



CITY OF SEATAC

SEPA NOTICE



DETERMINATION OF NONSIGNIFICANCE FILE SEP20-0010; CAM20-0002

DESCRIPTION OF PROPOSAL: Flood Hazard Regulations update. This non-project proposal includes proposed amendments to the SeaTac Municipal Code related to flood hazard regulations to comply with FEMA provisions for Flood Damage Prevention and using the State Model Ordinance; adding Chapter 18.10 Flood Hazard Areas; repealing Chapter 12.40 Flood Damage Prevention; and, amending 15.700 Critical Areas.

PROPONENT: City of SeaTac, Community and Economic Development
LOCATION: Entire City
LEAD AGENCY: City of SeaTac

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment, and an environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed Environmental Checklist and other information on file with the lead agency.

COMMENT PERIOD:

This DNS is issued under WAC 197-11-340(2); the lead agency will not act on this proposal for **14 days** from the date of issuance. Comments must be submitted by **5:00 P.M. on March 16, 2021**. Detailed information is available to the public upon request. CONTACT: Jennifer Kester at 206-973-4842/jkester@seatacwa.gov.

APPEAL PERIOD:

Any person wishing to appeal this determination may file such an appeal to the SeaTac City Clerk within **ten (10) days** from the end of the comment period. All appeals of the above determination must be filed by **5:00 P.M. March 26, 2020**. **THERE IS A FEE TO APPEAL THIS DETERMINATION (SEE CITY OF SEATAC FEE SCHEDULE).**

RESPONSIBLE OFFICIAL: Jennifer Kester, Planning Manager,
 Community and Economic Development
 4800 S. 188th Street
 SeaTac, Washington 98188
 (206) 973-4750



 Jennifer Kester, Planning Manager
 Department of Community & Economic Development

03/02/2021

 Date

DATE ISSUED/PUBLISHED IN THE SEATTLE TIMES:

MARCH 2, 2021

ENVIRONMENTAL (SEPA) CHECKLIST

DEPARTMENT OF COMMUNITY & ECONOMIC DEVELOPMENT

Date Checklist Prepared: 2/19/2021 Parcel No. N/A

A. BACKGROUND

1. **Name of proposed project:** Flood Hazard Regulations Update (File No.: CAM20-0002/SEP20-0010)

2. **Applicant:**

Name: City of SeaTac
Mailing Address: 4800 South 188th Street
SeaTac, WA 98188
Phone: 206-973-4750 Fax: _____
Alt. Phone: 206-973-4842 Email: jkester@seatacwa.gov
Status: (Owner, Lessee, Agent, Etc.) _____

3. **Designated Contact Person:** (The person who will receive and disseminate all correspondence from the City)

Name: Jennifer Kester, Planning Manager
Mailing Address: 4800 South 188th Street
SeaTac, WA 98188
Phone: 206-973-4750 Fax: _____
Alt. Phone: 206-973-4842 Email: jkester@seatacwa.gov

4. **Agency requesting checklist:** City of SeaTac

5. **Proposed timing or schedule (including phasing):** Planning Commission
Public Hearing:
March 16, 2021
Proposed Council Action:
June 8, 2021

6. **Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain:**

None.

7. **List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.**

King County FIRM Maps

8. **Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? Explain:**

None at this time.

9. **List any government approvals or permits that will be needed for your proposal.**

- Pursuant to RCW 36.70A.106, the Washington State Department of Commerce conducts review of the proposed code amendments. The amendments were submitted for consideration for expedited review on February 19, 2021
 - Ordinance adoption by City Council expected on June 8, 2021
-

10. **Give a brief, complete description of your proposal, including the proposed uses and the size, with square footage, of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page.**

This non-project proposal includes proposed amendments to the SeaTac Municipal Code related to flood hazard regulations to comply with FEMA provisions for Flood Damage Prevention and using the State Model Ordinance; adding Chapter 18.10 Flood Hazard Areas; repealing Chapter 12.40 Flood Damage Prevention; and, amending 15.700 Critical Areas.

11. **Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, and section, township, and range. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.**

This code affects any area of the City with identified special flood hazard areas. Currently, FIRM maps identify special flood hazard areas along Miller creek in the western area of the City of SeaTac.

B. ENVIRONMENTAL ELEMENTS

1. Earth:

- a) **General description of the site (article one): Flat, rolling, hilly steep slopes, mountainous, other _____**

The City occupies a plateau that is generally flat, sloping gently down from north to south. Section 1.b below describes sloped areas.

- b) **What is the steepest slope on the site (approximate percent slope?)**

There are slopes exceeding 40% in the east and southeast portions of the City. Along 28th Avenue S, where the land is rolling the slopes are approximately 15%.

- c) **What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any agricultural land of long-term commercial significance and whether the proposal results in removing any of these soils.**

The soil in the City is predominantly Alderwood gravelly sandy loam (Ag), Arents-Alderwood, Indianola loam fine sandy, Kitsap soils, Everett gravelly sandy loam, Norma sandy loam.

- d) **Are there surface indications or history of unstable soils in the immediate vicinity? Describe:**

There are areas of landslide hazard on the City's eastern edge sloping down to the Green River Valley.

- e) **Describe the purpose, type and approximate quantities of any filling or grading proposed. Indicate source of fill:**

This is a non-project action. No filling or grading is proposed.

- f) **Could erosion occur as a result of clearing, construction, or use? Generally describe:**

No. This is a non-project action.

- g) **About what percent of the site will be covered with impervious surfaces after project construction (e.g. asphalt and buildings)?**

This is a non-project action. No construction is proposed.

- h) **Proposed measures to reduce or control erosion, or other impacts to the earth, if any.**
-

This is a non-project action and therefore would not directly result in erosion or other impacts to earth.

2. Air:

- a) **What types of emissions to the air would result from the proposal (i.e. dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? Generally describe and give approximate quantities if known:**

This is a non-project action. No emissions would result.

- b) **Are there any off-site sources of emissions or odor that may affect your proposal? Generally describe:**

This is a non-project action.

- c) **Proposed measures to reduce or control emissions or other impacts to the air:**

This is a non-project action and therefore would not directly result in emissions or other impacts to the air.

3. Water:

a) **Surface**

- 1) **Is there any surface water body on or in the immediate vicinity of the site (including year round and seasonal streams, saltwater, lakes, ponds, or wetlands)? Describe type and provide names. If appropriate, state what stream or river it flows into.**

There are three lakes in SeaTac: Angle Lake, Bow Lake and Tub Lake. Angle Lake and Bow Lake are located in the Urban Center east of International Boulevard. Tub Lake is located in the southwest corner of an undeveloped area of North SeaTac Park. Angle Lake is the only water body of sufficient size to be considered as a "water of the state" and therefore subject to the Shoreline Management Act. Major streams include Des Moines Creek, Miller Creek and Walker Creek.

- 2) **Will the project require any work over, in, or adjacent to (within 200 feet) the described waters. Please describe and attach available plans.**

This is a non-project action. No work is proposed.

