

# Exhibit A: Findings of Fact Report As Amended

## October 2, 2023

### Project Summary

The Floodplain Resilience Plan aims to reduce the impacts of future flooding and prevent the degradation of floodplain habitat for endangered and threatened fish species. The plan responds to the recommendations of the 2016 Federal Emergency Management Agency (FEMA) National Flood Insurance Program (NFIP) Biological Opinion (FEMA BiOp) that was issued by the National Marine Fisheries Service (NMFS) and the Draft Implementation Plan FEMA released in response to it in October of 2021. The FEMA BiOp does not directly apply to the City, but rather identifies steps that FEMA must take to bring its NFIP minimum requirements into compliance with the Endangered Species. As a participating jurisdiction in the NFIP, the City of Portland will be required to comply with the updated NFIP minimum requirements. It is expected that NFIP participating jurisdictions will be required to demonstrate compliance by early 2027. If based on additional guidance provided by FEMA in the future it is determined that additional amendments to floodplain development regulations are needed, the Council will amend relevant codes as needed to ensure compliance.

Since the release of the FEMA BiOp in 2016, several City bureaus have been working together to craft a citywide strategy and response to it. The bureaus finalized a five-year flood management update workplan in 2019 that established a multi-phase process for updating the City's flood management regulations and includes a variety of regulatory changes across multiple chapters of City Code. Among other proposals, the workplan identified potential amendments to land use requirements in Title 33 (Zoning Code) and Chapter 24.50, including those in this ordinance. Future projects will continue implementation of the City's workplan with the overall aim of meeting FEMA's expected compliance timeline. Phase 1 was completed in December of 2020 with the adoption of the River Plan / South Reach.

The Floodplain Resilience Plan is Phase 2 of the implementation of the work plan and amends Title 33, Planning and Zoning (Zoning Code). A separate but related project to update Title 24, Building Regulations, was brought to the City Council at the same time as the Zoning Code amendments due their similar focus on floodplain management updates in response to the FEMA BiOp. However, Title 24 amendments are not a land use decision and do not implement any Comprehensive Plan or Statewide Planning Goals. These findings explain how the Title 33 ordinance complies with Statewide Planning Goals and the City's Comprehensive Plan, as required by Oregon law.

The Floodplain Resilience Plan substantive amendments include the following:

- 1) Update the City's zoning maps to apply floodplain regulations as follows:
  - Replace the existing 1996 Flood Inundation Area (defined by Metro) in the City's combined flood hazard area map with the Modeled Willamette River 1996 Flood Extent along the Willamette River, Lower Columbia Slough and a portion of the Columbia River.



- Apply the River Environmental (e) overlay zone along the Willamette River Central Reach in areas identified below. The River Environmental overlay zone requires that development impacts are avoided to the extent possible and, when impacts can't be avoided, mitigation is required. Mitigation of development impacts can be achieved through meeting established standards or through River Review, a land use review process. Mitigation of actions must fully offset all development impacts, also known as achieving a "no-net-loss" standard.
    - Undeveloped and developed portions of the combined flood hazard area within 170 feet of the ordinary high water mark (known as the riparian buffer area) that are not currently in the River Environmental overlay zone.
    - Undeveloped floodplains more than 170 feet from the ordinary high water mark that are not in the River Environmental overlay zone.
  - Update the application of the River Environmental overlay zone in the Willamette River South Reach to incorporate areas identified in the Modeled Willamette River 1996 Flood Extent. This update will modify the boundaries of the River Environmental overlay zone and the riparian buffer area. Additionally, the River Environmental overlay zone will be removed from developed portions of the combined flood hazard area that are more than 100 feet from top of bank and not in the riparian buffer area.
  - Apply the Environmental Conservation (c) overlay zone to undeveloped floodplains along Fanno Creek and Tryon Creek that are not currently in the Environmental Conservation overlay zone.
- 2) Amend chapters of the Zoning Code to update floodplain regulations as follows:
- Add riparian buffer area requirements to floodplains within 170 feet of ordinary high water in the Willamette River Central Reach (33.475). Development in the riparian buffer area is required to mitigate all impacts on identified natural resources (i.e., meet the existing "no net-loss" standard) and demonstrate an improvement in one of two riparian functions: (1) Bank function, and control of sediments, nutrients and pollution; or (2) Large wood and channel dynamics.
  - Update the requirements of the Environmental overlay zones chapter (33.430) to manage tree and vegetation removal and maintenance to achieve no net-loss in floodplain habitat functions, as defined by the FEMA BiOp. This includes limiting tree and vegetation removal that is allowed without City approval and increasing the minimum tree replacement required when a tree is removed in the Environmental overlay zone.
  - Add new standards for tree and vegetation removal and maintenance and restructure the South Waterfront Greenway overlay zone (33.510.253) requirements to clarify that the exterior lighting standards apply to all development in the River General overlay zone. Also, update the code to allow South Waterfront greenway reviews to be processed through a Type II procedure (administrative staff level review), instead of always requiring a Type III procedure (public hearing before the designated review body).

## General

Legislative amendments to the Comprehensive Plan goals, policies and map must be found to be consistent with the goals and policies of the Comprehensive Plan, Metro's Urban Growth Management



Functional Plan, the Statewide Planning Goals, and any relevant area plans adopted by City Council. (33.835.040 and 33.810.050).

The Comprehensive Plan requires that amendments to its elements, supporting documents, and implementation tools comply with the plan itself. “Comply” means that the amendments must be evaluated against the comprehensive plan’s applicable goals and policies and on balance be equally or more supportive of the Comprehensive Plan as a whole, than the existing language or designation. (Policy 1.10)

Text amendments to the Zoning Code must be found to be consistent with the Comprehensive Plan, Urban Growth Management Functional Plan, and the Statewide Planning Goals. In addition, the amendments must be consistent with the intent or purpose statement for the base zone, overlay zone, and plan district where the amendment is proposed, and any plan associated with the regulations. (33.835.040)

Legislative zoning map amendments must be found to comply with the Comprehensive Plan Map with a zone change to a corresponding zone of the Comprehensive Plan Map. The change also must demonstrate that there are adequate public services capable of supporting the uses allowed by the zone. In addition, the school district(s) within which the sites are located must have adequate enrollment capacity to accommodate any projected increase in student population over the number that would result from development in the existing zone. This criterion applies only to sites that are within the David Douglas School District, which has an adopted school facility plan that has been acknowledged by the City of Portland. (33.855.050)

1. **Finding:** The City Council has identified and addressed all relevant and applicable goals and policies and Zoning Code purpose statements relevant and applicable to Zoning Code text amendments in these additional findings of fact.
2. **Finding:** As discussed in more detail below, the City Council has considered the public testimony on this matter and has weighed all applicable goals and policies and on balance has found that the Floodplain Resilience Plan amendments are consistent with the goals and policies of the Comprehensive Plan, Metro Urban Growth Management Functional Plan, Statewide Planning Goals and other relevant city plans.



## Part I. Statewide Planning Goals

State planning statutes require cities to adopt and amend comprehensive plans and land use regulations in compliance with the Statewide Planning Goals.

**The Statewide Planning Goals that apply to Portland are:**

- Goal 1 Citizen Involvement
- Goal 2 Land Use Planning
- Goal 5 Natural Resources, Scenic and Historic Areas, and Open Spaces
- Goal 6 Air, Water and Land Resource Quality
- Goal 7 Areas Subject to Natural Hazards
- Goal 8 Recreational Needs
- Goal 9 Economic Development
- Goal 10 Housing
- Goal 11 Public Facilities and Services
- Goal 12 Transportation
- Goal 13 Energy Conservation
- Goal 14 Urbanization
- Goal 15 Willamette River Greenway

There are approximately 560 acres of land both within Portland’s municipal boundaries and beyond the regional urban service boundary that can be classified as rural land. In 1991, as part of Ordinance 164517, the City Council took an exception to Goal 3 and 4. the agriculture and forestry goals. Because of the acknowledged exception, the following goals do not apply:

- Goal 3 Agricultural Lands
- Goal 4 Forest Lands

Other Statewide Planning Goals apply only within Oregon’s coastal zone. Since Portland is not within Oregon’s coastal zone, the following goals do not apply to this decision:

- Goal 16 Estuarine Resources
- Goal 17 Coastal Shorelands
- Goal 18 Beaches and Dunes
- Goal 19 Ocean Resources

**Goal 1. Citizen Involvement.** To develop a citizen involvement program that insures the opportunity for citizens to be involved in all phases of the planning process.

**3. Finding:** Portland adopted a Community Involvement Program on June 15, 2016. The Community Involvement Program serves as a framework to carry out policies from Chapter 2 — Community Involvement, of the 2035 Comprehensive Plan, and applies to legislative land use and transportation projects initiated by the City. Among the commitments that the City is asked to make in the Comprehensive Plan are the following:

- To provide a wide range of opportunities for involvement in planning and investment decisions.
- To achieve greater equity in land use actions through setting priorities and making decisions with meaningful involvement of under-served and under-represented communities.



- To meaningfully involve, in decision making, those who potentially will be adversely affected by the results of those decisions.
- To provide this meaningful involvement throughout the phases of planning and investment projects - issue identification and project design through implementation, monitoring, evaluation, and enforcement.
- To provide well-designed, relevant, responsive and culturally-responsive public involvement.
- To build community capacity for meaningful participation and leadership in planning and investment decisions.

The City has an acknowledged Goal 1 program. Community involvement efforts for the Floodplain Resilience Plan project have been conducted in accordance with that program. Therefore, the project is in compliance with Goal 1. More specific findings related to the city's community involvement efforts are found in response to the policies in Chapter 2 of the Comprehensive Plan and are incorporated here. Therefore, the requirements of Goal 1 are met.

**Goal 2. Land Use Planning.** To establish a land use planning process and policy framework as a basis for all decisions and actions related to use of land and to assure an adequate factual base for such decisions and actions.

- 4. Finding:** Goal 2, as it applies to the Floodplain Resilience Plan amendments, requires the City to follow its established procedures for legislative amendments to the Zoning Code and the Zoning Map. The amendments comply with this goal because, as demonstrated by these findings, the amendments were developed consistent with the Statewide Planning Goals, the Metro Urban Growth Management Functional Plan, 2035 Comprehensive Plan and Portland Zoning Code, as detailed in this ordinance.

Other government agencies received notice from the 35-day DLCD notice and the City's legislative notice. The City did not receive any requests from other government agencies to modify the Floodplain Resilience Plan amendments.

The City Council's decision is based on the findings in this document, and the findings are based on the evidence presented to the Planning and Sustainability Commission and City Council that are incorporated in the record that provides the adequate factual basis for this decision. The Council legislative record specifically incorporates all materials linked on the project website, the reports, memos and presentations provided to the Planning and Sustainability Commission and City Council, the written and verbal testimony submitted to the Planning and Sustainability Commission and City Council, and notices sent to the public, and Floodplain Resilience Plan electronic "box" – available at <https://efiles.portlandoregon.gov/Record/14762263> - that contains reports, documents, and information related to the project. On the Bureau of Planning and Sustainability's website, the following link [<https://www.portland.gov/bps/planning/enviro-planning/floodplain-project>] provides access to a portion of the legislative record. This link was available to the public and City Council during the public hearing process. The City Council's decision is based on the findings in this document, and the findings are based on the evidence presented to the Planning and Sustainability Commission and City Council that are incorporated in the record that provides the adequate factual basis for this decision.



**Goal 5. Open Space, Scenic and Historic Areas, and Natural Resources.** To protect natural resources and conserve scenic and historic areas and open spaces.

5. **Finding:** Goal 5 addresses open spaces, scenic resources, historic resources, and natural resources. Each category is addressed below:

**Open Spaces.** The Floodplain Resilience Plan amendments do not expand or reduce the extent of Open Space zoning in the city. Where environmental overlay zones (e.g., Environmental Conservation, Environmental Protection, River Environmental, etc.) are applied to Open Space-zoned properties in the open space zone, the amendments are expected to result in better protection of floodplain habitat in the open space zone. Therefore, the Floodplain Resilience Plan amendments are consistent with the open space elements of Goal 5.

**Scenic Resources.** The City has designated scenic resources in an adopted inventory and protects them through an overlay zone (Chapter 33.480) which address landscaping, setbacks, screening, building facades and tree removal. The Floodplain Resilience Plan amendments do not affect the scenic resource overlay zone and therefore are consistent with the scenic elements of Goal 5.

**Historic Resources.** The Floodplain Resilience Plan amendments do not include any modifications to the City's historic resources requirements. Therefore, the Floodplain Resilience Plan amendments are consistent with the historic elements of Goal 5.

**Natural Resources.** The City protects natural resources by applying environmental zoning to significant natural resources that it identifies through its natural resources inventory (NRI). The City's most recent NRI was adopted as part of the *2035 Comprehensive Plan* (Ordinance 185657) and was acknowledged by LCDC on June 13, 2014. Subsequent amendments were made to the NRI as a part of the Environmental Overlay Zone Map Correction Project (Ordinance 190834), which was adopted in May of 2022. The NRI identifies the location, quantity, and quality of all significant natural resources, as required by the inventory provisions of Statewide Planning Goal 5. The existing environmental zones were implemented through a series of natural resource protection plans (see Figure 7-2 of the *2035 Comprehensive Plan*). Each protection plan evaluated the economic, social, environmental and energy (ESEE) impacts of regulating development within natural resource areas, as required by Statewide Planning Goal 5. The existing environmental zones have been acknowledged as in compliance with Statewide Planning Goal 5.

The Floodplain Resilience Plan amendments include a number of additional protections for Goal 5-identified resources. The application of the Environmental Conservation overlay zone along Fanno Creek and Tryon Creek is expanded to encompass all undeveloped floodplains. Additionally, in Columbia River, Columbia Slough, Fanno Creek, Tryon Creek and Johnson Creek floodplains, the plan amendments narrow tree and vegetation removal that is allowed without City approval and increase the number of trees that must be planted when a tree is removed. Other natural resources-related requirements in the Environmental overlay zone are unchanged. Therefore, the Floodplain Resilience Plan amendments are consistent with the natural resource elements of Goal 5.

**Generally.** As noted below in the findings for the 2035 Comprehensive Plan, the Floodplain Resilience Plan amendments are consistent with the goals and policies of Chapter 4 (Design and Development, including Historic and Cultural Resources) and Chapter 7 (Environment and Watershed Health) of the 2035 Comprehensive Plan and the findings in response to those goals and policies are incorporated by reference. Therefore, the amendments are consistent with the requirements of Statewide Planning Goal 5.



**Goal 6. Air, Water, and Land Resource Quality.** To maintain and improve the quality of the air, water, and land resources of the state.

- 6. Finding:** Goal 6 requires the maintenance and improvement of the quality of air, water, and land resources. The State has not yet adopted administrative rules for complying with Statewide Planning Goal 6. The City is in compliance with federal and state environmental standards and statutes, including the federal Clean Water Act and Clean Air Act. Existing City regulations including Title 10 (Erosion Control), the Stormwater Management Manual and environmentally-focused overlay zones (e.g., Environmental Conservation, Environmental Protection, River Environmental, etc.) remain in effect and are applicable to future development.

Additionally, the Floodplain Resilience Plan amendments are consistent with Goal 6 in the following ways:

1. The application of the River Environmental overlay zone and Environmental Conservation overlay zones to areas along the Willamette River, Tryon Creek, and Fanno Creek maintain and expand natural resources and the functions they provide. Environmentally-focused overlay zones encourage environmentally sensitive development and require mitigation whenever proposed development will have a detrimental impact on functions and values of existing natural resources.
2. Riparian buffer area requirements, applied to floodplains within 170 feet of ordinary high water in the Willamette River Central Reach and South Reach, maintain and improve water quality. The riparian buffer area protects important ecologically-sensitive areas nearest the river by requiring that proposed development demonstrate an improvement in one of two riparian functions: (1) Bank function, and control of sediments, nutrients and pollution; or (2) Large wood and channel dynamics.
3. Updates to standards in the Environmental overlay zones and the South Waterfront Greenway overlay zone (33.510.253) chapters maintain tree and vegetation cover, improving air and water quality. Updates to the Environmental zones chapter (33.430) limit tree and vegetation removal that is allowed without City approval and increases the minimum tree replacement required when a tree is removed in the Environmental overlay zones. The Floodplain Resilience Plan includes new standards for the South Waterfront Greenway overlay zone that establish a new minimum of 3 trees planted whenever a tree is removed in the floodplain. These new standards establish consistent requirements for tree and vegetation management for the Willamette River from the Fremont Bridge upstream to the urban services boundary.

As noted below in the findings for the 2035 Comprehensive Plan, the Floodplain Resilience Plan amendments are consistent with the goals and policies of Chapter 7 (Environment and Watershed Health) of the 2035 Comprehensive Plan and the findings in response to those goals and policies are incorporated by reference. Therefore, the amendments are consistent with the requirements of Statewide Planning Goal 6.

**Goal 7, Areas Subject to Natural Disasters and Hazards.** To protect people and property from natural hazards.

- 7. Finding:** The State has not yet adopted specific requirements for complying with Statewide Planning Goal 7. The Buildable Land Inventory (BLI), which was adopted (Ordinance 187831) and acknowledged by LCDC on April 25, 2017, included a development constraint analysis that identified parts of Portland that are subject to natural hazards. Copies of relevant portions of the



current version of the BLI have been included in the record. The City of Portland uses several sources of information in its Comprehensive Plan to identify potential hazards:

- Special flood hazard area (Land area covered by the floodwaters of the base flood, as shown on the Federal Emergency Management Agency (FEMA) maps in effect on November 26, 2010);
- Floodway (The active flowing channel during a flood, as designated on the flood maps adopted under authority of Title 24 of the Portland City Code);
- 1996 Flood Inundation area (A record peak flow in February of 1996 caused the Willamette River and its major tributaries to flood. This map was created to delineate the inundated areas near the mainstem and major tributaries of the Willamette River);
- Potential Rapidly Moving Landslide Hazard Zones (as shown in the DOGAMI IMS-22 publication); and
- Deep landslide—High Susceptibility or Landslide Deposit or Scarp as shown in the DOGAMI IMS-57 publication.

The Floodplain Resilience Plan amendments are consistent with Goal 7 in the following ways:

1. The plan utilizes a recently-completed hydraulic model of a Willamette River flood with characteristics similar to the one experienced in the Portland region in February of 1996. This new model, referred to as the Modeled Willamette River 1996 Flood Extent, serves as a more up-to-date estimate of flood risk along the Willamette River, Columbia Slough and a stretch of the Columbia River near the confluence with the Willamette River. The model provides new estimates of the extents and elevation of a 1996-like flood event using current river bathymetry, upland topography and development patterns. A map of the extent of the Modeled Willamette River 1996 Flood Extent and documentation of the methodology used to create it are included in the record. Upon implementation of the Zoning Code amendments, this extent will be available as a GIS layer for use by applicants as a part of future development proposals.

This new map supplements the FEMA 100-year floodplain, which is out of date because the floodplain extent and estimated flood elevation are primarily based on a model completed in 1979. The model is used in place of the existing Metro Title 3 1996 Flood Inundation Area (Metro is Portland's regional government) and is incorporated as a referenced floodplain in the City's "combined flood hazard area" map.

2. The riparian buffer area requirements, applied to floodplains within 170 feet of ordinary high water in the Willamette River Central Reach and South Reach, expand and improve riparian habitat along the river, reducing impervious surfaces in this important area and improving the riverbank's ability to manage flooding when it occurs. The riparian buffer area protects an ecologically sensitive area with mitigation requirements that must demonstrate an improvement in either of two of the City's floodplain-related functions: (1) Bank function, and control of sediments, nutrients and pollution; or (2) Large wood and channel dynamics.
3. The River Environmental overlay zone and Environmental Conservation overlay zones are applied to significant natural resources areas, including floodplains. These overlay zones guide development away from sensitive natural resources that provide important ecosystem services and require mitigation when development occurs, thereby protecting public health, safety, and property from natural disasters and hazards.



4. Existing requirements on flood management, and erosion and sediment control (City Title 10 Erosion Control, and the balanced cut and fill requirements of City Title 24 are not changed by the Floodplain Resilience Plan amendments. These requirements ensure any new development will be done in a way to protect people and property from hazards.

As noted below in the findings for the 2035 Comprehensive Plan, the Floodplain Resilience Plan amendments are consistent with the goals and policies of Chapter 7 (Environment and Watershed Health) of the 2035 Comprehensive Plan and the findings in response to those goals and policies are incorporated by reference. Therefore, the amendments are consistent with the requirements of Statewide Planning Goal 7.

**Goal 8. Recreational Needs.** To satisfy the recreational needs of the citizens of the state and visitors and, where appropriate, to provide for the siting of necessary recreational facilities including destination resorts.

8. **Finding:** Goal 8 focuses on the provision of destination resorts. However, it does impose a general obligation on the City to plan for meeting its residents' recreational needs: "(1) in coordination with private enterprise; (2) in appropriate proportions; and (3) in such quantity, quality and locations as is consistent with the availability of the resources to meet such requirements."

Goal 8 provides that "Recreation Needs -- refers to existing and future demand by citizens and visitors for recreations areas, facilities and opportunities." Goal 8 also provides that "Recreation Areas, Facilities and Opportunities -- provide for human development and enrichment, and include but are not limited to: open space and scenic landscapes; recreational lands; history, archaeology and natural science resources; scenic roads and travelers; sports and cultural events; camping, picnicking and recreational lodging; tourist facilities and accommodations; trails; waterway use facilities; hunting; angling; winter sports; mineral resources; active and passive games and activities."

The City of Portland has a robust and diverse system of parks, recreation areas and open spaces. The City's Parks 2020 Vision documents the City's long-term plan to provide a wide variety of high-quality park and recreation services and opportunities for all residents. The Floodplain Resilience Plan amendments do not impact that existing vision nor do they affect any land designated as open space.

Although the Floodplain Resilience Plan does not include objectives or actions directly addressing recreational needs, the project recognizes that land adjacent to waterways contain regional trails. While plan amendments do not change citywide requirements for public access and improvement of public trails, there are several elements that will preserve and enhance habitat in conjunction with any trail planning or improvements. Along the Willamette River Central Reach and South Reach, development within the riparian buffer area is required to mitigate for all impacts on identified natural resources and demonstrate an improvement in one of two of the City's floodplain-related functions. Where the River Environmental overlay zone and Environmental Conservation overlay zones are applied in the floodplain, tree and vegetation removal requirements will ensure that, at minimum, three trees are planted for each tree removed and that any other impacts of development on natural resources are mitigated. These amendments and standards are consistent with and support the maintenance and improvement of open spaces and trails and the opportunities for "human development and enrichment" identified in Goal 8.

As noted below in the findings for the 2035 Comprehensive Plan, the Floodplain Resilience Plan amendments are consistent with the goals and policies of Chapter 8 (Public Facilities and Services)



of the 2035 Comprehensive Plan and the findings in response to those goals and policies are incorporated by reference. Therefore, the amendments are consistent with the requirements of Statewide Planning Goal 8.

**Goal 9. Economic Development.** To provide adequate opportunities throughout the state for a variety of economic activities vital to the health, welfare, and prosperity of Oregon’s citizens.

- 9. Finding:** Goal 9 requires cities to consider economic activities vital to the health, welfare, and prosperity of Oregon's citizens. Comprehensive plans for urban areas are required to include, among other things: an analysis of economic patterns, potentialities, strengths, and deficiencies; policies concerning economic development; and land use maps that provide for at least an adequate supply of sites for a variety of industrial and commercial uses.

The 2035 Comprehensive Plan demonstrates compliance with Goal 9. Land needs for a variety of industrial and commercial uses are identified in the Economic Opportunities Analysis (EOA), which was adopted (Ordinance 187831) and acknowledged by LCDC on April 25, 2017. The City’s acknowledged EOA analyzed and demonstrated adequate growth capacity for a diverse range of employment uses.

The Floodplain Resilience Plan amendments do not reduce the supply of employment land because no land is being removed from the City’s employment land base, and no new permanent nonindustrial uses are being allowed within industrial zones. Additionally, to ensure adequate capacity for industrial uses moving forward, the Floodplain Resilience Plan amendments do not apply to three base zones identified as important for industrial and employment uses: Heavy Industrial (IH), General Industrial 2 (IG2) and General Employment 2 (EG2). Application of the requirements to these important industrial and employment zones will be evaluated as a part of the next update of the City’s Economic Opportunities Analysis, which is expected to be completed by the end of 2024.

As noted below in the findings for the 2035 Comprehensive Plan, the Floodplain Resilience Plan amendments are consistent with the goals and policies of Chapter 6 (Economic Development) of the 2035 Comprehensive Plan and the findings in response to those goals and policies are incorporated by reference. Therefore, the amendments are consistent with the requirements of Statewide Planning Goal 9.

**Goal 10. Housing.** To provide for the housing needs of citizens of the state.

- 10. Finding:** Goal 10 specifies that each city must plan for and accommodate needed housing types. As used in ORS 197.307 “needed housing” means all housing on land zoned for residential use or mixed residential and commercial use that is determined to meet the need shown for housing within an urban growth boundary at price ranges and rent levels that are affordable to households within the county with a variety of incomes, including but not limited to households with low incomes, very low incomes and extremely low incomes. Needed housing includes attached and detached single-dwelling housing and multi-dwelling housing for both owner and renter occupancy; government assisted housing, mobile home or manufactured dwelling parks; manufactured homes on individual lots; and housing for farmworkers.

Goal 10 requires each city to inventory its buildable residential lands, forecast future needs, and zone enough buildable land to meet those needs. It also prohibits local plans from discriminating against needed housing types.

Goal 10 and its implementing administrative rules contain the following specific requirements:



1. Identify future housing needs by amount, type, tenure and affordability;
2. Maintain a residential Buildable Lands Inventory (BLI) with sufficient land to meet identified needs;
3. Adopt land use maps, public facility plans and policies to accommodate needed housing (housing capacity, as well as type, tenure and affordability);
4. Meet minimum density and housing mix requirements (including the Metropolitan Housing Rule);
5. Adopt clear and objective standards for needed housing.

The adopted 2035 Comprehensive Plan conducted city-wide analysis to demonstrate compliance with Goal 10. The City's Housing Needs Analysis, which was adopted (Ordinance 185657) and acknowledged by LCDC on June 11, 2014, consists of five distinct reports that analyzed the state of housing supply, housing affordability issues and the City's ability to meet projected housing demand. The Buildable Land Inventory (BLI), which was adopted (Ordinance 187831) and acknowledged by LCDC on April 25, 2017, identified the supply of land available to provide this needed housing. Supporting documents adopted with the acknowledged 2035 Comprehensive Plan (Ordinance 187832) established that the residential housing capacity of the unconstrained vacant and underutilized parcels in Portland is approximately 169,000 units. This is much more than the estimated 20-year need of 123,000 housing units by 2035. Portland has a surplus of housing capacity. Copies of relevant portions of the current version of the BLI have been included in the record.

Goal 10 mandates that local jurisdictions ensure adequate capacity, and provides a “floor” for such measure, but does not restrict or prevent jurisdictions from increasing housing capacity above a set “ceiling”. In other words, just because the City has shown that it meets the number of requisite units to accommodate the forecast growth, Goal 10 does not prevent the City from increasing the capacity, and especially so when such increases help improve the housing target performance in other areas of the goal (type, tenure and affordability).

The Floodplain Resilience Plan amendments are consistent with Goal 10 in that they do not impact the underlying zoning that dictates the number of dwelling units or floor area that is allowed within each zone or plan district. The amendments include expansions of the River Environmental and Environmental Conservation overlay zones in some parts of the city to encompass the floodplain nearest the waterway (within 170 feet) and undeveloped floodplains. The River Environmental overlay zone includes development standards for all residential types (33.475.440.O) that allow for new residential structures to be approved without a land use review if established criteria are met. Similarly, the Environmental overlay zone chapter (33.430) also contains clear and objective standards for development, including housing, within an Environmental overlay zone. In both cases, land use review is required when the proposed development is not able to meet standards. The relatively small expansion of the River Environmental and Environmental Conservation overlay zones included in the plan will not have a significant impact on housing capacity or production in the city.

As noted below in the findings for the 2035 Comprehensive Plan, the Floodplain Resilience Plan amendments are consistent with the goals and policies of Chapter 5 (Housing) of the 2035 Comprehensive Plan and the findings in response to those goals and policies are incorporated by reference. Therefore, the amendments are consistent with the requirements of Statewide Planning Goal 10.



**Goal 11. Public Facilities and Services.** To plan and develop a timely, orderly, and efficient arrangement of public facilities and services to serve as a framework for urban and rural development.

- 11. Finding:** Statewide Planning Goal 11, Public Facilities, requires cities to adopt and update public facilities plans. Public facilities plans ensure that urban development is guided and supported by types and levels of water, sewer and transportation facilities appropriate for the needs and requirements of the urban areas to be serviced, and that those facilities and services are provided in a timely, orderly and efficient arrangement.

The adopted 2035 Comprehensive Plan includes the Citywide Systems Plan (CSP), which was adopted (Ordinance 185657) and acknowledged by LCDC on April 25, 2017. The CSP includes the Public Facilities Plan with information on current and future transportation, water, sanitary sewer, and stormwater infrastructure needs and projects, consistent with the requirements of Statewide Planning Goal 11.

Findings addressing water, sanitary sewage disposal, stormwater management, and school district capacity are found in findings in response to Comprehensive Plan Chapter 8 policies. Findings addressing transportation systems are in response to Chapter 9 policies. The findings in response to those goals and policies are incorporated by reference. Therefore, as described in these findings, the Floodplain Resilience Plan amendments are consistent with the requirements of Statewide Planning Goal 11.

**Goal 12. Transportation.** To provide and encourage a safe, convenient and economic transportation system.

- 12. Finding:** This goal requires Portland to adopt a Transportation System Plan (TSP) that supports safe, convenient and economical movement of people and goods, and supports a pattern of travel that will avoid air pollution, traffic and livability problems. Parts, but not all, of the City's TSP have to be adopted as part of the Comprehensive Plan.

All cities are required to provide safe and convenient motor vehicle, pedestrian and bicycle travel on a well-connected network of streets. Larger cities are required to provide for transit service and to promote more efficient performance of existing transportation facilities through transportation system management and demand management measures.

Goal 12 rules require coordination with the state and regional transportation plans (such as the Oregon Highway Plan and the Regional Transportation Plan), and with other transportation providers. OAR 660-012-0060 states that if an amendment to a functional plan, an acknowledged comprehensive plan, or a land use regulation (including a zoning map) would have a significant negative impact on an existing or planned transportation facility, then the local government must take mitigating action, or plan for additional facilities to accommodate the expected impact. Generally, a jurisdiction cannot take action that significantly increases traffic on a facility that is failing to meet state, regional, or local mobility standards.

Council finds that the Floodplain Resilience Plan amendments will not impact the City's provision of a safe, convenient and economic transportation system. The plan's amendments focus on environmental regulations that protect people and property from adverse effects of flooding in areas defined in the city's floodplain maps. In locations where environmentally focused overlay zones intersect with rights-of-way, there are standards and exemptions that allow for the development of roadways. In areas where overlay zones are applied to lots in which residential, government, or commercial development has been planned in coordination with transportation planning, development or alterations to existing development may be allowed by standard if it can



avoid natural resources or mitigate for impacts to natural resources. In situations where planned development cannot meet standards, it may be allowed through a land use review process.

As noted below and in the findings for the 2035 Comprehensive Plan, the Floodplain Resilience Plan amendments are consistent with the goals and policies of Chapter 9 (Transportation) of the 2035 Comprehensive Plan and the findings in response to those goals and policies are incorporated by reference. Therefore, the amendments are consistent with the requirements of Statewide Planning Goal 12.

**Goal 13. Energy Conservation.** To conserve energy.

- 13. Finding:** The State has not adopted specific rules for complying with Statewide Planning Goal 13. Goal 13 generally requires that land use plans contribute to energy conservation.

The Floodplain Resilience Plan amendments do not adopt or amend a local energy policy or implementing provisions. Therefore, the amendments are consistent with the requirements of Statewide Planning Goal 13.

**Goal 14. Urbanization.** To provide for an orderly and efficient transition from rural to urban land use, to accommodate urban population and urban employment inside urban growth boundaries, to ensure efficient use of land, and to provide for livable communities.

- 14. Finding:** Metro exercises Goal 14 obligations on behalf of Portland and other cities within the Metropolitan region. Metro has adopted an Urban Growth Management Functional Plan and compliance with this plan by constituent cities assures compliance with Goal 14, which is discussed in Part II of this document and those findings are incorporated by reference.

The Floodplain Resilience Plan amendment will not affect the City's ability to accommodate urban population and urban employment. The amendments aim to ensure that development in the floodplain is located and designed, to the extent possible, to minimize flood risk. These updates will contribute to the livability of Portlanders that live and work along our rivers and streams. Therefore, the Floodplain Resilience Plan amendments are consistent with the requirements of Statewide Planning Goal 14.

**Goal 15. Willamette River Greenway.** To protect, conserve, enhance and maintain the natural, scenic, historical, agricultural, economic and recreational qualities of lands along the Willamette River as the Willamette River Greenway.

- 15. Finding:** Statewide Planning Goal 15 requires cities to adopt local greenway plans, along with criteria for new development, new uses, and the increase of uses along the river. The City implements Statewide Planning Goal 15 through application of the Greenway and River overlay zones.

The Floodplain Resilience Plan does not modify the City's existing Willamette River Greenway Plan and strengthens the City's current efforts to protect, conserve enhance and maintain natural resources in the area. The Floodplain Resilience Plan includes a number of actions that contribute to furthering the City's compliance with Goal 15, including:

Willamette River Central Reach

- Require floodplain development within 170 feet of the ordinary high water mark (known as the riparian buffer area) to address natural resources impacts and incorporate measures to improve fish habitat along the riverbank, such as removal of structures or rip rap, creation of



shallow water habitat, and other strategies. This amendment will contribute to the preservation and expansion of fish and wildlife habitat in areas closest to the river.

- Apply the River Environmental overlay zone to encompass the proposed riparian buffer area and any undeveloped floodplain landward of the riparian buffer area. This amendment will ensure that existing natural resources in the floodplain will be maintained with new development.

#### Willamette River South Reach

- Update the boundaries of the existing riparian buffer area and River Environmental overlay zone to include the areas identified in the Modeled Willamette River 1996 Flood Extent and FEMA 100-year Floodplain. This amendment incorporates best-available science to guide the City's management of floodplains and ensures habitat protections are applied to areas most likely to flood in the future. Mitigation requirements in these areas will improve habitat for endangered and threatened species that live in or travel through Portland in the Willamette River. A map of the extent of the Modeled Willamette River 1996 Flood Extent and documentation of the methodology used to create it are included in the record. Upon implementation of the Zoning Code amendments, this extent will be available as a GIS layer for use by applicants as a part of future development proposals.
- Remove the River Environmental overlay zone from developed floodplains landward of the riparian buffer area. This amendment will address the potential for unnecessary River Review in cases where proposed development is located in the developed floodplain. This reduces time and costs of development approval and will contribute to the economic feasibility of proposed residential and commercial development along the Willamette River.

#### South Waterfront

- Add new standards for tree and vegetation removal and maintenance, similar to those that apply in the Willamette River Central Reach and South Reach. This amendment ensures that trees and vegetation in the floodplain in South Waterfront will be maintained and expanded over time. The new standards set a minimum planting of three trees when a tree is removed in the floodplain and ensures consistency in tree and vegetation requirements for the from the Fremont Bridge to the City's urban services boundary.
- Code clarifications and updates to the Greenway land use review process, including clarifying that exterior lighting standards apply to all of the Greenway overlay zone. This amendment will reduce light pollution along the river, reducing impacts for fish and wildlife while also enhancing the scenic and recreational qualities of the river.

Collectively, the Floodplain Resilience Plan amendments are consistent with Statewide Planning Goal 15.



## Part II. Metro Urban Growth Management Functional Plan

Under ORS 268.380 and its Charter, Metro has the authority to adopt regional plans and require city and county comprehensive plans to comply with the regional plan. Metro adopted its Urban Growth Management Functional Plan under this authority.

In Metro’s June 2011 update to its 2010 compliance report Metro found, “The City of Portland is in compliance with all Urban Growth Management Functional Plan requirements in effect on December 15, 2010, except for Title 13, Nature in Neighborhoods. On January 16, 2013 the City received a letter from Metro stating that Portland had achieved compliance with Title 13.

**Title 1. Housing Capacity**

**Title 2. Regional Parking Policy.** (Repealed Ord. 10-1241B, Sec. 6, 1997)

**Title 3. Water Quality and Flood Management.**

**Title 4. Industrial and Other Employment Areas.**

**Title 5. Neighboring Cities** (Repealed Ord. 10-1238A, Sec. 4, 1997)

**Title 6. Centers, Corridors, Station Communities and Main Streets.**

**Title 7. Housing Choice.**

**Title 8. Compliance Procedures.**

**Title 9. Performance Measures.** (repealed Ord. 10-1244B, Sec. 8, 2010)

**Title 10. Functional Plan Definitions.**

**Title 11. Planning for New Urban Areas.**

**Title 12. Protection of Residential Neighborhoods.**

**Title 13. Nature in Neighborhoods.**

**Title 14. Urban Growth Management Plan.**

**Title 1. Housing Capacity.** The Regional Framework Plan calls for a compact urban form and a “fair-share” approach to meeting regional housing needs. It is the purpose of Title 1 to accomplish these policies by requiring each city and county to maintain or increase its housing capacity, especially in centers, corridors, main streets, and station communities, except as provided in section 3.07.120.

- 16. Finding:** As discussed above under in Part I, Goal 10, the Floodplain Resilience Plan amendments do not change the allowable housing capacity within the city. Nor does the Floodplain Resilience Plan project impact the underlying zoning that dictates the number of dwelling units or the amount of floor area that is allowed within each base zone or plan district.

The amendments include expansions of the River Environmental and Environmental Conservation overlay zones in some parts of the city to encompass the floodplain nearest the waterway (within 170 feet) and undeveloped floodplains. The River Environmental overlay zone includes development standards for all residential types (33.475.440.O) that allow for new residential structures to be approved without a land use review if established criteria are met. Similarly, the Environmental overlay zone chapter (33.430) also contains clear and objective standards for development, including housing, within an Environmental overlay zone. In both cases, land use review is required when the proposed development is not able to meet standards. The relatively small expansion of the River Environmental and Environmental Conservation overlay zones included in the plan will not have a significant impact on housing capacity or production in the city. Therefore, the amendments are consistent with the applicable requirements of Metro Title 1.



**Title 2. Regional Parking Policy.** (Repealed Ord. 10-1241B, Sec. 6, 1997)

**Title 3. Water Quality and Flood Management.** To protect the beneficial water uses and functions and values of resources within the Water Quality and Flood Management Areas by limiting or mitigating the impact on these areas from development activities and protecting life and property from dangers associated with flooding.

- 17. Finding:** Title 3 calls for the protection of the beneficial water uses and functional values of resources within Metro-defined Water Quality and Flood Management Areas by limiting or mitigating the impact of development in these areas. Title 3 establishes performance standards for 1) flood management; 2) erosion and sediment control; and 3) water quality. The City implements zoning regulations (Title 33.430, 33.440, 33.465, 33.475, 33.510, 33.515, 33.537, 33.563, 33.631, 33.640), as well as erosion control and balanced cut-and-fill standards (Title 10 and Title 24, respectively).

The Floodplain Resilience Plan amendments maintain and support compliance with Title 3 in the following ways:

1. The Floodplain Resilience Plan amendments and action plan will contribute to waterways that are healthy, support fish and wildlife and maintain the quality, quantity, connectivity, and functions of the ecological system, including upland, riparian and in-water habitats, as well as improve the ability of floodplains to store water and provide habitat functions.
2. Utilizing the existing Metro Title 3 map (referred to as the 1996 Flood Inundation Area) to identify flood risk areas, while also supplementing the Metro Title 3 map with a recently-completed hydraulic model of a Willamette River flood with characteristics similar to the one experienced in the Portland region in February of 1996. This new model, referred to as the Modeled Willamette River 1996 Flood Extent, utilizes best available science and serves as a more up-to-date estimate of flood risk along the Willamette River, Columbia Slough and a stretch of the Columbia River near the confluence with the Willamette River. The model provides new estimates of the extents and elevation of a 1996-like flood event using current river bathymetry, upland topography and development patterns. This new map supplements the existing FEMA 100-year floodplain, which is out of date because the floodplain extent and estimated flood elevation are primarily based on a model completed in 1979.

The model is used in place of the existing Metro Title 3 1996 Flood Inundation Area along the Willamette River and is incorporated as a referenced floodplain in the City's "combined flood hazard area" map. The combined flood hazard area map serves as a basis for the application of environmentally-focused overlay zones in the city's floodplains.

3. The Floodplain Resilience Plan includes a number of amendments that increase protections of floodplains along the Willamette River, including:
  - Applies the River Environmental overlay zone to developed and undeveloped portions of the floodplain within 170 feet of the ordinary high water mark (known as the riparian buffer area) along the Willamette River Central Reach.
  - Expand the River Environmental overlay zone in the Willamette River Central Reach to encompass all undeveloped floodplains landward of the riparian buffer area that are not currently in the River Environmental overlay zone.



- Modifies the boundaries of the riparian buffer area and River Environmental overlay zone in the Willamette River South Reach to incorporate the Modeled Willamette River 1996 Flood Extent.
- Removes the River Environmental overlay zone from the developed floodplain more than 100 feet from top of bank and not in the riparian buffer area.

The requirements of the River Environmental overlay zone support are consistent with Title 3 goals to protect water quality, flooding, and fish and wildlife habitat. The overlay zone is designed to prevent adverse impacts on the features and functions of riparian corridors and the Willamette River by establishing standards and criteria that apply an avoid-minimize-mitigate hierarchy and encourage ecologically-sensitive development. The River Environmental overlay zone standards establish limitations on disturbance, including tree removal, and minimize impacts on natural resources and functional values. Development that meets these standards may be approved without a review. Development that does not meet standards is subject to River Review, where discretionary criteria are applied to ensure that unavoidable adverse impacts on natural resource values and functions, including floodplain habitat and water quality, are mitigated.

4. The Floodplain Resilience Plan also applies the Environmental Conservation overlay zone to undeveloped floodplains along Fanno Creek and Tryon Creek that are not currently in the Environmental Conservation overlay zone. Plan amendments update the requirements of the Environmental overlay zones chapter (33.430) to manage tree and vegetation removal and maintenance to achieve no net-loss in floodplain habitat, as defined by the guidance provided in the NOAA Fisheries Biological Opinion on the FEMA National Flood Insurance Program (NFIP). Amendments to the Environmental overlay zones chapter include limiting tree and vegetation removal that is allowed without City approval and increasing the minimum tree replacement required when a tree is removed in the floodplain.

Collectively, these requirements improve the City's water quality and flood management regulations. Therefore, the amendments are consistent with the applicable requirements of Metro Title 3.

**Title 4. Industrial and Other Employment Areas.** The Regional Framework Plan calls for a strong regional economy. To improve the economy, Title 4 seeks to provide and protect a supply of sites for employment by limiting the types and scale of non-industrial uses in Regionally Significant Industrial Areas (RSIAs), Industrial and Employment Areas. Title 4 also seeks to provide the benefits of "clustering" to those industries that operate more productively and efficiently in proximity to one another than in dispersed locations. Title 4 further seeks to protect the capacity and efficiency of the region's transportation system for the movement of goods and services and to encourage the location of other types of employment in Centers, Corridors, Main Streets and Station Communities. The Metro Council will evaluate the effectiveness of Title 4 in achieving these purposes as part of its periodic analysis of the capacity of the urban growth boundary.

18. **Finding:** The purpose of Title 4 is to maintain a regional supply of existing industrial and employment land by limiting competing uses for this land. Metro has not adopted a Statewide Planning Goal 9 economic opportunities analysis for the region, so Title 4 is not based on an assessment of the land needed for various employment types, nor do the Title 4 maps necessarily depict lands most suitable to accommodate future job growth. Rather, Title 4 seeks to protect the manufacturing, warehousing, and distribution of goods within three types of mapped areas by



limiting competing uses. These three areas are Regionally Significant Industrial Areas (RSIAs), Industrial Areas, and Employment Areas.

As discussed under Part I, Goal 9, the City's acknowledged EOA analyzed and demonstrated adequate growth capacity for a diverse range of employment uses. The Floodplain Resilience Plan project does not reduce the supply of employment land because no land is being removed from the City's employment land base, and no new permanent nonindustrial uses are being allowed within industrial zones. Additionally, to ensure adequate capacity for industrial uses moving forward, the Floodplain Resilience Plan amendments do not apply to three base zones identified as important for industrial and employment uses: Heavy Industrial (IH), General Industrial 2 (IG2) and General Employment 2 (EG2). Application of the requirements to these important industrial and employment zones will be evaluated a part of the next update of the City's Economic Opportunities Analysis, which is expected to be completed by the end of 2024.

Council finds that the Floodplain Resilience Plan amendments will not impact manufacturing, warehousing, and distribution of goods within the Regionally Significant Industrial Areas (RSIAs), Industrial Areas, or Employment Areas. Therefore, the amendments are consistent with the requirements of Metro Title 4.

**Title 5. Neighboring Cities** (Repealed Ord. 10-1238A, Sec. 4, 1997)

**Title 6. Centers, Corridors, Station Communities and Main Streets.** The Regional Framework Plan identifies Centers, Corridors, Main Streets and Station Communities throughout the region and recognizes them as the principal centers of urban life in the region. Title 6 calls for actions and investments by cities and counties, complemented by regional investments, to enhance this role. A regional investment is an investment in a new high-capacity transit line or designated a regional investment in a grant or funding program administered by Metro or subject to Metro's approval.

- 19. Finding:** Title 6 establishes eligibility criteria for certain regional investments, and the use of more flexible trip generation assumptions when evaluating transportation impacts. Title 6 also contains aspirational activity level targets for different Metro 2040 place types. This title is incentive-based, so these findings simply serve to document intent. There are no specific mandatory compliance standards in Title 6 that apply to this ordinance.

Metro has designated the areas that may qualify for these regional incentives, including transit stations, the Central City, Gateway regional center, along with Hollywood, Hillsdale, Raleigh Hills, West Portland, Lents, and St. Johns town centers. The Floodplain Resilience Plan amendments help to achieve Metro 2040 Growth Concept by contributing to more livable, flood-resilient communities along the city's rivers and creeks. Therefore, the amendments are consistent with the applicable requirements of Metro Title 6.

**Title 7. Housing Choice.** The Regional Framework Plan calls for establishment of voluntary affordable housing production goals to be adopted by local governments and assistance from local governments on reports on progress towards increasing the supply of affordable housing. It is the intent of Title 7 to implement these policies of the Regional Framework Plan.

- 20. Finding:** Title 7 addresses housing choice. Metro adopted voluntary affordable housing goals for each city and county in the region for the years 2001 to 2006, but never updated them. Therefore, Title 7 does not apply. Nevertheless, the recently adopted *2035 Comprehensive Plan* includes city-wide affordable housing production goals that greatly exceed those adopted by the outdated Title



7 (Ordinance 178832). In addition, the Zoning Code includes inclusionary housing regulations within Chapter 33.245 that require affordable housing for buildings with more than 20 units.

The Floodplain Resilience Plan amendments have no impact on housing choice and will not have an impact on the supply of affordable housing. Therefore, the Floodplain Resilience Plan amendments are consistent with Title 7.

**Title 8. Compliance Procedures.** Title 8 addresses compliance procedures and establishes a process for ensuring city or county compliance with requirements of the Urban Growth Management Functional Plan and for evaluating and informing the region about the effectiveness of those requirements. An amendment to a city or county comprehensive plan or land use regulation shall be deemed to comply with the functional plan upon the expiration of the appropriate appeal period specified in ORS 197.830 or 197.650 or, if an appeal is made, upon the final decision on appeal. Once the amendment is deemed to comply, the functional plan requirement shall no longer apply to land use decisions made in conformance with the amendment. A city or county proposing an amendment to a comprehensive plan or land use regulation shall submit the proposed amendment to Metro at least 35 days prior to the first evidentiary hearing on the amendment.

- 21. Finding:** Required notice was provided to Metro more than 35 days before the first evidentiary hearing on September 27, 2022. Title 8 also requires the City to provide findings of compliance with the *Urban Growth Management Functional Plan*. These findings meet this requirement. All applicable requirements of Title 8 have been met.

**Title 9. Performance Measures.** (repealed Ord. 10-1244B, Sec. 8, 2010)

**Title 10. Functional Plan Definitions.** Title 10 contains definitions.

- 22. Finding:** When 2035 Comprehensive Plan uses a term found in Title 10 either the term has the same meaning found in Title 10, or the difference is explained. The Floodplain Resilience Plan amendments do not change any definitions in the 2035 Comprehensive Plan that are also found in Title 10. All applicable requirements of Title 10 requirements have been met.

**Title 11. Planning for New Urban Areas.** The purpose of Title 11 to guide long range planning for urban reserves and areas added to the UGB. It also provides interim protection for areas added to the UGB until city or county amendments to land use regulations to allow urbanization to become applicable to the areas.

- 23. Finding:** The amendments do not add areas to the UGB. Therefore, this Title is not applicable.

**Title 12. Protection of Residential Neighborhoods.** Existing neighborhoods are essential to the success of the 2040 Growth Concept. The intent of Title 12 of the Urban Growth Management Functional Plan is to protect the region's residential neighborhoods. The purpose of Title 12 is to help implement the policy of the Regional Framework Plan to protect existing residential neighborhoods from air and water pollution, noise, and crime and to provide adequate levels of public services.

In order to protect these areas, Metro shall not require any city or county to authorize an increase in the residential density of a single-family neighborhood in an area mapped solely as Neighborhood. In addition, specific limits on access to commercial services are applied to commercial uses within designated neighborhood centers in order to reduce air pollution and traffic congestion. This Title also calls on Cities to establish a level of service standard for parks and greenspaces that calls for a park facility within a specified distance of all residences.



- 24. Finding:** Title 12 largely restricts Metro’s authority to plan and regulate density in single-family neighborhoods. The Floodplain Resilience Plan amendments were originated by the City’s legislative process, respond to locally identified needs, and are not at the direction of Metro. The Floodplain Resilience Plan amendments focus on environmental regulations that protect people and property from the adverse effects of flooding in areas, as well as the ecological and functional values of floodplains for wildlife. The Floodplain Resilience Plan amendments do not include amendments to neighborhood center designations or commercial use limits. The City has already established a goal in its Parks 2020 Vision of providing a basic, developed Neighborhood Park facility within a half mile of every Portland resident, and a Community Park within a mile of every resident. Therefore, these amendments comply with Title 12.

**Title 13. Nature in Neighborhoods.** The purposes of this program are to (1) 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; and (2) to control and prevent water pollution for the protection of the public health and safety, and to maintain and improve water quality throughout the region.

- 25. Finding:** Title 13 is expressly intended to provide a minimum baseline level of protection for identified Habitat Conservation Areas. Local jurisdictions may achieve substantial compliance with Title 13 using regulatory and/or non-regulatory tools. The City of Portland implements Title 13 through its adopted Natural Resources Inventory (NRI) and environmental overlay zone protection measures, which Metro has found to be in substantial compliance with Title 13.

The Floodplain Resilience Plan amendments build on the City’s existing Title 13 protections and furthers those protections in the following ways:

1. The application of the River Environmental overlay zone and Environmental Conservation overlay zones to areas along the Willamette River, Tryon Creek, and Fanno Creek maintain and expand natural resources and the functions they provide. Environmentally-focused overlay zones encourage environmentally sensitive development and require mitigation whenever proposed development will have a detrimental impact on functions and values of existing natural resources.
2. Riparian buffer area requirements, applied to floodplains within 170 feet of ordinary high water in the Willamette River Central Reach and South Reach, maintain and improve water quality. The riparian buffer area protects important ecologically-sensitive areas nearest the river by requiring that proposed development demonstrate an improvement in one of two riparian functions: (1) Bank function, and control of sediments, nutrients and pollution; or (2) Large wood and channel dynamics.
3. Expands the Environmental Conservation overlay zone to apply to undeveloped floodplains along Fanno and Tryon creeks that are not currently in an Environmental overlay zone (either Environmental Protection or Environmental Conservation).
4. Updates to standards in the Environmental overlay zones (33.430) and the South Waterfront Greenway overlay zone (33.510.253) chapters will preserve tree and vegetation cover in floodplains. Updates to the Environmental overlay zones chapter limit tree and vegetation removal that is allowed without City approval and increases the minimum tree replacement required when a tree is removed in the Environmental overlay zones. The Floodplain Resilience Plan includes new standards for the South Waterfront Greenway overlay zone that



establishes a new minimum of three trees planted whenever a tree is removed in the floodplain.

Collectively, the Floodplain Resilience Plan amendments will contribute to the protection and restoration of a more ecologically viable riparian corridor system and minimize water pollution along Portland waterways. The amendments will protect fish and wildlife habitat and improve water quality through better stormwater management. Therefore, the amendments are consistent with the applicable requirements of Title 13.

**Title 14. Urban Growth Management Plan.** Title 14 addresses the regional urban growth boundary.

- 26. Finding:** The Floodplain Resilience Plan project does not amend the current regional urban growth boundary. This Title does not apply.

**Summary, Urban Growth Management Functional Plan Findings**

- 27. Finding:** The Metro Title 10 definition of comply or compliance means “substantial” rather than absolute compliance. “Substantial compliance” means city comprehensive plans and implementing ordinances, on the whole, conform with the purposes of the performance standards in the functional plan and any failure to meet individual performance standard requirements is technical or minor in nature.

For the facts and reasons stated above, Council finds that this ordinance substantially complies with all Urban Growth Management Functional Plan requirements applicable to the Floodplain Resilience Plan amendments.



## Part III. Portland's Comprehensive Plan

Portland's 2035 Comprehensive Plan was adopted as part of Task Four of Periodic Review. Task Four was adopted by Ordinance No. 187832 on June 15, 2016. The 2035 Comprehensive Plan was amended as part of Task Five of Periodic Review, which was adopted by Ordinance No. 188177 on December 21, 2016. Both ordinances were made effective on May 24, 2018 by Ordinance No. 188695, and both Tasks Four and Five were approved by LCDC Order 18 – WKTSK – 001897 on August 8, 2018.

- 28. Finding:** The City Council has identified the following guiding principles, goals and policies to be applicable to the Floodplain Resilience Plan.

### Guiding Principles

The 2035 Comprehensive Plan adopted five “guiding principles” in addition to the goals and policies typically included in a comprehensive plan. These principles were adopted to reinforce that implementation of the plan needs to be balanced, integrated and multi-disciplinary, and the influence of each principle helps to shape the overall policy framework of the plan. While the policies in the Comprehensive Plan effectively ensure that the guiding principles are met, the findings below further demonstrate that in addition to meeting those specific policies on balance, the amendments in the Floodplain Resilience Plan are consistent with these guiding principles as described below.

**Economic Prosperity.** Support a low-carbon economy and foster employment growth, competitiveness and equitably distributed household prosperity.

- 29. Finding:** This guiding principle asserts prosperity is about more than job growth. It also is about having a resilient regional economy, thriving local businesses and growth in living-wage jobs. It is also prosperity shared by Portland households. The 2035 Comprehensive Plan measures household prosperity in terms of a “self-sufficiency index” of what income is needed to meet basic household needs – costs of housing, childcare, food, healthcare and transportation.

The Floodplain Resilience Plan amendments help to achieve this guiding principle by contributing to more livable, flood-resilient communities. The amendments aim to protect residents and workers near the city's rivers and creeks from the catastrophic effects of flooding events, while also providing habitat for threatened and endangered fish species.

Therefore, the amendments are consistent with the economic prosperity guiding principle. See also findings for relevant policies in Chapters 5 and 6.

**Human Health.** Avoid or minimize negative health impacts and improve opportunities for Portlanders to lead healthy, active lives.

- 30. Finding:** The Floodplain Resilience Plan aims to reduce the potential impacts of future flooding on residents and workers through amendments to floodplain development regulations. The City of Portland currently uses three primary sources of information in the Comprehensive Plan to identify potential hazards:

- Special flood hazard area (Land area covered by the floodwaters of the base flood, as shown on the Federal Emergency Management Agency (FEMA) maps in effect on November 26, 2010);
- Floodway (The active flowing channel during a flood, as designated on the flood maps adopted under authority of Title 24 of the Portland City Code);



- 1996 Flood Inundation area (A record peak flow in February of 1996 caused the Willamette River and its major tributaries to flood. This map was created to delineate the inundated areas near the mainstem and major tributaries of the Willamette River).

The Floodplain Resilience Plan amendments contribute to achieving the human health guiding principle in the following ways:

1. The plan utilizes a recently-completed hydraulic model of a Willamette River flood with characteristics similar to the one experienced in the Portland region in February of 1996. This new model, referred to as the Modeled Willamette River 1996 Flood Extent, serves as a more up-to-date estimate of flood risk along the Willamette River, Columbia Slough and a stretch of the Columbia River near the confluence with the Willamette River. The model provides new estimates of the extents and elevation of a 1996-like flood event using current river bathymetry, upland topography and development patterns.

This new map supplements the FEMA 100-year floodplain, which is out of date because the floodplain extent and estimated flood elevation are primarily based on a model completed in 1979. The model is used in place of the existing Metro Title 3 1996 Flood Inundation Area (Metro is Portland's regional government) and is incorporated as a referenced floodplain in the City's "combined flood hazard area" map.

2. The River Environmental overlay zone and Environmental Conservation overlay zones are applied to significant natural resources areas, including floodplains. These overlay zones guide development away from sensitive natural resources that provide important ecosystem services and require mitigation when development occurs, thereby protecting public health, safety, and property from natural disasters and hazards.
3. Existing requirements on flood management, and erosion and sediment control (City Title 10 Erosion Control), and the balanced cut and fill requirements of City Title 24 are not changed by the Floodplain Resilience Plan amendments. These requirements ensure any new development will be done in a way to protect people and property from hazards.

