



FLOODPLAIN MANAGEMENT UPDATE

Development Review Advisory Committee
(DRAC)

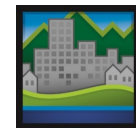
June 15, 2023

Jeff Caudill
Environmental Planner, BPS

Jason Butler-Brown
Site Development Manager, BDS



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Agenda

- I. Background
- II. BPS Floodplain Resilience Plan
- III. BDS Building Code Update Project
- IV. Next Steps/Schedule
- V. Q & A



Photo: The Oregonian



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Project Goals

- Maintain access to flood insurance and disaster relief funds
- Reduce future flood risk
- Expand habitat for Portland's threatened and endangered species



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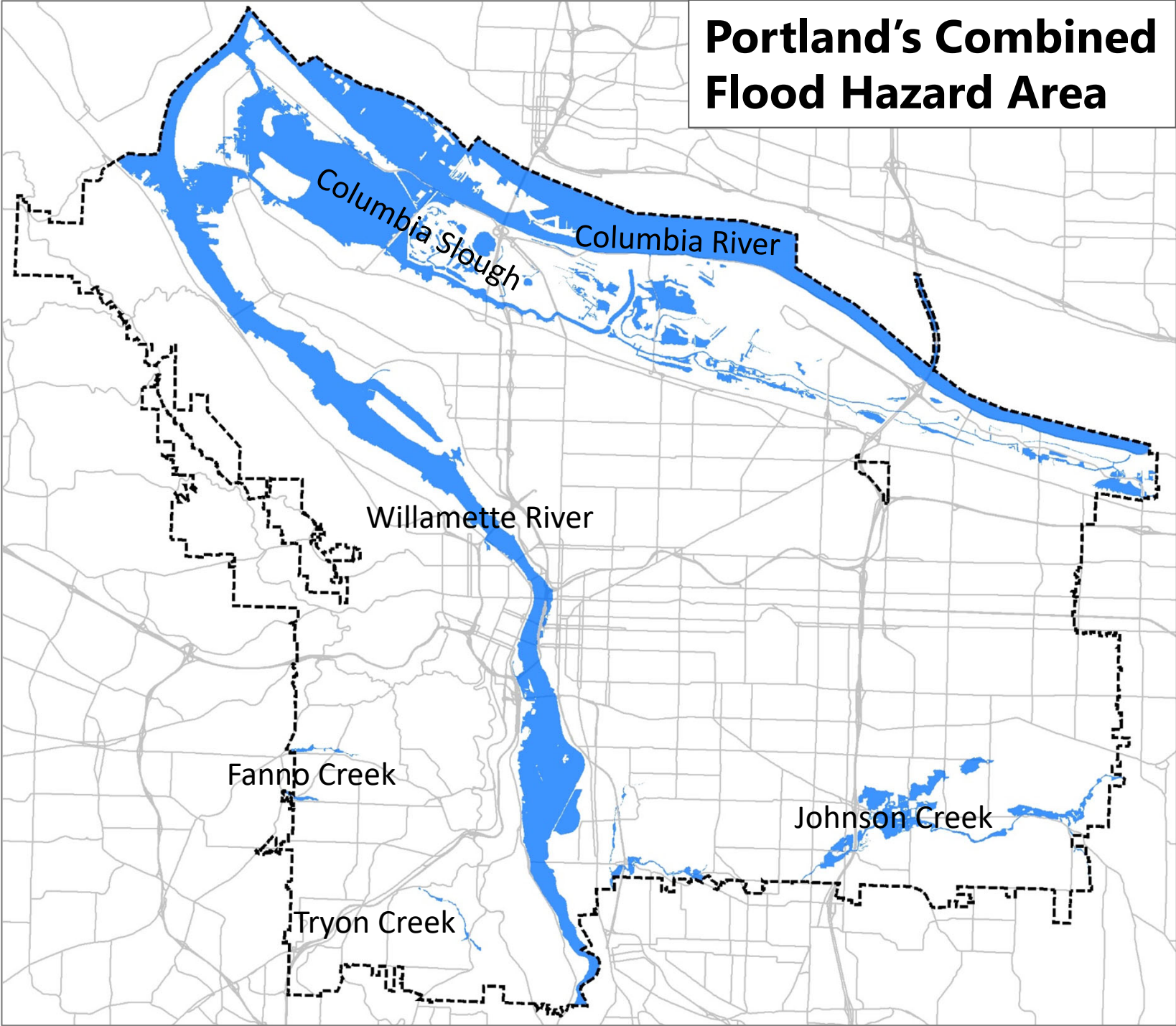
Background



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Portland's Combined Flood Hazard Area



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FEMA's National Flood Insurance Program (NFIP)

- Provides flood insurance in floodplains
- Minimum requirements must be met
- Community Rating System (CRS) participation reduces insurance rates when voluntary measures are taken

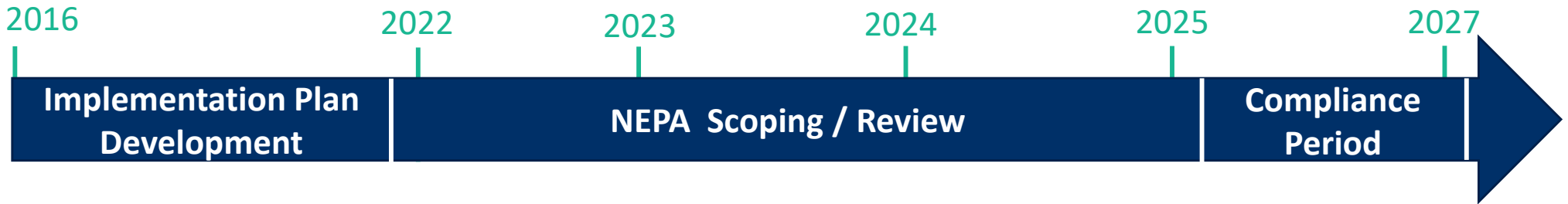


National Flood Insurance Program (NFIP) Oregon Biological Opinion

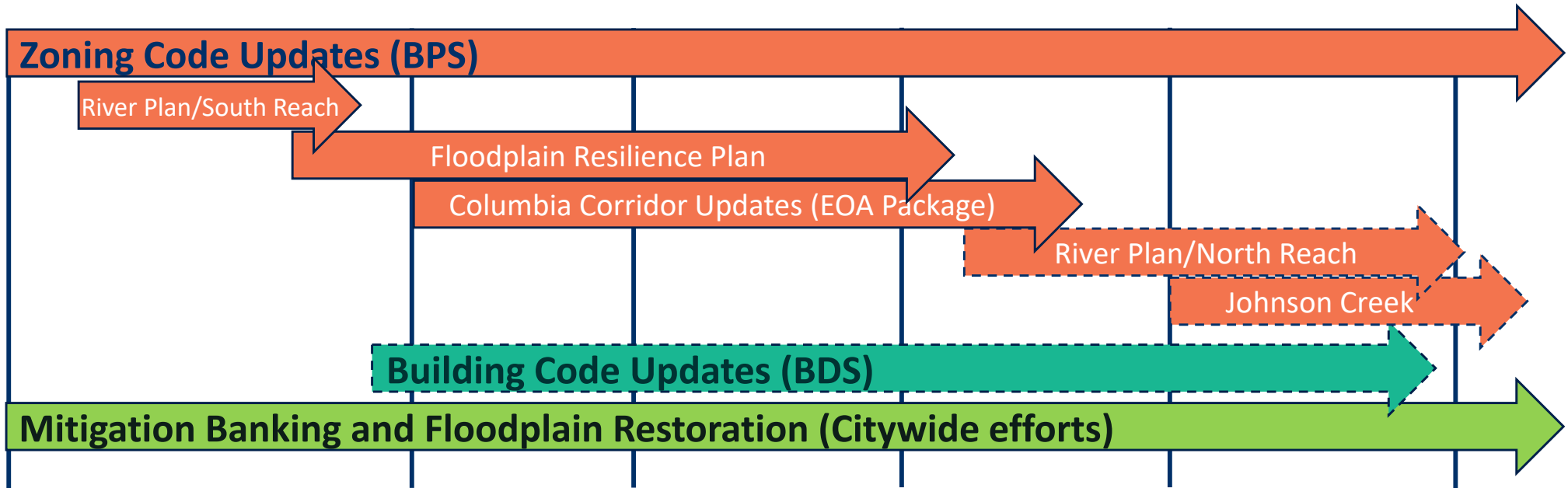
- Determined 16 threatened and endangered salmon and steelhead impacted
- FEMA Implementation Plan to comply with the Biological Opinion released in October 2021



