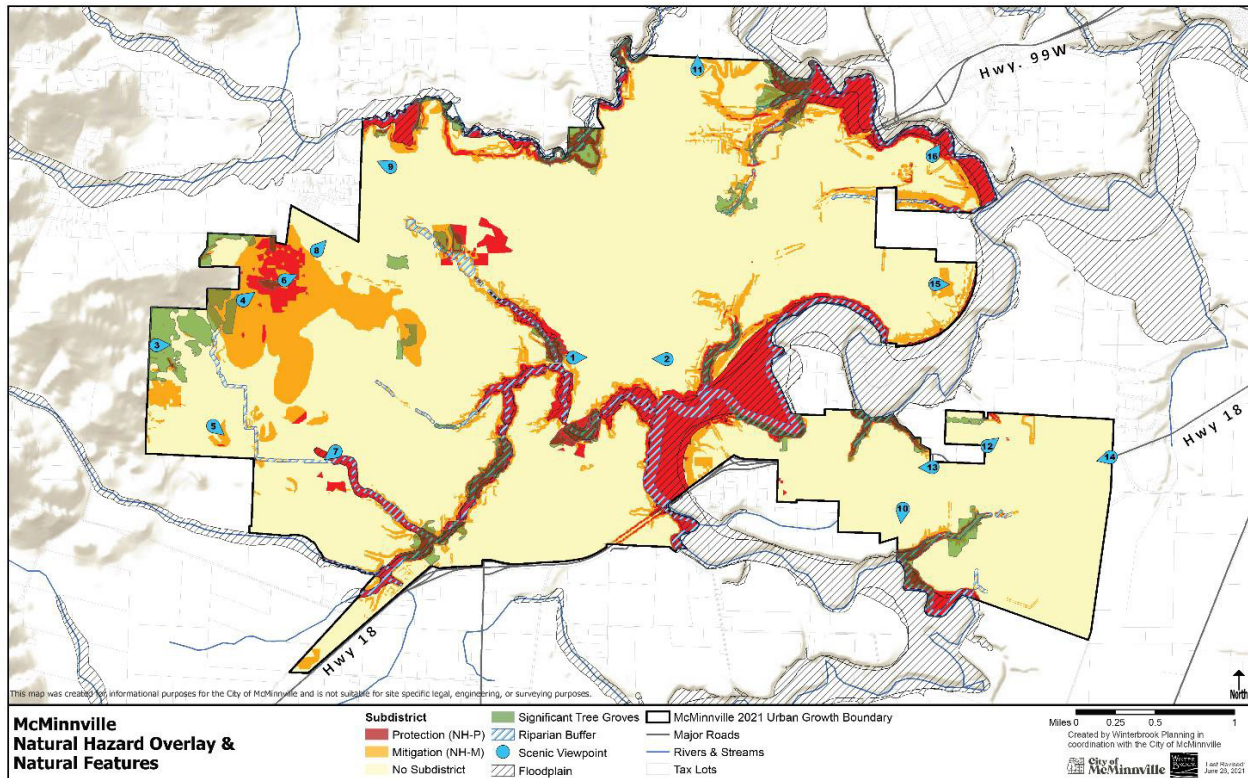


PROPOSED AMENDMENTS TO THE MCMINNVILLE COMPREHENSIVE PLAN, VOLUME II

This entire chapter is new.

**CHAPTER XI
NATURAL FEATURES**

GOAL XI 1: PROTECT LIFE AND PROPERTY FROM INVENTORIED NATURAL HAZARDS, INCLUDING FLOODING, GEOLOGICAL AND WILDFIRE HAZARDS.