Therefore, the amendments are consistent with the human health guiding principle.

**Environmental Health.** Weave nature into the city and foster a healthy environment that sustains people, neighborhoods, and fish and wildlife. Recognize the intrinsic value of nature and sustain the ecosystem services of Portland's air, water and land.

31. **Finding:** Council finds that this guiding principle requires the Council, when taking actions that implement the Comprehensive Plan, to not overlook the importance of including space for the health of natural resources and the ecosystem in the design and development of the city. This space can be in parks, streams, natural areas, along streets as well as on sites with development. The best performance occurs when the supply and design of these different types of spaces create, or "weave", intentional or ad-hoc pathways for wildlife through the city.

Ensuring environmental health is at the core of the Floodplain Resilience Plan amendments. The amendments do not prohibit floodplain development but rather they ensure that proposed development avoids natural resource impacts whenever possible and that mitigation of unavoidable impacts is achieved through project design. The amendments respond directly to the determination by the National Marine Fisheries Service that the NFIP impacts threatened and endangered fish species. As such, the amendments will improve conditions for these fish species and the wildlife that depends on floodplain habitat.



The amendments will maintain and weave nature into the city's neighborhoods and sustain ecosystem services. Therefore, the amendments are consistent with the environmental health guiding principle.

**Equity.** Promote equity and environmental justice by reducing disparities, minimizing burdens, extending community benefits, increasing the amount of affordable housing, affirmatively furthering fair housing, proactively fighting displacement, and improving socio-economic opportunities for under-served and under-represented populations. Intentionally engage under-served and under-represented populations in decisions that affect them. Specifically recognize, address and prevent repetition of the injustices suffered by communities of color throughout Portland's history.

- 32. Finding:** The 2035 Comprehensive Plan describes resilience as “reducing the vulnerability of our neighborhoods, businesses, and built and natural infrastructure to withstand challenges – environmental, economic and social – that may result from major hazardous events.”

The Floodplain Resilience Plan actively aims to reduce the vulnerability of neighborhoods, businesses and infrastructure to flooding. In many cases, the most vulnerable in our community live or work in the floodplain. The Floodplain Resilience Plan amendments aim to ensure that appropriate steps are taken to reduce the flood risk of all Portlanders, regardless of socio-economic status. A socioeconomic analysis was completed in 2019 to evaluate the demographic characteristics of neighborhoods with floodplains throughout the city. Members of the Black community and the urban Native American community were engaged through small focus groups where the plan's draft proposals were reviewed and feedback was gathered (see Chapter 2 findings below for more information). The input received was then evaluated and incorporated into the plan, as appropriate, prior to the release of the Proposed Draft.

The Floodplain Resilience Plan process and amendments are consistent with the equity guiding principle.

**Resilience.** Reduce risk and improve the ability of individuals, communities, economic systems, and the natural and built environments to withstand, recover from, and adapt to changes from natural hazards, human-made disasters, climate change, and economic shifts.

- 33. Finding:** The Floodplain Resilience Plan amendments aim to reduce the impacts of future flooding, including more intense flood events resulting from climate change, while also expanding fish and wildlife habitat. The amendments contribute to achieving the resilience guiding principle in the following ways:

1. Utilizes a recently-completed hydraulic model of a Willamette River flood with characteristics similar to the one experienced in the Portland region in February of 1996, which is expected to occur more frequently as a result of the changing climate. This new model, referred to as the Modeled Willamette River 1996 Flood Extent, serves as a more up-to-date estimate of flood risk along the Willamette River, Columbia Slough and a stretch of the Columbia River near the confluence with the Willamette River. The model provides new estimates of the extents and elevation of a 1996-like flood event using current river bathymetry, upland topography and development patterns.

This new map supplements the FEMA 100-year floodplain, which is out of date because the floodplain extent and estimated flood elevation are primarily based on a model completed in 1979. The model is used in place of the existing Metro Title 3 1996 Flood Inundation Area



(Metro is Portland’s regional government) and is incorporated as a referenced floodplain in the City’s “combined flood hazard area” map.

2. Applies the River Environmental overlay zone and Environmental Conservation overlay zones to significant natural resources areas, including floodplains. These overlay zones guide development away from sensitive natural resources that provide important ecosystem services and require mitigation when development occurs, thereby protecting public health, safety, and property from natural disasters and hazards. Floodplain Resilience Plan amendments to the requirements in these two overlay zones will preserve floodplain habitat and expand areas of respite for fish species during flood events. These amendments will allow fish species to escape the areas of high flows during flood events and return to the main channel once the flows have receded.
3. Expands the Environmental Conservation overlay zone to apply to undeveloped floodplains along Fanno and Tryon creeks that are not currently in an Environmental overlay zone (either Environmental Protection or Environmental Conservation).
4. Includes new standards for the South Waterfront Greenway overlay zone that establishes a new minimum of three trees planted whenever a tree is removed in the floodplain.
5. Existing requirements on flood management, and erosion and sediment control (City Title 10 Erosion Control, and the balanced cut and fill requirements of City Title 24 are not changed by the Floodplain Resilience Plan amendments. These requirements ensure any new development will be done in a way to protect people and property from hazards.

Collectively, Floodplain Resilience Plan amendments will contribute significantly to resilience in the city and are consistent with the resilience guiding principle.



## Chapter 1: The Plan

**Goal 1.A: Multiple goals.** Portland’s Comprehensive Plan provides a framework to guide land use, development, and public facility investments. It is based on a set of Guiding Principles that call for integrated approaches, actions, and outcomes that meet multiple goals to ensure Portland is prosperous, healthy, equitable, and resilient.

- 34. Finding:** As noted above, the Floodplain Resilience Plan amendments are consistent with the guiding principles of the Comprehensive Plan. As part of an integrated approach to meet multiple goals, the City Council has considered, weighed and balanced applicable policies, as described on page HTU-5 of the Comprehensive Plan, to determine that this ordinance on the whole complies with the Comprehensive Plan. As described below, the City Council’s decision to adopt the Floodplain Resilience Plan amendments has considered the multiple goals of the Comprehensive Plan, including the guiding principles, to determine that the adoption of this ordinance will ensure that Portland is prosperous, healthy, equitable, and resilient. Therefore, this goal is met.

**Goal 1.B: Regional partnership.** Portland’s Comprehensive Plan acknowledges Portland’s role within the region, and it is coordinated with the policies of governmental partners.

- 35. Finding:** The findings show how the amendments are consistent with Metro’s Urban Growth Management Functional Plan and the Statewide Planning Goals, including Goal 2 which requires coordination. Metro, TriMet, and other state agencies received notice of the proposed amendments from the 35-day DLCD notice and the City’s legislative notice. Therefore, this goal is met.

**Goal 1.C: A well-functioning plan.** Portland’s Comprehensive Plan is effective, its elements are aligned, and it is updated periodically to be current and to address mandates, community needs, and identified problems.

- 36. Finding:** The City Council defines “effective” as being successful in producing a desired or intended result. The desired or intended result is embodied in the Guiding Principles and goals and policies of the Comprehensive Plan. These findings demonstrate how the Floodplain Resilience Plan amendments are consistent with the Comprehensive Plan, including advancing multiple goals. These changes represent updating regulatory implementation tools that respond to community needs and identified problems, especially in addressing the impacts of future flooding and preventing the degradation of floodplain habitat for endangered and threatened fish species. The Floodplain Resilience Plan also ensures that Portlanders maintain access to the NFIP moving forward. Therefore, this goal is met.

**Goal 1.D: Implementation tools.** Portland’s Comprehensive Plan is executed through a variety of implementation tools, both regulatory and non-regulatory. Implementation tools comply with the Comprehensive Plan and are carried out in a coordinated and efficient manner. They protect the public’s current and future interests and balance the need for providing certainty for future development with the need for flexibility and the opportunity to promote innovation.

- 37. Finding:** The Floodplain Resilience Plan amendments include regulatory changes to one of the Comprehensive Plan’s implementation tools, the Zoning Code (Title 33). The Floodplain Resilience Plan amendments protect riparian resources and fish and wildlife habitat and will reduce flood risk for residents and workers.



The Floodplain Resilience Plan amendments to the River Environmental overlay (33.475) and the Environmental overlay zones (33.430), in many cases, include updates to existing regulations to incorporate new requirements for floodplain development. As such, these modifications maintain consistency for users of the Zoning Code and do not involve significant changes to the code. Amendments to the Central City Plan District's South Waterfront Greenway overlay zone (33.510.253) requirements make them more consistent with the Zoning Code regulations of adjacent areas, including the Willamette River Central Reach and South Reach.

Adding a definition of "combined flood hazard area" to 33.910, Definitions, and replacing references to specific floodplains with the term combined flood hazard area allows for a more efficient process to update flood hazard areas, when needed as a result of new data or mapping. This amendment will avoid the need to update every section of the code where floodplains are referenced in the future.

The Floodplain Resilience Plan amendments provide flexibility by providing a range of mitigation options, as well as different resource enhancement options to compensate for development impacts to riparian resources. These mitigation options allow for development without sacrificing riparian resources or compromising the environmental values they provide. Therefore, this goal is met.

**Goal 1.E: Administration.** Portland's Comprehensive Plan is administered efficiently and effectively and in ways that forward the intent of the Plan. It is administered in accordance with regional plans and state and federal law.

**38. Finding:** As noted above, the findings show how the amendments are consistent with the guiding principles of the 2035 Comprehensive Plan. Fundamentally, the Floodplain Resilience Plan amendments are in response to federal directives include in the Biological Opinion on the NFIP. The updates will ensure that the City's floodplain regulations continue to be in compliance with the NFIP and that Portlanders will continue to have access to the insurance program and disaster relief funds into the future. The findings also show how the amendments are consistent with the Urban Growth Management Functional Plan and the Statewide Planning Goals. Metro, TriMet, and other state agencies received notice of the proposed Floodplain Resilience Plan amendments from the 35-day DLCDD notice and the City's legislative notice. Therefore, this goal is met.

## The Comprehensive Plan

**Policy 1.1. Comprehensive Plan elements.** Maintain a Comprehensive Plan that includes these elements:

- **Vision and Guiding Principles.** The Vision is a statement of where the City aspires to be in 2035. The Guiding Principles call for decisions that meet multiple goals to ensure Portland is prosperous, healthy, equitable, and resilient.
- **Goals and policies.** The goals and policies of the Comprehensive Plan, including the Urban Design Framework, provide the long-range planning direction for the development and redevelopment of the city.
- **Comprehensive Plan Map.** The Comprehensive Plan Map is the official long-range planning guide for spatially defining the desired land uses and development in Portland. The Comprehensive Plan Map is a series of maps, which together show the boundaries of municipal incorporation, the Urban Service Boundary, land use designations, and the recognized boundaries of the Central City, Gateway regional center, town centers, and neighborhood centers.



- **List of Significant Projects.** The List of Significant Projects identifies the public facility projects needed to serve designated land uses through 2035 including expected new housing and jobs. It is based on the framework provided by a supporting Public Facilities Plan (PFP). The Citywide Systems Plan (CSP) is the City’s public facilities plan. The Transportation System Plan (TSP) includes the transportation-related list of significant projects. The list element of the TSP is also an element of the Comprehensive Plan.
  - **Transportation policies, street classifications, and street plans.** The policies, street classifications, and street plan maps contained in the Transportation System Plan (TSP) are an element of the Comprehensive Plan. Other parts of the TSP function as a supporting document, as described in Policy 1.2.
- 39. Finding:** The Floodplain Resilience Plan amendments do not change the structure of these plan elements. This policy does not apply.

## Supporting Documents

**Policy 1.2. Comprehensive Plan supporting documents.** Maintain and periodically update the following Comprehensive Plan supporting documents.

- 1. Inventories and analyses.** The following inventories and analyses are supporting documents to the Comprehensive Plan:
    - Economic Opportunities Analysis (EOA)
    - Buildable Lands Inventory (BLI)
    - Natural Resource Inventory (NRI)
    - Housing Needs Analysis (HNA)
  - 2. Public Facilities Plan.** The Public Facilities Plan (PFP) is a coordinated plan for the provision of urban public facilities and services within Portland’s Urban Services Boundary. The Citywide Systems Plan (CSP) is the City’s public facilities plan.
  - 3. Transportation System Plan (TSP).** The TSP is the detailed long-range plan to guide transportation system functions and investments. The TSP ensures that new development and allowed land uses are consistent with the identified function and capacity of, and adopted performance measures for, affected transportation facilities. The TSP includes a financial plan to identify revenue sources for planned transportation facilities included on the List of Significant Projects. The TSP is the transportation element of the Public Facilities Plan. Certain components of the TSP are elements of the Comprehensive Plan. *See Policy 1.1.*
  - 4. School Facility Plans.** School facility plans that were developed in consultation with the City, adopted by school districts serving the City, and that meet the requirements of ORS 195 are considered supporting documents to the Comprehensive Plan.
- 40. Finding:** The Floodplain Resilience Plan amendments do not change or update any of the supporting documents listed in Policy 1.2. This policy is not applicable.

## Implementation tools

**Policy 1.3. Implementation tools subject to the Comprehensive Plan.** Maintain Comprehensive Plan implementation tools that are derived from, and comply with, the Comprehensive Plan. *Implementation tools include those identified in policies 1.4 through 1.9.*



- 41. Finding:** The Floodplain Resilience Plan amendments maintain and amend the Comprehensive Plan implementation tools as described below in Policies 1.4 through 1.9. Consistency with the comprehensive policies and guiding principles for relevant amendments are demonstrated elsewhere in these findings.

**Policy 1.4. Zoning Code.** Maintain a Zoning Code that establishes the regulations that apply to various zones, districts, uses, and development types.

- 42. Finding:** Title 33 is the adopted and effective Zoning Code tool for the city. The Floodplain Resilience Plan Zoning Code amendments update mitigation requirements for the River Environmental overlay zone (33.475) and the Environmental Conservation overlay zone (33.430). These updates provide mitigation options for development that impacts identified natural resources and updates tree and vegetation removal and maintenance requirements. New standards for tree and vegetation removal and maintenance are added to South Waterfront Greenway overlay zone (33.510.253) and portions of the section have been updated for clarity. Additionally, the amendments update the South Waterfront Greenway reviews process to utilize a Type II procedure rather than the Type III procedure. This change will streamline the approval process and make it more consistent with the procedure type used for other environmentally-focused reviews. This policy is met.

**Policy 1.5 Zoning Map.** Maintain a Zoning Map that identifies the boundaries of various zones, districts, and other special features.

- 43. Finding.** Floodplain Resilience Plan zoning map amendments modify the boundaries of the River Environmental and Environmental Conservation overlay zones to accurately apply environmental protections to identified floodplain functions and important natural resources. The proposed changes to the River Environmental boundaries shown on the Zoning Map will better address flood risk by incorporating the results of a new hydrologic model of the Lower Willamette River that was produced in collaboration with the U.S. Army Corps of Engineers. These changes ensures the accuracy of the Zoning Map and, therefore, this policy is met.

**Policy 1.6 Service coordination agreements.** Maintain coordination agreements with local governments of adjoining jurisdictions concerning mutual recognition of urban service boundaries; special service districts concerning public facilities and services within Portland's Urban Services Boundary; and public school districts concerning educational facilities within Portland's Urban Services Boundary.

- 44. Finding:** The City maintains several intergovernmental agreements concerning mutual recognition of urban service boundaries; special service districts concerning public facilities and services within Portland's Urban Services Boundary; and with public school districts This policy is not relevant to the Floodplain Resilience Plan amendments because there are no changes being made to these coordination agreements.

**Policy 1.7 Annexations.** Provide a process incorporating urban and urbanizable land within the City's Urban Services Boundary through annexation. See policies 8.11-8.19 for service extension requirements for annexations.

- 45. Finding:** The City has a process for incorporating urban and urbanizable land. The Floodplain Resilience Plan amendments do not include any annexations nor change current processes for incorporation of land. Therefore, this policy is not applicable.



**Policy 1.8 Urban renewal plans.** Coordinate Comprehensive Plan implementation with urban renewal plans and implementation activities. A decision to adopt a new urban renewal district, adopt or amend goals and objectives that will guide investment priorities within a district, or amend the boundaries of an existing district, must comply with the Comprehensive Plan.

46. **Finding:** The Floodplain Resilience Plan amendments do not include changes to existing, or any new urban renewal plans. Therefore, this policy is not applicable.

**Policy 1.9 Development agreements.** Consider development agreements entered into by the City of Portland and pursuant to Oregon Revised Statute 94 a Comprehensive Plan implementation tool.

47. **Finding:** The Floodplain Resilience Plan amendments do not affect nor necessitate development agreements. Therefore, this policy is not applicable.

## **Administration**

**Policy 1.10. Compliance with the Comprehensive Plan.** Ensure that amendments to the Comprehensive Plan’s elements, supporting documents, and implementation tools comply with the Comprehensive Plan. “Comply” means that amendments must be evaluated against the Comprehensive Plan’s applicable goals and policies and on balance be equally or more supportive of the Comprehensive Plan than the existing language or designation.

**1.10.a** Legislative amendments to the Comprehensive Plan’s elements and implementation tools must also comply with the Guiding Principles.

**1.10.b** Legislative amendments to the Comprehensive Plan’s elements should be based on the factual basis established in the supporting documents as updated and amended over time.

**1.10.c** Amendments to the Zoning Map are in compliance with the Comprehensive Plan if they are consistent with the Comprehensive Plan Map.

48. **Finding.** The City Council finds that this is a fundamental policy of the Comprehensive Plan that guides the manner in which the City Council considers amendments to the Plan itself or any implementing regulations, such as the Zoning Code.

The City Council interprets the policy to require the Council to consider whether, after considering all relevant facts, an amendment is equally or more supportive of the Comprehensive Plan. The City Council finds that an amendment is equally supportive when it is on its face directly supported by goals and policies in the Plan. The City Council finds that an amendment is more supportive of the Comprehensive Plan when the amendment will further advance goals and policies, particularly those that are aspirational in nature. The City Council finds that the policy requires consideration as to whether amendments are equally or more supportive of the Plan as a whole. The City Council finds that amendments do not need to be equally or more supportive with individual goals and policies, but rather amendments must be equally or more supportive of the entire Comprehensive Plan. Therefore, the City Council finds that there may be instances where specific goals and policies are not supported by the amendments but still the amendment is equally or more supportive of the entire Comprehensive Plan when considered cumulatively. The City Council finds that there is no precise mathematical equation for determining when the Plan as a whole is supported but rather such consideration requires City Council discretion in evaluating the competing interests and objectives of the plan.

Council notes that the Comprehensive Plan introduction explains that “[t]he Comprehensive Plan contains a broad range of policies for Council to consider. Each policy describes a desirable



outcome. But it is unlikely that all policies are relevant to a particular decision and that a particular decision could be expected to advance all of the policies in the plan equally well . . . [E]ven the strongest policies do not automatically trump other policies. Every decision is different, with different facts. The particular policies that matter will change from one decision to another. There is no set formula—no particular number of ‘heavier’ policies equals a larger set of ‘lighter’ policies. In cases where there are competing directions embodied by different policies, City Council may choose the direction they believe best embodies the plan as a whole.” 2035 Comprehensive Plan, page HTU-5.

The Floodplain Resilience Plan amendments are a legislative amendment to the Zoning Code. These findings identify how the amendments comply with the Comprehensive Plan. That is, the amendments are evaluated against the Comprehensive Plan’s Guiding Principles, goals, and policies, as detailed throughout this set of findings. As described in the finding for Policy 1.2, the factual basis of the supporting documents is not changed by this ordinance.

The City Council has considered all applicable goals and policies to achieve an optimal outcome. Goals and policies are considered as factors which must be weighed, balanced and met on the whole, not as criteria that must be individually met. The overall purposes of the Floodplain Resilience Plan amendments are to update floodplain regulations to ensure that development in the floodplain addresses flood risk, does not jeopardize threatened and endangered species, and allows Portlanders to continue to obtain federally backed flood insurance.

The Council finds that the project particularly advances the following interjurisdictional guidance, goals and policies, and has weighed these policies heavily. The City Council finds that the Floodplain Resilience Plan amendments are more supportive of the Comprehensive Plan than the existing regulations, especially in regard to the goals and policies as discussed below:

#### Goals

- Goal 2.A: Community involvement as a partnership. The City of Portland works together as a genuine partner with all Portland communities and interests. The City promotes, builds, and maintains relationships, and communicates with individuals, communities, neighborhoods, businesses, organizations, Neighborhood Associations, Business Associations, institutions, and other governments to ensure meaningful community involvement in planning and investment decisions. Partnerships with historically under-served and under-represented communities must be paired with the City’s neighborhood organizations to create a robust and inclusive community involvement system.
- GOAL 3.B: A climate and hazard resilient urban form. Portland’s compact urban form, sustainable building development practices, green infrastructure, and active transportation system reduce carbon emissions, reduce natural hazard risks and impacts, and improve resilience to the effects of climate change.
- Goal 4.C: Human and environmental health. Neighborhoods and development are efficiently designed and built to enhance human and environmental health: they protect safety and livability; support local access to healthy food; limit negative impacts on water, hydrology, and air quality; reduce carbon emissions; encourage active and sustainable design; protect wildlife; address urban heat islands; and integrate nature and the built environment.
- Goal 4.D: Urban resilience. Buildings, streets, and open spaces are designed to ensure long-term resilience and to adjust to changing demographics, climate, and economy, and withstand and recover from natural disasters.



- Goal 7.B: Healthy watersheds and environment. Ecosystem services and ecosystem functions are maintained and watershed conditions have improved over time, supporting public health and safety, environmental quality, fish and wildlife, cultural values, economic prosperity, and the intrinsic value of nature.
- Goal 7.C: Resilience. Portland's built and natural environments function in complementary ways and are resilient in the face of climate change and natural hazards.
- Goal 7.D: Environmental equity. All Portlanders have access to clean air and water, can experience nature in their daily lives, and benefit from development designed to lessen the impacts of natural hazards and environmental contamination.
- Goal 8.F: Flood management. Flood management systems and facilities support watershed health and manage flooding to reduce adverse impacts on Portlanders' health, safety, and property.

#### Policies

- Policy 3.73, Habitat. Enhance the roles of the Willamette and Columbia rivers and their confluence as an ecological hub that provides locally and regionally significant habitat for fish and wildlife and habitat restoration opportunities.
- Policy 3.80, Willamette River Central Reach. Enhance the role of the Willamette River Central Reach as the Central City and region's primary riverfront destination for recreation, history and culture, emergency response, water transportation, and as habitat for fish and wildlife.
- Policy 4.77, Hazards to wildlife. Encourage building, lighting, site, and infrastructure design and practices that provide safe fish and wildlife passage, and reduce or mitigate hazards to birds, bats, and other wildlife.
- Policy 4.79, Natural hazards and climate change risks and impacts. Limit development in or near areas prone to natural hazards, using the most current hazard and climate change-related information and maps.
- Policy 4.81, Disaster-resilient development. Encourage development and site-management approaches that reduce the risks and impacts of natural disasters or other major disturbances and that improve the ability of people, wildlife, natural systems, and property to withstand and recover from such events.
- Policy 7.2, Environmental equity. Prevent or reduce adverse environment-related disparities affecting under-served and under-represented communities through plans and investments. This includes addressing disparities relating to air and water quality, natural hazards, contamination, climate change, and access to nature.
- Policy 7.4, Climate change. Update and implement strategies to reduce carbon emissions and impacts, and increase resilience through plans and investments and public education.
- 7.4.b, Climate adaptation and resilience. Enhance the ability of rivers, streams, wetlands, floodplains, urban forest, habitats, and wildlife to limit and adapt to climate-exacerbated flooding, landslides, wildfire, and urban heat island effects.
- Policy 7.6, Hydrology. Through plans and investments, improve or support efforts to improve watershed hydrology to achieve more natural flow and enhance conveyance and storage capacity in rivers, streams, floodplains, wetlands, and aquifers. Minimize impacts from



development and associated impervious surfaces, especially in areas with poorly-infiltrating soils and limited public stormwater discharge points, and encourage restoration of degraded hydrologic functions.

- Policy 7.9, Habitat and biological communities. Ensure that plans and investments are consistent with and advance efforts to improve, or support efforts to improve fish and wildlife habitat and biological communities. Use plans and investments to enhance the diversity, quantity, and quality of habitats habitat corridors, and especially habitats that:
  - Are rare or declining.
  - Support at-risk plant and animal species and communities.
  - Support recovery of species under the Endangered Species Act, and prevent new listings.
  - Provide culturally important food sources, including those associated with Native American fishing rights.
- Policy 7.10, Habitat connectivity. Improve or support efforts to improve terrestrial and aquatic habitat connectivity for fish and wildlife by using plans and investments, to:
  - Prevent and repair habitat fragmentation.
  - Improve habitat quality.
  - Weave habitat into sites as new development occurs.
  - Enhance or create habitat corridors that allow fish and wildlife to safely access and move through and between habitat areas.
  - Promote restoration and protection of floodplains.
- Policy 7.14, Natural hazards. Prevent development-related degradation of natural systems and associated increases in landslide, wildfire, flooding, and earthquake risks.
- Policy 7.19, Natural resource protection. Protect the quantity, quality, and function of significant natural resources identified in the City’s natural resource inventory, including:
  - Rivers, streams, sloughs, and drainageways.
  - Floodplains.
  - Riparian corridors.
  - Wetlands.
  - Groundwater.
  - Native and other beneficial vegetation species and communities.
  - Aquatic and terrestrial habitats, including special habitats or habitats of concern, large anchor habitats, habitat complexes and corridors, rare and declining habitats such as wetlands, native oak, bottomland hardwood forest, grassland habitat, shallow water habitat, and habitats that support special-status or at-risk plant and wildlife species.
  - Other resources identified in natural resource inventories.
- Policy 7.21, Environmental plans and regulations. Maintain up-to-date environmental protection plans and regulations that specify the significant natural resources to be protected and the types of protections to be applied, based on the best data and science available and on an evaluation of cumulative environmental, social, and economic impacts and tradeoffs. See Figure 7-2 — Adopted Environmental Plans.
- Policy 7.24, Regulatory hierarchy: avoid, minimize, mitigate. Maintain regulations requiring that the potential adverse impacts of new development on significant natural resources and their functions first be avoided where practicable, then minimized, then lastly, mitigated.



- Policy 7.31. Sensitive habitats. Enhance grassland, beach, riverbanks, wetlands, bottomland forests, shallow water habitats, and other key habitats for wildlife traveling along the Columbia River migratory corridor, while continuing to manage the levees and floodplain for flood control.
- Policy 7.35, River bank conditions. Preserve existing river bank habitat and encourage the rehabilitation of river bank sections that have been significantly altered due to development with more fish and wildlife friendly riverbank conditions.
- Policy 7.38, Sensitive habitats. Protect and enhance grasslands, beaches, floodplains, wetlands, remnant native oak, bottomland hardwood forest, and other key habitats for native wildlife including shorebirds, waterfowl, and species that migrate along the Pacific Flyway and the Willamette River corridor.
- Policy 7.45. Riparian corridors. Increase the width, quality, and native plant diversity of vegetated riparian buffers along Columbia Slough channels and other drainageways within the watershed, while also managing the slough for flood control.
- Policy 7.51 Riparian and habitat corridors. Protect and enhance riparian habitat quality and connectivity along Tryon and Fanno creeks and their tributaries. Enhance connections between riparian areas, parks, anchor habitats, and areas with significant tree canopy. Enhance in-stream and upland habitat connections between Tryon Creek State Natural Area and the Willamette River.
- Policy 8.76, Flood management. Improve and maintain the functions of natural and managed drainageways, wetlands, and floodplains to protect health, safety, and property, provide water conveyance and storage, improve water quality, and maintain and enhance fish and wildlife habitat.
- Policy 8.77, Floodplain management. Manage floodplains to protect and restore associated natural resources and functions and to minimize the risks to life and property from flooding.
- Policy 8.97, Natural resources. Preserve, enhance, and manage City-owned natural areas and resources to protect and improve their ecological health, in accordance with both the natural area acquisition and restoration strategies, and to provide compatible public access.

**Policy 1.11. Consistency with Metro Urban Growth Management Functional Plan and Urban Growth Boundary.** Ensure that the Comprehensive Plan remains consistent with the Metro Urban Growth Management Functional Plan and supports a tight urban growth boundary for the Portland Metropolitan area.

**49. Finding:** As noted earlier in these findings, the Floodplain Resilience Plan amendments are consistent with and designed to further the applicable elements of the Metro Urban Growth Management Functional Plan. See findings in Part II, Metro Urban Growth Management Functional Plan, which demonstrate consistency. Therefore, this policy is met.

**Policy 1.12. Consistency with Statewide Planning Goals.** Ensure that the Comprehensive Plan, supporting documents, and implementation tools remain consistent with the Oregon Statewide Planning Goals.

**50. Finding:** As noted earlier in these findings, the Floodplain Resilience Plan amendments are consistent with and designed to further the applicable elements of the Statewide Planning Goals. See findings in Part I, Statewide Planning Goals, which demonstrate consistency. Therefore, this policy is met.



**Policy 1.13. Consistency with state and federal regulations.** Ensure that the Comprehensive Plan remains consistent with all applicable state and federal regulations, and that implementation measures for the Comprehensive Plan are well coordinated with other City activities that respond to state and federal regulations.

- 51. Finding:** The Floodplain Resilience Plan amendments are, fundamentally, a response to federal directives that will shape the requirements of the NFIP but they also will significantly contribute to achieving a large number of City goals and policies focused on climate resilience and natural hazard preparedness. Zoning code amendments in both the Environmental Zones (33.430) and River Overlay Zones (33.475) chapters draw directly from floodplain management updates identified in the National Marine Fisheries Service’s 2016 Biological Opinion on the NFIP, titled *Endangered Species Act (ESA) Section 7(a)(2) Jeopardy and Destruction or Adverse Modification of Critical Habitat Biological Opinion and Section 7(a)(2) “Not Likely to Adversely Affect” Determination for the Implementation of the National Flood Insurance Program in the State of Oregon*, and FEMA’s *Oregon Implementation Plan for NFIP-ESA Integration*, released in response to the Biological Opinion in October 2021. Proposed amendments that are drawn from these documents and will ensure continued compliance the NFIP include (1) establishment of the riparian buffer area in the Willamette Central Reach, (2) expansion of the City’s environmental overlay zones to apply to all undeveloped floodplains along the Willamette River Central Reach, Fanno Creek, and Tryon Creek, and (3) minimum tree replacement ratio of 3:1 in the combined flood hazard area, which includes the FEMA 100-year floodplain and the area expected to be flooded due to a February 1996-type flood (the most significant recent flooding event in Portland). Future regulatory update projects efforts will continue the City’s progress for implementing the directives of the Biological Opinion and Implementation Plan by FEMA’s expected compliance deadline.

Additionally, as demonstrated in Part I of these findings, the Floodplain Resilience Plan amendments strengthen the City’s compliance with State Planning Goals 5: Natural Resources, Scenic and Historic Areas, and Open Spaces, 6: Air, Water and Land Resources Quality, 7: Areas Subject to Natural Hazards, and 15: Willamette River Greenway. Therefore, this policy is met.

**Policy 1.14. Public facility adequacy.** Consider impacts on the existing and future availability and capacity of urban public facilities and services when amending Comprehensive Plan elements and implementation tools. Urban public facilities and services include those provided by the City, neighboring jurisdictions, and partners within Portland’s urban services boundaries, as established by Policies 8.2 and 8.6.

- 52. Finding:** As demonstrated in the findings for Statewide Planning Goal 11 and Chapter 8 (Public Facilities and Services) of the Comprehensive Plan, City Council considered the impacts on the existing and future availability and capacity of urban public facilities and services consistent with this policy. No impact on the capacity of public facilities or service will result from the Floodplain Resilience Plan amendments. Therefore, this policy is met.

**Policy 1.15. Intergovernmental coordination.** Strive to administer the Comprehensive Plan elements and implementation tools in a manner that supports the efforts and fiscal health of the City, county and regional governments, and partner agencies such as school districts and transit agencies.

- 53. Finding:** As demonstrated in the findings for Statewide Planning Goal 2, the City filed the required 35-day notice with Oregon Department of Land Conservation and Development to notify other government agencies of the proposed Floodplain Resilience Plan amendments. In addition, the City sent a separate legislative notice to Multnomah County, adjacent cities, Metro and TriMet. No



government agencies raised issues or concerns with the Floodplain Resilience Plan amendments. Therefore, this policy is met.

**Policy 1.16. Planning and Sustainability Commission review.** Ensure the Planning and Sustainability Commission (PSC) reviews and makes recommendations to the City Council on all proposed legislative amendments to Comprehensive Plan elements, supporting documents, and implementation tools. The PSC advises City Council on the City’s long-range goals, policies, and programs for land use, planning, and sustainability. The membership and powers and duties of the PSC are described in the Zoning Code.

**54. Finding:** On August 30, 2022, the Proposed Draft of Floodplain Resilience Plan was released for public in preparation for the PSC review of the plan. The Proposed Draft updated based on the public input received on the previous version of the plan, called the Discussion Draft. The public comment period on the Discussion Draft extended from November of 2021 to the end of February 2022.

The PSC held public hearings and work sessions between September and November 2022. During these meetings, testimony was received on the Proposed Draft and targeted amendments were proposed during work sessions before the PSC voted on November 22, 2022, on the final Recommended Draft to be forwarded to City Council.

The PSC considered the Floodplain Resilience Plan amendments on the following dates:

September 13, 2022 – PSC briefing  
September 27, 2022 – PSC hearing  
October 25, 2022 – PSC work session  
November 22, 2022 – PSC recommendation

The PSC fulfilled its responsibilities as outlined in this policy. Therefore, this policy is met.

**Policy 1.17. Community Involvement Committee.** Establish a Community Involvement Committee to oversee the Community Involvement Program as recognized by Oregon Statewide Planning Goal 1 – Community Involvement and policies 2.15-2.18 of this Comprehensive Plan.

**55. Finding:** The Community Involvement Committee (CIC) was appointed in June 2018 and reviews and advises the way City staff engage with the public in land use and transportation planning. On May 11, 2021, the Floodplain Resilience Plan team presented initial draft of the Zoning Code amendments and reviewed the project’s draft Community Engagement Plan. The CIC was provided a briefing on the Floodplain Resilience Plan and advised project staff on potential public engagement strategies to reach those that may be impacted by the proposals, including Black, Indigenous and People of Color (BIPOC) and other under-represented communities. The CIC also provided feedback on some of the outreach materials that had been drafted at that time. Suggestions from the CIC were incorporated into the project’s Community Engagement Plan. A copy of the Community Engagement Plan is provided in the project record.

The project’s community involvement program is detailed more in the findings for Chapter 2, Community Involvement.

The CIC fulfilled its responsibilities as outlined in this policy. Therefore, this policy is met.

**Policy 1.18. Quasi-judicial amendments to the Comprehensive Plan Map.** Applicants for quasi-judicial amendments to the Comprehensive Plan Map must show that the requested change adheres to Policies 1.10 through 1.15 and:

- Is compatible with the land use pattern established by the Comprehensive Plan Map.



- Is not in conflict with applicable adopted area-specific plans as described in Policy 1.19, or the applicable hearings body determines that the identified conflict represents a circumstance where the area specific plan is in conflict with the Comprehensive Plan and the proposed amendment is consistent with the Comprehensive Plan.

The Hearings Officer must review and make recommendations to the City Council on all quasi-judicial amendments to the Comprehensive Plan Map using procedures outlined in the Zoning Code.

- 56. Finding:** This policy concerns quasi-judicial amendments to the Comprehensive Plan Map and is not applicable to this project.

**Policy 1.19. Area-specific plans.** Use area-specific plans to provide additional detail or refinements applicable at a smaller geographic scale, such as for centers and corridors, within the policy framework provided by the overall Comprehensive Plan.

**1.19.a** Area-specific plans that are adopted after May 24, 2018, should clearly identify which components amend Comprehensive Plan elements, supporting documents, or implementation tools. Such amendments should be appropriate to the scope of the Comprehensive Plan; be intended to guide land use decisions; and provide geographically-specific detail. Such amendments could include policies specific to the plan area, land use designation changes, zoning map changes, Zoning Code changes, and public facility projects necessary to serve designated land uses.

**1.19.b** Area-specific plan components intended as context, general guidance, or directives for future community-driven efforts should not amend the Comprehensive Plan elements or implementation tools but be adopted by resolution as intent. These components include vision statements, historical context, existing conditions, action plans, design preferences, and other background information.

**1.19.c** Community, area, neighborhood, and other area-specific plans that were adopted by ordinance prior to January 1, 2018 are still in effect. However, the elements of this Comprehensive Plan supersede any goals or policies of a community, area, or neighborhood plan that are inconsistent with this Plan.

- 57. Finding:** The Floodplain Resilience Plan amendments do not include or amend area specific plans. Therefore, this policy is not applicable.



## Chapter 2: Community Involvement

**Goal 2.A: Community involvement as a partnership.** The City of Portland works together as a genuine partner with all Portland communities and interests. The City promotes, builds, and maintains relationships, and communicates with individuals, communities, neighborhoods, businesses, organizations, institutions, and other governments to ensure meaningful community involvement in planning and investment decisions.

**Goal 2.B: Social justice and equity.** The City of Portland seeks social justice by expanding choice and opportunity for all community members, recognizing a special responsibility to identify and engage, as genuine partners, under-served and under-represented communities in planning, investment, implementation, and enforcement processes, particularly those with potential to be adversely affected by the results of decisions. The City actively works to improve its planning and investment-related decisions to achieve equitable distribution of burdens and benefits and address past injustices.

**Goal 2.C: Value community wisdom and participation.** Portland values and encourages community and civic participation. The City seeks and considers community wisdom and diverse cultural perspectives, and integrates them with technical analysis, to strengthen land use decisions.

**Goal 2.D: Transparency and accountability.** City planning and investment decision-making processes are clear, open, and documented. Through these processes a diverse range of community interests are heard and balanced. The City makes it clear to the community who is responsible for making decisions and how community input is considered. Accountability includes monitoring and reporting outcomes.

**Goal 2.E: Meaningful participation.** Community members have meaningful opportunities to participate in and influence all stages of planning and decision making. Public processes engage the full diversity of affected community members, including under-served and under-represented individuals and communities. The City will seek and facilitate the involvement of those potentially affected by planning and decision making.

**Goal 2.F: Accessible and effective participation.** City planning and investment decision-making processes are designed to be culturally accessible and effective. The City draws from acknowledged best practices and uses a wide variety of tools, including those developed and recommended by under-served and under-represented communities, to promote inclusive, collaborative, culturally-specific, and robust community involvement.

**Goal 2.G: Strong civic infrastructure.** Civic institutions, organizations, and processes encourage active and meaningful community involvement and strengthen the capacity of individuals and communities to participate in planning processes and civic life.

- 58. Finding:** The City Council interprets the Chapter 2 goals and policies as calling for a broad range of meaningful community engagement approaches that complement the legally required public notices and meetings. The City of Portland recognizes that equity is realized when identity – such as race, ethnicity, gender, age, disability, national origin, and sexual orientation – has no detrimental effect on the distribution of resources, opportunities, and project outcomes. Fair treatment means that no group of people, including a racial, ethnic, or a socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from the implementation of federal, state, or local programs and policies. Meaningful involvement means that: (1) potentially affected community residents have an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment or health; (2) the public's contribution can influence the regulatory agency's decision; (3) the concerns of all



participants involved will be considered in the decision-making process; and (4) decision makers seek out and facilitate the involvement of those potentially affected.

The City acknowledges historical injustices and discriminatory local decision-making and supports the equitable distribution of the benefits and burdens of decisions to ensure that those most impacted from decisions have an opportunity to meaningfully participate. The City's commitment to non-discriminatory engagement includes supporting special efforts to engage Black, Indigenous, and People of Color (BIPOC) communities, low-income individuals and households, women, people with disabilities, people with Limited English Proficiency, senior and youth populations.

The Floodplain Resilience Plan is the culmination of over three years of work by City staff to develop proposals and the planning effort provided numerous opportunities for meaningful community involvement consistent with Goals 2.A through 2.G, including:

#### **Vulnerability Analysis and Racial Equity Toolkit**

Early in the process of the development of the Floodplain Resilience Plan Community Engagement Plan, staff utilized vulnerability and housing analyses that were completed in 2018 to support the City's overall floodplain management update work. The vulnerability analysis evaluated a number of demographic and economic characteristics within all of the city's floodplains, as well as within the floodplains each of the city's watersheds. The City used four indicators to assess vulnerability, including the percentage of (1) persons of color, (2) people with less than a 4-year degree, (3) renters, and (4) low-income individuals. The analysis assessed these indicators for the Willamette River (North Reach, Central Reach, South Reach and South Waterfront), Columbia River, Columbia Slough, Tryon Creek and Fanno Creek, and Johnson Creek.

The vulnerability analysis determined that, when taken as a whole, the racial and ethnic diversity of the floodplains are roughly comparable to Portland overall. Thirty percent of Portlanders identify as people of color. However, there is significant variability in the diversity of the populations in the different subareas where the Floodplain Resilience Plan amendments apply. In the Columbia Slough subarea, 36 percent of the population identifies as being people of color. All the other subarea populations have smaller percentages of people of color than the city as a whole.

The analysis also found that the Columbia Slough and the Columbia River subareas have some of the largest percentages of residents that earn less than 80 percent of the median household income (55% and 58% respectively). Other Floodplain Resilience Plan subareas have low-income population percentages that are lower than the Portland citywide average, which is 45 percent.

Finally, the vulnerability analysis determined that the diversity in language and ethnic origin of immigrant populations in the city's floodplains also varies widely. The Columbia Slough and Columbia River subareas have significant populations of Spanish and Russian speaking immigrants, as well as immigrants of Laotian and Ethiopian origin. In the Fanno Creek subarea, there are significant Ukrainian and Spanish-speaking immigrant communities. The Tryon Creek subarea is the least diverse of the Floodplain Resilience Plan subareas, but it does have a significant Japanese immigrant community.

Based on the results of the vulnerability analysis, the Floodplain Resilience Plan project team utilized the BPS Racial Equity Analysis to identify key stakeholders and potential disparities in their role in the planning process through a power mapping analysis. To support this power mapping analysis, a matrix was developed to identify stakeholder groups, characterize their most salient interests, and the potential benefits and burdens that could result from the Floodplain Resilience Plan amendments. The Floodplain Resilience Plan Community Engagement Plan was then created



to address these interests and potential benefits and burdens. A copy of the Community Engagement Plan is provided in the project record. The components of the Community Engagement Plan are described in more detail in the Chapter 2 findings below.

### **Community Involvement Committee**

On May 11, 2021, the Floodplain Resilience Plan team provided a briefing on the Floodplain Resilience Plan to the Community Involvement Committee (CIC) and project staff reviewed an early draft of the Community Engagement Plan. The CIC advised project staff on other potential public engagement strategies to reach those that may be impacted by the proposals, including Black, Indigenous and People of Color (BIPOC) and other under-represented communities. The CIC also provided feedback on some of the outreach materials that had been drafted at that time. Suggestions from the CIC were then incorporated into the project's Community Engagement Plan. A copy of the Community Engagement Plan is provided in the project record.

### **Project Activities to Leading to the Discussion Draft.**

In preparation for the release of the Floodplain Resilience Plan Discussion Draft, project staff reached out to tribal council members and their staff for seven Pacific Northwest Tribes to provide the opportunity to review and provide feedback on early drafts of the Floodplain Resilience Plan amendments. In August of 2021, emails with an official invitation letter were sent to each of the following tribes: Cowlitz Indian Tribe, Confederated Tribes of Grand Ronde, Nez Perce Tribe, Confederated Tribes of Siletz Indians, Confederated Tribes of Umatilla Indian Reservation, Confederated Tribes of Warm Springs, and Yakama Nation. Interest in providing feedback was not expressed at that time, but additional opportunity for gathering feedback was extended after the Discussion Draft was released.

### **Discussion Draft**

The Floodplain Resilience Plan Discussion Draft was released on November 10, 2021, and the public comment on the draft ended on February 1, 2022. Public comments were primarily submitted using the Floodplain Resilience Plan Map App (<https://www.portlandmaps.com/bps/floodplain/#/map/>). A few others submitted comments directly to project staff. In total, comments were received from 64 individuals.

Prior to the release of the Discussion Draft a letter was sent to all properties that contained at least some floodplain and their owners to let them know about the project and the release of the Discussion Draft. Recipients of the letter were encouraged to provide feedback on the Discussion Draft.

To educate the public on the process, a Floodplain Resilience Plan website (<https://www.portland.gov/bps/planning/envirom-planning/floodplain-project>) was established. The website provided background information on the project and the FEMA Biological Opinion, as well as links to background documents on the city's floodplains and the Discussion Draft. A telephone helpline and an online scheduling application were also made available to answer questions from the public. Using the scheduling application, interested individuals were able to schedule a 20-minute meeting with project staff.

After the release of the Discussion Draft, a number of public outreach and engagement sessions were held with stakeholders and the public, including the following:

- November 16, 2021 (5 pm) – Discussion Draft Virtual Open House
- November 17, 2021 (8 am) – Discussion Draft Virtual Open House
- November 17, 2021 (12 pm) – Discussion Draft Virtual Open House



- December 9, 2021 – Portland Design Commission Briefing
- January 10, 2022 – Hayhurst Neighborhood Association meeting
- January 11, 2022 – Central Eastside Industrial Council (CEIC) Land Use Committee meeting
- January 17, 2022 – Bureau of Development Services NAIOP/BOMA Development Review Advisory Committee (DRAC) Subcommittee meeting
- January 24, 2022 – Multnomah County Drainage District (MCDD) staff
- January 26, 2022 – Bureau of Development Services NAIOP/BOMA Development Review Advisory Committee (DRAC) Subcommittee follow-up meeting
- February 1, 2022 – Parks Board Land Use and Infrastructure Subcommittee meeting
- March 17, 2022 – Development Review Advisory Committee (DRAC) meeting
- June 1, 2022 – Braided River Campaign meeting
- June 21, 2022 – Pearl District Neighborhood Association Planning and Transportation Committee meeting

In addition to these general public outreach and engagement sessions, the Floodplain Resilience Plan project team also conducted three focus groups to gather feedback on the Discussion Draft proposals from key stakeholder groups. The date and stakeholders of each focus group are listed below:

- April 7, 2022 – Black, Indigenous, and People of Color (BIPOC) focus group
- May 9, 2022 – Environmental stakeholder focus group
- May 27, 2022 – Environmental stakeholder focus group follow up meeting
- June 30, 2022 – Urban Native American focus group

In these focus groups, the Floodplain Resilience Plan Discussion Draft proposals were reviewed and participants were given the opportunity to provide feedback on how these proposals could be improved and what supporting programs might be useful to offset the potential impacts of the proposals on BIPOC and other under-represented communities. Participants in the BIPOC and Urban Native American focus groups were compensated for their participation.

All community engagement meetings, presentations, and hearings were held virtually in order to meet the City's guidelines for public meetings in light of COVID-19.

#### **Response to Discussion Draft Comments.**

Based on the input received on the Discussion Draft, along with additional analysis and evaluation of the proposals by the project team, a number of updates were incorporated into the next draft of the document, the Proposed Draft, including:

- Modeled Willamette River 1996 Flood Extent – In collaboration with the U.S. Army Corps of Engineers, City staff completed a new model of a Willamette River flood event similar to that experienced in Portland in February of 1996, which is expected to be more common due to climate change. The model identifies areas with a high probability of flooding along the Willamette River, lower Columbia Slough and portions of the Columbia River near its confluence with the Willamette River. The results of this model were incorporated into the “combined flood hazard area,” which now included three estimates of flood risk: the FEMA 100-year floodplain, the new Modeled Willamette River 1996 Flood Extent, and Metro’s 1996 Flood Inundation Area outside of the Modeled Willamette River 1996 Flood Extent area. Metro is the regional government of Portland.



- Updates in the Willamette River South Reach – The extents of the River Environmental and the riparian buffer area were modified to apply to the updated combined flood hazard area that includes the new Modeled Willamette River 1996 Flood Extent (as described in the previous bullet). In some cases, this resulted in an expansion of the River Environmental overlay zone and/or riparian buffer area and, in others, the extent of these areas was reduced.
- Developed Floodplains – The Discussion Draft proposed the application of one of the City’s environmental overlay zones to all floodplains along Fanno Creek, Tryon Creek and the Willamette River Central Reach. As a part of the River Plan/South Reach, the River Environmental overlay zone was applied to all floodplains in the Willamette River South Reach. As a result of comments received on the Discussion Draft, project staff had further discussions with Bureau of Development Services staff and it was determined that the application of the environmental overlay zones to developed floodplains – the River Environmental overlay zone outside the Willamette River riparian buffer area and the Conservation overlay zone along Fanno Creek and Tryon Creek – would not contribute to the protection or expansion of natural resources and would only result in additional development process and review costs. Therefore, the Proposed Draft did not apply one of the City’s environmental zoning to developed floodplain, other than when the developed floodplain was in the riparian buffer area along the Willamette River.

**Proposed Draft and Planning and Sustainability Commission (PSC) Hearing.**

On August 30, 2022 — four weeks before the Planning and Sustainability Commission’s (PSC) public hearing – the City published the Floodplain Resilience Plan Proposed Draft in preparation for the PSC’s review and subsequent recommendation. As with the Discussion Draft, the public was able to review the proposals and submit testimony using the Floodplain Resilience Plan Map App. As part of the Proposed Draft publication and legislative process requirements, the following legal notices were also sent:

- Form 1 Notice Sent to the Department of Land Conservation and Development (DLCD)
- Legislative Notice (304 notices) – Sent to interested parties, recognized organizations, affected bureaus, TriMet, Metro and ODOT.
- Measure 56 Notice (3,978 notices) Required by Ballot Measure 56 – This mailed notice was sent to owners of each lot or parcel of property with floodplain and an existing Environmental overlay zone (Environmental Conservation or Environmental Protection) applied. Notices were also sent to each lot or parcel or property where there was a proposed expansion of the River Environmental or Environmental Conservation overlay zone.

In addition to these legal requirements, information about the PSC hearings was featured in blog posts on the project website, e-updates to project mailing list (87 people as of July 2022), BPS project updates sent monthly, media releases and posts by BPS on Twitter and Facebook.

The PSC held a public hearing on September 27, 2022. 7 people testified at the hearing and 48 people submitted written testimony. The PSC discussed the proposals in a subsequent work session on October 25, 2022.

On November 22, 2022, the Commission deliberated on a small number of staff-proposed amendments before voting to recommend the changes to City Council.



All PSC meetings were streamed live and are also available for viewing on the City of Portland YouTube page ([https://www.youtube.com/playlist?list=PLfrETCbg3gsjbN6XeJJe\\_CS1tIRcX87k-](https://www.youtube.com/playlist?list=PLfrETCbg3gsjbN6XeJJe_CS1tIRcX87k-))

**Recommended Draft and City Council Hearing.**

On August 16, 2023, the Recommended Draft of the Floodplain Resilience Plan was published, presenting the PSC’s recommendations to City Council. Staff also published a memo on August 16, 2023, for public review that described seven potential amendments to the Recommended Draft for City Council consideration. On August 15, 2023, the City sent a legislative notice of the City Council hearing to interested parties and anyone who testified to the PSC on the Proposed Draft. Email notice was sent on August 16, 2023, to those that submitted written testimony but did not provide a physical address.

City Council held a public hearing on the August 30, 2023, to receive testimony on the Recommended Draft and the August 16, 2023, amendments memo. City Council heard oral testimony from 31 people and written testimony from 20 individuals. Three people submitted both oral and written testimony.

In response to testimony, an additional potential amendment was introduced for City Council consideration at a subsequent session on September 13, 2023. At the September 13, 2023, session, the City Council voted to approve all eight amendments to the Recommended Draft.

On October 11, 2023, City Council voted to approve these amended findings and the amended elements of the Floodplain Resilience Plan.

City Council finds that this plan and this public engagement process are consistent with Goals 2.A – 2.G of the 2035 Comprehensive Plan.

As noted below in these findings, the Floodplain Resilience Plan amendments are consistent with the goals and policies of Chapter 2 (Community Involvement) of the 2035 Comprehensive Plan and the findings in response to those goals and policies are incorporated by reference. The events and outreach strategies summarized here demonstrate consistency with the requirements of Statewide Planning Goal 1.

**Partners in decision making**

**Policy 2.1. Partnerships and coordination.** Maintain partnerships and coordinate land use engagement with:

- 2.1.a** Individual community members.
- 2.1.b** Communities of color, low-income populations, Limited English Proficient (LEP) communities, Native American communities, and other under-served and under-represented communities.
- 2.1.c** District coalitions, neighborhood associations, and business district associations as local experts and communication channels for place-based projects.
- 2.1.d** Businesses, unions, employees, and related organizations that reflect Portland’s diversity as the center of regional economic and cultural activity.
- 2.1.e** Community-based, faith-based, artistic and cultural, and interest-based non-profits, organizations, and groups.
- 2.1.f** Institutions, governments, and Sovereign tribes.



59. **Finding:** This policy directs the City to maintain partnerships and coordinate community engagement on a programmatic level and is not specific to a particular legislative project. Therefore, this policy is not applicable. Nevertheless, these partnerships were engaged throughout this process. As described in Finding 58, staff maintained on-going communication and responded to requests for additional information from neighborhood associations, coalitions, community-based organizations, under-represented communities as well as individuals, among others.

**Policy 2.2. Broaden partnerships.** Work with district coalitions, neighborhood associations, and business district associations to increase participation and to help them reflect the diversity of the people and institutions they serve. Facilitate greater communication and collaboration among district coalitions, neighborhood associations, business district associations, culturally-specific organizations, and community-based organizations.

60. **Finding:** This policy directs the City to work with coalitions and associations to increase participation and improve communication on a programmatic level and is not specific to a particular legislative project. Therefore, this policy is not applicable. However, as evidenced by the range of involvement from comments and testimony received, the City engaged a variety of partners to increase participation from these organizations and better reflect the diversity of the people served by them.

## Environmental justice

**Policy 2.3. Extend benefits.** Ensure plans and investments promote environmental justice by extending the community benefits associated with environmental assets, land use, and public investments to communities of color, low-income populations, and other under-served or under-represented groups impacted by the decision. Maximize economic, cultural, political, and environmental benefits through ongoing partnerships.

**Policy 2.4. Eliminate burdens.** Ensure plans and investments eliminate associated disproportionate burdens (e.g. adverse environmental, economic, or community impacts) for communities of color, low-income populations, and other under-served or under-represented groups impacted by the decision.

**2.4.a** Minimize or mitigate disproportionate burdens in cases where they cannot be eliminated.

**2.4.b** Use plans and investments to address disproportionate burdens of previous decisions.

61. **Finding:** The 2035 Comprehensive Plan defines “ensure” to mean “to make sure that something will happen or be available”. Council interprets these policies to mean that plans and investments each contribute to the extension of community benefits, and elimination of disproportionate burdens, over the duration of the planning period.

The Floodplain Resilience Plan project team worked hard to understand the demographic characteristics of individuals that live in the floodplain and their potential vulnerabilities and to utilize a public outreach approach that effectively engaged them to understand their concerns and minimize the potential burden. A 2018 vulnerability analysis conducted by City staff determined that when taken as a whole the racial and ethnic diversity of the floodplains are roughly comparable to Portland overall. However, there is variability in the percentage of under-represented communities in the different areas where the Floodplain Resilience Plan amendments apply. For example, in the Columbia Slough floodplain 36 percent of the population identifies as being people of color (compared to 30 percent for the entire city), 73 percent of the population has less than a 4-year degree (compared to 55 percent for the entire city) and 55 percent of the



population earns less than 80 percent of the city’s median household income (compared to 45 percent for the entire city). Similarly, residents of the Johnson Creek floodplain have a higher percentage of individuals who identify as persons of color (39%) and individuals with less than a 4-year degree (71%). Residents in the Columbia River floodplain have a higher percentage of low-income households (58%) and individuals with less than a 4-year degree (67%).

These vulnerability indicators were taken into consideration in the development of the Floodplain Resilience Plan amendments. In general, the amendments that apply to the Columbia River, Columbia Slough and Johnson Creek floodplains are focused on the Environmental overlay zone. These updates narrow tree and vegetation removal allowed without City approval and require a minimum of three trees to be planted for each tree removed. The amendments will enhance habitat connectivity and preserve natural resources in the area and would not be expected to result in a significant additional burden on historically underrepresented communities. In fact, these amendments would be expected to extend benefits by ensuring that future floodplain development does not result in tree and vegetation loss over time, while also better addressing the potential impacts from future flooding.

For the reasons above, the Floodplain Resilience Plan amendments are consistent with policies 2.3 and 2.4.

### **Invest in education and training**

**Policy 2.5. Community capacity building.** Enhance the ability of community members, particularly those in under-served and/or under-represented groups, to develop the relationships, knowledge, and skills to effectively participate in plan and investment processes.

**Policy 2.6. Land use literacy.** Provide training and educational opportunities to build the public’s understanding of land use, transportation, housing, and related topics, and increase capacity for meaningful participation in planning and investment processes.

**Policy 2.7. Agency capacity building.** Increase City staff’s capacity, tools, and skills to design and implement processes that engage a broad diversity of affected and interested communities, including under-served and under-represented communities, in meaningful and appropriate ways.

**62. Finding:** These policies address broad approaches to educating community members and City staff about planning processes and are not applicable to this project given the project scope.

### **Community assessment**

**Policy 2.8. Channels of communication.** Maintain channels of communication among City Council, the Planning and Sustainability Commission (PSC), project advisory committees, City staff, and community members.