FEMA BIOP TIMELINE



CITY WORK PLAN COMPONENTS & SCHEDULE



Floodplain Resilience Plan



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Zoning Code (Title 33) Updates

- Establish riparian buffer area in Willamette Central Reach
- Apply environmental zones to undeveloped floodplains
- Update tree and vegetation requirements throughout the city in the floodplain



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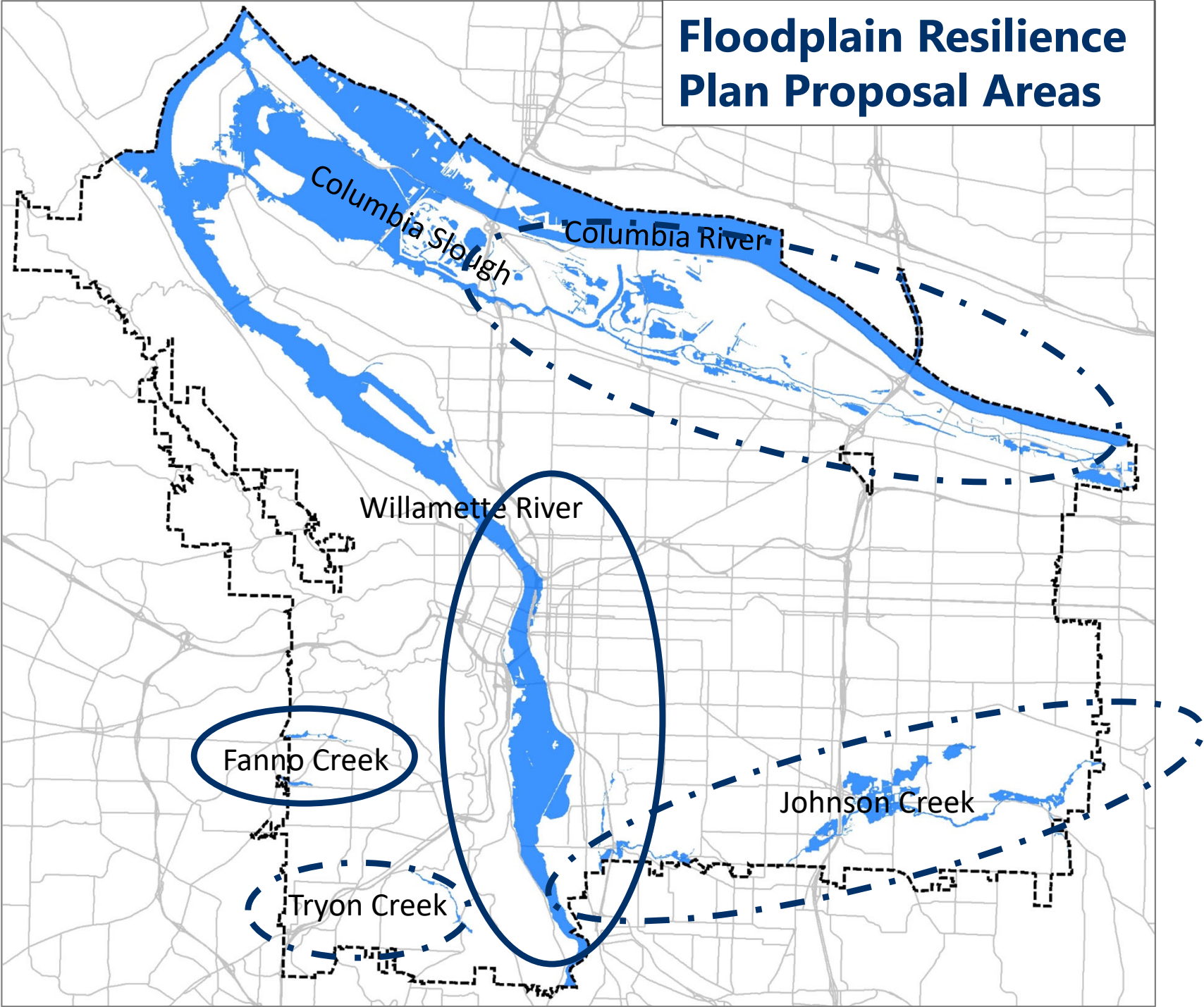
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Riparian Buffer Area

- Often extends beyond required setback, but not always
- Not a no-build zone but additional mitigation required
- Mitigation
 - Improvements onsite or off-site to offset development impacts
 - Extent/type of improvements depend on scale of impact



Floodplain Resilience Plan Proposal Areas



Schedule

Early Aug	Release of Floodplain Resilience Plan Recommended Draft
Aug 30	City Council hearing for Title 33 and Title 24
Sept–Oct	Deliberations, amendments, and adoption