- 3) **Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.**

This is a non-project action. No fill or dredging is proposed.

- 4) **Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.**

This is a non-project action. No withdrawals or diversions of surface water are proposed.

- 5) **Does the proposal lie within a 100-year floodplain? Note location on the site plan.**

Only one small area of the City lies within a flood plain; that of Miller Creek on the City's west edge. This non-project action will affect the development regulations applicable to this area.

- 6) **Does the proposal involve any discharges of waste materials to surface waters? Describe the type of waste and anticipated volume of discharge.**

This is a non-project action. No discharges of waste materials are proposed.

b) **Ground Water**

- 1) **Will groundwater be withdrawn from a well for drinking water or other purposes? If so, give a general description of the well, proposed uses and approximate quantities withdrawn from the well. Will water be discharged to groundwater? Give general description, purpose, and approximate quantities if known.**

This is a non-project action. No ground water will be withdrawn.

- 2) **Describe waste material that will be discharged into the ground from septic tanks or other sources, if any (for example: domestic sewage; industrial containing the following chemicals; toxic or non-toxic, agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.**

This is a non-project action. No waste material will be discharged.

Water Runoff (including storm water)

- 1) Describe the source of runoff (including storm water) and method of collection and disposal. (include quantities). Where will this water flow? Will this water flow into other waters? Describe

This is a non-project action. No changes to surface water flows will result.

- 2) Could waste materials enter ground or surface waters? Generally describe.

No. This is a non-project action.

- 3) Does the proposal alter or otherwise affect drainage patterns in the vicinity of the site? If so, describe.

This is a non-project action. No changes to drainage patterns will result.

- 4) Proposed measures to reduce or control surface, ground, and runoff impacts, if any.

This is a non-project action and therefore would not directly result in surface water runoff impacts. Surface water impacts are regulated by the King County Surface Water Design Manual, regulations under the SeaTac Shoreline Master Program and provisions of SMC Title 12, Public Utilities. The City is also subject to NPDES Phase 2 permit requirements.

4. Plants:

- a) Check the types of vegetation found on the site:

This non-project action is not site-specific. Most plants found in the Central Puget Sound basin are likely found in SeaTac, including trees, shrubs, grasses, and wet soil plants.

Deciduous tree: Alder Maple Aspen Other _____ N/A

Evergreen tree: Fir Cedar Pine Other _____
N/A _____

Shrubs N/A

Grass N/A

Pasture N/A

Crop or grain N/A

Wet soil plants: Water Lily Eelgrass Milfoil Other _____
N/A _____

Other types of vegetation: _____
N/A _____

- b) What kind and amount of vegetation will be removed or altered?

This is a non-project action. No vegetation will be removed or altered.

- c) **List threatened or endangered species known to be on or near the site.**

No threatened or endangered species known to be resident in the city.

- d) **Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site.**

This is a non-project action and therefore would not directly result in impacts to plants.

- e) **List all noxious weeds and invasive species known to be on or near the site.**

This non-project action is not site-specific. Most plants found in the Central Puget Sound basin are likely found in SeaTac, including invasive species.

5. Animals:

- a) **Check any birds and animals which have been observed on or near the site or are known to be on or near the site:**

This non-project action is not site-specific. Most animals found in the Central Puget Sound basin are likely found in SeaTac.

Birds: Hawk Heron Eagle Songbirds Other__ N/A

Mammals: Deer Bear Elk Beaver Other__ N/A

Fish: Bass Salmon Trout Herring Shellfish Other__ N/A

- b) **List any threatened or endangered species known to be on or near the site:**

This non-project action is not site-specific.

- c) **Is the site part of a migration route? Explain:**

This non-project action is not site-specific.

- d) **Proposed measures to preserve or enhance wildlife:**

This is a non-project action and therefore would not directly result in impacts to wildlife.

- e) **List any invasive animal species known to be on or near the site.**

This non-project action is not site-specific and therefore would not directly result in impacts to threatened or endangered animal species. Impacts to wildlife habitat are addressed through application of provisions of section 15.700.370 of the SeaTac Municipal Code.

6. Energy and Natural Resources:

- a) **What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.**

This is a non-project action.

- b) **Would your project affect the potential use of solar energy by adjacent properties? Generally describe:**

This non-project action is not site-specific. No properties are adjacent.

- c) **What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts:**

This is a non-project action, therefore no measures are proposed.

7. Environmental Health:

- a) **Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste that could occur as a result of this proposal? Describe:**

This is a non-project action. There are no environmental health hazards associated with this proposal.

- 1) **Describe any known or possible contamination at the site from present or past uses**

This non-project action is not site-specific.

- 2) **Describe existing hazardous chemicals/conditions that might affect project development and design. This includes underground hazardous liquid and gas transmission pipelines located within the project area and in the vicinity**

This non-project action is not site-specific.

- 3) **Describe any toxic or hazardous chemicals that might be stored, used, or produced during the project's development or construction, or at any time during the operating life of the project**

This is a non-project action.

4) Describe special emergency services that might be required

This is a non-project action and therefore would not directly result in the need for additional services.

5) Proposed measures to reduce or control environmental health hazards, if any:

No specific measures are proposed.

b) Noise:

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

This non-project action is not site-specific. There is traffic noise and other noise typical of an urbanized area. There is also commercial aircraft noise in certain parts of the City.

2) What types and levels of noise would be created by or associated with the project on a short time or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

This is a non-project action and therefore would not directly generate noise.

3) Proposed measures to reduce or control noise impacts:

No specific measures are proposed. New development is subject to Chapter 13.240 of the SeaTac Municipal Code, Sound Transmission Code.

8. Land and Shoreline Use:

a) What is the current use of the site and adjacent properties? Will the proposal affect current land uses on nearby or adjacent properties? If so, describe

This non-project action is not site-specific. SeaTac contains commercial, industrial and residential uses typical of a Central Puget Sound basin suburban community, in addition to the Seattle-Tacoma International Airport. There are no significant changes to land use proposed.

Site N/A

North N/A

South N/A

East N/A

West N/A

- b) Has the project site been used as working farmlands or working forest lands? If so, describe. How much agricultural or forest land of long-term commercial significance will be converted to other uses as a result of the proposal, if any? If resource lands have not been designated, how many acres in farmland or forest land tax status will be converted to nonfarm or nonforest use?**

This non-project action is not site-specific. Some areas of SeaTac were used for agriculture in the past.

- c) Will the proposal affect or be affected by surrounding working farm or forest land normal business operations, such as oversize equipment access, the application of pesticides, tilling, and harvesting? If so, how:**

Not applicable. The City is urban and surrounded by urban uses.

- d) Describe any structures on the site:**

This non-project action is not site-specific.

- e) Will any structures be demolished?**

This non-project action is not site-specific.

- g) What is the current zoning classification of the site?**

This non-project action is not site-specific.

- h) What is the current Comprehensive Plan designation of the site?**

This non-project action is not site-specific.

