

1 **3.5 NATURAL HAZARD AND MITIGATION - GOALS AND POLICIES**

2
3 **Flooding**

4
5 *Flooding poses a serious threat to public safety, property, and infrastructure in Yakima County.*
6 *Protection from flood hazards is required by RCW 86.16 and 44 CFR 60, the Shoreslines*
7 *Management Act, and the Growth Management Act and essential to community wellbeing. Flood*
8 *hazards include riverine flooding, stormwater flooding, post-wildfire debris flows, and climate-*
9 *driven changes in precipitation patterns. Flood hazard management must include approaches*
10 *based on Best Available Science, climate-adjusted projections, and nature-based solutions for*
11 *implementation.*

GOAL NH 1:	Prevent the loss of life or property and minimize public and private costs associated with repairing or preventing flood damages from development in frequently flooded and or flood hazard areas.
POLICIES:	
NH 1.1	Support comprehensive flood control planning.
NH 1.2	Conduct additional analysis and mapping of frequently flooded areas in cases where the 100-year and 500-year floodplain maps using the best available science prepared by the Federal Emergency Management Agency do not to adequately reflect the levels of risk or the geographic extent of flooding.
NH 1.3	Direct new critical facility development away from areas subject to catastrophic, life-threatening flood hazards where the hazards cannot be mitigated.
NH 1.4	Where the effects of flood hazards can be mitigated, require appropriate standards for subdivisions, parcel reconfigurations, site developments and for the design and placement of structures to be reasonably safe from flooding .
NH 1.5	Plan for and facilitate returning rivers to more natural hydrological conditions, and recognize that seasonal flooding is an essential natural process.
NH 1.6	When evaluating alternate flood control or mitigation measures in flood hazard areas on rivers : 1) Consider the removal or relocation of structures in the FEMA 100-year and 500-year floodplain; 2) Where feasible, give preference to nonstructural flood hazard reduction measures over structural measures; 3) Structural flood hazard reductions measures should be consistent with the County's comprehensive flood hazard management plans.
NH 1.7	New development or new uses, including the subdivision of land, should not be established when it would be reasonably foreseeable that the development or use would require structural flood hazard reduction measures within the channel migration zone or floodway unless such flood hazard reduction measures benefit a larger area or community .

Commented [TH1]: Does this sound better?

Conduct additional analysis and mapping of frequently flooded areas to serve as or support best available science where the 100-year and 500-year floodplain maps prepared by FEMA do not adequately reflect the levels of risk or the geographic extent of flooding.

Commented [KW2R1]: I think it does. We're getting close to a strong draft. Whew....

NH 1.8	Restrict subdivisions in areas subject to flooding. Site developments in fire-prone areas to minimize post-wildfire flooding which endangers lives, property, or resources.
NH 1.98	Site developments in fire-prone areas to minimize post-wildfire flooding which endangers lives, property, or resources. Require fencing designs and installation based on flood risk or zone that do not cause or exacerbate flooding which endanger lives, property, or resources.
NH 1.10	Require stream crossing designs and installation based on flood risk zone and freeboard that do not cause or exacerbate flooding which endangers lives, properties or resources.
NH 1.11	When evaluating stream crossing siting or designs, use a tiered approach:
NH 1.12	<u>1) Consider avoiding a new stream crossing by acquiring an access easement over adjacent properties outside of the flood hazard area.</u>
NH 1.13	<u>2) Consider avoiding a new stream crossing by utilizing existing stream crossings that do not cause or exacerbate flooding. Improve existing stream crossings that cause or exacerbate flooding prior to using as access for new development.</u>
NH 1.14	<u>3) Require stream crossings to be sited and designed in locations that do not cause or exacerbate flooding which endangers lives, properties, or resources.</u>
NH 1.15-8	Restrict subdivisions in areas subject to flooding.
NH 1.169	<u>Adopt the American Society of Engineers ASCE 24-24 Floodplain Resilient Design Building Standards, and the Washington Floodplain Managers Proposed Ordinance Language into the Periodic Update and YCC for Flood Hazard Protection, Critical Area Ordinances, the Shoreline Master Program and YCC Title 19.</u>
NH 1.170	<u>Adopt the International Certification Council and the State Building Code Councils recommendations for adoption of ASCE 24-24 into YCC Title 13 when available.</u>
NH 1.184	<u>Integration with Other Climate Hazards: Wildfire policies (drought increases fire risk); Extreme heat policies (compounding drought-heat stress); Flooding policies (altered precipitation timing); Surface water policies (maintaining flows during low-water); Agricultural viability policies (working lands adaptation); Vulnerable populations policies (equitable resource access).</u>

