
flood damage.

- 1 (2) All new construction and substantial
2 improvements shall be constructed using
3 methods and practices that minimize flood
4 damage.
5 (3) Electrical, heating, ventilation, plumbing,
6 and air-conditioning equipment and other
7 service facilities shall be designed and/or
8 otherwise elevated or located so as to
9 prevent water from entering or accumulating
10 within the components during conditions of
11 flooding.

11 c. Utilities

- 12 (1) All new and replacement water supply systems
13 shall be designed to minimize or eliminate
14 infiltration of flood waters into the system;
15 (2) New and replacement sanitary sewage systems
16 shall be designed to minimize or eliminate
17 infiltration of flood waters into the systems
18 and discharge from the systems into flood
19 waters; and
20 (3) On-site waste disposal systems shall be
21 located to avoid impairment to them or
22 contamination from them during flooding.

21 d. Subdivision Proposals

- 22 (1) All subdivision proposals shall be consistent
23 with the need to minimize flood damage;
24 (2) All subdivision proposals shall have public
25 utilities and facilities such as sewer, gas,
26 electrical, and water systems located and
27 constructed to minimize flood damage;
28

1 (3) All subdivision proposals shall have adequate
2 drainage provided to reduce exposure to flood
3 damage; and

4 (4) Where base flood elevation data has not been
5 provided or is not available from another
6 authoritative source, the applicant shall
7 provide such data for subdivision proposals
8 and other proposed developments which contain
9 at least 50 lots or 5 acres (whichever is
less).

10 e. Where elevation data is not available either
11 through the Flood Insurance Study or from another
12 authoritative source, proposed construction shall
13 be reasonably safe from flooding. The evaluation
14 of reasonableness shall include consideration of
15 historical data, high water marks, photographs of
16 past flooding, and similar information where
available.

17 25.06.110. STANDARDS INVOLVING BASE FLOOD ELEVATIONS. In
18 all areas of special flood hazards where base flood
19 elevation data has been provided under Section 25.06.050 or
Section 25.06.090(c), the following are required.

20 a. Residential Construction

21 (1) New construction and substantial improvement
22 of any residential structure shall have the
23 lowest floor, including basement, elevated to
24 one foot or more above base flood elevation.

25 (2) Fully enclosed areas below the lowest floor
26 that are subject to flooding are prohibited,
27 or shall be designed to automatically
28 equalize hydrostatic flood forces on exterior
walls by allowing for the entry and exit of

1 floodwaters. Designs for meeting this
2 requirement must either be certified by a
3 registered professional civil engineer or
4 architect or must meet or exceed the
5 following minimum criteria:

6 (i) A minimum of two openings having a
7 total net area of not less than one
8 square inch for every square foot of
9 enclosed area subject to flooding
10 shall be provided.

11 (ii) The bottom of all openings shall be no
12 higher than one foot above grade.

13 (iii) Openings may be equipped with screens,
14 louvers, or other coverings or
15 devices provided that they permit the
16 automatic entry and exit of
17 floodwaters.

18 b. Nonresidential Construction

19 New construction and substantial improvement of
20 any commercial, industrial or other nonresidential
21 structure shall either have the lowest floor,
22 including basement, elevated to one foot or more
23 above the level of the base flood elevation; or,
24 together with attendant utility and sanitary
25 facilities, shall:

26 (1) be floodproofed so that below one foot above
27 the base flood level the structure is
28 watertight with walls substantially
impermeable to the passage of water;

(2) have structural components capable of
resisting hydrostatic and hydrodynamic loads
and effects of buoyancy;

1 (3) be certified by a registered professional
2 civil engineer that the design and methods of
3 construction are in accordance with accepted
4 standards of practice for meeting provisions
5 of this subsection based on their development
6 and/or review of the structural design,
7 specifications and plans. Such
8 certifications shall be provided as set forth
9 in Section 25.06.070(3).