NATURAL HAZARDS

Multi Hazards

Policies:

- 197.00 *The City of McMinnville shall adopt and maintain a Natural Hazards Inventory as part of the McMinnville Comprehensive Plan (Volume I). The inventory shall include maps and text that identify the location, type and risk level for three types of natural hazards: geological hazards (including steep slopes, earthquakes and landslides), flood hazards (land within the 100-year floodplain), and wildfire hazards within the UGB).*
- 197.10 *The City of McMinnville shall apply public works construction standards, seismic building codes, and fire and life safety codes wherever natural hazards are identified in the Natural Hazards Inventory – including limited, moderate, and high combined risk subareas described the Natural Hazards Inventory.*
- 197.20 *The City of McMinnville shall establish a Natural Features (NF) overlay comprehensive plan designation to manage the cumulative effects of inventoried natural hazards in “moderate and high combined risk subareas” as described in Tables VII.1 and VII.2 of the Natural Hazards Inventory.*
- 197.30 *The NH overlay plan designation shall be implemented by two subdistricts based on cumulative ranking criteria found in Tables VII.1 and VII.2 of the Natural Hazards Inventory:*
1. ***The Natural Hazards Mitigation Subdistrict (NH-M).*** *The NH-M is intended to mitigate hazard impacts based on objective development standards for each applicable hazard type and the recommendations of required site-specific hazard studies.*
 2. ***The Natural Hazards Protection Subdistrict (NH-P).*** *The NH-P Subdistrict is intended to prohibit most types of development and may allow for residential density transfer. Where development is allowed it shall be subject to objective development standards for each applicable hazard type and the recommendations of required site-specific hazard studies.*
- 197.40 *The NH-M and NH-P Subdistricts shall include objective development standards for each type of natural hazard identified in the Natural Hazards Inventory, including landslides, earthquakes (liquefaction and shaking), floodplains, and wildfire hazards. Floodplains shall be protected by the underlying F-P Flood Hazard zone and the NH-P Subdistrict.*
1. *Maps showing the location and severity of each type of hazard in each subdistrict are available for public review and impacts on individual properties can be determined by city staff via the City’s GIS database.*

2. *In cases where hazard-specific development standards overlap, the more restrictive standard shall apply.*
3.
197.60 *Based on objective development standards and required hazard studies, the City of McMinnville may impose conditions of land use approval to protect life and property and mitigate natural hazard impacts in natural hazard subareas. Such conditions may include but are not limited to, conservation easements or dedication of hazard areas to the City.*
- 197.60 *Land division applications shall not create a lot that lacks sufficient buildable area to meet the minimum lot size and development standards applicable in the underlying zoning district.*
- 197.70 *New residential, commercial, and industrial construction shall be limited within the NH-P Subdistrict with the following exceptions:*
 1. *Public facilities and environmental restoration projects may be permitted under objective development standards.*
 2. *Residential density transfer from land within the NH-P Subdistrict to contiguous property under the same ownership that is outside both the floodplain and any applicable Natural Resource or Natural Hazard Subdistrict may be allowed.*
 3. *The maximum density allowed in the transfer area shall be the maximum density allowed in the next higher residential zoning district. For example, density transfer from the NH-P land with an underlying R1 zone to land outside the Natural Hazards Overlay (NH-P and NH-M) shall be capped at the density allowed in the R2 zone.*
 4. *In situations where density transfer is not feasible, a maximum of one dwelling unit per 2.5 acres may be allowed on land zoned for residential use, consistent with the recommendations of a geotechnical engineering study and any conditions required by the review authority.*
- 197.80 *In cases where the application of NH-P provisions would prohibit all reasonable economic use of an existing tract of land under common ownership, the City may grant an exception to allow a use permitted in the underlying zoning district that is not permitted in the NH-P Subdistrict. In making this decision, the applicant and City must:*
 1. *Consider first whether the exception provisions of Policy 197.70 would relieve the hardship;*
 2. *Consider potential uses that are allowed in the NH-P Subdistrict that could provide reasonable economic value;*
 3. *Consider alternative development layouts and land use intensity that minimize impacts from natural hazards on people and property and other values associated with natural hazard areas;*
 4. *Limit the intensity of the allowed land use to the minimum necessary to retain reasonable economic value of the subject tract; and*

