Environmental Overlay Project

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Environmental Overlay Project

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Overview of the Project

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Natural Resource Protection

- Technical Overview
- Map Updates
- Code Updates

3

Natural Hazard Risk Reduction

- Technical Overview
- Map Updates
- Code Updates

4

Status and Next Steps

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Project History

2016	• Project authorized by Council • Stakeholder meetings	Review and update riparian buffers and adopt floodplain Code and Map issues discussed to inform alternatives
2017	• Alternatives reviewed • Direction decided	Initial discussions with Metro regarding Title 3 and 13 “substantial compliance”
2018	• Natural resource modeling • FEMA mandate	Stream layer updated, remote sensing and field verifications Floodplain needed to be processed separately
2019	• Floodplain adoption • Landslide risk modeling	New DOGAMI study provided landslide risk data DLCD published landslide land use guide
2020	• Draft Code and Maps • Public Outreach • Adoption	

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Project Overview - Protecting Natural Resources

1. Address confusing, overly complex, and outdated resource info:
    - update with best available data
    - simplify complicated code and mapping processes

2. No significant changes to the overall levels of resource protection in current code

3. Consistent with past stakeholder input for:

    - ESRA-Pleasant Valley (2001)
    - ESRA-Springwater (2007)
    - Habitat Conservation Areas (2009)

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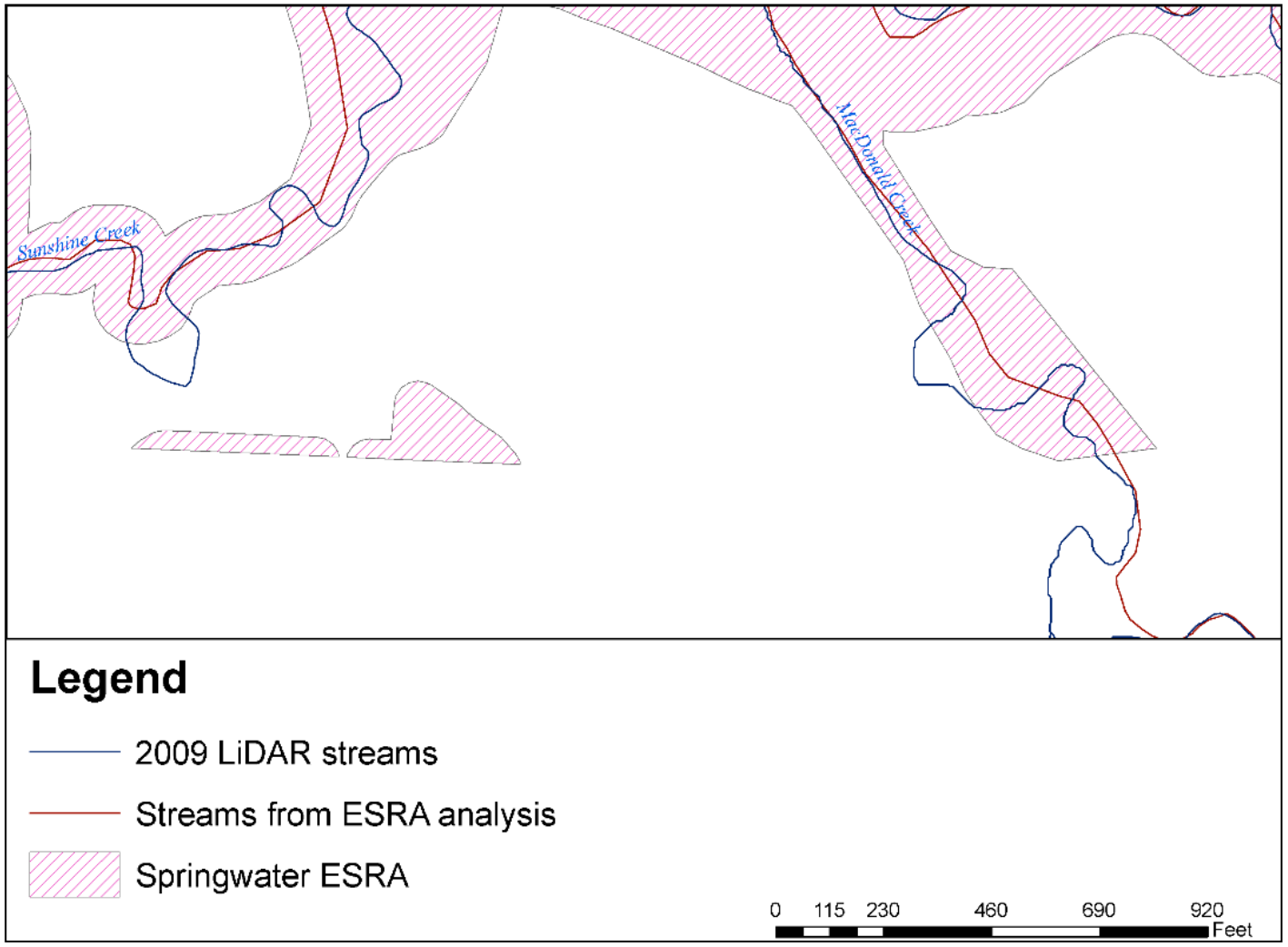
Natural Resource Protection – Data Issue