1

Stormwater Management

2

3

4 *Stormwater management is critical to protecting water quality, public health, and aquatic*

5 *ecosystems in Yakima County. Proper stormwater controls are required by state and federal law*

6 *and important to maintain clean rivers and streams. Stormwater impacts include flooding,*

7 *erosion, pollution of surface waters, groundwater contamination, and degradation of fish habitat.*

1 Stormwater management must include Low Impact Development techniques, green infrastructure approaches, and climate-resilient design standards for implementation.
 2
 3

GOAL NH 2: Prevent increased flooding from stormwater runoff.	
POLICIES:	
NH 2.1	Require on-site retention of stormwater.
NH 2.2	Preserve natural drainage <u>ways and drainage</u> courses.
NH 2.3	Minimize adverse storm water <u>quantity and quality</u> impacts generated by the removal of vegetation and alteration of land forms.
NH 2.4	Encourage the use of Low-Impact Development and other best management practices for capturing and infiltrating stormwater.
NH 2.3	<p>Update processes to include new information on resiliency and sustainability and how to mitigate climate impacts through stormwater management techniques, like:</p> <ul style="list-style-type: none"> • Nature-based solutions • Upsizing facilities and conveyances pipes • Reducing impervious surfaces <p>This will ensure that stormwater infrastructure is designed to meet future needs under HB 1181 requirements.</p>
NH 2.4	<p><u>Climate-Adjusted Stormwater Design</u> Require stormwater management systems designed for climate-adjusted precipitation scenarios including:</p> <ul style="list-style-type: none"> • Increased storm intensity (minimum 20% increase in design storm magnitude by 2050, 40% by 2080) • More frequent exceedance of historical design storms • Greater soil saturation from fall/winter precipitation increases leading to higher runoff coefficients • Post-wildfire conditions where infiltration capacity is severely reduced <p>Design standards shall use forward-looking precipitation data from University of Washington Climate Impacts Group regional projections rather than historical records alone.</p>
NH 2.5	<p><u>Green Stormwater Infrastructure</u> Prioritize green stormwater infrastructure including:</p> <ul style="list-style-type: none"> • Bioretention facilities (rain gardens, bioswales, filter strips) • Permeable pavements and porous surfaces • Tree canopy and vegetated areas that intercept precipitation • Rainwater harvesting and reuse systems • Green roofs and rooftop detention • Preservation and restoration of natural depressions, swales, and drainage features <p>Green infrastructure provides multiple benefits including flood reduction, aquifer recharge, water quality improvement, temperature moderation, and habitat enhancement that become increasingly valuable under climate change</p>

<u>NH 2.6</u>	<p><u>Post-Wildfire Stormwater Management Require enhanced stormwater management for development in watersheds experiencing wildfire, including:</u></p> <ul style="list-style-type: none"> • Increased design storm standards (minimum 50% increase in design flow capacity) • Sediment trapping and erosion control measures sized for post-fire debris loads • Monitoring and maintenance protocols for minimum 5 years following fire • Coordination with watershed-scale post-fire recovery planning <p><u>Avoidance of development in areas at high risk of post-fire debris flows</u></p>
<u>NH 2.7</u>	<p><u>Use best available science to monitor and mitigate for new and emerging toxics in stormwater.</u></p>