- i) If applicable, what is the current Shoreline Master Program designation of the site?**

This non-project action affects the Miller Creek area which is not identified as within the jurisdiction of the City's Shoreline Master Program.

- j) Has any part of the site been classified as an "environmentally sensitive" area? Specify:**

This non-project action amends regulations for special flood hazard areas consistent with FEMA, Washington State Department of Ecology model ordinance, and RCW 86.16.

- k) **Approximately how many people would reside or work in the completed project?**

This is a non-project action and therefore would not directly result in new residents.

- l) **Approximately how many people would the completed project displace?**

This is a non-project action. No people would be displaced.

- m) **Proposed measures to avoid or reduce displacement impacts:**

This is a non-project action and would not create displacements.

- n) **Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:**

This is a non-project action that would not impact existing land uses and plans..

9. Housing:

- a) **Approximately how many units would be provided? Indicate whether high, middle, or low-income housing.**

This is a non-project action and would not directly result in new housing units.

- b) **Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.**

This is a non-project action and therefore would not directly result in housing units being eliminated.

- c) **Proposed measures to reduce or control housing impacts.**

This is a non-project action and therefore would not impact housing.

10. Aesthetics:

- a) **What is the tallest height of any proposed structure(s), not including antennas; what is/are the principal exterior building material(s) proposed?**

This is a non-project action. No structures are proposed.

- b) **What views in the immediate vicinity would be altered or obstructed?**

This is a non-project action. No views will be affected.

- c) **Proposed measures to reduce or control aesthetic impacts:**

This is a non-project action. Aesthetics will not be impacted.

11. Light and Glare:

- a) **What type of light or glare will the proposal produce? What time of day would it mainly occur?**

This is a non-project action. No light or glare will be produced.

- b) **Could light or glare from the finished project be a safety hazard or interfere with views?**

This is a non-project action.

- c) **What existing off-site sources of light or glare may affect your proposal?**

This non-project action is not site-specific.

- d) **Proposed measure to reduce or control light and glare impacts, if any:**

This is a non-project action.

12. Recreation:

- a) **Would the proposed project displace any existing recreational uses? Describe:**

This is a non-project action. No existing uses will be displaced.

- b) **Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant:**

This is a non-project action. Recreation will not be impacted.

- c) **What designated and informal recreational opportunities are in the immediate vicinity?**

This non-project action is not site-specific. All of the City's parks are identified on City maps.

13. Historic and Cultural Preservation:

- a) **Are there any buildings, structures, or sites, located on or near the site that are over 45 years old listed in or eligible for listing in national, state, or local preservation registers located on or near the site? If so, specifically describe**

This non-project action is not site-specific.

- b) **Are there any landmarks, features, or other evidence of Indian or historic use or occupation? This may include human burials or old cemeteries. Are there any material evidence, artifacts, or areas of cultural importance on or near the site? Please list any professional studies conducted at the site to identify such resources**

This non-project action is not site-specific.

- c) **Describe the methods used to assess the potential impacts to cultural and historic resources on or near the project site. Examples include consultation with tribes and the department of archeology and historic preservation, archaeological surveys, historic maps, GIS data, etc.**

N/A

- d) **Proposed measures to avoid, minimize, or compensate for loss, changes to, and disturbance to resources. Please include plans for the above and any permits that may be required**

N/A

14. Transportation:

- a) **Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site Plans.**

This non-project action is not site specific, but is applicable to all special flood hazard areas within the jurisdictional boundary of the City of SeaTac. The freeways serving the City include I-5, SR 518, and SR 509. Principal arterial streets include International Boulevard (SR 99), S. 188th Street, S. 200th Street, and 28th/24th Avenue S. Minor arterial streets include S.128th Street, S.154th Street, S. 170th Street, S.176th Street, S.208th Street, Military Road, Des Moines Memorial Drive, and 51st Avenue S.

- b) **Is the site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?**

This non-project action is not site specific, but is applicable all special flood hazard areas within the jurisdictional boundary of the City of SeaTac. The City is served by public transit including Sound Transit's Link light rail and bus service provided by King County Metro and Sound Transit.

- c) **How many parking spaces would the completed project have? How many would the project eliminate?**

This is a non-project action and therefore will not directly affect changes in the number of parking spaces city-wide.

- d) **Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? Generally describe (indicate whether public or private):**

This is a non-project action and does not directly include any streets or improvements.

- e) **Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? Generally describe:**

This is a non-project action and therefore no direct use of water, rail, or air transportation will result.

- f) **How many vehicular trips per day would be generated by the completed project or proposal? If known, indicate when peak volumes would occur and what percentage of the volume would be trucks (such as commercial and nonpassenger vehicles). What data or transportation models were used to make these estimates?**

This is a non-project action and therefore would not directly result in additional trips.

- g) **Proposed measures to reduce or control transportation impacts:**

This is a non-project action and will not directly result in transportation impacts.

- h) **Will the proposal interfere with, affect or be affected by the movement of agricultural and forest products on roads or streets in the area? If so, generally describe:**

This is a non-project action and therefore will not directly affect the movement of agricultural and forest products.

15. Public Services:

- a) **Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? Generally describe:**

This is a non-project action and therefore would not directly result in impacts to public services.

b) Proposed measures to reduce or control direct impacts on public services:

This is a non-project action, therefore there are no measures proposed to reduce or control impacts on public services.

16. Utilities

a) Check utilities currently available at the site:

Electricity Natural Gas Water Refuse Service Telephone
Sanitary Sewer Septic System Other _____

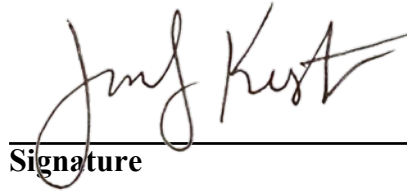
This non-project action is not site-specific. These utility services are available to properties throughout SeaTac.

b) Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed:

This is a non-project action and therefore would not directly result in impacts to utilities. Except for the Stormwater Utility, the City does not directly provide any utility services.

C. SIGNATURE

The above answers are true and complete to the best of my knowledge, I understand that the lead agency is relying on them to make its decision.



02/19/2021

Signature

Date Submitted

Jennifer Kester

Planning Manager, City of SeaTac Department of
Community and Economic Development

Printed Name

Position and Agency/Organization

D. SUPPLEMENTAL SHEET FOR NONPROJECT ACTIONS

(Do Not Use This Sheet For Project Actions)

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment. When answering these questions, be aware of the extent of the proposal, or how the types of activities likely to result from the proposal would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

1. How would the proposal be likely to increase discharge to water, emissions to air, production, storage, or release of toxic or hazardous substances, or production of noise?

The proposed amendments, in and of themselves, are not likely to increase discharge to water, emissions to air, production, storage, or release of toxic or hazardous substances, or production of noise.

Proposed measures to avoid or reduce such increases are:

The potential for subsequent projects to produce the noted effects that are not addressed through the application of existing federal, state or local laws will be addressed through appropriate environmental review as needed.