Wetland, Stream, Riparian Area, Upland Habitat

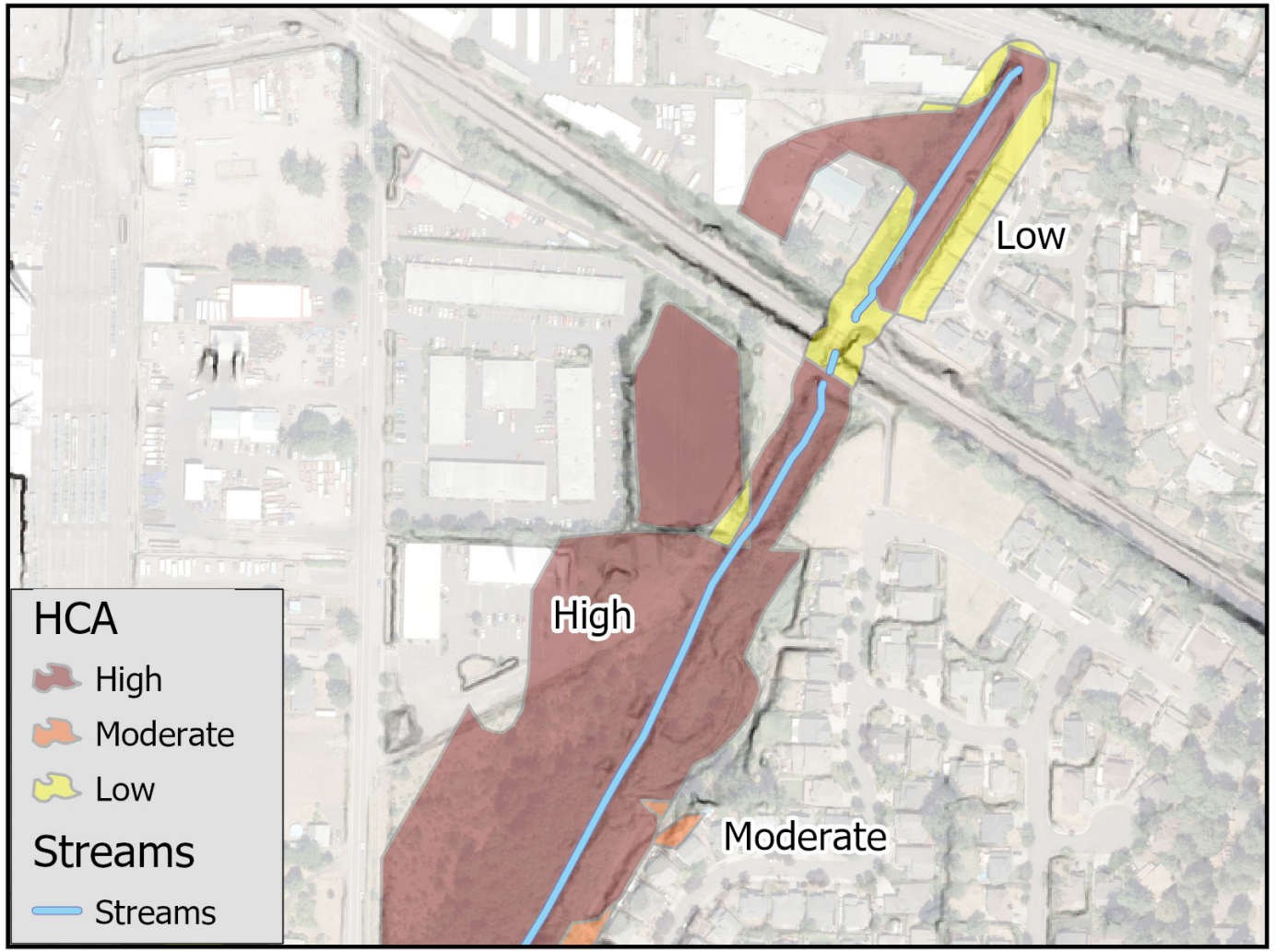


Current buffers don't reflect best available data

- Most improvements are based on LiDAR data

Natural Resource Protection – Modeling Issues

Wetland, Stream, Riparian Area, Upland Habitat

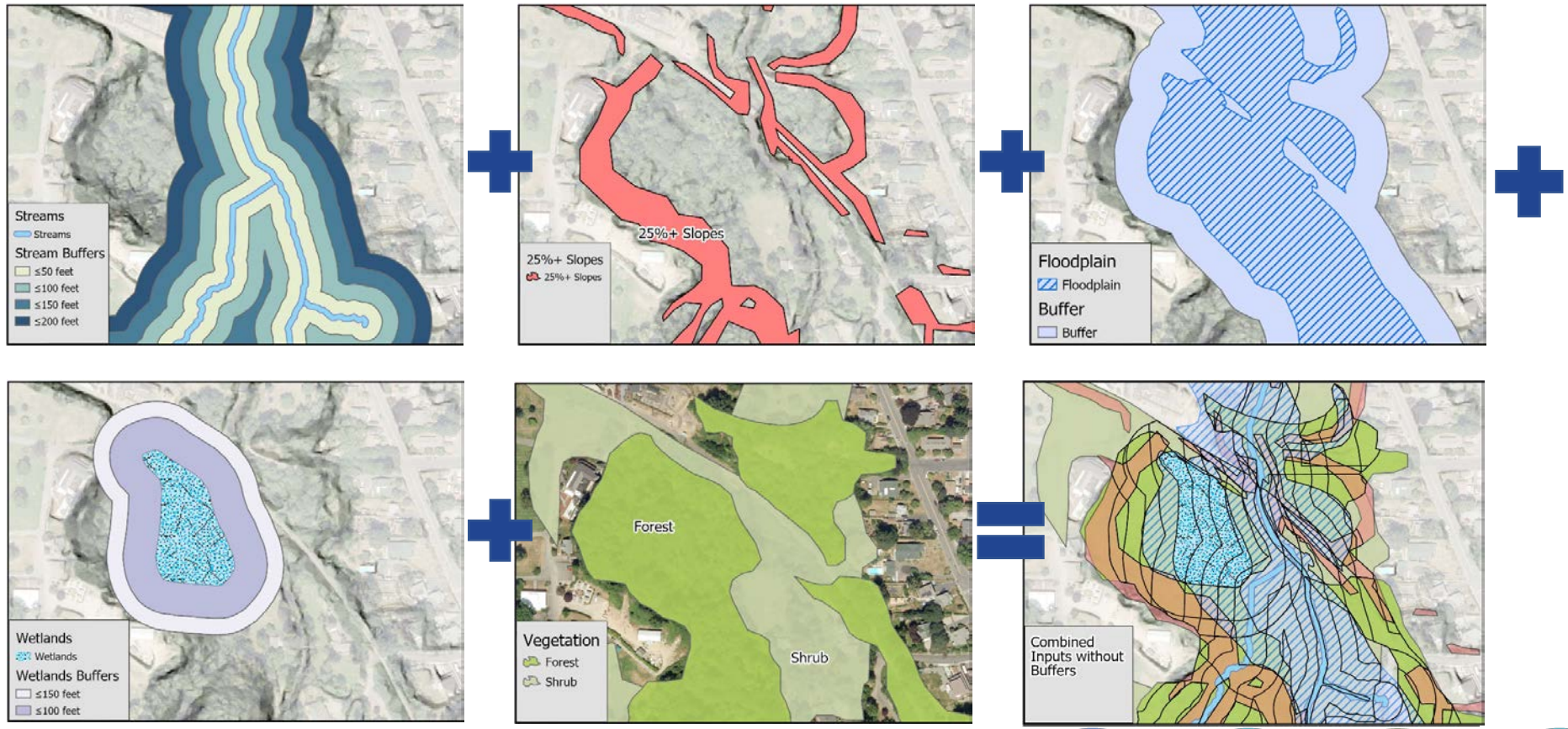


More inputs ≠ Better buffer

Good intentions to include a multitude of inputs lead to some non-sensical model output.

Natural Resource Protection – Complex

Wetland, Stream, Riparian Area, Upland Habitat



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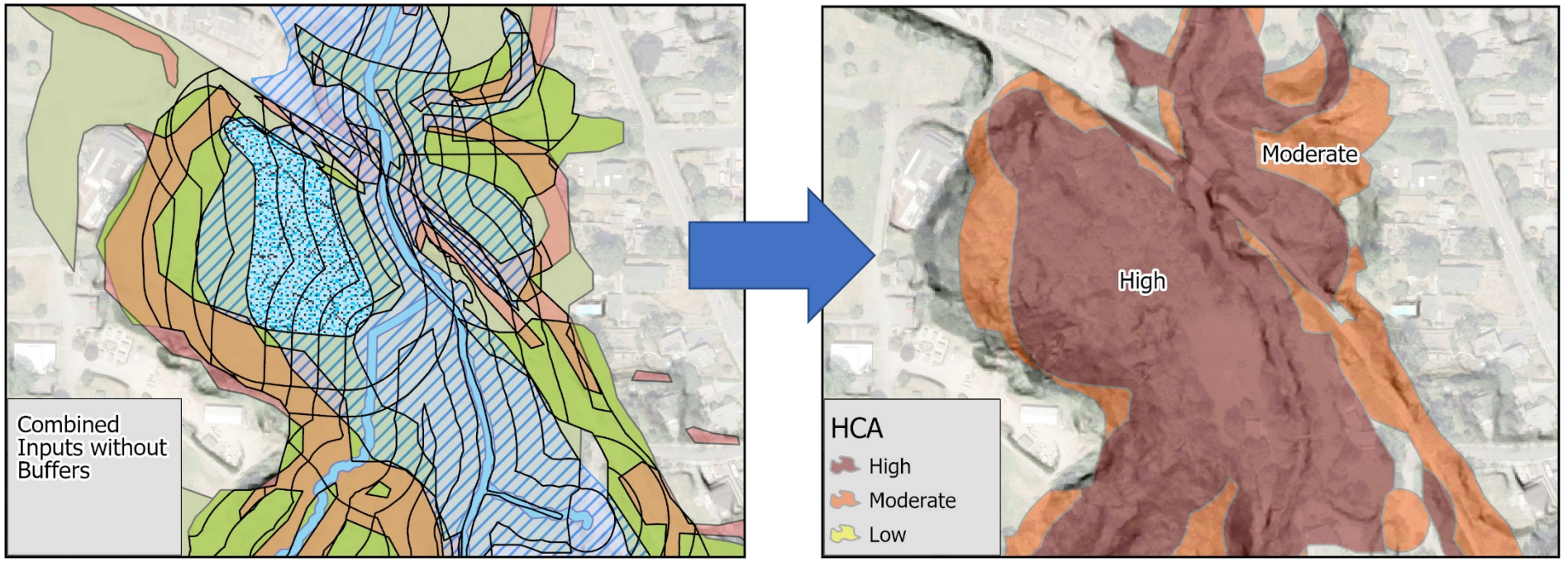
HCA Model – Final Values