10 Nonresidential structures that are elevated, not
11 floodproofed, must meet the same standards for
12 space below the lowest floor as described in
13 subsection a(2) above. Applicants floodproofing
14 nonresidential buildings shall be notified that
15 flood insurance premiums will be based on rates
16 that are one foot below the floodproofed level
17 (e.g. a building floodproofed to one foot above
18 the base flood level will be rated as at the base
19 flood level).

20 c. Critical Facilities

21 Construction of new critical facilities shall be
22 located outside the limits of the areas of special
23 flood hazard where possible. Construction of new
24 critical facilities shall be permissible within
25 areas of special flood hazard if no feasible
26 alternative site is available. Critical
27 facilities constructed within areas of special
28 flood hazard shall have the lowest floor elevated
to three feet or more above the level of the base
flood elevation at the site. Floodproofing and
sealing measures must be taken to ensure that
toxic substances will not be displaced by or

1 released into flood waters. Access routes to all
2 critical facilities shall be elevated to or above
3 the level of the base flood elevation to the
4 extent possible.

5 d. Manufactured homes

6 All manufactured homes to be placed or
7 substantially improved within Zones A1-30, AH, and
8 AE on the FIRM shall be elevated on a permanent
9 foundation so that the lowest floor of the
10 manufactured home is one foot or more above the
11 base flood elevation; and shall be securely
12 anchored to an adequately anchored foundation
13 system in accordance with the provisions of
14 section 25.06.100(a). This paragraph applies to
15 manufactured homes to be placed or substantially
16 improved in an expansion to an existing
17 manufactured home park or subdivision. This
18 paragraph does not apply to manufactured homes to
19 be placed or substantially improved in an existing
20 manufactured home park or subdivision except where
21 the repair, reconstruction, or improvement of the
22 streets, utilities and pads equals or exceeds 50
percent of the value of the streets, utilities and
pads before repair, reconstruction or improvement
has commenced.

23 25.06.120. STANDARDS FOR FLOODWAYS. Areas designated as
24 floodways are areas of special flood hazard established in
25 Section 25.06.050. The following provisions apply to
development in designated floodways:

- 26 a. Encroachments, including fill, new construction,
27 substantial improvements, and other development
28 are prohibited unless certification by a

1 registered professional civil engineer or
2 architect is provided demonstrating that
3 encroachment shall not result in any increase in
4 flood levels during the occurrence of the base
5 flood discharge.

6 b. Construction or reconstruction of residential
7 structures is prohibited within designated
8 floodways, except for (i) repairs, reconstruction,
9 or improvements to a structure which do not
10 increase the ground floor area; and (ii) repairs,
11 reconstruction or improvements to a structure, the
12 cost of which does not exceed 50 percent of the
13 market value of the structure either (A) before
14 the repair, reconstruction, or repair is started,
15 or (B) if the structure has been damaged, and is
16 being restored, before the damage occurred. Work
17 done on structures to comply with existing health,
18 sanitary, or safety codes or to structures
19 identified as historic or landmark structures
20 shall not be included in the 50 percent
21 requirement.

22 c. If the certification of subsection a above is
23 obtained, all new construction and substantial
24 improvements shall comply with all applicable
25 flood hazard reduction provisions of this Chapter.

26 25.06.130. STANDARDS FOR SHALLOW FLOODING AREAS. Areas
27 designated as AO zones on the Flood Insurance Rate Maps are
28 areas of shallow flooding. The following provisions apply
to such areas of shallow flooding:

a. New construction and substantial improvements of
residential structures within AO zones shall have
the lowest floor (including basement) elevated

1 above the highest grade adjacent to the building
2 one foot or more above the depth number specified
3 on the FIRM, or if no depth number is specified,
4 at least two feet.