5. *Meet all applicable development standards that apply to natural hazards in the NH-P zone.*

- 197.90 *The City of McMinnville shall coordinate with Yamhill County to apply McMinnville Comprehensive Plan Chapter XI Natural Features Policies to unincorporated land within the Urban Growth Boundary, including the application of the NH overlay zone (the NH-M and NH-S subdistricts) and related development standards. In cases of conflict with state law governing farm and forest land, state law will prevail over the NH overlay zone standards. For example, agricultural and forest uses allowed in Agricultural and Forest zones shall continue to be allowed; and the more restrictive fire mitigation standards in the County's Forest zones will prevail over the less restrictive City fire mitigation standards.*
- 197.100 *The City of McMinnville shall coordinate with the Oregon Department of Geology and Mineral Industries (DOGAMI), the Department of Land Conservation and Development (DLCD), the McMinnville Fire Department, and Yamhill County in updates of the Yamhill County Multi-Jurisdictional Natural Hazards Mitigation Plan, the McMinnville Addendum to County NHMP, and the Yamhill County Community Wildfire Protection Plan. Updates to these plans will be considered in future updates to Chapter XI of the McMinnville Comprehensive Plan.*
- 197.110 *The City of McMinnville shall coordinate with the Greater Yamhill Watershed Council to facilitate watershed restoration and improvement projects in natural hazard areas such as floodplains and slide hazard areas. Shared natural hazard mitigation goals include: (1) removal of invasive vegetation species (that increase fuel for wildfires and clog waterways) and replacement with native species that reduce erosion, are more fire resistant and are less likely to clog waterways; and (2) restoration and enhancement of wetlands that provide flood control.*
- 197.120 *Tree removal and major pruning within the Floodplain Zone, the NH-M and NH- P Subdistricts shall be limited to minimize erosion and landslide potential and to maintain water quality*

Geological Hazards

Geological hazards appear on the McMinnville Natural Hazards Inventory and include:

1. *Slopes of 25% or more;*
2. *Moderate, high and severe risk earthquake (liquefaction and shaking) risk areas; and*
3. *Moderate and high-risk landslide hazard areas.*