1

GOAL NH 3:	Protect the hydrologic functions of natural systems to store and slowly release floodwaters, reduce flood velocities, and filter sediment.
POLICIES:	
NH 3.1	Flood control measures should not be authorized if they obstruct fish passage <u>and</u> or result in the unmitigated loss or damage of fish and wildlife resources.
NH 3.2	Encourage and support the retention of natural open spaces or land uses which maintain hydrologic functions and are at low risk to property damage from floodwaters within frequently flooded areas.
<u>NH 3.3</u>	<u>Use best available science to monitor and mitigate for new and emerging toxics in Stormwater.</u>

2

3

4

5

6

Geologic Hazards (Drainage and Alluvial Fan Areas)

7

8

Geologic hazards present significant risks to development and public safety in Yakima County.

9

Protection from geologic hazards is required by the Growth Management Act and critical to preventing loss of life and property. Geologic hazards include landslides, erosion, unstable slopes, seismic risks, drainage issues, and alluvial fan flooding. Geologic hazard management must include approaches based on Best Available Science, geotechnical assessment, and climate considerations affecting slope stability for implementation.

10

GOAL NH 4:	Protect the public from personal injury, loss of life or property damage from geologic hazards.
POLICIES:	

NH 4.1	Ensure that land use practices in geologically hazardous areas do not cause or exacerbate natural processes which endanger lives, property, or resources.
NH 4.2	Locate development within the most environmentally suitable and naturally stable portions of the site.

NH 4.3	Classify and designate areas on which development should be prohibited, conditioned, or otherwise controlled because of danger from geological hazards.
NH 4.4	Prevent the subdividing of known or suspected landslide hazard areas, side slopes of stream ravines, <u>alluvial areas</u> , or slopes 40 percent or greater for development purposes.
NH 4.5	Maintain the integrity and moisture regimes of eversteepened <ins>over steepened</ins> slopes and other areas at risk for landslides
NH 4.6	Ensure that geologic hazard information is readily available to the public.

Wildfire

Wildfire is an increasing threat to communities, ecosystems, and the economy in Yakima County. Wildfire risk reduction is required by ESHB 1181 climate planning mandates and is essential to protecting lives and property. Wildfire hazards include direct fire exposure, ember ignition, post-fire flooding and debris flows, air quality impacts, and ecosystem degradation. Wildfire hazard mitigation must include approaches based on Best Available Science, defensible space requirements, ignition-resistant construction standards, and community preparedness programs for implementation. Wildfire hazard areas present increasing risks to public health, safety, property, and ecosystems as climate change intensifies fire frequency, severity, and duration across Yakima County. Designation and protection of wildfire hazard areas is required by ESHB 1181 climate planning mandates under RCW 36.70A.070(8) and necessary to reduce community vulnerability in the wildland-urban interface. Wildfire hazard areas include high and very high fire risk zones, wildland-urban interface areas, ember exposure zones, post-wildfire debris flow and flooding hazard areas, and areas with limited emergency access or inadequate water supply for fire protection. Protection and management of wildfire hazard areas must include approaches based on Best Available Science under RCW 36.70A.172, climate-adjusted fire weather and fuel moisture projections, ignition-resistant construction standards, defensible space requirements, adequate emergency access and water supply for fire suppression, fuel management and vegetation treatment, community wildfire preparedness programs, and prohibition of development where fire risks cannot be adequately mitigated for implementation.

Commented [KW3]: Wildfire - Resiliency as a Hazard.
Currently in CH2 Policy and Goals - will move to here

GOAL NH 5:	Protect life and property in rural Yakima County from fire hazards.
POLICIES:	
NH 5.1	Encourage <u>Require</u> the development of an adequate water supply/storage for new development which is not connected to a community water/hydrant system. A storage facility/fire well should be accessible by standard firefighting equipment and adequate for the needs of the structure(s) and people being protected.
NH 5.2	Reflect <u>Incorporate and require the use of</u> best practices in structural fire resistance design for new construction.