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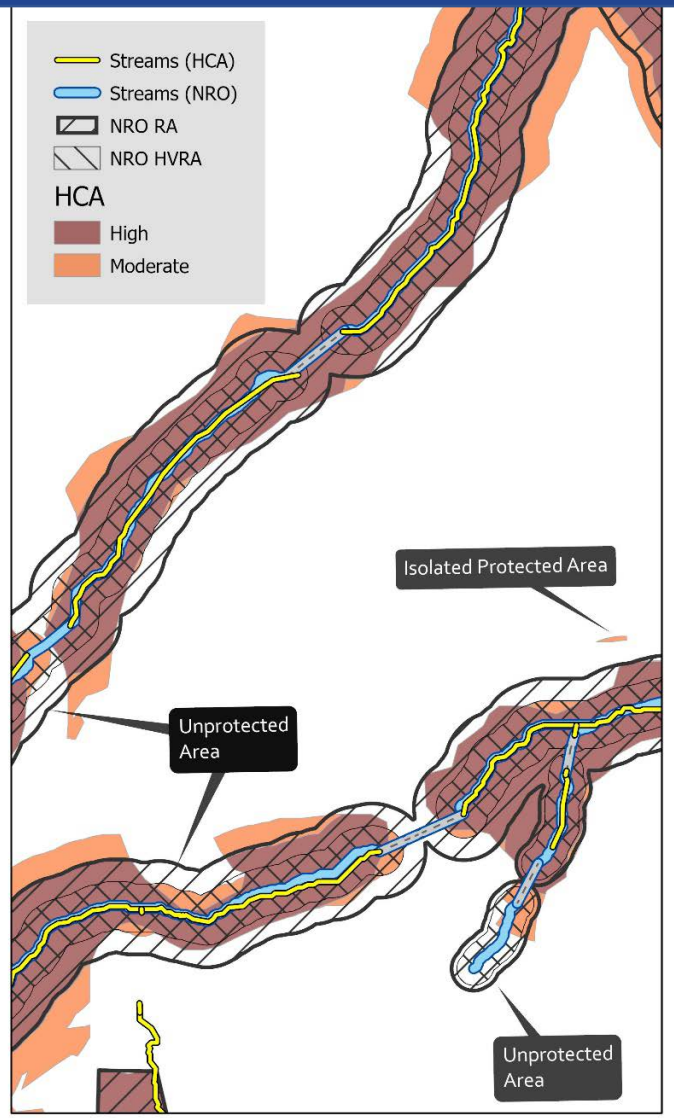
Natural Resource Protection – Simplify

Wetland, Stream, Riparian Area, Upland Habitat



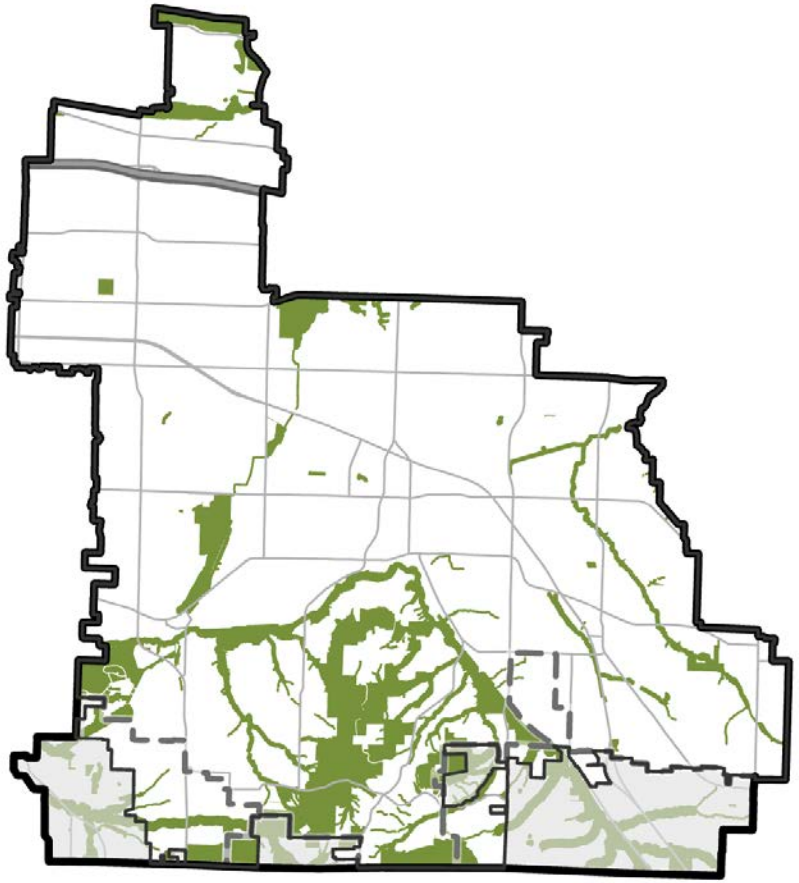
Create standard buffer widths around similar resources

- Uses best available data
- Easier-to-find field indicators
  (i.e., measure from center of the stream)

= No significant change in level of protection (updated buffers average the same as pre-existing buffers)

Natural Resource Protection – Map Update

Wetland, Stream, Riparian Area, Upland Habitat



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Comparison of Existing to Proposed

	Existing Acres	Existing w/ Corrections	Proposed Acres
ESRA-PV	252	~275	251
ESRA-SW	395	~420	447
HCA	2050	~2103	2039
Total	**2697**	**~2798**	**2737**

Natural Resource Protection – Notable Changes for Resources

- Two levels of protection:
  - Resource Areas (RAs) and High Value Resource Areas (HVRAs)
- Potential Resource Areas (PRAs) to find unmapped resources
- Protections for mature trees
- Encouraging road placement to separate development from RAs
- Programmatic permits for public agency land management
- Mitigation Options
  - More habitat types
  - Integration of Firewise Community Standards
  - Cash-in-Lieu

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Natural Resource Overlay Components – RA & HVRA

- **NRO** – A parcel containing RA or HVRA
  - **RA (Resource Area) The land inside the buffer boundaries**
    - HVRA (High Value Resource Area) Areas within the RA with a higher degree of protection. Generally the resource itself, and 35-50’ corridor along a stream.
    - HVRA is coincident with the Temperature TMDL buffers.

