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Sustainability**

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# M E M O

October 25, 2010

To: Portland Planning and Sustainability Commission

From: Sandra Wood, Supervising Planner, Bureau of Planning and Sustainability  
Doug Morgan, Supervising Engineer, Bureau of Development Services

**Subject: Amendments to *FEMA Flood Map Update Project: Proposed Draft* and Proposed Ordinance**

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## **Title 24, Building Regulations**

After the *FEMA Flood Map Update Project: Proposed Draft* was published on October 6, 2010, we received comments from the Oregon Department of Land Conservation and Development (DLCD). The DLCD completed a review of Title 24.50 Flood Hazards for compliance with the minimum requirements of the National Flood Insurance Program and recommended a few additional changes. The City is required to adopt the changes because having a flood hazard ordinance that is fully compliant with the minimum standards of the National Flood Insurance Program is necessary to remain in the program.

The proposed amendments are attached and include the following:

1. New definitions and changes to existing definitions;
2. Revised reference to the Flood Insurance Study and Flood Insurance Rate Maps to cite the documents by their official publication names and dates;
3. Clarification to the floodway encroachment standard for AE Zone flood hazard areas without a regulatory floodway;
4. Clarification to requirements for the use and design of fully enclosed spaces located below the lowest floor; and
5. The addition of standards for drainage paths in AH/AO Zone flood hazard areas.

## **Ordinance**

After we published the draft ordinance, we realized we had not addressed Metro's Title 13, Nature In Neighborhoods, or Statewide Planning Goal 5, Open Space, Scenic and Historic Areas, and Natural Resources. Additional finding to address this goal and title are in the revised ordinance, along with some additional language to strengthen and clarify some of our other findings. The revised ordinance is attached.

If you have any questions or need more information, please contact either of us. Doug is at 503-823-5824; [Douglas.Morgan@PortlandOregon.gov](mailto:Douglas.Morgan@PortlandOregon.gov) and Sandra is at 503-823-7949; [Sandra.Wood@PortlandOregon.gov](mailto:Sandra.Wood@PortlandOregon.gov).



# Proposed Additional Amendments to Title 24, Building Regulations

## Amend Chapter 24.50, Flood Hazard Areas

### 24.50.030 Flood Related Definitions.

The definitions contained in this Section relate to flood hazard areas and considerations outlined in this Chapter.

A through D: [No change]

E. "Basement" means any area of the building having its floor subgrade (below ground level) on all sides.

~~E.~~ F. "City Datum" means the reference datum for the City of Portland maps. The FIRM maps described in Section 24.50.050 are referenced to the North American Vertical Datum (NAVD) of 1988. To convert NAVD 1988 level to City datum, subtract 2.125 feet from the elevation referenced to NAVD 1988 level.

~~F.~~ G. "Development" means any man-made change to improved or unimproved real estate, including but not limited to buildings, bridges, other structures, and mining, dredging, filling, grading, paving, excavation, fencing, landscaping, drainage facilities, ~~or~~ drilling operations, or storage of equipment or materials.

[Re-letter G through V to H through W]

~~W.~~ X. "New manufactured home park or manufactured home subdivision" means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale for which the construction of facilities for servicing the lots on which the manufactured home is to be affixed (including as a minimum, the installation of utilities, either final site grading or the pouring of concrete pads and the construction of streets) is completed on or after the original date of this Chapter.

Y. "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, walkways, sanitary sewers, storm sewers, and/or drainage facilities; 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.

Z. "Structure or accessory structure" means, for the purposes of this Chapter, a walled and roofed building including a gas or liquid storage tank that is principally above ground.

**AA.** “Substantial Damage” means 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.

**BB.** "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:

1. Before the improvement or repair is started, or
2. If the structure has been damaged, and is being restored, before the damage occurred. Substantial improvement is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure.

The term does not, however, include either:

- a. Any project for improvement of a structure to comply with existing State or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions, or
- b. Any alteration of a structure listed on the National Register of Historic Places or the State Inventory of Historic Places.