Surface Water: Impacts to surface waters from pollutants carried by stormwater are mitigated through the implementation of the current King County Surface Water Design Manual (Section 12.10.010, SeaTac Municipal Code) and compliance with the City's Western Washington Phase II Municipal Stormwater Permit (Permit # WAR 04-55410).

Air: Production of air emissions is regulated under Sections 15.460.060, 15.460.070, 15.460.080, and 15.460.100 SMC.

Noise: Production of noise is regulated by Section 15.460.020 SMC.

Toxic or Hazardous Substances: The storage or release of toxic or hazardous substances is regulated by the International Fire Code (WAC 51-54A, adopted by reference in Section 13.150.010, SeaTac Municipal Code), and through the application of existing federal, state or other local laws. Potential impacts not addressed under these regulations will be addressed through appropriate environmental review as needed.

2. How would the proposal be likely to affect plants, animals, fish, or marine life?

The proposal amends the regulations for special flood hazard areas. While siting of buildings in a special flood hazard area may result in impacts to plants, animals, fish, or marine life at a site-level, none of the city's protections for critical areas or shoreline are being reduced.

Proposed measures to avoid or reduce such increases are:

Impacts not addressed by these regulations will be addressed through appropriate environmental review as needed.

3. How would the proposal be likely to deplete energy or natural resources?

The proposed amendments, in and of themselves, would not be likely to deplete energy or natural resources.

Proposed measures to protect or conserve energy and natural resources are:

None are presently proposed.

4. **How would the proposal be likely to use or affect environmentally sensitive areas or areas designed (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplain, or prime farmlands?**

This proposal amends regulations for special flood hazard areas (floodplains) consistent with FEMA, Washington State Department of Ecology model ordinance, and RCW 86.16. Protections for floodplains contained in this proposal are the minimum necessary to meet all of the above cited environmentally sensitive area regulatory agencies and laws.

Proposed measures to protect such resources or to avoid or reduce impacts are:

The proposed regulation are the protection measures.

5. **How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?**

The proposal does not changes uses allowed in the city.

Proposed measures to avoid or reduce shoreline and land use impacts are:

Shoreline use is addressed by the City's Shoreline Master Program, and Shoreline Management Code, SMC Title 18 and no changes are proposed to shoreline regulations.

6. **How would the proposal be likely to increase demands on transportation or public services and utilities?**

The proposed amendments, in and of themselves, would not be likely to increase demands on transportation or public services and utilities.

Proposed measures to reduce or respond to such demand(s) are:

None are presently proposed. Impacts related to specific developments at the project level will be mitigated subject to appropriate environmental review, as needed.

7. **Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.**

The proposed action will not conflict with local, state or federal laws or requirements for the protection of the environment.

City of SeaTac's Draft Flood Hazard Areas Ordinance for compliance with FEMA

Approach

- Two Chapters in our current code include floodplain regulations: SMC 12.40 Flood Damage Prevention and SMC 15.700 Critical Areas.
- Instead of having two separate sections covering the same topic, proposing to create a new chapter specific to floodplains in our Environmental Code (SMC Title 18). 18.10 Flood Hazard Areas will include all the required language from the model ordinance.
- Repeal Chapter 12.40 and the relevant sections from the Critical Area code (SMC 15.700) and make necessary code references throughout the code. (Sections 15.700.210, 15.700.210, 15.700.220, 15.700.230, 15.700.240)
- Section 15.700.200 amended to reference new Chapter 18.10 Flood Hazard Areas.
- Remove definitions from 15.700 Critical Area no longer used due to the new Chapter 18.10 Flood Hazard Areas. Amend other definition in 15.700 as necessary to be consistent with model ordinance.
- Draft Chapter 18.10 Flood Hazard Areas does not include model ordinance provisions for Coastal Hi Hazards V Zones) and Livestock/Farms since these do not exist in SeaTac
- Appendix A will be adopted, as shown at the end of this document

NEW Chapter 18.10 Flood Hazard Areas

18.10.010 Purpose

18.10.020 Authority and Application

18.10.030 Definitions

18.10.040 Basis for establishing the areas of special flood hazard

18.10.050 Development permit required.

18.10.060 Designation of the Administrator

18.10.070 Duties and responsibilities of the Administrator.

18.10.080 General standards for flood hazard reduction

18.10.090 Specific standards for flood hazard reduction.

18.10.100 AE and A1-30 Zones with Base Flood Elevations but No Floodways.

18.10.110 Floodways

18.10.120 Variances

18.10.130 Warning and Disclaimer of Liability

18.10.140 Severability

18.10.010 Purpose

It is the purpose of this chapter to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed:

- A. To protect human life and health;
- B. To minimize expenditure of public money and costly flood control projects;
- C. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;

- D. To minimize prolonged business interruptions;
- E. To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard;
- F. To help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas;
- G. To ensure that potential buyers are notified that property is in an area of special flood hazard; and
- H. To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

18.10.020 Authority and Application

- A. This Chapter shall apply to all areas of special flood hazards within boundaries of the City of SeaTac.
- B. Compliance. All development within special flood hazard areas is subject to the terms of this ordinance and other applicable regulations.
- C. Penalties for Noncompliance. No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this Chapter and other applicable regulations. Violations of the provisions of this Chapter by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions), shall be addressed in accordance with SMC 1.15.045 through 1.15.075 by way of correction agreement and/or notice of infraction. Nothing herein contained shall prevent the City from taking such other lawful action as is necessary to abate any violation.
- D. Abrogation and Greater Restrictions. This chapter is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this chapter and other regulations, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.
- E. Interpretation. In the interpretation and application of this ordinance, all provisions shall be:
 1. Considered as minimum requirements;
 2. Liberally construed in favor of the governing body; and,
 3. Deemed neither to limit nor repeal any other powers granted under state statutes.

18.10.030 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 and to give this chapter its most reasonable application.

Alteration of watercourse:

Any action that will change the location of the channel occupied by water within the banks of any portion of a riverine waterbody.

Area of special flood hazard:

The land in the flood plain within a community subject to a one percent or greater chance of flooding in any given year. It is shown on the Flood Insurance Rate Map (FIRM) as zone A, AO, AH, A1-30, AE, A99, AR (V, VO, V1-30, VE). "Special flood hazard area" is synonymous in meaning with the phrase "area of special flood hazard".

ASCE 24:

The most recently published version of ASCE 24, Flood Resistant Design and Construction, published by the American Society of Civil Engineers.

Base Flood:

The flood having a one percent chance of being equaled or exceeded in any given year. Also referred to as the "100-year flood." Designation on maps always includes the letters A or V.

Base Flood Elevation (BFE):

The elevation to which floodwater is anticipated to rise during the base flood.

Basement:

Any area of the building having its floor sub-grade (below ground level) on all sides.

Critical Facility:

A facility for which even a slight chance of flooding might be too great. Critical facilities include (but are not limited to) schools, nursing homes, hospitals, police, fire and emergency response installations, and installations which produce, use, or store hazardous materials or hazardous waste.