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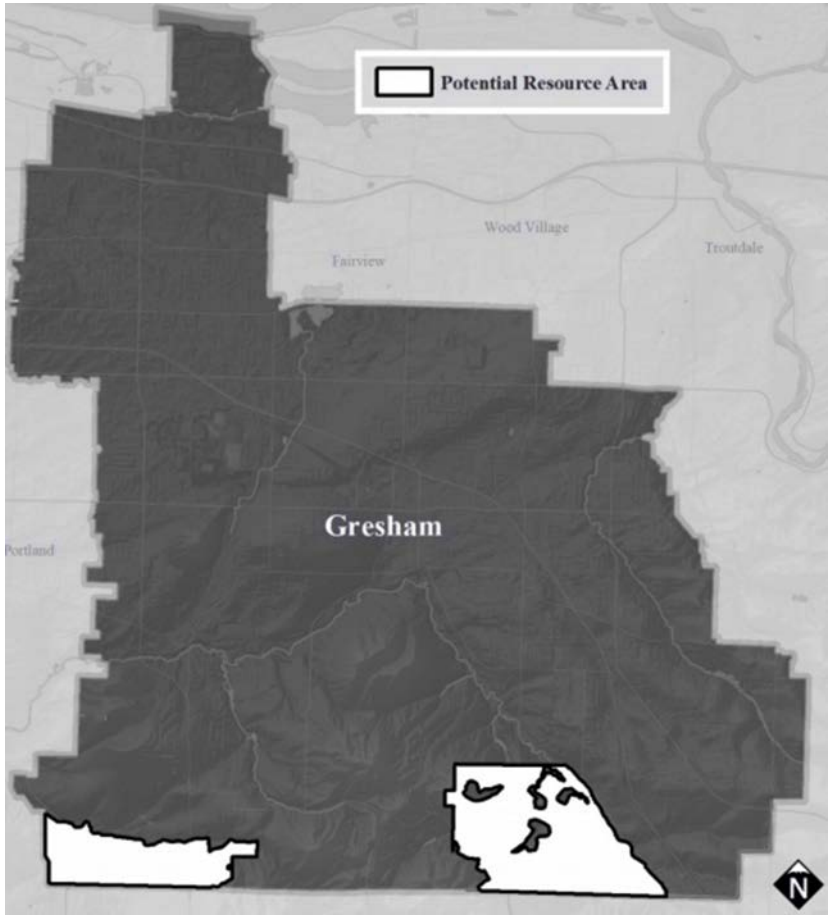
Natural Resource Overlay Components - PRA



Potential Resource Areas Include:

- "Weepy Buttes" (adjacent graphic)
- LWI identified "potential wetlands"
- Areas recorded by City as having wetland indicators

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RA and HVRA Buffer Widths

Streams by Stream Order	Pleasant Valley	Springwater	HCA Areas	HVRA
1	50	50	50	35
2	200	200	100	50
3	200	200	100	50
4	200	200	100	50
5	200	200	125	50
Wetlands	50	50	50	35
Uplands	Previously protected non-water resource-based areas (tree groves) and public Open Space ownership lands			
Potential Resource Areas	Those portions of the buttes with hydric or partially hydric soils above the contour representing toe of slope; plus the 2004 local wetland inventory "potential wetlands"; plus mapped known wetland sites			

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Natural Resource Protection – Mitigation

Wetland, Stream, Riparian Area, Upland Habitat

Cash-in-Lieu

- Often insufficient room to mitigate on-site
- Persistence of mitigation challenging to assess

Singe- Family Residential

- Will not mitigate on-site
- Cash-in-lieu required

Land Divisions & All Other Development

- All practicable mitigation must be on-site
- Cash-in-lieu an option when there is not room to mitigate on-site

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Natural Resource Protection – Notable Changes for Development

- Permanent and Temporary Disturbance Areas
    - Fewer impacts allowed in the HVRA
- Creating a simple review process for new single-family homes on vacant lots
- Providing clear and objective standards within the resource areas
- Density Transfer options expanded

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Natural Resource Protection – Allowed Disturbance

Wetland, Stream, Riparian Area, Upland Habitat

Single- Family Residential

Maximum disturbance area = 6,000 SF

Temporary
(up to 2,000 sq ft)

- staging, and stockpiling
- Vegetation removal (inc. small trees)
- Area must be restored

Permanent
(up to 4,000 sq ft)

- grading and building
- vegetation and tree removal
- Area must be mitigated

Non- Residential

Maximum disturbance area =

- 25% of the Resource Area on site
- No disturbance in the High-Value Resource Area (HVRA)
- Area must be mitigated

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Natural Resource Protection – Clear & Objective

Introduction of clear and objective standards:

- 2017 SB 1051 extended the requirement for clear and objective standards to all housing development not just that in “buildable areas”
- Code provisions that rely solely on discretion to resolve conflicts between new housing development and reducing risks posed by natural hazards or protecting natural resources, are no longer compliant with state law
- The City must provide a review track that does not require professional reports or alternatives analysis
- Developers can choose a discretionary path

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Natural Resource Protection – Incent Not to Disturb

Wetland, Stream, Riparian Area, Upland Habitat

Density Transfer – Land Divisions

- Incentive to not disturb
- For residential zones 50% of minimum density of underlying zone
- Transfer parcel and receiving parcel both part of Type II application
- Caps on receiving area density (up to 125% of maximum density)
- Slight reductions in setbacks and minimum lot sizes allowed.
- Can only be transferred within a planning area (eg Pleasant Valley to Pleasant Valley)

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Project Overview – Natural Hazards Risk Reduction

Incorporate Best Available Data to:

1. Protect Public Health and Safety
2. Protect Property
3. Meet State and Federal Hazard Mitigation Standards

Natural Hazard Risk Reduction - Hillsides

Hillside Code

- Regulates development on:
  - ✓ Steep slopes
  - ✓ Landslide prone soils
- Hillside Overlay boundary informed by
  - ✓Slope data
  - ✓Landslide hazard data
  - ✓Risk prioritization criteria

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Natural Hazard Risk Reduction - Hillsides

Why Update?

1. **Old Data**
   2002 data from OR Department of Geology and Mineral Industries (DOGAMI) determined to be inaccurate
   - Coarse slope data
   - Inaccurate landslide hazard data
   - Lacking clear and objective standards for needed housing

2. **New data**
   - 2014 higher resolution slope data (LiDAR)
   - 2018 DOGAMI updated landslide risk data for Multnomah County (IMS-57)
   - 2019 State Landslide Land Use Guide (DLCD and DOGAMI)

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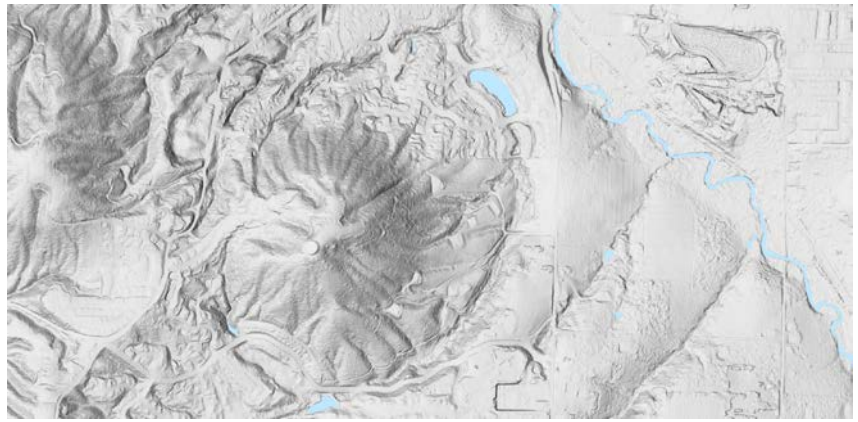
Natural Hazard Risk Reduction - Hillsides