**CC.** “Variance” means a grant of relief from the requirements of this ordinance which permits construction in a manner that would otherwise be prohibited by this ordinance.

**DD.** “Water surface elevation” means the height of the water surface of the base flood for any point along the longitudinal course of a stream.

**EE.** “Watercourse” means a channel in which a flow of water occurs, either continuously or intermittently, and if the latter, with some degree of regularity. Watercourses may be either natural or artificial.

#### **24.50.040 FIA Study and Flood Hazard Maps.**

The following study and maps in this Section are hereby adopted and declared to be a part of this Chapter.

- A. Flood Insurance Study is the official scientific and engineering report entitled “Flood Insurance Study for City of Portland, Oregon: Multnomah, Clackamas and Washington Counties”, dated November 26, 2010 prepared by the Federal Insurance Administration (FIA) under agency agreement with the Portland District Corps of Engineers. The latest ~~revised October 19, 2004~~, edition of the report, along with accompanying FIRMs, are on file with the Bureau of Development Services.
- B. Flood Insurance Rate Maps (FIRMs) ~~are~~ is the official maps entitled “The Flood Insurance Rate Maps (FIRMs) for City of Portland, Oregon: Multnomah, Clackamas and Washington Counties”, dated either October 19, 2004 or November 26, 2010, whichever is more current, on which the Federal Insurance Administration has delineated the areas of flood hazards along with the 100-year (base flood) and 500-year flood boundaries, the floodway zone boundaries and the 100-year flood elevations.

**C. through E.** [No change.]

## 24.50.060 Provisions for Flood Hazard Reduction.

In all flood hazard areas defined in Section 24.50.050, the following provisions are required:

A through C. [No change.]

**D. Floodway.** Encroachments into the floodway by development and structures defined in Section 24.50.020 are prohibited unless it is demonstrated by technical analysis from a registered engineer that the development will result in no increase in the base flood elevation. In areas where a regulatory floodway has not been designated, no new construction, substantial improvement or other development (including fill) shall be permitted within Zone AE, 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 1 foot at any point within the community. Technical analysis shall be reviewed and approved by the Sewage System Administrator. However, the minimum width of the floodway shall not be less than 15 feet.

E. [No change.]

**F. Special flood hazard areas.**

1. [No change]

2. **Residential construction.**

a. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to or above the flood protection elevation. Floodproofing of “lowest floor” space is not permitted.

b. Fully closed areas below the lowest floor that are subject to flooding are prohibited or shall be used solely for parking of vehicles, building access or limited storage and be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing 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:

(1) A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided;

(2) The bottom of all openings shall be no higher than one foot above grade;

(3) Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

a. Fills required to elevate the lowest floor to the flood protection level shall comply with Chapter 24.70. Fill selection and placement shall recognize the effects of inundation from floodwaters on slope stability, fill settlement, and scour. The minimum elevation at the top of the fill slope shall be at the base flood level. Minimum distance from any point of the building perimeter to the top of the fill slope shall be either 25 feet or twice the depth of fill at that point, whichever is the greater distance.

b. Piling foundations required to elevate the lowest habitable floor to the flood protection level shall comply with Section 1809 and 1808 of the Structural Specialty Code. Pilings shall be spaced no more than 10 feet apart, and reinforcement shall be provided for piling more than 6 feet above the ground level.

3 through 10. [No change.]

**11. AH/AO Zone Drainage.** Adequate drainage paths shall be provided around structures on slopes to guide floodwaters around and away from proposed structures.