**63. Finding:** The City Council interprets this policy to mean that the community and advisory committees to have opportunities to communicate their issues and concerns to the PSC and City Council outside of the formal legislative process. These changes are a legislative process with formal opportunities to testify to communicate directly with City Council. Therefore, this policy does not apply.

**Policy 2.9. Community analysis.** Collect and evaluate data, including community-validated population data and information, to understand the needs, priorities, and trends and historical context affecting different communities in Portland.



**Policy 2.10. Community participation in data collection.** Provide meaningful opportunities for individuals and communities to be involved in inventories, mapping, data analysis, and the development of alternatives.

**Policy 2.11, Open data.** Ensure planning and investment decisions are a collaboration among stakeholders, including those listed in Policy 2.1. Where appropriate, encourage publication, accessibility, and wide-spread sharing of data collected and generated by the City.

**64. Finding:** Policies 2.9 through 2.11 concern how the City collects and makes available data that supports land use decisions. The Floodplain Resilience Plan completed analyses in 2018 to understand demographic and housing characteristics in floodplains. This demographic and housing data, along with a variety of species, vegetation, and other data, were presented for each of the City's main watersheds in a Draft Existing Conditions Report released along with the Floodplain Resilience Plan Discussion Draft. The Draft Existing Conditions Report was available for public review and comment from November 2021 to February 2022. Additionally, community members could evaluate proposals and submit comments/testimony on the Discussion Draft, Proposed Draft (PSC) and Recommended Draft (City Council) using the project's Map App (<https://www.portlandmaps.com/bps/floodplain/#/map/>). The Map App allows its users to select a property or enter an address and see the specific proposals for that property. Therefore, the Floodplain Resilience Plan approach to data analysis and availability are consistent with these policies.

## **Transparency and accountability**

**Policy 2.12. Roles and responsibilities.** Establish clear roles, rights, and responsibilities for participants and decision makers in planning and investment processes. Address roles of City bureaus, elected officials, and participants, including community and neighborhood leadership, business, organizations, and individuals.

**Policy 2.13. Project scope.** Establish clear expectations about land use project sponsorship, purpose, design, and how decision makers will use the process results.

**Policy 2.14. Community influence.** At each stage of the process, identify which elements of a planning and investment process can be influenced or changed through community involvement. Clarify the extent to which those elements can be influenced or changed.

**Policy 2.15. Documentation and feedback.** Provide clear documentation for the rationale supporting decisions in planning and investment processes. Communicate to participants about the issues raised in the community involvement process, how public input affected outcomes, and the rationale used to make decisions.

**65. Finding:** As described in the findings above, the legislative process was clearly outlined in notices, documents and on the project website, including how to testify to influence the Proposed Draft at the PSC and the Recommended Draft at City Council. The Recommended Draft was published with information about how to testify.

Throughout this process, BPS staff contacted, met with, and coordinated with stakeholders to inform them how to engage in the decision-making process, how the process was structured, and additional opportunities to participate when such opportunities existed. Community members could evaluate proposals and submit comments/testimony on the Discussion Draft, Proposed Draft (PSC) and Recommended Draft (City Council) using the project's Map App (<https://www.portlandmaps.com/bps/floodplain/#/map/>). The Map App allows its users to select



a property or enter an address and see the specific proposals for that property. From November of 2021 to Floodplain Resilience Plan adoption on October 11, 2023, community members were able to review all comments and testimony submitted on the Floodplain Resilience Plan using the “Read Public Testimony” page (<https://www.portlandmaps.com/bps/testimony/#proposal=fprp>).

During the public review phases of the project, BPS staff presented at various community meetings to inform people of the proposed amendments. All meetings and events were open to the public and included opportunities for public comment. Additionally, each new draft of the document included a summary of changes made since the previous version. Findings on public outreach and engagement are included elsewhere in this document. The Floodplain Resilience Plan amendments are consistent with these policies.

### **Community involvement program**

**Policy 2.16. Community Involvement Program.** Maintain a Community Involvement Program that supports community involvement as an integral and meaningful part of the planning and investment decision-making process.

**Policy 2.17. Community engagement manual.** Create, maintain, and actively implement a community engagement manual that details how to conduct community involvement for planning and investment projects and decisions.

**Policy 2.18. Best practices engagement methods.** Utilize community engagement methods, tools, and technologies that are recognized as best practices.

**Policy 2.19. Community Involvement Committee.** The Community Involvement Committee (CIC), an independent advisory body, will evaluate and provide feedback to City staff on community involvement processes for individual planning and associated investment projects, before, during, and at the conclusion of these processes.

**Policy 2.20. Review bodies.** Maintain review bodies, such as the Planning and Sustainability Commission (PSC), Design Commission, Historic Landmarks Commission, and Adjustment Committee, to provide an opportunity for community involvement and provide leadership and expertise for specialized topic areas.

**Policy 2.21. Program evaluation.** Periodically evaluate the effectiveness of the Community Involvement Program and recommend and advocate for program and policy improvements. The Community Involvement Committee (CIC) will advise City staff regarding this evaluation.

**Policy 2.22. Shared engagement methods.** Coordinate and share methods, tools, and technologies that lead to successful engagement practices with both government and community partners and solicit engagement methods from the community.

**Policy 2.23. Adequate funding and human resources.** Provide a level of funding and human resources allocated to the Community Involvement Program sufficient to make community involvement an integral part of the planning, policy, investment and development process.

**66. Finding:** Policies 2.16 through 2.23 concern the City’s Community Involvement Program and are not applicable because the Floodplain Resilience Plan amendments do not change the program. However, the Floodplain Resilience Plan process worked to utilize best practice engagement methods and gathered valuable feedback from the CIC to inform the project’s Community Engagement Plan. A copy of the Community Engagement Plan is provided in the project record.



## Process design and evaluation

**Policy 2.24. Representation.** Facilitate participation of a cross-section of the full diversity of affected Portlanders during planning and investment processes. This diversity includes individuals, stakeholders, and communities represented by race, color, national origin, English proficiency, gender, age, disability, religion, sexual orientation, gender identity, and source of income.

**Policy 2.25. Early involvement.** Improve opportunities for interested and affected community members to participate early in planning and investment processes, including identifying and prioritizing issues, needs, and opportunities; participating in process design; and recommending and prioritizing projects and/or other types of implementation.

**Policy 2.26. Verifying data.** Use data, including community-validated population data, to guide planning and investment processes and priority setting and to shape community involvement and decision-making efforts.

**Policy 2.27. Demographics.** Identify the demographics of potentially affected communities when initiating a planning or investment project.

**Policy 2.28. Historical understanding.** To better understand concerns and conditions when initiating a project, research the history, culture, past plans, and other needs of the affected community, particularly under-represented and under-served groups, and persons with limited English proficiency (LEP). Review preliminary findings with members of the community who have institutional and historical knowledge.

**Policy 2.29. Project-specific needs.** Customize community involvement processes to meet the needs of those potentially affected by the planning or investment project. Use community involvement techniques that fit the scope, character, and potential impact of the planning or investment decision under consideration.

**Policy 2.30. Culturally-appropriate processes.** Consult with communities to design culturally-appropriate processes to meet the needs of those affected by a planning or investment project. Evaluate, use, and document creative and culturally-appropriate methods, tools, technologies, and spaces to inform and engage people from under-served and under-represented groups about planning or investment projects.

**Policy 2.31. Innovative engagement methods.** Develop and document innovative methods, tools, and technologies for community involvement processes for plan and investment projects.

**Policy 2.32. Inclusive participation beyond Portland residents.** Design public processes for planning and investment projects to engage affected and interested people who may not live in Portland such as property owners, employees, employers, and students, among others, as practicable.

**Policy 2.33. Inclusive participation in Central City planning.** Design public processes for the Central City that recognize its unique role as the region's center. Engage a wide range of stakeholders from the Central City and throughout the region including employees, employers, social service providers, students, and visitors, as well as regional tourism, institutional, recreation, transportation, and local/regional government representatives, as appropriate.

**Policy 2.34. Accessibility.** Ensure that community involvement processes for planning and investment projects are broadly accessible in terms of location, time, and language, and that they support the engagement of individuals with a variety of abilities and limitations on participation.



**Policy 2.35. Participation monitoring.** Evaluate and document participant demographics throughout planning and investment processes to assess whether participation reflects the demographics of affected communities. Adapt involvement practices and activities accordingly to increase effectiveness at reaching targeted audiences.

**Policy 2.36. Adaptability.** Adapt community involvement processes for planning and investment projects as appropriate to flexibly respond to changes in the scope and priority of the issues, needs, and other factors that may affect the process.

**Policy 2.37. Process evaluation.** Evaluate each community involvement process for planning or investment projects from both the City staff and participants' perspectives, and consider feedback and lessons learned to enhance future involvement efforts.

**67. Finding:** Policies 2.24 through 2.37 address how the community involvement program is designed and developed to support planning and investment projects. As describe elsewhere in these findings, the Floodplain Resilience Plan is the culmination of over three years of work by City staff to develop proposals. The planning effort and associated public engagement processes incorporated the various considerations identified in policies 2.24 through 2.37 and provided numerous opportunities for meaningful community involvement.

Early in the process of the development of the Floodplain Resilience Plan Community Engagement Plan, staff utilized vulnerability and housing analyses that were completed in 2018 to support the City's overall floodplain management update work. The vulnerability analysis evaluated a number of demographic and economic characteristics within all of the city's floodplains, as well as within the floodplains each of the city's watersheds. The City used four indicators to assess vulnerability, including the percentage of (1) persons of color, (2) people with less than a 4-year degree, (3) renters, and (4) low-income individuals. The analysis assessed these indicators for all of the watersheds where the Floodplain Resilience Plan amendments apply: Willamette River (Central Reach, South Reach and South Waterfront), Columbia River, Columbia Slough, Tryon Creek and Fanno Creek, and Johnson Creek.

The vulnerability analysis determined that, when taken as a whole, the racial and ethnic diversity of the floodplains are roughly comparable to Portland overall. Variability in the diversity of the populations in the different subareas where the Floodplain Resilience Plan amendments apply was identified. Given historic flooding during events like the Vanport flood in 1948 and its impact on communities of color, assessing potential impacts of the amendments on areas with conditions that contribute to vulnerability was an important component of the project.

Based on the results of the vulnerability analysis, the Floodplain Resilience Plan project team utilized the BPS Racial Equity Analysis to identify key stakeholders and potential disparities in their role in the planning process through a power mapping analysis. To support this power mapping analysis, a matrix was developed to identify stakeholder groups, characterize their most salient interests, and the potential benefits and burdens that could result from the Floodplain Resilience Plan amendments. The Floodplain Resilience Plan Community Engagement Plan was then created to address these interests and potential benefits and burdens. A copy of the Community Engagement Plan is provided in the project record.

In preparation for the release of the Floodplain Resilience Plan Discussion Draft, project staff reached out to tribal council members and their staff for seven Pacific Northwest Tribes to provide the opportunity to review and provide feedback on early drafts of the plan's amendments. In August of 2021, emails with an official invitation letter were sent to each of the following tribes: Cowlitz Indian Tribe, Confederated Tribes of Grand Ronde, Nez Perce Tribe, Confederated Tribes



of Siletz Indians, Confederated Tribes of Umatilla Indian Reservation, Confederated Tribes of Warm Springs, and Yakama Nation.

In addition to general public outreach and engagement sessions, the Floodplain Resilience Plan project team also conducted three focus groups to gather feedback on Discussion Draft proposals from key stakeholder groups. Focus group discussions were held with members of the Black, Indigenous, and People of Color (BIPOC) community in April 2022 and the Urban Native American community in June 2022. In these focus groups, the Floodplain Resilience Plan Discussion Draft proposals were reviewed and participants were given the opportunity to provide feedback on how these proposals could be improved and what supporting programs might be useful to offset the potential impacts of the proposals on BIPOC and other under-represented communities. Participants in the BIPOC and Urban Native American focus groups were compensated for their participation.

Throughout the public engagement process, project staff were evaluating the effectiveness of the outreach approaches and identifying opportunities for reaching other interested stakeholders whenever possible. Council finds that the Floodplain Resilience Plan amendments are consistent with these policies.

### **Information design and development**

**Policy 2.38. Accommodation.** Ensure accommodations to let individuals with disabilities participate in administrative, quasi-judicial, and legislative land use decisions, consistent with federal regulations.

**Policy 2.39. Notification.** Notify affected and interested community members and recognized organizations about administrative, quasi-judicial, and legislative land use decisions with enough lead time to enable effective participation. Consider notification to both property owners and renters.

**Policy 2.40. Tools for effective participation.** Provide clear and easy access to information about administrative, quasi-judicial, and legislative land use decisions in multiple formats and through technological advancements and other ways.

**Policy 2.41. Limited English Proficiency (LEP).** Ensure that limited English proficient (LEP) individuals are provided meaningful access to information about administrative, quasi-judicial, and legislative land use decisions, consistent with federal regulations.

**68. Finding:** Consistent with Policies 2.38 through 2.41, and BPS community involvement practices, meetings, open house events, and all public meetings, described in more detail in the findings above, were noticed, and information was provided online. Information about accommodation and translation was provided on all notices. The City also sent a legislative notice on August 23, 2022, of the September 27, 2022, PSC hearing to interested parties, including neighborhood associations, business associations, and other affected jurisdictions, that have requested notice of proposed land use changes. The City sent a legislative notice on August 15, 2023, to interested parties and others that participated in the PSC hearings to inform them of the opportunity to testify at the August 30, 2023, Council public hearing. The amendments are consistent with these policies.



## Chapter 3: Urban Form

**GOAL 3.A: A city designed for people.** Portland’s built environment is designed to serve the needs and aspirations of all Portlanders, promoting prosperity, health, equity, and resiliency. New development, redevelopment, and public investments reduce disparities and encourage social interaction to create a healthy connected city.

- 69. Finding:** City Council interprets this goal as calling for a built environment that supports the ability of Portlanders to meet their needs, including but not limited to needs for housing, employment, commercial and community services, education, and access to recreation and open space – as a basis for how the City of Portland will guide the future of the built environment. This goal identifies a number of important outcomes that this goal is intended to promote, including prosperity (which the Comprehensive Plan defines as including the prosperity of both households and businesses), health, equity (which the Comprehensive Plan defines to be when everyone has access to the opportunities necessary to satisfy their essential needs, advance their well-being, and achieve their full potential), and resilience (which the Comprehensive Plan defines as the capability to anticipate, prepare for, respond to, and recover from significant multi-hazard threats with minimum damage to social well-being, the economy, and the environment). This goal also calls for the City to be involved in fostering development and public investments that reduce disparities, which the City Council interprets to mean reducing disparities among Portlanders and Portland communities in access to resources that are essential for achieving equity, such as household income and access to housing, quality education, and services. A desired outcome of this goal is therefore to create a healthy connected city in which Portlanders can meet their needs for housing, employment, services, transportation, social connections, and have access to recreation and nature.

The Floodplain Resilience Plan amendments aim to reduce future flood risk for people living and working in the City’s floodplains and improve floodplain habitat. Floodplains provide many important functional values including floodwater storage. When development impacts the functions of floodplain, the capacity to store and slow floodwaters is lost, and the impact of flooding can be exacerbated, which may put other nearby properties at risk. Plan amendments promote equity and resilience through regulations that allow for development to occur that is sensitive to adjacent waterways and fish and wildlife habitat. Due to the risk of flooding, floodplains have historically often been an area where low-income and BIPOC communities have lived as a result of redlining and other measures that limited access to other housing options. The application of the Environmental Conservation overlay zone (33.430) and the River Environmental overlay zone (33.475) ensure that mitigation is required to achieve no net-loss in floodplain habitat functions. The Floodplain Resilience Plan applies new requirements consistently across the city, expanding floodplain habitat and improving flood management for all Portlanders. Therefore, this goal is met.

**GOAL 3.B: A climate and hazard resilient urban form.** Portland’s compact urban form, sustainable building development practices, green infrastructure, and active transportation system reduce carbon emissions, reduce natural hazard risks and impacts, and improve resilience to the effects of climate change.

- 70. Finding:** The requirements of the River Environmental overlay zone and Environmental Conservation overlay zone ensure that detrimental impacts on natural resources from future development along and near waterways are mitigated. In the overlay zones, development impacts must be avoided to the extent possible, and when impacts can’t be avoided, impacts must be fully



mitigated. Limiting the removal of trees and vegetation that is allowed without City approval and applying the minimum 3:1 tree replacement ratio in the floodplain will ensure that flood risk is not increased with new development, while also preserving important habitat for fish and wildlife. Tree and vegetation removal standards ensure that the stormwater management functions of floodplains remain intact, and the updated floodplain development regulations reduce future flood risk and increase resilience to the area. Therefore, this goal is met.

**GOAL 3.C: Focused growth.** Household and employment growth is focused in the Central City and other centers, corridors, and transit station areas, creating compact urban development in areas with a high level of service and amenities, while allowing the relative stability of lower-density single-family residential areas.

**GOAL 3.D: A system of centers and corridors.** Portland’s interconnected system of centers and corridors provides diverse housing options and employment opportunities, robust multimodal transportation connections, access to local services and amenities, and supports low-carbon complete, healthy, and equitable communities.

**71. Finding:** The Floodplain Resilience Plan amendments do not change the large-scale spatial layout of the City. The City’s emphasis on focusing growth on centers and corridors is unchanged by the Floodplain Resilience Plan. Goals 3.C.-3. E. do not apply.

**GOAL 3.E: Connected public realm and open spaces.** A network of parks, streets, City Greenways, and other public spaces supports community interaction; connects neighborhoods, districts, and destinations; and improves air, water, land quality, and environmental health.

**72. Finding:** The Floodplain Resilience Plan amendments will ensure expand tree and vegetation removal that will be subject to City approval and increase tree planting that is required when trees in the floodplain are removed. The application of riparian buffer area requirements in the Willamette River Central Reach will expand floodplain habitat in this critically-important area for threatened and endangered species. Collectively, the amendments will improve land and water quality and result in a general improvement in environmental health in areas nearest city waterways. Therefore, this goal is met.

**GOAL 3.F: Employment districts.** Portland supports job growth in a variety of employment districts to maintain a diverse economy.

**73. Finding:** The Floodplain Resilience Plan will not impact the city’s ability to support job growth and is not expected to affect the diversity of the city’s economy. Goal 3.F. does not apply.

**GOAL 3.G: Nature in the city.** A system of habitat corridors weaves nature into the city, enhances habitat connectivity, and preserves natural resources and the ecosystem services they provide.

**74. Finding:** The Floodplain Resilience Plan amendments protect and enhance floodplain and riparian habitat for fish and wildlife, including the 16 threatened and endangered species identified in the FEMA Biological Opinion. Amendments draw guidance from the FEMA Biological Opinion and include mitigation requirements for the riparian buffer area of the Willamette River Central Reach (33.475). The riparian buffer area requirements mandate that development must achieve a no net-loss standard across all natural resources while also demonstrating an improvement to one of two floodplain-related functions, as defined in the City’s Natural Resources Inventory. Development proposed in the riparian buffer area must be approved through land use review, allowing for site-specific characteristics to be considered. The existing requirements of the River Environmental overlay zone (33.475) and the amendments to the Environmental overlay zones chapter (33.430) narrow tree and vegetation removal that is allowed without City approval and



increase the minimum tree replacement to three trees for each tree removed. These requirements ensure that a no net-loss standard will be achieved for existing natural resources in riparian corridors and floodplains, more generally. The Floodplain Resilience Plan amendments will enhance habitat connectivity and preserve natural resources and the ecosystem services they provide in the floodplain. Therefore, this goal is met.

## Citywide design and development

**Policy 3.1 Urban Design Framework.** Use the Urban Design Framework (UDF) as a guide to create inclusive and enduring places, while providing flexibility for implementation at the local scale to meet the needs of local communities.

- 75. Finding:** The UDF provides guidance on the built and natural form of Portland, providing in Comprehensive Plan Figure 3-1 a diagrammatic arrangement of centers, corridors, city greenways, urban habitat corridors, and pattern areas. Urban Design Framework Objective D aims to improve natural areas and open spaces to ensure Portland will continue to be a healthy place to live and a resilient urban landscape as the climate changes. The Floodplain Resilience Plan amendments update floodplain regulations to ensure that development in the floodplain addresses flood risk from a changing climate. The replacement of the existing 1996 Flood Inundation Area in the City’s combined flood hazard area with the Modeled Willamette River 1996 Flood Extent along the Willamette River, Columbia Slough and a portion of the Columbia River reflect best available science and provides a more accurate estimation of the impact area of a future 1996 flood-like event. Mitigation requirements that achieve a no net-loss standard preserve vegetation and riparian habitat, making the area more resilient. Therefore, the Floodplain Resilience Plan amendments are consistent with this policy.

**Policy 3.2. Growth and stability.** Direct most growth and change to centers, corridors, and transit station areas, allowing the continuation of the scale and characteristics of Portland’s residential neighborhoods.

- 76. Finding:** This policy reflects the Comprehensive Plan preferred growth scenario which calls for roughly 30% of the housing growth in the Central City, centers and corridors accommodating about 50% of new housing units, while the single-family residential areas accounting for the remaining 20% of growth. The Floodplain Resilience Plan amendments do not affect the City’s priority for focusing future growth in centers and corridors. Some amendments apply to Central City floodplains, however, these regulations will apply to a limited number of properties along the Willamette River and are not expected to significantly impact the development in the area. Therefore, the Floodplain Resilience Plan amendments are consistent with this policy.

**Policy 3.3. Equitable development.** Guide development, growth, and public facility investment to reduce disparities, ensure equitable access to opportunities, and produce positive outcomes for all Portlanders.

**3.3.a.** Anticipate, avoid, reduce, and mitigate negative public facility and development impacts, especially where those impacts inequitably burden communities of color, under-served and under-represented communities, and other vulnerable populations.

- 77. Finding:** The Comprehensive Plan defines ‘public facility’ as “Any facility, including buildings, property, and capital assets, that is owned, leased, or otherwise operated, or funded by a governmental body or public entity. Examples of public facilities include sewage treatment and collection facilities, stormwater and flood management facilities, water supply and distribution facilities, streets, and other transportation assets, parks, and public buildings.” City Council



interprets this policy as calling for the City to identify and mitigate potential impacts, including displacement risks, associated with major public facility improvements (such as the citing of a waste treatment facility, roadway interchange or other major capital asset, as well as local improvement districts where numbers of properties would be simultaneously affected both by assessments as well as physical changes to the condition of area infrastructure). While specific development may be required to improve the condition of infrastructure to support the proposed development, Council does not find that public facilities that are required in association with a specific site development (such as street frontage improvements or upsizing infrastructure to meet the demands of the specific development) will have negative impacts to surrounding properties or residents. The Floodplain Resilience Plan amendments do not include any new major public facilities or public facilities investments. Therefore, this policy is not applicable.

**3.3.b.** Make needed investments in areas that are deficient in public facilities to reduce disparities and increase equity. Accompany these investments with proactive measures to avoid displacement and increase affordable housing.

**3.3.c.** Encourage use of community benefit agreements to ensure equitable outcomes from development projects that benefit from public facility investments, increased development allowances, or public financial assistance. Consider community benefit agreements as a tool to mitigate displacement and housing affordability impacts.

**3.3d.** Incorporate requirements into the Zoning Code to provide public and community benefits as a condition of development projects to receive increased development allowances.

**3.3.e.** When private property value is increased by public plans and investments, require development to address or mitigate displacement impacts and impacts on housing affordability, in ways that are related and roughly proportional to these impacts.

**3.3.f.** Coordinate housing, economic development, and public facility plans and investments to create an integrated community development approach to restore communities impacted by past decisions.

**3.3.g.** Encourage developers to engage directly with a broad range of impacted communities to identify potential impacts to private development projects, develop mitigation measures, and provide community benefits to address adverse impacts.

- 78. Finding:** Major investments in deficient public facility areas are outlined in the list of Significant Projects in the CSP. City Council interprets an “integrated community development approach” as one that moves out of traditional policy silos and approaches community development related issues in a more holistic manner, with partners from multiple sectors working and investing together by using money from a mix of funding streams and to increase impact. The Floodplain Resilience Plan amendments are focused on the Zoning Code and do not include specific investments. The amendments do not alter the City’s ability to use community benefit agreements or its ability to address or mitigate development impacts and housing affordability. Therefore, policies 3.3.b-g. are not applicable.

**Policy 3.4. All ages and abilities.** Strive for a built environment that provides a safe, healthful, and attractive environment for people of all ages and abilities.

- 79. Finding:** The City Council interprets this policy to be focused on creating a supportive built environment for children, the elderly, and people with disabilities. The Floodplain Resilience Plan amendments do not impact the ability of the built environment to provide a safe, healthful, and



attractive environment for children, the elderly, and people with disabilities. Therefore, this policy is not applicable.

**Policy 3.5. Energy and resource efficiency.** Support energy-efficient, resource-efficient, and sustainable development and transportation patterns through land use and transportation planning.

**80. Finding:** The Floodplain Resilience Plan amendments apply environmentally-focused overlay zones as one tool to promote sustainable development. Development in an overlay zone is required to avoid impacts to extent possible and, when impacts cannot be avoided, mitigation is required. Amendments protect natural resources while allowing for development that is sensitive to its environmental context. Therefore, the amendments are consistent with this policy.

**Policy 3.6. Land efficiency.** Provide strategic investments and incentives to leverage infill, redevelopment, and promote intensification of scarce urban land while protecting environmental quality.

**Policy 3.7. Integrate nature.** Integrate nature and use green infrastructure throughout Portland.

**81. Finding:** The Floodplain Resilience Plan amendments do not address infill development, redevelopment, or land intensification. However, plan amendments protect the ecological functions of floodplains through the application of the River Environmental overlay zone and riparian buffer area in the Willamette River Central Reach and amendments to the Environmental Conservation overlay zone, which apply elsewhere in the city. The City's environmentally-focused overlay zones require mitigation when development is determined to impact natural resources. Mitigation requirements include tree and vegetation planting and other habitat improvements in floodplains. The Floodplain Resilience Plan amendments aim to maintain the integrity of the functions of Portland's floodplains, an invaluable form of green infrastructure. Portland's floodplains act to protect development and habitat from the effects of flooding and act as a system of natural green infrastructure, storing and slowing stormwater and runoff. Therefore, the amendments are consistent with policies 3.6 and 3.7.

**Policy 3.8. Leadership and innovation in design.** Encourage high-performance design and development that demonstrates Portland's leadership in the design of the built environment, commitment to a more equitable city, and ability to experiment and generate innovative design solutions.

**82. Finding:** Floodplain Resilience Plan amendments encourage the built environment to develop in an equitable manner that is sensitive to the environment. When development occurs in floodplains, it has the potential to cause adverse effects downstream and to neighboring properties. Plan amendments include the mitigation of impacts from development on natural resources, reducing any adverse impacts. Development in the riparian buffer area must also demonstrate an improvement in one of two City-defined riparian functions. Therefore, the amendments are consistent with this policy.

**Policy 3.9. Growth and development.** Evaluate the potential impacts of planning and investment decisions, significant new infrastructure, and significant new development on the physical characteristics of neighborhoods and their residents, particularly under-served and under-represented communities, with attention to displacement and affordability impacts. Identify and implement strategies to mitigate the anticipated impacts.

**83. Finding:** The Floodplain Resilience Plan amendments aim to reduce future flood risk for Portlanders living and working in the City's floodplains, among other project goals. When considered as a whole, the racial and ethnic diversity of people in the floodplains is roughly comparable to Portland overall, with variability in the diversity of populations in different



watersheds. The Columbia Slough and Columbia River watersheds are the most diverse among the City’s watershed, and also have some of the largest percentages of residents that earn less than 80 percent of the median household income. Plan amendments ensure development mitigates impacts to impacts to natural resources and allow ecologically-sensitive development in areas that may be flooded in the future, increasing resilience to future flood risk. In the Columbia River and Columbia Slough watersheds, amendments to tree and vegetation requirements will ensure that existing natural resources in the floodplain will be preserved and a minimum of three trees will be planted for each tree removed. This will avoid the loss of natural resources in these areas. Therefore, the amendments are consistent with this policy.

**Policy 3.10. Rural, urbanizable, and urban land.** Preserve the rural character of rural land outside the Regional Urban Growth Boundary. Limit urban development of urbanizable land beyond the City Limits until it is annexed, and full urban services are extended.

**84. Finding:** The Floodplain Resilience Plan amendments will have no effect on rural lands and will not influence the urban development of land beyond the City limits. This policy is not applicable.

**Policy 3.11. Significant places.** Enhance and celebrate significant places throughout Portland with symbolic features or iconic structures that reinforce local identity, histories, and cultures and contribute to way-finding throughout the city. Consider these especially at:

- High-visibility intersections
- Attractions
- Schools, libraries, parks, and other civic places
- Bridges
- Rivers
- Viewpoints and view corridor locations
- Historically or culturally significant places
- Connections to volcanic buttes and other geologic and natural landscape features
- Neighborhood boundaries and transitions

**85. Finding:** City Council interprets this policy as applying to prominent specific places, features and iconic structures. The Floodplain Resilience Plan amendments enhance and celebrate the features and functions of the Willamette River, Columbia River, Columbia Slough, Fanno Creek, Tryon Creek, and Johnson Creek. Floodplain Resilience Plan amendments to the River Environmental overlay zone and Environmental Conservation overlay zone will strengthen the symbolic and iconic character of the city’s rivers by preserving fish and wildlife habitat along them. The region’s salmon and steelhead have been culturally-significant species to Pacific Northwest Tribal peoples for thousands of years and play an important role in their traditional lifeways. Floodplain protections in the plan will contribute to restoration efforts for the species. Therefore, the amendments are consistent with this policy.

## Centers

**Policy 3.12. Role of centers.** Enhance centers as anchors of complete neighborhoods that include concentrations of commercial and public services, housing, employment, gathering places, and green spaces.



**Policy 3.13. Variety of centers.** Plan for a range of centers across the city to enhance local, equitable access to services, and expand housing opportunities.

**Policy 3.14. Housing in centers.** Provide housing capacity for enough population to support a broad range of commercial services, focusing higher-density housing within a half-mile of the center core.

**Policy 3.15. Investments in centers.** Encourage public and private investment in infrastructure, economic development, and community services in centers to ensure that all centers will support the populations they serve.

**Policy 3.16. Government services.** Encourage the placement of services in centers, including schools and colleges, health services, community centers, daycare, parks and plazas, library services, and justice services.

**Policy 3.17. Arts and culture.** Ensure that land use plans and infrastructure investments allow for and incorporate arts, culture, and performance arts as central components of centers.

**Policy 3.18. Accessibility.** Design centers to be compact, safe, attractive, and accessible places, where the street environment makes access by transit, walking, biking, and mobility devices such as wheelchairs, safe and attractive for people of all ages and abilities.

**Policy 3.19. Center connections.** Connect centers to each other and to other key local and regional destinations, such as schools, parks, and employment areas, by frequent and convenient transit, bicycle sharing, bicycle routes, pedestrian trails and sidewalks, and electric vehicle charging stations.

**86. Finding:** Policies 3.12 through 3.19 provide guidance on how centers identified on the Comprehensive Plan map should evolve over time. The policies address investments, uses, the relationship of centers to transportation networks, design, and development. City Council interprets most of these policies as applying to the commercial/mixed use and multi-dwelling zones within the mapped boundaries of centers. The exception to this is Policy 3.14, which calls for providing housing capacity within a half-mile of center cores to provide population to support services in centers. The Floodplain Resilience Plan amendments will not affect the City's ability to address the considerations contained in policies 3.12 through 3.19. These policies are not applicable.

**Policy 3.20. Green infrastructure in centers.** Integrate nature and green infrastructure into centers and enhance public views and connections to the surrounding natural features.

**87. Finding:** The only center where the Floodplain Resilience Plan amendments will apply is in the Central City. The amendments will ensure that trees and vegetation in the Willamette River Central Reach and South Waterfront floodplains are maintained along with development. The riparian buffer area requirements in the Willamette River Central Reach will improve and expand habitat close to the river, a key area for threatened and endangered species. These amendments will integrate nature and green infrastructure into the Central City center. Therefore, the amendments are consistent with these policies.

**Policy 3.21. Role of the Central City.** Encourage continued growth and investment in the Central City, and recognize its unique role as the region's premier center for jobs, services, and civic and cultural institutions that support the entire city and region.

**Policy 3.22. Model Urban Center.** Promote the Central City as a living laboratory that demonstrates how the design and function of a dense urban center can concurrently provide equitable benefits to human health, the natural environment, and the local economy.



**Policy 3.23. Central City employment.** Encourage the growth of the Central City’s regional share of employment and continue its growth as the region’s unique center for innovation and exchange through commerce, employment, arts, culture, entertainment, tourism, education, and government.

**Policy 3.24. Central City housing.** Encourage the growth of the Central City as Portland’s and the region’s largest center with the highest concentrations of housing and with a diversity of housing options and services.

**Policy 3.25. Transportation hub.** Enhance the Central City as the region’s multimodal transportation hub and optimize regional access as well as the movement of people and goods among key destinations.

**Policy 3.26. Public places.** Promote public places and the Willamette River waterfront in the Central City as places of business and social activity and gathering for the people of its districts and the broader region.

**88. Finding:** Policies 3.21 through 3.26 provide direction on the desired characteristics and functions of the Central City. The Floodplain Resilience Plan amendments in the Willamette River Central Reach, which is located within the Central City, expand the River Environmental overlay zone to encompass all of the riparian buffer area (i.e., floodplains within 170 feet of the ordinary high water mark) and any undeveloped floodplain landward of the riparian buffer area. Existing riparian buffer area requirements (33.475) are applied to Central City floodplains. These changes will apply to a very small percentage of properties within the Central City, the large majority of which are not expected to develop within the next 20 years according to the City’s Buildable Lands Inventory (BLI). The BLI is an assessment of the development capacity of land with the city of Portland to accommodate forecasted housing and employment needs over a 20-year period. The City’s most recent BLI was adopted in 2016. Copies of relevant portions of the current version of the BLI have been included in the record. A new BLI is under development and is expected to be completed by the end of 2024. The plan amendments will not affect the design and function of Central City as a dense urban center that can concurrently support and benefit human health and the natural environment without having a detrimental effect on the achievement of Policies 3.21-3.26. The amendments are consistent with these policies.

### **Gateway Regional Center**

**Policy 3.27 Role of Gateway.** Encourage growth and investment in Gateway to enhance its role as East Portland’s center of employment, commercial, and public services.

**Policy 3.28 Housing.** Encourage housing in Gateway, to create East Portland’s largest concentration of high-density housing.

**Policy 3.29 Transportation.** Enhance Gateway’s role as a regional high-capacity transit hub that serves as an anchor for East Portland’s multimodal transportation system.

**Policy 3.30 Public places.** Enhance the public realm and public places in Gateway to provide a vibrant and attractive setting for business and social activity that serves East Portland residents and the region.

**89. Finding:** Policies 3.27 through 3.30 provide direction on the desired characteristics and functions of the Gateway Regional Center. The Floodplain Resilience Plan amendments do not change the boundary of any of the Town Centers on the Urban Design Framework, or propose new transportation facilities or new public spaces, or include any policies or regulations that would impact the feasibility of such facilities in Town Centers. There are no floodplains within the Gateway Regional Center. Policies 3.27 through 3.30 are therefore not applicable.



## Town Centers

**Policy 3.31 Role of Town Centers.** Enhance Town Centers as successful places that serve the needs of surrounding neighborhoods as well as a wider area, and contain higher concentrations of employment, institutions, commercial and community services, and a wide range of housing options.

**Policy 3.32 Housing.** Provide for a wide range of housing types in Town Centers, which are intended to generally be larger in scale than the surrounding residential areas. There should be sufficient zoning capacity within a half-mile walking distance of a Town Center to accommodate 7,000 households.

**Policy 3.33 Transportation.** Improve Town Centers as multimodal transportation hubs that optimize access from the broad area of the city they serve and are linked to the region's high-capacity transit system.

**Policy 3.34 Public places.** Provide parks or public squares within or near Town Centers to support their roles as places of focused business and social activity.

- 90. Finding:** Policies 3.31 through 3.34 provide the direction and function for Town Centers. These policies are principally targeted at multi-dwelling and mixed-use zones. The Floodplain Resilience Plan amendments do not change the boundary of any of the Town Centers on the Urban Design Framework, or propose new transportation facilities or new public spaces, or include any policies or regulations that would impact the feasibility of such facilities in Town Centers. There are no floodplains within any of the City's Town Centers. Policies 3.31 through 3.34 are therefore not applicable.

## Neighborhood Centers

**Policy 3.35 Role of Neighborhood Centers.** Enhance Neighborhood Centers as successful places that serve the needs of surrounding neighborhoods. In Neighborhood Centers, provide for higher concentrations of development, employment, commercial and community services, and a wider range of housing options than the surrounding neighborhoods.

**Policy 3.36 Housing.** Provide for a wide range of housing types in Neighborhood Centers, which are intended to generally be larger in scale than the surrounding residential areas, but smaller than Town Centers. There should be sufficient zoning capacity within a half-mile walking distance of a Neighborhood Center to accommodate 3,500 households.

**Policy 3.37 Transportation.** Design Neighborhood Centers as multimodal transportation hubs that are served by frequent-service transit and optimize pedestrian and bicycle access from adjacent neighborhoods.

**Policy 3.38 Public places.** Provide small parks or plazas within or near Neighborhood Centers to support their roles as places of local activity and gathering.

- 91. Finding:** Policies 3.35 through 3.38 provide direction on the desired characteristics and functions of Neighborhood Centers. These policies are principally targeted at multi-dwelling and mixed-use zones. They address the types of uses that are expected in Neighborhood Centers, the intensity of housing, the presence of multimodal transportation options, and the need for public spaces. The Macadam Neighborhood Center is the only Neighborhood Center where the Floodplain Resilience Plan amendments apply. In this Neighborhood Center, the amendments are focused on adjusting the extents of the River Environmental overlay zone and riparian buffer area to address floodplain areas identified in the Modeled Willamette River 1996 Flood Extent. These updates better-identify the areas of flood risk within the Macadam Neighborhood Center and do not the spatial layout or



density of the area. Additionally, plan amendments do not propose new transportation facilities or new public spaces or include any policies or regulations that would impact the feasibility of such facilities in Neighborhood Centers. The amendments are consistent with policies 3.35 and 3.38.

## Inner Ring Districts

**Policy 3.39 Growth.** Expand the range of housing and employment opportunities in the Inner Ring Districts. Emphasize growth that replaces gaps in the historic urban fabric, such as redevelopment of surface parking lots and 20th century auto-oriented development.

**Policy 3.40 Corridors.** Guide growth in corridors to transition to mid-rise scale close to the Central City, especially along Civic Corridors.

**Policy 3.41 Distinct identities.** Maintain and enhance the distinct identities of the Inner Ring Districts and their corridors. Use and expand existing historic preservation and design review tools to accommodate growth in ways that identify and preserve historic resources and enhance the distinctive characteristics of the Inner Ring Districts, especially in areas experiencing significant development.

**Policy 3.42 Diverse residential areas.** Provide a diversity of housing opportunities in the Inner Ring Districts' residential areas. Encourage approaches that preserve or are compatible with existing historic properties in these areas. Acknowledge that these areas are historic assets and should retain their established characteristics and development patterns, even as Inner Ring centers and corridors grow. Apply base zones in a manner that takes historic character and adopted design guidelines into account.

**Policy 3.43 Active transportation.** Enhance the role of the Inner Ring Districts' extensive transit, bicycle, and pedestrian networks in conjunction with land uses that optimize the ability for more people to utilize this network. Improve the safety of pedestrian and bike connections to the Central City. Strengthen transit connections between the Inner Ring Districts and to the Central City.

**92. Finding:** Policies 3.39 through 3.43 provide direction on the desired characteristics and functions of the Inner Ring Districts. These are the pre-automobile neighborhoods within short distance of the Central City. They include some of Portland's oldest neighborhoods, including Buckman, Albina, and Northwest Portland. In the mid-20<sup>th</sup>-century many older buildings in these neighborhoods were demolished to make way for transportation infrastructure and parking. These policies encourage infill development to re-establish the historic pedestrian-oriented urban form and acknowledge the close proximity of the Central City's array of services, jobs, and amenities. In the Urban Form Background Report with the 2035 Comprehensive Plan, the Inner Ring was described as having a consistent pattern of rectilinear blocks, typically 200'-deep; streets with sidewalks, planting strips, and street trees; a fine-grain pattern of development, based on lots commonly 50' x 100' street-oriented buildings; and a green-edge of front setbacks. The report noted several particularly distinctive places with unique street patterns, including Ladd's Addition, Laurelhurst, Alameda, and Woodlawn.

The Floodplain Resilience Plan amendments do not alter the spatial layout or density of inner ring districts. However, the amendments in the Willamette River Central Reach expand the River Environmental overlay zone to encompass all of the riparian buffer area (i.e., floodplains within 170 feet of the ordinary high water mark) and any undeveloped floodplain landward of the riparian buffer area. Existing riparian buffer area requirements (33.475) are applied to Central City floodplains, with no amendments made as a part of the Floodplain Resilience Plan. These changes will apply to a very small percentage of properties within the Central City, most of which are not expected to develop within the next 20 years. Similarly, generally small changes in the River Environmental overlay zone and riparian buffer area are proposed within the Macadam



neighborhood, as described in Finding 91. Neither of these changes will affect the growth potential, diversity of housing opportunities or identities, or transportation options in the Inner Ring Districts. Therefore, the Floodplain Resilience Plan is consistent with Policies 3.39-3.43.

## **Corridors**

**Policy 3.44. Growth and mobility.** Coordinate transportation and land use strategies along corridors to accommodate growth and mobility needs for people of all ages and abilities.

**Policy 3.45. Connections.** Improve corridors as multimodal connections providing transit, pedestrian, bicycle, and motor vehicle access and that serve the freight needs of centers and neighborhood business districts.

**Policy 3.46. Design.** Encourage street design that balances the important transportation functions of corridors with their roles as the setting for commercial activity and residential living.

**Policy 3.47. Green infrastructure in corridors.** Enhance corridors with distinctive green infrastructure, including landscaped stormwater facilities, extensive tree plantings, and other landscaping that both provide environmental function and contribute to a quality pedestrian environment.

**93. Finding:** Policies 3.44 through 3.47 provide direction on the desired characteristics and functions of corridors as well as street design and future land use changes. Corridors are defined as part of the City's Urban Design Framework in Figure 3-2 of the Comprehensive Plan. The Floodplain Resilience Plan amendments do not change the location of adopted corridors, impact transportation facility design or green infrastructure programs, or amend the TSP. The Floodplain Resilience Plan amendments do not designate or remove any Historic, Conservation, or National Register Landmarks or Districts. Therefore, these policies are not applicable.

## **Civic Corridors**

**Policy 3.48. Integrated land use and mobility.** Enhance Civic Corridors as distinctive places that are models of ecological urban design, with transit-supportive densities of housing and employment, prominent street trees and other green features, and high-quality transit service and pedestrian and bicycle facilities.

**Policy 3.49. Design great places.** Improve public streets and sidewalks along Civic Corridors to support the vitality of business districts, create distinctive places, provide a safe, healthy, and attractive pedestrian environment, and contribute to quality living environments for residents.

**Policy 3.50. Mobility corridors.** Improve Civic Corridors as key mobility corridors of citywide importance that accommodate all modes of transportation within their right-of-way or on nearby parallel routes.

**Policy 3.51. Freight.** Maintain freight mobility and access on Civic Corridors that are also Major or Priority Truck Streets.

**94. Finding:** Policies 3.48 through 3.51 provide direction on the desired characteristics and functions of civic corridors as well as street design and future land use changes. These policies are implemented by the Bureau of Transportation through the Transportation System Plan and street design guidelines, as well as by higher-density mixed-use and multi-dwelling zoning along the corridors mapped on the UDF. The Floodplain Resilience Plan amendments do not change the boundary of corridors on the Urban Design Framework, impact transportation facility design, or amend the TSP. Therefore, these policies are not applicable.



## Neighborhood Corridors

**Policy 3.52. Neighborhood Corridors.** Enhance Neighborhood Corridors as important places that support vibrant neighborhood business districts with quality multi-family housing, while providing transportation connections that link neighborhoods.

95. **Finding:** This policy provides direction on the desired characteristics and functions of corridors as well as street design and future land use changes. This policy is primarily implemented by the Bureau of Transportation through the Transportation System Plan and by higher-density mixed-use and multi-dwelling zoning along the corridors mapped on the UDF. The Floodplain Resilience Plan amendments do not change the boundary of neighborhood corridors on the Urban Design Framework or amend the TSP. These policies are not applicable.

## Transit Station Areas

**Policy 3.53. Transit-oriented development.** Encourage transit-oriented development and transit-supportive concentrations of housing and jobs, and multimodal connections at and adjacent to high-capacity transit stations.

**Policy 3.54. Community connections.** Integrate transit stations into surrounding communities and enhance pedestrian and bicycle facilities (including bike sharing) to provide safe and accessible connections to key destinations beyond the station area.

**Policy 3.55. Transit station area safety.** Design transit areas to improve pedestrian, bicycle, and personal safety.

**Policy 3.56. Center stations.** Encourage transit stations in centers to provide high density concentrations of housing and commercial uses that maximize the ability of residents to live close to both high-quality transit and commercial services.

**Policy 3.57. Employment stations.** Encourage concentrations of jobs and employment-focused land uses in and around stations in employment-zoned areas.

**Policy 3.58. Transit neighborhood stations.** Encourage concentrations of mixed-income residential development and supportive commercial services close to transit neighborhood stations. Transit neighborhood stations serve mixed-use areas that are not in major centers.

**Policy 3.59. Destination stations.** Enhance connections between major destinations and transit facilities and strengthen the role of these station areas as places of focused activity.

96. **Finding:** Policies 3.53 through 3.59 provide direction on the desired characteristics and functions of transit station areas. These policies are implemented by higher-density mixed-use, employment, and multi-dwelling zoning in designated transit station areas, as well as through transportation improvements providing connections to transit stations. The Floodplain Resilience Plan amendments do not affect the City's ability to achieve policies 3.53 through 3.59. These policies are not applicable.

## City Greenways

**Policy 3.60. Connections.** Create a network of distinctive and attractive City Greenways that link centers, parks, schools, rivers, natural areas, and other key community destinations.

**Policy 3.61. Integrated system.** Create an integrated City Greenways system that includes regional trails through natural areas and along Portland's rivers, connected to neighborhood greenways, and heritage



parkways.

**Policy 3.62. Multiple benefits.** Design City Greenways that provide multiple benefits that contribute to Portland’s pedestrian, bicycle, green infrastructure, and parks and open space systems.

**Policy 3.63. Design.** Use design options such as distinctive street design, motor vehicle diversion, landscaping, tree plantings, scenic views, and other appropriate design options, to create City Greenways that extend the experience of open spaces and nature into neighborhoods, while improving stormwater management and calming traffic.

**97. Finding:** Policies 3.60 through 3.63 primarily relate to the design and construction of improvements for City Greenways within rights-of-way and not to the development requirements for lots that abut them. The Floodplain Resilience Plan amendments do not alter the design or construction of City Greenways. However, in areas where City Greenways and trails intersect with floodplains, plan amendments in the Willamette River Central Reach adopt a new Zoning Code map to identify the Central Reach riparian buffer area and apply the existing riparian buffer area requirements (33.475). Amendments expand the River Environmental overlay zone to encompass the proposed riparian buffer area and any floodplains landward of the riparian buffer area. In the Willamette River South Reach plan amendments use the Modeled Willamette River 1996 Flood Extent and FEMA 100-year Floodplain to update the boundaries of the existing riparian buffer area and River Environmental overlay zone. A map of the extent of the Modeled Willamette River 1996 Flood Extent and documentation of the methodology used to create it are included in the record. Upon implementation of the Zoning Code amendments, this extent will be available as a GIS layer for use by applicants as a part of future development proposals. Elsewhere in the city where City Greenways intersect with Environmental Conservation and Environmental Protection overlay zones, the amendments will preserve existing floodplain habitat and increase minimum planting requirements for trees and vegetation in floodplains. Where applicable, these amendments will protect and strengthen the ecological and functional value of the City Greenways. Therefore, the amendments are consistent with these policies.

## Urban habitat corridors

**Policy 3.64. Urban habitat corridors.** Establish a system of connected, well-functioning, and diverse habitat corridors that link habitats in Portland and the region, facilitate safe fish and wildlife access and movement through and between habitat areas, enhance the quality and connectivity of existing habitat corridors, and establish new habitat corridors in developed areas.

**Policy 3.65. Habitat connection tools.** Improve habitat corridors using a mix of tools including natural resource protection, property acquisition, natural resource restoration, tree planting and landscaping with native plants, and ecological design integrated with new development.

**Policy 3.66. Connect habitat corridors.** Ensure that planned connections between habitat corridors, greenways, and trails are located and designed to support the functions of each element, and create positive interrelationships between the elements, while also protecting habitat functions, fish, and wildlife.

**98. Finding:** Habitat corridors are mapped on Figure 3-6 of the Comprehensive Plan. The City has an adopted Natural Resources Inventory (NRI) that provides a basis for establishing future habitat corridors and enhancing connectivity. The City’s environmental overlay zone regulations are the implementing regulatory tools to preserve natural resources and their ecosystem services, particularly in relationship habitat areas. The Floodplain Resilience Plan does not amend the NRI but amendments do modify the requirements of the Environmental overlay zone and expand the



boundaries of the River Environmental and Environmental Conservation overlay zone in some parts of the city. The amendments will ensure that existing floodplain habitat in the urban habitat corridors will be maintained by requiring that impacts to natural resources be avoided or minimized to the extent possible. Where impacts can't be avoided, mitigation will be required. In the floodplains along the Willamette River South Reach, Columbia River, Columbia Slough, Fanno Creek, Tryon Creek, and Johnson Creek, allowances for removal of trees and vegetation in the floodplain will be more limited and a minimum of three trees will be required to be planted for each tree removed. These amendments will strengthen protections of urban habitat corridors and are therefore consistent with these policies.

## Employment areas

**Policy 3.67. Employment area geographies.** Consider the land development and transportation needs of Portland's employment geographies when creating and amending land use plans and making infrastructure investments.

- 99. Finding:** Comprehensive Plan Figure 3-7 identifies four employment area geographies – Central City, industrial/employment, commercial, and institutional. In consideration of the land development and transportation needs of Portland's employment geographies, the Floodplain Resilience Plan amendments do not apply at this time to the Willamette River North Reach, home to a large majority of the City's river-dependent and river-related industrial uses, and three industrial and employment zones: Heavy Industrial (IH), General Industrial 2 (IG2), and General Employment 2 (EG2). This exemption is done in consideration of the adopted 2016 Economic Opportunities Analysis (EOA) and the rate at which industrial land in the Columbia Corridor has been absorbed. The City has started an EOA project that will update the estimate of 20-year industrial land capacity and consider and implement, as appropriate, additional environmental protections, including floodplain management-related amendments. In the Central City, the Floodplain Resilience Plan amendments generally apply to properties that zoned for residential or mixed-use are development. These amendments will not impact employment capacity in the Central City. The amendments are consistent with Policy 3.67.

**Policy 3.68. Regional Truck Corridors.** Enhance designated streets to accommodate forecast freight growth and support intensified industrial use in nearby freight districts. *See Figure 3-7 — Employment Areas.* Designated regional truckways and priority truck streets (Transportation System Plan classifications are shown to illustrate this network).

- 100. Finding:** Regional truckways and priority truck streets are major freight routes, such as the interstate highways. The City Council interprets this policy to acknowledge the role that regional truck corridors play in our transportation system and to take steps to improve those functions. Therefore, the amendments are consistent with these policies. Portland's approach to regional truck corridors is unchanged because the Floodplain Resilience Plan amendments do not amend the Citywide System Plan or the Transportation System Plan, which implement this policy. Policy 3.68 is not applicable.

## Rivers Pattern Area

**Policy 3.69. Historic and multi-cultural significance.** Recognize, restore, and protect the historic and multi-cultural significance of the Willamette and Columbia Rivers, including current activities such as subsistence fishing of legally-permitted fish species.



**101. Finding:** The Floodplain Resilience Plan amendments contribute to the protection and restoration of the significance of the Willamette River and Columbia River. Floodplain Resilience Plan amendments to the River Environmental overlay zone and Environmental Conservation overlay zone will preserve, improve and expand fish and wildlife habitat along both rivers. The region's salmon and steelhead have been culturally-significant species to Pacific Northwest Tribal peoples for thousands of years and play an important role in their traditional lifeways. Floodplain protections in the plan will contribute to recovery efforts for 16 threatened and endangered salmon and steelhead species. The amendments are consistent with Policy 3.69.

**Policy 3.70. River transportation.** Recognize and enhance the roles of the Willamette and Columbia rivers as part of Portland's historic, current, and future transportation infrastructure, including for freight, commerce, commuting, and other public and private transportation functions.

**Policy 3.71. Recreation.** Improve conditions along and within the Willamette and Columbia rivers to accommodate a diverse mix of recreational users and activities. Designate and invest in strategically-located sites along the length of Portland's riverfronts for passive or active recreation activities that are compatible with nearby land uses, historically and culturally important sites, significant habitat areas, restoration sites, and native fish and wildlife usage.

**Policy 3.72 Industry and port facilities.** Enhance the regionally significant economic infrastructure that includes Oregon's largest seaport and largest airport, unique multimodal freight, rail, and harbor access; the region's critical energy hub; and proximity to anchor manufacturing and distribution facilities.

**102. Finding:** Policies 3.70-3.72 address transportation, recreation and industrial uses of the Willamette River and Columbia River waterfronts. The Floodplain Resilience Plan amendments in no way affect the City's ability to achieve these goals. These policies are not applicable.

**Policy 3.73. Habitat.** Enhance the roles of the Willamette and Columbia rivers and their confluence as an ecological hub that provides locally and regionally significant habitat for fish and wildlife and habitat restoration opportunities.

**103. Finding:** The Floodplain Resilience Plan amendments will enhance the ecological function of the Willamette River and Columbia River. The Floodplain Resilience Plan amendments protect and enhance floodplain and riparian habitat for fish and wildlife, include the 16 locally and regionally significant threatened and endangered species identified in the FEMA Biological Opinion. Amendments draw guidance from the FEMA Biological Opinion and include mitigation requirements for the riparian buffer area of the Willamette River Central Reach (33.475). The riparian buffer area requirements mandate that development must achieve a no net-loss standard across all natural resources while also demonstrating an improvement to one of two floodplain-related functions, as defined in the City's Natural Resources Inventory. Development proposed in the riparian buffer area must be approved through land use review, allowing for site-specific characteristics to be considered. Amendments to the Environmental overlay zones chapter (33.430) narrow tree and vegetation removal that is allowed without City approval in the Columbia River floodplain and increases the minimum tree replacement to three trees for each tree removed. The Floodplain Resilience Plan amendments will enhance habitat connectivity and preserve natural resources and the ecosystem services they provide in and along the Willamette and Columbia rivers. Therefore, amendments are consistent with this policy.

**Policy 3.74. Commercial activities.** Enhance the roles of the Willamette and Columbia rivers in supporting local and regional business and commerce, including commercial fishing, tourism, recreation, and leisure.



**Policy 3.75. River neighborhoods.** Enhance the strong river orientation of residential areas that are located along the Willamette and Columbia Rivers.

**Policy 3.76. River access.** Enhance and complete Portland’s system of river access points and riverside trails, including the Willamette Greenway Trail, and strengthen active transportation connections between neighborhoods and the rivers.

**104. Finding:** Policies 3.74-3.76 address commercial activities of, orientation of residential neighborhoods to, and access and transportation connections to the Willamette and Columbia rivers. The Floodplain Resilience Plan amendments in no way affect the City’s ability to achieve these goals. These policies are not applicable.

**Policy 3.77. River management and coordination.** Coordinate with federal, state, regional, special districts, and other agencies to address issues of mutual interest and concern, including economic development, recreation, water transportation, flood and floodplain management and protection, regulatory compliance, permitting, emergency management, endangered species recovery, climate change preparation, Portland Harbor Superfund, brownfield cleanup, and habitat restoration.

**105. Finding:** As described elsewhere in this document, the Floodplain Resilience Plan amendments are a response to federal directives that will shape the requirements of the NFIP. Zoning Code amendments in both the Environmental Zones (33.430) and River Overlay Zones (33.475) chapters draw directly from floodplain management updates identified in the FEMA Biological Opinion on the NFIP and FEMA’s *Oregon Implementation Plan for NFIP-ESA Integration*, released in October 2021. Proposed amendments that are drawn from these documents and will ensure continued compliance the NFIP include (1) establishment of the riparian buffer area in the Willamette Central Reach, (2) expansion of the City’s environmental overlay zones to apply to all undeveloped floodplains along the Willamette River Central Reach, Fanno Creek, and Tryon Creek, and (3) minimum tree replacement ratio of 3:1 in the combined flood hazard area, which includes the FEMA 100-year floodplain and the area expected to be flooded due to a February 1996-type flood (the most significant recent flooding event in Portland).

Since the release of the FEMA Biological Opinion in 2016, City staff have consistently attended FEMA work sessions and met with FEMA staff to understand the FEMA Biological Opinion directives and coordinate the City’s response. The development of the Floodplain Resilience Plan amendments was also informed by workshops and meetings with State of Oregon Department of Land Conservation and Development (DCLD) staff. City staff also met with staff from Metro, Portland’s regional government, at key points in plan development.

The Floodplain Resilience Plan amendments are consistent with Policy 3.77.

**Policy 3.78 Columbia River.** Enhance the role of the Columbia River for river dependent industry, fish and wildlife habitat, subsistence and commercial fisheries, floating- and land-based neighborhoods, recreational uses, and water transportation.