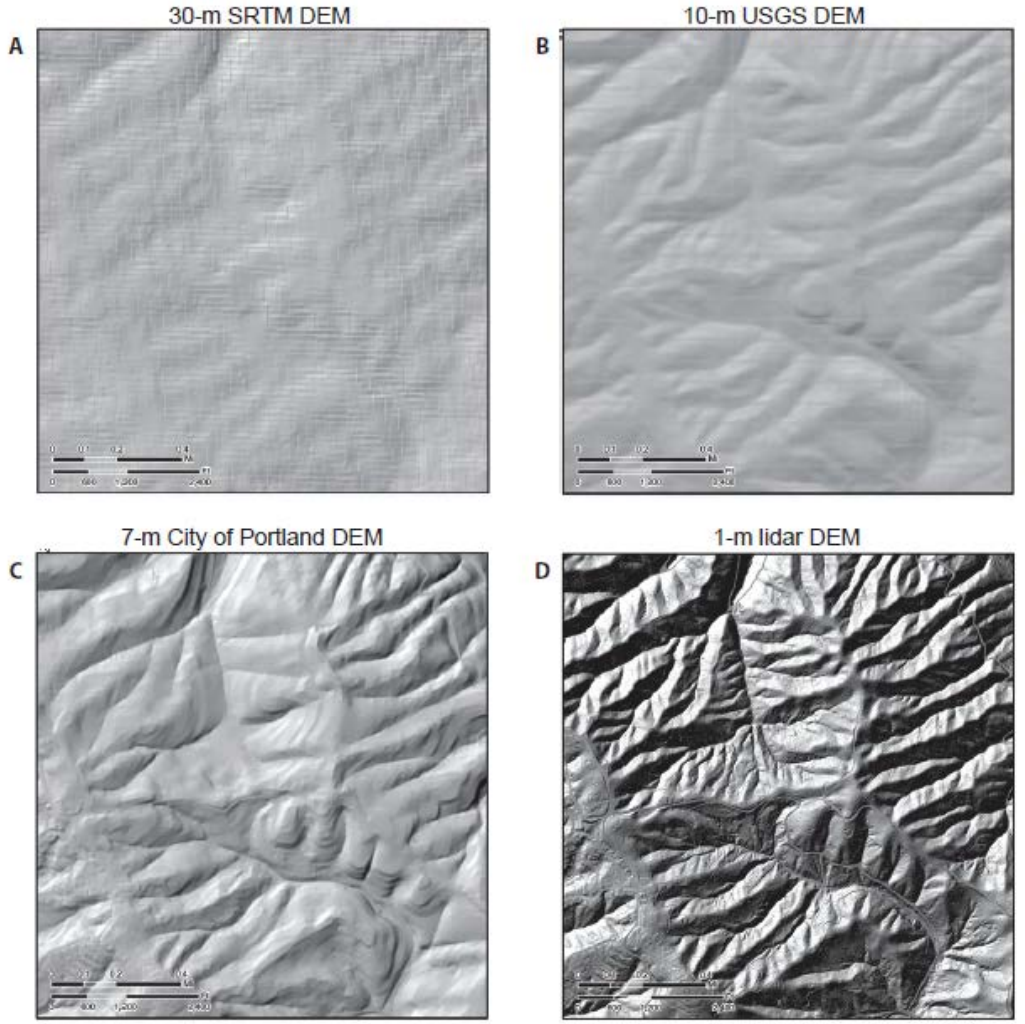
New high-quality slope data



Hogan Butte and Johnson Creek

2003 data

2014 data



IMS-57 Report

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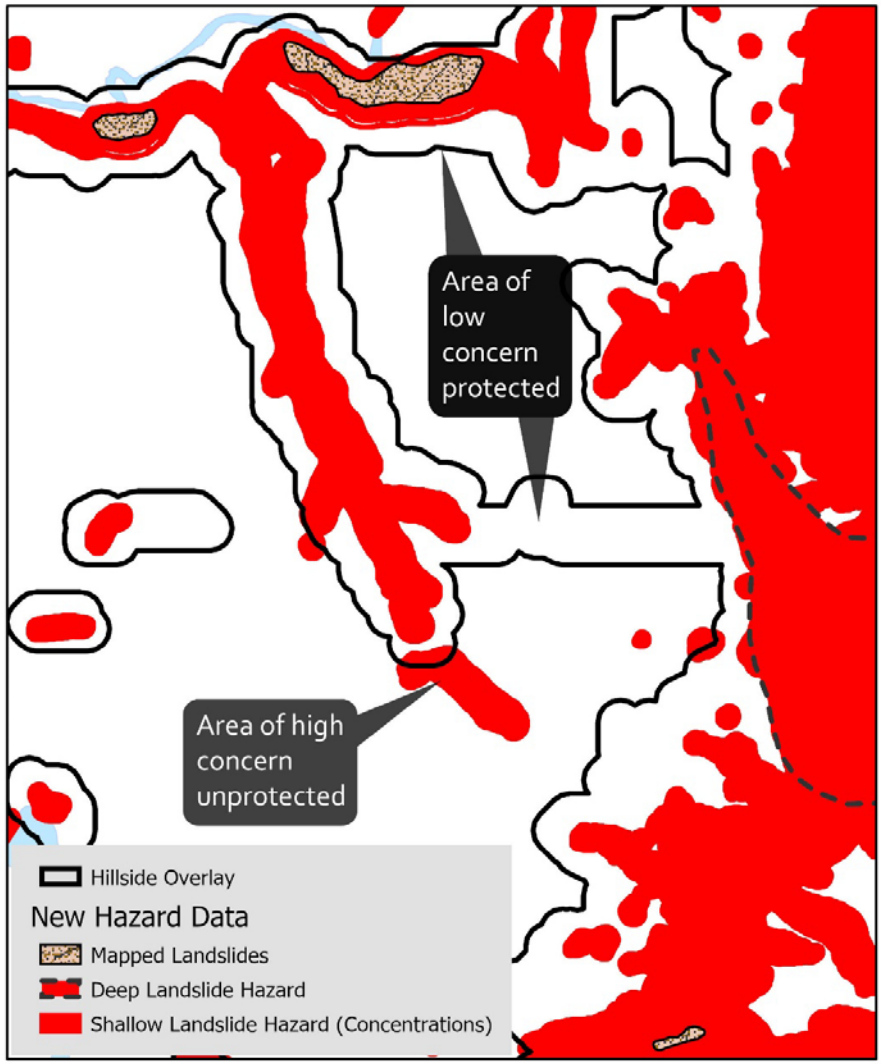
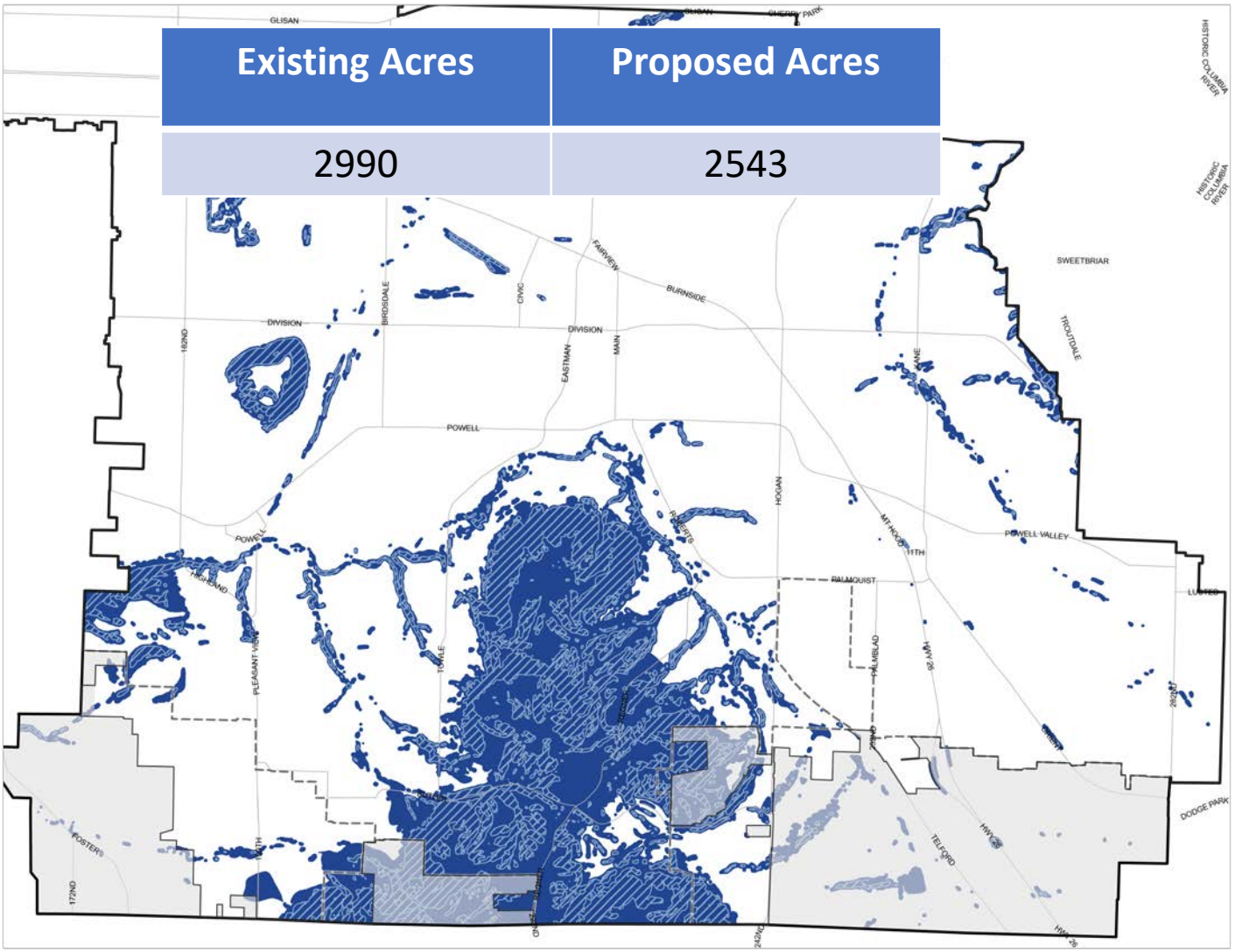
Natural Hazard Risk Reduction - Hillsides