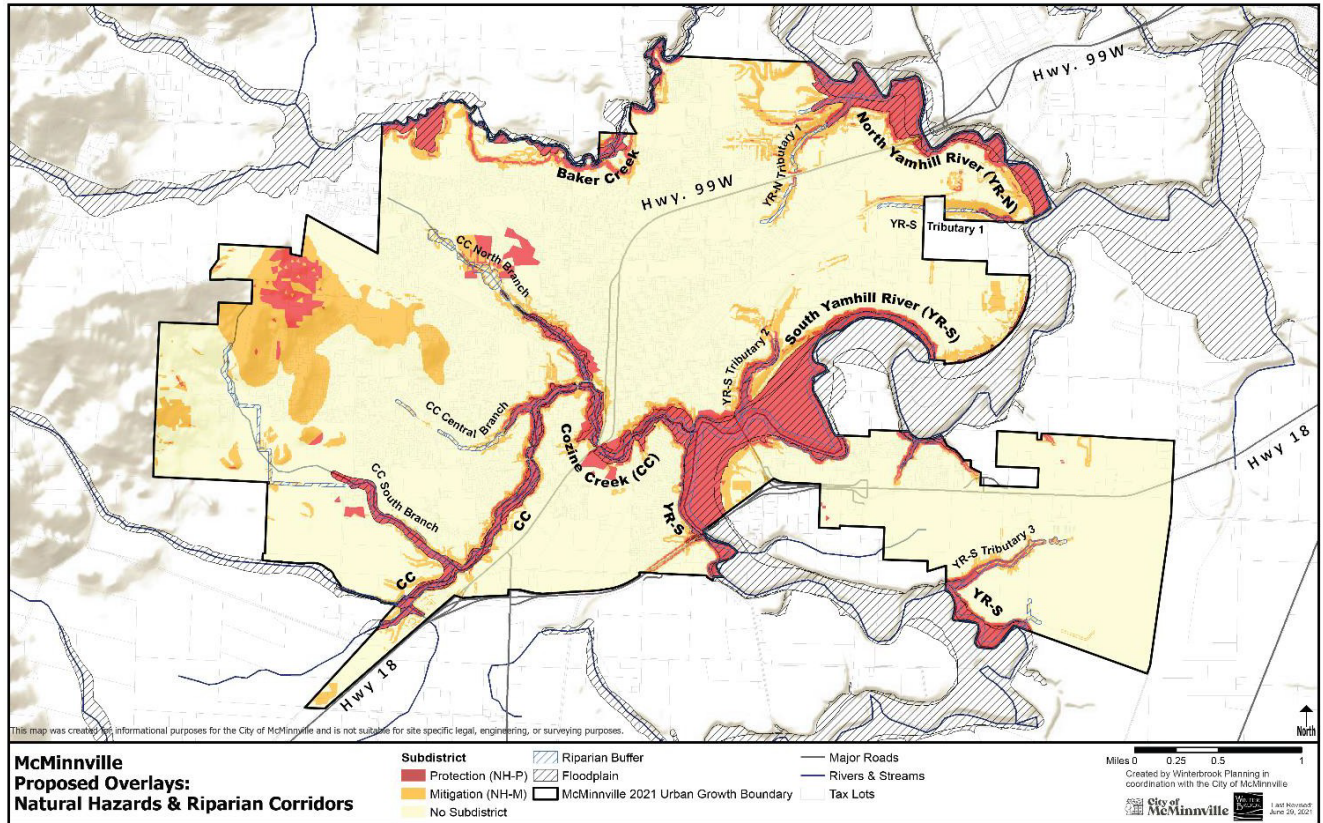
Policies:

- 198.10 *The NH-P and NH-M Subdistricts shall apply to subareas with geological hazards as shown on the Natural Hazards Inventory. Specific geological*

hazards found in each subdistrict are determined by referencing the McMinnville Natural Hazards Inventory and may be determined for individual properties by referencing the City's GIS database.

- 198.20 *Residential and commercial construction in areas with moderate or high geological risk hazards – as indicated on the Natural Hazards Inventory – shall meet the seismic and slope stability provisions of the Oregon State Building Codes. The Building Official may require a geotechnical engineering study prior to approval of construction.*
- 198.30 *The City of McMinnville shall require erosion control measures prior to grading or construction in subareas with:*
1. *Slopes of 15% or greater, and*
 2. *Landslide hazards in the NH-M and NH-P Subdistricts.*
- 198.40 *The City of McMinnville shall require geological reconnaissance studies with the submission of land development applications where geological hazards are present within the NH-M and NH-P Subdistricts. The recommendations of the geological reconnaissance study shall become conditions of land use approval unless specifically exempted or modified by the review authority.*
- 198.50 *Where recommended in a required geological reconnaissance study – or where determined necessary by the City Engineer or Building Official in moderate risk landslide hazard areas that are not included in the NH-M Subdistrict – a geotechnical engineering study may be required prior to grading, land development or construction.*
- 198.60 *The City of McMinnville shall retain the services of a qualified geologist or geological engineer to review geological studies prepared for land use applicants.*
1. *The City Engineer shall determine whether a second professional opinion is required.*
 2. *The costs of peer review shall be borne by the applicant.*
- 198.70 *The City shall consider adopting standards for public street and utility construction to moderate or higher geological hazard areas.*
- 198.80 *Because trees contribute to slope stability and reduce erosion, tree removal shall be limited in the NH-M Subdistricts.*