**106. Finding:** The Floodplain Resilience Plan amendments protect and enhance floodplain and riparian habitat along the Willamette and Columbia Rivers for the 16 threatened and endangered species identified in the FEMA Biological Opinion. Amendments to the Environmental overlay zones chapter (33.430) that apply to the Columbia River floodplain narrow tree and vegetation removal allowed without City approval and require a minimum of three trees to be planted for each tree removed. The Floodplain Resilience Plan amendments will enhance habitat connectivity and preserve natural resources to the benefit of fish species in the Columbia River. The amendments are consistent with this policy.



**Policy 3.79 Willamette River North Reach.** Enhance the role of the Willamette River North Reach for river dependent industry, fish and wildlife habitat, and as an amenity for riverfront neighborhoods and recreational users.

**107. Finding:** The Floodplain Resilience Plan amendments make no changes in the Willamette River North Reach. Therefore, these policies are not applicable.

**Policy 3.80. Willamette River Central Reach.** Enhance the role of the Willamette River Central Reach as the Central City and region’s primary riverfront destination for recreation, history and culture, emergency response, water transportation, and as habitat for fish and wildlife.

**Policy 3.81 Willamette River South Reach.** Enhance the role of the Willamette River South Reach as fish and wildlife habitat, a place to recreate, and as an amenity for riverfront neighborhoods and others.

**Policy 3.82. Willamette River Greenway.** Maintain multi-objective plans and regulations to guide development, infrastructure investments, and natural resource protection and enhancement within and along the Willamette Greenway.

**108. Finding:** Policies 3.80-3.82 describe the desired characteristics of the Willamette River Central Reach and South Reach and the plans and regulations that manage development along the river. The Floodplain Resilience Plan amendments update floodplain regulations to ensure that development in the floodplain addresses flood risk from a changing climate and protects wildlife and habitat in both reaches. The replacement of the existing 1996 Flood Inundation Area in the City’s combined flood hazard area with the Modeled Willamette River 1996 Flood Extent along the Willamette River reflects best available science and provides a more accurate estimation of the impact area of a future 1996 flood-like event. A map of the extent of the Modeled Willamette River 1996 Flood Extent and documentation of the methodology used to create it are included in the record. Upon implementation of the Zoning Code amendments, this extent will be available as a GIS layer for use by applicants as a part of future development proposals.

Amendments in the Willamette River Central Reach (33.475) establish the riparian buffer area, which includes the floodplain within 170 feet of the ordinary high water mark. In this area, proposed development must demonstrate no net-loss in natural resources while also demonstrating an improvement to at least one of two floodplain-related functions, as defined in the City’s Natural Resources Inventory. The amendments also expand the River Environmental overlay zone in the Central Reach to encompass all undeveloped floodplains landward of the riparian buffer area that are not currently in the River Environmental overlay zone.

In the Willamette River South Reach, the plan amendments update the application of the River Environmental overlay zone and extent of the riparian buffer area to incorporate areas identified in the Modeled Willamette River 1996 Flood Extent, a hydraulic model of a February 1996-like flood prepared by City of Portland Bureau of Environmental Services staff in collaboration with U.S. Army Corps of Engineers staff. These updates ensure that areas that are likely to be inundated during a February 1996-like flood event (which is expected to be more common due to climate change) will be protected from future habitat loss as a result of development through the River Environmental overlay and, more specifically, the riparian buffer area requirements.

The Floodplain Resilience Plan amendments draw on guidance provided in the FEMA Biological Opinion on the NFIP. The strategies in the FEMA Biological Opinion ensure that future floodplain development allowed by the NFIP will not harm endangered and threatened salmon and steelhead species. As a result, the amendments strengthen implementation of existing plans that apply to the Willamette River Central Reach and Willamette River South Reach and protect and, in



the areas nearest the river, expand fish and wildlife habitat in floodplains. The amendments are consistent with these policies.

### **Central City Pattern Area**

**Policy 3.83. Central City districts.** Enhance the distinct identities of the Central City's districts.

**Policy 3.84. Central City river orientation.** Enhance and strengthen access and orientation to the Willamette River in the Central City and increase river-focused activities.

**Policy 3.85. Central City pedestrian system.** Maintain and expand the Central City's highly interconnected pedestrian system.

**Policy 3.86. Central City bicycle system.** Expand and improve the Central City's bicycle system.

**109. Finding:** Policies 3.83-3.86 aim to enhance the identity of Central City districts, strengthen the relationship between the Central City and the Willamette River through increased access and orientation, and expand the bicycle and pedestrian system. The Floodplain Resilience Plan amendments in the Willamette River Central Reach do not affect any of these characteristics in the Central City. Therefore, these policies do not apply.

### **Inner Neighborhoods Pattern Area**

**Policy 3.87 Inner Neighborhoods main streets.** Maintain and enhance the Streetcar Era pattern of street-oriented buildings along Civic and Neighborhood corridors.

**Policy 3.88 Inner Neighborhoods street patterns.** Preserve the area's urban fabric of compact blocks and its highly interconnected grid of streets.

**Policy 3.89 Inner Neighborhoods infill.** Fill gaps in the urban fabric through infill development on vacant and underutilized sites and in the reuse of historic buildings on adopted inventories.

**Policy 3.90 Inner Neighborhoods active transportation.** Use the extensive street, sidewalk, and bikeway system and multiple connections to the Central City as a key part of Portland's active transportation system

**Policy 3.91 Inner Neighborhoods residential areas.** Continue the patterns of small, connected blocks, regular lot patterns, and streets lined by planting strips and street trees in Inner Neighborhood residential areas.

**110. Finding:** Policies 3.87 through 3.91 provide direction on the desired characteristics and functions of the Inner Neighborhoods Pattern Area. The Inner Neighborhoods were developed and shaped during the Streetcar Era of the late 19th and early 20th centuries. The Inner Neighborhoods are characterized by a regular pattern of neighborhood business districts located along former streetcar streets interspersed with residential areas. These policies express the overall design approach in Inner Neighborhoods. They address block patterns, infill development, building orientation and design, and active transportation. The Floodplain Resilience Plan amendments include small areas of the inner neighborhoods along the Willamette River South Reach. Plan amendments protect riparian resources and habitat for use and safety of current and future residents, property owners, tenants, visitors, and wildlife. Generally, the Floodplain Resilience Plan amendments do not alter the ability to maintain or enhance the urban fabric, street-oriented buildings or filling in the gaps of urban fabric. Plan amendments do not address infill development, reuse of historic buildings, or the active transportation system. Therefore, the amendments are consistent with these policies.



## **Eastern Neighborhoods Pattern Area**

**Policy 3.92 Eastern Neighborhoods street, block, and lot pattern.** Guide the evolving street and block system in the Eastern Neighborhoods in ways that build on positive aspects of the area’s large blocks, such as opportunities to continue mid-block open space patterns and create new connections through blocks that make it easier to access community destinations.

- A. **North-South Transit.** Support development of, access to, and service enhancement for North-South transit.
- B. **Alleyways.** Promote and guide the implementation of alley improvements that result in alleys that are safe, well maintained, and an asset for the community.

**Policy 3.93 Eastern Neighborhoods site development.** Require that land be aggregated into larger sites before land divisions and other redevelopment occurs. Require site plans which advance design and street connectivity goals.

**111. Finding:** The Floodplain Resilience Plan amendments make no changes that would affect the Eastern Neighborhood Pattern Area street, block, and lot pattern or site development approaches. Policy 3.92 and 3.93 are not applicable.

**Policy 3.94 Eastern Neighborhoods trees and natural features.** Encourage development and right-of-way design that preserves and incorporates Douglas fir trees and groves, and that protects the area’s streams, forests, wetlands, steep slopes, and buttes.

**112. Finding:** The Floodplain Resilience Plan amendments protect riparian resources and habitat while also aiming to reduce flood risk for residents and property owners. Plan amendments update the requirements of the Environmental overlay zones chapter (33.430) for properties in the Johnson Creek floodplain to manage tree and vegetation removal and maintenance to achieve a no net-loss in floodplain habitat functions, as defined in the FEMA Biological Opinion. This includes limiting tree and vegetation removal that is allowed without City approval and increasing the minimum tree replacement required when a tree is removed in the Environmental overlay zone. This will preserve neighborhood trees and natural features, protecting natural resources and waterways in the Eastern Neighborhoods Pattern Area. Therefore, the amendments are consistent with Policy 3.94.

**Policy 3.95 Eastern Neighborhoods buttes.** Enhance public views of the area’s skyline of buttes and stands of tall Douglas fir trees.

**Policy 3.96 Eastern Neighborhoods corridor landscaping.** Encourage landscaped building setbacks along residential corridors on major streets.

**Policy 3.97 Eastern Neighborhoods active transportation.** Enhance access to centers, employment areas, and other community destinations in Eastern Neighborhoods by ensuring that corridors have safe and accessible pedestrian and bicycle facilities and creating additional secondary connections that provide low-stress pedestrian and bicycle access.

**113. Finding:** The Floodplain Resilience Plan amendments are focused on the Johnson Creek floodplain within the Eastern Neighborhoods Pattern Area. The amendments make no changes that would affect public views, corridor landscaping on major streets or active transportation options. Policies 3.95-3.97 are not applicable.



## **Western Neighborhoods Pattern Area**

**Policy 3.98 Western Neighborhoods village character.** Enhance the village character of the Western Neighborhoods' small commercial districts and increase opportunities for more people to live within walking distance of these neighborhood anchors.

- A. Prioritize new sidewalk connections.** Prioritize adding sidewalks where there are none over expanding/ widening existing connections.
- B. North-South transit.** Support development of, access to, and service enhancement for North-South transit.

**Policy 3.99 Western Neighborhoods active transportation.** Provide safe and accessible pedestrian and bicycle connections, as well as off-street trail connections, to and from residential neighborhoods.

**114. Finding:** The Floodplain Resilience Plan amendments in the Western Neighborhood Pattern Area are focused on the floodplains along Fanno Creek and Tryon Creek. The amendments make no changes that would affect the village character goals of Policy 3.98 or active transportation network in the area. Therefore, these policies are not applicable.

**Policy 3.100 Western Neighborhoods development.** Encourage new development and infrastructure to be designed to minimize impacts on the area's streams, ravines, and forested slopes.

**Policy 3.101 Western Neighborhoods habitat corridors.** Preserve, enhance, and connect the area's network of habitat areas and corridors, streams, parks, and tree canopy.

**115. Finding:** The Floodplain Resilience Plan amendments apply the Environmental Conservation overlay zone to undeveloped floodplains along Fanno Creek and Tryon Creek that are not currently in the Environmental Conservation overlay zone (33.430). Development in the Environmental overlay zone can occur that avoids, minimizes and mitigates impacts to waterways, preserves vegetation, and protects wildlife habitat corridors. Amendments to the Environmental Zones chapter (33.430) that apply to the Fanno Creek and Tryon Creek floodplains narrow tree and vegetation removal allowed without City approval and require a minimum of three trees to be planted for each tree removed. By protecting natural resources and allowing for limited development that avoids natural resources or mitigates for the impacts to natural resources, the environmental overlay zone encourages development that is context-sensitive, integrates with nature and that protects and preserves green infrastructure of the waterways and their floodplains in the Western Neighborhoods Pattern Area. Therefore, the amendments are consistent with Policy 3.100 and 3.101.

**Policy 3.102 Western Neighborhoods trails.** Develop pedestrian-oriented connections and enhance the Western Neighborhoods' distinctive system of trails to increase safety, expand mobility, access to nature, and active living opportunities in the area.

- A. TDM strategies.** Explore and emphasize Transportation Demand Management strategies and tools, that function in spite of unique topographic conditions of the West Hills, to provide effective options for commuters while reducing carbon emissions, improving neighborhood livability and cycling safety, and protecting important natural resources.
- B. Forest Park natural resources.** Protect the ecological quality and function of natural Forest Park's natural resources in the design and development of transportation projects in or near the park and avoid, minimize, then mitigate adverse impacts to wildlife, habitat, and riparian corridors.
- C. Focus for active transportation.** Primarily focus sidewalk and bicycle route improvements in (and



in close proximity to) the designated Centers and Corridors of the Comp Plan.

- D. **Filling gaps in connections.** Fill gaps in important access connections, including exploring traditional ROW acquisition and partnerships with other City bureaus.
  - E. **Accessible routes.** Improve accessibility/create parallel routes in some cases (for motor vehicles, bicycles and pedestrians, and/or both). Explore what existing facilities and connections most merit upgrades or secondary accessible routes.
- 116. Finding:** The Floodplain Resilience Plan amendments in the Western Neighborhood Pattern Area are focused on the floodplains along Fanno Creek and Tryon Creek. The amendments make no changes that would affect the provision of trails in the Western Neighborhood Pattern Area. Therefore, Policy 3.102 is not applicable



## Chapter 4: Design and Development

**Goal 4.A: Context-sensitive design and development.** New development is designed to respond to and enhance the distinctive physical, historic, and cultural qualities of its location, while accommodating growth and change.

**117. Finding:** The Design and Development chapter focuses on the specifics of the built environment. City Council interprets this goal as calling for the design of new development to consider and respond to the context where the development is taking place. This context includes physical characteristics, as well as the history and culture of places. Zoning and development standards are only one of many ingredients that define a neighborhood’s context. In addition to the architecture of its homes and the people who inhabit them, the context of a neighborhood also concerns the spaces in between – the natural environment, open space, plants, access to sunlight, and more. Street layout, topography, existing vegetation and mix of residential, commercial and open space also have a strong influence. In addition, a neighborhood’s historical narrative, such as influences from major infrastructure or institutional investments or changing socio-economic compositions, also define the distinct attributes of different neighborhoods. City Council interprets response to context to not be about replicating what exists, but for development and the regulations that shape this development to be informed by context. The Floodplain Resilience Plan amendments support this policy through updates to the City’s Zoning Code and maps. Plan amendments apply floodplain regulations to areas throughout the City, protecting people and property against the effects of flooding while also protecting habitat for wildlife and fish species from development impacts. By protecting natural resources and allowing for limited development that avoids natural resources or mitigates for the impacts to natural resources, plan amendments encourage development that is context-sensitive, integrates with nature, and that protects and preserves green infrastructure. Therefore, this goal is met.

**Goal 4.B: Historic and cultural resources.** Historic and cultural resources are integral parts of an urban environment that continue to evolve and are preserved.

**118. Finding:** City Council interprets this goal as recognizing that Portland’s built environment will and should continue to change over time, but that it is important that historic and cultural resources be preserved as part of this changing environment. City Council interprets “historic and cultural resources” to refer to “historic resources” as defined in the Comprehensive Plan, which indicates that these are designated historic resources that include “historic landmarks, conservation landmarks, historic districts, conservation districts, and structures or objects that are identified as contributing to the historic significance of a district, including resources that are listed in the National Register of Historic Places.” The Floodplain Resilience Plan amendments do not propose changes to existing citywide historic resources regulations, therefore this goal does not apply.

**Goal 4.C: Human and environmental health.** Neighborhoods and development are efficiently designed and built to enhance human and environmental health: they protect safety and livability; support local access to healthy food; limit negative impacts on water, hydrology, and air quality; reduce carbon emissions; encourage active and sustainable design; protect wildlife; address urban heat islands; and integrate nature and the built environment.

**119. Finding:** City Council interprets this goal as calling for the protection and enhancement of human and environmental health as objectives that should guide City actions related to the built environment. City Council interprets development that is “efficiently designed” as designed to be resource- and cost-efficient. Consistent with Goal 4.C., the Floodplain Resilience Plan amendments further human and environmental health through the appropriate regulation of development in



the floodplain. The Floodplain Resilience Plan amendments recognize that the City of Portland, situated at the confluence on the Columbia and Willamette Rivers with tributaries, contains important areas of habitat for threatened and endangered salmon and steelhead. Plan amendments draw on guidance from the 2016 FEMA Biological Opinion on expanding and improving floodplain habitat for salmon and steelhead while reducing future flood risk by ensuring capacity for flood waters along rivers and streams.

Along the Willamette River, the plan extends the riparian buffer area requirements currently applied in the South Reach to the Central Reach of the river. In the riparian buffer area, which includes floodplains within 170 feet of the ordinary high water mark, proposed development must address natural resources impacts and incorporate measures to improve fish habitat along the riverbank, such as removal of structures or rip rap, creation of shallow water habitat, and other strategies. The River Environmental overlay zone is applied to all of the riparian buffer area in the Central Reach. The Floodplain Resilience Plan amendments also extend the River Environmental overlay zone to all undeveloped floodplain landward of the riparian buffer area. Floodplain Resilience Plan amendments also include new standards for tree and vegetation removal and maintenance in the South Waterfront area that are consistent those that already apply in the Willamette River Central Reach and South Reach. This amendment ensures that trees and vegetation in the floodplain in South Waterfront will be maintained and expanded over time.

Floodplain Resilience Plan amendments also extend the Environmental Conservation overlay zone (33.430) to undeveloped floodplains along Fanno Creek and Tryon Creek not currently in an Environmental overlay zone (either Environmental Conservation or Environmental Protection). Plan amendments include updating the requirements in the Environmental overlay zones chapter (33.430) to limit vegetation that is allowed to be removed through exemptions and increase tree replacement requirements to a minimum 3:1 ratio. In the riparian buffer area, development is required to mitigate all impacts on identified natural resources and demonstrate an improvement in one of two riparian functions, as defined in the City's Natural Resources Inventory. Mitigation requirements include planting of native vegetation and a mix of trees, shrubs and groundcover, which will improve habitat quality, quantity, and connectivity and maintain species diversity.

To address human health impacts, the Floodplain Resilience Plan utilizing the existing Metro Title 3 map (referred to as the 1996 Flood Inundation Area) to identify flood risk areas, while also supplementing the Metro Title 3 map with a recently-completed hydraulic model of a Willamette River flood with characteristics similar to the one experienced in the Portland region in February of 1996. This new model, referred to as the Modeled Willamette River 1996 Flood Extent, utilizes best available science and serves as a more up-to-date estimate of flood risk along the Willamette River, Columbia Slough and a stretch of the Columbia River near the confluence with the Willamette River. The model provides new estimates of the extents and elevation of a 1996-like flood event using current river bathymetry, upland topography and development patterns.

Where relevant, the model is used in place of the existing Metro Title 3 1996 Flood Inundation Area along the Willamette River and is incorporated as a referenced floodplain in the City's "combined flood hazard area" map. The combined flood hazard area map serves as a basis for the application of environmentally-focused overlay zones in the city's floodplains.

Collectively, these measures will contribute to the achievement of Goal 4.C.

**Goal 4.D: Urban resilience.** Buildings, streets, and open spaces are designed to ensure long-term resilience and to adjust to changing demographics, climate, and economy, and withstand and recover from natural disasters.



- 120. Finding:** City Council interprets this goal as calling for the protection and enhancement of human and environmental health as objectives that should guide City actions related to the built environment. City Council interprets development that is “efficiently designed” as designed to be resource- and cost-efficient. The Floodplain Resilience Plan recognizes floodplains as providing essential ecological services for flood management in a changing climate. Vegetated areas of floodplains including trees, shrubs, and herbaceous vegetation absorb and filter water, reducing surface runoff. Floodplain vegetation also stores and slows the flow of floodwaters. When this vegetation is removed and replaced with impervious surfaces, the capacity to store and slow floodwater is lost, and the impact of flooding is exacerbated.

Plan amendments include the application of the River Environmental overlay zone and Environmental Conservation overlay zone, which ensure the protection and conservation of waterways, floodplains, and riparian areas by encouraging environmentally sensitive development and requiring mitigation when development has a detrimental impact on floodplains and/or natural resources. Plan amendments include updating the requirements in the Environmental overlay zones chapter (33.430) to limit vegetation that is allowed to be removed through exemptions and increase tree replacement requirements to a minimum 3:1 ratio. Mitigation requirements include planting of native vegetation and a mix of trees, shrubs and groundcover, which will provide the benefits explained above.

The Floodplain Resilience Plan amendments contribute to meeting Goal 4.D.

## Context

**Policy 4.1. Pattern areas.** Encourage building and site designs that respect the unique built, natural, historic, and cultural characteristics of Portland’s five pattern areas described in Chapter 3: Urban Form.

**Policy 4.2. Community identity.** Encourage the development of character-giving design features that are responsive to place and the cultures of communities.

**Policy 4.3. Site and context.** Encourage development that responds to and enhances the positive qualities of site and context — the neighborhood, the block, the public realm, and natural features.

- 121. Finding:** Policies 4.1 through 4.3 provide direction on how the context of where development occurs should be considered in City implementation approaches – including how building and site design respect pattern areas and respond to the physical character-giving aspect of place and context. These policies are implemented by site and building development standards in the Zoning Code, and in some situations through design review guidelines.

Floodplain Resilience Plan amendments apply to all of the City’s five pattern areas to varying degrees. In the Western Neighborhoods pattern area along Fanno Creek and Tryon Creek, plan amendments include applying the Environmental Conservation overlay zone along undeveloped floodplains that are not currently within the overlay zone. The Western Neighborhoods and Inner Neighborhoods pattern areas include portions of the Willamette River South Reach. Plan amendments in the South Reach update the boundary of the existing riparian buffer area and River Environmental overlay zone to include the areas identified in the Modeled Willamette River 1996 Flood Extent and 100-year Floodplain and remove the River Environmental overlay zone from developed floodplains landward of the riparian buffer area. These modifications in the South Reach will ensure that future development protects key floodplain areas and reduces flood risk. A map of the extent of the Modeled Willamette River 1996 Flood Extent and documentation of the methodology used to create it are included in the record. Upon implementation of the Zoning Code amendments, this extent will be available as a GIS layer for use by applicants as a part of



future development proposals. The Central City pattern area encompasses the Willamette River Central Reach as well as the South Waterfront Subdistrict. In the Willamette River Central Reach, plan amendments Adopt a new Zoning Code map to identify the Central Reach riparian buffer area and apply the existing riparian buffer area requirements (located in Zoning Code chapter 33.475, River Overlay Zones) to the area shown in the map. Development proposed in the riparian buffer area is required to mitigate all impacts on identified natural resources and demonstrate an improvement in one of two floodplain-related riparian functions. Improvements to floodplain functions are approved through land use review. Central Reach amendments also Expand the River Environmental overlay zone to encompass the proposed riparian buffer area and any undeveloped floodplain landward of the riparian buffer area. In the South Waterfront Subdistrict, plan amendments add new standards for tree and vegetation removal and maintenance, similar to those in the River Overlay Zones chapter (33.475). Plan amendments in this area also include code clarification and updates to the Greenway land use review process.

The Inner Neighborhood pattern area also includes a portion of Johnson Creek, as does the Eastern Neighborhood pattern area. Plan amendments in Johnson Creek update the Environmental overlay zone chapter (33.430) to limit, in some cases, when a tree can be removed through an exemption and establish a requirement that at least three trees are to be planted whenever a tree is removed in the floodplain.

The designation of pattern areas in the city acknowledges that different areas of Portland have different characteristics and cannot be treated the same. Similarly, the Floodplain Resilience Plan recognizes that the different watersheds and waterways have unique characteristics and regulatory structures that guide development within and along them. Therefore, the amendments are consistent with Policies 4.1-4.3.

**Policy 4.4. Natural features and green infrastructure.** Integrate natural and green infrastructure such as trees, green spaces, ecoroofs, gardens, green walls, and vegetated stormwater management systems, into the urban environment. Encourage stormwater facilities that are designed to be a functional and attractive element of public spaces, especially in centers and corridors.

**122. Finding:** This policy calls for including natural elements, such as trees and green infrastructure, including ecoroofs and vegetated stormwater facilities, as part of the urban environment – both as part of development projects and within public spaces, such as streets. The Floodplain Resilience Plan recognizes floodplains as providing essential ecological services for flood management in a changing climate. Vegetated areas of floodplains, including with trees, shrubs, and herbaceous vegetation, absorb and filter water, reducing surface runoff. Floodplain vegetation also stores and slows the flow of floodwaters. When this vegetation is removed and replaced with impervious surfaces, the capacity to store and slow floodwater is lost, and the impact of flooding is exacerbated. Plan amendments to the Environmental Zones chapter (33.430) limit in some cases when a tree can be removed through an exemption and require that at least three trees be planted whenever a tree is removed in the floodplain. Through the directive to avoid, minimize and mitigate development impacts, the River Environmental overlay zone along the Willamette River and Environmental overlay zones (Environmental Protection and Environmental Conservation) elsewhere in the city preserve natural resources and are expected to increase trees and fish and wildlife habitat over time. Plan amendments apply throughout the city, including dense environments such as the Central City. Plan amendments balance protecting and integrating natural resources and their functions as green infrastructure with allowing for development that is environmentally sensitive. Therefore, the amendments are consistent with this policy.



**Policy 4.5. Pedestrian-oriented design.** Enhance the pedestrian experience throughout Portland through public and private development that creates accessible, safe, and attractive places for all those who walk and/or use wheelchairs or other mobility devices.

**Policy 4.6. Street orientation.** Promote building and site designs that enhance the pedestrian experience with windows, entrances, pathways, and other features that provide connections to the street environment.

**Policy 4.7. Development and public spaces.** Guide development to help create high-quality public places and street environments while considering the role of adjacent development in framing, shaping, and activating the public space of streets and urban parks.

**Policy 4.8. Alleys.** Encourage the continued use of alleys for parking access, while preserving pedestrian access. Expand the number of alley-facing accessory dwelling units.

**123. Finding:** The Floodplain Resilience Plan amendments do not address pedestrian-oriented design, street orientation, development of public spaces, or alleys. Therefore, these policies do not apply.

**Policy 4.9. Transitional urbanism.** Encourage temporary activities and structures in places that are transitioning to urban areas to promote job creation, entrepreneurship, active streets, and human interaction.

**124. Finding:** The Council interprets this policy as relating to temporary commercial activities and public gathering places, rather than residential uses that are the focus of the single-dwelling zones. The Floodplain Resilience Plan amendments have no effect on the City's ability to support transitional urbanism. This policy does not apply.

## **Health and safety**

**Policy 4.10. Design for active living.** Encourage development and building and site design that promotes a healthy level of physical activity in daily life.

**125. Finding:** The Floodplain Resilience Plan amendments do not address active living. However, there are regional and local trails within or located near floodplains. Plan amendments protect floodplains and resources on individual sites and also provide benefits to all of Portland. Plan amendments protect floodplain vegetation and trees, providing a safe and comfortable environment, while development standards allow for the maintenance of existing trails. Therefore, the amendments are consistent with Policy 4.10.

**Policy 4.11. Access to light and air.** Provide for public access to light and air by managing and shaping the height and mass of buildings while accommodating urban-scale development.

**Policy 4.12. Privacy and solar access.** Encourage building and site designs that consider privacy and solar access for residents and neighbors while accommodating urban-scale development.

**Policy 4.13. Crime-preventive design.** Encourage building, site, and public infrastructure design approaches that help prevent crime.

**Policy 4.14. Fire prevention and safety.** Encourage building and site design that improves fire prevention, safety, and reduces seismic risks.

**126. Finding:** Policies 4.11 through 4.14 provide direction on the promotion of health and safety in development. They address issues such as site planning, solar access, and design approaches that reduce crime or mitigate seismic hazards. The Floodplain Resilience Plan amendments do not



affect any development/design standards or programs that implement these policies. Therefore, policies 4.11-4.14 do not apply.

## **Residential areas**

**Policy 4.15. Residential area continuity and adaptability.** Encourage more housing choices to accommodate a wider diversity of family sizes, incomes, and ages, and the changing needs of households over time. Allow adaptive reuse of existing buildings, the creation of accessory dwelling units, and other arrangements that bring housing diversity that is compatible with the general scale and patterns of residential areas.

**127. Finding:** The Floodplain Resilience Plan amendments do not include any objectives or policies related to residential housing continuity or adaptability. Therefore, Policy 4.15 does not apply.

**Policy 4.16. Scale and patterns.** Encourage design and development that complements the general scale, character, and natural landscape features of neighborhoods. Consider building forms, scale, street frontage relationships, setbacks, open space patterns, and landscaping. Allow for a range of architectural styles and expression.

**128. Finding:** The Floodplain Resilience Plan amendments apply floodplain regulations that protect the ecological functions of floodplains and habitat for threatened and endangered species. As described in the findings for Policy 4.3 and other policies in this chapter, plan amendments apply regulations to different areas of Portland’s waterways with consideration of their unique characteristics. The requirements of the River Environmental and Environmental Conservation overlay zones, the primary tools of implementation for the Floodplain Resilience Plan amendments, ensure that development is sensitive to the site’s context and natural resources. Development that has detrimental impacts on resources in these areas must mitigate for those impact. Plan amendments do not address architectural styles and expression. The amendments are consistent with this policy.

**Policy 4.17. Demolitions.** Encourage alternatives to the demolition of sound housing, such as rehabilitation and adaptive reuse, especially affordable housing, and when new development would provide no additional housing opportunities beyond replacement.

**Policy 4.18. Compact single-family options.** Encourage development and preservation of small resource-efficient and affordable single-family homes in all areas of the city.

**Policy 4.19. Resource efficient and healthy residential design and development.** Support resource efficient and healthy residential design and development.

**129. Finding:** City Council interprets the residential areas policies (policies 4.15 through 4.19) as applying to the lower-density residential zones located outside centers, including the single-dwelling zones. Council interprets “compatible” to mean two things that are able to exist or occur together without conflict. The Floodplain Resilience Plan amendments do not change development standards that apply to demolition of housing, preservation of small affordable single-dwelling homes and resource efficient and healthy residential design and development. Therefore amendments 4.17-4.19 do not apply.

## **Design and development of centers and corridors**

**Policy 4.20. Walkable scale.** Focus services and higher-density housing in the core of centers to support a critical mass of demand for commercial services and more walkable access for customers.



**Policy 4.21. Street environment.** Encourage development in centers and corridors to include amenities that create a pedestrian-oriented environment and provide places for people to sit, spend time, and gather.

**Policy 4.22. Relationship between building height and street size.** Encourage development in centers and corridors that is responsive to street space width, thus allowing taller buildings on wider streets.

**Policy 4.23. Design for pedestrian and bicycle access.** Provide accessible sidewalks, high-quality bicycle access, and frequent street connections and crossings in centers and corridors.

**Policy 4.24. Drive-through facilities.** Prohibit drive through facilities in the Central City, and limit new development of new ones in the Inner Ring Districts and centers to support a pedestrian-oriented environment.

**Policy 4.25. Residential uses on busy streets.** Improve the livability of places and streets with high motor vehicle volumes. Encourage landscaped front setbacks, street trees, and other design approaches to buffer residents from street traffic.

**Policy 4.26. Active gathering places.** Locate public squares, plazas, and other gathering places in centers and corridors to provide places for community activity and social connections. Encourage location of businesses, services, and arts adjacent to these spaces that relate to and promote the use of the space.

**130. Finding:** The Floodplain Resilience Plan amendments do not include objectives or policies related to walkable scale housing, street environments, the relationship between building height and street size, pedestrian or bicycle access, drive through facilities, residential uses on busy streets, or active gathering spaces; therefore, Policies 4.20-4.26 do not apply.

**Policy 4.27. Protect defining features.** Protect and enhance defining places and features of centers and corridors, including landmarks, natural features, and historic and cultural resources.

**131. Finding:** The only center where the Floodplain Resilience Plan amendments will apply is in the Central City and do not affect established corridors. The Floodplain Resilience Plan recognizes Portland's waterways and floodplains as defining features. Floodplains provide critical ecosystem services and act as green infrastructure by providing essential ecological services for flood management and for the health of waterbodies. The amendments will ensure that trees and vegetation in the Willamette River Central Reach and South Waterfront floodplains are maintained along with development. Floodplain vegetation stores and slows the flow of floodwaters. When this vegetation is removed and replaced with impervious surfaces, the capacity to store and slow floodwater is lost and the impact of flooding is exacerbated. The riparian buffer area requirements in the Willamette River Central Reach will improve and expand habitat close to the river, a key area for threatened and endangered species. These amendments will integrate nature and green infrastructure into the Central City center. Therefore, the amendments are consistent with this policy.

**Policy 4.28. Historic buildings in centers and corridors.** Protect and encourage the restoration and improvement of historic resources in centers and corridors.

**Policy 4.29. Public art.** Encourage new development and public places to include design elements and public art that contribute to the distinct identities of centers and corridors, and that highlight the history and diverse cultures of neighborhoods.

**132. Finding:** The Floodplain Resilience Plan amendments do not include objectives or policies related to preservation of historic buildings or inclusion of public art during development. Policies 4.28 and 4.29 do not apply.



**Policy 4.30. Scale transitions.** Create transitions in building scale in locations where higher-density and higher-intensity development is adjacent to smaller-scale single-dwelling zoning. Ensure that new high-density and large-scale infill development adjacent to single dwelling zones incorporates design elements that soften transitions in scale and limit light and privacy impacts on adjacent residents.

**Policy 4.31. Land use transitions.** Improve the interface between non-residential uses and residential uses in areas where commercial or employment uses are adjacent to residentially-zoned land.

**Policy 4.32. Industrial edge.** Protect non-industrially zoned parcels from the adverse impacts of facilities and uses on industrially zoned parcels using a variety of tools, including but not limited to vegetation, physical separation, land acquisition, and insulation to establish buffers between industrial sanctuaries and adjacent residential or mixed-use areas to protect both the viability of long-term industrial operations and the livability of adjacent areas.

**133. Finding:** Policies 4.30 through 4.32 provide direction regarding transitions between different types of land uses and development scales. These policies are implemented by regulations in the higher-density mixed-use, multi-dwelling, employment, and institutional zones that require transitions in building height, landscaped buffers, and limitations in activities adjacent to single-dwelling zoning. The Floodplain Resilience Plan amendments do not include objectives or policies related to scale transitions, land use transitions, or industrial edges. Therefore, Policies 4.30-4.32 do not apply.

### Off-site impacts

**Policy 4.33. Off-site impacts.** Limit and mitigate public health impacts, such as odor, noise, glare, light pollution, air pollutants, and vibration that public facilities, land uses, or development may have on adjacent residential or institutional uses, and on significant fish and wildlife habitat areas. Pay attention to limiting and mitigating impacts to under-served and under-represented communities.

**134. Finding:** Policy 4.33 addresses impacts that can negatively affect adjacent residential and institutional uses, as well as significant fish and wildlife habitat. The Floodplain Resilience Plan amendments protect against degradation of floodplain habitat to maintain their ecosystem services and the benefits they provide to threatened and endangered fish species. Plan amendments achieve this primarily through the application of the River Environmental and Environmental Conservation overlay zones. These environmentally-focused overlay zones require that development avoid, minimize, and then mitigate the unavoidable impacts of development. Through tree and vegetation management requirements in the floodplain, trees and other vegetation are maintained or expanded and stormwater is effectively managed on site. Without these requirements, vegetation removal can exacerbate the impact of flooding due to an increase in impervious surfaces.

The Floodplain Resilience Plan amendments also incorporate a recently-completed hydraulic model of a Willamette River flood with characteristics similar to the one experienced in the Portland region in February of 1996. This new model, referred to as the Modeled Willamette River 1996 Flood Extent, serves as a more up-to-date estimate of flood risk along the Willamette River, Columbia Slough and a stretch of the Columbia River near the confluence with the Willamette River. The model provides new estimates of the extents and elevation of a 1996-like flood event using current river conditions, upland topography and development patterns. Use of this new flood risk map will reduce the potential for the shifting of flooding impacts to neighboring properties with new development. Therefore, the amendments are consistent with this policy.



**Policy 4.34. Auto-oriented facilities, uses, and exterior displays.** Minimize the adverse impacts of highways, auto-oriented uses, vehicle areas, drive-through areas, signage, and exterior display and storage areas on adjacent residential uses.

**Policy 4.35. Noise impacts.** Encourage building and landscape design and land use patterns that limit and/or mitigate negative noise impacts to building users and residents, particularly in areas near freeways, regional truckways, major city traffic streets, and other sources of noise.

**Policy 4.36. Air quality impacts.** Encourage building and landscape design and land use patterns that limit and/or mitigate negative air quality impacts to building users and residents, particularly in areas near freeways, regional truckways, high traffic streets, and other sources of air pollution.

**Policy 4.37. Diesel emissions.** Encourage best practices to reduce diesel emissions and related impacts when considering land use and public facilities that will increase truck or train traffic.

**135. Finding:** Policies 4.33 through 4.40 generally address impacts that can negatively affect adjacent residential uses and areas. The City Council interprets these policies to apply to non-residential uses, such as those allowed in commercial and employment zones, that can have negative public health impacts on adjacent residential uses. They are implemented through a variety of design and impact-related performance standards in the Zoning Code. Current base zone development standards address potential off-site impacts through existing setback requirements, tree density standards, limitations on commercial uses and signage. Offsite impacts are additionally addressed in Chapter 33.262. Existing regulations Auto-oriented facilities, noise and air quality impacts and diesel emissions are unaffected by the Floodplain Resilience Plan amendments. Policies 4.34-4.37 do not apply.

**Policy 4.38. Light pollution.** Encourage lighting design and practices that reduce the negative impacts of light pollution, including sky glow, glare, energy waste, impacts to public health and safety, disruption of ecosystems, and hazards to wildlife.

**136. Finding:** The Floodplain Resilience Plan amendments that apply in the South Waterfront Subdistrict of the Central City Plan District clarify where the exterior lighting requirements apply. In the past, these requirements have only been applied to the South Waterfront Greenway Area (the area 100 feet landward of top of bank). However, the original intent of the requirements for the subdistrict was to apply the exterior lighting requirements to all of the South Waterfront Greenway Area. The amendments make that clear and will reduce light pollution in the area, resulting in benefits for people, fish and wildlife. The amendments are consistent with this policy.

**Policy 4.39. Airport noise.** Partner with the Port of Portland to require compatible land use designations and development within the noise-affected area of Portland International Airport, while providing disclosure of the level of aircraft noise and mitigating the potential impact of noise within the affected area.

**Policy 4.40. Telecommunication facility impacts.** Mitigate the visual impact of telecommunications and broadcast facilities near residentially zoned areas through physical design solutions.

**137. Finding:** The Floodplain Resilience Plan amendments will have no effect on the City's partnership with the Port of Portland to address airport noise or the impacts of telecommunication facilities. Policies 4.39 and 4.40 do not apply.



## Scenic resources

**Policy 4.41. Scenic resources.** Enhance and celebrate Portland’s scenic resources to reinforce local identity, histories, and cultures and contribute toward way-finding throughout the city. Consider views of mountains, hills, buttes, rivers, streams, wetlands, parks, bridges, the Central City skyline, buildings, roads, art, landmarks, or other elements valued for their aesthetic appearance or symbolism.

**Policy 4.42. Scenic resource protection.** Protect and manage designated significant scenic resources by maintaining scenic resource inventories, protection plans, regulations, and other tools.

**Policy 4.43. Vegetation management.** Maintain regulations and other tools for managing vegetation in a manner that preserves or enhances designated significant scenic resources.

**Policy 4.44. Building placement, height, and massing.** Maintain regulations and other tools related to building placement, height, and massing to preserve designated significant scenic resources.

**Policy 4.45. Future development.** Encourage new public and private development to create new public viewpoints providing views of Portland’s rivers, bridges, surrounding mountains, hills and buttes, the Central City skyline, and other landmark features.

**138. Finding:** The City has designated scenic resources in an adopted inventory and protects them through an overlay zone (Chapter 33.480) which addresses landscaping, setbacks, screening, building facades and tree removal. The Floodplain Resilience Plan amendments do not change this program and the changes proposed for the River Environmental and Environmental overlay zones will not affect the ability to manage vegetation to preserve scenic resources. These policies do not apply.

## Historic and cultural resources

**Policy 4.46. Historic and cultural resource protection.** Protect and encourage the restoration of historic buildings, places, and districts that contribute to the distinctive character and history of Portland’s evolving urban environment.

**Policy 4.47. State and federal historic resource support.** Advocate for state and federal policies, programs, and legislation that would enable stronger historic resource designations, protections, and rehabilitation programs.

**Policy 4.48. Continuity with established patterns.** Encourage development that fills in vacant and underutilized gaps within the established urban fabric, while preserving and complementing historic resources.

**Policy 4.49. Resolution of conflicts.** Adopt and periodically update design guidelines for unique historic districts. Refine base zoning in historic districts to consider the character of the historic resources in the district.

**Policy 4.50. Demolition.** Protect historic resources from demolition. Provide opportunities for public comment, and encourage pursuit of alternatives to demolition or other actions that mitigate for the loss.

**Policy 4.51. City-owned historic resources.** Maintain City-owned historic resources with necessary upkeep and repair.

**Policy 4.52. Historic Resources Inventory.** Maintain and periodically update Portland’s Historic Resources Inventory to inform historic and cultural resource preservation strategies.



**Policy 4.53. Preservation equity.** Expand historic preservation inventories, regulations, and programs to encourage historic preservation in areas and in communities that have not benefited from past historic preservation efforts, especially in areas with high concentrations of under-served and/or under-represented people.

**Policy 4.54. Cultural diversity.** Work with Portland’s diverse communities to identify and preserve places of historic and cultural significance.

**Policy 4.55. Cultural and social significance.** Encourage awareness and appreciation of cultural diversity and the social significance of historic places and their roles in enhancing community identity and sense of place.

**Policy 4.56. Community structures.** Encourage the adaptive reuse of historic community structures, such as former schools, meeting halls, and places of worship, for arts, cultural, and community uses that continue their role as anchors for community and culture.

**Policy 4.57. Economic viability.** Provide options for financial and regulatory incentives to allow for the productive, reasonable, and adaptive reuse of historic resources.

**Policy 4.58. Archaeological resources.** Protect and preserve archaeological resources, especially those sites and objects associated with Native American cultures. Work in partnership with Sovereign tribes, Native American communities, and the state to protect against disturbance to Native American archaeological resources.

**139. Finding:** Policies 4.46 through 4.58 address historic and cultural resources. The City’s regulations for historic and cultural resource preservation are primarily found in Chapter 33.445 but are found in a few other chapters (e.g., 33.515, Columbia South Shore Plan District and 33.475, River Overlay Zones). No changes to these historic or cultural resource protections are proposed with the Floodplain Resilience Plan amendments. These policies do not apply.

## **Public art**

**Policy 4.59. Public art and development.** Create incentives for public art as part of public and private development projects.

**140. Finding:** No changes to public art programs or new incentives are proposed with the Floodplain Resilience Plan project. This policy does not apply.

## **Resource-efficient design and development**

**Policy 4.60. Rehabilitation and adaptive reuse.** Encourage rehabilitation and adaptive reuse of buildings, especially those of historic or cultural significance, to conserve natural resources, reduce waste, and demonstrate stewardship of the built environment.

**Policy 4.61. Compact housing.** Promote the development of compact, space- and energy-efficient housing types that minimize use of resources such as smaller detached homes or accessory dwellings and attached homes.

**Policy 4.62. Seismic and energy retrofits.** Promote seismic and energy-efficiency retrofits of historic buildings and other existing structures to reduce carbon emissions, save money, and improve public safety.

**Policy 4.63. Life cycle efficiency.** Encourage use of technologies, techniques, and materials in building design, construction, and removal that result in the least environmental impact over the life cycle of the



structure.

**Policy 4.64. Deconstruction.** Encourage salvage and reuse of building elements when demolition is necessary or appropriate.

**Policy 4.65. Materials and practices.** Encourage use of natural, resource-efficient, recycled, recycled content, and non-toxic building materials and energy-efficient building practices.

**Policy 4.66. Water use efficiency.** Encourage site and building designs that use water efficiently and manage stormwater as a resource.

**Policy 4.67. Optimizing benefits.** Provide mechanisms to evaluate and optimize the range of benefits from solar and renewable resources, tree canopy, ecoroofs, and building design.

**Policy 4.68. Energy efficiency.** Encourage and promote energy efficiency significantly beyond the Statewide Building Code and the use of solar and other renewable resources in individual buildings and at a district scale.

**Policy 4.69. Reduce carbon emissions.** Encourage a development pattern that minimizes carbon emissions from building and transportation energy use.

**Policy 4.70. District energy systems.** Encourage and remove barriers to the development and expansion of low-carbon heating and cooling systems that serve multiple buildings or a broader district.

**Policy 4.71. Ecodistricts.** Encourage ecodistricts, where multiple partners work together to achieve sustainability and resource efficiency goals at a district scale.

**Policy 4.72. Energy-producing development.** Encourage and promote development that uses renewable resources, such as solar, wind, and water to generate power on-site and to contribute to the energy grid.

**141. Finding:** Policies 4.60 through 4.72 address resource efficiency and resilience – primarily related to building design. This includes consideration of energy use, water use, use of recycled and healthy building materials, seismic standards, and adoptive re-use. Therefore, the amendments are consistent with these policies. The Floodplain Resilience Plan amendments do not change any existing design or development standards that have an impact on resource efficiency. The Floodplain Resilience Plan amendments also do not impact programs related to water or energy efficiency, recycling, or seismic resiliency. Therefore, these policies do not apply.

### **Designing with nature**

**Policy 4.73. Design with nature.** Encourage design and site development practices that enhance, and avoid the degradation of, watershed health and ecosystem services and that incorporate trees and vegetation.

**142. Finding:** Policy 4.73 addresses the interface between site design and development and natural features and functions. The Floodplain Resilience Plan recognizes floodplains as providing essential ecological services for flood management in a changing climate. Vegetated areas of floodplains including trees, shrubs, and herbaceous vegetation absorb and filter water, reducing surface runoff. Floodplain vegetation also stores and slows the flow of floodwaters. When this vegetation is removed and replaced with impervious surfaces, the capacity to store and slow floodwater is lost, and the impact of flooding is exacerbated. Plan amendments address this policy in the following ways:



- A. The River Environmental overlay zone is applied along the Willamette River Central Reach to undeveloped and developed portions of the combined flood hazard area within the riparian buffer area and undeveloped floodplains landward of the riparian buffer area. Development within the riparian buffer area, defined as all land within 170 feet of the ordinary high water mark, must demonstrate significant improvement in at least one of two City-defined floodplain functions while also ensuring no net loss of other natural resource functions in this key riparian area. This requirement draws on guidance provided in the NOAA Fisheries Biological Opinion on the NFIP and will expand and improve riparian habitat along the river, increasing floodplain management capacity in the area.
- B. The extent of the River Environmental overlay zone is modified along the Willamette River South Reach to incorporate areas identified in a recently-completed hydraulic model of a Willamette River flood with characteristics similar to the one experienced in the Portland region in February of 1996. This new model, referred to as the Modeled Willamette River 1996 Flood Extent, utilizes best available science and serves as a more up-to-date estimate of flood risk along the Willamette River, Columbia Slough and a stretch of the Columbia River near the confluence with the Willamette River. The model provides new estimates of the extents and elevation of a 1996-like flood event using current river characteristics, upland topography and development patterns. All development in the River Environmental overlay zone must be mitigated via standards or the River Review process.
- C. The Environmental Conservation overlay zone is expanded to be applied to any undeveloped floodplains along Fanno Creek and Tryon Creek not currently in an Environmental overlay zone (either Environmental Conservation or Environmental Protection). Similar to the River Environmental overlay zone, the Environmental Conservation overlay zone protects floodplains and their functions by requiring development to avoid, minimize and mitigate impacts to natural resources. The plan amendments also update the Environmental Zones chapter (33.430) to limit, in some cases, when a tree can be removed without City approval and establish a requirement that at least three trees are to be planted whenever a tree is removed in the floodplain.

The Floodplain Resilience Plan amendments are consistent with Policy 4.73.

**Policy 4.74. Flexible development options.** Encouraging flexibility in the division of land, the siting and design of buildings, and other improvements to reduce the impact of development on environmentally sensitive areas and to retain healthy native and beneficial vegetation and trees.

**143. Finding:** The Floodplain Resilience Plan amendments apply zoning regulations to reduce the impacts of future flooding and the degradation of floodplain habitat. While tax lots that are fully within a floodplain cannot avoid impacting the floodplain to some extent, development on tax lots that are only partially within a floodplain have the potential to avoid or significantly reduce adverse impacts to resources, while retaining development capacity. The Floodplain Resilience Plan amendments include the application of the River Environmental overlay zone in areas of the Willamette River Central Reach and update the location of the overlay zone in the Willamette River South Reach. Plan amendments modify the extent of the Environmental Conservation zone to apply to any undeveloped floodplains along Fanno Creek and Tryon Creek not currently in an Environmental overlay zone (either Environmental Conservation or Environmental Protection).

The River Environmental and Environmental Conservation overlay zones both includes a two-track system where projects can meet established development standards or be approved through land use review. Development standards provide “clear and objective” requirements that allow for



approval without a discretionary review. If there are no standards available for the proposed development, or if a proposal is not able to meet standards, the proposal must be approved through River Review or Environmental Review, respectively.

The River Environmental overlay zone and Environmental Conservation overlay zones are applied to significant natural resources areas, including floodplains. Development in the overlay zones is required to avoid impacts to extent possible and, when impacts cannot be avoided, mitigation is required. Amendments protect natural resources while allowing for development that is sensitive to its environmental context. The amendments are consistent with Policy 4.74.

**Policy 4.75. Low-impact development and best practices.** Encourage use of low-impact development, habitat-friendly development, bird-friendly design, and green infrastructure.

**Policy 4.76. Impervious surfaces.** Limit use of and strive to reduce impervious surfaces and associated impacts on hydrologic function, air and water quality, habitat connectivity, tree canopy, and urban heat island effects.

**Policy 4.77. Hazards to wildlife.** Encourage building, lighting, site, and infrastructure design and practices that provide safe fish and wildlife passage, and reduce or mitigate hazards to birds, bats, and other wildlife.

**144. Finding:** Policies 4.75-4.77 provide direction regarding the interface of impacts from development and natural features and wildlife. The Floodplain Resilience Plan recognizes floodplains as providing essential ecological services for flood management in a changing climate and as critical habitat for threatened and endangered species, including the 13 threatened or endangered salmon and steelhead species that have been found in Portland's waterways. While overfishing and dams have had some of the biggest impacts on native fish populations, declines have continued as ongoing development and resource extraction in riparian areas and floodplains has further degraded the habitat. Portland is obligated at several levels to manage and regulate floodplains and riparian areas, including by the FEMA Biological Opinion. Plan proposals draw on guidance from the FEMA Biological Opinion Draft Implementation. Plan amendments address these policies in the following ways:

- A. The River Environmental overlay zone is applied along the Willamette River Central Reach to undeveloped and developed portions of the combined flood hazard area within the riparian buffer area and undeveloped floodplains landward of the riparian buffer area. The River Environmental overlay zone is also updated along the Willamette River Central Reach to incorporate areas identified by the Modeled Willamette River 1996 Flood Extent, and removed from developed portions of the combined flood hazard area that are more than 100 feet from top of bank and not in the riparian buffer area. All development in the River Environmental overlay zone must be mitigated via standards or the River Review process.
- B. The Environmental Conservation overlay zone is applied to undeveloped floodplains along Fanno Creek and Tryon Creek. The Environmental Conservation overlay zone protects floodplains and their functions by similarly requiring development to mitigate for impacts to resources via standards or the Environmental Review process. Plan amendments also include Updating 33.430, Environmental Zones, to limit, in some cases, when a tree can be removed through an exemption and establish a requirement that at least three trees are to be planted whenever a tree is removed in the floodplain.
- C. Development within the riparian buffer area, defined as all land within 170 feet of the ordinary high water mark, must demonstrate significant improvement in at least one of two



City-defined floodplain functions while also ensuring no net loss of other natural resource functions in this key riparian area. This requirement draws on guidance provided in the NOAA Fisheries Biological Opinion on the NFIP and will expand and improve riparian habitat along the river, increasing floodplain management capacity in the area. Therefore, the amendments are consistent with these Policy 4.75-4.77.

**Policy 4.78. Access to nature.** Promote equitable, safe, and well-designed physical and visual access to nature for all Portlanders, while also maintaining the functions and values of significant natural resources, fish, and wildlife. Provide access to major natural features, including:

- Water bodies such as the Willamette and Columbia rivers, Smith and Bybee Lakes, creeks, streams, and sloughs.
- Major topographic features such as the West Hills, Mt. Tabor, and the East Buttes.
- Natural areas such as Forest Park and Oaks Bottom.

**145. Finding:** Policy 4.78 addresses access to nature, including access to waterbodies and natural areas. Although the Floodplain Resilience Plan does not include objectives or actions directly addressing access to nature, it recognizes that plan amendments apply to the sensitive riparian areas closest to waterbodies. While access to nature is not among plan objectives, plan amendments protect existing access points through regulations that protect these areas from adverse impacts from development. Along the Willamette River Central Reach and South Reach, development within the riparian buffer area is required to mitigate for all impacts on identified natural resources and demonstrate an improvement in one of two city defined riparian functions. Where the River Environmental overlay zone and Environmental Conservation overlay zones are applied tree and vegetation removal standards apply, as well as mitigation requirements when development causes adverse impacts to natural resources. These amendments and standards are consistent with and support the maintenance and improvement of public trails as well as the preservation and enhancement of habitat. Therefore, the amendments are consistent with these policies.

### **Hazard-resilient design**

**Policy 4.79. Natural hazards and climate change risks and impacts.** Limit development in or near areas prone to natural hazards, using the most current hazard and climate change-related information and maps.

**146. Finding:** The Floodplain Resilience Plan amendments are focused on addressing natural hazards, specifically the risk of flooding and its potential impacts, which are expected to worsen with climate change. Plan amendments apply to floodplains, with higher mitigation standards for areas closest to waterways due to their important ecological functions. In the Willamette River Central Reach, new riparian buffer area requirements, applied to floodplains within 170 feet of ordinary high water in the Willamette River Central Reach, will expand and improve riparian habitat along the river and reduce impervious surfaces in this important area. The riparian buffer area requirements protect an ecologically sensitive area by requiring floodplain development to demonstrate an improvement in either of two of the City's floodplain-related functions: (1) Bank function, and control of sediments, nutrients and pollution; or (2) Large wood and channel dynamics. These requirements will improve the riverbank's ability to manage flooding when it occurs, while also improving habitat for threatened and endangered salmon and steelhead species.

Elsewhere in the city, the Environmental Conservation overlay zone is applied to significant natural resources areas, including floodplains. These overlay zones guide development away from



sensitive natural resources that provide important ecosystem services and require mitigation when development occurs, thereby protecting public health, safety, and property from natural disasters and hazards. Where the Environmental Conservation overlay zone is applied in the floodplain, new tree and vegetation removal requirements ensure that, at minimum, three trees are planted for each tree removed and that any other impacts of development on natural resources are mitigated.

The plan utilizes a recently-completed hydraulic model of a Willamette River flood similar to the one experienced in the Portland region in February of 1996. This new model, referred to as the Modeled Willamette River 1996 Flood Extent, serves as a more up-to-date estimate of flood risk along the Willamette River, Columbia Slough and a stretch of the Columbia River near the confluence with the Willamette River. The model provides a new estimate of the extent of a 1996-like flood event and its likely flood elevation by incorporating current development patterns, upland topography and river bathymetry. This new map supplements the FEMA 100-year floodplain, which is out of date because the floodplain extent and estimated flood elevation are primarily based on a model completed in 1979. The model is used in place of the existing Metro Title 3 1996 Flood Inundation Area (Metro is Portland's regional government) and is incorporated as a referenced floodplain in the City's "combined flood hazard area" map.

Therefore, the amendments are consistent with Policy 4.79.

**Policy 4.80. Geological hazards.** Evaluate slope and soil characteristics, including liquefaction potential, landslide hazards, and other geologic hazards.

**147. Finding:** This policy addresses geological hazards, including liquefaction areas, landslide hazards. The Floodplain Resilience Plan amendments do not change requirements related to geological hazards. Therefore, Policy 4.80 does not apply.

**Policy 4.81. Disaster-resilient development.** Encourage development and site-management approaches that reduce the risks and impacts of natural disasters or other major disturbances and that improve the ability of people, wildlife, natural systems, and property to withstand and recover from such events.

**Policy 4.82. Portland Harbor Facilities.** Reduce natural hazard risks to critical public and private energy and transportation facilities in the Portland Harbor.

**Policy 4.83. Urban heat islands.** Encourage development, building, landscaping, and infrastructure design that reduce urban heat island effects.

**Policy 4.84. Planning and disaster recovery.** Facilitate effective disaster recovery by providing recommended updates to land use designations and development codes, in preparation for natural disasters.

**148. Finding:** The Floodplain Resilience Plan amendments reduce the risk and impacts of flooding through the application of environmentally-focused zoning requirements to the city's floodplains. Plan amendments apply to floodplains and areas closest to waterways, areas known for their important ecological functions. In the Willamette River Central Reach, new riparian buffer area requirements, applied to floodplains within 170 feet of ordinary high water in the Willamette River Central Reach, will expand and improve riparian habitat along the river and reduce impervious surfaces in this important area. The riparian buffer area requirements protect an ecologically sensitive area by requiring floodplain development to demonstrate an improvement in either of two of the City's floodplain-related functions: (1) Bank function, and control of sediments, nutrients and pollution; or (2) Large wood and channel dynamics. These requirements



will improve the riverbank's ability to manage flooding when it occurs, while also improving habitat for threatened and endangered salmon and steelhead species.

Elsewhere in the city, the Environmental Conservation overlay zone is applied to significant natural resources areas, including floodplains. These overlay zones guide development away from sensitive natural resources that provide important ecosystem services and require mitigation when development occurs, thereby protecting public health, safety, and property from natural disasters and hazards. Where the Environmental Conservation overlay zone is applied in the floodplain, new tree and vegetation removal requirements ensure that, at minimum, three trees are planted for each tree removed and that any other impacts of development on natural resources are mitigated.

Collectively, these changes will reduce flood risk for humans and improve the ability of fish and wildlife to recover after a flood event. Therefore, the amendments are consistent with policy 4.81 – 4.84.