5 b. New construction and substantial improvements of
6 nonresidential structures within AO zones shall
7 either (i) have the lowest floor (including
8 basement) elevated above the highest adjacent
9 grade of the building site one foot or more above
10 the depth number specified on the FIRM, or if no
11 depth number is specified, at least two feet; or
12 (ii) together with attendant utility and sanitary
13 facilities, be completely floodproofed so that any
14 space below the level specified in subsection (i)
15 above is watertight with walls substantially
16 impermeable to the passage of water and with
17 structural components having the capability of
18 resisting hydrostatic and hydrodynamic loads and
19 effects of buoyancy. If floodproofing is used,
20 compliance with these standards must be certified
21 by a registered professional engineer or
22 architect.

23 c. Adequate drainage paths around structures on
24 slopes to guide flood waters around and away from
25 proposed structures shall be required.

26 25.06.140. PENALTIES FOR NONCOMPLIANCE. No development
27 shall occur in an area of special flood hazard in the City
28 of Seattle without full compliance with the terms of this
chapter and other applicable regulations. Any person who
violates this chapter or fails to comply with any of its
requirements shall be subject to cumulative civil penalty in
the amount of \$50.00 per day for each day from the date the

1 violation began until the date compliance with the
2 requirements of this chapter is achieved. Nothing herein
3 contained shall prevent the City of Seattle from taking such
4 other lawful action as is necessary to prevent or remedy any
5 violation.

6 25.06.150. WETLANDS MANAGEMENT. To the maximum extent
7 possible, development shall avoid the short and long term
8 adverse impacts associated with the destruction or
9 modification of wetlands, especially development which
10 limits or disrupts the ability of wetland to alleviate
11 flooding impacts. The Administrators shall implement the
12 following process:

- 13 a. Review proposals for development within areas of
14 special flood hazard for their possible impacts on
15 wetlands located within such areas;
- 16 b. Ensure that development activities in or around
17 wetlands do not negatively affect public safety,
18 health, and welfare by disrupting the wetland's
19 ability to reduce flood and storm drainage.
- 20 c. Request technical assistance from the Department
21 of Ecology in identifying wetland areas.

22 Section 2. That a new subsection D is added to Section
23 23.62.002 of the Seattle Municipal Code, relating to
24 environmentally sensitive areas, to read as follows:

25 23.62.002 Establishment of Areas

26 * * *

27 D. Development in areas of special flood hazard, as
28 identified in the report entitled "Flood Insurance Study for
King County, Washington and Incorporated Areas" and the
accompanying Flood Insurance Rate Maps and filed in
C.F. 296948, are subject to additional standards and
requirements, including floodplain development approval or a

1 Floodplain Development License, as set forth in Chapter
2 25.06, the Seattle Floodplain Development Ordinance.

3 Section 3. That a new Section 22.804.020 is added of
4 the Seattle Municipal Code to read as follows:

5 22.804.020 Grading in Areas of Special Flood Hazard
6 In addition to requirements for grading approval set forth
7 in this Chapter, any grading or fill in areas of special
8 flood hazard, as identified in the report entitled "Flood
9 Insurance Study for King County, Washington and Incorporated
10 Areas" and the accompanying Flood Insurance Rate Maps and
11 filed in C.F. 296948, is subject to additional standards and
12 requirements, including floodplain development approval or a
13 Floodplain Development License, as set forth in Chapter
14 25.06, the Seattle Floodplain Development Ordinance.

15 Section 4. That Section 301 of the Seattle amendments
16 to the Uniform Building Code as adopted by Ordinance 113701
17 is amended to add a new subsection c to read as follows:

18 Sec. 301. Building Permit Requirements

19 * * *

20 (c) In addition to the permit required by this
21 section, all work to be performed in areas of special flood
22 hazard, as identified in the report entitled "Flood
23 Insurance Study for King County, Washington and Incorporated
24 Areas" and the accompanying Flood Insurance Rate Maps and
25 filed in C.F. 296948, is subject to additional standards and
26 requirements, including floodplain development approval or a
27 Floodplain Development License, as set forth in Chapter
28 25.06, the Seattle Floodplain Development Ordinance.