Flood Hazards

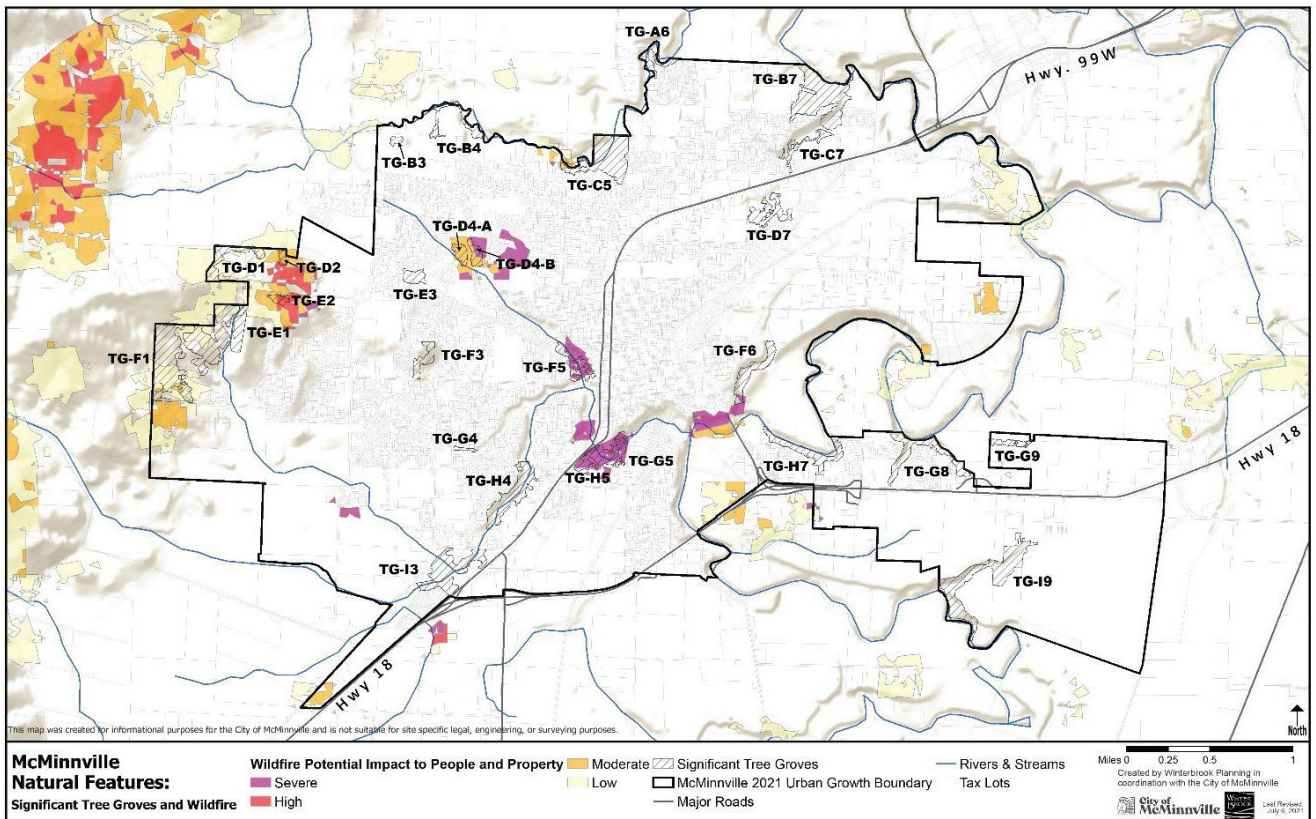


Policies

- 199.00 *Flood hazards areas are located within the designated 100-year floodplain. The City of McMinnville will continue to prohibit most types of development within the 100-year floodplain consistent with the City's F-P Flood Area Zone. Most significant riparian corridors are also located in the F-P Zone.*
- 199.10 *Land within the F-P Zone is protected by applicable NH-P Subdistrict standards. Natural geological and wildfire hazards associated with the 100-year floodplain, including but not limited to landslide and wildfire hazard areas, are addressed in NH-P Subdistrict development standards.*
- 199.20 *The City of McMinnville is committed to continued participation in the National Flood Insurance Program (NFIP) through the enforcement of local floodplain management regulations.*
- 199.30 *The City of McMinnville will work with the Federal Emergency Management Agency (FEMA) to update Flood Insurance Rate Maps (FIRM). The City will request Oregon Department of Geology and Mineral Industries (DOGAMI) debris flow and lidar data be included in FIRM updates.*