new Hazard data



Hillside & Geologic Risk Overlay – Map Update

Existing Acres	Proposed Acres
2990	2543



Notable Map Changes

1. New High Slope Subarea (HSS) – 35%+ percent slopes
2. More strategic and targeted to hazard areas, prioritizing
    1. Deep Landslides
    2. Landslide Deposits
    3. Shallow Landslides Hazards concentrations near creeks and on slopes above 15% with 30ft buffer

Hillside & Geologic Risk Overlay – Code Update

Highlights:

- Instituting a simple review process for building single family homes safely
- Requiring geotechnical issues be taken into consideration during grading and building
- Establishing clear and objective standards within overlay areas
- Clearly defining when geotechnical review is required for proposed development
- Ensuring protections for forested hillsides
- Introducing fire-safety considerations with hazard tree removal
- Providing greater predictability for developers wishing to divide land or build

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Recap - Project Steps

Natural Resource	Floodplain	Hillside + Geologic Risk
Issues Identification	Code Audit NFIP + ESA	Code Audit
Alternatives Analysis	Statewide Tech Meetings	DLCD/DOGAMI Consultations
Creation Of New Stream Layer Identification Of Wetland Data Issues	State And Federal Review Draft Code	Receipt Of New Landslide Hazard And Risk Data Community Risk Tolerance Assessment
Field Work	Outreach	Model Update
Model Update	Hearings	Data Analysis
Data Analysis	Adopted 2019	**Draft Code (Multiple Drafts)**
Draft Code (Multiple Drafts)		**Outreach**
Outreach		**Hearings**
Hearings		

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Project Status

Wednesday, September 9:

- Draft codes are ready for public review
- GIS maps are ready for public review

Thursday, September 17:

- Public Work Sessions at 2pm or 7pm
- GIS maps are ready for public review

Thursday, October 1:

- This round of public comments due

Materials available online at GreshamOregon.gov/Overlays

Contact Overlays@GreshamOregon.gov for more information.

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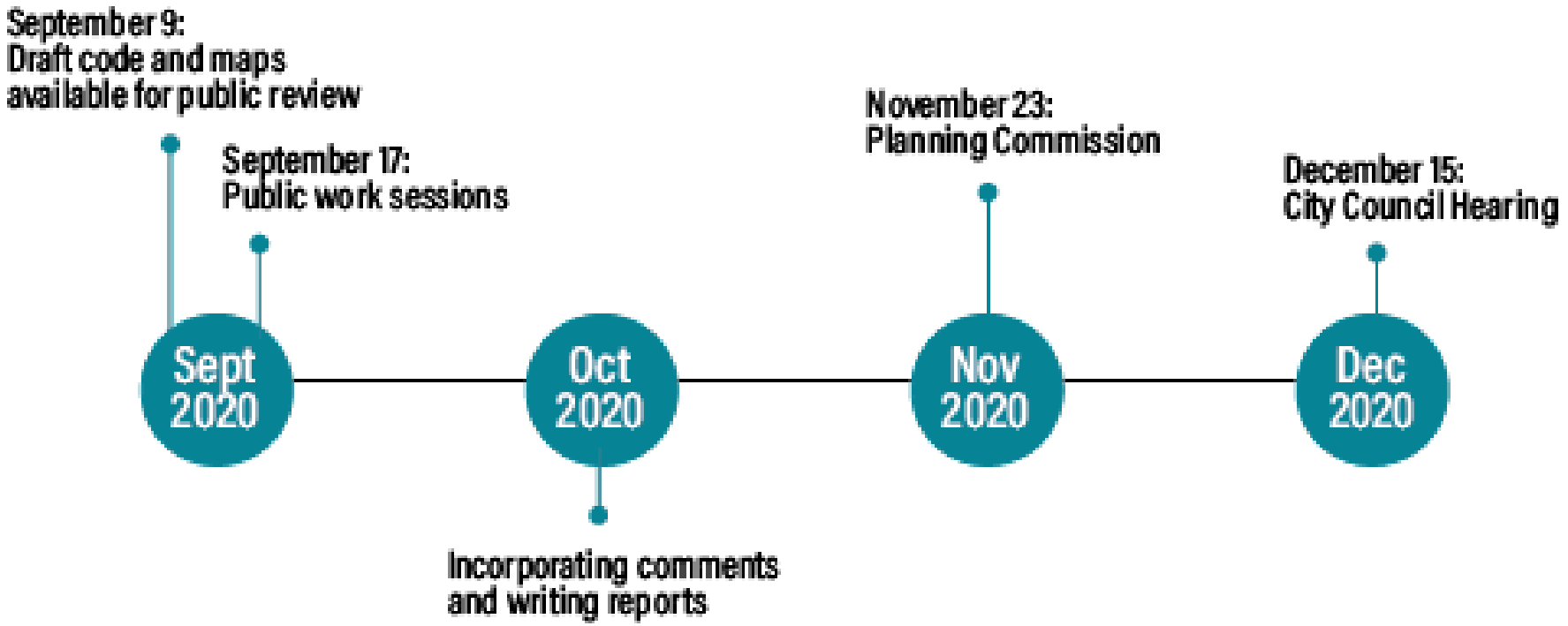
Next Steps



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DISCUSSION

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Project Direction

Protect Natural Resources

No significant changes to the degree of resource protection in current code.