NH 5.3	Roofing used in the construction of residential development shall be of a Class "A" fire retardant material when located outside of 5 road miles of a full service fire station.
NH 5.4	Encourage, where feasible, the undergrounding of electrical utilities to reduce their exposure to fire.
NH 5.5	Require new residential construction to provide for a fuel break around structures of x feet.
NH 5.6	Require proposed developments to provide sufficient <u>unimpeded</u> access for heavy-duty firefighting equipment.
NH 5.7	Bridges, culverts, road drains and other structures shall be constructed and maintained in a manner to accommodate firefighting apparatus on a year around basis.
NH 5.8	Residences and driveways shall be clearly marked and visible with the appropriate address assigned by Yakima County.
NH 5.9	Encourage cluster developments and the appropriate rural and urban reduce density in wildfire hazard areas.
NH 5.10	Support the activities of the Fire Adapted Communities Coalition.

1

NH 5S-21.1	<u>Encourage the development of adequate water supply/storage for new development which is not connected to a community water/hydrant system. A storage facility/fire well should be accessible by standard firefighting equipment and adequate for the needs of the structure(s) and people being protected.</u>
NH 5S-21.2	<u>Roofing used in the construction of residential development shall be of a Class "A" fire retardant material when located outside of 5 road miles of a full service fire station.</u>
NH 5S-21.3	<u>Encourage, where feasible, the undergrounding of electrical utilities to reduce their exposure to fire.</u>
NH 5S-21.4	<u>Require new residential construction to provide for a fuel break around structures.</u>
NH 5S-21.5	<u>Require proposed developments to provide sufficient access for heavy-duty firefighting equipment.</u>
NH 5S-21.6	<u>Bridges, culverts, road drains and other structures shall be constructed and maintained in a manner to accommodate firefighting apparatus on a year around basis.</u>
NH 5S-21.7	<u>Residences and driveways shall be clearly marked and visible with the appropriate address assigned by Yakima County.</u>
NH 5S-21.8	<u>Designate Wildfire Hazard Areas as a critical area type under the Growth Management Act, recognizing that climate change is substantially increasing wildfire risk through:</u> <ul style="list-style-type: none"> <u>• Temperature increases +1.18°C to +3.52°C by end of century depending on emissions scenario</u> <u>• Extended fire seasons with earlier spring drying and later fall moisture</u>

	<ul style="list-style-type: none"> Declining summer soil moisture and more frequent drought conditions Climate-driven forest stress increasing vulnerability to insect outbreaks (mountain pine beetle, spruce budworm) that create fuel loads Longer periods of critically low fuel moisture and high fire danger Increased lightning frequency from atmospheric instability More extreme fire weather conditions including low humidity, high temperatures, and strong winds
NH 5S-21.9	<p>Mapping Map and classify the Wildland-Urban Interface (WUI) using criteria established by the U.S. Forest Service and Washington Department of Natural Resources, including:</p> <ul style="list-style-type: none"> Interface WUI: Areas where structures directly abut wildland vegetation (within 0-1.5 miles) Intermix WUI: Areas where structures are interspersed within wildland vegetation Occluded WUI: Areas of wildland vegetation isolated within predominantly developed areas that pose internal fire risk <p>Map WUI boundaries shall be updated every 5 years or following significant development or vegetation changes and shall account for projected expansion of high fire risk areas under climate change scenarios.</p>
NH 5S-21.10	<p>Wildfire Risk Classification Classify wildfire hazard areas into risk categories based on:</p> <ul style="list-style-type: none"> Fuel characteristics: Vegetation type, density, continuity, and fuel loading (shrub steppe, pine forests, mixed forests, recently burned areas with regenerating vegetation) Topography: Slope, aspect, elevation, and terrain features that influence fire behavior (steep south-facing slopes present highest risk) Climate factors: Historical fire occurrence, projected temperature and precipitation changes, drought frequency, and seasonal fire weather patterns Access and water supply: Adequacy of emergency access routes, water availability for fire suppression, and response time from fire protection districts Exposure density: Concentration of structures and populations at risk <p>Risk classifications (Very High, High, Moderate, Low) shall inform development standards, vegetation management requirements, and emergency planning priorities.</p>
NH 5S-21.11	<p>Post-Wildfire Hazard Area Designation Automatically designate burned areas as Post-Wildfire Hazard Areas for minimum 5 years following fire events, or until watershed stabilization is demonstrated through:</p> <ul style="list-style-type: none"> Vegetation recovery assessment showing adequate ground cover to prevent erosion Hydrologic monitoring demonstrating return to pre-fire infiltration rates Geotechnical analysis confirming slope stability