## **Healthy food**

**Policy 4.85. Grocery stores and markets in centers.** Facilitate the retention and development of grocery stores, neighborhood-based markets, and farmer's markets offering fresh produce in centers.

**Policy 4.86. Neighborhood food access.** Encourage small, neighborhood-based retail food opportunities, such as corner markets, food co-ops, food buying clubs, and community-supported agriculture pickup/drop-off sites, to fill in service gaps in food access across the city.

**Policy 4.87. Growing food.** Increase opportunities to grow food for personal consumption, donation, sales, and educational purposes.

**Policy 4.88. Access to community gardens.** Ensure that community gardens are allowed in areas close to or accessible via transit to people living in areas zoned for mixed-use or multi-dwelling development, where residents have few opportunities to grow food in yards.

**149. Finding:** Policies 4.85 through 4.88 address ways that programs and land use plans can facilitate better access to healthy food. These policies do not apply because the Floodplain Resilience Plan amendments do not change any programs related to food access or change retail allowances or zoning that would directly affect food access.



## Chapter 5: Housing

**Goal 5.A: Housing diversity.** Portlanders have access to high-quality affordable housing that accommodates their needs, preferences, and financial capabilities in terms of different types, tenures, density, sizes, costs, and locations.

**150. Finding:** The City's Housing Needs Analysis, which was adopted (Ordinance 185657) and acknowledged by LCDC on June 11, 2014, consists of five distinct reports that analyzed the state of housing supply, housing affordability issues and the City's ability to meet projected housing demand. The Buildable Land Inventory (BLI), which was adopted (Ordinance 187831) and acknowledged by LCDC on April 25, 2017, identified the supply of land available to provide this needed housing. This demonstrated compliance with Statewide Land Use Goal 10. These background documents formed the policy direction that planning projects ensure that a variety of housing be provided to meet the needs of all Portlanders. Copies of relevant portions of the current version of the BLI have been included in the record.

The Floodplain Resilience Plan amendments do not change allowances for housing on the Zoning Map or reduce allowances for housing provided in the Zoning Code. As a result, the amendments do not decrease the amount or types of housing anticipated to be built under the supporting documents or the 2035 Comprehensive Plan. Therefore, this goal is met.

**Goal 5.B: Equitable access to housing.** Portland ensures equitable access to housing, making a special effort to remove disparities in housing access for people with disabilities, people of color, low-income households, diverse household types, and older adults.

**151. Finding:** City Council defines “equitable access to housing” as a goal to create housing that is accessible and affordable to a wide range of households, including people with disabilities, people of color, low-income households, diverse household types, and older adults. The Floodplain Resilience Plan amendments do not significantly impact the creation of or ability to access accessible and affordable housing. Plan amendments reduce the impacts of future flooding by updating the City’s floodplain regulations and apply to only a small number of expected housing sites, as identified in the City’s most recent Buildable Lands Inventory, or BLI (adopted in 2016). These housing sites are located in the Central City and are expected to contribute a very small number of housing units (150 units) to the City’s total projected Central City housing capacity (37,236 units), as identified in the 2016 BLI. Copies of relevant portions of the current version of the BLI have been included in the record. The amendments do not prohibit development on these sites. Additionally, projects on these sites are expected to provide over 20 units and will therefore be required to incorporate affordable housing, per the City’s inclusionary zoning requirements. Therefore, this goal is met.

**Goal 5.C: Healthy connected city.** Portlanders live in safe, healthy housing that provides convenient access to jobs and to goods and services that meet daily needs. This housing is connected to the rest of the city and region by safe, convenient, and affordable multimodal transportation.

**152. Finding:** This goal aims to provide housing in areas of the city that also have access to the goods and services needed by the residents on a daily basis, often defined as a Complete Neighborhood, as well as to ensure access to affordable transportation options. This goal is generally implemented through the base zones and plan districts that concentrate the greatest amount of housing growth in the areas with the best access to services. The Floodplain Resilience Plan amendments do not change base zone or plan districts designations. The plan amendments do not



change the location of housing or strategies to achieve Complete Neighborhoods. Plan amendments would not impact connections between housing and daily needs through multimodal transportation. This goal does not apply.

**Goal 5.D: Affordable housing.** Portland has an adequate supply of affordable housing units to meet the needs of residents vulnerable to increasing housing costs.

**153. Finding:** City Council interprets this goal as to encourage the development of regulated affordable housing that provides long-term stability to low-income households. The Floodplain Resilience Plan amendments do not impact the supply of regulated affordable housing units. Plan amendments do not change any base zone designations. Existing development standards in the River Environmental and Environmental Conservation overlay zones allow for projects proposed in the floodplain to be approved without a land use review. If proposed development is not able to meet those standards, it must be approved through land use review. The amendments apply to only a small number of expected housing sites, as identified in the City’s most recent Buildable Lands Inventory, or BLI (adopted in 2016). These housing sites are located in the Central City and are projected to contribute a very small number of housing units (150 units) to the City’s total projected Central City housing capacity (37,236 units), as identified in the 2016 BLI. Copies of relevant portions of the current version of the BLI have been included in the record. The amendments do not prohibit development on these sites. Additionally, projects on these sites are expected to provide over 20 units and will therefore be required to incorporate affordable housing, per the inclusionary zoning requirements. City Council finds that the amendments will not reduce the supply of regulated affordable housing units and are therefore consistent with this goal.

**Goal 5.E: High-performance housing.** Portland residents have access to resource-efficient and high-performance housing for people of all abilities and income levels.

**154. Finding:** City Council interprets “high-performance housing” to include housing that is developed with a lighter environmental impact (smaller carbon footprint, eco-friendly materials, longevity of construction, reducing waste, recycling). The Floodplain resilience Plan amendments promote development with a lighter environmental impact through mitigation requirements in the River Environmental overlay zone, Environmental Conservation overlay zone, and riparian buffer area. Plan amendments ensure that potential adverse impacts of development on natural resources and their functions are first avoided, to the extent possible, then minimized, and lastly, mitigated. Plan amendments also include updating the requirements of the Environmental overlay zone chapter (33.430) and riparian buffer area requirements to achieve a no net-loss standard in floodplain function when development occurs. Therefore, the amendments are consistent with this goal.

### **Diverse and expanding housing supply**

**Policy 5.1. Housing supply.** Maintain sufficient residential development capacity to accommodate Portland’s projected share of regional household growth.

**Policy 5.2. Housing growth.** Strive to capture at least 25 percent of the seven-county region’s residential growth (Multnomah, Washington, Clackamas, Yamhill, Columbia, Clark, and Skamania counties).

**155. Finding:** Policies 5.1 and 5.2 ensure that Portland preserves enough land and development capacity to accommodate household growth projections and to continue to capture a significant proportion of future regionwide residential growth. These policies are generally implemented through the density allowances of the base zones and plan districts. The Floodplain Resilience Plan



amendments do not change base zone designations, density allowances, or plan districts. While the Floodplain Resilience Plan doesn't address housing supply or growth, it recognizes that development, including housing, is likely to continue in Portland's floodplains. Plan amendments include applying the River Environmental overlay zone or Environmental Conservation overlay zones in areas along Portland's waterways. Application of these overlay zones does not prohibit development but encourages environmentally sensitive development in floodplains, which have been determined to be important areas for threatened and endangered species. Unavoidable impacts to natural resources must be mitigated so that there is no loss of natural resources over time. The amendments apply to only a small number of expected housing sites, as identified in the City's most recent Buildable Lands Inventory, or BLI (adopted in 2016). These housing sites are located in the Central City and are projected to contribute a very small number of housing units (150 units) to the City's total projected Central City housing capacity (37,236 units), as identified in the 2016 BLI. Copies of relevant portions of the current version of the BLI have been included in the record. The amendments do not prohibit development on these sites and will ensure that housing built in the floodplain adequately addresses flood risk. City Council finds that the amendments are not expected to have a significant impact on residential development capacity and are therefore consistent with these policies.

**Policy 5.3. Housing potential.** Evaluate plans and investments for their impact on housing capacity, particularly the impact on the supply of housing units that can serve low- and moderate-income households and identify opportunities to meet future demand.

**156. Finding:** Policy 5.3 provides direction on evaluating proposed amendments for their potential impact on housing capacity, with a particular emphasis on low-income and moderate-income households. Plan amendments address future flood risk and floodplain habitat through the expansion of the River Environmental overlay zone along the Willamette River Central Reach and the Environmental Conservation overlay zone along Fanno Creek and Tryon Creek. Application of these overlay zones does not prohibit development but requires environmentally sensitive development. Unavoidable impacts to natural resources must be mitigated so that there is no loss of natural resources over time. Development standards in the River Environmental and Environmental Conservation overlay zones allow projects with residential uses to be approved without land use review. If proposed development is unable to meet standards, a land use review is required.

The amendments apply to only a small number of expected housing sites, as identified in the City's most recent Buildable Lands Inventory, or BLI (adopted in 2016). These housing sites are located in the Central City and are projected to contribute a very small number of housing units (150 units) to the City's total projected Central City housing capacity (37,236 units), as identified in the 2016 BLI. Copies of relevant portions of the current version of the BLI have been included in the record. The amendments do not prohibit development on these sites and will ensure that housing built in the floodplain adequately addresses flood risk. City Council finds that the amendments are not expected to have a significant impact on residential development capacity and are therefore consistent with Policy 5.3.

**Policy 5.4. Housing types.** Encourage new and innovative housing types that meet the evolving needs of Portland households, and expand housing choices in all neighborhoods. These housing types include but are not limited to single-dwelling units; multi-dwelling units; accessory dwelling units; small units; pre-fabricated homes such as manufactured, modular, and mobile homes; co-housing; and clustered housing/clustered services.



**Policy 5.5. Housing in centers.** Apply zoning in and around centers that allows for and supports a diversity of housing that can accommodate a broad range of households, including multi-dwelling and family-friendly housing options.

**Policy 5.6. Middle housing.** Enable and encourage development of middle housing. This includes multi-unit or clustered residential buildings that provide relatively smaller, less expensive units; more units; and a scale transition between the core of the mixed-use center and surrounding single family areas. Where appropriate, apply zoning that would allow this within a quarter mile of designated centers, corridors with frequent service transit, high capacity transit stations, and within the Inner Ring around the Central City.

**157. Finding:** Policies 5.4, 5.5 and 5.6 provide direction on housing types, including those specifically allowed in and around centers. In general, the types of housing allowed are specified in the base zones. The Floodplain Resilience Plan amendments do not change base zone designations. Plan amendments address future flood risk and floodplain habitat for threatened and endangered species. Application of these overlay zones does not prohibit development or modify the types of development that are allowed in the floodplain. Therefore, these policies do not apply.

**Policy 5.7. Adaptable housing.** Encourage adaption of existing housing and the development of new housing that can be adapted in the future to accommodate the changing variety of household types.

**Policy 5.8. Physically-accessible housing.** Allow and support a robust and diverse supply of affordable, accessible housing to meet the needs of older adults and people with disabilities, especially in centers, station areas, and other places that are proximate to services and transit.

**Policy 5.9. Accessible design for all.** Encourage new construction and retrofitting to create physically-accessible housing, extending from the individual unit to the community, using Universal Design Principles.

**158. Finding:** Policies 5.7 through 5.9 aim to ensure sure that housing is designed to be accessible to people of all physical abilities and that can adapt to changing needs. The Floodplain Resilience Plan amendments do not change base zone designations or the ability for housing to meet accessibility requirements. These policies do not apply.

**Policy 5.10. Coordinate with fair housing programs.** Foster inclusive communities, overcome disparities in access to community assets, and enhance housing choice for people in protected classes throughout the city by coordinating plans and investments to affirmatively further fair housing.

**159. Finding:** This policy encourages programs and projects to ensure neighborhoods provide for a wide diversity of people in terms of people in terms of race, ethnicity, gender, sexual orientation, socio-economic status, age, physical abilities, religious beliefs, political beliefs, or other characteristics. Generally, programs administered by the Housing Bureau and regulations such as the Inclusionary Zoning requirements provide the opportunity to create developments that provide access to housing for people in a range of classes. The Floodplain Resilience Plan amendments do not impact fair housing programs in the city. This policy does not apply.

## **Housing access**

**Policy 5.11. Remove barriers.** Remove potential regulatory barriers to housing choice for people in protected classes to ensure freedom of choice in housing type, tenure, and location.

**160. Finding:** The Floodplain Resilience Plan amendments do not affect regulatory barriers to housing choice and do not impact housing access in any way. Therefore, this policy does not apply.



**Policy 5.12. Impact analysis.** Evaluate plans and investments, significant new infrastructure, and significant new development to identify potential disparate impacts on housing choice, access, and affordability for protected classes and low-income households. Identify and implement strategies to mitigate the anticipated impacts.

**Policy 5.13. Housing stability.** Coordinate plans and investments with programs that prevent avoidable, involuntary evictions and foreclosures.

**Policy 5.14. Preserve communities.** Encourage plans and investments to protect and/or restore the socioeconomic diversity and cultural stability of established communities.

**Policy 5.15. Gentrification/displacement risk.** Evaluate plans and investments, significant new infrastructure, and significant new development for the potential to increase housing costs for, or cause displacement of communities of color, low- and moderate-income households, and renters. Identify and implement strategies to mitigate the anticipated impacts.

**Policy 5.16. Involuntary displacement.** When plans and investments are expected to create neighborhood change, limit the involuntary displacement of those who are under-served and under-represented. Use public investments and programs, and coordinate with nonprofit housing organizations (such as land trusts and housing providers) to create permanently-affordable housing and to mitigate the impacts of market pressures that cause involuntary displacement.

**161. Finding:** The City Council interprets Policies 5.12 to 5.16 as requiring evaluation and analysis as to who will benefit and who will be burdened by a planning decision, including amendments to the Comprehensive Plan, the Comprehensive Plan Map, the Zoning Code, and the Zoning Map. The Council interprets “involuntary displacement” to occur when a resident is forced to relocate due to factors that are beyond the resident’s control including, but not limited to, increased rents due to market pressure and decisions by landlords to redevelop property.

City staff completed a vulnerability analysis in 2018 that evaluated a number of demographic and economic characteristics within all of the city’s floodplains, as well as within the floodplains each of the city’s watersheds, to determine potential impacts of the proposed amendments. The City used four indicators to assess vulnerability, including the percentage of (1) persons of color, (2) people with less than a 4-year degree, (3) renters, and (4) low-income individuals. The analysis assessed these indicators for the Willamette River (North Reach, Central Reach, South Reach and South Waterfront), Columbia River, Columbia Slough, Tryon Creek and Fanno Creek, and Johnson Creek.

The Floodplain Resilience Plan project team utilized the results of the vulnerability analysis to complete the BPS Racial Equity Analysis to identify key stakeholders and potential disparities in their role in the planning process. A matrix was developed to identify stakeholder groups, characterize their most salient interests, and the potential benefits and burdens that could result from the Floodplain Resilience Plan amendments. The Floodplain Resilience Plan Community Engagement Plan was then created to address these interests and potential benefits and burdens. A copy of the Community Engagement Plan is provided in the project record. Plan amendments are not expected to result in displacement or affect housing stability. Therefore, the amendments are consistent with these policies.

**Policy 5.17. Land banking.** Support and coordinate with community organizations to hold land in reserve for affordable housing, as an anti-displacement tool, and for other community development purposes.

**Policy 5.18. Rebuild communities.** Coordinate plans and investments with programs that enable communities impacted by involuntary displacement to maintain social and cultural connections, and re-



establish a stable presence and participation in the impacted neighborhoods.

**162. Finding:** These policies are not relevant because this ordinance amends the Zoning Code and land banking programs and programs for maintaining social and cultural connections are not authorized or managed through the Zoning Code.

**Policy 5.19. Aging in place.** Encourage a range of housing options and supportive environments to enable older adults to remain in their communities as their needs change.

**163. Finding:** The Floodplain Resilience Plan amendments do not make changes that would impact the ability of older adults to remain in their communities over time. Therefore, these policies are not applicable.

### **Housing location**

**Policy 5.20. Coordinate housing needs in high-poverty areas.** Meet the housing needs of under-served and under-represented populations living in high-poverty areas by coordinating plans and investments with housing programs.

**Policy 5.21. Access to opportunities.** Improve equitable access to active transportation, jobs, open spaces, high-quality schools, and supportive services and amenities in areas with high concentrations of under-served and under-represented populations and an existing supply of affordable housing.

**Policy 5.22. New development in opportunity areas.** Locate new affordable housing in areas that have high/medium levels of opportunity in terms of access to active transportation, jobs, open spaces, high-quality schools, and supportive services and amenities.

**Policy 5.23. Higher-density housing.** Locate higher-density housing, including units that are affordable and accessible, in and around centers to take advantage of the access to active transportation, jobs, open spaces, schools, and various services and amenities.

**Policy 5.24. Impact of housing on schools.** Evaluate plans and investments for the effect of housing development on school enrollment, financial stability, and student mobility. Coordinate with school districts to ensure plans are aligned with school facility plans.

**164. Finding:** The Floodplain Resilience Plan amendments do not impact the location or types of housing expected to be built in the city. These considerations are largely implemented through base zones. The Floodplain Resilience Plan amendments do not modify base zone requirements. Therefore, these policies are not applicable.

### **Housing affordability**

**Policy 5.25. Housing preservation.** Preserve and produce affordable housing to meet needs that are not met by the private market by coordinating plans and investments with housing providers and organizations.

**Policy 5.26. Regulated affordable housing target.** Strive to produce at least 10,000 new regulated affordable housing units citywide by 2035 that will be affordable to households in the 0-80 percent MFI bracket.

**Policy 5.27. Funding plan.** Encourage development or financial or regulatory mechanisms to achieve the regulated affordable housing target set forth for 2035.

**Policy 5.28. Inventory of regulated affordable housing.** Coordinate periodic inventories of the supply of regulated affordable housing in the four-county (Clackamas, Clark, Multnomah and Washington) region



with Metro.

**Policy 5.29. Permanently-affordable housing.** Increase the supply of permanently-affordable housing, including both rental and homeownership opportunities.

**165. Finding:** Policies 5.25 through 5.29 promote the production and preservation of regulated affordable housing. In general, these policies are implemented through city programs administered by the Portland Housing Bureau (PHB). Within the Zoning Code, the inclusionary housing provisions require buildings with 20 units or more to provide to provide a percentage of the units at affordable rates. The Floodplain Resilience Plan amendments do not affect the PHB programs or the Zoning Code inclusionary housing regulations. Therefore, these policies are not applicable.

**Policy 5.30. Housing cost burden.** Evaluate plans and investments for their impact on household cost, and consider ways to reduce the combined cost of housing, utilities, and/or transportation. Encourage energy-efficiency investments to reduce overall housing costs.

**166. Finding:** This policy directs City staff to evaluate the potential impacts of proposals on housing costs and consider ways to address potential increases in those costs. The Floodplain Resilience Plan amendments aim to reduce the risk of flooding on housing in the floodplain, while also improving habitat for threatened and endangered species. These efforts are expected to reduce the impacts of future flooding and therefore the costs of rebuilding after a flood event. Staff evaluated the potential impacts of the amendments on housing costs and determined the amendments would apply to only a small number of expected housing sites, as identified in the City's most recent Buildable Lands Inventory, or BLI (adopted in 2016). These housing sites are located in the Central City and are projected to contribute a very small number of housing units (150 units) to the City's total housing capacity (37,236 units) estimated for the Central City in the 2016 BLI. Copies of relevant portions of the current version of the BLI have been included in the record. The amendments do not prohibit development on these sites and will ensure that housing built in the floodplain adequately addresses flood risk. City Council finds that the amendments are not expected to have a significant impact on housing costs.

Additionally, the amendments ensure that the City of Portland maintains compliance with the NFIP. Participation in the NFIP requires that communities implement FEMA's minimum requirements. Through its participation in FEMA's voluntary Community Rating System program, Portlanders currently receive a 25% discount on federally backed flood insurance that Portlanders rely on to meet their minimum mortgage requirements and access financial assistance for flood recovery. The Floodplain Resilience Plan amendments will contribute to the maintenance of this discount and the associated reduction in housing costs. Therefore, the amendments are consistent with this policy.

**Policy 5.31. Household prosperity.** Facilitate expanding the variety of types and sizes of affordable housing units, and do so in locations that provide low-income households with greater access to convenient transit and transportation, education and training opportunities, the Central City, industrial districts, and other employment areas.

**Policy 5.32 Affordable Housing in Centers.** Encourage income diversity in and around centers by allowing a mix of housing types and tenures.

**Policy 5.33. Central City affordable housing.** Encourage the preservation and production of affordable housing in the Central City to take advantage of the area's unique concentration of active transportation access, jobs, open spaces, and supportive services and amenities.



**167. Finding:** Policies 5.31 through 5.33 promote the placement of a mix of housing, focused on affordable housing in areas that have access to transit and services, especially in Centers and the Central City. The Floodplain Resilience Plan amendments do not change base zone designations that allow for different housing types and location of housing. The Floodplain Resilience Plan amendments apply targeted new floodplain regulations in the Central City. The Floodplain Resilience Plan amendments in the Willamette River Central Reach, which encompasses the Central City, adopt a new Zoning Code map to identify the Central Reach riparian buffer area and apply the existing riparian buffer area requirements (33.475). The amendments also expand the River Environmental overlay zone to encompass the proposed riparian buffer area and any undeveloped floodplain landward of the riparian buffer area. Staff evaluated the potential impacts of the amendments on housing costs and determined the amendments would apply to only a small number of expected housing sites in the Central City, as identified in the City's most recent Buildable Lands Inventory, or BLI (adopted in 2016). These sites are projected to contribute a very small number of housing units (150 units) to the Central City's total housing capacity (37,236 units) estimated in the 2016 BLI. Copies of relevant portions of the current version of the BLI have been included in the record. The amendments do not prohibit development on these sites and will ensure that housing built in the floodplain adequately addresses flood risk. Additionally, projects on these sites are expected to provide over 20 units and will therefore be required to incorporate affordable housing, per the inclusionary zoning requirements. City Council finds that the amendments are not expected to have a significant impact on affordability in the Central City and therefore this policy is met.

**Policy 5.34. Affordable housing resources.** Pursue a variety of funding sources and mechanisms including new financial and regulatory tools to preserve and develop housing units and various assistance programs for households whose needs are not met by the private market.

**168. Finding:** This policy does not apply because it concerns affordable housing funding sources and mechanisms, which are not addressed by Zoning Code regulations that are the focus of the Floodplain Resilience Plan amendments.

**Policy 5.35. Inclusionary housing.** Use inclusionary zoning and other regulatory tools to effectively link the production of affordable housing to the production of market-rate housing.

**169. Finding:** Inclusionary housing regulations were adopted in 2018. The Floodplain Resilience Plan amendments do not change that code or program, therefore this policy does not apply.

**Policy 5.36. Impact of regulations on affordability.** Evaluate how existing and new regulations affect private development of affordable housing, and minimize negative impacts where possible. Avoid regulations that facilitate economically-exclusive neighborhoods.

**170. Finding:** The Floodplain Resilience Plan amendments apply zoning regulations to reduce the impacts of future flooding and the degradation of floodplain habitat. While tax lots that are fully within a floodplain cannot avoid impacting the floodplain to some extent, development on tax lots that are only partially within a floodplain have the potential to avoid or significantly reduce adverse impacts to resources, while retaining development capacity. The Floodplain Resilience Plan amendments include expanding the application of the River Environmental overlay zone in areas of the Willamette River Central Reach and updating the location of the overlay zone in the Willamette River South Reach to better reflect flood risk based on recent flood hazard modeling completed by City staff in collaboration with the U.S. Army Corps of Engineers.

The structure and requirements of the River Environmental overlay zone are consistent with other environmental overlay zones in the city. Specifically, the River Environmental overlay zone



includes a two-track system for project approval, where either development standards can be met or projects can be approved through land use review. If there is no standard for the proposed activity, or if a proposal is not able to meet the standards, the proposal must be approved through River Review. The development standards will establish “clear and objective” standards to permit typical development types without a discretionary review, increasing certainty for applicants and reducing the costs of approval. Staff evaluated the potential impacts of the amendments on housing costs and determined the amendments would apply to only a small number of expected housing sites, as identified in the City’s most recent Buildable Lands Inventory, or BLI (adopted in 2016). These housing sites are located in the Central City and are expected to contribute a very small number of housing units (150 units) to the City’s total projected Central City housing capacity (37,236 units), as identified in the 2016 BLI. Copies of relevant portions of the current version of the BLI have been included in the record. The amendments do not prohibit development on these sites. Additionally, projects on these sites are expected to provide over 20 units and will therefore be required to incorporate affordable housing, per the City’s inclusionary zoning requirements. This inclusionary zoning requirement will ensure that an economically-exclusive neighborhood is not created.

Plan amendments also include small expansions of the Environmental Conservation zone in areas along Fanno Creek and Tryon Creek. The Environmental Conservation overlay zone operates similarly, with a two-track system for project approval, where either established development standards can be met or projects can be approved through land use review. If there is no standard for the proposed activity, or if a proposal is not able to meet the standards, the proposal must be approved through Environmental Review. The existing and proposed development standards provide “clear and objective” standards to permit typical development types without a discretionary review. A significant number of new housing units is not expected to be built in the areas of Environmental Conservation zone expansion. However, these regulations and standards would allow for development of affordable housing while protecting floodplain habitat and function. The amendments are consistent with this policy.

**Policy 5.37. Mobile home parks.** Encourage preservation of mobile home parks as a low/moderate-income housing option. Evaluate plans and investments for potential redevelopment pressures on existing mobile home parks and impacts on park residents and protect this low/moderate-income housing option. Facilitate replacement and alteration of manufactured homes within an existing mobile home park.

**171. Finding:** Existing mobile home parks are generally located within areas where the Environmental overlay zones are applied. The Floodplain Resilience Plan amendments update standards in the Environmental Zones (33.430) chapter to ensure maintenance of tree and vegetation cover in floodplains, improving air and water quality. These amendments to the Environmental Zones chapter limit tree and vegetation removal that is allowed without City approval and increases the minimum tree replacement required when a tree is removed in the floodplain. These amendments affect fewer than 5 properties in the City and are not expected to impact redevelopment pressures on existing mobile home parks. Environmental overlay zone exemptions allow for the maintenance, repair, and replacement of existing structures. There are no expansions of the Environmentally Conservation overlay zone on existing mobile home parks and there are no mobile home parks along the Willamette River where new floodplain regulations are proposed. This policy is met.

**Policy 5.38. Workforce housing.** Encourage private development of a robust supply of housing that is affordable to moderate-income households located near convenient multimodal transportation that



provides access to education and training opportunities, the Central City, industrial districts, and other employment areas.

**Policy 5.39. Compact single-family options.** Encourage development and preservation of small resource-efficient and affordable single-family homes in all areas of the city.

**Policy 5.40. Employer-assisted housing.** Encourage employer-assisted affordable housing in conjunction with major employment development.

**172. Finding:** The Floodplain Resilience Plan amendments do not make changes that would affect the ability to provide workforce housing, compact single-family homes, or employer-assisted housing. These policies do not apply.

**Policy 5.41. Affordable homeownership.** Align plans and investments to support improving homeownership rates and locational choice for people of color and other groups who have been historically under-served and under-represented.

**Policy 5.42. Homeownership retention.** Support opportunities for homeownership retention for people of color and other groups who have been historically under-served and under-represented.

**Policy 5.43. Variety in homeownership opportunities.** Encourage a variety of ownership opportunities and choices by allowing and supporting including but not limited to condominiums, cooperatives, mutual housing associations, limited equity cooperatives, land trusts, and sweat equity.

**173. Finding:** The Floodplain Resilience Plan amendments do not address affordable housing options and programs, homeownership rates, or homeownership retention. However, among other project objectives, the Floodplain Resilience Plan amendments ensure that Portland maintains compliance with the NFIP. Participation in the NFIP requires that communities implement FEMA’s minimum requirements. Through its participation in FEMA’s voluntary Community Rating System program, Portlanders currently receive a 25% discount on federally backed flood insurance that Portlanders rely on to meet their minimum mortgage requirements and access financial assistance for flood recovery. The Floodplain Resilience Plan amendments will contribute to the maintenance of this discount and the associated reduction in housing costs. Therefore, the amendments are consistent with this policy.

**Policy 5.44. Regional cooperation.** Facilitate opportunities for greater regional cooperation in addressing housing needs in the Portland Metropolitan area, especially for the homeless, low- and moderate-income households, and historically under-served and under-represented communities.

**Policy 5.45. Regional balance.** Encourage development of a “regional balance” strategy to secure greater regional participation to address the housing needs of homeless people and communities of color, low- and moderate-income households, and historically under-served and under-represented communities throughout the region.

**174. Finding:** The Floodplain Resilience Plan amendments do not address regional cooperation or regional balance in relation to addressing the housing needs of Portlanders. Therefore, policies 5.44 and 5.45 do not apply.

## Homelessness

**Policy 5.46. Housing continuum.** Prevent homelessness and reduce the time spent being homeless by ensuring that a continuum of safe and affordable housing opportunities and related supportive services are allowed, including but not limited to Permanent Supportive Housing, transitional housing, self-built micro housing communities, emergency shelters, temporary shelters such as warming centers, and



transitional campgrounds.

- 175. Finding:** The Floodplain Resilience Plan amendments do not change the types of housing allowed. Plan amendments do not address homelessness or the housing continuum. Therefore, this policy does not apply.

### **Health, safety, and well-being**

**Policy 5.47 Healthy housing.** Encourage development and maintenance of all housing, especially multi-dwelling housing, that protects the health and safety of residents and encourages healthy lifestyles and active living.

**Policy 5.48 Housing safety.** Require safe and healthy housing free of hazardous materials such as lead, asbestos, and radon.

**Policy 5.49. Housing quality.** Encourage housing that provides high indoor air quality, access to sunlight and outdoor spaces, and is protected from excessive noise, pests, and hazardous environmental conditions.

**Policy 5.50. High-performance housing.** Encourage energy efficiency, green building practices, materials, and design to produce healthy, efficient, durable, and adaptable homes that are affordable or reasonably priced.

**Policy 5.51. Healthy and active living.** Encourage housing that provides features supportive of healthy eating and active living such as useable open areas, recreation areas, community gardens, crime-preventive design, and community kitchens in multifamily housing.

**Policy 5.52. Walkable surroundings.** Encourage active transportation in residential areas through the development of pathways, sidewalks, and high-quality onsite amenities such as secure bicycle parking.

**Policy 5.53. Responding to social isolation.** Encourage site designs and relationship to adjacent developments that reduce social isolation for groups that often experience it, such as older adults, people with disabilities, communities of color, and immigrant communities.

**Policy 5.54 Renter protections.** Enhance renter health, safety, and stability through education, expansion of enhanced inspections, and support of regulations and incentives that protect tenants and prevent involuntary displacement.

- 176. Finding:** The Floodplain Resilience Plan amendments apply zoning regulations to reduce the impacts of future flooding, protecting people and property, and ensure the preservation of floodplain habitat. Plan amendments promote the health, safety, and well-being of people and property located within floodplains through regulations that protect the ecosystem functions of floodplains while allowing for environmentally sensitive development. Plan amendments also promote development that has a lighter environmental impact through mitigation requirements in the River Environmental overlay zone, Environmental Conservation overlay zone, and riparian buffer area. Plan amendments ensure that potential adverse impacts of new development on natural resources and their functions are first avoided, to the extent possible, then minimized, and lastly, mitigated. These amendments contribute to the overall health, safety, and wellbeing of housing and communities located in or near floodplains. Therefore, the amendments are consistent with these policies.



## Chapter 6: Economic Development

**Goal 6.A: Prosperity.** Portland has vigorous economic growth and a healthy, diverse economy that supports prosperity and equitable access to employment opportunities for an increasingly diverse population. A strong economy that is keeping up with population growth and attracting resources and talent can:

- Create opportunity for people to achieve their full potential.
- Improve public health.
- Support a healthy environment.
- Support the fiscal well-being of the city.

**177. Finding:** City Council interprets this goal to apply to the city as whole and not to individual businesses or sectors of business. The City Council interprets this goal to mean that Portland has a strong economy with employment opportunities for a diverse population. City Council finds that an important factor in a diverse economy is to provide access to job opportunities across a wide range of wage scales, especially middle wage jobs. The Floodplain Resilience Plan amendments will not impact Portland’s employment ability to create opportunities for a growing economy. The amendments are consistent with Goal 6.A.

**Goal 6.B: Development.** Portland supports an attractive environment for industrial, commercial, and institutional job growth and development by: 1) maintaining an adequate land supply; 2) a local development review system that is nimble, predictable, and fair; and 3) high-quality public facilities and services.

**178. Finding:** The verb “support”, which is defined in the 2035 Comprehensive Plan, means to aid the cause of. The City Council interprets this goal to apply to the city as whole and not to individual businesses or sectors of business. The City Council interprets this goal to mean that an attractive environment for economic development has three elements: 1) adequate land supply; 2) a predictable development review system; and 3) high-quality public services. The Floodplain Resilience Plan amendments maintain the employment land supply. Plan amendments to apply the River Environmental overlay zone and Environmental Conservation overlay zone allow for development approval through standards, ensuring a predictable process. If development standards can’t be met approval is through a land use review (River Review or Environmental Review). These processes are applied consistently and fairly across the city. Plan amendments also update the code to allow South Waterfront greenway reviews to be processed through a Type II procedure, instead of requiring a Type III procedure. This shift to a Type II procedure will simplify the review process for South Waterfront projects. To ensure adequate capacity for industrial uses moving forward, the Floodplain Resilience Plan amendments do not apply to three base zones identified as important for industrial and employment uses: Heavy Industrial (IH), General Industrial 2 (IG2) and General Employment 2 (EG2). Application of the requirements to these important industrial and employment zones will be evaluated a part of the next update of the City’s Economic Opportunities Analysis, which is expected to be completed by the end of 2024. The amendments are consistent with this goal.

**Goal 6.C: Business district vitality.** Portland implements land use policy and investments to:

- Ensure that commercial, institutional, and industrial districts support business retention and expansion.
- Encourage the growth of districts that support productive and creative synergies among local businesses.



- Provide convenient access to goods, services, and markets.
- Take advantage of our location and quality of life advantages as a gateway to world-class natural landscapes in Northwest Oregon, Southwest Washington, and the Columbia River Basin, and a robust interconnected system of natural landscapes within the region’s Urban Growth Boundary.

**179. Finding:** Overall, the City Council interprets this goal to apply to the city as whole and not to individual businesses or sectors of business. The City Council interprets this goal to mean that the City will provide an adequate land base that is supported by public infrastructure investments that are needed to support businesses. The City Council finds that the goal aims to ensure that the City will implement land use policies that strengthen easy access to goods, services, and markets while the city’s leveraging location, access and quality of life as an advantage to attracting and retaining businesses and employees.

The Floodplain Resilience Plan amendments do not propose changes that would alter business district vitality. Plan amendments to apply the River Environmental overlay zone and Environmental Conservation overlay zone allow for development approval through standards, ensuring a predictable process. If development standards can’t be met approval is through a land use review (River Review or Environmental Review). Exemptions within the City’s environmentally-focused overlay zones (Environmental and River Environmental) allow for the continued maintenance, operation, repair, and replacement of existing development and development standards allow for expansion of existing development that avoids or mitigates for natural resource impacts. Floodplain Resilience Plan amendments do not apply to three base zones identified as important for industrial and employment uses: Heavy Industrial (IH), General Industrial 2 (IG2) and General Employment 2 (EG2). Application of the requirements to these important industrial and employment zones will be evaluated a part of the next update of the City’s Economic Opportunities Analysis, which is expected to be completed by the end of 2024. The amendments are consistent with this goal.

### **Diverse, expanding city economy**

**Policy 6.1. Diverse and growing community.** Expand economic opportunity and improve economic equity for Portland’s diverse, growing population through sustained business growth.

**Policy 6.2. Diverse and expanding economy.** Align plans and investments to maintain the diversity of Portland’s economy and status as Oregon’s largest job center with growth across all sectors (commercial, industrial, creative, and institutional) and across all parts of the city.

**Policy 6.3. Employment growth.** Strive to capture at least 25 percent of the seven-county region’s employment growth (Multnomah, Washington, Clackamas, Yamhill, Columbia, Clark, and Skamania counties).

**180. Finding:** Policies 6.1-6.3 provide direction regarding economic and employment growth. The Floodplain Resilience Plan amendments focus on environmental regulations that protect people and property from adverse effects of flooding in areas defined in the city’s floodplain maps. Plan amendments do not affect the City’s ability to expand the economy. To ensure adequate capacity for industrial uses moving forward, plan amendments do not apply to three base zones identified as important for industrial and employment uses: Heavy Industrial (IH), General Industrial 2 (IG2) and General Employment 2 (EG2). Application of the requirements to these zones will be evaluated as a part of the next update of the City’s Economic Opportunities Analysis, which has begun. Therefore, the amendments are consistent with these policies.



**Policy 6.4. Fiscally-stable city.** Promote a high citywide jobs-to-households ratio that supports tax revenue growth at pace with residential demand for municipal services.

**Policy 6.5. Economic resilience.** Improve Portland’s economic resilience to impacts from climate change and natural disasters through a strong local economy and equitable opportunities for prosperity.

**Policy 6.6. Low-carbon and renewable energy economy.** Align plans and investments with efforts to improve energy efficiency and reduce lifecycle carbon emissions from business operations. Promote employment opportunities associated with energy efficiency projects, waste reduction, production of more durable goods, and recycling.

**Policy 6.7. Competitive advantages.** Maintain and strengthen the city’s comparative economic advantages including access to a high-quality workforce, business diversity, competitive business climate, and multimodal transportation infrastructure.

**Policy 6.8. Business environment.** Use plans and investments to help create a positive business environment in the city and provide strategic assistance to retain, expand, and attract businesses.

**Policy 6.9. Small business development.** Facilitate the success and growth of small businesses and coordinate plans and investments with programs that provide technical and financial assistance to promote sustainable operating practices.

**Policy 6.10. Business innovation.** Encourage innovation, research, development, and commercialization of new technologies, products, and services through responsive regulations and public sector approaches.

**Policy 6.11. Sharing economy.** Encourage mechanisms that enable individuals, corporations, non-profits, and government to market, distribute, share, and reuse excess capacity in goods and services. This includes peer-to-peer transactions, crowd funding platforms, and a variety of business models to facilitate borrowing and renting unused resources.

**181. Finding:** Policies 6.4-6.11 provide direction regarding economic and employment growth. The Floodplain Resilience Plan amendments focus on environmental regulations that protect people and property from adverse effects of flooding in areas defined in the city’s floodplain maps. Plan amendments do not adversely impact the economic development capacity of the city, its competitive business advantage, innovation or the sharing economy. These policies do not apply.

**Policy 6.12. Economic role of livability and ecosystem services.** Conserve and enhance Portland’s cultural, historic, recreational, educational, food-related, and ecosystem assets and services for their contribution to the local economy and their importance for retention and attraction of skilled workers and businesses.

**182. Finding:** The Floodplain Resilience Plan amendments conserve and enhance Portland’s ecosystem assets and services through implementing regulations that protect people and property from adverse effects of flooding. The River Environmental overlay zone and Environmental Conservation overlay zone encourage environmentally sensitive development with mitigation requirement when impacts to natural resources are unavoidable. By avoiding natural resources and mitigating for impacts, ecosystem and functional values are maintained and enhanced. Small expansions of the Environmental Conservation and River Environmental overlay zones and updates to the tree and vegetation requirements in South Waterfront and the Environmental Zones chapter will conserve and enhance ecosystem services by supporting fish and wildlife, maintain the quality, quantity, connectivity, and functions of natural systems, including upland,



riparian and in-water habitats, and improve the flood storage in floodplains. The amendments are consistent with this policy.

## **Land development**

**Policy 6.13. Land supply.** Provide supplies of employment land that are sufficient to meet the long-term and short-term employment growth forecasts, adequate in terms of amounts and types of sites, available and practical for development and intended uses. Types of sites are distinguished primarily by employment geographies identified in the Economic Opportunities Analysis, although capacity needs for building types with similar site characteristics can be met in other employment geographies.

**183. Finding:** Policy 6.13 provides direction on sufficient land supply to meet employment types and amounts of sites for development. In a 2021 existing conditions report, it was found that the predominate type of land use in lots that are fully in the floodplain is residential, specifically single-dwelling residential, indicating that the owners and residents of single dwelling lots are the most likely category of landowner to be impacted by floodplain regulations. However, the floodplain does extend onto industrial and employment land in many parts of the city. In recognition of the city's current limited industrial land capacity and to ensure adequate capacity for industrial uses moving forward, plan amendments do not at this time apply to three industrial and employment-focused base zones: Heavy Industrial (IH), General Industrial 2 (IG2) and General Employment 2 (EG2). Application of new floodplain management requirements to these zones will be evaluated as a part of the next update of the City's Economic Opportunities Analysis, which is expected to be completed by the end of 2024. The amendments are consistent with this policy.

**Policy 6.14. Brownfield redevelopment.** Overcome financial-feasibility gaps to cleanup and redevelop 60 percent of brownfield acreage by 2035.

**184. Finding:** Policy 6.14 encourages redevelopment of brownfields within the city. The Floodplain Resilience Plan amendments do not affect the potential for brownfield redevelopment. Therefore, policies 6.14 does not apply.

**Policy 6.15. Regionally-competitive development sites.** Improve the competitiveness of vacant and underutilized sites located in Portland's employment areas using incentives, and regional and state assistance for needed infrastructure and site readiness improvements.

**185. Finding:** Policy 6.15 aims to ensure that Portland's employment areas remain competitive within the region. In recognition of the city's current limited industrial land capacity and to ensure adequate capacity for industrial uses moving forward, plan amendments do not at this time apply to three industrial and employment-focused base zones: Heavy Industrial (IH), General Industrial 2 (IG2) and General Employment 2 (EG2). Application of new floodplain management requirements to these zones will be evaluated as a part of the next update of the City's Economic Opportunities Analysis, which is expected to be completed by the end of 2024. This approach will assess the potential implications of these new regulations on vacant and underutilized employment lands to ensure their continuing competitiveness within the region. Therefore, the amendments are consistent with this policy.

**Policy 6.16. Regulatory climate.** Improve development review processes and regulations to encourage predictability and support local and equitable employment growth and encourage business retention, including:

**6.16.a.** Assess and understand cumulative regulatory costs to promote Portland's financial competitiveness with other comparable cities.



**6.16.b.** Promote certainty for new development through appropriate allowed uses and “clear and objective” standards to permit typical development types without a discretionary review.

**6.16.c.** Allow discretionary-review to facilitate flexible and innovative approaches to meet requirements.

**6.16.d.** Design and monitor development review processes to avoid unnecessary delays.

**6.16.e.** Promote cost effective compliance with federal and state mandates, productive intergovernmental coordination, and efficient, well-coordinated development review and permitting procedures.

**186. Finding:** The Floodplain Resilience Plan is one piece in the City’s Floodplain Management Update Work Plan. Among other project purposes, the plan is updating the rules for development along the edges of Portland’s rivers and streams in anticipation of new Federal Emergency Management Agency guidelines. The Floodplain Resilience Plan amendments include the application of the River Environmental overlay zone in areas of the Willamette River Central Reach and updates to the location of the overlay zone in the Willamette River South Reach. The structure and requirements of the River Environmental overlay zone are consistent with other environmental overlay zones in the city. Specifically, the River Environmental overlay zone includes a two-track system for project approval, where either established development standards can be met or projects can be approved through land use review. The development standards include “clear and objective” standards to permit typical development types without a discretionary review, increasing certainty for applicants and reducing the costs of approval. If there is no standard for the proposed activity, or if a proposal is not able to meet the standards, the proposal must be approved through River Review.

Plan amendments also include small expansions to the Environmental Conservation zone along Fanno Creek and Tryon Creek. The Environmental Conservation overlay zone operates similarly, with a two-track system for project approval, where either established development standards can be met or projects can be approved through land use review. Existing development standards provide “clear and objective” requirements for project approval.

Amendments to the South Waterfront Greenway Review chapter (33.851) update the approval process from a Type III procedure to a Type II procedure. Type II procedures will allow for approvals through a faster review process. Therefore, the amendments are consistent with this policy.

**Policy 6.17. Short-term land supply.** Provide for a competitive supply of development-ready sites with different site sizes and types, to meet five-year demand for employment growth in the Central City, industrial areas, campus institutions, and neighborhood business districts.

**Policy 6.18. Evaluate land needs.** Update the Economic Opportunities Analysis and short-term land supply strategies every five to seven years.

**Policy 6.19. Corporate headquarters.** Provide land opportunities for development of corporate headquarters campuses in locations with suitable transportation facilities.

**187. Finding:** Policies 6.17 through 6.19 ensure that the City maintains an adequate supply of employment lands, including lands that can be used for future corporate headquarters. The Floodplain Resilience Plan amendments have no impact on short-term land supply of development-ready sites. To ensure adequate long-term capacity for industrial uses moving forward, plan amendments do not at this time apply to three base zones identified as important



for industrial and employment uses: Heavy Industrial (IH), General Industrial 2 (IG2) and General Employment 2 (EG2). Application of the requirements to these zones will be evaluated as a part of the next update of the City’s Economic Opportunities Analysis, which is expected to be completed by the end of 2024. The amendments are consistent with these policies.

### **Traded sector competitiveness**

**Policy 6.20. Traded sector competitiveness.** Align plans and investments with efforts to improve the city and regional business environment for traded sector and export growth. Participate in regional and statewide initiatives.

**Policy 6.21. Traded sector diversity.** Encourage partnerships to foster the growth, small business vitality, and diversity of traded sectors.

**Policy 6.22. Clusters.** Align plans and investments with efforts that direct strategic business development resources to enhance the competitiveness of businesses in traded sector clusters.

**Policy 6.23. Trade and freight hub.** Encourage investment in transportation systems and services that will retain and expand Portland’s competitive position as a West Coast trade gateway and freight distribution hub.

**Policy 6.24. Traded sector land supply.** Foster traded sector retention, growth, and competitive advantages in industrial districts and the Central City. Recognize the concentration of traded-sector businesses in these districts.

**Policy 6.25. Import substitution.** Encourage local goods production and service delivery that substitute for imports and help keep the money Portlanders earn in the local economy.

**Policy 6.26. Business opportunities in urban innovation.** Strive to have Portland’s built environment, businesses, and infrastructure systems showcase examples of best practices of innovation and sustainability.

**188. Finding:** Policies 6.20 through 6.26 address Portland’ traded sector competitiveness. The Floodplain Resilience Plan amendments do not impact the city and regional business climate as it relates to traded sector competitiveness. Therefore, these policies do not apply.

### **Equitable household prosperity**

**Policy 6.27. Income self-sufficiency.** Expand access to self-sufficient wage levels and career ladders for low-income people by maintaining an adequate and viable supply of employment land and public facilities to support and expand opportunities in Portland for middle- and high-wage jobs that do not require a 4-year college degree.

**6.27.a.** Support the role of industrial districts as a leading source of middle-wage jobs that do not require a 4-year college degree and as a major source of wage-disparity reduction for under-served and under-represented communities.

**6.27.b.** Evaluate and limit negative impacts of plans and investments on middle and high wage job creation and retention.

**189. Finding:** Policy 6.27 provides direction on ensuring income self-sufficiency by providing access to employment opportunities for middle and high-wage jobs that do not require a 4-year college degree. In recognition of the city’s current limited industrial land capacity – an economic sector shown to provide opportunities for middle-wage jobs for people without a 4-year degree – and to



ensure adequate capacity for industrial uses moving forward, plan amendments do not apply to three industrial and employment-focused base zones: Heavy Industrial (IH), General Industrial 2 (IG2) and General Employment 2 (EG2). Application of new floodplain management requirements to these zones will be evaluated as a part of the next update of the City's Economic Opportunities Analysis, which is expected to be completed by the end of 2024. The amendments are consistent with this policy.

**Policy 6.28. East Portland job growth.** Improve opportunities for East Portland to grow as a business destination and source of living wage jobs.

**190. Finding:** The Floodplain Resilience Plan amendments do not include expansions of the Environmental Conservation overlay zone in East Portland. Relevant amendments in East Portland are focused on floodplain areas that are already in Environmental overlay zones, either Environmental Conservation or Environmental Protection. Plan amendments update the requirements of the Environmental Zones chapter (33.430) to manage tree and vegetation removal and maintenance to achieve no net-loss in floodplain habitat, as defined by the guidance provided in the NOAA Fisheries Biological Opinion on the FEMA National Flood Insurance Program (NFIP). Amendments to the chapter include limiting tree and vegetation removal that is allowed without City approval and increasing the minimum tree replacement required when a tree is removed in the floodplain to at least three trees. New regulations apply to areas within the combined flood hazard area, which in East Portland contains the FEMA 100-year floodplain and Metro's 1996 Flood Inundation Area. These changes effect a limited number of properties in the Columbia River and Johnson Creek floodplains. City Council finds that these changes will not impact opportunities for job growth in East Portland. The amendments are consistent with this policy.

**Policy 6.29. Poverty reduction.** Encourage investment in, and alignment of, poverty-reduction efforts that address economic development, land use, transportation, housing, social services, public health, community development, and workforce development.

**Policy 6.30. Disparity reduction.** Encourage investment in, and alignment of, public efforts to reduce racial, ethnic, and disability-related disparities in income and employment opportunity.

**Policy 6.31. Minority-owned, woman-owned and emerging small business (MWESB) assistance.** Ensure that plans and investments improve access to contracting opportunities for minority-owned, woman-owned, and emerging small businesses.

**191. Finding:** Policies 6.29-6.31 provide equity-related approaches to poverty reduction, employment and small business development through public programs. The Floodplain Resilience Plan does not have any impact on or propose any community spending or investment. Policies 6.29-6.31 do not apply.

**Policy 6.32. Urban renewal plans.** Encourage urban renewal plans to primarily benefit existing residents and businesses within the urban renewal area through:

- Revitalization of neighborhoods.
- Expansion of housing choices.
- Creation of business and job opportunities.
- Provision of transportation linkages.
- Protection of residents and businesses from the threats posed by gentrification and displacement.



- The creation and enhancement of those features which improve the quality of life within the urban renewal area.

**192. Finding:** The Floodplain Resilience Plan amendments do not address or amend urban renewal plans. Therefore, this policy does not apply.

### **Central City**

**Policy 6.33. Central City.** Improve the Central City’s regional share of employment and continue its growth as the unique center of both the city and the region for innovation and exchange through commerce, employment, arts, culture, entertainment, tourism, education, and government.

**Policy 6.34. Central City industrial districts.** Protect and facilitate the long-term success of Central City industrial districts, while supporting their evolution into places with a broad mix of businesses with high employment densities.

**Policy 6.35. Innovation districts.** Provide for expanding campus institutions in the Central City and Marquam Hill, and encourage business development that builds on their research and development strengths.

**193. Finding:** Policies 6.33 through 6.35 provide direction regarding economic development in the Central City. The Floodplain Resilience Plan amendments have no impact on Central City or Marquam Hill employment zones. Therefore, these policies do not apply.

### **Industrial and employment districts**

**Policy 6.36. Industrial land.** Provide industrial land that encourages industrial business retention, growth, and traded sector competitiveness as a West Coast trade and freight hub, a regional center of diverse manufacturing, and a widely-accessible base of family-wage jobs, particularly for under-served and under-represented people.

**Policy 6.37. Industrial sanctuaries.** Protect industrial land as industrial sanctuaries identified on the Comprehensive Plan Map primarily for manufacturing and distribution uses and to encourage the growth of industrial activities in the city.

**Policy 6.38. Prime industrial land retention.** Protect the multimodal freight-hub industrial districts at the Portland Harbor, Columbia Corridor, and Brooklyn Yard as prime industrial land that is prioritized for long-term retention.

**6.38.a.** Protect prime industrial lands from quasi-judicial Comprehensive Plan Map amendments that convert prime industrial land to non-industrial uses, and consider the potential for other map amendments to otherwise diminish the economic competitiveness or viability of prime industrial land.

**6.38.b.** Limit conversion of prime industrial land through land use plans, regulations, or public land acquisition for non-industrial uses, especially land that can be used by river-dependent and river-related industrial uses.

**6.38.c.** Limit regulatory impacts on the capacity, affordability, and viability of industrial uses in the prime industrial area while ensuring environmental resources are also protected.

**6.38.d.** Strive to offset the reduction of development capacity as needed, with additional prime industrial capacity that includes consideration of comparable site characteristics. Offsets may include but are not limited to additional brownfield remediation, industrial use intensification,



strategic investments, and other innovative tools and partnerships that increase industrial utilization of industrial land.

**6.38.e.** Protect prime industrial land for siting of parks, schools, large-format places of assembly, and large-format retail sales.

**6.38.f.** Promote efficient use of freight hub infrastructure and prime industrial land by limiting non-industrial uses that do not need to be in the prime industrial area.

**Policy 6.39. Harbor access lands.** Limit use of harbor access lands to river- or rail-dependent or related industrial land uses due to the unique and necessary infrastructure and site characteristics of harbor access lands for river-dependent industrial uses.

**Policy 6.40. Portland Harbor Superfund Site.** Take a leadership role to facilitate a cleanup of the Portland Harbor that moves forward as quickly as possible and that allocates cleanup costs fairly and equitably. Encourage a science-based and cost-effective cleanup solution that facilitates re-use of land for river- or rail-dependent or related industrial uses.

**Policy 6.41. Multimodal freight corridors.** Encourage freight-oriented industrial development to locate where it can maximize the use of and support reinvestment in multimodal freight corridors.

**Policy 6.42. Columbia East.** Provide a mix of industrial and limited business park development in Columbia East (east of 82nd Avenue) that expand employment opportunities supported by proximity to Portland International Airport and multimodal freight access.

**Policy 6.43. Dispersed employment areas.** Provide small, dispersed employment areas for a flexible and affordable mix of office, creative services, small-scale manufacturing, traded sector and distribution, and other small-format light industrial and commercial uses with access to nearby freeways or truck streets.

**Policy 6.44. Industrial land use intensification.** Encourage reinvestment in, and intensification of, industrial land use, as measured by output and throughput per acre.

**Policy 6.45. Industrial brownfield redevelopment.** Provide incentives, investments, technical assistance and other direct support to overcome financial-feasibility gaps to enable remediation and redevelopment of brownfields for industrial growth.

**Policy 6.46. Impact analysis.** Evaluate and monitor the impacts on industrial land capacity that may result from land use plans, regulations, public land acquisition, public facility development, and other public actions to protect and preserve existing industrial lands.

**Policy 6.47. Clean, safe, and green.** Encourage improvements to the cleanliness, safety, and ecological performance of industrial development and freight corridors by facilitating adoption of market feasible new technology and design.

**Policy 6.48. Fossil fuel distribution.** Limit fossil fuels distribution and storage facilities to those necessary to serve the regional market.

**Policy 6.49. Industrial growth and watershed health.** Facilitate concurrent strategies to protect and improve industrial capacity and watershed health in the Portland Harbor and Columbia Corridor areas.

**Policy 6.50. District expansion.** Provide opportunities for expansion of industrial areas based on evaluation of forecasted need and the ability to meet environmental, social, economic, and other goals.

**Policy 6.51. Golf course reuse and redevelopment.** Facilitate a mix of industrial, natural resource, and public open space uses on privately-owned golf course sites in the Columbia Corridor that property owners make available for reuse.



**Policy 6.52. Residential and commercial reuse.** Facilitate compatible industrial or employment redevelopment on residential or commercial sites that become available for reuse if the site is in or near prime industrial areas, and near a freeway or on a freight street.

**Policy 6.53 Mitigation banks.** Facilitate industrial site development by promoting and allowing environmental mitigation banks that serve industrial land uses on prime industrial land.

**194. Finding:** Policies 6.36-6.55 provide direction regarding industrial and employment districts. The Floodplain Resilience Plan amendments do not change comprehensive plan designations affecting lands in these districts. The Floodplain Resilience Plan amendments conserve and enhance Portland’s ecosystem assets and services for their contribution to the local economy through implementing regulations that protect people and property from adverse effects of flooding. To ensure adequate long-term capacity for industrial uses moving forward, plan amendments do not at this time apply to three base zones identified as important for industrial and employment uses: Heavy Industrial (IH), General Industrial 2 (IG2) and General Employment 2 (EG2). Application of the requirements to these zones in the Columbia Corridor and North Reach of the Willamette River will be evaluated as a part of the next update of the City’s Economic Opportunities Analysis, which is expected to be completed by the end of 2024. Therefore, the amendments are consistent with this policy.

**Policy 6.54 Neighborhood buffers.** Maintain and enhance major natural areas, open spaces, and constructed features as boundaries and buffers for the Portland Harbor and Columbia Corridor industrial areas.

**195. Finding:** Policy 6.54 aims to maintain and enhance natural areas and open spaces as buffers for the Portland Harbor and Columbia Corridor industrial areas. Though the Floodplain Resilience Plan amendments do not apply to the three base zones identified as important for industrial and employment uses (IH, IG2 and EG2), the amendments strengthen requirements to preserve natural resources in the floodplains of the Columbia Corridor industrial areas as a result of new tree and vegetation removal and planting requirements in the Environmental Zones chapter (33.430). These amendments limit tree and vegetation removal that is allowed without City approval and increase the minimum tree replacement required when a tree is removed in the floodplain to three trees. The amendments are consistent with this policy.

**Policy 6.55. Neighborhood park use.** Allow neighborhood park development within industrial zones where needed to provide adequate park service within one-half mile of every resident.

**196. Finding:** Policy 6.55 aims to ensure park development within industrial zones, where needed. The Floodplain Resilience Plan amendments do not change any allowances for neighborhood park development in industrial zones. This policy does not apply.