Be consistent with prior stakeholder input:

- Pleasant Valley Community Plan, 1999-2005
- Springwater Community Plan, 2004-2007
- Metro Title 3 and 13 processes, 2002-2008

Reduce Risk from Natural Hazards

Use best available data to meet state and federal hazard mitigation standards.

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Natural Resource Protection and Hazards

	Recently Updated (2019)	What's Currently Being Udpated (2020)	
	Floodplain	**Natural Resources (protecting environment)**	**Natural Hazards (protecting development)**
Last updated	1990s (Johnson, Fairview, Kelly /Burlingame) 2009 (in Columbia Slough)	2001 (ESRA-PV), 2005 (ESRA-SW), 2008 (HCA)	2003
Regulates development	Floodplains	Streams, wetlands, uplands, natural areas	Steep slopes and landslide-prone soils
Drivers	• National Flood Insurance Program requirements (FEMA) • Statewide Planning Goal 7 (Flooding) • Public health and safety • Preserve property	• Metro Title 3 and 13 (Statewide Planning Goals 5, 6, and 7) • Clean Water Act • Preserve wildlife habitat and water quality	• Statewide Planning Goal 7 (Landslides) • Public health and safety • Preserve property

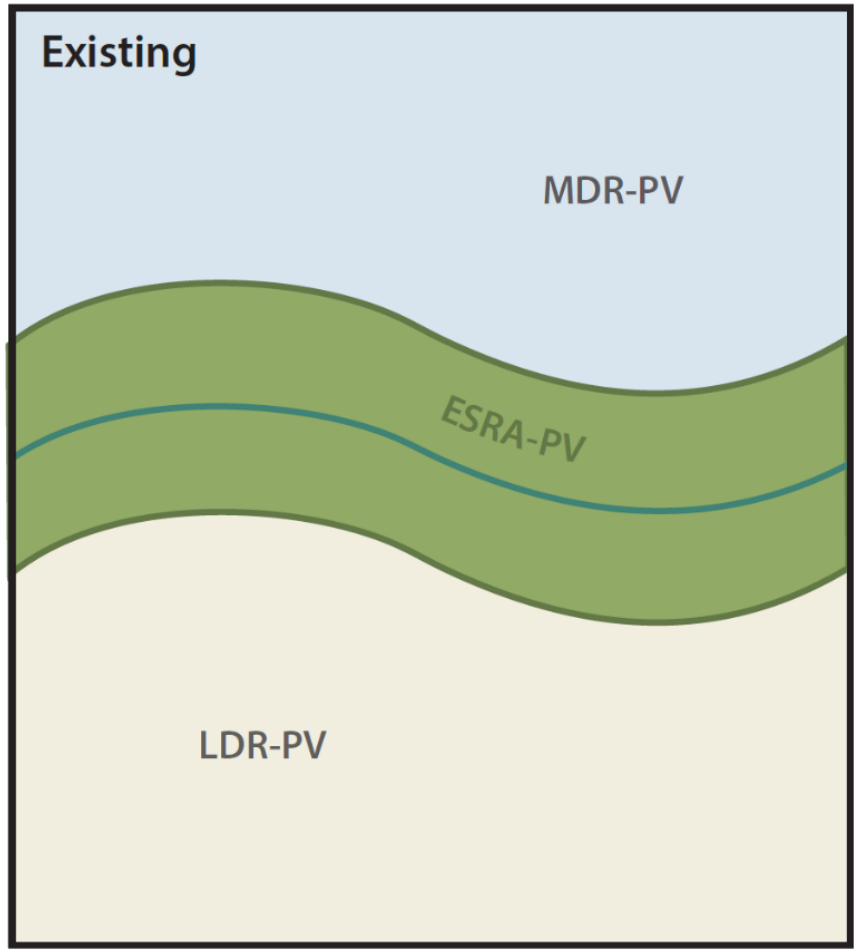
Natural Resource Protection – Buffer Issue

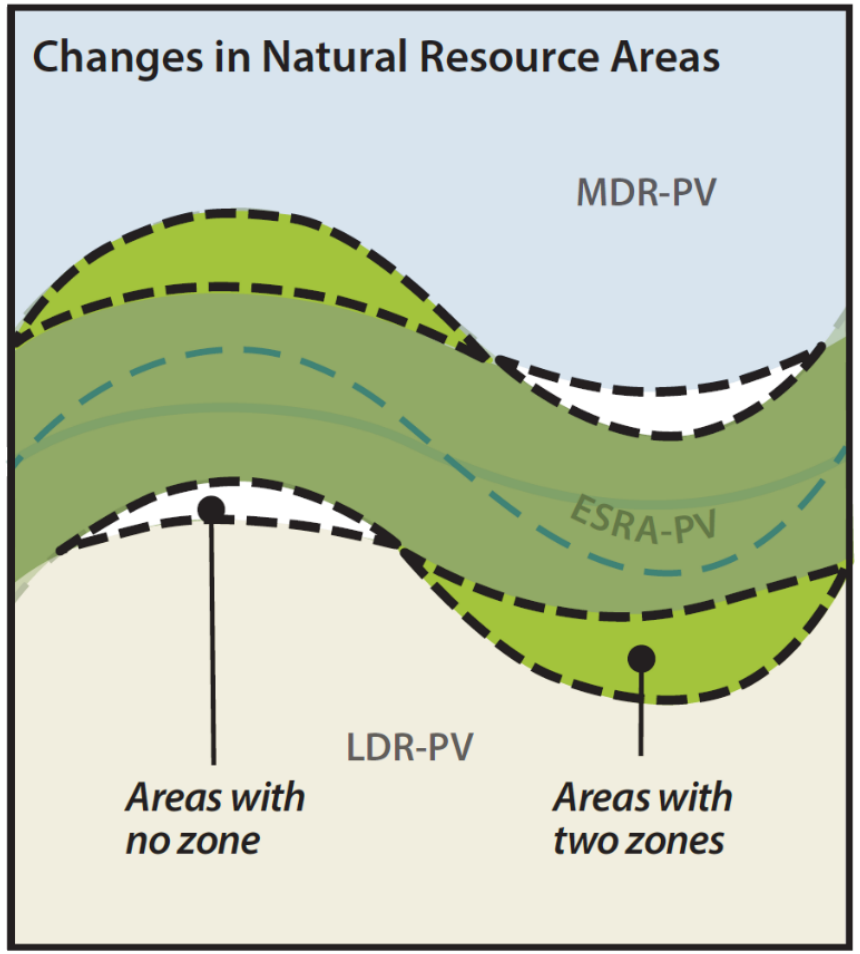
Wetland, Stream, Riparian Area, Upland Habitat

Natural Resource Buffers as Zones

Issues:

- Resources shift over time
- Zones are static over time
- Areas may end up with no zoning
- Areas may end up with two different zones