Section 5. That Section 301 of the Seattle amendments
to the National Electrical Code as adopted by Ordinance
114181 and 114182 is amended to add a new subsection c to
read as follows:

1 Section 301. (a) Permits Required. It shall be
2 unlawful to install, alter, extend or connect any
3 electrical equipment in a building, or allow the same
4 to be done, without first obtaining a permit for such
5 work from the Building Official.

6 * * *

7 (c) In addition to the permit required by this
8 section, all work to be performed in areas of special flood
9 hazard, as identified in the report entitled "Flood
10 Insurance Study for King County, Washington and Incorporated
11 Areas" and the accompanying Flood Insurance Rate Maps and
12 filed in C.F. 296948, is subject to additional standards and
13 requirements, including floodplain development approval or a
14 Floodplain Development License, as set forth in Chapter
15 25.06, the Seattle Floodplain Development Ordinance.

16 Section 6. That Section 301 of the Seattle amendments
17 to the Uniform Mechanical Code as adopted by Ordinance
18 113702 is amended to add a new subsection d to read as
19 follows:

20 Sec. 301. Permits

21 * * *

22 (d) In addition to the permit required by this
23 section, all work to be performed in areas of special flood
24 hazard, as identified in the report entitled "Flood
25 Insurance Study for King County, Washington and Incorporated
26 Areas" and the accompanying Flood Insurance Rate Maps and
27 filed in C.F. 296948, is subject to additional standards and
28 requirements, including floodplain development approval or a
Floodplain Development License, as set forth in Chapter
25.06, the Seattle Floodplain Development Ordinance.

Section 7. A new section 28.900.300 is added to the
Seattle Municipal Code to read as follows:

1 22.900.300. Floodplain Development Approval or License

2 Fee.

3 The fee for processing and review of applications for
4 floodplain development approvals shall be One Hundred Six
5 Dollars and Fifty Cents (\$106.50), except that the fee for
6 processing and review of applications for a Floodplain
7 Development License shall be Seventy-one Dollars (\$71.00).
8 The fee shall be collected at the time of application.

(To be used for all Ordinances except Emergency.)

Section 8. This ordinance shall take effect and be in force thirty days from and after its passage and approval, if approved by the Mayor; otherwise it shall take effect at the time it shall become a law under the provisions of the city charter.

Passed by the City Council the 6th day of March, 1989, and signed by me in open session in authentication of its passage this 6th day of March, 1989.

Approved by me this 17th day of March, 1989. *Charles Remy* Mayor.

Filed by me this 17th day of March, 1989.

Attest: *Norward J. Brooks*
City Comptroller and City Clerk.

(SEAL)

Published _____ By *Margaret Carter* Deputy Clerk.

Seattle
Department of Construction and Land Use

Dennis J. McLerran, Director
Charles Royer, Mayor



C.B. 107114

JAN 26 1989

M E M O R A N D U M

To: Sam Smith, City Council President
via Office of Management and Budget

From: Dennis J. McLerran, Director *D.J.M.*

Date: January 27, 1989

Re: Proposed Floodplain Development Ordinance

Attached for City Council consideration is the proposed ordinance to adopt a new Floodplain Development Ordinance for the Seattle Municipal Code. The proposed ordinance would create a new Chapter 25.06 containing development regulations for floodplain areas in Seattle to comply with requirements of federal and state law. The ordinance also contains amendments to the Land Use, Grading, Building, Electrical and Mechanical Codes and the Fee Ordinance to reflect the new development regulations. Also attached is the Director's Report on the proposed ordinance.

An environmental review checklist has been filed with the Department and a Declaration of Non-Significance issued. The appeal period ended on January 1, 1989, with no requests for appeal of the DNS.

The estimated costs to implement the proposed ordinance are outlined in the attached costs memorandum. I have discussed this legislation with Councilmember Norm Rice, and he has agreed to sponsor the proposal. If you have any questions about the proposal, please call Mark Summers of my staff at 684-8880.