	<ul style="list-style-type: none"> Removal of hazard trees and unstable fuels <p><u>Post-Wildfire Hazard Areas are subject to enhanced regulations addressing debris flow, flooding, erosion, landslide, and air quality risks described in Wildfire Policy 22-24.</u></p>
<u>NH 5S-21.12</u>	<p><u>Development Standards in Wildfire Hazard Areas</u></p> <p><u>Wildfire Risk Assessment Requirement</u> <u>Require comprehensive wildfire risk assessments prepared by qualified professionals (Washington State certified Wildfire Hazard Mitigation Specialist, Certified Fire Protection Specialist, or Registered Professional Forester with wildfire specialization) for:</u></p> <ul style="list-style-type: none"> <u>All new residential subdivisions in High or Very High wildfire hazard areas</u> <u>Commercial, industrial, or institutional development in any wildfire hazard area</u> <u>Critical facilities (schools, hospitals, emergency services, utilities) within 2 miles of wildland fuels</u> <u>Any development requiring Type I, II, or III Forest Practice permit</u> <u>Expansion or modification of existing development increasing occupancy or exposure in wildfire hazard areas</u> <p><u>Wildfire risk assessments shall evaluate site-specific fire behavior potential, ember exposure, structure ignitability, access and evacuation adequacy, water supply for fire suppression, and climate-driven trends in fire danger</u></p>
<u>NH 5S-21.13</u>	<p><u>Adoption of Urban Wildfire Interface Code</u> <u>Adopt the International Wildland-Urban Interface Code (IWUIC) or equivalent wildfire protection standards as amended for Yakima County conditions, establishing minimum requirements for:</u></p> <ul style="list-style-type: none"> <u>Building location and siting to minimize fire exposure</u> <u>Ignition-resistant construction and materials</u> <u>Defensible space vegetation management</u> <u>Emergency vehicle access and fire apparatus turnaround</u> <u>Water supply for fire protection</u> <u>Fuel breaks and fire-resistant landscaping</u> <p><u>Standards shall be consistent with Washington State Building Code provisions and may be enhanced based on local fire history and climate projections.</u></p>
<u>NH 5S-21.14</u>	<p><u>Ignition-Resistant Construction Standards</u> <u>Require ignition-resistant construction for new buildings and substantial improvements to existing buildings in High and Very High wildfire hazard areas, including:</u></p> <ul style="list-style-type: none"> <u>Roofing: Class A fire-rated roofing materials (composition shingle, metal, tile, or approved equivalents); prohibition of wood shake roofs</u> <u>Exterior walls: Non-combustible or ignition-resistant materials (stucco, fiber cement, brick, concrete, or approved fire-retardant treated wood) in areas within 5 feet of ground</u> <u>Vents: Ember-resistant vents with 1/8-inch maximum mesh screening on all attic, foundation, and crawlspace vents</u>