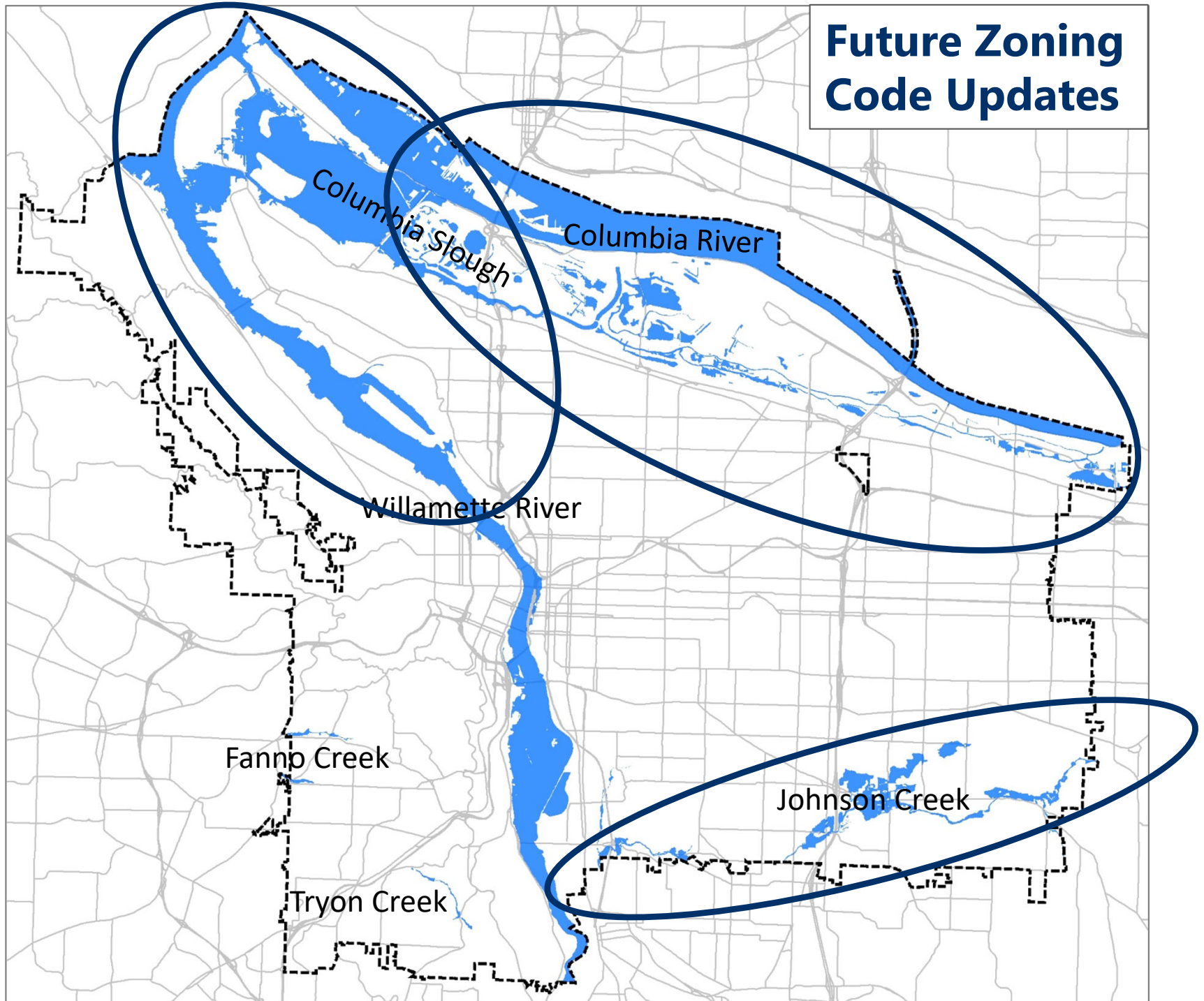


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Future Zoning Code Updates



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Building Code (Title 24) Updates



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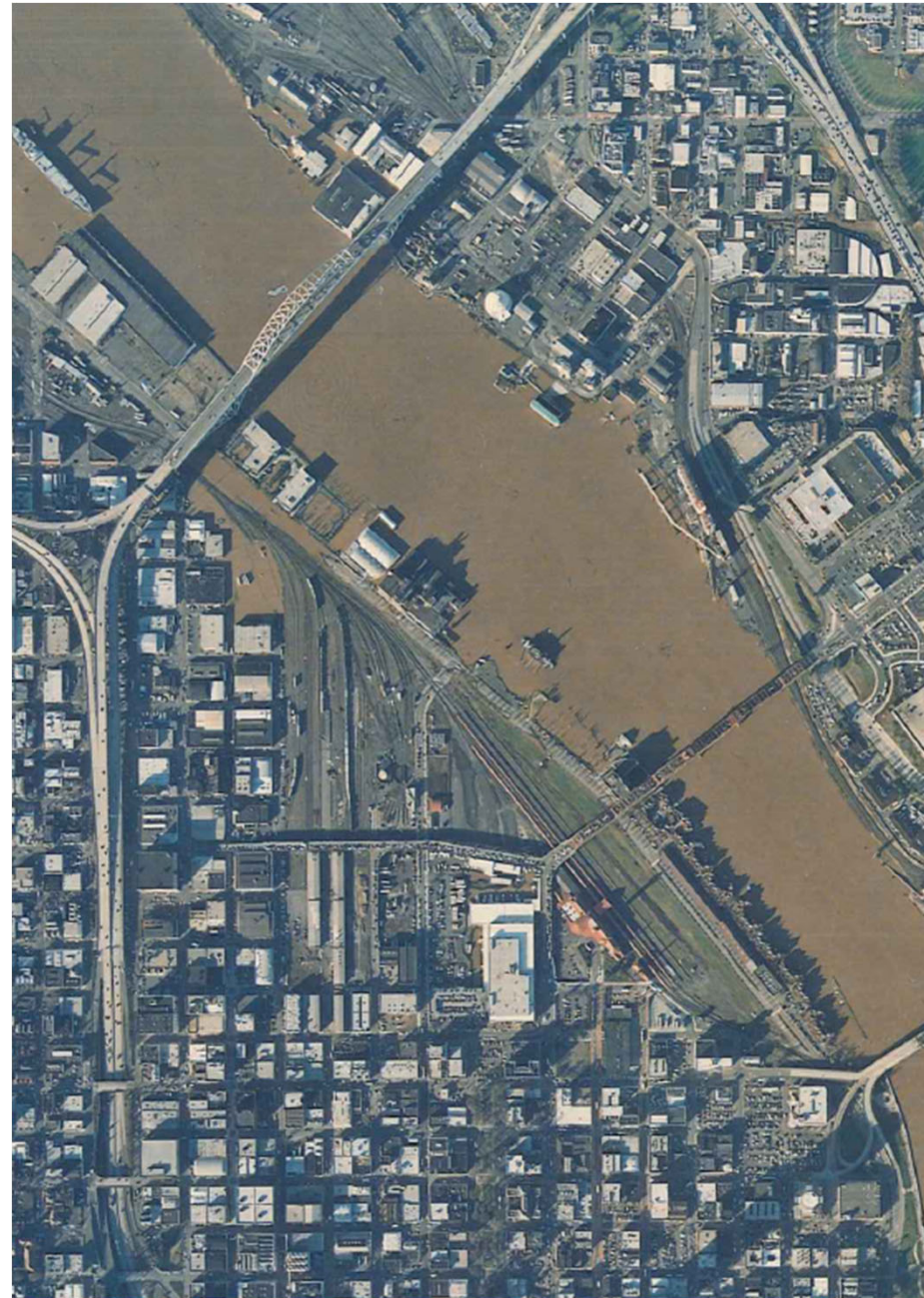


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Building Code (Title 24)

24.50 Flood Hazard Areas

- Review existing flood storage requirements
- Review proposed code changes
 - FEMA regulatory code review updates
 - FEMA BiOp flood storage
 - Updated February 1996 Flood Inundation Area map
- Review future work

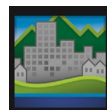
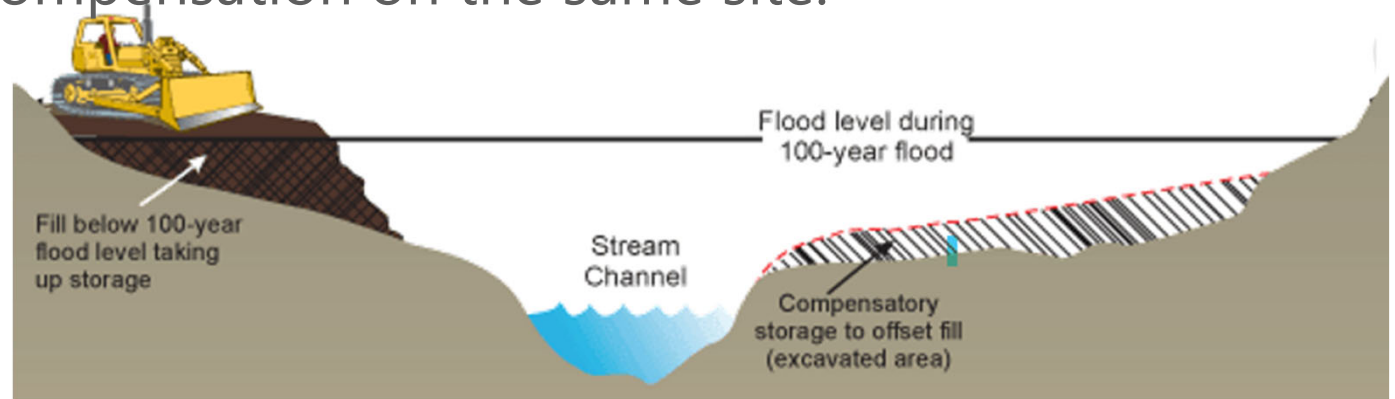


Building Code (Title 24)

24.50 Flood Hazard Areas

Current Flood Storage - “Balanced cut and fill”

- Compensation for lost flood storage volume from fill placement is required at a ratio of 1 to 1.
- Applies to the flood hazard areas shown on the Metro Title 3 map.
- Requires flood storage compensation within same flood hazard area. Except Johnson Creek Flood Zones which requires compensation on the same site.