Development:

Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials located within the area of special flood hazard.

Flood or flooding:

- A. 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
 - 2. The unusual and rapid accumulation of runoff of surface waters from any source.
 - 3. Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in paragraph (A)(2) of this definition and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.
- B. The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (A)(1) of this

definition.

Flood Elevation Study:

An examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e., mudflow) and/or flood-related erosion hazards. Also known as a Flood Insurance Study (FIS).

Flood Insurance Rate Map (FIRM):

The official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).

Floodplain or flood-prone area:

Any land area susceptible to being inundated by water from any source. See "Flood or flooding."

Floodplain administrator:

The City of SeaTac official designated to administer and enforce the floodplain management regulations.

Flood proofing:

Any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate risk of flood damage to real estate or improved real property, water and sanitary facilities, structures, and their contents. Flood proofed structures are those that have the structural integrity and design to be impervious to floodwater below the Base Flood Elevation.

Floodway or Regulatory Floodway:

The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

Functionally dependent use:

A use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, and does not include long-term storage or related manufacturing facilities.

Highest adjacent grade:

The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

Historic structure:

Any structure that is:

- A. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as

- meeting the requirements for individual listing on the National Register;
- B. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
 - D. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of Interior; or
 - E. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - 1. By an approved state program as determined by the Secretary of the Interior, or
 - 2. Directly by the Secretary of the Interior in states without approved programs.

Lowest floor:

The lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access or storage, in an area other than a basement area is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of Section 18.10.090A of this code.

Manufactured home:

A structure, transportable in 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. For flood plain management purposes the term "manufactured home" also includes park trailers, travel trailers, and other similar vehicles placed on a site for greater than 180 consecutive days. For insurance purposes the term "manufactured home" does not include park trailers, travel trailers, and other similar vehicles.

Mean Sea Level:

For purposes of the National Flood Insurance Program, the vertical datum to which Base Flood Elevations shown on a community's Flood Insurance Rate Map are referenced.

New construction:

For the purposes of determining insurance rates, structures for which the "start of construction" commenced on or after the effective date of an initial Flood Insurance Rate Map or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, "new construction" means structures for which the "start of construction" commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structures.

Reasonably Safe from Flooding:

Development that is designed and built to be safe from flooding based on consideration of current flood elevation studies, historical data, high water marks and other reliable data known to the community. In unnumbered A zones where flood elevation information is not available and cannot be obtained by practicable means, reasonably safe from flooding means that the lowest floor is at least two feet above the Highest Adjacent Grade.

Recreational Vehicle:

A vehicle that is:

- A. Built on a single chassis; and
- B. 400 square feet or less when measured at the largest horizontal projection; and
- C. Designed to be self-propelled or permanently towable by a light duty truck; and
- D. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

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 slab 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 land 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. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

Structure:

A walled and roofed building including a gas or liquid storage tank that is principally above ground, as well as a manufactured home.

Substantial damage:

Damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

Substantial improvement:

Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage," regardless of the actual repair work performed. The term does not, however, include either:

- A. Any project for improvement of a structure to correct previously identified existing violations of state or local health, sanitary, or safety code specifications that have been identified by the local code enforcement official and that are the minimum necessary to assure safe living conditions; or
- B. Any alteration of a "historic structure," provided that the alteration will not preclude the structure's continued designation as a "historic structure."

Variance:

A grant of relief by a community from the terms of a floodplain management regulation.

18.10.040 Basis for establishing the areas of special flood hazard.

The special flood hazard areas identified by the Federal Insurance Administrator in a scientific and engineering report entitled “The Flood Insurance Study (FIS) for King County, Washington and Incorporated Areas” dated August 19, 2020, and any revisions thereto, with accompanying Flood Insurance Rate Maps (FIRM’s), and any revisions thereto, are hereby adopted by reference. The FIS and the FIRM are on file at SeaTac City Hall with the City of SeaTac Department of Public Works. The best available information for flood hazard area identification as outlined in Section 18.10.070(B) shall be the basis for regulation until a new FIRM is issued that incorporates data utilized under Section 18.10.070(B).

18.10.050 Development permit required.

- A. A development permit shall be obtained before construction or development begins within any area of special flood hazard established in Section 18.10.040 of this Chapter. The permit shall be for all structures, including manufactured homes, as , and for all development, including fill and other activities as defined in Section 18.10.020 of this Chapter.
- B. Application for a development permit shall be made on forms furnished by the Floodplain Administrator and may include, but not be limited to, plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing. Specifically, the following information is required:
 - 1. Elevation in relation to mean sea level, of the lowest floor (including basement) of all structures recorded on a current elevation certificate with Section B completed by the Floodplain Administrator.
 - 2. Elevation in relation to mean sea level to which any structure has been flood proofed;
 - 3. Where a structure is to be flood proofed, certification by a registered professional engineer or architect that the flood proofing methods for any nonresidential structure meet flood proofing criteria in SMC 18.10.090(B);
 - 4. Description of the extent to which a watercourse will be altered or relocated as a result of proposed development;
 - 5. Where development is proposed in a floodway, an engineering analysis indicating no rise of the Base Flood Elevation; and
 - 6. Any other such information that may be reasonably required by the Floodplain Administrator in order to review the application.

18.10.060 Designation of the Administrator.

The City Manager or designee is appointed, as Administrator, to administer and implement this chapter by granting or denying development permit applications in accordance with its provisions.

18.10.070 Duties and responsibilities of the Administrator.

Duties of the Administrator shall include, but not be limited to:

- A. Permit Review.
 - 1. Review all development permits to determine that the permit requirements of this chapter have been satisfied.
 - 2. Review all development permits to determine that all necessary permits have been obtained from those federal, State, or local government agencies from which prior approval is required.
 - 3. Review all development permits to determine if the proposed development is located in the floodway. If located in the floodway, assure that the encroachment provisions of Section 18.10.110(A) are met.
 - 4. Determine that the site is reasonably safe from flooding;
 - 5. Notify FEMA when annexations occur in the Special Flood Hazard Area.
- B. Use of Other Base Flood Data. When base flood elevation data has not been provided in accordance with Section 18.10.040 of this Chapter, obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, State or other source, in order to administer Sections 18.10.090 and 18.10.110 of this Chapter.
- C. Information to be Obtained and Maintained.
 - 1. Where base flood elevation data is provided through the Flood Elevation Study or as required in subsection B of this section, obtain and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement.
 - 2. For all new or substantially improved flood proof nonresidential structures where base flood elevation data is provided through the FIS, FIRM, or as required in SMC 18.10.070(B):
 - a. Obtain and maintain a record of the elevation (in relation to mean sea level) to which the structure was flood proofed; and
 - b. Maintain the flood proofing certifications in SMC 18.10.050(B)(3).
 - 3. Certification required by SMC 18.10.110(A).
 - 4. Records of all variance actions, including justification for their issuance.
 - 5. Improvement and damage calculations.
 - 6. Maintain for public inspection all records pertaining to the provisions of this chapter.
- D. Alteration of Watercourses.
 - 1. Notify adjacent communities and the appropriate department of the State of Washington prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.
 - 2. Require that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.
- E. Interpretation of FIRM Boundaries. Make interpretations where needed, as to exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation. Such appeals shall be granted consistent with the standards of Section 60.6 of the rules and regulations of the National Flood Insurance Program (44 CFR 59-76).