# PROPOSED ORDINANCE, REVISED October 25, 2010

## ORDINANCE No.

\* Adopt updated FEMA Flood Insurance Rate Map (FIRM) and ensure regulations are consistent (Ordinance; amend Titles 24 and 33, Special Flood Hazard Map)

The City of Portland Ordains:

Section 1. The Council finds:

### General Findings

1. The Federal Emergency Management Agency (FEMA) maintains maps of areas around the country that are prone to flooding. They update these maps periodically. The current maps were last updated in 2004 and were adopted by the City of Portland.
2. The maps maintained by FEMA are called the Flood Insurance Rate Maps (FIRMs). One of the elements shown on the maps are the special flood hazard areas.
3. The FEMA maps show the land area covered by the floodwaters of the base flood. The base flood is the flood having a one percent chance of being equaled or exceeded in any given year. This is the regulatory standard also referred to as the "100-year flood."
4. After conducting a public process, including notice as required in 44 CFR 9.8, FEMA has revised and updated nine of the 26 FIRM Panels that cover the City of Portland. The revised and updated panels affect special flood hazard areas in the North Reach of the Willamette River, Columbia River, Columbia Slough, Peninsula Drainage Districts No. 1 and 2, and Multnomah Drainage District No. 1.
5. FEMA has issued a Letter of Final Determination and requires the revised FIRMs to be adopted by municipalities and become effective by November 26, 2010.
6. The changes to FEMA's maps are to incorporate better information: FEMA was able to map contours and potential flood areas using recent and more accurate technology called LiDAR (Light Detection and Ranging). The maps indicate which properties—or portions of properties—are in or out of the special flood hazard areas. These areas are often called the "100-year floodplain."
7. Some areas of Portland are subject to periodic flooding. This flooding can cause the loss of life, health and property; disrupt commerce and the provision of governmental services, and require extraordinary public expenditures for flood protection and relief. Flooding losses harm the public health, safety, and general welfare of the city.
8. When communities adopt flood hazard regulations that apply within the areas mapped by FEMA, communities in those areas are eligible to participate in the National Flood Insurance Program (NFIP). The regulations limit the kinds of development allowed in the areas likely to flood, and specify building regulations that limit damage when there is a flood. The regulations also require balanced cut and fill when development takes place to reduce the cumulative impact of development on flood risk. The NFIP makes flood insurance available to homeowners, renters, and business owners at a lower rate than private insurance companies would be able to provide.
9. The City's flood program and regulations are in City Code Chapter 24.50 and in several chapters of Title 33, Planning and Zoning.

10. Portland participates in the NFIP. However, to maintain compliance with federal programs—and maintain the ability for community members to obtain flood insurance in Portland—Portland must update the maps of flood-prone areas in the city to reflect the changes made by the November 26, 2010 FEMA map update. Portland's maps must exactly match FEMA's maps, without variation. The City also has to update some references in City Code by that date.
11. Meeting the requirements necessary to participate in the NFIP is in the public interest. It is also in the public interest to adopt the updated maps and make minor, concurrent amendments to City Titles. The adoption of the maps and amendments to code strengthen the regulations that protect human life and health; minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public, minimize prolonged business interruptions, and minimize damage to public facilities and utilities such as water and gas mains, electric, telephone, and sewer lines, streets, and bridges. These benefits from the regulations are achieved through such measures as prohibiting buildings in the floodway, generally requiring that buildings in the special flood hazard area be raised above the base flood and requiring balanced cut-and-fill. While many of these regulations are currently part of City Code, adoption of the map helps the City apply the regulations more accurately, and the amendments to City Code refine the regulations to better provide the benefits listed above.
12. On May 26, 2010, the Department of Land Conservation and Development (DLCD) notified the City of Portland that the 2010 FEMA maps were considered “new hazard inventory information” requiring a response under Statewide Planning Goal 7. Although Goal 7 provides local governments three years to complete the required response, the City must adopt the new maps by November 26, 2010 to preserve Portland's eligibility under the NFIP program.
13. On September 8, 2010, notice of the proposed action was mailed to the Department of Land Conservation and Development in compliance with the post-acknowledgement review process required by OAR 660-18-020.
14. On September 24, 2010 notice of the proposal was sent to 538 people and organizations on the Bureau of Planning and Sustainability's Legislative Mailing List. This includes all neighborhood and business associations. The notice also informed them of the hearing to be held before the Planning and Sustainability Commission.
15. On October 1, 2010 supplemental notice of the proposed action was mailed to the Department of Land Conservation and Development, along with specific proposed amendments to the Portland City Code.
16. On October 5, 2010 notice of the proposal as required by ORS 227.186 was sent to approximately 225 property owners potentially affected by proposed changes. This notice is also known as a "Measure 56 notice." The notice was sent to the owners of property where no portion of the property is now within the special flood hazard area, but some or all of the property will be in the special flood hazard area under the proposed changes.
17. The boundaries of the special flood hazard area are changing on 641 properties where some portion of the property is now within the special flood hazard area, and some or all of the property will be in the special flood hazard area under the proposed changes. The "Measure 56" notice was not sent to the owners of these properties because the regulations that affect their use of the property are not changing in a way that will impose additional limitations or restrictions on the use of these properties.