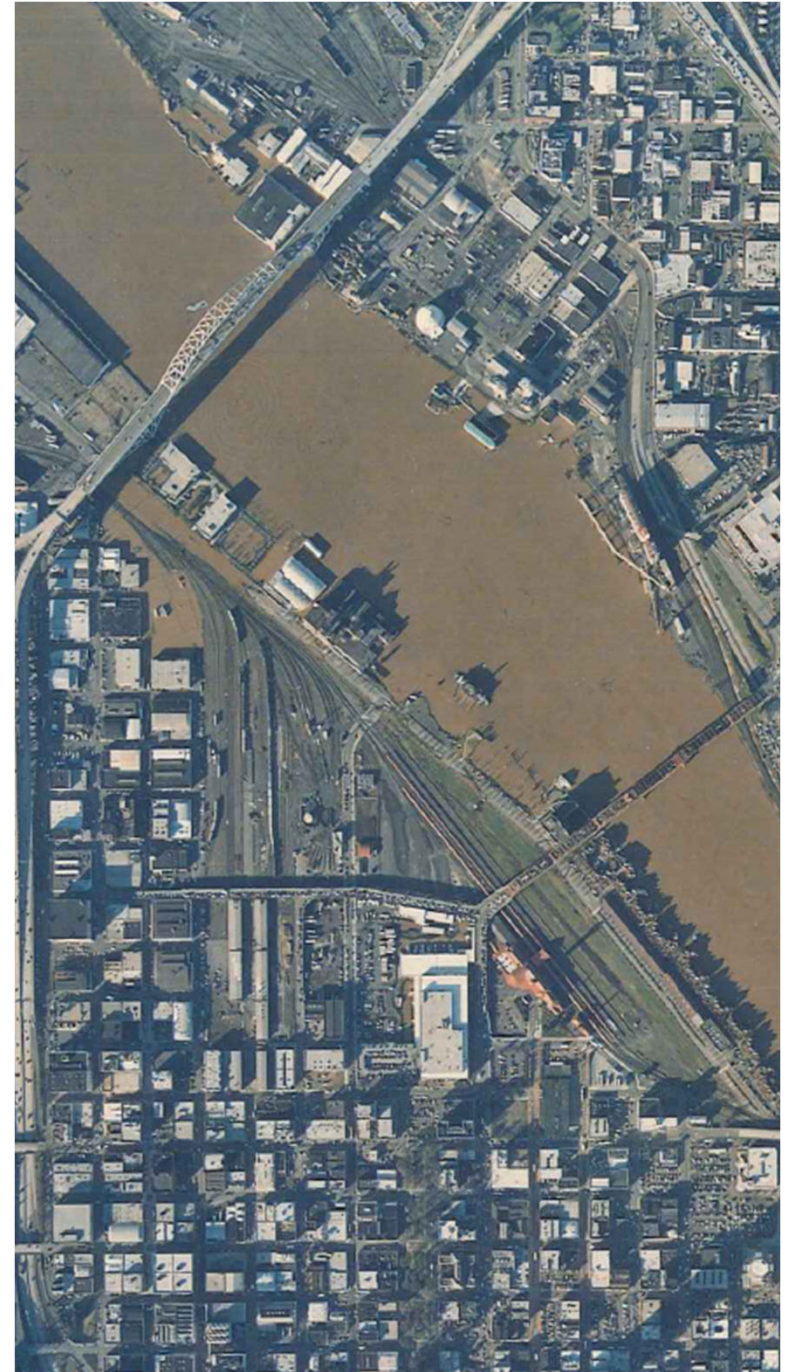


Updates to 24.50 Flood Hazard Areas

FEMA Regulatory Review - align with State Model Code

Changes include:

- Additional definitions.
- Clarifying permit submittal and inspection requirements.
- Requiring a covenant for certain enclosed spaces below the design flood elevation.
- Requiring a development permit for exempt (e.g. accessory) structures in the floodplain.



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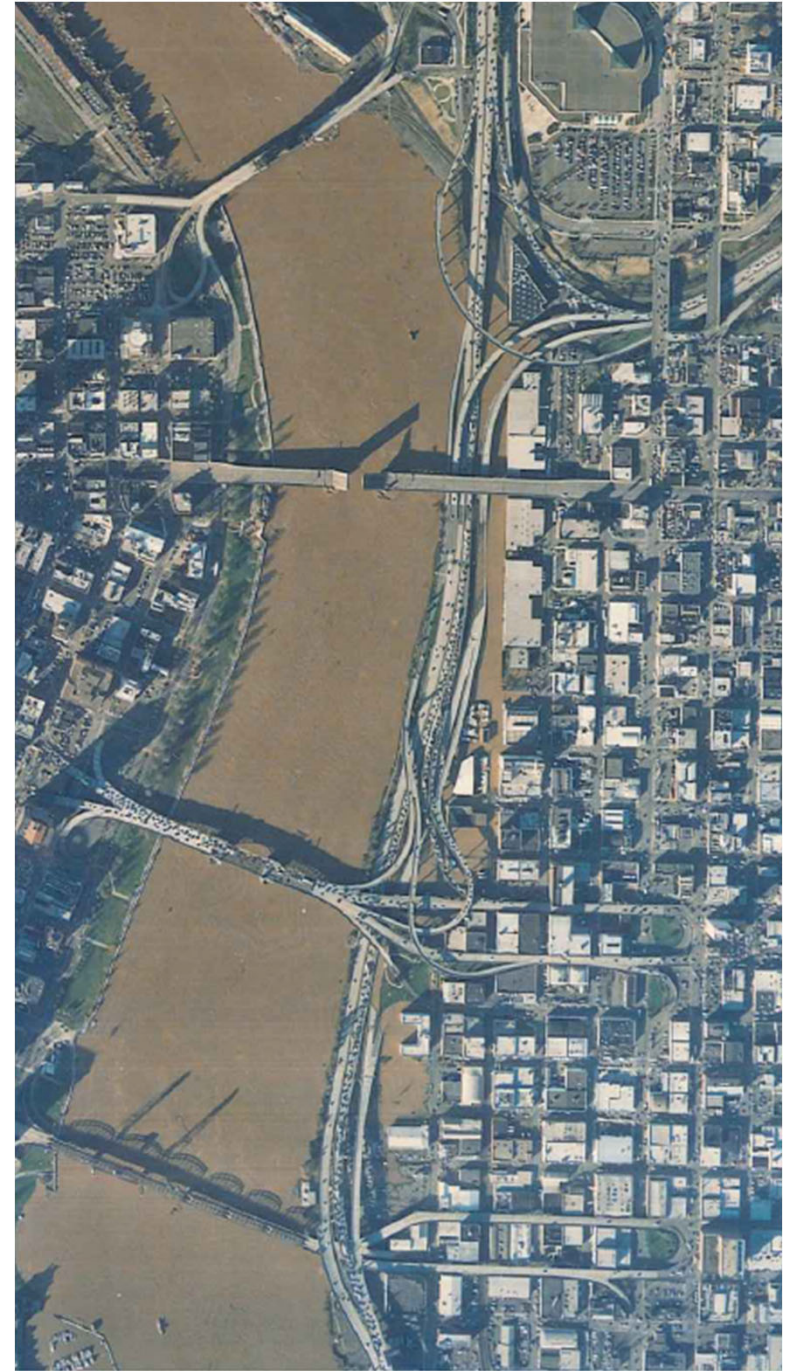


