Flood Management Amendments to the Johnson Creek Basin Plan District

FINAL REPORT

Adopted by the Portland City Council on April 29, 1998
Effective May 13, 1998

Bureau of Planning
Portland, Oregon
April 30, 1998
Portland City Council

Vera Katz, Mayor
Jim Francesconi, Commissioner
Charlie Hales, Commissioner
Gretchen Kafoury, Commissioner
Eric Sten, Commissioner

Portland Planning Commission

Richard Michaelson, President
Steve Abel, Vice President
Sara fitch
Amanda Fritz
Rick Holt
Marcy McInelly
Steve Naito
Paul Schubach
Ruth Scott

To help ensure equal access to information, the City of Portland Bureau of Planning offers accommodation to persons with disabilities. Call 823-7700 in advance to arrange accommodation.
TTY: 823-6868
Flood Management Amendments
to the Johnson Creek Basin Plan District

FINAL REPORT

Acknowledgments

Portland Bureau of Planning

Charlie Hales, Commissioner of Public Safety
David Knowles, Planning Director
Cary Pinard, Chief Planner, Planning Support Group

Project Staff
Tom McGuire, Senior Planner

Bureau of Planning
Portland, Oregon

April 30, 1998
TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Background</td>
<td>6</td>
</tr>
<tr>
<td>Discussion of Adopted Code Amendments</td>
<td>7</td>
</tr>
<tr>
<td>Planning Commission Discussion</td>
<td>8</td>
</tr>
<tr>
<td>Adopted Zoning Code Amendments to Chapter 33.535, Johnson Creek Basin Plan District</td>
<td>11</td>
</tr>
<tr>
<td>Map 535-??: Flood Risk Area and Floodway</td>
<td>after page 14</td>
</tr>
</tbody>
</table>
Background

Project History

The adopted changes to the Johnson Creek Basin Plan District result from recommendations from the City of Portland’s Development Review Team (DRT). The DRT is comprised of representatives from the City’s development bureaus. It initiated this effort as a follow-up to the Outer Southeast Community Plan (OSCP). Several of the OSCP Action Items under the Open Space and Environmental Policy propose that actions be taken by various City bureaus to address flooding problems along Johnson Creek.

Action Items OS26, OS29, and OS31 are particularly relevant. They are listed below:

**OS26** Create “balanced cut and fill” regulations for development in the 100-year flood plain.

**OS29** Prepare and implement a comprehensive management approach, including a Johnson Creek Comprehensive Flood Management Plan, that:
- minimizes or reduces flooding and water quality problems,
- seeks to satisfy multiple objectives, and
- provides for new development safe from flooding impacts.

**OS31** Rewrite portions of Title 24, Chapters 24.50 and 24.70 to better address flood impacts from filling and excavation.

The DRT formed a subcommittee in 1996 to follow-up on the direction of the OSCP. The subcommittee consisted of representatives from the Bureau of Environmental Services, the Bureau of Buildings, the Planning Bureau, and the City Attorneys Office. Representatives from the Portland Development Commission and the Bureau of Housing and Community Development joined later. The subcommittee brought forward the proposed Title 33 amendments to the Johnson Creek Basin Plan District as well as proposed changes to Title 24, after discussions focused on the continual flooding problems in the area of SE Foster Road and SE 108th in the Lents Neighborhood.

Project Purpose

The purpose of the amendments are to control where and how development can happen in the floodplain. These code amendments are intended to prevent additional damage caused by frequent flooding, not to control flooding. Other actions are being undertaken by the City to address flood reduction issues.

The Johnson Creek Watershed frequently floods, causing property damage, creating a health and safety hazard to the areas residents, and generating costs to the City for emergency services. Additional development in frequently flooded areas only compounds the existing problems. The adopted code changes regulate development in the area most frequently damaged by flooding—the Flood Risk Area. City staff has delineated the flood risk area using flood damage surveys, aerial photographs, and modeling. The flood risk area is shown in Figure 1, map 3 of 4. The proposed code changes also modify existing restrictions in the Floodway, which is also shown in Figure 1.
Discussion of Adopted Code Amendments

Title 33—Johnson Creek Basin Plan District

There were two amendments adopted for the Johnson Creek Basin Plan District.