	<ul style="list-style-type: none"> • Windows and doors: Dual-pane tempered glass windows; weather-stripping and tight-fitting doors to prevent ember entry • Decks and attachments: Heavy timber or non-combustible deck materials; prohibition of combustible materials stored under decks or overhangs • Gutters and eaves: Enclosed eaves or non-combustible construction; gutter screens to prevent debris accumulation
NH 5S-24.15	<p>Defensible Space Requirements Require creation and maintenance of defensible space around all structures in wildfire hazard areas, implementing three-zone approach:</p> <ul style="list-style-type: none"> • Zone 1 (Immediate/Ember-Resistant Zone - 0-5 feet from structure): Remove all flammable vegetation and combustible materials; use non-combustible hardscape materials (gravel, pavers, rock); maintain low-growing, fire-resistant, well-watered plants with no plant material touching structures • Zone 2 (Intermediate Zone - 5-30 feet from structure): Create fuel breaks with well-spaced fire-resistant plants; remove ladder fuels (vegetation connecting ground fuels to tree canopies); limb trees to 10 feet above ground; maintain horizontal spacing between tree crowns equal to 10 feet; mow grasses to maximum 4 inches; remove dead vegetation and slash • Zone 3 (Extended/Reduced Fuel Zone - 30-100 feet from structure, extended to 200 feet on steep slopes >20%): Thin trees to create crown spacing; remove ladder fuels and dead/dying trees; create shaded fuel breaks; maintain access to property for fire equipment <p>Defensible space distances shall be increased by 50% on slopes exceeding 20% and by 100% on slopes exceeding 40%, measured from downslope side of structures.</p>
NH 5S-24.16	<p>Fuel Break Requirements for Subdivisions Require perimeter fuel breaks for residential subdivisions in High and Very High wildfire hazard areas, including:</p> <ul style="list-style-type: none"> • Minimum 100-foot wide fuel break along subdivision boundaries adjacent to wildland vegetation (increased to 300 feet on steep south-facing slopes) • Reduction of shrub and tree density to limit fire intensity and rate of spread • Strategic placement considering prevailing wind directions and topographic features that channel fire • Maintenance responsibility assigned to homeowners association or similar permanent entity • Integration with natural features (ridgelines, roads, streams) where feasible • Native vegetation retention where compatible with fire safety objectives to prevent erosion and maintain habitat

NH 5S-21.17	<p><u>Fire-Resistant Landscaping Standards</u> Establish fire-resistant landscaping standards for development in wildfire hazard areas:</p> <ul style="list-style-type: none"> • Prohibited plants: Highly flammable species including junipers, arborvitae, ornamental grasses, and other plants with high oil content, fine foliage, or dead material retention • Encouraged plants: Fire-resistant natives and adapted species including serviceberry, snowberry, currant, aspen, cottonwood, and low-growing succulents • Irrigation requirements: Permanent irrigation systems maintaining adequate soil moisture during fire season (May-October) for vegetation within 30 feet of structures • Mulch specifications: Non-combustible mulch (gravel, rock) within 5 feet of structures; bark or wood chip mulch maximum 3 inches depth in other areas • Tree siting: Large conifers located minimum 30 feet from structures; hardwoods with lower fire risk may be closer with adequate clearance and maintenance
NH 5S-21.18	<p><u>Emergency Access Standards</u> Require adequate emergency access for wildfire hazard areas meeting or exceeding:</p> <ul style="list-style-type: none"> • Road width: Minimum 20 feet of unobstructed driving surface for single access; minimum 24 feet for roads serving >30 dwelling units • Vertical clearance: Minimum 13.5 feet for tree limbs and overhanging vegetation along entire route • Grade: Maximum sustained grade 15%; maximum short pitches (maximum 200 foot length) of 18% • Load capacity: Structural design for 75,000-pound fire apparatus with snow and ice loads in mountainous areas • Turnaround provisions: Fire apparatus turnarounds (hammerhead or cul-de-sac minimum 60-foot radius) for dead-end roads exceeding 150 feet; turnarounds required at maximum 1,000-foot intervals on roads exceeding 1,000 feet length • Surface: All-weather surface (asphalt, concrete, or gravel minimum 6 inches compacted depth) maintained year-round • Signage: Reflective street signs and address markers visible from both directions meeting NFPA standards
NH 5S-21.19	<p><u>Secondary Access Requirements</u> Require secondary emergency access for:</p> <ul style="list-style-type: none"> • Residential subdivisions with more than 30 dwelling units in High or Very High wildfire hazard areas • Subdivisions where primary access route exceeds 2 miles in length • Developments in areas identified as high evacuation risk due to limited egress, steep terrain, or historical fire occurrence • Critical facilities including schools, assisted living facilities, and emergency services