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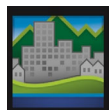
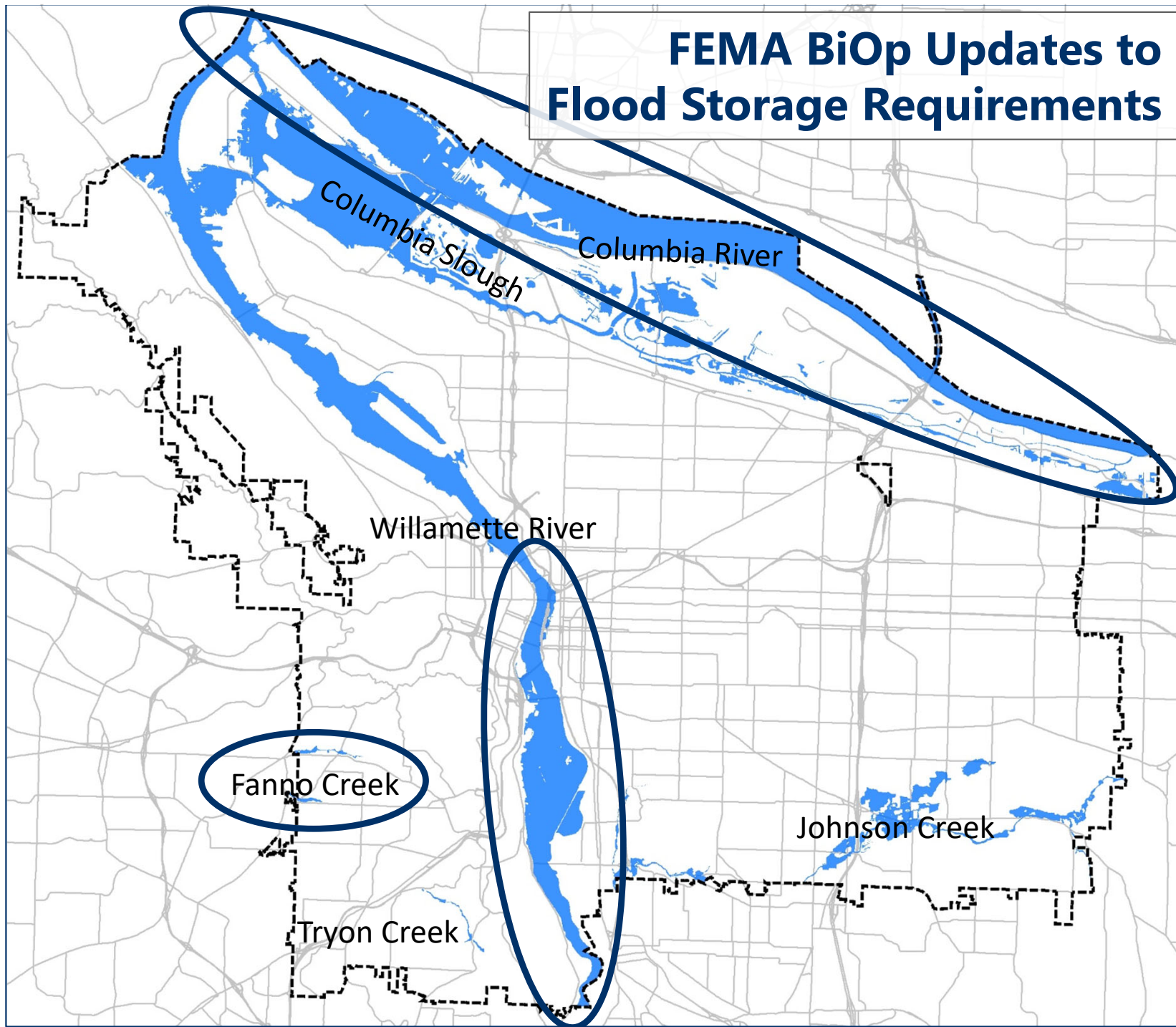
Updates to 24.50 Flood Hazard Areas

FEMA BiOp – Flood Storage

- Adopting compensation for lost flood storage volume from fill and structure placed below the 100-year flood elevation.
- Flood storage compensation means removal of soil, rock, or permanent structure below the flood elevation.
- Applies to
 - Columbia River Flood Zones,
 - Willamette River Central and South Reach Flood Zones, and
 - Fanno Creek Flood Zones.



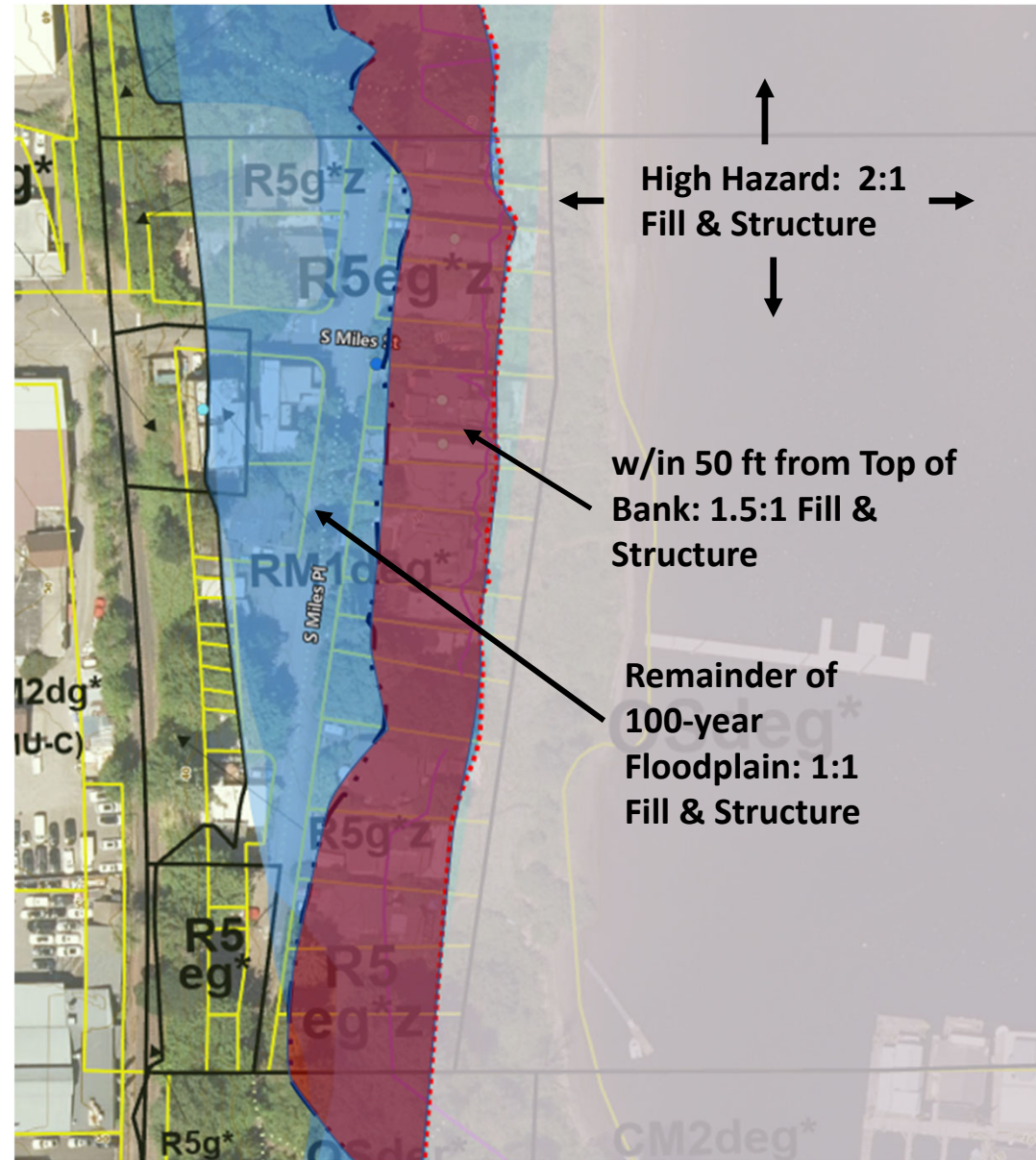
FEMA BiOp Updates to Flood Storage Requirements