Restrictions on Redevelopment within the Johnson Creek Floodway

The Plan District previously restricted new above ground structures within the Floodway. The Federal Emergency Management Agency (FEMA) defines the Floodway as the channel necessary to allow passage of a 100-year flood event without raising the flood elevation more than one foot. Essentially, the Floodway is the active flowing channel during a flood event. There are some existing structures built within the Floodway on Johnson Creek. The adopted change limits redevelopment of existing structures in the Floodway. Expansion of the footprint of all structures in the Floodway is prohibited. Alterations to industrial and commercial structures within the Floodway that exceed 50 percent of the assessed value are also prohibited. The level of restriction on new above ground structures would also be changed from “not allowed” to “prohibited” which means that no adjustment could be applied for to build within the Floodway.

Prohibition of Land Divisions and Planned Unit Developments (PUD’s) within the Flood Risk Area

The policy behind the Flood Risk Area is the reduction of flood damage and loss through avoidance. The Flood Risk Area covers a large area along Johnson Creek that is frequently flooded. It is extremely flat and it does not take a very significant precipitation event to cause some flooding. Additionally, because it is so flat even minor changes in grade, a new building, or leaves in a storm drain can cause localized flooding and changes in the flood flow or inundation area.

Within the Flood Risk Area the flooding is not frequent or severe enough to legally justify prohibiting development of a property outright as in the Floodway but it does warrant an effort to reduce potential damage by not allowing additional land divisions leading to more intensive development.

The Bureau of Environmental Services, using records of past flood events, five year flood event modeling, the 210-foot topographic line, and aerial photographs, has delineated an area found to be frequently flooded. This area is defined as the Flood Risk Area (see Figure 1, map 3 of 4). Because of the risk of property damage, health and safety hazards, and the costs to the City for emergency services, land divisions and PUD’s are prohibited within the Flood Risk Area. Property owners can maintain existing lots and development but the current problems inherent to this area should not be increased by allowing further land division.
City Council Discussion

Issues

The prohibition on alterations of existing structures exceeding 50 percent of the assessed value.

The City Council rejected this restriction for residential properties. The City Council voted to apply this restriction only to existing commercial and industrial properties. The prohibition on expansion of a building footprint within the Floodway was adopted for all zones. The City Council made no other amendments to the Planning Commission's recommendations.

City Council Decision

The City Council took the following actions:

• adopted the Planning Commission report;

• amended the 50 percent impervious surface limitation in the Johnson Creek Floodplain Subdistrict so that it applies to all zones;

• amended the zoning Code to create the Flood Risk Area and adopt the regulations that prohibit land divisions within the risk area; and

• amended the Johnson Creek Floodway standard to prohibit the expansion of building coverage within the Floodway and to prohibit alterations to existing commercial and industrial development in the Floodway that exceeds 50 percent of assessed value.
Adopted Zoning Code Amendments to
Chapter 33.535, Johnson Creek Basin Plan District

The amendments are shown on the following pages: proposed code language is shown on the right-hand page, with staff commentary on the left-hand page. Language to be added is underlined; language to be deleted is shown in strikethrough.
33.535.100  General Development Standards

Adds additional restrictions and thresholds for redevelopment of structures within the Floodway. Changes the term “not allowed” to “prohibited” so that the regulation cannot be adjusted.

Prohibits alterations to commercial and industrial structures that exceed 50 percent of assessed value. This change essentially codifies existing federal requirements.

Johnson Creek Flood Plain Subdistrict Development Standards

33.535.310.B Impervious surface

Applies the 50 percent impervious surface limitation standard to all zones. This change was added by the Planning Commission and adopted by City Council.

33.535.320 Land Divisions and PUDs

Adds a prohibition on land division and PUD's within the "Flood Risk Area". The Flood Risk Area is illustrated on map, Map 535-1, at the end of the Plan District Chapter. (see also Figure 1, map 3 of 4)
CHAPTER 33.535
JOHNSON CREEK BASIN PLAN DISTRICT

33.535.100 General Development Standards
The standards of this Section apply to the entire Johnson Creek Basin plan district.