DJM:ms

attachments

Seattle
Department of Construction and Land Use



Dennis J. McLerran, Director
Charles Royen, Mayor

M E M O R A N D U M

To: Sam Smith, President, Seattle City Council
via Office of Management and Budget

From: Dennis J. McLerran, Director *D.J.M.*

Date: January 27, 1989

Re: Costs of Implementing Floodplain Development Ordinance

This memo outlines our current estimates of the costs of implementing the Floodplain Development Ordinance. Although this memo describes our implementation efforts, some potential costs of the ordinance are impossible to estimate because they involve impacts on other departments.

TRAINING

Training for staff will be provided by a member of the Code Development and Coordination (CDC) Section of DCLU. Preparation time will cost approximately \$141.00 for five hours of work.

Because many aspects of the Floodplain Development Ordinance constitute entirely new concepts for staff and because the ordinance imposes an additional layer of regulation on existing permitting requirements, training on the new ordinance will be particularly important. Those members of the staff who will be required to implement or answer questions about the new regulations will receive two hours of general training on new ordinance and one additional hour of procedural training on the review process. The staff members who will be required to review and approve plans will also receive training from technical publications from the federal government. Other staff will receive a general, one-hour overview of the ordinance and its requirements. The training needs are estimated to be as follows:

Land Use Review Section	3 hours
Land Use Support Services	1 hour
Land Use Intake	3 hours
Construction Intake	3 hours
Building Inspection	2 hours
Housing and Zoning Inspectors	1 hour
Floodplain plans examiners	5 hours

Other plans examiners	3 hours
CDC staff	1 hour
Accounting Staff	1 hour

Because most training may be held during regularly scheduled staff meetings, general staffing costs should not be substantial. However, the estimated costs of the staff time to conduct the training will be \$562.00 for 20 hours of work.

PUBLIC INFORMATION

A comprehensive sets of public information materials will have to be prepared to ensure public understanding of the new floodplain regulations. Staff from our CDC section will do the bulk of the drafting of public information materials with the assistance of the department's public information officer and the graphics assistant. The expected cost of the materials will be \$600.00.

We have found with other new codes that the staff person who drafted the regulations becomes the primary source of information on the new code for the months immediately before and after adoption. Because the areas affected by the floodplain regulations are small, we do not expect a great number of calls or inquiries; however, we do expect drafting staff to spend approximately one hour per week for a period of four months at a cost of \$450.00.

MAPS AND CODES

Printing costs for the new code pages will be approximately \$631.00. Copying costs for approximately 60 DCLU staff members will total \$40.00.

In addition, minor additions to the Kroll Map overlays will need to be made on approximately 30 Kroll pages. At an estimated correction time of ten minutes per page, the cost of Kroll corrections will be \$110.00.

COSTS BEYOND ESTIMATION

In addition to the costs outlined above, the new floodplain regulations will involve review costs and documentation costs not previously incurred by City departments. The new regulations require a substantive review and approval of all development that occurs in the City's floodplain areas. The reviews and approvals conducted by DCLU will not involve any unrecovered costs because the proposed ordinance includes additional fees for plan review and permit issuance.

However, City departments that conduct development activities in floodplain areas and departments other than DCLU that have approval authority over development activity

Seattle
Department of Construction and Land Use



Dennis J. McLerran, Director
Charles Royer, Mayor

January 27, 1989

Dear Citizen:

The Department of Construction and Land Use has submitted the attached Floodplain Development Ordinance and Director's Report to the City Council for consideration. The proposed ordinance would create a new Chapter 25.06 to the Seattle Municipal Code, containing development regulations for floodplain areas in Seattle to comply with requirements of federal and state law. The ordinance also contains amendments to the Land Use, Grading, Building, Electrical, and Mechanical Codes and the Fee Ordinance to reflect the new development regulations.

The Council is expected to schedule a public hearing on the proposed ordinance, with an early March deadline for a decision on adoption. Questions about the proposal should be directed to Mark Summers, DCLU Code Compliance Coordinator, at 684-8880.