Updates to 24.50 Flood Hazard Areas

FEMA BiOp – Flood Storage

- Increased ratios of flood storage compensation in the 100-year floodplain:
 - High Hazard Area, the landward extent of 10-year Floodplain and the Floodway at a ratio of 2 to 1.
 - Within 50 ft of Top of Bank at a ratio of 1.5 to 1.
 - Within the remainder of the 100-year floodplain the ratio will be 1 to 1.



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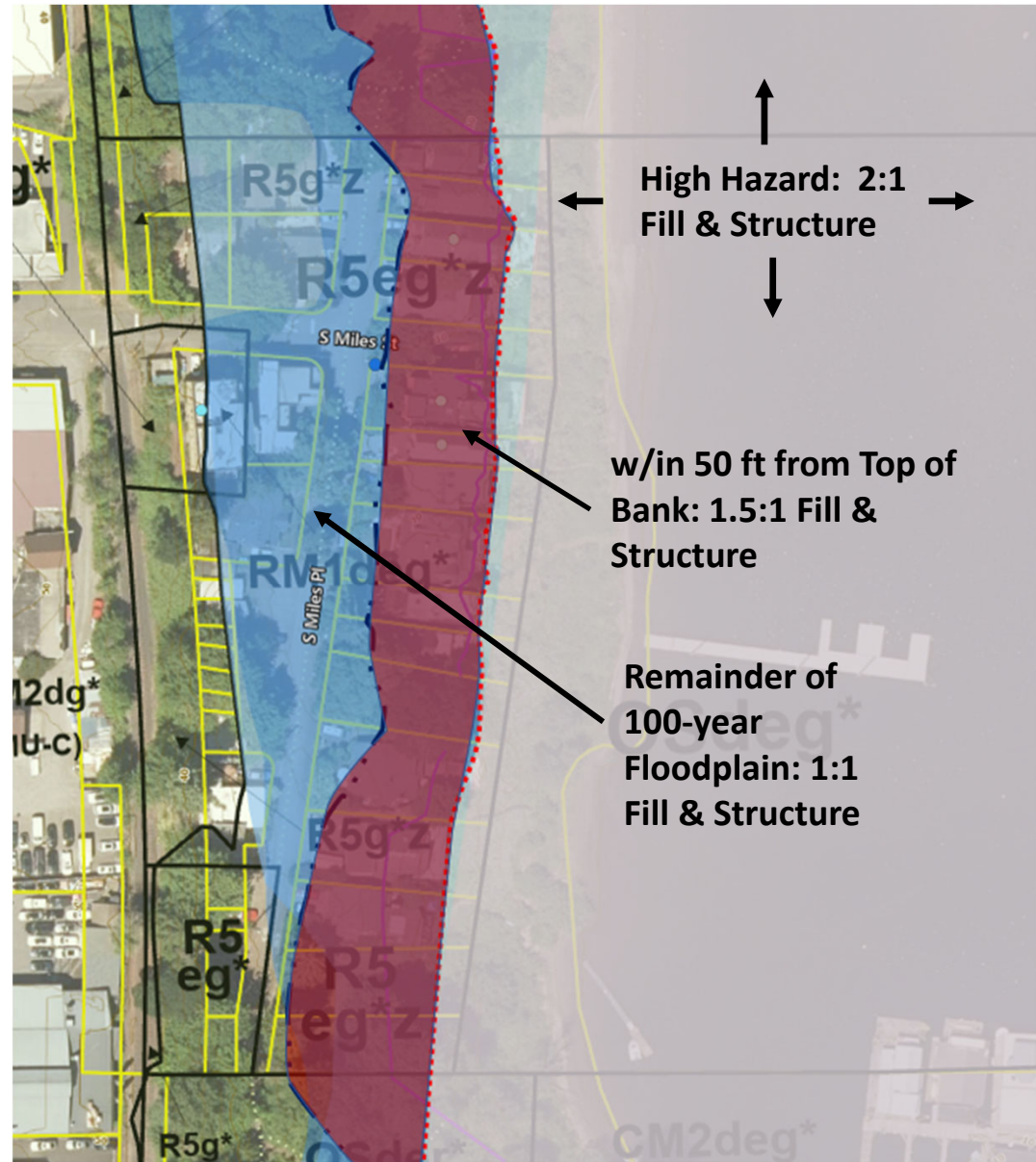


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Updates to 24.50 Flood Hazard Areas

FEMA BiOp – Flood Storage

- Retain current requirements for February 1996 Flood Inundation Area for fill placement at a ratio of 1 to 1.
- Allow use of flood storage mitigation bank credits within the same flood hazard area.
- Does not apply to Industrial Lands: Heavy Industrial (IH), General Industrial 2 (IG2), or General Employment 2 (EG2) zoning.