The FEMA maps show the special flood hazard area, which is the land area covered by the floodwaters of the base flood. The base flood is the flood having a one percent chance of being equaled or exceeded in any given year. This is the regulatory standard also referred to as the “100-year flood.”

FEMA has predicted how deep the water will be—the elevation to which it will rise—at various

locations during the 100-year flood. Their maps show the 100-year flood elevations and the areas of Portland that are predicted to be inundated by floodwater during a 100-year flood. However, the maps are not exact: they are drawn with a somewhat broad brush, and are based on the best data available, which might be of limited accuracy.

When any portion of a property is shown to be in the special flood hazard area, the City's regulations require additional information—through a survey—to establish up-to-date, site-specific, and accurate elevation information. The results of the survey determine the location of the actual flood elevation and will determine what regulations apply to the property. So, the requirements affecting properties identified in current FEMA special flood hazard areas will not change with adoption of the November 26, 2010 maps.

18. On October 5, 2010, the *FEMA Flood Map Update Project: Proposed Draft* was published. The report was available to City bureaus and the public, and mailed to all those requesting a copy. An electronic copy was posted to the Bureau of Planning and Sustainability's website.
19. On October 26, 2010, the Planning and Sustainability Commission held a public hearing on the *FEMA Flood Map Update Project: Proposed Draft*. The Commission heard testimony, and recommended that City Council adopt the proposed changes to City Code and maps.
20. On \_\_\_\_\_, notice of the City Council hearing on this proposal was sent to all those who had written or emailed with comments on the proposal. Notice was also given by hand to all those who testified in person at the hearing of the Planning and Sustainability Commission.
21. On \_\_\_\_\_, the *FEMA Flood Map Update Project: Recommended Draft* was published. The report was available to City bureaus and the public, and mailed to all those requesting a copy. An electronic copy was posted to the Bureau's website.
22. On \_\_\_\_\_, City Council held a public hearing on the *FEMA Flood Map Update Project: Recommended Draft*. They heard testimony, and voted to amend the City Code and maps as shown in the Recommended Draft.
23. On \_\_\_\_\_, notice of the adoption was mailed to the Department of Land Conservation and Development in compliance with the post-acknowledgement review process required by OAR 660-18-020.

## Findings on Statewide Planning Goals

24. State planning statutes require cities to adopt and amend comprehensive plans and land use regulations in compliance with state land use goals. Only the state goals addressed below apply.
25. **Goal 1, Citizen Involvement**, requires provision of opportunities for citizens to be involved in all phases of the planning process. The preparation of these amendments has provided numerous opportunities for public involvement, including:
  - On September 8, 2010, notice of the proposed action was mailed to the Department of Land Conservation and Development in compliance with the post-acknowledgement review process required by OAR 660-18-020.
  - On September 24, 2010 notice of the proposal was sent to 538 people and organizations on the Bureau of Planning and Sustainability's Legislative Mailing List. This includes all neighborhood and business associations. The notice also informed them of the hearing to be held before the Planning and Sustainability Commission.