Sincerely,

DENNIS J. MCLERRAN
Director

DJM:ms

will be required to conduct substantive floodplain review for such activity and will be required to document approvals for development. DCLU cannot estimate the costs that those other departments will incur to comply with the review and approval requirements of the new ordinance. We have been working with the departments which could be affected, including Engineering, Parks, Health, City Light, Water and Administrative Services, and from their comments, it appears that no significant impacts would result.

SUMMARY OF ESTIMATED COSTS

The total estimated costs to DCLU for implementation of the proposed Floodplain Development Ordinance are as follows:

Employee training	\$ 703.00
Public Information	1050.00
Code Costs	671.00
Map Updates	<u>110.00</u>
TOTAL	\$ <u>2534.00</u>

DJM:ms

The attached mailing label contains the address of the only person who submitted comments to the Department of Construction and Land Use relating to the draft Director's Report and proposed Floodplain Development Ordinance.

Your
City,
Seattle

Memorandum



CSS 25.3

To Theresa Dunbar From Gordon Crandall
Date 2 1 89 Subject Seattle Floodplain Development Ordinance

Please include the following for introduction on
2 6 89:

AN ORDINANCE adopting a Seattle Floodplain Development Ordinance as Chapter 25.06 of the Seattle Municipal Code, amending sections of 23.62.002, 22.900.290, 22.100.010, 22.300.020, and 22.400.010 and adding a new section 22.804.020 to the Seattle Municipal Code to regulate construction and development in designated areas of special flood hazard with standards established by the National Flood Insurance Program and the Washington State Department of Ecology.

DIRECTOR'S REPORT

Introduction

The Department of Construction and Land Use (DCLU) proposes the adoption of a Floodplain Development Ordinance along with amendments to the Seattle Land Use, Grading, Building, Electrical and Mechanical Codes to satisfy Federal and State requirements regulating development in floodplains. The proposal also establishes, by amendment to the Fee Ordinance, a license fee for development in floodplains. The proposed amendments would bring Seattle into compliance with Federal and State laws by requiring that new or substantially improved structures located in designated areas of special flood hazard meet more stringent locational and construction standards than structures located elsewhere.

For purposes of this Report, the terms "floodplain" and "areas of special flood hazard" will be used interchangeably to refer to the area covered by a 100-year flood.

Background

Through the National Flood Insurance Program (NFIP), the Federal government provides low cost flood insurance to property owners across the nation. To be eligible for such low cost insurance, a property owner must reside in a jurisdiction that has adopted a floodplain development ordinance meeting minimum requirements established by FEMA. In brief, these minimum requirements establish locational and construction standards for new or substantially improved structures located in areas of special flood hazard. These areas are designated on maps and in studies that have been prepared by a local contractor working for FEMA.

Although maps of flood prone areas in Seattle were initially published in 1977, no regulations imposing specific locational and construction standards have been previously adopted. The City has not enacted a floodplain development regulation because development potential in floodplains is limited and because a limited number of existing structures are located in officially designated floodplains. Moreover, almost all of the City's four floodplain areas -- located along Thornton Creek and Piper Creek in North Seattle, Longfellow Creek in West Seattle, and in the South Park area along the Duwamish Waterway -- are already designated as environmentally sensitive. Accordingly, the City regulates

development in these areas through the City-adopted State Environmental Policy Act (SEPA).

Despite Seattle's historical decision not to enact specific flood protection regulations, neither FEMA nor NFIP has previously restricted the sale of flood insurance within the City. Currently, there are 140 issued policies, covering thirteen million dollars in property, primarily along Puget Sound and Lake Washington. However, FEMA is revising its floodplain maps to reflect changes to the City's drainage system and to incorporate data gathered in early 1986 when heavy rains provided the basis for an accurate model to predict flood levels. In conjunction with this map revision process, FEMA is requiring the City to adopt specific flood protection regulations.

In 1987, the State Legislature increased the State's role in the regulation of floodplains. First, the Department of Ecology (DOE) was assigned responsibility for overseeing the development of local regulations and was given the responsibility to approve local regulations before they become law. Second, the Legislature made several of FEMA's locational and construction standards more stringent. The new law applies to all communities containing floodplain areas.