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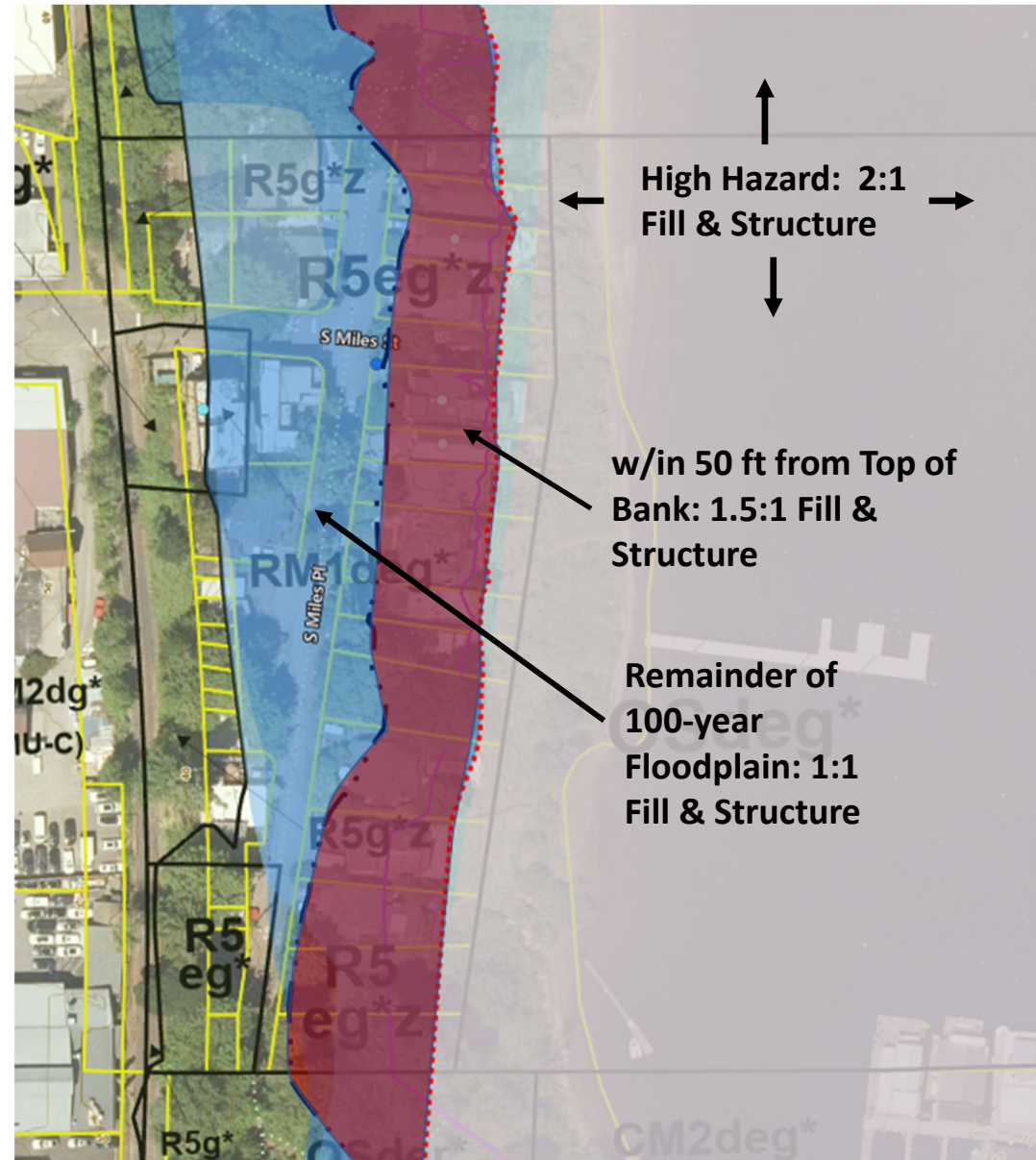


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Updates to 24.50 Flood Hazard Areas

FEMA BiOp – Flood Storage

- Does not apply to South Waterfront.
- Allow certain land use approvals to vest permits in flood storage requirements.



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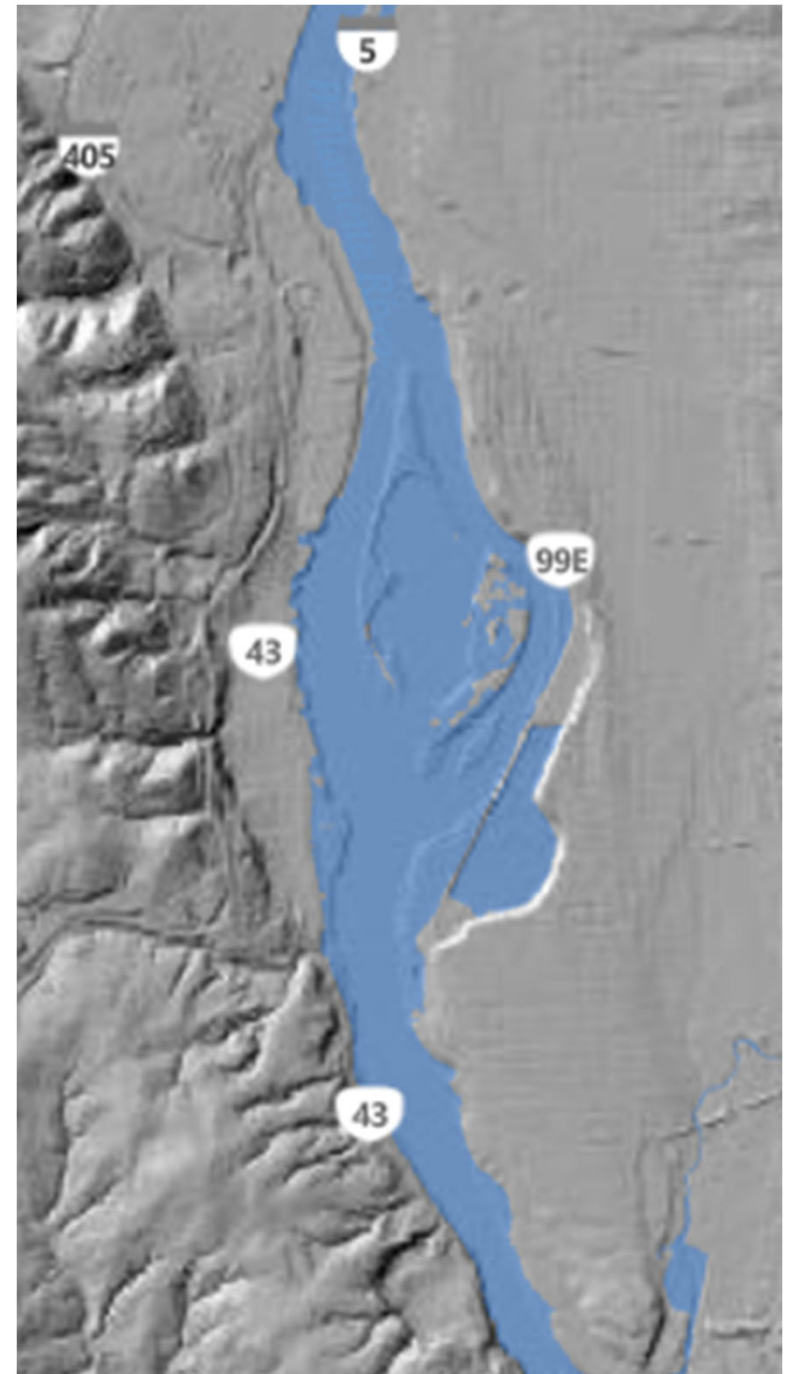


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Updates to 24.50 Flood Hazard Areas

Updated February 1996 Flood
Inundation Area map.

- Updating Metro Title 3 Map to include new modeled Willamette River 1996 Flood Inundation Area for the Central and South Reach.