## **Campus institutions**

**Policy 6.56. Campus institutions.** Provide for the stability and growth of Portland’s major campus institutions as essential service providers, centers of innovation, workforce development resources, and major employers.

**Policy 6.57. Campus land use.** Provide for major campus institutions as a type of employment land, allowing uses typically associated with health care and higher education institutions. Coordinate with institutions in changing campus zoning to provide land supply that is practical for development and intended uses.



**Policy 6.58. Development impacts.** Protect the livability of surrounding neighborhoods through adequate infrastructure and campus development standards that foster suitable density and attractive campus design. Minimize off-site impacts in collaboration with institutions and neighbors, especially to reduce automobile traffic and parking impacts.

**Policy 6.59. Community amenities and services.** Encourage campus development that provides amenities and services to surrounding neighborhoods, emphasizing the role of campuses as centers of community activity.

**Policy 6.60. Campus edges.** Provide for context-sensitive, transitional uses, and development at the edges of campus institutions to enhance their integration into surrounding neighborhoods, including mixed-use and neighborhood-serving commercial uses where appropriate.

**Policy 6.61. Satellite facilities.** Encourage opportunities for expansion of uses, not integral to campus functions, to locate in centers and corridors to support their economic vitality.

**197. Finding:** Policies 6.56 through 6.61 provide direction regarding campus institutions. There are no zones with a campus institution land use designation impacted by Floodplain Resilience Plan. Therefore, these policies do not apply.

### **Neighborhood business districts**

**Policy 6.62. Neighborhood business districts.** Provide for the growth, economic equity, and vitality of neighborhood business districts.

**Policy 6.63. District function.** Enhance the function of neighborhood business districts as a foundation of neighborhood livability.

**Policy 6.64. Small, independent businesses.** Facilitate the retention and growth of small and locally-owned businesses.

**Policy 6.65. Home-based businesses.** Encourage and expand allowances for small, low-impact home based businesses in residential areas, including office or personal service uses with infrequent or by-appointment customer or client visits to the site. Allow a limited number of employees, within the scale of activity typical in residential areas. Allow home-based businesses on sites with accessory dwelling units.

**Policy 6.66. Neighborhood-serving business.** Provide for neighborhood business districts and small commercial nodes in areas between centers to expand local access to goods and services. Allow nodes of small-scale neighborhood-serving commercial uses in large planned developments and as a ground floor use in high density residential areas.

**Policy 6.67. Retail development.** Provide for a competitive supply of retail sites that support the wide range of consumer needs for convenience, affordability, accessibility, and diversity of goods and services, especially in under-served areas of Portland.

**Policy 6.68. Investment priority.** Prioritize commercial revitalization investments in neighborhoods that serve communities with limited access to goods and services.

**Policy 6.69. Non-conforming neighborhood business uses.** Limit non-conforming uses to reduce adverse impacts on nearby residential uses while avoiding displacement of existing neighborhood businesses.

**Policy 6.70. Involuntary commercial displacement.** Evaluate plans and investments for their impact on existing businesses.



**6.70.a.** Limit involuntary commercial displacement in areas at risk of gentrification, and incorporate tools to reduce the cost burden of rapid neighborhood change on small business owners vulnerable to displacement.

**6.70.b.** Encourage the preservation and creation of affordable neighborhood commercial space to support a broad range of small business owners.

**Policy 6.71. Temporary and informal markets and structures.** Acknowledge and support the role that temporary markets (farmer’s markets, craft markets, flea markets, etc.) and other temporary or mobile-vending structures play in enabling startup business activity. Also, acknowledge that temporary uses may ultimately be replaced by more permanent development and uses.

**Policy 6.72. Community economic development.** Encourage collaborative approaches to align land use and neighborhood economic development for residents and business owners to better connect and compete in the regional economy.

**6.72.a.** Encourage broad-based community coalitions to implement land use and economic development objectives and programs.

**6.72.b.** Enhance opportunities for cooperation and partnerships between public and private entities that promote economic vitality in communities most disconnected from the regional economy.

**6.72.c.** Encourage cooperative efforts by area businesses, Business Associations, and Neighborhood Associations to work together on commercial revitalization efforts, sustainability initiatives, and transportation demand management.

**Policy 6.73. Centers.** Encourage concentrations of commercial services and employment opportunities in centers.

**6.73.a.** Encourage a broad range of neighborhood commercial services in centers to help residents and others in the area meet daily needs and/or serve as neighborhood gathering places.

**6.73.b.** Encourage the retention and further development of grocery stores and local markets as essential elements of centers.

**6.73.c.** Enhance opportunities for services and activities in centers that are responsive to the needs of the populations and cultural groups of the surrounding area.

**6.73.d.** Require ground-level building spaces in core areas of centers accommodate commercial or other street-activating uses and services.

**6.73.e.** Encourage employment opportunities as a key function of centers, including connections between centers, institutions, and other major employers to reinforce their roles as vibrant centers of activity.

**198. Finding:** Policies 6.62 through 6.65 provide direction regarding neighborhood districts and smaller businesses. The Floodplain Resilience Plan amendments will not affect the types of businesses that can be supported in neighborhood business districts and are not expected to result in additional displacement pressure on small businesses or increase the impact the affordability of neighborhood commercial spaces. Therefore, these policies do not apply.



## Chapter 7: Environmental and Watershed Health

**Goal 7.A: Climate.** Carbon emissions are reduced to 50 percent below 1990 levels by 2035.

**199. Finding:** The Floodplain Resilience Plan amendments apply zoning regulations through the application of the River Environmental and Environmental Conservation overlay zones. The application of these overlay zones will protect and conserve identified natural resource features and functions by encouraging environmentally sensitive development and requiring mitigation when development has a detrimental impact on the resources. Preservation of vegetation in these areas will contribute to carbon sequestration and maintaining tree canopy reduces heat island impacts and reduces the need for secondary cooling systems that result in additional carbon emissions. Therefore, the amendments are consistent with this goal.

**Goal 7.B: Healthy watersheds and environment.** Ecosystem services and ecosystem functions are maintained and watershed conditions have improved over time, supporting public health and safety, environmental quality, fish and wildlife, cultural values, economic prosperity, and the intrinsic value of nature.

**200. Finding:** The Comprehensive Plan defines ecosystem services as “the contribution of ecosystem conditions and processes to human wellbeing including the production of goods and processes that control variability, support life, health, and safety, enrich cultural life, and preserve options.” Ecosystem functions are the benefits provided by natural (and, in some cases, other) resources and may include physical, aesthetic, scenic, educational, or other nonphysical functions. City Council interprets this goal to ensure that amendments protect existing resources and functional values. The primary tool in the Zoning Code to protect identified natural resources and functional values is environmental overlay zoning. The Floodplain Resilience Plan amendments protect existing natural resource and improve watershed health over time in the following ways:

- A. The Floodplain Resilience Plan recognizes that the six watersheds within the City are distinct, with their own floodplains that are unique in character. Land uses in the floodplain vary greatly by location, with some floodplains made up of industrial and/or commercial uses and others that are primarily residential. To address these different characteristics and their regulatory structures, plan amendments apply regulations differently to protect and improve ecosystem services and functions.
- B. The expansion of the River Environmental overlay zone along the Willamette River Central Reach and modification of the River Environmental overlay zone in the Willamette River South Reach will ensure the protection and conservation of the Willamette River and its floodplains and riparian areas by encouraging ecologically-sensitive development in floodplains and requiring mitigation when development has unavoidable detrimental impacts on resources. Mitigation requirements include planting of native vegetation, which will maintain habitat quality, quantity, and connectivity along the Central and South reaches.
- C. Mitigation for impacts within the riparian buffer area (land within 170 feet of the ordinary high water mark) will also require mitigation and demonstrate an improvement in one of two riparian functions: (1) Bank function, and control of sediments, nutrients and pollution; or (2) Large wood and channel dynamics. Mitigation must also meet the existing no net-loss standard of natural resource functions. Requirements in this key habitat area are drawn from guidance provided in the NOAA Fisheries Biological Opinion on the NFIP. These new requirements will expand and improve riparian habitat along the river, increasing floodplain



management capacity and contributing to the recovery of threatened and endangered fish species in the city.

- D. The Floodplain Resilience Plan amendments include the application of the Environmental Conservation overlay zone to undeveloped floodplains along Fanno Creek and Tryon Creek that are not currently in the Environmental Conservation overlay zone. This small expansion in the overlay zone will ensure the preservation of floodplain habitat and the ecological benefits it provides over time.
- E. In the floodplains along the Columbia River, Columbia Slough, Fanno Creek, Tryon Creek, and Johnson Creek, allowances for removal of trees and vegetation in the floodplain will be more limited and a minimum of three trees will be required to be planted for each tree removed.

Therefore, the amendments are consistent with this goal.

**Goal 7.C: Resilience.** Portland’s built and natural environments function in complementary ways and are resilient in the face of climate change and natural hazards.

**201. Finding:** The Comprehensive Plan defines “resilience” as the capability to anticipate, prepare for, respond to, and recover from significant multi-hazard threats with minimum damage to social well-being, the economy, and the environment. The Floodplain Resilience Plan amendments support this goal in the following ways:

- A. Replace the existing 1996 Flood Inundation Area in the City’s combined flood hazard area map with the Modeled Willamette River 1996 Flood Extent along the Willamette River, Columbia Slough, and a portion of the Columbia River. This new modeled flood extent reflects best available knowledge of current topography, bathymetry, and development patterns and provides a more accurate estimation of the impact area of a future 1996 flood-like event.
- B. The River Environmental overlay zone is applied and updated in the Willamette River Central Reach and South Reach. Through its requirement to avoid, minimize and mitigate development impacts, the River Environmental overlay zone will strengthen riparian corridors, preserve natural resources, and expand habitat over time. Tree canopy will be protected, and connectivity between floodplain habitat and other citywide natural resources will be improved as development will be designed to minimize impacts on fish and wildlife.
- C. Development in floodplains within the riparian buffer area (land within 170 feet of the ordinary high water mark) in the Willamette River Central Reach must mitigate for all impacts on identified natural resources and demonstrate an improvement in one of two riparian functions. Improved floodplain function in the riparian buffer area will expand and improve riparian habitat, increasing floodplain management capacity in this critical area.
- D. Applies the Environmental Conservation overlay zone to undeveloped floodplains along Fanno Creek and Tryon Creek that are not currently in the Environmental Conservation overlay zone. Plan amendments update the requirements of the Environmental Zones chapter (33.430) to limit tree and vegetation removal that is allowed without City approval and increase the minimum number of trees planted when a tree is removed to three trees.

Therefore, the amendments are consistent with this goal.

**Goal 7.D: Environmental equity.** All Portlanders have access to clean air and water, can experience nature in their daily lives, and benefit from development designed to lessen the impacts of natural hazards and environmental contamination.



- 202. Finding:** The Floodplain Resilience Plan recognize floodplains as an integral form of green infrastructure for the City that provide benefits to all residents. Plan amendments extend to all six of the City’s watersheds, implementing different protections as appropriate to the context of current land use. The ecological health of Portland’s waterways are important to everyone who lives, works, and recreates along them. Protecting and enhancing floodplains and riparian area contributes towards environmental equity in Portland. Healthy and functioning floodplains and associated vegetation and habitat provide ecosystem services, including reducing surface water runoff from entering and polluting waterways, reducing the impact of flooding by storing and slowing floodwaters and providing critical habitat that is utilized by threatened and endangered species.

The Floodplain Resilience Plan amendments make targeted expansions of the River Environmental and Environmental Conservation overlay zones, which will require proposed floodplain development to avoid, minimize, and mitigate impacts to natural resources. These requirements will ensure that natural resources in the floodplain are not lost with development, regardless of where it is occurring. The amendments will strengthen riparian corridors, preserve natural resources, and expand habitat over time, contributing to environmental equity. The amendments also incorporate a new Modeled Willamette River 1996 Flood Extent in the Willamette River Central Reach and South Reach to estimate future flood risk. This new model represents the best available science for estimating of flood risk along the Willamette River and will protect people and property in this area. The amendments are consistent with this goal.

**Goal 7.E: Community stewardship.** Portlanders actively participate in efforts to maintain and improve the environment, including watershed health.

- 203. Finding:** The Floodplain Resilience Plan amendments modify floodplain development requirements to ensure preservation of natural resources with development. As such, these requirements will ensure maintenance of natural resources throughout the city. The amendments are consistent with this goal.

### **Improving environmental quality and resilience**

**Policy 7.1. Environmental quality.** Protect or support efforts to protect air, water, and soil quality, and associated benefits to public and ecological health and safety, through plans and investments.

- 204. Finding:** The Floodplain Resilience Plan amendments protect existing natural resource and will contribute to waterways that are healthy, support fish and wildlife and maintain the quality, quantity, connectivity, and functions of the ecological system in the following ways:
- A. Recognizes that the watersheds within the City are distinct, with their own floodplains that are unique in character. Land uses in the floodplain vary greatly by location, with some floodplains made up of industrial and/or commercial uses and others that are primarily residential. To address these different characteristics and their regulatory structures, plan amendments apply regulations differently to protect and improve ecosystem services and functions.
  - B. Utilizes the existing Metro Title 3 map (referred to as the 1996 Flood Inundation Area) to identify flood risk areas, while also supplementing the Metro Title 3 map with a recently-completed model of a Willamette River flood with characteristics similar to the one experienced in the Portland region in February of 1996. This new model, referred to as the Modeled Willamette River 1996 Flood Extent, utilizes best available science and serves as a more up-to-date estimate of flood risk. The model provides new estimates of the extent and elevation of a 1996-like flood event using current river bathymetry, upland topography and



development patterns. This new map supplements the existing FEMA 100-year floodplain, which is out of date because the floodplain extent and estimated flood elevation are primarily based on a model completed in 1979.

The model is used in place of the existing Metro Title 3 1996 Flood Inundation Area along the Willamette River and is incorporated as a referenced floodplain in the City's "combined flood hazard area" map. The combined flood hazard area map serves as a basis for the application of environmentally-focused overlay zones in the city's floodplains.

- C. Includes a number of amendments that increase protections of floodplains along the Willamette River:
- Applies the River Environmental overlay zone to developed and undeveloped portions of the floodplain within 170 feet of the ordinary high water mark (known as the riparian buffer area) along the Willamette River Central Reach. Mitigation for impacts within the riparian buffer area (land within 170 feet of the ordinary high water mark) will require mitigation and demonstrate an improvement in one of two riparian functions: (1) Bank function, and control of sediments, nutrients and pollution; or (2) Large wood and channel dynamics. Requirements in this key riparian area are drawn from guidance provided in the NOAA Fisheries Biological Opinion on the NFIP and will expand and improve riparian habitat along the river.
  - Expand the River Environmental overlay zone in the Willamette River Central Reach to encompass all undeveloped floodplains landward of the riparian buffer area that are not currently in the River Environmental overlay zone.
  - Modifies the boundaries of the riparian buffer area and River Environmental overlay zone in the Willamette River South Reach to incorporate the Modeled Willamette River 1996 Flood Extent.

The requirements of the River Environmental overlay zone protect water quality and fish and wildlife habitat, while also minimizing the potential impacts of flooding. The overlay zone is designed to prevent adverse impacts on the features and functions of the Willamette River and its riparian corridor by establishing standards and criteria that apply an avoid-minimize-mitigate hierarchy and encourage ecologically-sensitive development. Development that meets these standards may be approved without a review. Development that does not meet standards is subject to River Review, where discretionary criteria are applied to ensure that unavoidable adverse impacts on natural resource values and functions, including floodplain habitat and water quality, are mitigated.

- D. Applies the Environmental Conservation overlay zone to undeveloped floodplains along Fanno Creek and Tryon Creek that are not currently in the Environmental Conservation overlay zone. Plan amendments update the requirements of the Environmental Zones chapter (33.430) to manage tree and vegetation removal and maintenance to achieve no net-loss in floodplain habitat, as defined by the guidance provided in the NOAA Fisheries Biological Opinion on the FEMA National Flood Insurance Program (NFIP). Amendments include limiting tree and vegetation removal that is allowed without City approval and increasing the minimum tree replacement required when a tree is removed in the floodplain.

Therefore, the amendments are consistent with this policy.



**Policy 7.2. Environmental equity.** Prevent or reduce adverse environment-related disparities affecting under-served and under-represented communities through plans and investments. This includes addressing disparities relating to air and water quality, natural hazards, contamination, climate change, and access to nature.

**205. Finding:** The Floodplain Resilience Plan recognize floodplains as an integral form of green infrastructure for the City that provide benefits to all residents. Plan amendments extend to all six of the City’s watersheds, implementing different protections as appropriate to the context of current land use. The ecological health of Portland’s waterways are important to everyone who lives, works, and recreates along them. Protecting and enhancing floodplains and riparian area contributes towards environmental equity in Portland. Healthy and functioning floodplains and associated vegetation and habitat provide ecosystem services, including reducing surface water runoff from entering and polluting waterways, reducing the impact of flooding by storing and slowing floodwaters and providing critical habitat that is utilized by threatened and endangered species.

The Floodplain Resilience Plan amendments make targeted expansions of the River Environmental and Environmental Conservation overlay zones, which will require proposed floodplain development to avoid, minimize, and mitigate impacts to natural resources. These requirements will ensure that natural resources in the floodplain are not lost with development, regardless of where it is occurring. The amendments will strengthen riparian corridors, preserve natural resources, and expand habitat over time, contributing to environmental equity. The amendments also incorporate a new Modeled Willamette River 1996 Flood Extent in the Willamette River Central Reach and South Reach to estimate future flood risk. This new model represents the best available science for estimating of flood risk along the Willamette River and will protect people and property in this area. The amendments are consistent with this policy.

**Policy 7.3. Ecosystem services.** Consider the benefits provided by healthy ecosystems that contribute to the livability and economic health of the city.

**206. Finding:** The Floodplain Resilience Plan amendments support healthy ecosystems that contribute to the livability and economic health of the city in the following ways:

- A. Reduces the impacts of future flooding and the degradation of floodplain habitat on endangered and threatened fish species. It recognizes the importance of protecting and maintaining the features and functions of natural resources for quality, quantity, and connectivity of habitats. The plan recognizes flooding as a disrupting factor in lives and the economic health of the City. The plan addresses livability and economic health by the new Modeled Willamette River 1996 Flood Extent into the “combined flood hazard area.” This new model better-estimates flood risk along the Willamette River because it provides a more accurate estimation of the impact area of a future 1996 flood-like event, which is expected to be more common as a result of climate change. Utilizing the model as a flood hazard area will protect people and property.
- B. Includes a number of amendments that increase protections of floodplains along the Willamette River:
  - Applies the River Environmental overlay zone to developed and undeveloped portions of the floodplain within 170 feet of the ordinary high water mark (known as the riparian buffer area) along the Willamette River Central Reach. Mitigation for impacts within the riparian buffer area (land within 170 feet of the ordinary high water mark) will require mitigation and demonstrate an improvement in one of two riparian functions: (1) Bank



function, and control of sediments, nutrients and pollution; or (2) Large wood and channel dynamics. Requirements in this key riparian area are drawn from guidance provided in the NOAA Fisheries Biological Opinion on the NFIP and will expand and improve riparian habitat along the river.

- Expand the River Environmental overlay zone in the Willamette River Central Reach to encompass all undeveloped floodplains landward of the riparian buffer area that are not currently in the River Environmental overlay zone.
- Modifies the boundaries of the riparian buffer area and River Environmental overlay zone in the Willamette River South Reach to incorporate the Modeled Willamette River 1996 Flood Extent.

The requirements of the River Environmental overlay zone protect water quality and fish and wildlife habitat, while also minimizing the potential impacts of flooding. The overlay zone is designed to prevent adverse impacts on the features and functions of the Willamette River and its riparian corridor by establishing standards and criteria that apply an avoid-minimize-mitigate hierarchy and encourage ecologically-sensitive development.

- C. Applies the Environmental Conservation overlay zone to undeveloped floodplains along Fanno Creek and Tryon Creek that are not currently in the Environmental Conservation overlay zone. Plan amendments update the requirements of the Environmental Zones chapter (33.430) to limit tree and vegetation removal that is allowed without City approval and increase the minimum number of trees planted when a tree is removed to three trees.

Therefore, the amendments are consistent with this policy.

**Policy 7.4. Climate change.** Update and implement strategies to reduce carbon emissions and impacts and increase resilience through plans and investments and public education.

**7.4.a. Carbon sequestration.** Enhance the capacity of Portland’s urban forest, soils, wetlands, and other water bodies to serve as carbon reserves.

**7.4.b. Climate adaptation and resilience.** Enhance the ability of rivers, streams, wetlands, floodplains, urban forest, habitats, and wildlife to limit and adapt to climate-exacerbated flooding, landslides, wildfire, and urban heat island effects.

- 207. Finding:** The 2035 Comprehensive Plan describes resilience as “reducing the vulnerability of our neighborhoods, businesses, and built and natural infrastructure to withstand challenges – environmental, economic and social – that may result from major hazardous events.”

The Floodplain Resilience Plan amendments aim to minimize impacts from climate change and natural disasters, specifically flooding. The Environmental Conservation and River Environmental overlay zones protect and conserve natural resources and their functions by encouraging environmentally sensitive development and requiring mitigation for unavoidable impacts to natural resource. The targeted expansions of the River Environmental and Environmental overlay zones to floodplains will enhance their ability to manage climate-exacerbated flooding. The application of the River Environmental overlay zone’s riparian buffer area requirements to the Willamette River Central Reach will require proposed developments to improve riparian function within 170 feet of the ordinary high water mark.

Amendments to the Environmental Zones chapter (33.430) establish additional limits on tree and vegetation removal that is allowed without City approval and increase the minimum number of



trees planted when a tree is removed to three trees. These amendments will expand tree canopy and strengthen their ability to act as a carbon reserve.

The amendments are consistent with this policy.

**Policy 7.5. Air quality.** Improve, or support efforts to improve, air quality through plans and investments, including reducing exposure to air toxics, criteria pollutants, and urban heat island effects. Consider the impacts of air quality on the health of all Portlanders.

**208. Finding:** The Floodplain Resilience Plan amendments use the River Environmental and Environmental Conservation overlay zones, as well as changes to requirements in the South Waterfront subdistrict, to protect and maintain vegetated riparian areas. These vegetated floodplains have a natural function of cooling the air and reducing heat island impacts. The amendments include additional limitations on when trees and vegetation can be removed without City approval and increases to the minimum tree replacement required when a tree is removed in the floodplain. These amendments will expand tree canopy along waterways, which will improve air quality and provide shade for Portlanders and fish and wildlife. Therefore, the amendments are consistent with this policy.

**Policy 7.6. Hydrology.** Through plans and investments, improve or support efforts to improve watershed hydrology to achieve more natural flow and enhance conveyance and storage capacity in rivers, streams, floodplains, wetlands, and aquifers. Minimize impacts from development and associated impervious surfaces, especially in areas with poorly-infiltrating soils and limited public stormwater discharge points, and encourage restoration of degraded hydrologic functions.

**209. Finding:** A primary purpose of the Floodplain Resilience Plan is to preserve and expand vegetated floodplain areas to strengthen the hydrologic function of the city's riverbanks and broader watersheds to improve conditions for threatened and endangered fish species. Through targeted expansions of the Environmental Conservation and River Environmental overlay zones, as well as amendments to floodplain development requirements in the Environmental Conservation overlay zone, future development will minimize impacts on floodplain habitat. Development in these overlay zones must first avoid and minimize impacts through an alternatives analysis. For those impacts that cannot be avoided, mitigation is then required. These requirements will preserve natural hydrologic function, maintain vegetation and protect fish and wildlife habitat.

Amendments to the Environmental Zones chapter (33.430) narrow tree and vegetation removal allowed without City approval and require a minimum of three trees to be planted for each tree removed. By protecting natural resources and allowing for limited development that avoids natural resources or mitigates for the impacts to natural resources, the environmental overlay zone encourages development that is context-sensitive, integrates with nature and that protects and preserves green infrastructure of the waterways and their floodplains.

Similarly, tree and vegetation removal requirements in the River Environmental overlay zone ensure a more natural hydrologic cycle in these critical areas along waterways and their associated riparian corridors. Development within the riparian buffer area (i.e., floodplains within 170 feet of ordinary high water) will be required to demonstrate an improvement in one of two riparian functions identified in the City's Natural Resources Inventory (NRI): (1) Bank function, and control of sediments, nutrients and pollution; or (2) Large wood and channel dynamics. Mitigation must meet the existing no net-loss standard of natural resource functions.

Therefore, the amendments are consistent with this policy.



**Policy 7.7. Water quality.** Improve, or support efforts to improve, water quality in rivers, streams, floodplains, groundwater, and wetlands through land use plans and investments, to address water quality issues including toxics, bacteria, temperature, metals, and sediment pollution. Consider the impacts of water quality on the health of all Portlanders.

**210. Finding:** The Floodplain Resilience Plan amendments recognize floodplains and associated vegetation as a form of green infrastructure that have the capacity to store and slow surface runoff, reducing the amount of pollution from entering waterways. To protect floodplains and associated vegetation, the Floodplain Resilience Plan amendments include expanding the River Environmental overlay zone to floodplains in the Willamette River Central Reach and updating the application of the River Environmental overlay zone in the Willamette River South Reach. Through its requirement to first avoid, then minimize and, finally, when necessary, mitigate development impacts, the River Environmental overlay zone will limit development in natural resource areas, encourage environmentally sensitive development, and require mitigation when development has a detrimental impact on the functions and values of the identified resource. Vegetation removal allowed through exemptions in the River Environmental is limited, especially in the river setback where only non-native vegetation and no trees can be removed. The riparian buffer area is another tool to protect floodplains and their functions. Development within the riparian buffer area is required to demonstrate an improvement in one of two riparian functions: (1) Bank function, and control of sediments, nutrients and pollution; or (2) Large wood and channel dynamics. Mitigation must meet the existing no net-loss standard of natural resource functions.

The Floodplain Resilience Plan also applies the Environmental Conservation overlay zone to undeveloped floodplains along Fanno Creek and Tryon Creek that are not currently in the Environmental Conservation overlay zone. Plan amendments update the requirements of the Environmental overlay zones chapter (33.430) to manage tree and vegetation removal and maintenance to achieve no net-loss in floodplain habitat, as defined by the guidance provided in the NOAA Fisheries Biological Opinion on the FEMA National Flood Insurance Program (NFIP). Amendments to the Environmental overlay zones chapter include limiting tree and vegetation removal that is allowed without City approval and increasing the minimum tree replacement required when a tree is removed in the floodplain.

All development will continue to be required to meet the City's stringent stormwater management requirements, which ensure the incorporation of well-functioning, effective green infrastructure. The regulations require that new impervious surfaces be reduced and that impervious surfaces be treated for stormwater runoff quantity and/or quality. The Stormwater Management Manual requires onsite infiltration to the maximum extent possible through green infrastructure techniques. Title 10, Erosion Control, of the City Code will also be applied applicable to future development. Title 10 requirements will minimize development-related erosion, reducing the potential impact of these activities on water quality. Therefore, the amendments are consistent with this policy.

**Policy 7.8. Biodiversity.** Strive to achieve and maintain self-sustaining populations of native species, including native plants, native resident and migratory fish and wildlife species, at-risk species, and beneficial insects (such as pollinators) through plans and investments.

**Policy 7.9. Habitat and biological communities.** Ensure that plans and investments are consistent with and advance efforts to improve, or support efforts to improve fish and wildlife habitat and biological communities. Use plans and investments to enhance the diversity, quantity, and quality of habitats habitat corridors, and especially habitats that:



- Are rare or declining.
- Support at-risk plant and animal species and communities.
- Support recovery of species under the Endangered Species Act, and prevent new listings.
- Provide culturally important food sources, including those associated with Native American fishing rights.

**Policy 7.10. Habitat connectivity.** Improve or support efforts to improve terrestrial and aquatic habitat connectivity for fish and wildlife by using plans and investments, to:

- Prevent and repair habitat fragmentation.
- Improve habitat quality.
- Weave habitat into sites as new development occurs.
- Enhance or create habitat corridors that allow fish and wildlife to safely access and move through and between habitat areas.
- Promote restoration and protection of floodplains.

**211. Finding:** The Floodplain Resilience Plan amendments recognize that the City of Portland, situated at the confluence on the Columbia and Willamette Rivers with tributaries, contains important areas of habitat for salmon and steelhead, including 13 endangered and threatened species. Plan amendments draw on guidance from the NOAA Fisheries Biological Opinion on the FEMA National Flood Insurance Program that identified strategies for improving and expanding floodplain habitat for salmon and steelhead, while reducing future flood risk by ensuring capacity for flood waters along rivers and streams.

The application of the River Environmental and Environmental Conservation overlay zones ensure the protection and conservation of the waterways, floodplains, and riparian areas in the project area by encouraging environmentally sensitive development and requiring mitigation when development has a detrimental impact on resources. The application of the River Environmental overlay zone and Environmental Conservation overlay zone ensure the protection and conservation of the waterways, floodplains, and riparian areas in the project area by encouraging environmentally sensitive development and requiring mitigation when development has a detrimental impact on resources. The mitigation requirements include planting of native vegetation and a mix of trees, shrubs and groundcover, which will improve habitat quality, quantity, and connectivity and maintain species diversity. In the riparian buffer area along the Willamette River, development is required to mitigate all impacts on identified natural resources and demonstrate an improvement in one of two riparian functions: (1) Bank function, and control of sediments, nutrients and pollution; or (2) large wood and channel dynamics.

The Floodplain Resilience Plan amendments also include new standards for tree and vegetation removal in the South Waterfront subdistrict of the Central City, similar to those that apply in the Willamette River Central Reach and South Reach. This amendment ensures that trees and vegetation in the floodplain in South Waterfront will be maintained and expanded over time. The new standards set a minimum planting of three trees when a tree is removed in the floodplain and ensures consistency in tree and vegetation requirements for the from the Fremont Bridge to the City's urban services boundary.

The amendments will increase biodiversity and threatened and endangered species habitat and strengthen habitat connectivity. Therefore, the amendments are consistent with these policies.



**Policy 7.11. Urban forest.** Improve, or support efforts to improve the quantity, quality, and equitable distribution of Portland’s urban forest through plans and investments.

**7.11.a. Tree preservation.** Require or encourage preservation of large healthy trees, native trees and vegetation, tree groves, and forested areas.

**7.11.b. Urban forest diversity.** Coordinate plans and investments with efforts to improve tree species diversity and age diversity.

**7.11.c. Tree canopy.** Support progress toward meeting City tree canopy targets.

**7.11.d. Tree planting.** Invest in tree planting and maintenance, especially in low-canopy areas, neighborhoods with under-served or under-represented communities, and within and near urban habitat corridors.

**7.11.e. Vegetation in natural resource areas.** Require native trees and vegetation in significant natural resource areas.

**7.11.f. Resilient urban forest.** Encourage planting of Pacific Northwest hardy and climate change resilient native trees and vegetation generally, and especially in urban habitat corridors.

**7.11.g. Trees in land use planning.** Identify priority areas for tree preservation and planting in land use plans.

**7.11.h. Managing wildfire risk.** Address wildfire hazard risks and management priorities through plans and investments.

**212. Finding:** The Floodplain Resilience Plan amendments include an update to the requirements of the Environmental Zones chapter (33.430) to achieve a no net-loss in floodplain habitat functions, including limiting tree and vegetation removal that is allowed without City approval and increasing the minimum tree replacement required when a tree is removed in the floodplain. The River Environmental overlay zone requires that existing trees be protected and its requirements for tree preservation and replacement within and landward of the river setback will increase tree canopy. The River Environmental overlay zone regulates removal of native plants and requires replanting disturbance areas with native vegetation. Development in the River Environmental and Environmental Conservation overlay zones must avoid, minimize, then mitigate impacts on natural resources. The plan does not include any changes to the City’s tree planting and maintenance investments. Therefore, the amendments are consistent with this policy.

**Policy 7.12. Invasive species.** Prevent the spread of invasive plants, and support efforts to reduce the impacts of invasive plants, animals, and insects, through plans, investments, and education.

**213. Finding:** The Floodplain Resilience Plan amendments are consistent with Policy 7.12 as the planting or propagation of any plant on the Nuisance Plants list in the *Portland Plant List* is prohibited in the City’s environmentally-focused overlay zones. In the River Environmental and Environmental Conservation overlay zones, invasive species can be removed at any time through an exemption, which does not require City approval. The *Portland Plant List* also includes a Required Eradication List of invasive plant species that must be removed. The Floodplain Resilience Plan amendments include targeted expansions of the River Environmental and Environmental Conservation overlay zones. These amendments will expand the area where native vegetation must be planted as a part of proposed development. The Floodplain Resilience Plan amendments are consistent with this policy.



**Policy 7.13. Soils.** Coordinate plans and investments with programs that address human-induced soil loss, erosion, contamination, or other impairments to soil quality and function.

**214. Finding:** The Floodplain Resilience Plan amendments maintain soil integrity in the River Environmental and Environmental Conservation overlay zones through requirements that limit ground disturbance and require mitigation for unavoidable impacts, including application of top soil before planting. Native plants are required to be planted in these overlay zones. In both overlay zones, tree and vegetation planting requirements help to hold soils in place and reduce erosion. The amendments are consistent with this policy.

**Policy 7.14. Natural hazards.** Prevent development-related degradation of natural systems and associated increases in landslide, wildfire, flooding, and earthquake risks.

**215. Finding:** The Floodplain Resilience Plan amendments are focused on addressing natural hazards, specifically the risk of flooding and its potential impacts, which are expected to worsen with climate change. Plan amendments apply to floodplains, with higher mitigation standards for areas closest to waterways due to their important ecological functions. In the Willamette River Central Reach, new riparian buffer area requirements, applied to floodplains within 170 feet of ordinary high water in the Willamette River Central Reach, will expand and improve riparian habitat along the river and reduce impervious surfaces. The riparian buffer area requirements protect an ecologically sensitive area by requiring floodplain development to demonstrate an improvement in either of two of the City’s floodplain-related functions: (1) Bank function, and control of sediments, nutrients and pollution; or (2) Large wood and channel dynamics. These requirements will improve the riverbank’s ability to manage flooding when it occurs, while also improving habitat for threatened and endangered salmon and steelhead species.

Elsewhere in the city, the Environmental Conservation overlay zone is applied to significant natural resources areas, including floodplains. These overlay zones guide development away from sensitive natural resources that provide important ecosystem services and require mitigation when development occurs, thereby protecting public health, safety, and property from natural disasters and hazards. Where the Environmental Conservation overlay zone is applied in the floodplain, new tree and vegetation removal requirements ensure that, at minimum, three trees are planted for each tree removed and that any other impacts of development on natural resources are mitigated.

The plan utilizes a recently-completed hydraulic model of a Willamette River flood similar to the one experienced in the Portland region in February of 1996. This new model, referred to as the Modeled Willamette River 1996 Flood Extent, serves as a more up-to-date estimate of flood risk along the Willamette River, Columbia Slough and a stretch of the Columbia River near the confluence with the Willamette River. The model provides a new estimate of the extent of a 1996-like flood event and its likely flood elevation by incorporating current development patterns, upland topography and river bathymetry. This new map supplements the FEMA 100-year floodplain, which is out of date because the floodplain extent and estimated flood elevation are primarily based on a model completed in 1979. The model is used in place of the existing Metro Title 3 1996 Flood Inundation Area (Metro is Portland’s regional government) and is incorporated as a referenced floodplain in the City’s “combined flood hazard area” map.

Therefore, the amendments are consistent with this policy.

**Policy 7.15. Brownfield remediation.** Improve environmental quality and watershed health by promoting and facilitating brownfield remediation and redevelopment that incorporates ecological site design and resource enhancement.



**216. Finding:** The Floodplain Resilience Plan amendments do not change the existing requirements or programs for brownfield redevelopment. Therefore, this policy does not apply.

**Policy 7.16. Adaptive management.** Evaluate trends in watershed and environmental health using current monitoring data and information to guide and support improvements in the effectiveness of City plans and investments.

**217. Finding:** The Floodplain Resilience Plan amendments draw on information and guidance from the Federal Emergency Management Agency, the National Marine Fisheries, and the Army Corps of Engineers. The NOAA Fisheries Biological Opinion on the National Flood Insurance Program was prepared using best available science and information on floodplain regulations to achieve compliance with the Endangered Species Act. The Modeled Willamette River 1996 Flood Extent was prepared through collaboration between City staff and the U.S. Army Corps of Engineers, and used the most recent bathymetry, upland topography, and development patterns. Data sources included Light Detection and Ranging (LiDAR) surveys, geographic information systems (GIS) and hydrologic and hydraulic analyses. The new map better defines which areas of Portland are likely to be susceptible to future flooding. The amendments are consistent with this policy.

**Policy 7.17. Restoration partnerships.** Coordinate plans and investments with other jurisdictions, air and water quality regulators, watershed councils, soil and water conservation districts, Sovereign nations, and community organizations and groups including under-served and under-represented communities, to optimize the benefits, distribution, and cost-effectiveness of watershed restoration and enhancement efforts.

**218. Finding:** The Floodplain Resilience Plan amendments draw on a collaborative process that involved input from a variety of stakeholders including tribal nations, neighborhood associations, various commissions and committees, Multnomah County Drainage District and Central Eastside Industrial Council Land Use Committee among other stakeholders. Given the cultural significance of Portland's waterways, outreach to tribal nations was made at a number of milestones. Focus group sessions were held with Black, Indigenous, and People of Color communities and the urban Native community to gather thoughts, experiences, perspectives and concerns from these groups. In development and implementation of the Community Engagement Plan, project staff conducted racial equity analyses that explored equity implications, benefits and burdens on stakeholders, and the most effective approach for engagement of underserved communities. A copy of the Community Engagement Plan is provided in the project record. See Chapter 2, Community Engagement, findings for more information. The amendments are consistent with this policy.

**Policy 7.18. Community stewardship.** Encourage voluntary cooperation between property owners, community organizations, and public agencies to restore or re-create habitat on their property, including removing invasive plants and planting native species.

**219. Finding:** The Floodplain Resilience Plan amendments modify floodplain development requirements to ensure preservation of natural resources with development. As such, these requirements will ensure maintenance of natural resources throughout the city. The amendments are consistent with this policy.

## **Planning for natural resource protection**

**Policy 7.19. Natural resource protection.** Protect the quantity, quality, and function of significant natural resources identified in the City's natural resource inventory, including:

- Rivers, streams, sloughs, and drainageways.



- Floodplains.
- Riparian corridors.
- Wetlands.
- Groundwater.
- Native and other beneficial vegetation species and communities.
- Aquatic and terrestrial habitats, including special habitats or habitats of concern, large anchor habitats, habitat complexes and corridors, rare and declining habitats such as wetlands, native oak, bottomland hardwood forest, grassland habitat, shallow water habitat, and habitats that support special-status or at-risk plant and wildlife species.
- Other resources identified in natural resource inventories.

**220. Finding:** The Floodplain Resilience Plan amendments protect the quantity, quality, and function of Portland’s floodplains and associated vegetation in the project area. The plan recognizes healthy vegetated floodplains as providing essential functions including the slowing and absorption of floodwaters, providing habitat for protected species, all while reducing the economic, social, and human impact of flood events. The Floodplain Resilience Plan amendments protect these resources and their ecosystem services, as defined in the Natural Resources Inventory, from detrimental impacts from development through the River Environmental overlay zone, the riparian buffer area, and the Environmental Conservation overlay zone.

The application of the River Environmental overlay zone will ensure the protection and conservation of floodplains and riparian areas where it’s applied along the Willamette River Central Reach and South Reach. Development in the River Environmental overlay zone must be sensitive to the environmental context, with mitigation required when development has a detrimental impact on resources. Development in the riparian buffer area is required to mitigate all impacts on identified natural resources and demonstrate an improvement in one of two riparian functions: (1) Bank function, and control of sediments, nutrients and pollution; or (2) large wood and channel dynamics. Mitigation requirements are intended to improve habitat quality, quantity, and connectivity along the Willamette River.

The targeted expansions of the Environmental Conservation overlay zone on undeveloped floodplains along Fanno Creek and Tryon Creek achieve similar outcomes of conserving important resources and functional values while allowing environmentally sensitive urban development. Where the Environmental Conservation overlay zone is applied in the floodplain, Floodplain Resilience Plan amendments establish new tree and vegetation removal requirements to ensure that, at minimum, three trees are planted for each tree removed.

Both of these overlay zones guide development away from sensitive natural resources that provide important ecosystem services and require mitigation when development occurs, thereby protecting the quantity, quality, and function of significant natural resources.

The amendments are consistent with this policy.

**Policy 7.20. Natural resource inventory.** Maintain an up-to-date inventory by identifying the location and evaluating the relative quantity and quality of natural resources.

**221. Finding:** The Floodplain Resilience Plan amendments do not update the Natural Resources Inventory. Therefore, Policy 7.20 is not applicable.



**Policy 7.21. Environmental plans and regulations.** Maintain up-to-date environmental protection plans and regulations that specify the significant natural resources to be protected and the types of protections to be applied, based on the best data and science available and on an evaluation of cumulative environmental, social, and economic impacts and tradeoffs. *See Figure 7-2 — Adopted Environmental Plans.*

**7.21.a.** Improve the effectiveness of environmental protection plans and regulations to protect and encourage enhancement of ecological functions and ecosystem services.

**222. Finding:** The Floodplain Resilience Plan amendments draw on information and guidance from the Federal Emergency Management Agency, the National Marine Fisheries, and the Army Corps of Engineers. The NOAA Fisheries Biological Opinion on the National Flood Insurance Program was prepared using best available science and information on floodplain regulations to achieve compliance with the Endangered Species Act. The Modeled Willamette River 1996 Flood Extent was prepared through collaboration between City staff and the U.S. Army Corps of Engineers, and used the most recent bathymetry, upland topography, and development patterns. Data sources included Light Detection and Ranging (LiDAR) surveys, geographic information systems (GIS) and hydrologic and hydraulic analyses. The new map better defines which areas of Portland are likely to be susceptible to future flooding. The amendments are consistent with this policy.

**Policy 7.22. Land acquisition priorities and coordination.** Maintain a land acquisition program as a tool to protect and support natural resources and their functions. Coordinate land acquisition with the programs of City bureaus and other agencies and organizations.

**223. Finding:** The Floodplain Resilience Plan does not include changes to any existing land acquisitions program within the City. Therefore, this policy does not apply.

### **Protecting natural resources in development situations**

**Policy 7.23. Impact evaluation.** Evaluate the potential adverse impacts of proposed development on significant natural resources, their functions, and the ecosystem services they provide to inform and guide development design and mitigation consistent with policies 7.24-7.26. and other relevant Comprehensive Plan policies.

**Policy 7.24. Regulatory hierarchy: avoid, minimize, mitigate.** Maintain regulations requiring that the potential adverse impacts of new development on significant natural resources and their functions first be avoided where practicable, then minimized, then lastly, mitigated.

**Policy 7.25. Mitigation effectiveness.** Require that mitigation approaches compensate fully for adverse impacts on locally and regionally significant natural resources and functions. Require mitigation to be located as close to the impact as possible. Mitigation must also take place within the same watershed or portion of the watershed that is within the Portland Urban Services Boundary, unless mitigating outside of these areas will provide a greater local ecological benefit. Mitigation will be subject to the following preference hierarchy:

1. On the site of the resource subject to impact with the same kind of resource; if that is not possible, then
2. Off-site with the same kind of resource; if that is not possible, then
3. On-site with a different kind of resource; if that is not possible, then
4. Off-site with a different kind of resource.



**Policy 7.26. Improving environmental conditions through development.** Encourage ecological site design, site enhancement, or other tools to improve ecological functions and ecosystem services in conjunction with new development and alterations to existing development.

**224. Finding:** The Floodplain Resilience Plan amendments recognize the importance of appropriate regulations when floodplain development is proposed. The River Environmental and Environmental Conservation overlay zones require proposed floodplain development to avoid, minimize, and mitigate any unavoidable impacts to natural resources. These requirements will ensure that natural resources in the floodplain are not lost with development.

The Floodplain Resilience Plan amendments further natural resource protections in the following ways:

1. The application of the River Environmental overlay zone and Environmental Conservation overlay zones to areas along the Willamette River, Tryon Creek, and Fanno Creek maintain and expand natural resources and the functions they provide. Environmentally-focused overlay zones encourage environmentally sensitive development and require mitigation whenever proposed development will have a detrimental impact on functions and values of existing natural resources.
2. Riparian buffer area requirements, applied to floodplains within 170 feet of ordinary high water in the Willamette River Central Reach and South Reach, maintain and improve water quality. The riparian buffer area protects important ecologically-sensitive areas nearest the river by requiring that proposed development demonstrate an improvement in one of two riparian functions: (1) Bank function, and control of sediments, nutrients and pollution; or (2) Large wood and channel dynamics.
3. Expands the Environmental Conservation overlay zone to apply to undeveloped floodplains along Fanno and Tryon creeks that are not currently in an Environmental overlay zone (either Environmental Protection or Environmental Conservation).
4. Updates to standards in the Environmental overlay zones (33.430) and the South Waterfront Greenway overlay zone (33.510.253) chapters will preserve tree and vegetation cover in floodplains. Updates to the Environmental overlay zones chapter limit tree and vegetation removal that is allowed without City approval and increases the minimum tree replacement required when a tree is removed in the Environmental overlay zones. The Floodplain Resilience Plan includes new standards for the South Waterfront Greenway overlay zone that establishes a new minimum of three trees planted whenever a tree is removed in the floodplain.

Both the River Environmental overlay zone and Environmental overlay zones (Environmental Conservation and Environmental Protection) place the highest priority on locating mitigation on the same site where impacts will occur. When placement of mitigation on site is not feasible, applicants are able to locate mitigation off site, as long as the applicant either owns the site or possesses a legal instrument, such as an easement or deed restriction, that ensures the ongoing monitoring and maintenance of the mitigation area.

The River Environmental overlay zone includes standards for mitigation that require a minimum 1.5:1 ratio (mitigation area to disturbance area) for on-site mitigation or the purchase of mitigation bank credits from a City-approved mitigation bank. The 1.5:1 ratio accounts for the time it takes for vegetation to mature and replace natural resources that were impacted by the development. Credits purchased from an approved mitigation bank must be located as close to



the disturbance area as possible. The ratio for off-site mitigation is 3:1 to account for the added uncertainty in management and operation of the mitigation site when it is off site.

Therefore, the amendments are consistent with these policies.

### **Aggregate resources**

**Policy 7.27. Aggregate resource protection.** Protect aggregate resource sites for current and future use where there are no major conflicts with urban needs, or where these conflicts may be resolved.

**Policy 7.28. Aggregate resource development.** When aggregate resources are developed, ensure that development minimizes adverse environmental impacts and impacts on adjacent land uses.

**Policy 7.29. Mining site reclamation.** Ensure that the reclamation of mining sites protects public health and safety, protects fish and wildlife (including at-risk species), enhances or restores habitat (including rare and declining habitat types), restores adequate watershed conditions and functions on the site, and is compatible with the surrounding land uses and conditions of nearby land.

**225. Finding:** Policies 7.27 through 7.29 provide direction regarding aggregate resources. The Floodplain Resilience Plan amendments do not impact aggregate resources or mine sites. These policies do not apply.

### **Columbia River Watershed**

**Policy 7.30. In-water habitat.** Enhance in-water habitat for native fish and wildlife, particularly in the Oregon Slough and near-shore environments along the Columbia River.

**Policy 7.31. Sensitive habitats.** Enhance grassland, beach, riverbanks, wetlands, bottomland forests, shallow water habitats, and other key habitats for wildlife traveling along the Columbia River migratory corridor, while continuing to manage the levees and floodplain for flood control.

**Policy 7.32. River-dependent and river-related uses.** Maintain plans and regulations that recognize the needs of river-dependent and river-related uses while also supporting ecologically-sensitive site design and practices.

**226. Finding:** Policies 7.30 through 7.32 provide direction regarding habitat and river-related uses in the Columbia River Watershed. The Floodplain Resilience Plan amendments that apply to the Columbia River floodplain modify the requirements of the Environmental Zones chapter (33.430) to limit tree and vegetation removal that is allowed without City approval and increases the minimum tree replacement required when a tree is removed in the Environmental overlay zones. These amendments will ensure that sensitive floodplain habitat is preserved and tree canopy is expanded. The findings earlier in this chapter that apply to all of Portland's watersheds are incorporated by reference.

The amendments are consistent with this policy.

### **Willamette River Watershed**

**Policy 7.33. Fish habitat.** Provide adequate intervals of ecologically-functional shallow-water habitat for native fish along the entire length of the Willamette River within the city, and at the confluences of its tributaries.

**Policy 7.34. Stream connectivity.** Improve stream connectivity between the Willamette River and its tributaries.



**Policy 7.35. River bank conditions.** Preserve existing river bank habitat and encourage the rehabilitation of river bank sections that have been significantly altered due to development with more fish and wildlife friendly riverbank conditions.

**227. Finding:** The Floodplain Resilience Plan strengthens the City’s efforts to protect, conserve and enhance fish habitat, stream connectivity and river bank conditions, including:

Willamette River Central Reach

- Require floodplain development within 170 feet of the ordinary high water mark (known as the riparian buffer area) to address natural resources impacts and incorporate measures to improve fish habitat along the riverbank, such as removal of structures or rip rap, creation of shallow water habitat, and other strategies. This amendment will contribute to the preservation and expansion of fish and wildlife habitat in areas closest to the river.
- Apply the River Environmental overlay zone to encompass the proposed riparian buffer area and any undeveloped floodplain landward of the riparian buffer area. This amendment will ensure that existing natural resources in the floodplain will be maintained with new development.

Willamette River South Reach

- Update the boundaries of the existing riparian buffer area and River Environmental overlay zone to include the areas identified in the Modeled Willamette River 1996 Flood Extent and FEMA 100-year Floodplain. This amendment incorporates best-available science to guide the City’s management of floodplains and ensures habitat protections are applied to areas most likely to flood in the future. Mitigation requirements in these areas will improve habitat for endangered and threatened species that live in or travel through Portland in the Willamette River. A map of the extent of the Modeled Willamette River 1996 Flood Extent and documentation of the methodology used to create it are included in the record. Upon implementation of the Zoning Code amendments, this extent will be available as a GIS layer for use by applicants as a part of future development proposals.

South Waterfront

- Add new standards for tree and vegetation removal and maintenance, similar to those that apply in the Willamette River Central Reach and South Reach. This amendment ensures that trees and vegetation in the floodplain in South Waterfront will be maintained and expanded over time. The new standards set a minimum planting of three trees when a tree is removed in the floodplain and ensures consistency in tree and vegetation requirements for the from the Fremont Bridge to the City’s urban services boundary.
- Code clarifications and updates to the Greenway land use review process, including clarifying that exterior lighting standards apply to all of the Greenway overlay zone. This amendment will reduce light pollution along the river, reducing impacts for fish and wildlife while also enhancing the scenic and recreational qualities of the river.

The River Environmental overlay zone, which is applied in the Central Reach and South Reach, requires development to avoid, minimize and mitigate development impacts. The River Environmental overlay zone protects existing shallow water habitats and requires mitigation for impacts to natural resource features and functions. Additionally, the Floodplain Resilience Plan amendments draw from the guidance on minimizing floodplain development impacts on threatened and endangered species provided in the NOAA Fisheries Biological Opinion on the FEMA National Flood Insurance Program. The findings earlier in this chapter that apply to all of Portland’s watersheds are incorporated by reference.



Therefore, the amendments are consistent with this policy.

**Policy 7.36. South Reach ecological complex.** Enhance habitat quality and connections between Ross Island, Oaks Bottom, and riverfront parks and natural areas south of the Central City, to enhance the area as a functioning ecological complex.

**228. Finding:** The Floodplain Resilience Plan amendments update the boundaries of the River Environmental overlay zone and the existing riparian buffer area in the Willamette River South Reach based on a recently-completed hydraulic model of a Willamette River flood with characteristics similar to the one experienced in the Portland region in February of 1996. This new model, referred to as the Modeled Willamette River 1996 Flood Extent, utilizes best available science and serves as a more up-to-date estimate of flood risk along the Willamette River, Columbia Slough and a stretch of the Columbia River near the confluence with the Willamette River. The model provides new estimates of the extents and elevation of a 1996-like flood event using current river bathymetry, upland topography and development patterns. This new map supplements the existing FEMA 100-year floodplain, which is out of date because the floodplain extent and estimated flood elevation are primarily based on a model completed in 1979.

Updating the River Environmental overlay zone and riparian buffer area will ensure improvements to floodplain functions and expand fish habitat in the flood-prone areas of the Willamette River. The findings earlier in this chapter that apply to all of Portland's watersheds are incorporated by reference. Therefore, the amendments are consistent with this policy.

**Policy 7.37. Contaminated sites.** Promote and support programs that facilitate the cleanup, reuse, and restoration of the Portland Harbor Superfund site and other contaminated upland sites.

**229. Finding:** The Floodplain Resilience Plan does not change the requirements for contaminated sites in the Willamette River South Reach. This policy does not apply.

**Policy 7.38. Sensitive habitats.** Protect and enhance grasslands, beaches, floodplains, wetlands, remnant native oak, bottomland hardwood forest, and other key habitats for native wildlife including shorebirds, waterfowl, and species that migrate along the Pacific Flyway and the Willamette River corridor.

**Policy 7.39. Riparian corridors.** Increase the width and quality of vegetated riparian buffers along the Willamette River.

**Policy 7.40. Connected upland and river habitats.** Enhance habitat quality and connectivity between the Willamette riverfront, the Willamette's floodplain, and upland natural resource areas.

**Policy 7.41. River-dependent and river-related uses.** Develop and maintain plans and regulations that recognize the needs of river-dependent and river-related uses, while also supporting ecologically-sensitive site design and practices.

**230. Finding:** Policies 7.38-7.41 addresses the protection, and quality of riparian habitat along the Willamette River. The Floodplain Resilience Plan amendments protect the quantity, quality, and function of Portland's floodplains and associated vegetation in the project area. The plan recognizes healthy vegetated floodplains as providing essential functions including the slowing and absorption of floodwaters, providing shallow water habitat for protected species and migratory species, all while reducing the economic, social, and human impact of flood events. The Floodplain Resilience Plan amendments protect these resources and their ecosystem services from detrimental impacts from development through the application of the River Environmental overlay zone and riparian buffer area requirements.



The application of the River Environmental overlay zone will ensure the protection and conservation of floodplains and riparian areas where it's applied along the Willamette River Central Reach and South Reach. Development in the River Environmental overlay zone must be sensitive to the environmental context, with mitigation requirements when development has a detrimental impact on resources. Mitigation requirements are intended to improve habitat quality, quantity, and connectivity along the Willamette River.

Development in the new Central Reach riparian buffer area, or floodplain areas within 170 feet of the ordinary high water mark, must mitigate all impacts on identified natural resources and demonstrate an improvement in one of two riparian functions: (1) Bank function, and control of sediments, nutrients and pollution; or (2) large wood and channel dynamics. The riparian buffer area is recognized as critical for its habitat and ecosystem functions.

The Floodplain Resilience Plan amendments make no changes to the requirements for river-dependent or river-related uses. The findings earlier in this chapter that apply to all of Portland's watersheds are incorporated by reference. The amendments are consistent with this policy.

**Policy 7.42. Forest Park.** Enhance Forest Park as an anchor habitat and recreational resource.

**231. Finding:** Policy 7.42 addresses Forest part as an anchor habitat and recreational resource. The Floodplain Resilience Plan amendments do not apply to any portion of Forest Park. This policy does not apply.

### **Columbia Slough Watershed**

**Policy 7.43. Fish passage.** Restore in-stream habitat and improve fish passage within the Columbia Slough, including for salmonids in the lower slough.

**Policy 7.44. Flow constriction removal.** Reduce constriction, such as culverts, in the slough channels, to improve the flow of water and water quality.

**Policy 7.45. Riparian corridors.** Increase the width, quality, and native plant diversity of vegetated riparian buffers along Columbia Slough channels and other drainageways within the watershed, while also managing the slough for flood control.

**Policy 7.46. Sensitive habitats.** Enhance grasslands and wetland habitats in the Columbia Slough, such as those found in the Smith and Bybee Lakes and at the St. Johns Landfill site, to provide habitat for sensitive species, and for wildlife traveling along the Columbia and Willamette river migratory corridors.

**Policy 7.47. Connected rivers habitats.** Enhance upland habitat connections to the Willamette and Columbia rivers.

**232. Finding:** Policies 7.43 through 7.49 provide direction regarding the environment and watershed health in the Columbia Slough Watershed. The Floodplain Resilience Plan amendments that apply to the Columbia Slough floodplain modify the requirements of the Environmental Zones chapter (33.430) to limit tree and vegetation removal that is allowed without City approval and increases the minimum tree replacement required when a tree is removed in the Environmental overlay zones. These amendments will ensure that sensitive floodplain habitat is preserved and tree canopy is expanded. The findings earlier in this chapter that apply to all of Portland's watersheds are incorporated by reference. The amendments are consistent with this policy.

**Policy 7.48. Contaminated sites.** Ensure that plans and investments are consistent with and advance programs that facilitate the cleanup, reuse, and restoration of contaminated sites that are adjacent, or that discharge stormwater, to the Columbia Slough.



**Policy 7.49. Portland International Airport.** Protect, restore, and enhance natural resources and functions in the Portland International Airport plan district, as identified in Portland International Airport/Middle Columbia Slough Natural Resources Inventory. Accomplish this through regulations, voluntary strategies, and the implementation of special development standards.

**233. Finding:** The Floodplain Resilience Plan amendments do not change the requirements for contaminated sites in the Columbia Slough watershed or the Portland International Airport. These policies do not apply.

### **Fanno and Tryon Creek Watersheds**

**Policy 7.50. Stream connectivity.** Encourage the daylighting of piped portions of Tryon and Fanno creeks and their tributaries.