18.10.080 General standards for flood hazard reduction.

In all areas of special flood hazards, the following standards are required:

- A. Anchoring.
 - 1. All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads including the effects of buoyancy.
 - 2. All manufactured homes must likewise be anchored to prevent flotation, collapse or lateral movement, and shall be installed using methods and practices that minimize flood damage. Anchoring methods may include, but are not limited to, use of over-the-top or frame ties to ground anchors (Reference FEMA's "Manufactured Home Installation in Flood Hazard Areas" guidebook for additional techniques).
- B. Construction Materials and Methods.
 - 1. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
 - 2. All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
 - 3. Electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed and/or otherwise elevated or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
- C. Utilities.
 - 1. All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
 - 2. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters;
 - 3. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding; and
 - 4. Water wells shall be located on high ground that is not in the floodway.
- D. Subdivision Proposals and Development.
 - 1. All subdivision proposals shall be consistent with the need to minimize flood damage;
 - 2. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage;
 - 3. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage; and
 - 4. Where subdivision proposals and other proposed developments contain greater than 50 lots or 5 acres (whichever is the lesser) base flood elevation data shall be included as part of the application.
- E. Review of Building Permits. Where elevation data is not available either through the Flood Elevation Study or from another authoritative source (Section 18.10.070(B)), applications for building permits shall be reviewed to assure that proposed construction will be reasonably safe from flooding. The test of reasonableness is a local judgment and includes use of historical data, high water marks, photographs of past flooding, etc.,

where available. Failure to elevate at least two feet above grade in these zones may result in higher insurance rates.

F. Certification by a Land Surveyor (*SMC15.700.240*)

1. For all new structures or substantial improvements in a flood hazard area, the applicant shall provide certification by a land surveyor licensed by the State of Washington of:
 - a. The actual, as-built elevation of the lowest floor, including basement; and
 - b. The actual, as-built elevation to which the structure is flood-proofed, if applicable.
2. The surveyor shall indicate if the structure has a basement.
3. The City shall maintain the certifications required by this section for public inspection.

18.10.090 Specific standards for flood hazard reduction.

In all areas of special flood hazards where base flood elevation data has been provided as set forth in Sections 18.10.040 or 18.10.070(B) the following provisions are required:

A. Residential Construction.

1. In AE and A1-30 zones or other A zoned areas where the BFE has been determined or can be reasonably obtained, new construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated one foot or more above the BFE. Mechanical equipment and utilities shall be waterproof or elevated least one foot above the BFE.
2. New construction and substantial improvement of any residential structure in an AO zone shall meet the requirements of Appendix A.
3. New construction and substantial improvement of any residential structure in an Unnumbered A zone for which a BFE is not available and cannot be reasonably obtained shall be reasonably safe from flooding, but in all cases the lowest floor shall be at least two feet above the Highest Adjacent Grade.
4. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs must meet or exceed the following minimum criteria:
 - a. Have a minimum of two openings with a total net area of not less than one square inch for every square foot of enclosed area subject to flooding.
 - b. The bottom of all openings shall be no higher than one foot above grade.
 - c. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwater.
 - d. A garage attached to a residential structure, constructed with the garage floor slab below the BFE, must be designed to allow for the automatic entry and exit of floodwaters.

Alternatively, a registered engineer or architect may design and certify engineered openings.

- B. Nonresidential Construction. New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall meet the requirements of subsection 1 or 2, below.

1. New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall meet all of the following requirements:
 - a. In AE and A1-30 zones or other A zoned areas where the BFE has been determined or can be reasonably obtained:

New construction and substantial improvement of any commercial, industrial, or other nonresidential structure shall have the lowest floor, including basement, elevated one foot or more above the BFE, or elevated as required by ASCE 24, whichever is greater. Mechanical equipment and utilities shall be waterproofed or elevated least one foot above the BFE, or as required by ASCE 24, whichever is greater.
 - b. If located in an AO zone, the structure shall meet the requirements in Appendix A.
 - c. If located in an Unnumbered A zone for which a BFE is not available and cannot be reasonably obtained, the structure shall be reasonably safe from flooding, but in all cases the lowest floor shall be at least two feet above the Highest Adjacent Grade.
 - d. Fully enclosed areas below the lowest floor that are subject to flooding are prohibited, or shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria:
 - i. Have a minimum of two openings with a total net area of not less than one square inch for every square foot of enclosed area subject to flooding.
 - ii. The bottom of all openings shall be no higher than one foot above grade.
 - iii. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwater.
 - iv. A garage attached to a residential structure, constructed with the garage floor slab below the BFE, must be designed to allow for the automatic entry and exit of floodwaters.

Alternatively, a registered engineer or architect may design and certify engineered openings.
2. If the requirements of subsection 1 are not met, then new construction and substantial improvement of any commercial, industrial or other nonresidential structure shall meet all of the following requirements:
 - a. Be dry flood proofed so that below one foot or more above the base flood level the structure is watertight with walls substantially impermeable to the passage of water or dry flood proofed to the elevation required by ASCE 24, whichever is greater;
 - b. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy;
 - c. Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted

standards of practice for meeting provisions of this subsection based on their development and/or review of the structural design, specifications and plans. Such certifications shall be provided to the official as set forth in SMC 18.10.070(C)(2);

- d. Nonresidential structures that are elevated, not flood proofed, must meet the same standards for space below the lowest floor as described in SMC 18.10.090(A)(2);
3. Applicants flood proofing nonresidential buildings shall be notified that flood insurance premiums will be based on rates that are one foot below the flood proofed level (e.g. a building constructed to the base flood level will be rated as one foot below that level).
- C. Manufactured Homes. All manufactured homes to be placed or substantially improved within appropriate zones of the City shall be elevated on a permanent foundation such that the lowest floor of the manufactured homes is at or above the base flood elevation and be securely anchored to an adequately anchored foundation system in accordance with the provisions of Section 12.40.080A(2) of this Chapter.
- D. Recreational Vehicles. Recreational vehicles placed on sites are required to either:
 1. Be on the site for fewer than 180 days, or
 2. Be fully licensed and ready for highway use, on wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached additions; or
 3. Meet the requirements of SMC 18.10.090(C).
- E. Enclosed Area Below the Lowest Floor. If buildings or manufactured homes are constructed or substantially improved with fully enclosed areas below the lowest floor, the areas shall be used solely for parking of vehicles, building access, or storage.
- F. Appurtenant Structures (Detached Garages & Small Storage Structures)
For A Zones (A, AE, A1-30, AH, AO):
 1. Appurtenant structures used solely for parking of vehicles or limited storage may be constructed such that the floor is below the BFE, provided the structure is designed and constructed in accordance with the following requirements:
 - a. Use of the appurtenant structure must be limited to parking of vehicles or limited storage;
 - b. The portions of the appurtenant structure located below the BFE must be built using flood resistant materials;
 - c. The appurtenant structure must be adequately anchored to prevent flotation, collapse, and lateral movement;
 - d. Any machinery or equipment servicing the appurtenant structure must be elevated or floodproofed to or above the BFE;
 - e. The appurtenant structure must comply with floodway encroachment provisions in SMC18.10.110(A);
 - f. The appurtenant structure must be designed to allow for the automatic entry and exit of flood waters in accordance with SMC18.10.090(A)(4).
 - g. The structure shall have low damage potential,
 - h. If the structure is converted to another use, it must be brought into full compliance with the standards governing such use, and
 - i. The structure shall not be used for human habitation.