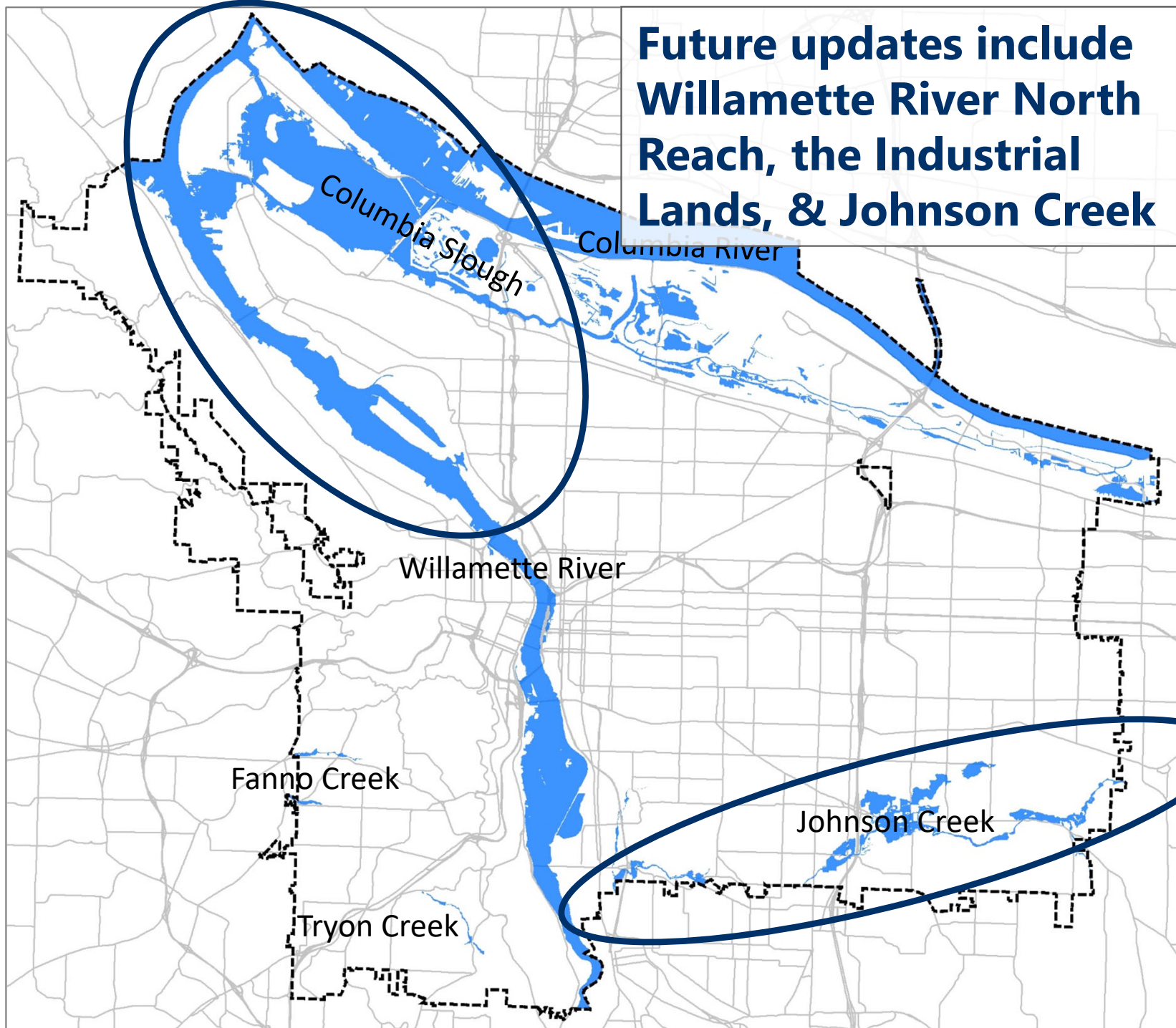


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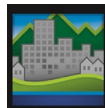


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**Future updates include
Willamette River North
Reach, the Industrial
Lands, & Johnson Creek**



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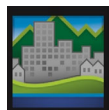


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Next Steps / Schedule



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Schedule

Jul 10-Aug 1	Public comment on proposed Title 24 updates
Early Aug	Release of Floodplain Resilience Plan Recommended Draft
Aug 30	City Council hearing for Title 33 and Title 24
Sept–Oct	Deliberations, amendments, and adoption



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Anticipated Code Implementation

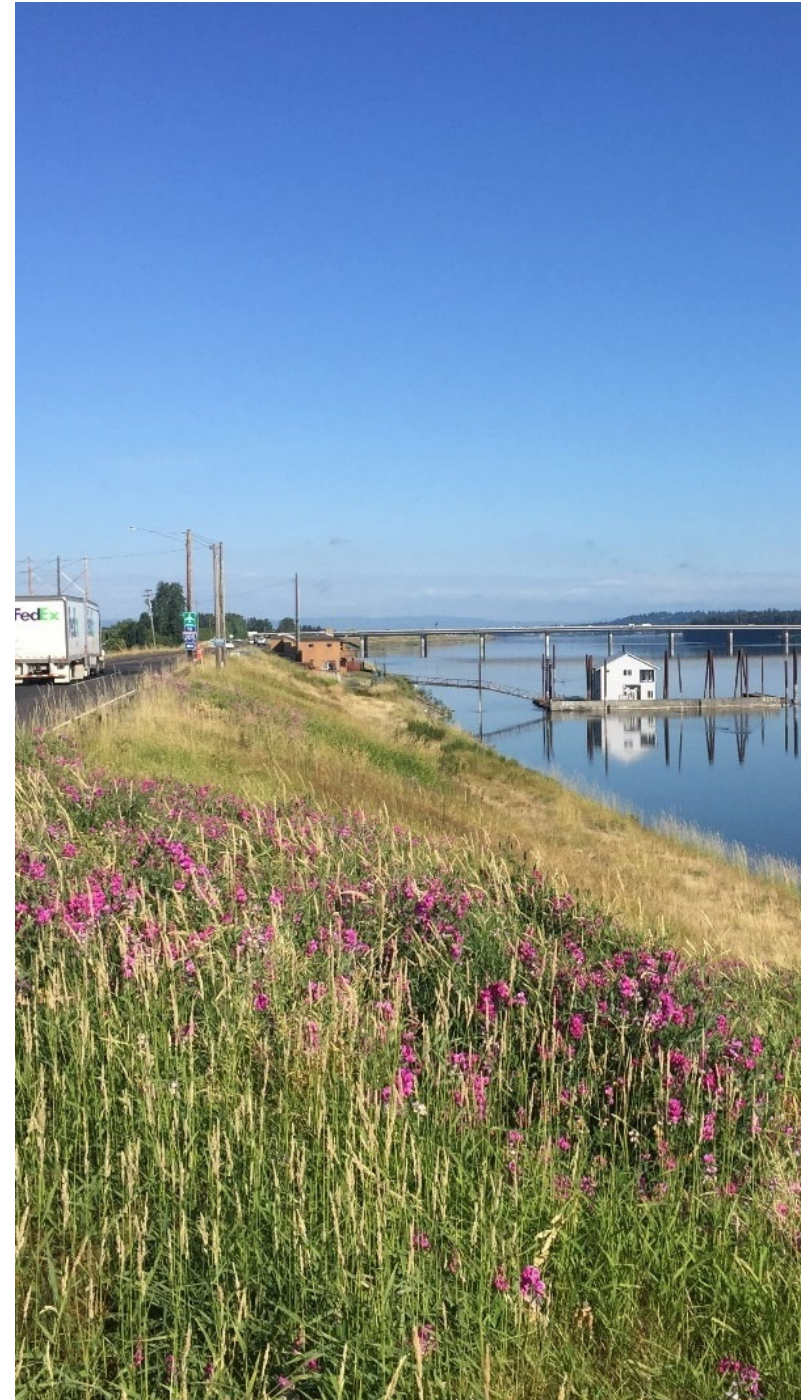
**April
2024**

Title 24 - Regulatory review changes and updates to February 1996 Flood Inundation Area map.

Title 33 – Technical code changes (“clean up”)

**October
2025**

Title 33 and Title 24 FEMA BiOp changes



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Questions?