A. Above-ground structures The following are not allowed prohibited within the Johnson Creek Floodway as delineated by the Federal Emergency Management Agency (FEMA) on July 1, 1991. An exception Exceptions to this is are fences, public bridges, outfall structures, and fire hydrants which are allowed subject to standards set by the Bureau of Environmental Services.

1. New above ground structures;

2. Alterations to existing commercial and industrial structures that exceed 50% of the assessed value; or

3. Increase of building coverage.

B. through D. [no change]

Johnson Creek Flood Plain Subdistrict Development Standards

33.535.300 Housing Types [no change]

33.535.310 Site Development Standards

A. Tree removal. [no change]

B. Impervious surface. No more than 50 percent of any site in a residential zone may be developed in impervious surface.

C. Stormwater collection. [no change]

33.535.320 Land Divisions and PUDs
Land divisions and PUDs within the Johnson Creek Flood Risk Area, as indicated on Map 535-1, are prohibited.
All data compiled from source materials at different scales. For more detail, please refer to the source materials or City of Portland, Bureau of Planning.

The information on the map was derived from digital databases on the City of Portland, Bureau of Planning GIS. Care was taken in the creation of this map but it is provided "as is". The City of Portland cannot accept any responsibility for errors, omissions, or positional accuracy, and therefore, there are no warranties which accompany this product. However, notification of any errors will be appreciated.

Figure 1: Flood Risk Area and Floodway

Map 1 of 4

Information Sources:
- Johnson Creek Floodway and Flood Risk Area: Digitized by Bureau of Environmental Services. Source of data and accuracy unknown. Approximately registered to taxlots.

Scale: 1" = 600'
September 15, 1997

LEGEND
- Johnson Creek Floodway
- Flood Risk Area
The information on the map was derived from digital databases on the City of Portland, Bureau of Planning GIS. Care was taken in the creation of this map but it is provided "as is". The City of Portland cannot accept any responsibility for errors, omissions, or positional accuracy, and therefore, there are no warranties which accompany this product. However, notification of any errors will be appreciated.

All data compiled from source materials at different scales. For more detail, please refer to the source materials or City of Portland, Bureau of Planning.

LEGEND

Johnson Creek Floodway

Flood Risk Area

Scale: 1" = 600'

September 15, 1997

INFORMATION SOURCES:


Floodway and Flood Risk Area: Digitized by Bureau of Environmental Services. Source of data and accuracy unknown. Approximately registered to taxlots.
All data compiled from Bource materials at different scales.
For more detail, please refer to the source materials or City of Portland, Bureau of Planning.

The information on the map was derived from digital databases on the City of Portland, Bureau of Planning GIS. Care was taken in the creation of this map but it is provided "as is". The City of Portland cannot accept any responsibility for errors, omissions, or positional accuracy, and therefore, there are no warranties which accompany this product. However, notification of any errors will be appreciated.

Floodway and Flood Risk Area: Digitized by Bureau of Environmental Services. Source of data and accuracy unknown. Approximately registered to taxlots.

Legend:
- Johnson Creek Floodway
- Flood Risk Area

Scale: 1" = 600'

January 02, 1998

Information Sources:
- April 1996.

Figure 1: Flood Risk Area and Floodway
Figure 1: Flood Risk Area and Floodway

Legend:
- Johnson Creek Floodway
- Flood Risk Area

Scale: 1" = 600'

September 15, 1997

Information Sources:
- Floodway and Flood Risk Area: Digitized by Bureau of Environmental Services. Source of data and accuracy unknown. Approximately registered to taxlots.

All data compiled from source materials at different scales. For more detail, please refer to the source materials or City of Portland, Bureau of Planning.

The information on the map was derived from digital databases on the City of Portland, Bureau of Planning GIS. Care was taken in the creation of this map but it is provided "as is". The City of Portland cannot accept any responsibility for errors, omissions, or positional accuracy, and therefore, there are no warranties which accompany this product. However, notification of any errors will be appreciated.