- On October 1, 2010 supplemental notice of the proposed action was mailed to the Department of Land Conservation and Development, along with specific proposed amendments to the Portland City Code.
  - On October 5, 2010 notice of the proposal as required by ORS 227.186 was sent to approximately 225 property owners potentially affected by proposed changes. This notice is also known as a "Measure 56 notice." The notice was sent to the owners of property where no portion of the property is now within the special flood hazard area, but some or all of the property will be in the special flood hazard area under the proposed changes.
  - On October 5, 2010, the FEMA Flood Map Update Project: Proposed Draft was published. The report was available to City bureaus and the public, and mailed to all those requesting a copy. An electronic copy was posted to the Bureau of Planning and Sustainability's website.
  - On October 26, 2010, the Planning and Sustainability Commission held a public hearing on the FEMA Flood Map Update Project: Proposed Draft. They heard testimony.
  - On \_\_\_\_\_, notice of the City Council hearing on this proposal was sent to all those who had written or emailed with comments on the proposal. Notice was also given by hand to all those who testified in person at the hearing of the Planning and Sustainability Commission.
  - On \_\_\_\_\_, the FEMA Flood Map Update Project: Recommended Draft was published. The report was available to City bureaus and the public, and mailed to all those requesting a copy. An electronic copy was posted to the Bureau's website.
  - On \_\_\_\_\_, City Council held a public hearing on the FEMA Flood Map Update Project: Recommended Draft. They heard testimony.
  - Staff of the Bureau of Development Services and the Bureau of Planning and Sustainability engaged in telephone and email exchanges with property owners and other interested parties in regards to project provisions.
  - The Bureau of Planning and Sustainability maintained and updated, as needed, a project web site that included basic project information, announcements of public events, project documents and staff contact information.
26. **Goal 5, Natural Resources, Scenic and Historic Areas, and Open Spaces**, addresses the conservation of open space and the protection of natural and scenic resources. The amendments are consistent with and support this goal. Floodplains provide important watershed functions including nutrient transfer, off-channel fish and wildlife habitat, and groundwater recharge, along with conveyance and storage of flood waters. The values and functions of floodplains, and maps of flood areas, are identified in City and Metro natural resource inventories that have been adopted and found in compliance with Goal 5. Mapped flood areas include a combination of the FEMA special flood hazard maps and areas inundated during the 1996 floods. The amendments will improve the accuracy of information regarding where flooding is likely to occur, which in turn will inform the maintenance and update of the City's programs to comply with Goal 5, including but not limited to the City's environmental overlay zones.
27. **Goal 6, Air, Water, and Land Resource Quality**, requires the maintenance and improvement of the quality of air, water, and land resources. The amendments support this goal. Adoption of the updated FEMA maps will improve the accuracy of information about areas prone to flooding in the City. This information will inform future planning and management decisions about how the City's floodplain areas are managed, including approaches that will help maintain water quality and prevent water pollution from occurring during flood events.
28. **Goal 7, Areas Subject to Natural Disasters and Hazards**, requires the protection of people and property from natural hazards. The amendments support this goal. Adopting the updated FEMA

maps and appropriate code references will improve the accuracy of information used to implement existing City flood regulations. These regulations protect people and property from flooding by limiting the kinds of development allowed in the areas likely to flood, and specify building regulations that limit damage when there is a flood. The regulations also require balanced cut and fill when development takes place to reduce the cumulative impact of development on flood risk. . Adoption of the maps is also needed to maintain Portland's eligibility to participate in the NFIS program.

The amendments to the City Code are clarifications of terminology, and also bring the City into conformance with recent court cases; the court cases clarify that the City must refer to the maps by their specific adoption dates rather than simply "the current maps." There are no substantive changes to the City Code.

The changes to the maps are based on update maps produced by FEMA. Portland has in place the maps FEMA updated in 2004. The FEMA maps show the land area covered by the floodwaters of the base flood. The base flood is the flood having a one percent chance of being equaled or exceeded in any given year. This is the regulatory standard also referred to as the "100-year flood."