DOE originally established an adoption deadline of December 3, 1988 for all jurisdictions. Although DOE has subsequently indicated that it will not require that Seattle enact flood protection regulations prior to the completion of the final FEMA maps, FEMA has adopted December 3, 1988, as its required compliance date. FEMA has determined that the City must adopt a floodplain development ordinance, using the preliminary maps as the best available floodplain information, or face cancellation of all federally supported flood insurance policies in the City.

The Current Code

The City currently has no comprehensive regulations relating to construction or development in areas of special flood hazard. The City's Land Use Code, in Chapter 23.62, designates several natural hazard areas, including floodplains, as environmentally sensitive areas. However, the Land Use Code does not regulate development in these areas; it merely identifies them. Actual authority to regulate development in environmentally sensitive areas rests with the City's SEPA ordinance.

Under the SEPA ordinance, most development in environmentally sensitive areas, with single family residences recently included, is subject to environmental

review. Generally, this review involves the applicant's disclosure of anticipated project-related development impacts and the City's analysis of these impacts to determine whether they are of sufficient magnitude to require an environmental impact statement. Frequently, impacts are not considered significant but do require mitigation through the imposition of permit conditions. In floodplains, typical mitigation measures would include elevating a structure above known flood levels, designing utilities to minimize potential flood damage, and locating structures outside of designated floodways.

SEPA has proven to be a reasonably effective means of regulating development in floodplains and of meeting the standards established by FEMA. However, neither DOE nor FEMA will sanction SEPA as a means of regulating such development. Therefore, it is necessary to adopt a specific ordinance that meets the FEMA and DOE standards.

The Proposed Code

The proposed Floodplain Development Ordinance will impose the following general standards on construction or development in areas of special flood hazard:

- All new construction or substantial improvement must be designed to resist damage from flooding.
- All subdivision proposals shall be consistent with the need to minimize flood damage.
- New residential construction shall have its lowest habitable floor, including basement, elevated at least one foot above the base flood level.
- New non-residential construction shall have its lowest floor, including basement, elevated or floodproofed to a level at least one foot above the base flood level.
- Development within designated floodways, areas more restrictive than the floodplain area, is prohibited unless it can be demonstrated that the construction would not result in any increase in flood levels.
- Siting and construction standards are established for critical facilities such as hospitals.

In addition, the proposed ordinance establishes a new license requirement for some development or construction in areas of special flood hazard. All City departments that regulate development will administer the regulations and will be required to maintain floodplain development information for future use by local, state and federal authorities. Most of the substantive provisions of the

Director's Report
Recommended Code for Floodplain Areas
Page 4

proposed ordinance are required regulations under the DOE and FEMA standards.

The proposed amendments to the Land Use, Grading, Building, Mechanical and Electrical Codes are intended to acknowledge the existence of the new requirements. The Fee Ordinance amendment will establish a fee for the review and administration done by the Department of Construction and Land Use to issue floodplain development approvals and licenses.

MS4:floddr4

City of Seattle

Executive Department-Office of Management and Budget
James P. Ritch, Director
Charles Royer, Mayor

COPY RECEIVED



JAN 27 1989

January 27, 1989

SEATTLE CITY ATTORNEY

The Honorable Douglas Jewett
City Attorney
City of Seattle

IMMEDIATE ATTENTION

*GORDON F. CRANDALL, ASST.
X 8248*

Dear Mr. Jewett:

The Mayor is proposing to the City Council that the enclosed legislation be adopted.

REQUESTING
DEPARTMENT: DCLU

SUBJECT: AN ORDINANCE creating a new Chapter 25.06 to the Seattle Municipal Code and amending sections 23.62.002, 22.804.020, 22.900.290, 22.100.010, 22.300.020 and 22.400.010 of the Seattle Municipal Code relating to construction and development in designated areas of special flood hazard and establishing regulations complying with federal and state laws for development in floodplain areas.