	<p><u>Secondary access may utilize different route, adjoining property easement, or emergency-only access meeting reduced but acceptable standards for evacuation (minimum 12-foot width, maximum 20% grade).</u></p>
<u>NH 5S-21.20</u>	<p><u>Fire Flow and Water Supply Requirements</u> Require adequate water supply for fire protection in wildfire hazard areas:</p> <ul style="list-style-type: none"> • <u>Hydrant systems:</u> Fire hydrants meeting NFPA 291 standards with minimum 1,000 gallons per minute (GPM) flow at 20 psi residual pressure where public water systems exist or are extended to serve development • <u>Alternative water sources:</u> Where hydrant systems infeasible, require on-site water storage minimum 10,000 gallons in tanks with fire department drafting connection, or drafting access to ponds/streams with minimum 30,000 gallons year-round accessible water • <u>Dry hydrant systems:</u> Where water sources available, install dry hydrant systems meeting NFPA 1142 standards providing fire department access • <u>Water source spacing:</u> Hydrants or alternative water sources located maximum 1,000 feet apart along primary access routes; maximum 800 feet from any structure <p><u>Coordinate with fire protection districts on water supply adequacy and preferred systems during development review.</u></p>
<u>NH 5S-21.21</u>	<p><u>Evacuation Route Planning</u> Require evacuation planning for development in wildfire hazard areas addressing:</p> <ul style="list-style-type: none"> • <u>Identification of primary and alternate evacuation routes to areas of refuge</u> • <u>Capacity analysis ensuring routes can accommodate simultaneous evacuation of affected populations within acceptable timeframes (target: complete evacuation within 3 hours of notification)</u> • <u>Vulnerable populations requiring evacuation assistance (elderly, disabled, non-English speakers)</u> • <u>Assembly areas and traffic control points</u> • <u>Coordination with law enforcement, fire districts, and emergency management</u> • <u>Public education and notification systems (reverse 911, emergency alert systems, sirens)</u> • <u>Evacuation drills and periodic plan updates</u> <p><u>Subdivisions creating more than 50 dwelling units in High or Very High hazard areas shall prepare formal Community Wildfire Protection Plans addressing evacuation, pre-positioning of resources, and mutual aid agreements.</u></p>
<u>NH 5S-21.22</u>	<p><u>Adoption of USFS Wildfire Protection and Response Plan</u> Adopt and implement applicable provisions of the U.S. Forest Service Wildfire Protection and Response Plan, including:</p> <ul style="list-style-type: none"> • <u>Prioritization of fuel treatments in wildland-urban interface areas</u>