2. Detached garages, storage structures, and other appurtenant structures not meeting the above standards must be constructed in accordance with all applicable standards in SMC 18.10.090(A).
3. Upon completion of the structure, certification that the requirements of this section have been satisfied shall be provided to the Floodplain Administrator for verification.

18.10.100 AE and A1-30 Zones with Base Flood Elevations but No Floodways.

In areas with BFE's (when a regulatory floodway has not been designated), no new construction, substantial improvements, or other development (including fill) shall be permitted within zones A1-30 and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

18.10.110 Floodways.

Located within areas of special flood hazard established in Section 18.10.040 of this code are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and erosion potential, the following provisions apply:

- A. No Rise Standard. Prohibit encroachments, including fill, new construction, substantial improvements, and other development unless certification by a registered professional engineer is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
- B. Residential Construction in Floodway. Construction or reconstruction of residential structures is prohibited within designated floodways, except for (1) repairs, reconstruction, or improvements to a structure which do not increase the ground floor areas; and (2) repairs, reconstruction or improvements to a structure, the cost of which does not exceed 50 percent of the market value of the structure either, (a) before the repair, reconstruction, or repair is started, or (b) if the structure has been damaged, and is being restored, before the damage occurred. Work done on structures to comply with existing health, sanitary, or safety codes or to structures identified as historic places shall not be included in the 50 percent.
- C. Substantially Damaged Residences in Floodway
 1. For all substantially damaged residential structures, other than farmhouses, located in a designated floodway, the Floodplain Administrator may make a written request that the Department of Ecology assess the risk of harm to life and property posed by the specific conditions of the floodway. Based on analysis of depth, velocity, flood-related erosion, channel migration, debris load potential, and flood warning capability, the Department of Ecology may exercise best professional judgment in recommending to the local permitting authority repair, replacement, or relocation of a substantially damaged structure consistent with WAC 173-158-076. The property owner shall be responsible for submitting to the local government and the Department of Ecology any information necessary to complete the assessment. Without a favorable recommendation from the

department for the repair or replacement of a substantially damaged residential structure located in the regulatory floodway, no repair or replacement is allowed per WAC 173-158-070(1).

2. Before the repair, replacement, or reconstruction is started, all requirements of the NFIP, the state requirements adopted pursuant to 86.16 RCW, and all applicable local regulations must be satisfied. In addition, the following conditions must be met:
 - a. There is no potential safe building location for the replacement residential structure on the same property outside the regulatory floodway.
 - b. A replacement residential structure is a residential structure built as a substitute for a legally existing residential structure of equivalent use and size.
 - c. Repairs, reconstruction, or replacement of a residential structure shall not increase the total square footage of floodway encroachment.
 - d. The elevation of the lowest floor of the substantially damaged or replacement residential structure is a minimum of one foot higher than the BFE.
 - e. New and replacement water supply systems are designed to eliminate or minimize infiltration of floodwater into the system.
 - f. New and replacement sanitary sewerage systems are designed and located to eliminate or minimize infiltration of floodwater into the system and discharge from the system into the floodwaters.
 - g. All other utilities and connections to public utilities are designed, constructed, and located to eliminate or minimize flood damage.
- D. All Other Building Standards Apply in the Floodway. If subsection A of this section is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Sections 18.10.080, 18.10.090, and 18.10.110 of this Chapter.

18.10.120 Variances

- A. The variance criteria set forth in this section is based on the general principle of zoning law that variances pertain to a piece of property and are not personal in nature. A variance may be granted for a parcel of property with physical characteristics so unusual that complying with the requirements of this Chapter would create an exceptional hardship to the applicant or the surrounding property owners. The characteristics must be unique to the property and not be shared by adjacent parcels. The unique characteristic must pertain to the land itself, not to the structure, its inhabitants, or the property owners.
- B. It is the duty of the City of SeaTac to help protect its citizens from flooding. This need is so compelling and the implications of the cost of insuring a structure built below the Base Flood Elevation are so serious that variances from the flood elevation or from other requirements in the flood ordinance are quite rare. The long-term goal of preventing and reducing flood loss and damage can only be met if variances are strictly limited. Therefore, the variance guidelines provided in this ordinance are more detailed and contain multiple provisions that must be met before a variance can be properly granted. The criteria are designed to screen out those situations in which alternatives other than a variance are more appropriate.

C. Requirements for Variances.

1. Variances shall only be issued:
 - a. Upon 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;
 - b. For the repair, rehabilitation, or restoration of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure;
 - c. Upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief;
 - d. Upon a showing of good and sufficient cause;
 - e. Upon a determination that failure to grant the variance would result in exceptional hardship to the applicant;
 - f. Upon a showing that the use cannot perform its intended purpose unless it is located or carried out in close proximity to water. This includes only facilities defined in Section 18.10.030 of this Chapter in the definition of "Functionally Dependent Use."
2. Variances shall not be issued within any floodway if any increase in flood levels during the base flood discharge would result.
3. Generally, variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the BFE, provided the procedures of SMC 18.10.040 and 18.10.090 have been fully considered. As the lot size increases beyond one-half acre, the technical justification required for issuing the variance increases.

D. Variance Criteria.

1. In considering variance applications, the City shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this ordinance, and:
 - a. The danger that materials may be swept onto other lands to the injury of others;
 - b. The danger to life and property due to flooding or erosion damage;
 - c. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - d. The importance of the services provided by the proposed facility to the community;
 - e. The necessity to the facility of a waterfront location, where applicable;
 - f. The availability of alternative locations for the proposed use, which are not subject to flooding or erosion damage;
 - g. The compatibility of the proposed use with existing and anticipated development;
 - h. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;

- i. The safety of access to the property in time of flood for ordinary and emergency vehicles;
 - j. The expected heights, velocity, duration, rate of rise, and sediment transport of the floodwaters expected at the site; and,
 - k. The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities, such as sewer, gas, electrical, water system, and streets and bridges.
- E. Additional Requirements for the Issuance of a Variance.
- 1. Any applicant to whom a variance is granted shall be given written notice over the signature of a community official that:
 - a. The issuance of a variance to construct a structure below the BFE will result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage, and
 - b. Such construction below the BFE increases risks to life and property.
 - 2. The Floodplain Administrator shall maintain a record of all variance actions, including justification for their issuance.
 - 3. The Floodplain Administrator shall condition the variance as needed to ensure that the requirements and criteria of this chapter are met.
 - 4. Variances as interpreted in the NFIP are based on the general zoning law principle that they pertain to a physical piece of property; they are not personal in nature and do not pertain to the structure, its inhabitants, economic or financial circumstances. They primarily address small lots in densely populated residential neighborhoods. As such, variances from flood elevations should be quite rare.