- 199.40 *The City of McMinnville will develop and maintain GIS maps of critical facilities identified in the McMinnville NHMP for all structures and residential development and commercial buildings within the 100-year and 500-year floodplains.*
- 199.50 *Because wetlands serve an important flood control function, wetland fill and removal shall not be permitted within the 100-year floodplain unless there is no reasonable alternative for a planned public works project.*
- 199.60 *The City of McMinnville will coordinate with the Greater Yamhill Watershed Council (or its affiliates) regarding stream and river restoration and enhancements projects to restore native vegetation, improve bank stability and improve water quality.*
- 199.70 *Because trees and vegetation reduce streambank failure and improve water quality, tree removal shall be limited in F-P Zone.*

Wildfire Hazards



Policies

- 200.00 *Moderate, high and severe wildfire hazard areas appear on the Natural Hazards Inventory and are generally associated with the West Hills and*

vegetated floodplains. Where wildfire hazards subareas overlap with geological or floodplain hazards, they may be subject to NH-P or NH-M Subdistrict requirements, consistent with the ranking criteria found in the Natural Hazards Inventory and as shown on Natural Hazards Inventory Map VII-1.

- 200.10 City staff shall coordinate with the McMinnville Fire Department and RFPD to encourage fire safety planning and education – especially in Wildfire Urban Interface zones and designated Fire Reduction Areas in the West Hills. The City of McMinnville shall continue to coordinate wildfire mitigation action items through the Yamhill County Community Wildfire Protection Plan.*
- 200.20 Residential, commercial, and industrial development shall be limited in wildfire risk subareas in the NH-P Subdistrict; However, exceptions may be permitted pursuant to Natural Hazard Policies 197.70 and 197.80.*
- 200.30 Development density in moderate to high wildfire risk areas in the NH-M Subdistrict may be limited where necessary to provide adequate space for fuel breaks in areas that are threatened by two or more natural hazards.*
- 200.40 In the NH-P and NH-M Subdistricts with identified wildfire hazards, applicants for land divisions and new development (excluding home remodels or additions) shall prepare a Fire Prevention and Control Plan in coordination with the McMinnville Fire Department or RFPD. The plan shall be prepared by a certified arborist and shall consider necessary tree and vegetation removal, erosion control, and replacement of lost trees and vegetation with native, fire-resistant trees and vegetation.*
- 200.50 The maximum density allowed within the NH-P Subdistrict shall be one unit per 2.5 acres or shall be subject to the density transfer provisions of Policy 197.70.*
- 200.60 Based on the Fire Prevention and Control Plan, the following wildfire mitigation standards shall be met:*
- 1. Installation and maintenance of at least a 40-foot fuel break around each new dwelling or structure.*
 - 2. Where vegetation needs to be maintained for slope stability in a fuel break area, require plantings of fire-resistant or slow-burning plants. The City shall make a list of such plants available to the public.*
 - 3. Provision of one or more than one ingress/egress route or road widths wide enough to accommodate incoming fire apparatus and evacuating residents simultaneously in an emergency situation.*
 - 4. Roofs and siding with fire-resistant materials. Wood shake or shingle roofs are not allowed.*
 - 5. Design road placement to function as fire breaks in urban wildland*

interface developments.

6. *Chimneys of wood-burning devices to be equipped with spark arrester caps and/or screens.*
7. *Underground electrical distribution circuits if technically feasible.*
8. *Sprinkler systems in all dwelling units and occupied buildings.*