Pursuant to the City Council's S.O.P. 100-014, the Executive Department is forwarding this request for legislation to your office for review and drafting.

After reviewing this request and any necessary redrafting of the enclosed legislation, return the legislation to OMB. Any specific questions regarding the legislation can be directed to Kwan Wong.

Sincerely,

Charles Royer
Mayor

by

[Signature]
JAMES P. RITCH
Budget Director

JR/kw/sbd

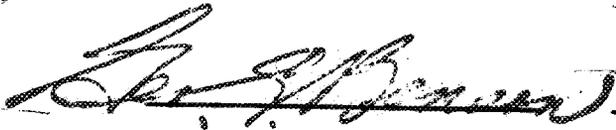
Enclosure

cc: Director, DCLU

TIME AND DATE STAMP

SPONSORSHIP

THE ATTACHED DOCUMENT IS SPONSORED FOR FILING WITH THE CITY COUNCIL BY
THE MEMBER(S) OF THE CITY COUNCIL WHOSE SIGNATURE(S) ARE SHOWN BELOW:



FOR CITY COUNCIL PRESIDENT USE ONLY

COMMITTEE(S) REFERRED TO:

PRESIDENT'S SIGNATURE

STATE OF WASHINGTON - KING COUNTY

13409
City of Seattle, City Clerk

---SS.

No.

Affidavit of Publication

The undersigned, on oath states that he is an authorized representative of The Daily Journal of Commerce, a daily newspaper, which newspaper is a legal newspaper of general circulation and it is now and has been for more than six months prior to the date of publication hereinafter referred to, published in the English language continuously as a daily newspaper in Seattle, King County, Washington, and it is now and during all of said time was printed in an office maintained at the aforesaid place of publication of this newspaper. The Daily Journal of Commerce was on the 12th day of June, 1941, approved as a legal newspaper by the Superior Court of King County.

The notice in the exact form annexed, was published in regular issues of The Daily Journal of Commerce, which was regularly distributed to its subscribers during the below stated period. The annexed notice, a

ORD 114395

was published on
03/28/89

The amount of the fee charged for the foregoing publication is the sum of \$ _____, which amount has been paid in full.

R. Spicuzza
Subscribed and sworn to before me on
3/28/89
Richard C. Jones

Notary Public for the State of Washington,
residing in Seattle

City of Seattle

ORDINANCE 114385

AN ORDINANCE adopting a Seattle Floodplain Development Ordinance as Chapter 25.06 to the Seattle Municipal Code, amending sections 22.62.001, 22.900.190, 22.100.010, 22.300.020 and 22.400.010 of and adding a new section 22.804.020 to the Seattle Municipal Code to regulate construction and development in designated areas of special flood hazard with standards established by the National Flood Insurance Program and the Washington State Department of Ecology.

BE IT ORDAINED BY THE CITY OF SEATTLE AS FOLLOWS:

Section 1. There is hereby added to the Seattle Municipal Code a new Chapter 25.06 to read as follows:

25.06.010. TITLE. This chapter shall be known and may be cited as the "Seattle Floodplain Development Ordinance."

25.06.020. PURPOSE. The purpose of this chapter is to regulate development in areas of special flood hazard in accordance with standards established by the National Flood Insurance Program and the Washington State Department of Ecology. This chapter is intended to promote the public health, safety and welfare and is not intended to protect or benefit any individual or any class or group of persons specifically or to create or form the basis for any liability on the part of the City or its officers, employees or agents in connection with administration of this chapter. This chapter shall be administered by affected City departments and interpreted to accomplish its stated purpose.

25.06.030. DEFINITIONS. Unless specifically defined

"start of Construction" includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slabs or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation, or the placement of a manufactured home on a foundation. Permanent construction does not include site preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundation or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure.

"Structure" means anything that is built or constructed, an edifice or building of any kind, or any piece of work artificially built up or composed of parts joined together in some definite manner.

"Substantial Improvement" means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure either:

a. before the improvement or repair is started, or