**234. Finding:** The Floodplain Resilience Plan amendments do not make any changes to the potential for daylighting streams in Tryon Creek and Fanno Creek. This policy does not apply.

**Policy 7.51. Riparian and habitat corridors.** Protect and enhance riparian habitat quality and connectivity along Tryon and Fanno creeks and their tributaries. Enhance connections between riparian areas, parks, anchor habitats, and areas with significant tree canopy. Enhance in-stream and upland habitat connections between Tryon Creek State Natural Area and the Willamette River.

**Policy 7.52. Reduced hazard risks.** Reduce the risks of landslides and streambank erosion by protecting trees and vegetation that absorb stormwater, especially in areas with steep slopes or limited access to stormwater infrastructure.

**235. Finding:** Policies 7.51 and 7.52 provide direction regarding habitat and river-related uses in the Fanno and Tryon Creek Watersheds. The Floodplain Resilience Plan amendments expand the Environmental Conservation overlay zone to encompass undeveloped floodplains not currently in an environmental overlay zone. Within the Environmental Conservation overlay zone, development must avoid, minimize, then mitigate natural resources impacts. Floodplain Resilience Plan amendments to the Environmental Zones chapter (33.430) limit tree and vegetation removal that is allowed without City approval and increase the minimum tree replacement required when a tree is removed in the Environmental overlay zones. These amendments will improve and expand riparian and habitat corridors while reducing the risk of landslides and streambank erosion. Increases in trees in the floodplain will stabilize streambanks, manage stormwater and provide expanded tree canopy. The findings earlier in this chapter that apply to all of Portland's watersheds are incorporated by reference. The amendments are consistent with this policy.

### **Johnson Creek Watershed**

**Policy 7.53. In-stream and riparian habitat.** Enhance in-stream and riparian habitat and improve fish passage for salmonids along Johnson Creek and its tributaries.

**Policy 7.54. Floodplain restoration.** Enhance Johnson Creek floodplain functions to increase flood-storage capacity, improve water quality, and enhance fish and wildlife habitat.

**Policy 7.55. Connected floodplains, springs, and wetlands.** Enhance hydrologic and habitat connectivity between the Johnson Creek floodplain and its springs and wetlands.

**Policy 7.56. Reduced natural hazards.** Reduce the risks of landslides, streambank erosion and downstream flooding by protecting seeps, springs, trees, vegetation, and soils that absorb stormwater in the East Buttes.



**Policy 7.57. Greenspace network.** Enhance the network of parks, trails, and natural areas near the Springwater Corridor Trail and the East Buttes to enhance habitat connectivity and nature-based recreation in East Portland.

**236. Finding:** Policies 7.53 through 7.57 provide direction regarding habitat and river-related uses in the Johnson Creek Watersheds. The Floodplain Resilience Plan amendments expand the Environmental Conservation overlay zone to encompass undeveloped floodplains not currently in an environmental overlay zone. Within the Environmental Conservation overlay zone, development must avoid, minimize, then mitigate natural resources impacts. Floodplain Resilience Plan amendments to the Environmental Zones chapter (33.430) limit tree and vegetation removal that is allowed without City approval and increase the minimum tree replacement required when a tree is removed in the Environmental overlay zones. These amendments will improve and expand riparian and habitat corridors while reducing the risk of landslides, streambank erosion and downstream flooding. Increases in trees in the floodplain will stabilize streambanks, manage stormwater and provide expanded tree canopy. Therefore, the amendments are consistent with this policy.



## Chapter 8: Public Facilities and Services

**Goal 8.A: Quality public facilities and services.** High-quality public facilities and services provide Portlanders with optimal levels of service throughout the city, based on system needs and community goals, and in compliance with regulatory mandates.

**Goal 8.B: Multiple benefits.** Public facility and service investments improve equitable service provision, support economic prosperity, and enhance human and environmental health.

**Goal 8.C: Reliability and resiliency.** Public facilities and services are reliable, able to withstand or recover from catastrophic natural and manmade events, and are adaptable and resilient in the face of long-term changes in the climate, economy, and technology.

**Goal 8.D: Public rights-of-way.** Public rights-of-way enhance the public realm and provide a multi-purpose, connected, safe, and healthy physical space for movement and travel, public and private utilities, and other appropriate public functions and uses.

**237. Finding:** Goals 8.A through 8.D address provision of public facilities and services and public rights of way. The Floodplain Resilience Plan amendments do not affect the City’s ability to provide equitable, well-functioning, and high-quality public facilities and services. The amendments are consistent with these goals.

**Goal 8.E: Sanitary and stormwater systems.** Wastewater and stormwater are managed, conveyed, and/or treated to protect public health, safety, and the environment, and to meet the needs of the community on an equitable, efficient, and sustainable basis.

**238. Finding:** This goal aims to ensure that wastewater and stormwater systems protect public health, safety, and the environment. The Floodplain Resilience Plan amendments do not modify how existing sanitary and stormwater systems are operated. However, the amendments expand the River Environmental overlay zone and Environmental Conservation overlay zones in some areas so that significant natural resources, including those in floodplains, are protected. These overlay zones guide development away from sensitive natural resources that provide important ecosystem services, including stormwater management, and require mitigation when development occurs. Plan amendments also update the requirements of the Environmental Zones chapter (33.430) and South Waterfront subdistrict Greenway overlay zone (33.510.253) to manage tree and vegetation removal and replacement to achieve no net-loss in floodplain habitat, as defined by the guidance provided in the NOAA Fisheries Biological Opinion on the FEMA National Flood Insurance Program (NFIP). Amendments to these chapters include limiting tree and vegetation removal that is allowed without City approval and increasing the minimum tree replacement required when a tree is removed in the floodplain. The amendments are consistent with Goal 8.E.

**Goal 8.F: Flood management.** Flood management systems and facilities support watershed health and manage flooding to reduce adverse impacts on Portlanders’ health, safety, and property.

**239. Finding:** Goal 8.F aims to reduce the negative impacts of flooding on health, safety and property. The primary goals of the Floodplain Resilience Plan amendments are to better identify areas of likely future flooding and reduce the impacts of flooding on people and property. To that end, the amendments do the following:

- The plan utilizes a recently-completed hydraulic model of a Willamette River flood with characteristics similar to the one experienced in the Portland region in February of 1996. This new model, referred to as the Modeled Willamette River 1996 Flood Extent, serves as a more



up-to-date estimate of flood risk along the Willamette River, Columbia Slough and a stretch of the Columbia River near the confluence with the Willamette River. The model provides new estimates of the extents and elevation of a 1996-like flood event using current river bathymetry, upland topography and development patterns.

This new map supplements the FEMA 100-year floodplain, which is out of date because the floodplain extent and estimated flood elevation are primarily based on a model completed in 1979.

- Riparian buffer area requirements, applied to floodplains within 170 feet of ordinary high water in the Willamette River Central Reach and South Reach, expand and improve riparian habitat along the river, reducing impervious surfaces in this important area and improving the riverbank's ability to manage flooding when it occurs. The riparian buffer area protects an ecologically sensitive area through new mitigation requirements that require proposed development to improve one of two of the City's floodplain-related habitat functions: (1) Bank function, and control of sediments, nutrients and pollution; or (2) Large wood and channel dynamics.
- The River Environmental overlay zone and Environmental Conservation overlay zones are expanded applied to undeveloped floodplains not already in an environmentally-focused overlay zone. The application of overlay zones will guide development away from sensitive natural resources in these areas and require mitigation when development occurs, thereby protecting public health, safety, and property from natural disasters and hazards.
- Amendments to the standards in the Environmental overlay zones (33.430) and the South Waterfront Greenway overlay zone (33.510.253) chapters maintain tree and vegetation cover, improving air and water quality. Updates to the Environmental overlay zones chapter limit tree and vegetation removal that is allowed without City approval and increases the minimum tree replacement required when a tree is removed. The amendments add new tree replacement standards for the South Waterfront Greenway overlay zone that requires at least three trees to be planted when a tree is removed in the floodplain.

Therefore, the amendments are consistent with Goal 8.F.

**Goal 8.G: Water.** Reliable and adequate water supply and delivery systems provide sufficient quantities of high-quality water at adequate pressures to meet the needs of the community on an equitable, efficient, and sustainable basis.

**240. Finding:** The Floodplain Resilience Plan amendments do not affect the City's ability to ensure reliable and adequate water supply and delivery systems and meet community needs. Therefore, the amendments are consistent with this goal.

**Goal 8.H: Parks, natural areas, and recreation.** All Portlanders have safe, convenient, and equitable access to high-quality parks, natural areas, trails, and recreational opportunities in their daily lives, which contribute to their health and well-being. The City manages its natural areas and urban forest to protect unique urban habitats and offer Portlanders an opportunity to connect with nature.

**241. Finding:** The Floodplain Resilience Plan amendments will contribute to the overall management of natural areas and urban forests in the city by ensuring that impacts to natural resources within the parks and open spaces are avoided and minimized, and that any unavoidable impacts are mitigated. Amendments to Environmental Zones chapter (33.430) limit tree and vegetation removal that is allowed without City approval and increase the minimum tree replacement to three trees when a tree is removed in the floodplain. This will expand tree canopy on Parks



property while also contributing to the recovery of threatened and endangered fish species. Therefore, the amendments are consistent with this goal.

**Goal 8.I: Public safety and emergency response.** Portland is a safe, resilient, and peaceful community where public safety, emergency response, and emergency management facilities and services are coordinated and able to effectively and efficiently meet community needs.

**Goal 8.J: Solid waste management.** Residents and businesses have access to waste management services and are encouraged to be thoughtful consumers to minimize upstream impacts and avoid generating waste destined for the landfill. Solid waste — including food, yard debris, recyclables, electronics, and construction and demolition debris — is managed, recycled, and composted to ensure the highest and best use of materials.

**Goal 8.K: School facilities.** Public schools are honored places of learning as well as multifunctional neighborhood anchors serving Portlanders of all ages, abilities, and cultures.

**Goal 8.L: Technology and communications.** All Portland residences, businesses, and institutions have access to universal, affordable, and reliable state-of-the-art communication and technology services.

**Goal 8.M: Energy infrastructure and services.** Residents, businesses, and institutions are served by reliable energy infrastructure that provides efficient, low-carbon, affordable energy through decision-making based on integrated resource planning.

**242. Finding:** The Floodplain Resilience Plan amendments do not affect the any of the infrastructure and public facilities and services identified in goals 8.I through 8.M. The amendments are consistent with these goals.

## **Service provision and urbanization**

**Policy 8.1. Urban services boundary.** Maintain an Urban Services Boundary for the City of Portland that is consistent with the regional urban growth policy, in cooperation with neighboring jurisdictions. The Urban Services Boundary is shown on the Comprehensive Plan Map.

**Policy 8.2. Rural, urbanizable, and urban public facility needs.** Recognize the different public facility needs in rural, urbanizable and urban land as defined by the Regional Urban Growth Boundary, the City Urban Services Boundary, and the City Boundaries of Municipal Incorporation. See Figure 8-1 — Urban, Urbanizable, and Rural Lands.

**Policy 8.3. Urban service delivery.** Provide the following public facilities and services at urban levels of service to urban lands within the City’s boundaries of incorporation:

- Public rights-of-way, streets, and public trails
- Sanitary sewers and wastewater treatment
- Stormwater management and conveyance
- Flood management
- Protection of the waterways of the state
- Water supply
- Police, fire, and emergency response



- Parks, natural areas, and recreation
- Solid waste regulation

**Policy 8.4. Supporting facilities and systems.** Maintain supporting facilities and systems, including public buildings, technology, fleet, and internal service infrastructure, to enable the provision of public facilities and services.

**Policy 8.5. Planning service delivery.** Provide planning, zoning, building, and subdivision control services within the boundaries of incorporation, and as otherwise provided by intergovernmental agreement within the City's Urban Services Boundary.

**243. Finding:** The City Council interprets policies 8.1 through 8.5 to provide direction on the provision of public facilities and services and the process of urbanization. The Floodplain Resilience Plan amendments do not urbanize any rural land or include new public facilities or infrastructure projects. These policies do not apply.

### **Service coordination**

**Policy 8.6. Interagency coordination.** Maintain interagency coordination agreements with neighboring jurisdictions and partner agencies that provide urban public facilities and services within the City of Portland's Urban Services Boundary to ensure effective and efficient service delivery. See Policy 8.3 for the list of services included. Such jurisdictions and agencies include, but may not be limited to:

- Multnomah County for transportation facilities and public safety.
- State of Oregon for transportation and parks facilities and services.
- TriMet for public transit facilities and services.
- Port of Portland for air and marine facilities and services.
- Metro for regional parks and natural areas, and for solid waste, composting, and recycling facilities and transfer stations.
- Gresham, Milwaukie, Clackamas County Service District #1, and Clean Water Services for sanitary sewer conveyance and treatment.
- Multnomah County Drainage District No. 1, Peninsula Drainage District No 1, and Peninsula Drainage District No. 2 for stormwater management and conveyance, and for flood mitigation, protection, and control.
- Rockwood People's Utility District; Sunrise Water Authority; and the Burlington, Tualatin Valley, Valley View, West Slope, Palatine Hill, Alto Park, and Clackamas River Water Districts for water distribution.
- Portland Public Schools and the David Douglas, Parkrose, Reynolds, Centennial, and Riverdale school districts for public education, park, trail, and recreational facilities.

**Policy 8.7. Outside contracts.** Coordinate with jurisdictions and agencies outside of Portland where the City provides services under agreement.



**Policy 8.8. Public service coordination.** Coordinate with the planning efforts of agencies providing public education, public health services, community centers, urban forest management, library services, justice services, energy, and technology and communications services.

**Policy 8.9. Internal coordination.** Coordinate planning and provision of public facilities and services, including land acquisition, among City agencies, including internal service bureaus.

**Policy 8.10. Co-location.** Encourage co-location of public facilities and services across providers where co-location improves service delivery efficiency and access for historically under-represented and under-served communities.

**244. Finding:** City Council interprets policies 8.6 through 8.10 to provide direction on coordination with neighboring jurisdictions and partner agencies that provide urban public facilities and services within the City of Portland’s Urban Services Boundary. The Floodplain Resilience Plan amendments do not include amendments to public service coordination agreements. The Floodplain resilience Plan was developed in collaboration with an internal team that included the bureaus of Development Services, Environmental Services, Emergency Management, the Office of Government Affairs, the Office of the City Attorney, Parks and Recreation and Prosper Portland. Therefore, the amendments are consistent with policies 8.6 through 8.10.

### **Service extension**

**Policy 8.11. Annexation.** Require annexation of unincorporated urbanizable areas within the City’s Urban Services Boundary as a prerequisite to receive urban services.

**Policy 8.12. Feasibility of service.** Evaluate the physical feasibility and cost-effectiveness of extending urban public services to candidate annexation areas to ensure sensible investment and to set reasonable expectations.

**Policy 8.13. Orderly service extension.** Establish or improve urban public services in newly-annexed areas to serve designated land uses at established levels of service, as funds are available and as responsible engineering practice allows.

**Policy 8.14. Coordination of service extension.** Coordinate provision of urban public services to newly-annexed areas so that provision of any given service does not stimulate development that significantly hinders the City’s ability to provide other urban services at uniform levels.

**Policy 8.15. Services to unincorporated urban pockets.** Plan for future delivery of urban services to urbanizable areas that are within the Urban Services Boundary but outside the city limits.

**Policy 8.16. Orderly urbanization.** Coordinate with counties, neighboring jurisdictions, and other special districts to ensure consistent management of annexation requests, and to establish rational and orderly process of urbanization that maximize efficient use of public funds.

**Policy 8.17. Services outside the city limits.** Prohibit City provision of new urban services, or expansion of the capacity of existing services, in areas outside city limits, except in cases where the City has agreements or contracts in place.

**Policy 8.18. Service district expansion.** Prohibit service district expansion or creation within the City’s Urban Services Boundary without the City’s expressed consent.

**Policy 8.19. Rural service delivery.** Provide the public facilities and services identified in Policy 8.3 in rural areas only at levels necessary to support designated rural residential land uses and protect public health and safety. Prohibit sanitary sewer extensions into rural land and limit other urban services.



**245. Finding:** City Council interprets Policies 8.11-8.19 to provide direction on extending public services and orderly urbanization. The Floodplain Resilience Plan amendments do not include new public facility or infrastructure projects or service extensions. These policies do not apply.

### **Public investment**

**Policy 8.20. Regulatory compliance.** Ensure public facilities and services remain in compliance with state and federal regulations. Work toward cost-effective compliance with federal and state mandates through intergovernmental coordination and problem solving.

**Policy 8.21. System capacity.** Establish, improve, and maintain public facilities and services at levels appropriate to support land use patterns, densities, and anticipated residential and employment growth, as physically feasible and as sufficient funds are available.

**Policy 8.22. Equitable service.** Provide public facilities and services to alleviate service deficiencies and meet level-of-service standards for all Portlanders, including individuals, businesses, and property owners.

**8.22.a.** In places that are not expected to grow significantly but have existing deficiencies, invest to reduce disparity and improve livability.

**8.22.b.** In places that lack basic public facilities or services and also have significant growth potential, invest to enhance neighborhoods, fill gaps, maintain affordability, and accommodate growth.

**8.22.c.** In places that are not expected to grow significantly and already have access to complete public facilities and services, invest primarily to maintain existing facilities and retain livability.

**8.22.d.** In places that already have access to complete public facilities and services, but also have significant growth potential, invest to fill remaining gaps, maintain affordability, and accommodate growth.

**Policy 8.23. Asset management.** Improve and maintain public facility systems using asset management principles to optimize preventative maintenance, reduce unplanned reactive maintenance, achieve scheduled service delivery, and protect the quality, reliability, and adequacy of City services.

**Policy 8.24. Risk management.** Maintain and improve Portland’s public facilities to minimize or eliminate economic, social, public health and safety, and environmental risks.

**Policy 8.25. Critical infrastructure.** Increase the resilience of high-risk and critical infrastructure through monitoring, planning, maintenance, investment, adaptive technology, and continuity planning.

**Policy 8.26. Capital programming.** Maintain long-term capital improvement programs that balance acquisition and construction of new public facilities with maintenance and operations of existing facilities.

**246. Finding:** The City Council interprets policies 8.20 through 8.26 to provide direction on investment priorities for public facilities. The Floodplain Resilience Plan amendments do not include new public facility or infrastructure projects, or changes to the operation or maintenance of those facilities. These policies do not apply.

### **Funding**

**Policy 8.27. Cost-effectiveness.** Establish, improve, and maintain the public facilities necessary to serve designated land uses in ways that cost-effectively provide desired levels of service, consider facilities’



lifecycle costs, and maintain the City’s long-term financial sustainability.

**Policy 8.28. Shared costs.** Ensure the costs of constructing and providing public facilities and services are equitably shared by those who benefit from the provision of those facilities and services.

**Policy 8.29. System development.** Require private or public entities whose prospective development or redevelopment actions contribute to the need for public facility improvements, extensions, or construction to bear a proportional share of the costs.

**Policy 8.30. Partnerships.** Maintain or establish public and private partnerships for the development, management, or stewardship of public facilities necessary to serve designated land uses, as appropriate.

**247. Finding:** City Council interprets policies 8.27 through 8.30 to provide direction on funding public facilities and services within the City of Portland’s Urban Services Boundary. The Floodplain Resilience Plan amendments do not include new public facility or infrastructure projects, or changes to the operation or maintenance of those facilities. These policies do not apply.

### **Public benefits**

**Policy 8.31. Application of Guiding Principles.** Plan and invest in public facilities in ways that promote and balance the Guiding Principles established in The Vision and Guiding Principles of this Comprehensive Plan.

**Policy 8.32. Community benefit agreements.** Encourage the use of negotiated community benefit agreements for large public facility projects as appropriate to address environmental justice policies in Chapter 2: Community Involvement.

**Policy 8.33. Community knowledge and experience.** Encourage public engagement processes and strategies for larger public facility projects to include community members in identifying potential impacts, mitigation measures and community benefits.

**Policy 8.34. Resource efficiency.** Reduce the energy and resource use, waste, and carbon emissions from facilities necessary to serve designated land uses to meet adopted City goals and targets.

**248. Finding:** The City Council interprets policies 8.31 through 8.34 to provide direction on the associated public benefits that should be considered in conjunction with investment in public facilities and services within the City of Portland’s Urban Services Boundary. The Floodplain Resilience Plan amendments do not include new public facility or infrastructure projects, or changes to the operation or maintenance of those facilities. These policies do not apply.

**Policy 8.35. Natural systems.** Protect, enhance, and restore natural systems and features for their infrastructure service and other values.

**Policy 8.36. Context-sensitive infrastructure.** Design, improve, and maintain public rights-of-way and facilities in ways that are compatible with, and that minimize negative impacts on, their physical, environmental, and community context.

**249. Finding:** The Floodplain Resilience Plan amendments protect and enhance floodplain and riparian habitat along the Willamette River, Columbia River, Columbia Slough and other waterways in the city for the 16 threatened and endangered species identified in the FEMA Biological Opinion. Amendments in the Willamette River Central Reach (33.475) establish the riparian buffer area, which includes the floodplain within 170 feet of the ordinary high water mark. In this area, proposed development must demonstrate no net-loss in natural resources while also demonstrating an improvement to one of two floodplain-related functions, as defined in the City’s



Natural Resources Inventory. Amendments to the Environmental overlay zones chapter (33.430), which applies to the city's other floodplains, narrow tree and vegetation removal allowed without City approval and require a minimum of three trees to be planted for each tree removed. Both overlay zones apply an avoid-minimize-mitigate hierarchy and encourage ecologically-sensitive development. The Floodplain Resilience Plan amendments are consistent with this policy.

**Policy 8.38. Age-friendly public facilities.** Promote public facility designs that make Portland more age-friendly.

**250. Finding:** The Floodplain Resilience Plan amendments do not include new public facility or infrastructure projects, or changes to the operation or maintenance of those facilities. Therefore, this policy does not apply.

### **Public rights-of-way**

**Policy 8.39. Interconnected network.** Establish a safe and connected rights-of-way system that equitably provides infrastructure services throughout the city.

**Policy 8.40. Transportation function.** Improve and maintain the right-of-way to support multimodal transportation mobility and access to goods and services as is consistent with the designated street classification.

**Policy 8.41. Utility function.** Improve and maintain the right-of-way to support equitable distribution of utilities, including water, sanitary sewer, stormwater management, energy, and communications, as appropriate.

**Policy 8.42. Stormwater management function.** Improve rights-of-way to integrate green infrastructure and other stormwater management facilities to meet desired levels-of-service and economic, social, and environmental objectives.

**Policy 8.43. Trees in rights-of-way.** Integrate trees into public rights-of-way to support City canopy goals, transportation functions, and economic, social, and environmental objectives.

**Policy 8.44. Community uses.** Allow community use of rights-of-way for purposes such as public gathering space, events, or temporary festivals, if the community uses are integrated in ways that balance and minimize conflict with the designated through movement and access roles of rights-of-ways.

**Policy 8.45. Pedestrian amenities.** Encourage facilities that enhance pedestrian enjoyment, such as transit shelters, garbage containers, benches, etc. in the right-of-way.

**Policy 8.46. Commercial uses.** Accommodate allowable commercial uses of the rights-of-way for enhancing commercial vitality, if the commercial uses can be integrated in ways that balance and minimize conflict with the other functions of the right-of-way.

**Policy 8.47. Flexible design.** Allow flexibility in right-of-way design and development standards to appropriately reflect the pattern area and other relevant physical, community, and environmental contexts and local needs.

**8.47.a.** Use a variety of transportation resources in developing and designing projects for all City streets, such as the City of Portland's Pedestrian Design Guide, Bicycle Master Plan-Appendix A, NACTO Urban Bikeway Design Guide, NACTO Urban Street Design Guide, Portland Parks and Recreation Trail Design Guidelines, Designing for Truck Movements and Other Large Vehicles, and City of Portland Green Street Policy, Stormwater Management Manual, Design Guide for Public



Street Improvements, and Neighborhood Greenways. (TSP objective 8.1.e.).

**Policy 8.48. Corridors and City Greenways.** Ensure public facilities located along Civic Corridors, Neighborhood Corridors, and City Greenways support the multiple objectives established for these corridors.

**Policy 8.49. Coordination.** Coordinate the planning, design, development, improvement, and maintenance of public rights-of-way among appropriate public agencies, private providers, and adjacent landowners.

**8.49.a.** Coordination efforts should include the public facilities necessary to support the uses and functions of rights-of-way, as established in policies 8.40 to 8.46.

**8.49.b.** Coordinate transportation and stormwater system plans and investments, especially in unimproved or substandard rights-of-way, to improve water quality, public safety, including for pedestrians and bicyclists, and neighborhood livability.

**Policy 8.50. Undergrounding.** Encourage undergrounding of electrical and telecommunications facilities within public rights-of-way, especially in centers and along Civic Corridors.

**Policy 8.51. Right-of-way vacations.** Maintain rights-of-way if there is an established existing or future need for them, such as for transportation facilities or for other public functions established in policies 8.40 to 8.46.

**Policy 8.52. Rail rights-of-way.** Preserve existing and abandoned rail rights-of-way for future rail or public trail uses.

**251. Finding:** The City Council interprets policies 8.39 through 8.52 to apply to new public facilities, uses, or infrastructure projects in the right-of-way; and right of way vacations. The Floodplain Resilience Plan amendments do not include new public facility, uses, or infrastructure projects in the right-of-way. Therefore, these policies do not apply.

## Trails

**Policy 8.53. Public trails.** Establish, improve, and maintain a citywide system of public trails that provide transportation and/or recreation options and are a component of larger network of facilities for bicyclists, pedestrians, and recreational users.

**Policy 8.54. Trail system connectivity.** Plan, improve, and maintain the citywide trail system so that it connects and improves access to Portland's neighborhoods, commercial areas, employment centers, schools, parks, natural areas, recreational facilities, regional destinations, the regional trail system, and other key places that Portlanders access in their daily lives.

**Policy 8.55. Trail coordination.** Coordinate planning, design, improvement, and maintenance of the trail system among City agencies, other public agencies, non-governmental partners, and adjacent landowners.

**Policy 8.56. Trail diversity.** Allow a variety of trail types to reflect a trail's transportation and recreation roles, requirements, and physical context.

**Policy 8.57. Public access requirements.** Require public access and improvement of public trails along the future public trail alignments shown in Figure 8-2 — Future Public Trail Alignments.

**Policy 8.58. Trail and City Greenway coordination.** Coordinate the planning and improvement of trails as part of the City Greenways system.



**Policy 8.59. Trail and Habitat Corridor coordination.** Coordinate the planning and improvement of trails with the establishment, enhancement, preservation, and access to habitat corridors.

**Policy 8.60. Intertwine coordination.** Coordinate with the Intertwine Alliance and its partners, including local and regional parks providers, to integrate Portland’s trail and active transportation network with the bi-state regional trail system.

**252. Finding:** Policies 8.53 through 8.60 address public trail systems, connectivity, access, and coordination. Although the Floodplain Resilience Plan does not include objectives or actions directly addressing public recreational trail planning or development, the project recognizes that land adjacent to waterways contain regional trails. While plan amendments do not change citywide requirements for public access and improvement of public trails, there are several elements that will preserve and enhance habitat in conjunction with any trail planning or improvements. Along the Willamette River Central Reach and South Reach, development within the riparian buffer area is required to mitigate for all impacts on identified natural resources and demonstrate an improvement in one of two City-defined riparian functions. Where the River Environmental overlay zone and Environmental Conservation overlay zones are applied, tree and vegetation removal allowed without City approval will be more limited and a minimum of three trees to be planted for each tree removed in the floodplain. These amendments and standards are consistent with and support the maintenance and improvement of public trails as well as the preservation and enhancement of habitat. Therefore, the amendments are consistent with this policy.

## **Sanitary system**

**Policy 8.61. Sewer connections.** Require all developments within the city limits to be connected to sanitary sewers unless the public sanitary system is not physically or legally available per City Code and state requirements; or the existing onsite septic system is functioning properly without failure or complaints per City Code and state requirements; and the system has all necessary state and county permits.

**Policy 8.62. Combined sewer overflows.** Provide adequate public facilities to limit combined sewer overflows to frequencies established by regulatory permits.

**Policy 8.63. Sanitary sewer overflows.** Provide adequate public facilities to prevent sewage releases to surface waters as consistent with regulatory permits.

**Policy 8.64. Private sewage treatment systems.** Adopt land use regulations that require any proposed private sewage treatment system to demonstrate that all necessary state and county permits are obtained.

**Policy 8.65. Sewer extensions.** Prioritize sewer system extensions to areas that are already developed at urban densities and where health hazards exist.

**Policy 8.66. Pollution prevention.** Reduce the need for wastewater treatment capacity through land use programs and public facility investments that manage pollution as close to its source as practical and that reduce the amount of pollution entering the sanitary system.

**Policy 8.67. Treatment.** Provide adequate wastewater treatment facilities to ensure compliance with effluent standards established in regulatory permits.

**253. Finding:** The City Council interprets policies 8.61 through 8.67 to apply to the provision of sanitary sewer facilities. The Floodplain Resilience Plan amendments to not impact any capital



improvement projects related to sewer or sanitary systems. Policies 8.61 and 8.64 apply to development and are ensured through Title 25, Plumbing Regulations, and verified at the time of development permit application. The Floodplain Resilience Plan amendments do not alter or affect Title 25 requirements. These policies do not apply.

## Stormwater Systems

**Policy 8.68. Stormwater facilities.** Provide adequate stormwater facilities for conveyance, flow control, and pollution reduction.

**Policy 8.69. Stormwater as a resource.** Manage stormwater as a resource for watershed health and public use in ways that protect and restore the natural hydrology, water quality, and habitat of Portland's watersheds.

**Policy 8.70. Natural systems.** Protect and enhance the stormwater management capacity of natural resources such as rivers, streams, creeks, drainageways, wetlands, and floodplains.

**Policy 8.71. Green infrastructure.** Promote the use of green infrastructure, such as natural areas, the urban forest, and landscaped stormwater facilities, to manage stormwater.

**Policy 8.72. Stormwater discharge.** Avoid or minimize the impact of stormwater discharges on the water and habitat quality of rivers and streams.

**Policy 8.73. On-site stormwater management.** Encourage on-site stormwater management, or management as close to the source as practical, through land use decisions and public facility investments.

**254. Finding:** The City Council interprets policies 8.68 through 8.73 to apply to the provision of stormwater facilities and stormwater management, more generally. Stormwater is conveyed through the combined sewer system, pipes, ditches, or drainageways to streams and rivers. In some cases, stormwater is managed in detention facilities, other vegetated facilities, or allowed to infiltrate in natural areas. The Citywide Systems Plan includes projects to address facilities needed for conveyance, flow control and pollution reduction.

Many of these policies are ensured through application of the City's Stormwater Management Manual. Stormwater management is critical to maintaining and enhancing the City's livability and improving watershed health. The Stormwater Management Manual (SWMM) allows the City of Portland to protect both watershed resources and infrastructure investments with every development or improvement. Implementing the requirements in this manual helps protect Portland's water resources, which in turn will provide great benefit to human health, fish and wildlife habitat, recreational resources, and drinking water. Bureau of Environmental Services staff evaluates development proposals that increase impervious area (including buildings and hardscape) against the SWMM and Source Control Manual to effectively comply with local, state and federal point and non-point pollution water quality mandates. The Floodplain Resilience Plan amendments do not affect the SWMM or Source Control Manual

The River Environmental and Environmental Conservation overlay zones are applied to significant natural resources areas, including floodplains. These overlay zones guide development away from sensitive natural resources that provide important ecosystem services and require mitigation when development occurs. Plan amendments to these overlay zones limit vegetation that is allowed to be removed through exemptions and increase tree replacement requirements to a minimum 3:1 ratio in floodplains. These amendments will expand green infrastructure contributes significantly to effective stormwater management. Riparian buffer area requirements of the River



Overlay Zones chapter (33.475), which apply to floodplains within 170 feet of ordinary high water in the Willamette River Central Reach and South Reach, aim to expand and improve riparian habitat while also reducing impervious surfaces. In the riparian buffer area, proposed mitigation must demonstrate an improvement in at least one of two floodplain-related functions: (1) Bank function, and control of sediments, nutrients and pollution; or (2) Large wood and channel dynamics. Therefore, the amendments are consistent with policies 8.68 through 8.73.

**Policy 8.74. Pollution prevention.** Coordinate policies, programs, and investments with partners to prevent pollutants from entering the stormwater system by managing point and non-point pollution sources through public and private facilities, local regulations, and education.

**Policy 8.75. Stormwater partnerships.** Provide stormwater management through coordinated public and private facilities, public-private partnerships, and community stewardship.

**255. Finding:** The Floodplain Resilience Plan amendments do not affect the management of point and non-point source pollution entering the stormwater system or change the coordination of stormwater management with other partners. These policies do not apply.

### **Flood management**

**Policy 8.76. Flood management.** Improve and maintain the functions of natural and managed drainageways, wetlands, and floodplains to protect health, safety, and property, provide water conveyance and storage, improve water quality, and maintain and enhance fish and wildlife habitat.

**Policy 8.77. Floodplain management.** Manage floodplains to protect and restore associated natural resources and functions and to minimize the risks to life and property from flooding.

**Policy 8.78. Flood management facilities.** Establish, improve, and maintain flood management facilities to serve designated land uses through planning, investment and regulatory requirements.

**256. Finding:** Policies 8.76 through 8.78 provide guidance on flood management. The Floodplain Resilience Plan amendments reduce the impacts of flooding and the degradation of floodplain habitat. Plan amendments preserve the functions of floodplains as green infrastructure that protects people and property against damaging impacts of flooding. Plan amendments are supportive of these policies in the following ways:

- The plan utilizes a recently-completed hydraulic model of a Willamette River flood with characteristics similar to the one experienced in the Portland region in February of 1996. This new model, referred to as the Modeled Willamette River 1996 Flood Extent, serves as a more up-to-date estimate of flood risk along the Willamette River, Columbia Slough and a stretch of the Columbia River near the confluence with the Willamette River. The model provides new estimates of the extents and elevation of a 1996-like flood event using current river bathymetry, upland topography and development patterns.

This new map supplements the FEMA 100-year floodplain, which is out of date because the floodplain extent and estimated flood elevation are primarily based on a model completed in 1979. The model is used in place of the existing Metro Title 3 1996 Flood Inundation Area (Metro is Portland's regional government) and is incorporated as a referenced floodplain in the City's "combined flood hazard area" map.

- Amendments to the River Environmental overlay zone and Environmental Conservation overlay zone ensure that detrimental impacts on natural resources from future development along and near waterways are mitigated. The River Environmental overlay zone is applied



along the Willamette River Central Reach to undeveloped and developed portions of the combined flood hazard area within 170 feet of the ordinary high water mark and to any remaining undeveloped floodplains landward of that area. Development that is not river-dependent or river-related within 170 feet of the ordinary high water mark must demonstrate significant improvement in at least one of two City-defined floodplain functions. The River Environmental overlay zone applied along the Willamette River South Reach is also updated to incorporate areas identified in the Modeled Willamette River 1996 Flood Extent (see previous bullet). The Environmental Conservation overlay zone is applied to undeveloped floodplains along Fanno Creek and Tryon Creek that are not currently in the Environmental Conservation overlay zone. The Environmental Conservation overlay zone protects floodplains and their functions by requiring development to mitigate for impacts to resources via standards or the Environmental Review process.

In both overlay zones, development impacts must be avoided to the extent possible, and when impacts can't be avoided, impacts must be fully mitigated. Limiting the removal of trees and vegetation that is allowed without City approval and applying a minimum 3:1 tree replacement ratio in the floodplain will ensure that flood risk is not increased with new development, while also preserving important habitat for fish and wildlife. Tree and vegetation removal standards ensure that the stormwater management functions of floodplains remain intact, reducing future flood risk and increase resilience to the area.

- Existing structures, including flood management facilities, can be operated, maintained, repaired and, in many cases, replaced without having to meet the overlay zone requirements.

The amendments are consistent with policies 8.76 through 8.78.

**Policy 8.79. Drainage district coordination.** Coordinate with drainage districts that provide stormwater management, conveyance, and flood mitigation, protection, and control services within the City's Urban Services Boundary.

**Policy 8.80. Levee coordination.** Coordinate plans and investments with special districts and agencies responsible for managing and maintaining certification of levees along the Columbia River.

**257. Finding:** Policies 8.79 through 8.80 provide guidance on coordinating with drainage districts and agencies responsible for managing levees along the Columbia River. As part of community engagement, City staff met with Multnomah County Drainage District staff to gather feedback on the plan amendments. Additionally, the Bureau of Environmental Services is a member of the inter-bureau team that was established to develop a coordinated strategy on floodplain regulations. A separate effort, Levee Ready Columbia, led by Multnomah County, is working to ensure that the levee system along the Columbia River continues to reduce the risk of flooding. The amendments are consistent with these policies.

## Water systems

**Policy 8.81. Primary supply source.** Protect the Bull Run watershed as the primary water supply source for Portland.

**Policy 8.82. Bull Run protection.** Maintain a source-protection program and practices to safeguard the Bull Run watershed as a drinking water supply.

**Policy 8.83. Secondary supply sources.** Protect, improve, and maintain the Columbia South Shore wellfield groundwater system, the Powell Valley wellfield groundwater system, and any other alternative water sources designated as secondary water supplies.



**Policy 8.84. Groundwater wellfield protection.** Maintain a groundwater protection program and practices to safeguard the Columbia South Shore wellfield and the Powell Valley wellfield as drinking water supplies.

**Policy 8.85. Water quality.** Maintain compliance with state and federal drinking water quality regulations.

**Policy 8.86. Storage.** Provide sufficient in-city water storage capacity to serve designated land uses, meet demand fluctuations, maintain system pressure, and ensure supply reliability.

**Policy 8.87. Fire protection.** Provide adequate water facilities to serve the fire protection needs of all Portlanders and businesses.

**Policy 8.88. Water pressure.** Provide adequate water facilities to maintain water pressure in order to protect water quality and provide for the needs of customers.

**Policy 8.89. Water efficiency.** Reduce the need for additional water facility capacity and maintain compliance with state water resource regulations by encouraging efficient use of water by customers within the city.

**Policy 8.90. Service interruptions.** Maintain and improve water facilities to limit interruptions in water service to customers.

**Policy 8.91. Outside user contracts.** Coordinate long-term water supply planning and delivery with outside-city water purveyors through long-term wholesale contracts.

**258. Finding:** The City Council interprets policies 8.81-8.91 to apply to the provision of water service. Primarily these policies govern how the City manages its water system and are not applicable to development. Policies 8.81 through 8.85 are addressed through the requirements in Title 21 Water. Protections for the Bull Run watershed are enumerated in Chapter 21.36. Groundwater wellfield protections are ensured through regulations in Chapter 21.35. And water quality is locally regulated by Chapter 21.12, as well as Title 25 Plumbing Regulations, in addition to compliance mandates at the state and federal level. Implementation of these policies is unaffected by the Floodplain Resilience Plan amendments.

## **Parks and recreation**

**Policy 8.92. Acquisition, development, and maintenance.** Provide and maintain an adequate supply and variety of parkland and recreational facilities to serve the city's current and future population based on identified level-of-service standards and community needs.

**Policy 8.93. Service equity.** Invest in acquisition and development of parks and recreation facilities in areas where service-level deficiencies exist.

**Policy 8.94. Capital programming.** Maintain a long-range park capital improvement program, with criteria that considers acquisition, development, and operations; provides opportunities for public input; and emphasizes creative and flexible financing strategies.

**Policy 8.95. Park planning.** Improve parks, recreational facilities, natural areas, and the urban forest in accordance with current master plans, management plans, or adopted strategies that reflect user group needs, development priorities, development and maintenance costs, program opportunities, financing strategies, and community input.

**Policy 8.96. Recreational trails.** Establish, improve, and maintain a complete and connected system of public recreational trails, consistent with Portland Parks & Recreation's trail strategy.



**259. Finding:** The Floodplain Resilience Plan amendments do not affect the planning for, programming of or acquisition or development of Parks facilities. Therefore, these policies do not apply.

**Policy 8.97. Natural resources.** Preserve, enhance, and manage City-owned natural areas and resources to protect and improve their ecological health, in accordance with both the natural area acquisition and restoration strategies, and to provide compatible public access.

**Policy 8.98. Urban forest management.** Manage urban trees as green infrastructure with associated ecological, community, and economic functions, through planning, planting, and maintenance activities, education, and regulation.

**260. Finding:** The Floodplain Resilience Plan amendments will contribute to the overall ecological health of the city's natural areas and urban forests by ensuring that impacts to natural resources within the parks and open spaces are avoided and minimized, and that any unavoidable impacts are mitigated. Amendments to Environmental Zones chapter (33.430) limit tree and vegetation removal that is allowed without City approval and increase the minimum tree replacement to three trees when a tree is removed in the floodplain. These amendments will protect existing tree canopy on Parks property and expand canopy in floodplains closest to the Willamette River. The amendments will contribute to the recovery of threatened and endangered fish species that may utilize the riverbanks and floodplains of City owned properties. Therefore, the amendments are consistent with these policies.

**Policy 8.99. Recreational facilities.** Provide a variety of recreational facilities and services that contribute to the health and well-being of Portlanders of all ages and abilities.

**Policy 8.100. Self-sustaining Portland International Raceway (PIR).** Provide for financially self-sustaining operations of PIR, and broaden its programs and activities to appeal to families, diverse communities, and non-motorized sports such as biking and running.

**Policy 8.101. Self-sustaining and inclusive golf facilities.** Provide financially self-sustaining public golf course operations. Diversify these assets to attract new users, grow the game, provide more introductory-level programming, and expand into other related recreational opportunities such as foot golf and disk golf.

**Policy 8.102. Specialized recreational facilities.** Establish and manage specialized facilities within the park system that take advantage of land assets and that respond to diverse, basic, and emerging recreational needs.

**Policy 8.103. Public-private partnerships.** Encourage public-private partnerships to develop and operate publicly-accessible recreational facilities that meet identified public needs.

**261. Finding:** The City Council interprets policies 8.99 through 8.103 to primarily address City-owned parks and natural areas and not development on private land. The Floodplain Resilience Plan amendments do not change current parks and recreation programs or change the supply of parks.

## **Public safety and emergency response**

**Policy 8.104. Emergency preparedness, response, and recovery coordination.** Coordinate land use plans and public facility investments between City bureaus, other public and jurisdictional agencies, businesses, community partners, and other emergency response providers, to ensure coordinated and comprehensive emergency and disaster risk reduction, preparedness, response, and recovery.

**Policy 8.105. Emergency management facilities.** Provide adequate public facilities – such as emergency coordination centers, communications infrastructure, and dispatch systems – to support emergency



management, response, and recovery.

**Policy 8.106. Police facilities.** Improve and maintain police facilities to allow police personnel to efficiently and effectively respond to public safety needs and serve designated land uses.

**Policy 8.107. Community safety centers.** Establish, coordinate, and co-locate public safety and other community services in centers.

**Policy 8.108. Fire facilities.** Improve and maintain fire facilities to serve designated land uses, ensure equitable and reliable response, and provide fire and life safety protection that meets or exceeds minimum established service levels.

**Policy 8.109. Mutual aid.** Maintain mutual aid coordination with regional emergency response providers as appropriate to protect life and ensure safety.

**Policy 8.110. Community preparedness.** Enhance community preparedness and capacity to prevent, withstand, and recover from emergencies and natural disasters through land use decisions and public facility investments.

**Policy 8.111. Continuity of operations.** Maintain and enhance the City's ability to withstand and recover from natural disasters and human-made disruptions in order to minimize disruptions to public services.

**262. Finding:** The City Council interprets policies 8.104 through 8.111 to address the provision of public safety and emergency response services. The Floodplain Resilience Plan does not impact the underlying zoning that determines where various public safety facilities can locate, nor do they affect community preparedness or responses to natural disasters or other disruptions. These policies do not apply.

### **Solid waste management**

**Policy 8.112. Waste management.** Ensure land use programs, rights-of-way regulations, and public facility investments allow the City to manage waste effectively and prioritize waste management in the following order: waste reduction, recycling, anaerobic digestion, composting, energy recovery, and then landfill.

**263. Finding:** The City Council interprets this policy to address the provision of waste management services. The changes made by the Floodplain Resilience Plan do not impact these waste management services. This policy does not apply.

### **School facilities**

**Policy 8.113. School district capacity.** Consider the overall enrollment capacity of a school district – as defined in an adopted school facility plan that meets the requirements of Oregon Revised Statute 195 – as a factor in land use decisions that increase capacity for residential development.

**Policy 8.114. Facilities Planning.** Facilitate coordinated planning among school districts and City bureaus, including Portland Parks and Recreation, to accommodate school site/facility needs in response to most up-to-date growth forecasts.

**Policy 8.115. Co-location.** Encourage public school districts, Multnomah County, the City of Portland, and other providers to co-locate facilities and programs in ways that optimize service provision and intergenerational and intercultural use.

**Policy 8.116. Community use.** Encourage public use of public school grounds for community purposes while meeting educational and student safety needs and balancing impacts on surrounding



neighborhoods.

**Policy 8.117. Recreational use.** Encourage publicly-available recreational amenities (e.g. athletic fields, green spaces, community gardens, and playgrounds) on public school grounds for public recreational use, particularly in neighborhoods with limited access to parks.

**Policy 8.118. Schools as emergency aid centers.** Encourage the use of seismically-safe school facilities as gathering and aid-distribution locations during natural disasters and other emergencies.

**Policy 8.119. Facility adaptability.** Ensure that public schools may be upgraded to flexibly accommodate multiple community-serving uses and adapt to changes in educational approaches, technology, and student needs over time.

**Policy 8.120. Leverage public investment.** Encourage City public facility investments that complement and leverage local public school districts' major capital investments.

**Policy 8.121. School access.** Encourage public school districts to consider the ability of students to safely walk and bike to school when making decisions about the site locations and attendance boundaries of schools.

**Policy 8.122. Private institutions.** Encourage collaboration with private schools and educational institutions to support community and recreational use of their facilities.

**264. Finding:** The City Council interprets policies 8.113 through 8.122 to address school facilities and school sites. The Floodplain Resilience Plan amendments do not affect the zoning that determines where schools can locate, their allowed uses or adaptability over time. These policies do not apply.

### Technology and communications

**Policy 8.123. Technology and communication systems.** Maintain and enhance the City's technology and communication facilities to ensure public safety, facilitate access to information, and maintain City operations.

**Policy 8.124. Equity, capacity, and reliability.** Encourage plans and investments in technology and communication infrastructure to ensure access in all areas of the city, reduce disparities in capacity, and affordability, and to provide innovative high-performance, reliable service for Portland's residents and businesses.

**265. Finding:** The City Council interprets policies 8.123 and 8.124 to address the provision technology and communication services. These policies do not apply.

### Energy infrastructure

**Policy 8.125. Energy efficiency.** Promote efficient and sustainable production and use of energy resources by residents and businesses, including low-carbon renewable energy sources, district energy systems, and distributed generation, through land use plans, zoning, and other legislative land use decisions.

**Policy 8.126. Coordination.** Coordinate with energy providers to encourage investments that ensure reliable, equitable, efficient, and affordable energy for Portland residents and businesses.

**266. Finding:** The Floodplain Resilience Plan amendments do not amend the sections of the Zoning Code that regulate the production of energy or other types of energy infrastructure and do not affect coordination efforts. These policies do not apply.



## Chapter 9 Transportation

**GOAL 9.A: Safety.** Transportation safety impacts the livability of a city and the comfort and security of those using City streets. Comprehensive efforts to improve transportation safety through engineering, education, enforcement and evaluation will be used to eliminate traffic-related fatalities and serious injuries from Portland’s transportation system.

**Goal 9.B: Multiple goals.** Portland’s transportation system is funded and maintained to achieve multiple goals and measurable outcomes for people and the environment. The transportation system is safe, complete, interconnected, multimodal, and fulfills daily needs for people and businesses.

**GOAL 9.C: Great places.** Portland’s transportation system enhances quality of life for all Portlanders, reinforces existing neighborhoods and great places, and helps make new great places in town centers, neighborhood centers and corridors, and civic corridors.

**GOAL 9.D: Environmentally sustainable.** The transportation system increasingly uses active transportation, renewable energy, or electricity from renewable sources, achieves adopted carbon reduction targets, and reduces air pollution, water pollution, noise, and Portlanders’ reliance on private vehicles.

**GOAL 9.E: Equitable transportation.** The transportation system provides all Portlanders options to move about the city and meet their daily needs by using a variety of safe, efficient, convenient, and affordable modes of transportation. Transportation investments are responsive to the distinct needs of each community.

**GOAL 9.F: Positive health outcomes.** The transportation system promotes positive health outcomes and minimizes negative impacts for all Portlanders by supporting active transportation, physical activity, and community and individual health.

**GOAL 9.G: Opportunities for prosperity.** The transportation system supports a strong and diverse economy, enhances the competitiveness of the city and region, and maintains Portland’s role as a West Coast trade gateway and freight hub by providing efficient and reliable goods movement, multimodal access to employment areas and educational institutions, as well as enhanced freight access to industrial areas and intermodal freight facilities. The transportation system helps people and businesses reduce spending and keep money in the local economy by providing affordable alternatives to driving.

**GOAL 9.H. Cost Effectiveness.** The City analyzes and prioritizes capital and operating investments to cost effectively achieve the above goals while responsibly managing and protecting our past investments in existing assets.

**GOAL 9.I. Airport Futures.** Promote a sustainable airport (Portland International Airport [PDX]) by meeting the region’s air transportation needs without compromising livability and quality of life for future generations.

**267. Finding:** Goals 9.A. through 9.I. provide direction for a well-functioning transportation system that connects people and businesses to goods and services and creates opportunity while reducing emissions and improving public health. The goals and policies of Chapter 9 address transportation improvements, programming, funding priorities and maintenance and not development or uses on private or public land outside of the right of way. The Floodplain Resilience Plan amendments focus on environmental regulations that protect people and property from adverse effects of flooding in areas defined in the city’s floodplain maps. Generally, plan amendments do not impact the Transportation System Plan or its ability to meet local transportation needs as well as regional



and state planning requirements. Therefore, the amendments are consistent with Goals 9.A. through 9.I.

## **Designing and planning**

**Policy 9.1. Street design classifications.** Maintain and implement street design classifications consistent with land use plans, environmental context, urban design pattern areas, and the Neighborhood Corridor and Civic Corridor Urban Design Framework designations.

**Policy 9.2. Street policy classifications.** Maintain and implement street policy classifications for pedestrian, bicycle, transit, freight, emergency vehicle, and automotive movement, while considering access for all modes, connectivity, adjacent planned land uses, and state and regional requirements.

**9.2.a.** Designate district classifications that emphasize freight mobility and access in industrial and employment areas serving high levels of truck traffic and to accommodate the needs of intermodal freight movement.

**9.2.b.** Designate district classifications that give priority to pedestrian access in areas where high levels of pedestrian activity exist or are planned, including the Central City, Gateway regional center, town centers, neighborhood centers, and transit station areas.

**9.2.c.** Designate district classifications that give priority to bicycle access and mobility in areas where high levels of bicycle activity exist or are planned, including Downtown, the River District, Lloyd District, Gateway Regional Center, town centers, neighborhood centers, and transit station areas.

**Policy 9.3. Transportation System Plan.** Maintain and implement the Transportation System Plan (TSP) as the decision-making tool for transportation-related projects, policies, programs, and street design.

**Policy 9.4. Use of classifications.** Plan, develop, implement, and manage the transportation system in accordance with street design and policy classifications outlined in the Transportation System Plan.

**9.4.a.** Classification descriptions are used to describe how streets should function for each mode of travel, not necessarily how they are functioning at present.

**Policy 9.5. Mode share goals and Vehicle Miles Travelled (VMT) reduction.** Increase the share of trips made using active and low-carbon transportation modes. Reduce VMT to achieve targets set in the most current Climate Action Plan and Transportation System Plan and meet or exceed Metro's mode share and VMT targets.

**Policy 9.6. Transportation strategy for people movement.** Implement a prioritization of modes for people movement by making transportation system decisions per the following ordered list:

1. Walking
2. Bicycling
3. Transit
4. Fleets of electric, fully automated, multiple passenger vehicles
5. Other shared vehicles
6. Low or no occupancy vehicles, fossil-fueled non-transit vehicles

When implementing this prioritization ensure that:

- The needs and safety of each group of users are considered, and changes do not make existing conditions worse for the most vulnerable users higher on the ordered list.



- All users' needs are balanced with the intent of optimizing the right of way for multiple modes on the same street.
- When necessary to ensure safety, accommodate some users on parallel streets as part of multi-street corridors.
- Land use and system plans, network functionality for all modes, other street functions, and complete street policies, are maintained.
- Policy-based rationale is provided if modes lower in the ordered list are prioritized.

**Policy 9.7. Moving goods and delivering services.** In tandem with people movement, maintain efficient and reliable movement of goods and services as a critical transportation system function. Prioritize freight system reliability improvements over single-occupancy vehicle mobility where there are solutions that distinctly address those different needs.

**Policy 9.8. Affordability.** Improve and maintain the transportation system to increase access to convenient and affordable transportation options for all Portlanders, especially those who have traditionally been under-served or under-represented or have historically borne unequal burdens.

**Policy 9.9. Accessible and age-friendly transportation system.** Ensure that transportation facilities are accessible to people of all ages and abilities, and that all improvements to the transportation system (traffic, transit, bicycle, and pedestrian) in the public right-of-way comply with the Americans with Disabilities Act of 1990. Improve and adapt the transportation system to better meet the needs of the most vulnerable users, including the young, older adults, and people with different abilities.

**Policy 9.10. Geographic policies.** Adopt geographically specific policies in the Transportation System Plan to ensure that transportation infrastructure reflects the unique topography, historic character, natural features, system gaps, economic needs, demographics, and land uses of each area. Use the Pattern Areas identified in Chapter 3: Urban Form as the basis for area policies.

**268. Finding:** Policies 9.1 through 9.10 provide direction regarding transportation system classifications and the Transportation System Plan and planning for the transportation system. These policies address the design and planning of transportation facilities and not development or uses on private or public land outside of the right of way. The Floodplain Resilience Plan amendments do not change the functional classification of any existing or proposed transportation. Plan amendments do not alter geographic-specific policies in the Transportation System Plan (TSP). These policies do not apply.

### **Land use, development, and placemaking**

**Policy 9.11. Land use and transportation coordination.** Implement the Comprehensive Plan Map and the Urban Design Framework through coordinated long-range transportation and land use planning. Ensure that street policy and design classifications and land uses complement one another.

**Policy 9.12. Growth strategy.** Use street design and policy classifications to support Goals 3A-3G in Chapter 3: Urban Form. Consider the different design contexts and transportation functions in Town Centers, Neighborhood Centers, Neighborhood Corridors, Employment Areas, Freight Corridors, Civic Corridors, Transit Station Areas, and Greenways.

**Policy 9.13. Development and street design.** Evaluate adjacent land uses to help inform street classifications in framing, shaping, and activating the public space of streets. Guide development and land use to create the kinds of places and street environments intended for different types of streets.



**269. Finding:** Policies 9.11 through 9.13 address the relationship between land use and transportation planning – both at the citywide scale of urban form, and at the site and street level. Policy 9.12 does not apply because the Floodplain Resilience Plan amendments do not change the Comprehensive Plan Map, the Urban Design Framework, or the functional classification of any existing or proposed transportation facility, nor do they change the standards implementing a functional classification system. Policy 9.13 addresses how development creates place and street environments at the block-by-block scale, and Policy 9.11 addresses the relationship at the street or corridor level. Because the Floodplain Resilience Plan amendments do not change regulations associated with either of these considerations, policies 9.11 and 9.13 also do not apply.

### **Streets as public spaces**

**Policy 9.14. Streets for transportation and public spaces.** Integrate both placemaking and transportation functions when designing and managing streets by encouraging design, development, and operation of streets to enhance opportunities for them to serve as places for community interaction, environmental function, open space, tree canopy, recreation, and other community purposes.

**Policy 9.15. Repurposing street space.** Encourage repurposing street segments that are not critical for transportation connectivity to other community purposes.

**Policy 9.16. Design with nature.** Promote street alignments and designs that respond to topography and natural features, when feasible, and protect streams, wildlife habitat, and native trees.

**270. Finding:** Policies 9.14 through 9.16 provide direction on streets as public spaces for community interaction and community purposes and designing streets with nature in mind. The requirements of the River Environmental overlay zone and Environmental Conservation overlay zone will ensure that future development along and near waterways effectively responds to the environmental context and that impacts on natural resources will be minimized. The overlay zones are designed to prevent adverse impacts on natural resources through the avoid-minimize-mitigate hierarchy and ecologically-sensitive development. Tree replacement requirements will increase tree canopy over time, improving stormwater management and reducing heat island effects when these streets intersect with the floodplain. Updated floodplain development regulations will also reduce future flood risk and increase resilience in these areas. The Floodplain Resilience Plan amendments are consistent with policies 9.14 through 9.16.

### **Modal policies**

**Policy 9.17. Pedestrian transportation.** Encourage walking as the most attractive mode of transportation for most short trips, within and to centers, corridors, and major destinations, and as a means for accessing transit.

**Policy 9.18. Pedestrian networks.** Create more complete networks of pedestrian facilities, and improve the quality of the pedestrian environment.

**Policy 9.19. Pedestrian safety and accessibility.** Improve pedestrian safety, accessibility, and convenience for people of all ages and abilities.

**Policy 9.20. Bicycle transportation.** Create conditions that make bicycling more attractive than driving for most trips of approximately three miles or less.

**Policy 9.21. Accessible bicycle system.** Create a bicycle transportation system that is safe, comfortable, and accessible to people of all ages and abilities.