FEMA has updated maps for parts of Portland; the new maps take effect on November 26, 2010. It is these 2010 maps that Portland is adopting. These also amend the City's inventory of natural hazards. The changes to FEMA's maps are primarily because of better information: FEMA was able to map contours and potential flood areas using recent and more accurate technology called LIDAR. The maps indicate which properties—or portions of properties—are in or out of the special flood hazard areas. These areas are often called the "100-year floodplain."

Adoption of special flood hazard area maps that are more accurate will increase Portland's ability to protect people and property from flooding. Therefore, this goal is met.

29. **Goal 12, Transportation**, requires provision of a safe, convenient, and economic transportation system. The Oregon Transportation Planning Rule (TPR) was adopted in 1991 and amended in 1996 and 2005 to implement State Goal 12. The TPR requires certain findings if the proposed Comprehensive Plan Map amendment, Zone Change, or regulation will significantly affect an existing or planned transportation facility. This proposal will have no effect on existing or planned transportation facilities. The proposed map and code amendments update maps of the special flood hazard areas, but do not change what uses are allowed, the amounts of uses allowed, or the amount of development allowed.
30. **Goal 15, Willamette River Greenway**, requires protection, conservation, enhancement and maintenance of the natural, scenic, historic, agricultural, economic, and recreational qualities of lands along the Willamette River. Under this Goal, any "intensification" of land use after December 6, 1975 requires an examination against the requirements of the Goal. Because adoption of the updated FEMA maps does not intensify land use, this goal is met.

## **Findings on Metro Urban Growth Management Functional Plan**

31. **Title 1, Requirements for Housing and Employment Accommodation**, requires that each jurisdiction contribute its fair share to increasing the development capacity of land within the Urban Growth Boundary. This requirement is to be generally implemented through citywide analysis based on calculated capacities from land use designations. The amendments are consistent with this title because they do not increase the development capacity of the city.

32. **Title 2, Regional Parking Policy**, regulates the amount of parking permitted by use for jurisdictions in the region. The amendments are consistent with this title because they do not affect the parking regulations.
33. **Title 3, Water Quality, Flood Management and Fish and Wildlife Conservation**, establishes requirements that Metro-area cities and counties must meet to reduce flood and landslide hazards, control soil erosion and protect water quality. Title 3 specifically implements the Statewide Land Use Goals 6, Air, Water and Land Resource Quality and 7, Areas Subject to Natural Hazards. The findings for Statewide Land Use Goals 6 and 7 provided in this ordinance support this finding that the amendments are consistent with Title 3.
34. **Title 4, Industrial and Other Employment Areas**, limits retail and office development in Employment and Industrial areas to those that are most likely to serve the needs of the area and not draw customers from a larger market area. The amendments are consistent with this title because they do not affect the development capacity of industrial or employment areas.
35. **Title 7, Affordable Housing**, ensures opportunities for affordable housing at all income levels, and calls for a choice of housing types. The amendments are consistent with this title because they do not affect the development capacity of residential areas.
36. **Title 13, Nature in Neighborhoods**, is a program to conserve, protect, and restore a continuous ecologically viable streamside corridor system, from the streams' headwaters to their confluence with other streams and rivers, and with their floodplains in a manner that is integrated with upland wildlife habitat and with the surrounding urban landscape. This Title is also intended to foster control and prevent water pollution for the protection of the public health and safety, and to maintain and improve water quality throughout the region. The amendments are consistent with and support this Title. The City will use the updated FEMA maps to update the City's Natural Resource Inventory (NRI). Using the updated FEMA maps will improve NRI information and maps showing where floodplain functions occur in different parts of the city. The City NRI provides a technical basis for evaluating and modifying City programs to comply with Title 13, including but not limited to the environmental and greenway overlay zones.