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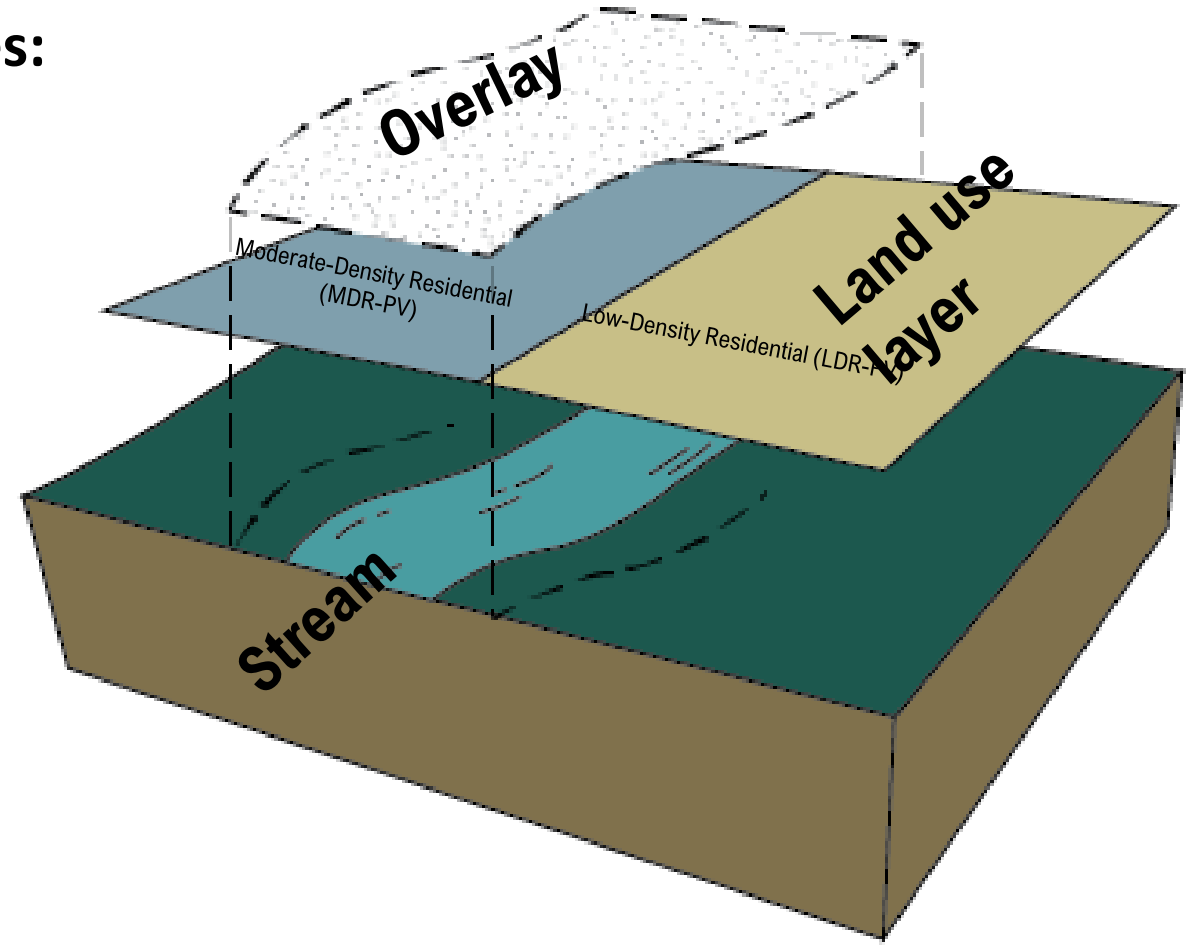
Natural Resource Protection – Buffer Update

Wetland, Stream, Riparian Area, Upland Habitat

Natural Resource Buffers as Overlays vs. Zones:

Benefits:

- Eliminates potential problem of gaps or overlapping of natural protection areas on a defined land use
- Creates consistency between the City and the Pleasant Valley and Springwater Plan Areas
- Allows for shifting of a boundary as natural resources evolve over time without changing underlying land uses



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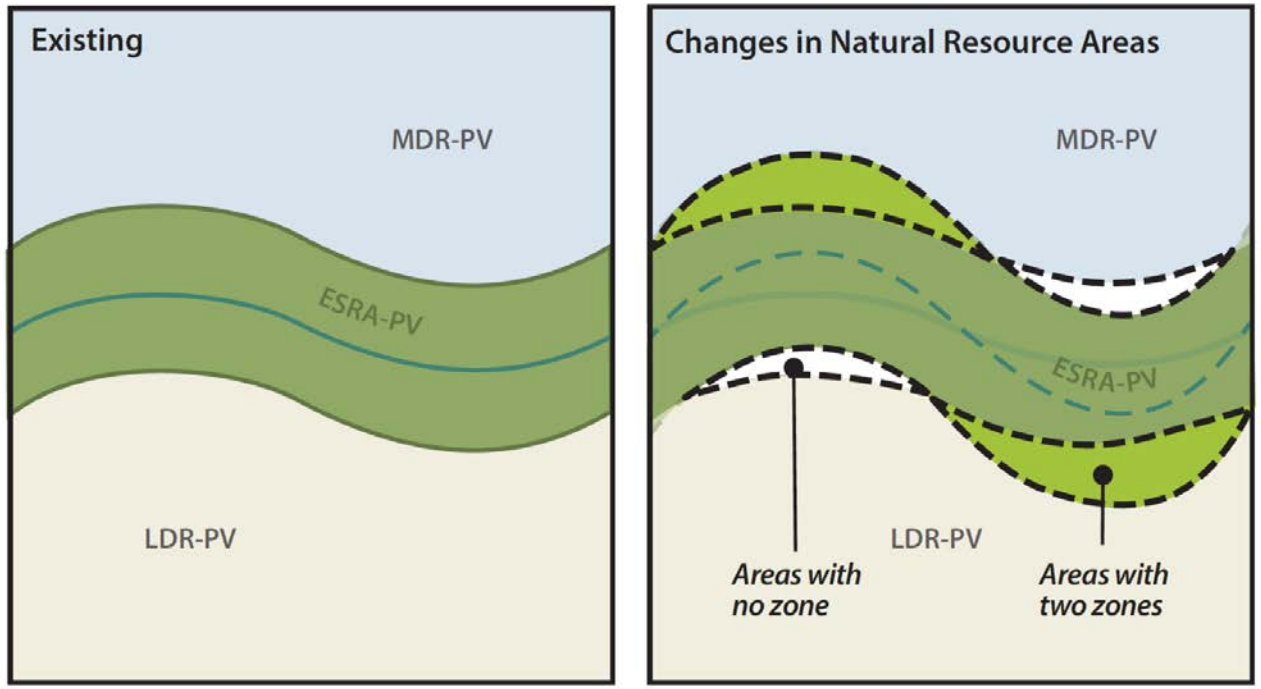
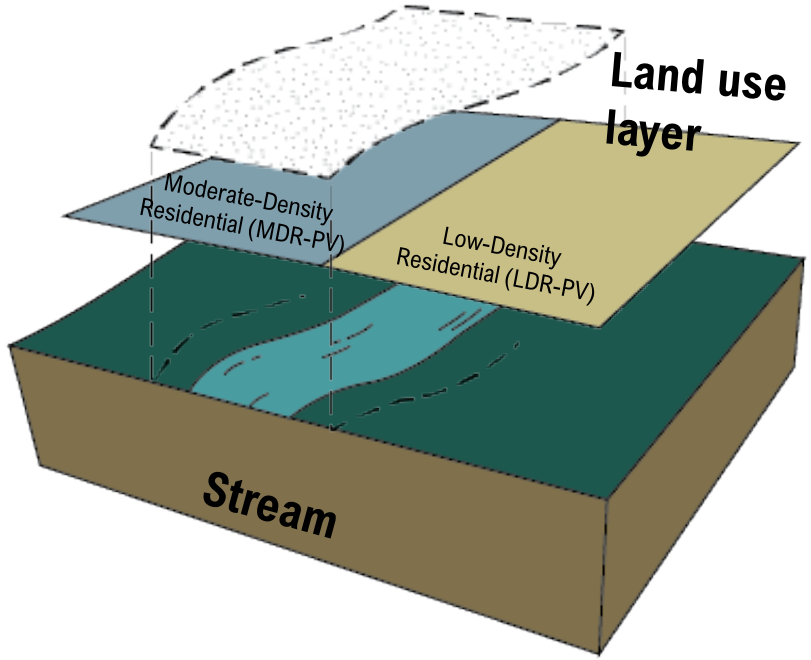
Natural Resource Buffers Unified

stream, wetland, upland habitat buffers





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