**Policy 9.22. Public transportation.** Coordinate with public transit agencies to create conditions that make transit the preferred mode of travel for trips that are longer than 3 miles or shorter trips not made by walking or bicycling.

**Policy 9.23. Transportation to job centers.** Promote and enhance transit to be more convenient and economical than the automobile for people travelling more than three miles to and from the Central City and Gateway. Enhance regional access to the Central City and access from Portland to other regional job centers.

**Policy 9.24. Transit service.** In partnership with TriMet, develop a public transportation system that conveniently, safely, comfortably, and equitably serves residents and workers 24 hours a day, 7 days a week.

**Policy 9.25. Transit equity.** In partnership with TriMet, maintain and expand high-quality frequent transit service to all Town Centers, Civic Corridors, Neighborhood Centers, Neighborhood Corridors, and other major concentrations of employment, and improve service to areas with high concentrations of poverty and historically under-served and under-represented communities.

**9.25.a.** Support a public transit system and regional transportation that address the transportation needs of historically marginalized communities and provide increased mobility options and access.

**Policy 9.26. Transit funding.** Consider funding strategies and partnership opportunities that improve access to and equity in transit service, such as raising Metro-wide funding to improve service and decrease user fees/fares.

**Policy 9.27. Transit service to centers and corridors.** Use transit investments to shape the city's growth and increase transit use. In partnership with TriMet and Metro, maintain, expand, and enhance Portland Streetcar, frequent service bus, and high-capacity transit, to better serve centers and corridors with the highest intensity of potential employment and household growth.

**9.27.a.** Locate major park-and-ride lots only where transit ridership is increased significantly, vehicle miles traveled are reduced, transit-supportive development is not hampered, bus service is not available or is inadequate, and the surrounding area is not negatively impacted.

**Policy 9.28. Intercity passenger service.** Coordinate planning and project development to expand intercity passenger transportation services in the Willamette Valley, and from Portland to Seattle and Vancouver, BC.

**Policy 9.29. Regional trafficways and transitways.** Maintain capacity of regional transitways and existing regional trafficways to accommodate through-traffic.

**Policy 9.30. Multimodal goods movement.** Develop, maintain, and enhance a multimodal freight transportation system for the safe, reliable, sustainable, and efficient movement of goods within and through the city.

**Policy 9.31. Economic development and industrial lands.** Ensure that the transportation system supports traded sector economic development plans and full utilization of prime industrial land, including brownfield redevelopment.

**Policy 9.32. Multimodal system and hub.** Maintain Portland's role as a multimodal hub for global and regional movement of goods. Enhance Portland's network of multimodal freight corridors.

**Policy 9.33. Freight network.** Develop, manage, and maintain a safe, efficient, and reliable freight street network to provide freight access to and from intermodal freight facilities, industrial and commercial districts, and the regional transportation system. Invest to accommodate forecasted growth of



interregional freight volumes and provide access to truck, marine, rail, and air transportation systems. Ensure designated routes and facilities are adequate for over-dimensional trucks and emergency equipment.

**Policy 9.34. Sustainable freight system.** Support the efficient delivery of goods and services to businesses and neighborhoods, while also reducing environmental and neighborhood impacts. Encourage the use of energy efficient and clean delivery vehicles, and manage on- and off-street loading spaces to ensure adequate access for deliveries to businesses, while maintaining access to homes and businesses.

**Policy 9.35. Freight rail network.** Coordinate with stakeholders and regional partners to support continued reinvestment in, and modernization of, the freight rail network.

**Policy 9.36. Portland Harbor.** Coordinate with the Port of Portland, private stakeholders, and regional partners to improve and maintain access to marine terminals and related river dependent uses in Portland Harbor.

**9.36.a.** Support continued reinvestment in, and modernization of, marine terminals in Portland Harbor.

**9.36.b.** Facilitate continued maintenance of the shipping channels in Portland Harbor and the Columbia River.

**9.36.c.** Support more long-distance, high-volume movement of goods to river and oceangoing ships and rail.

**Policy 9.37. Portland Heliport.** Maintain Portland’s Heliport functionality in the Central City.

**Policy 9.38. Automobile transportation.** Maintain acceptable levels of mobility and access for private automobiles while reducing overall vehicle miles traveled (VMT) and negative impacts of private automobiles on the environment and human health.

**Policy 9.39. Automobile efficiency.** Coordinate land use and transportation plans and programs with other public and private stakeholders to encourage vehicle technology innovation, shifts toward electric and other cleaner, more energy-efficient vehicles and fuels, integration of smart vehicle technology with intelligent transportation systems, and greater use of options such as car-share, carpool, and taxi.

**Policy 9.40. Emergency response.** Maintain a network of accessible emergency response streets to facilitate safe and expedient emergency response and evacuation. Ensure that police, fire, ambulance, and other emergency providers can reach their destinations in a timely fashion, without negatively impacting traffic calming and other measures intended to reduce crashes and improve safety.

**271. Finding:** Policies 9.17 through 9.40 primarily address the design and use of transportation infrastructure, and the goal of developing a more multimodal system. The Floodplain Resilience Plan amendments do not affect the design or use of transportation infrastructure. Therefore, these policies do not apply.

## **Airport Futures**

**Policy 9.41. Portland International Airport.** Maintain the Portland International Airport as an important regional, national, and international transportation hub serving the bi-state economy.

**Policy 9.42. Airport regulations.** Implement the Airport Futures Plan through the implementation of the Portland International Airport Plan District.

**9.42.a.** Prohibit the development of a potential third parallel runway at PDX unless need for its



construction is established through a transparent, thorough, and regional planning process.

**9.42.b.** Support implementation of the Aircraft Landing Zone to provide safer operating conditions for aircraft in the vicinity of Portland International Airport by limiting the height of structures, vegetation, and construction equipment.

**9.42.c.** Support the Port of Portland’s Wildlife Hazard Management Plan by implementing airport-specific landscaping requirements in the Portland International Airport Plan District to reduce conflicts between wildlife and aircraft.

**Policy 9.43. Airport partnerships.** Partner with the Port of Portland and the regional community to address the critical interconnection between economic development, environmental stewardship, and social responsibility. Support an ongoing public advisory committee for PDX to:

**9.43.a.** Support meaningful and collaborative public dialogue and engagement on airport related planning and development.

**9.43.b.** Provide an opportunity for the community to inform the decision-making related to the airport of the Port, the City of Portland, and other jurisdictions/organizations in the region.

**9.43.c.** Raise public knowledge about PDX and impacted communities.

**Policy 9.44. Airport investments.** Ensure that new development and redevelopment of airport facilities supports the City’s and the Port’s sustainability goals and policies, and is in accordance with Figure 9-3 — Portland International Airport. Allow the Port flexibility in configuring airport facilities to preserve future development options, minimize environmental impacts, use land resources efficiently, maximize operational efficiency, ensure development can be effectively phased, and address Federal Aviation Administration’s airport design criteria.

**272. Finding:** Policies 9.41 through 9.44 provide policy direction related to Portland International Airport. The Floodplain Resilience Plan amendments do not change the Portland International Airport Plan District or have any impact on airport facilities. Therefore, these policies do not apply.

## **System management**

**Policy 9.45. System Management.** Give preference to transportation improvements that use existing roadway capacity efficiently and that improve the safety of the system for all users.

**9.45.a.** Support regional equity measures for transportation system evaluation.

**Policy 9.46. Traffic management.** Evaluate and encourage traffic speed and volume to be consistent with street classifications and desired land uses to improve safety, preserve and enhance neighborhood livability, and meet system goals of calming vehicle traffic through a combination of enforcement, engineering, and education efforts.

**9.46.a.** Use traffic calming tools, traffic diversion and other available tools and methods to create and maintain sufficiently low automotive volumes and speeds on neighborhood greenways to ensure comfortable cycling environment on the street.

**Policy 9.47. Connectivity.** Establish an interconnected, multimodal transportation system to serve centers and other significant locations. Promote a logical, direct, and connected street system through street spacing guidelines and district-specific street plans found in the Transportation System Plan, and prioritize access to specific places by certain modes in accordance with policies 9.6 and 9.7.

**9.47.a.** Develop conceptual master street plans for areas of the City that have significant amounts of vacant or underdeveloped land and where the street network does not meet City and Metro



connectivity guidelines.

**9.47.b.** As areas with adopted Street Plans develop, provide connectivity for all modes by developing the streets and accessways as shown on the Master Street Plan Maps in the Comprehensive Plan.

**9.47.c.** Continue to provide connectivity in areas with adopted Street Plans for all modes of travel by developing public and private streets as shown on the Master Street Plan Maps in the Comprehensive Plan.

**9.47.d.** Provide street connections with spacing of no more than 530 feet between connections except where prevented by barriers such as topography, railroads, freeways, or environmental constraints. Where streets must cross over protected water features, provide crossings at an average spacing of 800 to 1000 feet, unless exceptional habitat quality of length of crossing prevents a full street connection.

**9.47.e** Provide bike and pedestrian connections at approximately 330 feet intervals on public easements or rights-of-way when full street connections are not possible, except where prevented by barriers s such as topography, railroads, freeways, or environmental constraints. Bike and pedestrian connections that cross protected water features should have an average spacing of no more than 530 feet, unless exceptional habitat quality or length of connection prevents a connection.

**Policy 9.48 Technology.** Encourage the use of emerging vehicle and parking technology to improve real-time management of the transportation network and to manage and allocate parking supply and demand.

**Policy 9.49 Performance measures.** Establish multimodal performance measures and measures of system completeness to evaluate and monitor the adequacy of transportation services based on performance measures in goals 9.A. through 9.I. Use these measures to evaluate overall system performance, inform corridor and area-specific plans and investments, identify project and program needs, evaluate and prioritize investments, and regulate development, institutional campus growth, zone changes, Comprehensive Plan Map amendments, and conditional uses.

**9.49.a.** Eliminate deaths and serious injuries for all who share Portland streets by 2025.

**9.49.b.** Maintain or decrease the number of peak period non-freight motor vehicle trips, system-wide and within each mobility corridor to reduce or manage congestion.

**9.49.c.** By 2035, reduce the number of miles Portlanders travel by car to 11 miles per day or less, on average.

**9.49.d.** Establish mode split targets in 2040 Growth Concept areas within the City, consistent with Metro’s targets for these areas.

**9.49.e.** By 2035, increase the mode share of daily non-drive alone trips to 70 percent citywide, and to the following in the five pattern areas:

Pattern Area	2035 daily target mode share
Central City	85%
Inner Neighborhoods	70%



Western Neighborhoods	65%
Eastern Neighborhoods	65%
Industrial and River	55%

**9.49.f.** By 2035, 70 percent of commuters walk, bike, take transit, carpool, or work from home at approximately the following rates:

Mode	Mode Share
Walk	7.5%
Bicycle	25%
Transit	25%
Carpool	10%
Single Occupant Vehicle (SOV)	30% or less
Work at home	10% below the line (calculated outside of the modal targets above)

**9.49.g.** By 2035, reduce Portland’s transportation-related carbon emissions to 50% below 1990 levels, at approximately 934,000 metric tons.

**9.49.h.** By 2025, increase the percentage of new mixed use zone building households not owning an automobile from approximately 13% (2014) to 25%, and reduce the percentage of households owning two automobiles from approximately 24% to 10%.

**9.49.i.** Develop and use alternatives to the level-of-service measure to improve safety, encourage multimodal transportation, and to evaluate and mitigate maintenance and new trip impacts from new development.

**9.49.j.** Use level-of-service, consistent with Table 9.1, as one measure to evaluate the adequacy of transportation facilities in the vicinity of sites subject to land use review.

**9.49.k.** Maintain acceptable levels of performance on state facilities and the regional arterial and throughway network, consistent with the interim standard in Table 9.2, in the development and adoption of, and amendments to, the Transportation System Plan and in legislative amendments to the Comprehensive Plan Map.

**9.49.l.** In areas identified by Metro that exceed the level-of-service in Table 9.2 and are planned to, but do not currently meet the alternative performance criteria, establish an action plan that does the following:

- Anticipates growth and future impacts of motor vehicle traffic on multimodal travel in the area



- Establishes strategies for mitigating the future impacts of motor vehicles
- Establishes performance standards for monitoring and implementing the action plan.

<b>Table 9-2: Oregon Metro Interim Deficiency Thresholds and Operating Standards</b>			
Location	Standards		
	Mid-Day One-Hour Peak *	PM 2-Hour Peak *	
		1st Hour	2nd Hour
Central City, Gateway, Town Centers, Neighborhood Centers, Station Areas	0.99	1.1	0.99
I-84 (from I-5 to I-205), I-5 North (from Marquam Bridge to Interstate Bridge, OR 99- E (from Lincoln St. to OR 224), US 26 (from I-405 to Sylvan Interchange), I-405	0.99	1.1	0.99
Other Principal Arterial Routes	0.90	0.99	0.99
*The demand-to-capacity ratios in the table are for the highest two consecutive hours of the weekday traffic volumes. The mid-day peak hour is the highest 60-minute period between the hours of 9 a.m. and 3 p.m. The 2nd hour is defined as the single 60-minute period, either before or after the peak 60-minute period, whichever is highest.			

**9.49.m.** Develop performance measures to track progress in creating and maintaining the transportation system.

**Policy 9.50 Regional congestion management.** Coordinate with Metro to establish new regional multimodal mobility standards that prioritize transit, freight, and system completeness.

**9.50.a.** Create a regional congestion management approach, including a market-based system, to price or charge for auto trips and parking, better account for the cost of auto trips, and to more efficiently manage the regional system.

**Policy 9.51. Multimodal Mixed-Use Area.** Manage Central City Plan amendments in accordance with the designated Central City Multimodal Mixed-Use Area (MMA) in the geography indicated in Figure 9-2. The MMA renders congestion / mobility standards inapplicable to any proposed plan amendments under OAR 660-0012-0060(10).

**273. Finding:** Policies 9.45 through 9.51 address the system-wide management of the City's transportation system. Floodplain Resilience Plan does not address specific traffic improvements nor make changes to the city's Transportation Systems Plan (TSP). Policy 9.48 focuses on vehicle and parking technology, but the focus is on the city's transportation network and not on private development. The Floodplain Resilience Plan amendments do not affect the management of the city's transportation network. These policies do not apply.



## Transportation Demand Management

**Policy 9.52. Outreach.** Create and maintain TDM outreach programs that work with Transportation Management Associations (TMA), residents, employers, and employees that increase the modal share of walking, bicycling, and shared vehicle trips while reducing private vehicle ownership, parking demand, and drive-alone trips, especially during peak periods.

**Policy 9.53. New development.** Create and maintain TDM regulations and services that prevent and reduce traffic and parking impacts from new development and redevelopment. Encourage coordinated area-wide delivery of TDM programs. Monitor and improve the performance of private-sector TDM programs.

**Policy 9.54. Projects and programs.** Integrate TDM information into transportation project and program development and implementation to increase use of new multimodal transportation projects and services.

**274. Finding:** Policies 9.52-9.54 provide direction on Transportation Demand Management (TDM) programs. The Floodplain Resilience Plan amendments do not affect existing TDM regulations or outreach programs. These policies do not apply.

## Parking management

**Policy 9.55. Parking management.** Reduce parking demand and manage supply to improve pedestrian, bicycle and transit mode share, neighborhood livability, safety, business district vitality, vehicle miles traveled (VMT) reduction, and air quality. Implement strategies that reduce demand for new parking and private vehicle ownership, and that help maintain optimal parking occupancy and availability.

**Policy 9.56. Curb Zone.** Recognize that the Curb Zone is a public space, a physical and spatial asset that has value and cost. Evaluate whether, when, and where parking is the highest and best use of this public space in support of broad City policy goals and local land use context. Establish thresholds to utilize parking management and pricing tools in areas with high parking demand to ensure adequate on-street parking supply during peak periods.

**Policy 9.57. On-street parking.** Manage parking and loading demand, supply, and operations in the public right of way to achieve mode share objectives, and to encourage safety, economic vitality, and livability. Use transportation demand management and pricing of parking in areas with high parking demand.

**Policy 9.58. Off-street parking.** Limit the development of new parking spaces to achieve land use, transportation, and environmental goals, especially in locations with frequent transit service. Regulate off-street parking to achieve mode share objectives, promote compact and walkable urban form, encourage lower rates of car ownership, and promote the vitality of commercial and employment areas. Use transportation demand management and pricing of parking in areas with high parking demand.

**Policy 9.59. Share space and resources.** Encourage the shared use of parking and vehicles to maximize the efficient use of limited urban space.

**Policy 9.60. Cost and price.** Recognize the high public and private cost of parking by encouraging prices that reflect the cost of providing parking and balance demand and supply. Discourage employee and resident parking subsidies.

**Policy 9.61. Bicycle parking.** Promote the development of new bicycle parking facilities including dedicated bike parking in the public right-of-way. Provide sufficient bicycle parking at high-capacity transit stations to enhance bicycle connection opportunities. Require provision of adequate off-street



bicycle parking for new development and redevelopment. Encourage the provision of parking for different types of bicycles. In establishing the standards for long-term bicycle parking, consider the needs of persons with different levels of ability.

**275. Finding:** Policies 9.55 through 9.61 address auto parking management and bicycle parking. The Floodplain Resilience Plan does not modify how the City manages the right of way for parking, development standards affecting parking, the shared use or cost of parking, or bicycle parking facilities. These policies do not apply.

### **Finance, programs, and coordination**

**Policy 9.62. Coordination.** Coordinate with state and federal agencies, local and regional governments, special districts, other City bureaus, and providers of transportation services when planning for, developing, and funding transportation facilities and services.

**Policy 9.63. New development impacts.** Prevent, reduce, and mitigate the impacts of new development and redevelopment on the transportation system. Utilize strategies including transportation and parking demand management, transportation system analysis, and system and local impact mitigation improvements and fees.

**Policy 9.64. Education and encouragement.** Create, maintain, and coordinate educational and encouragement programs that support multimodal transportation and that emphasize safety for all modes of transportation. Ensure that these programs are accessible to historically under-served and under-represented populations.

**Policy 9.65. Telecommuting.** Promote telecommuting and the use of communications technology to reduce travel demand.

**Policy 9.66. Project and program selection criteria.** Establish transportation project and program selection criteria consistent with goals 9A through 9I, to cost-effectively achieve access, placemaking, sustainability, equity, health, prosperity, and safety goals.

**Policy 9.67. Funding.** Encourage the development of a range of stable transportation funding sources that provide adequate resources to build and maintain an equitable and sustainable transportation system.

**276. Finding:** Policies 9.62 through 9.67 address the funding and management of the City's transportation system and programs. The Floodplain Resilience Plan does not modify funding or management of the City's transportation system. These policies do not apply.

### **Connected and Automated Vehicles**

**Policy 9.68 New mobility priorities and outcomes.** Facilitate new mobility vehicles and services with the lowest climate and congestion impacts and greatest equity benefits; with priority to vehicles that are fleet/shared ownership, fully automated, electric and, for passenger vehicles, shared by multiple passengers (known by the acronym FAVES). Develop and implement strategies for each following topic.

**9.68.a.** Ensure that all new mobility vehicles and services and levels of automated vehicles advance Vision Zero by operating safely for all users, especially for vulnerable road users. Require adequate insurance coverage for operators, customers, and the public-at-large by providers of new mobility vehicles and services.

**9.68.b.** Ensure that new mobility vehicles and services improve active transportation and shared ride travel time reliability and system efficiency by:



1. maintaining or reducing the number of vehicle trips during peak congestion periods;
2. reducing low occupancy vehicle trips during peak congestion periods;
3. paying for use of, and impact on, Portland’s transportation system including factors such as congestion level, carbon footprint, vehicle miles traveled, vehicle occupancy, and vehicle energy efficiency; and
4. supporting and encouraging use of public transportation.

**9.68.c.** Cut vehicle carbon pollution by reducing low occupancy “empty miles” traveled by passenger vehicles with zero or one passengers. Prioritize vehicles and services with the least climate pollution, and electric and other zero direct emission vehicles operated by fleets and carrying multiple passengers.

**9.68.d.** Make the benefits of new mobility available on an equitable basis to all segments of the community while ensuring traditionally disadvantaged communities are not disproportionately hurt by new mobility vehicles and services. This includes people with disabilities, as well as communities of color, women, and geographically underserved communities.

**9.68.e** Identify, prevent, and mitigate potential adverse impacts from new mobility vehicles and services.

**Policy 9.69 New mobility tools.** Use a full range of tools to ensure that new mobility vehicles and services and private data communications devices installed in the City right of way contribute to achieving Comprehensive Plan and Transportation System Plan goals and policies.

**9.69.a.** Maintain City authority to identify and develop appropriate data sharing requirements to inform and support safe, efficient, and effective management of the transportation system. Ensure that when new mobility vehicles and services use City rights-of-way or when vehicles connect with smart infrastructure within the City they share information including, but not limited to, vehicle type, occupancy, speed, travel routes, and travel times, crashes and citations, with appropriate privacy controls. Ensure that private data communications devices installed in the City right of way are required to share anonymized transportation data.

**9.69.b.** Design and manage the mobility zone, curb/flex zone, and traffic control devices, e.g. to limit speeds to increase safety, to minimize cut-through traffic, evaluate future demand for pick-up and drop-off zones, and to prioritize automated electric vehicles carrying more passengers in congested times and locations;

**9.69.c.** Evaluate the public cost and benefit of investments in wayside communication systems serving new mobility vehicles and services.

**9.69.d.** Develop sustainable user-pays funding mechanisms to support new mobility vehicle infrastructure and service investments, transportation system maintenance, and efficient system management.

**9.69.e.** Ensure that new mobility vehicles and vehicles that connect to smart City infrastructure, and private data communications devices installed in the City right of way, help pay for infrastructure and service investments, and support system reliability and efficiency. Develop a tiered pricing structure that reflects vehicle and service impacts on the transportation system, including factors such as congestion level, carbon footprint, vehicle miles traveled, vehicle occupancy, and vehicle energy efficiency.



- 277. Finding:** Policies 9.68 and 9.69 address the management of automated vehicles and not development or uses on private or public land outside of the right of way. These policies do not apply.



## Chapter 10: Land Use Designations and Zoning

**Goal 10.A: Land use designations and zoning.** Effectively and efficiently carry out the goals and policies of the Comprehensive Plan through the land use designations, Zoning Map, and the Zoning Code.

**278. Finding:** Policy 10.1 provides direction on applying land use designations in a manner that best advances the Comprehensive Plan goals and policies in an effective and efficient manner. The Floodplain Resilience Plan amendments include map amendments to the overlay zones along Fanno Creek, Tryon Creek, and the Willamette River Central Reach and South Reach. Plan amendments also revise Zoning Code provisions related to the protection and conservation of riparian resources and environmentally sensitive areas. The amendments clarify mitigation requirements, procedures, and standards. These amendments effectively and efficiently implement the goals and policies in the 2035 Comprehensive Plan, as described in this report. Therefore, the amendments are consistent with this policy.

### Land use designations

**Policy 10.1. Land use designations.** Apply a land use designation to all land and water within the City's Urban Services Boundary. Apply the designation that best advances the Comprehensive Plan goals and policies. The land use designations are shown on the adopted Land Use Map and on official Zoning Maps.

**279. Finding:** The Floodplain Resilience Plan amendments do not make changes to base zone designations or land use designations. Map amendments include small expansions of the Environmental Conservation overlay zone in the Fanno Creek and Tryon Creek floodplains, as well as an expansion of River Environmental overlay zone along the Willamette River Central Reach. These expansions ensure greater protection of natural resources in the floodplain and increased mitigation for impacts to those resources. Modifications to the boundary of the River Environmental overlay zone in the Willamette River South Reach incorporate a recently-completed model of a Willamette River flood with characteristics similar to the one experienced in the Portland region in February of 1996. This new model, referred to as the Modeled Willamette River 1996 Flood Extent, serves as a more up-to-date estimate of flood risk. The model provides new estimates of the extents and elevation of a 1996-like flood event using current river bathymetry, upland topography and development patterns. These changes best advance the Comprehensive plan, as demonstrated elsewhere in this document. Therefore, the amendments are consistent with this policy.

### The Zoning Map and the Zoning Code

**Policy 10.2. Relationship of land use designations to base zones.** Apply a base zone to all land and water within the City's urban services boundary. The base zone applied must either be a zone that corresponds to the land use designation or be a zone that does not correspond but is allowed per Figure 10-1 — Corresponding and Less-Intense Zones for Each Plan Map Designation. In some situations, there are long-term or short-term obstacles to achieving the level of development intended by the land use designation (e.g., an infrastructure improvement to serve the higher level of development is planned but not yet funded). In these situations, a less intense zone (listed in Figure 10-1) may be applied. When a land use designation is amended, the zone may also have to be changed to a corresponding zone or a zone that does not correspond but is allowed.

**280. Finding:** The Floodplain Resilience Plan does not add or remove base zones. This policy does not apply.



**Policy 10.3. Amending the Zoning Map.**

**10.3.a.** Amending a base zone may be done legislatively or quasi-judicially.

**10.3.b.** When amending a base zone quasi-judicially, the amendment must be to a corresponding zone (see *Figure 10-1 — Corresponding and Allowed Zones for Each Land Use Designation*). When a designation has more than one corresponding zone, the most appropriate zone, based on the purpose of the zone and the zoning and general land uses of surrounding lands, will be applied.

**10.3.c.** When amending a base zone legislatively, the amendment may be to a corresponding zone or to a zone that does not correspond but is allowed (see *Figure 10-1 — Corresponding and Allowed Zones for each Land Use Designation for zones that are allowed*). A legislative Zoning Map amendment may not be to a zone that is not allowed.

**10.3.d.** An amendment to a base zone consistent with the land use designation must be approved when it is found that current public services can support the uses allowed by the zone, or that public services can be made capable by the time the development is complete. The adequacy of services is based on the proposed use and development. If a specific use and development proposal is not submitted, services must be able to support the range of uses and development allowed by the zone. For the purposes of this requirement, services include water supply, sanitary sewage disposal, stormwater management, transportation, school district capacity (where a school facility plan exists), and police and fire protection.

**10.3.e.** An amendment to apply or remove an overlay zone or plan district may be done legislatively or quasi-judicially, and must be based on a study or plan document that identifies a specific characteristic, situation, or problem that is not adequately addressed by the base zone or other regulations.

**281. Finding:** The Floodplain Resilience Plan amendments do not add or remove base zones but do modify the application of the River Environmental overlay zone (both reductions and expansions) and the Environmental Conservation overlay zone (expansion). Generally, these modifications are based on the City's Natural Resources Inventory and the findings of the 2016 NOAA Fisheries Biological Opinion on FEMA's National Flood Insurance Program (NFIP) that determined that floodplain development allowed by the NFIP jeopardized salmon and steelhead species in Oregon. The Biological Opinion included directives to modify tree and vegetation management requirements to ensure a no-net loss of floodplain function and habitat, as well as the recognition of needed mitigation of floodplain development 170 feet of the ordinary high water mark. The application of expanded overlay zones in the Floodplain Resilience Plan protect these important natural resources. Therefore, the amendments are consistent with this policy.

**Policy 10.4. Amending the Zoning Code.** Amendments to the zoning regulations must be done legislatively and should be clear, concise, and applicable to a broad range of development situations faced by a growing city. Amendments should:

**10.4.a.** Promote good planning:

1. Effectively and efficiently implement the Comprehensive Plan.
2. Address existing and potential land use problems.
3. Balance the benefits of regulations against the costs of implementation and compliance.
4. Maintain Portland's competitiveness with other jurisdictions as a location in which to live, invest, and do business.

**10.4.b.** Ensure good administration of land use regulations:



1. Keep regulations as simple as possible.
2. Use clear and objective standards wherever possible.
3. Maintain consistent procedures and limit their number.
4. Establish specific approval criteria for land use reviews.
5. Establish application requirements that are as reasonable as possible, and ensure they are directly tied to approval criteria.
6. Emphasize administrative procedures for land use reviews.
7. Avoid overlapping reviews.

**10.4.c.** Strive to improve the code document:

1. Use clear language.
2. Maintain a clear and logical organization.
3. Use a format and layout that enables use of the document by lay people as well as professionals.
4. Use tables and drawings to clarify and shorten the document.
5. Identify and act on regulatory improvement suggestions.

**282. Finding:** The Floodplain Resilience Plan amends the following chapters of the Zoning Code:

- 33.10, Legal Framework and Relationships
- 33.110, Single-Dwelling Residential Zones
- 33.120, Multi-Dwelling Residential Zones
- 33.258, Nonconforming Situations
- 33.285, Short Term, Mass, and Outdoor Shelters
- 33.296, Temporary Activities
- 33.418, Constrained Sites Overlay Zone
- 33.430, Environmental Zones
- 33.465, Pleasant Valley Natural Resources Overlay Zone
- 33.475, River Overlay Zones
- 33.510, Central City Plan District
- 33.537, Johnson Creek Basin Plan District
- 33.564, Pleasant Valley Plan District
- 33.610, Lots in RF through R5 Zones
- 33.611, Lots in the R2.5 Zone
- 33.631, Sites in Flood Hazard Areas
- 33.634, Required Recreation Area
- 33.654, Rights-of-Way
- 33.660, Review in OS & R Zones
- 33.662, Review of Land Divisions in Commercial/Mixed Use, Campus Institutional, Employment, and Industrial Zones
- 33.664, Review on Large Sites in Industrial Zones
- 33.675, Replats
- 33.677, Property Line Adjustments
- 33.700, Administration and Enforcement
- 33.730, Quasi-Judicial Procedures
- 33.851, South Waterfront Greenway Review



- 33.854, Planned Development Review
- 33.865, River Review
- 33.910, Definitions

The Floodplain Resilience Plan Recommended Draft as Amended presents the legislative amendments to the Zoning Code to implement the concepts presented in this ordinance. In all cases, the Zoning Code amendments are presented in as clear and objective of a way possible to ensure the intended users will be able understand and utilize the Zoning Code as it applies to their development proposals, land use, and properties, consistent with Comprehensive Plan Policy 10.4.



## Part IV. Area-Specific Plans

As required by 2035 Comprehensive Plan Policy 1.19, the following area-specific plan provides additional policy direction that is relevant within the policy framework provided by the overall Comprehensive Plan. The following plans were analyzed for policies related to the Floodplain Resilience Plan. In addition, the neighborhood plans that made up these area plans were also reviewed:

Albina Community Plan (Ordinances 166786 and 167054, effective 1993)

Outer Southeast Community Plan (Ordinance 169763, effective 1996)

Southwest Community Plan Vision, Policies and Objectives (Ordinance 174667, effective 2000)

Other area, center and neighborhood plans are reviewed when they involve consideration of the Design overlay zone.

### Albina Community Plan (1993)

The following Albina Community Plan policies and objectives are relevant to the Floodplain Resilience Plan and its proposals. The Albina Community Plan boundary includes the floodplains of both the Columbia River and Willamette River. However, the Floodplain Resilience Plan does not propose changes in the portion of the Albina Community Plan that is located along the Willamette River.

Additional findings for individual neighborhood plans within the Albina Community Plan boundary are located immediately after the Albina Community Plan findings.

**Policy X. Environmental Values.** Maintain a strong commitment to preserving and improving the environment within the community and its neighborhoods, including air, water, and soil quality and related natural values.

**283. Finding:** The Floodplain Resilience Plan amendments update floodplain regulations to ensure that development in the floodplain addresses flood risk from a changing climate. The Albina Community Plan encompasses riparian areas along the Columbia River and area north of the Broadway Bridge, on the east side of the Willamette River. Within the Albina Community Plan area there are existing areas of environmental overlay zones. Plan amendments include updating the requirements of the Environmental overlay zones chapter (33.430) to manage tree and vegetation removal and maintenance to achieve no net-loss in floodplain habitat functions, as defined by the FEMA BiOp. This includes limiting tree and vegetation removal that is allowed without City approval and increasing the minimum tree replacement required when a tree is removed in the Environmental overlay zone. Therefore, the amendments are consistent with this policy.

**Objective 6.** Improve water quality and enhance fish and wildlife habitats. Protect wetlands and water features.

**284. Finding:** The Floodplain Resilience Plan amendments update floodplain regulations to ensure that development in the floodplain addresses flood risk from a changing climate. The Albina Community Plan encompasses riparian areas along the Columbia River and area north of the Broadway Bridge, on the east side of the Willamette River. Within the Albina Community Plan area there are existing areas of environmental overlay zones. Plan amendments include updating the requirements of the Environmental overlay zones chapter (33.430) to manage tree and vegetation removal and maintenance to achieve no net-loss in floodplain habitat functions, as defined by the FEMA BiOp. This includes limiting tree and vegetation removal that is allowed without City approval and increasing the minimum tree replacement required when a tree is removed in the



Environmental overlay zone. Generally, though plan amendments apply regulations to specific riparian areas in Portland, the Floodplain Resilience Plan recognizes Portland's waterways as an interconnected network. Plan amendments that apply outside of the Albina Community Plan boundary still provide watershed wide benefits including improved riparian habitat and floodplain functions. Therefore, the amendments are consistent with this policy.

## **Neighborhood Plans Associated with Albina Community Plan**

### **East Columbia**

No neighborhood plan.

### **Kenton Neighborhood Plan (1993), Amended by the Kenton Downtown Plan (2001) Policy 6.**

**Historic and Natural Resources.** Increase awareness of Kenton's historical and natural resources through the establishment of a Kenton Historic District and an Urban Wildlife Habitat Corridor. Use these resources as focal points of Kenton pride and revitalization.

**Objective 2.** Enhance the natural resource values of the Columbia Slough. Establish slough management policies which preserve environmental, recreational, and educational uses of the Columbia Slough for Kenton and Portland residents.

**Objective 3.** Reinforce the Columbia Slough and surrounding wetlands as an urban wildlife habitat corridor with connections and access to Kenton's residential areas.

**285. Finding:** The Floodplain Resilience Plan updates the tree removal and planting requirements in the Environmental overlay zones, including requiring at least three trees to be planted whenever a tree is removed in the floodplain. These updated requirements apply to floodplains in the Kenton neighborhood where either the Environmental Protection or Environmental Conservation overlay zones is applied. These updates will expand tree canopy within the floodplain, enhancing natural resources (including wetlands) in the Kenton neighborhood. Therefore, the amendments are consistent with this policy.

### **Sunderland**

No neighborhood plan.

### **Bridgeton Neighborhood Plan (1997)**

**Policy 3. Environment.** Protect and enhance the integrity of North Portland Harbor, the shoreline dike, the Bridgeton Slough, and other natural resources of the Bridgeton neighborhood.

**Objective 3.** Enhance and maintain North Portland Harbor as a scenic corridor, waterway, view, fish habitat, home to Bridgeton residents, and recreational amenity.

**286. Finding:** The Floodplain Resilience Plan updates regulations for development within the Columbia River floodplain. Updates to the Environmental overlay zones include limiting tree and vegetation removal allowed via exemption and increasing the minimum number of trees planted to three whenever a tree is removed in the floodplain. Therefore, the amendments are consistent with Policy 3 and Objective 3 of the plan.



## **Outer Southeast Community Plan (1996)**

The following policies and objectives of the Outer Southeast Community Plan are relevant to the Floodplain Resilience Plan. The Floodplain Resilience Plan updates the requirements in the Environmental overlay zones, which are applied to Johnson Creek and its associated floodplains.

Additional findings for the individual neighborhood plans within the Outer Southeast Community Plan boundary are provided immediately after the Outer Southeast Community Plan findings.

**Open Space and Environmental Policy.** Provide parks and open spaces to meet projected recreational needs of outer southeast residents. Create a sense of connection with the natural environment. Protect natural resources by reducing the impact of development on them.

**Objective 7.** Protect and improve water quality within the Johnson Creek basin.

- Improve flood plain management.
- Encourage responsible flood plain development.

**287. Finding:** The Floodplain Resilience Plan updates the City's floodplain regulations to reduce the impacts of future flooding and degradation of floodplain habitat. These updates include modifying existing mitigation requirements in Environmental overlay zones to ensure the continued health of riparian habitat by limiting tree and vegetation removal allowed via exemption and increasing the minimum number of trees to be planted whenever a tree is removed in the floodplain. These changes will protect and improve water quality and encourage more responsible development in the Johnson Creek floodplain. Therefore, the amendments are consistent with the Open Space and Environmental Policy and Objective 7.

**Objective 8.** Maintain Johnson Creek and all related waterways in as natural condition as possible.

**288. Finding:** The Floodplain Resilience Plan updates the City's floodplain regulations to reduce the impacts of future flooding and degradation of floodplain habitat. The updated regulations limit tree and vegetation removal allowed without City approval and increase the minimum number of trees to be planted whenever a tree is removed in the floodplain. These changes will contribute to the continued health of Johnson Creek riparian habitat and the maintenance of its natural condition. Therefore, the amendments are consistent with the Open Space and Environmental Policy and Objective 8.

### **Subarea Policy III: Lents Town Center Policy.**

**Objective 3.** Address flood plain and other environmental issues so that industrial and commercial uses do not have an adverse impact on Johnson Creek and surrounding wetlands.

### **Subarea Policy VII: Mixed-Era Neighborhoods**

**Objective 10.** Ensure that potential development permitted by the Comprehensive Plan within the Johnson Creek flood plain does not contribute to the Johnson Creek flooding problem.

**289. Finding:** The Floodplain Resilience Plan addresses the impact of new development on undeveloped floodplains through mitigation requirements when impacts to natural resources are unavoidable. In the Johnson Creek watershed, areas of where Environmental overlay zones (Environmental Conservation and Environmental Protection) are currently applied are subject to plan amendments, which update when trees and vegetation can be removed without City



approval and increase the minimum number of trees to be replanted whenever a tree is removed in the floodplain. These changes will contribute to the continued health of Johnson Creek floodplains and help to preserve their natural flood management functions. Therefore, the amendments are consistent with these policies.

## **Neighborhood Plans Associated with Outer Southeast Community Plan (1996)**

### **Powellhurst-Gilbert Neighborhood Plan (1995)**

**Policy 2. Trails, Parks, Open Space and Environment.** Ensure that the parks, green spaces, open spaces and other recreational and cultural opportunities of the Powellhurst-Gilbert neighborhood meet the needs of area residents and improve the neighborhood's appearance.

**Objective 1:** Encourage preservation and enhancement of Johnson Creek and its adjacent areas.

**290. Finding:** The Floodplain Resilience Plan amendments include updating the requirements of the Environmental overlay zones chapter (33.430) to achieve no net-loss in floodplain habitat functions. This includes limiting tree and vegetation removal that is allowed without City approval and increasing the minimum tree replacement required when a tree is removed in the Environmental overlay zone. This is applicable along Johnson Creek and elsewhere in the Powellhurst-Gilbert Neighborhood where existing environmental overlay zones exist, contributing to the continued health and preservation of Johnson Creek and other natural areas. Therefore, the amendments are consistent with this policy.

### **Lents Neighborhood Plan (1995)**

**Policy 3. Trails, Parks, Open Space and the Environment:** Promote recreational opportunities in and arounds Lents while preserving and protecting the environment.

**Objective 6.** Protect from degradation and maintain the integrity of minor tributaries to Johnson Creek.

**291. Finding:** The Floodplain Resilience Plan amendments include updating the requirements of the Environmental overlay zones chapter (33.430) to achieve no net-loss in floodplain habitat functions. This includes limiting tree and vegetation removal that is allowed without City approval and increasing the minimum tree replacement required when a tree is removed in the Environmental overlay zone. This is applicable along Johnson Creek, its tributaries, and elsewhere in the Lents Neighborhood where existing environmental overlay zones exist, contributing to the continued health and preservation of Johnson Creek and other natural areas. Therefore, the amendments are consistent with this policy.

### **Centennial Neighborhood Plan (1996)**

**Policy 3. Environment and Parks.** Protect, preserve and enhance parks, natural areas and environmentally sensitive areas, such as wooded areas, wetlands, wildlife habitats, wildlife corridors, steep slopes and open spaces, in the Centennial neighborhood.

**Objective 5.** Consider protecting those portions of Centennial containing wetlands, Johnson Creek and its watershed, Springwater Corridor, wildlife habitats and corridors, wooded areas and drainageways



and slopes over 15%, especially the slopes of Powell Butte, through an Economic, Social, Environmental, and Energy (ESEE) Analysis process.

**292. Finding:** The Floodplain Resilience Plan amendments include updating the requirements of the Environmental overlay zones chapter (33.430) to achieve no net-loss in floodplain habitat functions. This includes limiting tree and vegetation removal that is allowed without City approval and increasing the minimum tree replacement required when a tree is removed in the Environmental overlay zone. This is applicable along Johnson Creek and elsewhere in Centennial Neighborhood where existing environmental overlay zones exist, contributing to the continued health and preservation of Johnson Creek and other natural features. Therefore, the amendments are consistent with this policy.

### **Pleasant Valley Neighborhood Plan (1996)**

**Policy 2 Environment.** Preserve the ecosystem and diverse character of Pleasant Valley.

**Objective 1:** Preserve and enhance the current quality of life and retain the area's diversity through careful land use planning, protecting environmentally sensitive areas, such as steep slopes, landslide areas, floodways, floodplains, and wetlands.

**293. Finding:** The Floodplain Resilience Plan amendments include updating the requirements of the Environmental overlay zones chapter (33.430) to achieve no net-loss in floodplain habitat functions. This includes limiting tree and vegetation removal that is allowed without City approval and increasing the minimum tree replacement required when a tree is removed in the Environmental overlay zone. This is applicable along Johnson Creek and elsewhere in the Pleasant Valley Neighborhood where there are existing environmental overlay zones, contributing to the continued health and preservation of Johnson Creek and other environmentally sensitive areas including floodways, floodplains, and wetlands. Therefore, the amendments are consistent with this policy.

### **Brentwood-Darlington Neighborhood Plan (1992)**

No relevant policies and objectives in this plan.

### **Southwest Community Plan (2000)**

The following policies related to the Southwest Community Plan are applicable to the Floodplain Resilience Plan, as the Southwest Community includes a portion of the Willamette River South Reach, Fanno Creek and Tryon Creek. Additional findings for individual neighborhood plans within Southwest are located immediately after the Community Plan findings.

**Parks, Recreation, and Open Space.** Enrich neighborhoods and the Southwest community as a whole with ample, accessible, and well-maintained parks and open space. Preserve and enhance the natural habitat features of Southwest Portland's parks and open spaces. Ensure a wide range of recreational opportunities for Southwest citizens.

**Objective 2.** Preserve natural areas for wildlife habitat, environmental and scenic values.

**Finding:** The Floodplain Resilience Plan recognizes the value of preserving and protecting the functions of riparian habitat for wildlife, including threatened and endangered species. Plan amendments include



expanding the Environmental Conservation overlay zone to encompass undeveloped floodplains along Fanno and Tryon creeks. By minimizing and mitigating development impacts, the Environmental Conservation overlay zone conserves important resources and functional values. Plan amendments also update the requirements of the Environmental overlay zones chapter (33.430) to manage tree and vegetation removal and maintenance to achieve no net-loss in floodplain habitat functions. This includes limiting tree and vegetation removal that is allowed without City approval and increasing the minimum tree replacement required when a tree is removed in the Environmental overlay zone. Along the Willamette River South Reach, plan amendments update the boundaries of the existing riparian buffer area and River Environmental overlay zone to include the areas identified in the Modeled Willamette River 1996 Flood Extent and FEMA 100-year floodplain and remove the River Environmental overlay zone from developed floodplains landward of the riparian buffer area. A map of the extent of the Modeled Willamette River 1996 Flood Extent and documentation of the methodology used to create it are included in the record. Upon implementation of the Zoning Code amendments, this extent will be available as a GIS layer for use by applicants as a part of future development proposals. These amendments provide protections to natural resources, preserving and enhancing their functions. Therefore, the amendments are consistent with this policy.

**Watershed.** Protect and enhance Southwest Portland’s environment and natural resources on a watershed by watershed basis. Integrate stormwater management into land use planning and development in a way that prevents net degradation of water quality, aquatic, streamside and riparian habitats and ecosystems, and plant and animal habitats throughout the stream corridor.

**Objective 5.** Protect the structural stability and riparian conditions of stream corridors, water quality and the needs of aquatic and riparian wildlife and vegetation.

**Objective 6.** Create conditions which support the recovery of threatened, endangered, and other sensitive species and remove streams from water quality-limited listings.

**Objective 9.** Integrate floodplain values of the Willamette River with developments and uses along the Willamette Greenway.

**Objective 10.** Promote the restoration and protection of vegetated riparian corridors as a means to restore and preserve water quality and aquatic streamside plant and animal habitats and ecosystems.

**294. Finding:** The Floodplain Resilience Plan amendments are supportive of the Southwest Community Plan’s Watershed Objectives 5-10 through environmental regulations that recognize the value of preserving and protecting the functions and quality of floodplains and riparian habitat for threatened or endangered species. Plan amendments include expanding the Environmental Conservation overlay zone to encompass undeveloped floodplains along Fanno and Tryon creeks. By minimizing and mitigating development impacts, the Environmental Conservation overlay zone conserves important resources and functional values. Plan amendments also update the requirements of the Environmental overlay zones chapter (33.430) to manage tree and vegetation removal and maintenance to achieve no net-loss in floodplain habitat functions. This includes limiting tree and vegetation removal that is allowed without City approval and increasing the minimum tree replacement required when a tree is removed in the Environmental overlay zone. Along the Willamette River South Reach, plan amendments update the boundaries of the existing riparian buffer area and River Environmental overlay zone to include the areas identified in the Modeled Willamette River 1996 Flood Extent and FEMA 100-year floodplain and remove the River Environmental overlay zone from developed floodplains landward of the riparian buffer area. A



map of the extent of the Modeled Willamette River 1996 Flood Extent and documentation of the methodology used to create it are included in the record. Upon implementation of the Zoning Code amendments, this extent will be available as a GIS layer for use by applicants as a part of future development proposals. Therefore, the amendments are consistent with this policy.

## **Neighborhood Plans Associated with Southwest Community Plan (2001)**

### **Collins View**

No neighborhood plan

### **Marshall Park**

No neighborhood plan

### **Markham**

No neighborhood plan

### **South Portland**

No neighborhood plan

### **Hayhurst**

No neighborhood plan

### **Bridlemile**

No neighborhood plan

## **Other Neighborhood Plans**

The following neighborhood plans and findings are included due to the relevance of their waterways and floodplains to the Floodplain Resilience Plan.

### **Cully-Parkrose Neighborhood Plan (1986)**

No relevant policies

### **Wilkes Community and Rockwood Corridor Plan (1987)**

No relevant policies

### **Northwest District Plan (2003)**

No relevant policies

### **North Pearl District Plan (2008)**

## **Goal 8. Project Stormwater.**

- Develop a systems approach to the conveyance and infiltration of stormwater by embracing natural topography to reduce the need for piped infrastructure, using a surface conveyance system, minimizing conveyance distance between facilities, and embedding facilities within the urban fabric.
- Mimic natural hydrology by infiltrating stormwater to increase stream base flows and to recharge aquifers.



**295. Finding:** The Floodplain Resilience Plan recognizes that floodplains, in their natural form, provide flood risk reduction by slowing and storing runoff. During non-flood periods, floodplains can aid in naturally regulating the flow of a river. The Floodplain Resilience Plan protects these natural functions through the application of riparian buffer area requirements to identified areas. Development proposed in the riparian buffer area is required to mitigate all impacts on identified natural resources and demonstrate an improvement in one of two floodplain-related riparian functions. The Plan also expands the River Environmental overlay zone to encompass the proposed riparian buffer area and any undeveloped floodplain landward of the riparian buffer area. Therefore, the amendments are consistent with this policy.

### **Kerns Neighborhood Action Plan (1991)**

**Policy 1. Neighborhood Quality and Livability.** Improve the quality and livability of Kerns by ensuring an environment which contributes to the safety, welfare and education of those who live, work, and own property in the neighborhood.

**296. Finding:** The Kerns Neighborhood Action Plan encompasses a small area of floodplain along the Willamette River Central Reach, between the Burnside Bridge and Steele Bridge. The Floodplain Resilience Plan recognizes that floodplains, in their natural form, provide flood risk reduction by slowing and storing runoff. During non-flood periods, floodplains can aid in naturally regulating the flow of a river. The Floodplain Resilience Plan protects these natural functions through the application of riparian buffer area requirements to identified areas. Development proposed in the riparian buffer area is required to mitigate all impacts on identified natural resources and demonstrate an improvement in one of two floodplain-related riparian functions. The Plan also expands the River Environmental overlay zone to encompass the proposed riparian buffer area and any undeveloped floodplain landward of the riparian buffer area. Therefore, the amendments are consistent with this policy.

### **Buckman Neighborhood Plan (1991)**

No relevant policies

### **Downtown Plan (1972)**

No relevant policies

### **Hosford-Abernathy Neighborhood Plan (1988)**

No relevant policies

### **Brooklyn Neighborhood Plan (1991)**

No relevant policies

### **Sellwood-Mooreland Neighborhood Plan (1998)**

**Policy XII. Environment and Greenspaces.** Foster community care and respect for the environment

**Objective 2:** Protect neighborhood greenspaces and preserve wildlife habitats.

**297. Finding:** The Floodplain Resilience Plan supports the protection and preservation of wildlife habitat through updating the boundaries of the existing riparian buffer area and River Environmental overlay. Degradation of floodplain habitat is reduced through mitigation when



development in the riparian buffer area is proposed. Therefore, the amendments are consistent with this policy.

### **St. Johns/Lombard Plan (2004)**

**Policy 6. Environment.** Promote the development of a built environment that fosters ecological quality and uses sustainable development practices.

- The establishment of habitat enhancement and restoration projects to preserve tracts of remnant native vegetation along the river's edge. Such projects will help to preserve and expand habitat for wildlife in the area, will improve the general environmental and aesthetic quality of the riverfront, and will improve the livability of residents, workers, and visitors of the riverfront.

**298. Finding:** The St. Johns/Lombard Plan encompasses areas of floodplains along the Willamette River South Reach. The Floodplain Resilience Plan amendments along the South Reach are consistent with Policy 6 by promoting healthy and functioning floodplains through regulations. Plan amendments include updating the boundaries of the existing riparian buffer area and River Environmental overlay zone to include the areas identified in the Modeled Willamette River 1996 Flood Extent and FEMA 100-year Floodplain. Mitigation requirements in the riparian buffer area and River Environmental overlay zone prioritize ecological quality and sustainable development practices that reduce impacts to natural resources. A map of the extent of the Modeled Willamette River 1996 Flood Extent and documentation of the methodology used to create it are included in the record. Upon implementation of the Zoning Code amendments, this extent will be available as a GIS layer for use by applicants as a part of future development proposals. Therefore, the amendments are consistent with this policy.

**Policy 7. Willamette Riverfront.** Develop the Willamette Riverfront as an active mixed-use area containing housing and opportunities for local employment, supported by community oriented retail services and a network of open space areas including an expanded greenway trail and other public amenities.

**299. Finding:** The Floodplain Resilience Plan amendments are consistent with Policy 7 as they implement protections for floodplains and their functions while providing flexibility for development. Plan amendments along the Willamette River South Reach include updating the boundaries of the existing riparian buffer area and River Environmental overlay zone to include the areas identified in the Modeled Willamette River 1996 Flood Extent and FEMA 100-year Floodplain. A map of the extent of the Modeled Willamette River 1996 Flood Extent and documentation of the methodology used to create it are included in the record. Upon implementation of the Zoning Code amendments, this extent will be available as a GIS layer for use by applicants as a part of future development proposals. All new development in the River Environmental overlay zone must be mitigated via standards or the River Review process. Existing structures can operate, maintain, conduct alterations, repair and replace the existing structure by exemption. Development that is not river-dependent or river-related within the riparian buffer area, must demonstrate significant improvement in at least one of two City-defined floodplain functions while also ensuring no net loss of other natural resource functions in this key riparian area. Therefore, the amendments are consistent with this policy.



## Hayden Island Plan (2009)

### Environment and Open Space

**b.** Protect and restore Columbia River Habitat, including shallow water habitat and water quality.

- Replant riparian areas in native species, and remove rip-rap and set back banks where possible.

**300. Finding:** The Floodplain Resilience Plan recognizes floodplains as providing shallow water habitat, water storage, and recharge functions. Plan amendments include updating the requirements of the Environmental overlay zones chapter (33.430) to achieve no net-loss in floodplain habitat functions. This includes limiting tree and vegetation removal that is allowed without City approval and increasing the minimum tree replacement required when a tree is removed in the Environmental overlay zone. This is applicable along the Columbia River and elsewhere on Hayden Island where existing environmental overlay zones exist. Therefore, amendments are consistent with this policy.



## Part V. Comprehensive Plan and Zoning Code Text Amendment Criteria

### 33.835.040 Approval Criteria

**A. Amendments to the zoning code.** Text amendments to the Zoning Code must be found to be consistent with the Comprehensive Plan, Urban Growth Management Functional Plan, and the Statewide Planning Goals. In addition, the amendments must be consistent with the intent or purpose statement for the base zone, overlay zone, plan district, use and development, or land division regulation where the amendment is proposed, and any plan associated with the regulations. The creation of a new plan district is subject to the approval criteria stated in 33.500.050.

**301. Finding:** The findings in this exhibit demonstrate how the Floodplain Resilience Plan Zoning Code amendments are consistent with the *2035 Comprehensive Plan*, the *Urban Growth Management Functional Plan*, and the Statewide Planning Goals. Findings showing consistency with the purpose statements of individual Zoning Code sections are provided below.

The Council interprets this criterion to require the ordinance to be consistent with the Comprehensive Plan. Council notes that the Comprehensive Plan defines the phrase “consistent with” to mean “the subject meets the requirements of, satisfies, or adheres to the regulations, mandate, or plan listed in the goal or policy.”

The City Council has considered all applicable policies, and the findings in this exhibit demonstrate how the amendments to the Zoning Code are consistent with the *2035 Comprehensive Plan*, the Urban Growth Management Functional Plan, and with the Statewide Planning Goals.

Council further finds this criterion operates in conjunction with Comprehensive Plan Policy 1.10 which requires that amendments to the Comprehensive Plan’s supporting documents, such as the Zoning Code, must “comply” with the Comprehensive Plan. “Comply” means “that amendments must be evaluated against the Comprehensive Plan’s applicable goals and policies and on balance be equally or more supportive of the Comprehensive Plan as a whole than the existing language or designation.” Additional findings in response to Policy 1.10 describe how the Council interprets “equally or more supportive” are incorporated here by reference.

PCC 33.835.040.A requires Council to demonstrate that the Floodplain Resilience Plan amendments are consistent with, or adhere to, the entire Comprehensive Plan. PCC 33.835.040.A does not require Council to demonstrate that the amendments are consistent with, or adhere to, individual goals and policies but rather the entire plan. Regardless, as demonstrated in this exhibit, Council has considered all applicable goals and policies and finds that the Floodplain Resilience Plan amendments are consistent with all the individual goals and policies.

Council finds that a proposed amendment is equally supportive when it is on its face directly supported by goals and policies in the Plan. The City Council finds that an amendment is more supportive of the Comprehensive Plan when the amendment will further advance goals and policies, particularly those that are aspirational in nature. The policy requires consideration as to whether amendments are equally or more supportive of the Plan as a whole. The City Council finds that amendments do not need to be equally or more supportive of individual goals and policies, but rather amendments must be equally or more supportive of the entire Comprehensive Plan. Therefore, there may be instances where specific goals and policies are not supported by the amendments but still the amendment is equally or more supportive of the entire Comprehensive Plan when considered cumulatively. There is no precise mathematical equation for determining



when the Plan as a whole is supported but rather such consideration requires Council discretion in evaluating the competing interests and objectives of the plan.

Applying both the Zoning Code criterion and Policy 1.10 together, as discussed above, Council finds that the ordinance is consistent and complies with the Comprehensive Plan.

Council also finds that this criterion requires Council to consider whether the Floodplain Resilience Plan amendments are consistent with the Urban Growth Management Functional Plan and Statewide Planning Goals. As discussed fully above, Council finds that the Floodplain Resilience Plan amendments are consistent with both the Urban Growth Management Functional Plan and the Statewide Planning Goals.

Finally, as discussed above, this ordinance is consistent with the applicable intent or purpose statement for the base zones, overlay zones, plan district, use and development standards where the amendments have been proposed.

For all of these reasons, Council finds that the Floodplain Resilience Plan amendments are consistent and comply with each applicable policy in the Comprehensive Plan and the amendments are consistent with the Urban Growth Management Functional Plan, the Statewide Planning Goals and relevant purpose statements.

No new plan district has been proposed, therefore the criteria in 33.500.050 do not apply. Additionally, Council finds that the proposed amendments are consistent with plans associated with the regulations, including area plans.

Several technical amendments are made to clarify wording or references within certain chapters to the combined flood hazard area and its associated requirements. These technical amendments are done to increase clarity in the use of the Zoning Code as stated in the findings for Chapter 10 of the Comprehensive Plan. These technical amendments include small changes within the following chapters:

- 33.110, Single-Dwelling Residential Zones
- 33.120, Multi-Dwelling Residential Zones
- 33.258, Nonconforming Situations
- 33.285, Short Term, Mass, and Outdoor Shelters
- 33.296, Temporary Activities
- 33.418, Constrained Sites Overlay Zone
- 33.465, Pleasant Valley Natural Resources Overlay Zone
- 33.537, Johnson Creek Basin Plan District
- 33.564, Pleasant Valley Plan District
- 33.634, Required Recreation Area
- 33.654, Rights-of-Way
- 33.660, Review in OS & R Zones
- 33.662, Review of Land Divisions in Commercial/Mixed Use, Campus Institutional, Employment, and Industrial Zones
- 33.664, Review on Large Sites in Industrial Zones
- 33.675, Replats
- 33.677, Property Line Adjustments
- 33.854, Planned Development Review

These amendments do not impact the Purpose Statement for these chapters.