## Findings on Portland's Comprehensive Plan Goals

37. Only the Comprehensive Plan goals addressed below apply.
38. **Policy 1.4, Intergovernmental Coordination**, requires continuous participation in intergovernmental affairs with public agencies to coordinate metropolitan planning and project development and maximize the efficient use of public funds. The amendments support this policy because a number of other government agencies were notified of this proposal and given the opportunity to comment. These agencies include the Oregon Department of Land Conservation and Development, Metro, TriMet, and Multnomah County.
39. **Goal 8, Environment**, calls for the maintenance and improvement of the quality of Portland's air, water, and land resources, as well as the protection of neighborhoods and business centers from noise pollution. **Policy 8.12, National Flood Insurance Program**, calls for the City to retain qualification in the National Flood Insurance Program (NFIS) through implementation of a full range of floodplain management measures. Adopting the FEMA maps that take effect on November 26, 2010, along with the amendments to the City Code to accurately refer to those maps is required by FEMA if the City is to remain eligible for the NFIS program. **Policy 8.13, Natural Hazards**, calls for controlling the density of development in areas of natural hazards consistent with the provisions of the City's Building Code, Chapter 70, the Floodplain Ordinance and the Subdivision Ordinance. This policy is met because the proposed amendments to City Codes and maps will not change the effect the City's regulations have on controlling the density of development in areas prone to flooding.
40. **Goal 9, Citizen Involvement**, calls for improved methods and ongoing opportunities for citizen involvement in the land use decision-making process, and the implementation, review, and amendment of the Comprehensive Plan. This project followed the process and requirements specified in Chapter 33.740, Legislative Procedure. The amendments support this goal for the reasons found in the findings for Statewide Planning Goal 1, Citizen Involvement.
41. **Goal 10, Plan Review and Administration**, calls for periodic review of the Comprehensive Plan, for implementation of the Plan, and addresses amendments to the Plan, to the Plan Map, and to the Zoning Code and Zoning Map. **Policy 10.10, Amendments to the Zoning and Subdivision Regulations**, requires amendments to the zoning and subdivision regulations to be clear, concise, and applicable to the broad range of development situations faced by a growing, urban city. The amendments support this policy by being both clear and concise, and are applicable to all properties within the FEMA-defined special flood hazard areas.

NOW, THEREFORE, the Council directs:

- a. Adopt Exhibit A, the *FEMA Flood Map Update Project: Recommended Draft*, dated October 27, 2010.
- b. Amend Title 24, Building Regulations, as shown in Exhibit A, the *FEMA Flood Map Update Project: Recommended Draft*, dated October 27, 2010.
- c. Amend Title 33, Planning and Zoning, as shown in Exhibit A, the *FEMA Flood Map Update Project: Recommended Draft*, dated October 27, 2010.
- d. Adopt the commentary in Exhibit A, the *FEMA Flood Map Update Project: Recommended Draft*, dated October 27, 2010, as legislative intent and as further findings.
- e. Amend the special flood hazard areas information on the FEMA Flood Insurance Rate Map (FIRM) as shown in Exhibit B, *FEMA Special Flood Hazard Areas (effective 11/26/2010)*.
- f. Update the City's inventory of natural hazards to conform to the map shown in Exhibit B *FEMA Special Flood Hazard Areas (effective 11/26/2010)*.

Section 2. If any section, subsection, sentence, clause, phrase, diagram, designation, or drawing contained in this Ordinance, or the plan, map or code it adopts or amends, is held to be deficient, invalid or unconstitutional, that shall not affect the validity of the remaining portions. The Council declares that it would have adopted the plan, map, or code and each section, subsection, sentence, clause, phrase, diagram, designation, and drawing thereof, regardless of the fact that any one or more sections, subsections, sentences, clauses, phrases, diagrams, designations, or drawings contained in this Ordinance, may be found to be deficient, invalid or unconstitutional.

Section 3. The Council declares that an emergency exists because the maps and code amendments must be adopted by November 26, 2010 to maintain Portland's eligibility to participate in FEMA's National Flood Insurance Program; therefore, this ordinance will be effective on November 26, 2010.

Passed by the Council:

Mayor Adams  
Prepared by: J. Richman  
Date Prepared: October 25, 2010

**LaVonne Griffin-Valade**  
Auditor of the City of Portland  
By

Deputy