18.10.130 Warning and Disclaimer of Liability

The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This ordinance does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of the City of SeaTac, any officer or employee thereof, or the Federal Insurance Administration, for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made hereunder.

18.10.140 Severability

This ordinance and the various parts thereof are hereby declared to be severable. Should any Section of this ordinance be declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the ordinance as a whole, or any portion thereof other than the Section so declared to be unconstitutional or invalid.

Changes in other Parts of SMC

1. Repeal Chapter 12.40 Flood Damage Prevention of the SeaTac Municipal Code

2. Amend Section SMC 15.700.200 to read:

15.700.200 Flood Hazard Areas – Components

~~A. A flood hazard area consists of the following components:~~

- ~~1. Floodplain;~~
- ~~2. Flood fringe;~~
- ~~3. Zero-rise floodway; and~~
- ~~4. Federal Emergency Management Agency (FEMA) floodway.~~

~~B. The City shall determine the flood hazard area after obtaining, reviewing and utilizing base flood elevations and available floodway data for a flood having a one percent (1%) chance of being equaled or exceeded in any given year, often referred to as the “one hundred (100) year flood.” The base flood is determined for existing conditions unless a basin plan including projected flows under future developed conditions has been completed, approved and adopted by the City, in which case these future flow projections shall be used. In areas where the flood insurance study for the City includes detailed base flood calculations, those calculations may be used until projection of future flows are completed and approved by the City in concurrence with FEMA.~~

If an area of special flood hazard is located on or adjacent to a development site, all activities on the site shall be in compliance with the following requirements and restrictions:

- A. The provisions of chapter 18.10 SMC.
- B. Prior to approval of any development proposal within an area of special flood hazard, special environmental studies must demonstrate that the proposed development and related construction activities will not result in an increase in the frequency, severity, or magnitude of flooding on the development site or on properties within the same hydrologic system.

3. Repeal Sections SMC 15.700.210, 15.700.220, 15.700.230, 15.700.240 in Chapter 15.700 SMC, Critical Areas

4. Remove Flood related definitions from 15.700 Critical Areas no longer used in that chapter and amend those that must be retained to match model ordinance language as follows:

- A. Amend Base Flood definition as follows:
The flood having a one percent chance of being equaled or exceeded in any given year. Also referred to as the “100-year flood.” Designation on maps always includes the letters A or V. A flood having a one percent (1%) chance of being equaled or exceeded in any given year, often referred to as the “one hundred (100) year flood.”
- B. Repeal Base Flood Elevation definition.

- C. Repeal Flood Fringe definition
- D. Repeal Flood Insurance Rate Map (FIRM) definition
- E. Repeal Flood Insurance Study for King County definition
- F. Amend Floodplain definition as follows:
Any land area susceptible to being inundated by water from any source. The total area subject to inundation by the base flood.
- G. Repeal Floodproofing definition
- H. Repeal Flood Protection Elevation definition
- I. Repeal Floodway, Zero-Rise definition

5. Amend Section 15.700.050 Partial Exemptions as follows:

15.700.050 Partial Exemptions

The following are exempt from the provisions of this and any administrative rules promulgated thereunder, except for the notice on title provisions, SMC 15.700.160, Notice on Title, ~~and the flood hazard area provisions, SMC 15.700.200, Flood Hazard Areas—Components, through 15.700.240, Flood Hazard Areas—Certification by an Engineer or Surveyor:~~

* * *

6. Amend Subsection 15.700.300(C) as follows:

* * *

- C. If the altered wetland is located on more than one (1) property, no more than twenty-five percent (25%) of the entire wetland may be filled. The remainder of the wetland shall be enhanced as approved by the City provided it can be shown by a qualified professional, approved by the City that:
 - 1. The enhancement of the remaining wetland shall provide the same or better hydrologic or biologic functions as the class of wetland identified in the wetland study for the site;
 - 2. If the altered wetland is located on more than one property, the entire altered wetland shall be identified; and
 - 3. Any altered wetlands located in a flood hazard area shall conform with SMC 15.700.140, Vegetation Management Plan, through 15.700.200, Flood Hazard Areas ~~15.700.240, Flood Hazard Areas—Certification by an Engineer or Surveyor;~~ and

* * *

7. Amend Subsection 15.700.340(J) as follows:

* * *

- J. A stream channel may be stabilized if:
 - 1. Movement of the stream channel threatens existing residential or commercial structures, public facilities or improvements, unique natural resources or the only existing access to property; and

2. The stabilization is done in compliance with the requirements of SMC 15.700.140, Vegetation Management Plan, through 15.700.200 Flood Hazard Areas ~~15.700.240, Flood Hazard Areas—Certification by an Engineer or Surveyor~~, and administrative rules promulgated pursuant to this chapter;

* * *

APPENDIX A
STANDARDS FOR SHALLOW FLOODING
AREAS (AO ZONES)
44 CFR 60.3(c)7, 8 and 11

Shallow flooding areas appear on FIRMs as AO zones with depth designations. The base flood depths in these zones range from one to three feet (1' to 3') above ground where a clearly defined channel does not exist, or where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is usually characterized as sheet flow. In addition to other provisions in this code, the following additional provisions also apply in AO zones:

1. New construction and substantial improvements of residential structures and manufactured homes within AO zones shall have the lowest floor (including basement and mechanical equipment) elevated above the highest adjacent grade to the structure, one foot (1') or more above* the depth number specified in feet on the community's FIRM (at least two feet (2') above the highest adjacent grade to the structure if no depth number is specified).

2. New construction and substantial improvements of nonresidential structures within AO zones shall either:

- a. Have the lowest floor (including basement) elevated above the highest adjacent grade of the building site, one foot or more above* the depth number specified on the FIRM (at least two feet if no depth number is specified); or
- b. Together with attendant utility and sanitary facilities, be completely flood proofed to or above that level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. If this method is used, compliance shall be certified by a registered professional engineer, or architect as in section 5.2-2(3).

3. Require adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.

4. Recreational vehicles placed on sites within AO zones on the community's FIRM either:

- a) Be on the site for fewer than 180 consecutive days, or
- b) Be fully licensed and ready for highway use, on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; or

- c) Meet the requirements of subsections (1) and (3) above and the anchoring requirements for manufactured homes (Section 5.1-1(2)).