	<ul style="list-style-type: none"> Coordination of federal, state, tribal, and local wildfire management activities Pre-positioning of firefighting resources during high fire danger periods Rapid initial attack strategies to contain fires at small size Use of prescribed fire and mechanical treatments to reduce fuel loads Post-fire rehabilitation to prevent erosion and promote resilient vegetation recovery <p>Coordinate with Okanogan-Wenatchee National Forest and other federal land managers on cross-boundary wildfire prevention and response.</p>
<u>NH 5S-21.23</u>	<p>Community Wildfire Preparedness Programs Support and facilitate community wildfire preparedness through:</p> <ul style="list-style-type: none"> Firewise USA recognition program encouraging neighborhood-scale risk reduction Community chipping programs for disposal of slash and pruning debris Wildfire education and outreach including property assessments and homeowner workshops Coordination with Washington State Department of Natural Resources and State Conservation Commission Forest Health and Community Wildfire Resiliency programs Technical assistance connecting private landowners with cost-share programs for fuel reduction treatments Recognition and incentive programs for property owners implementing comprehensive wildfire protection measures
<u>NH 5S-21.24</u>	<p>Forest Health and Fuels Treatment on Private Lands Encourage voluntary forest health treatments and fuel reduction on private forest lands through:</p> <ul style="list-style-type: none"> Coordination with conservation districts providing technical assistance for forest stewardship planning, wildfire risk assessments, and implementation of treatments Connection to funding programs including State Conservation Commission Forest Health and Community Wildfire Resiliency grants, USDA Natural Resources Conservation Service programs, and DNR competitive grants Streamlined permitting for thinning, pruning, slash disposal, and fuel break creation meeting Best Management Practices Integration with Voluntary Stewardship Program for agricultural forest lands Support for collaborative landscape-scale projects addressing continuous fuel beds across multiple ownerships <p>Priority treatments include thinning overstocked stands (target: <40% canopy closure in fire-prone forests), removing ladder fuels connecting surface fuels to tree crowns, limbing trees to minimum 10 feet above ground, removing dead and dying trees (particularly pine beetle-killed timber), and creating strategic fuel breaks along ridgelines and access corridors.</p>

NH 5S-21.25	<p><u>Vegetation Management Along Roads and Utilities</u> Require ongoing vegetation management along roads and utility corridors to:</p> <ul style="list-style-type: none"> • Maintain vertical clearance for emergency vehicle access (minimum 13.5 feet) • Create fuel breaks limiting fire crossing potential • Reduce ignition risk from vehicle sparks, hot exhaust components, and dragging chains • Prevent power line ignitions from vegetation contact or tree failure during high winds • Provide refuge areas for trapped evacuees <p>County road maintenance shall include annual mowing, brush clearing, and hazard tree removal within 30 feet of road centerlines in wildfire hazard areas. Require utility providers to maintain vegetation clearance per National Electric Safety Code and additional requirements for high fire risk areas.</p> <p><u>Prescribed Fire and Cultural Burning</u> Support use of prescribed fire as a wildfire risk reduction tool where appropriate, including:</p> <ul style="list-style-type: none"> • Coordination with Washington Department of Natural Resources, U.S. Forest Service, and Washington Prescribed Fire Council on burn permitting, smoke management, and burn plan approval • Recognition of prescribed fire benefits including fuel reduction, forest health improvement, habitat enhancement, and perpetuation of fire-adapted ecosystems • Support for tribal cultural burning practices that reduce fuel loads while maintaining traditional plant species and cultural resources • Public education distinguishing prescribed fire from wildfire and communicating smoke management strategies • Liability protection for prescribed burn practitioners following approved burn plans and meeting professional standards <p>Prescribed fire should target shrub steppe fuel accumulations, understory fuels in pine forests, and regenerating post-fire vegetation creating continuous fuel beds</p>
NH 5S-21.26	<p><u>Post-Fire Hazard Assessment</u> Require comprehensive post-fire hazard assessment for burned watersheds evaluating:</p> <ul style="list-style-type: none"> • Debris flow risk: Slope steepness, soil burn severity, basin morphology, potential debris volume, runout distance to structures and infrastructure • Flooding risk: Loss of infiltration capacity, increased runoff rates and volumes, channel scour potential, culvert and bridge capacity • Erosion and sedimentation: Soil loss rates, sediment delivery to streams, water quality impacts, reservoir sedimentation • Landslide risk: Slope destabilization from root strength loss and altered groundwater conditions • Air quality: Windblown ash and dust during dry periods affecting sensitive populations

	<ul style="list-style-type: none"> <u>Hazard tree risk: Standing dead trees threatening roads, structures, and utilities</u> <u>Assessment shall use methodologies including USGS Debris Flow Assessment and USFS BAER (Burned Area Emergency Response) protocols.</u>
<u>NH 5S-21.27</u>	<u>Post-Fire Development Moratorium</u> <u>Implement development moratorium in Post-Wildfire Hazard Areas pending completion of hazard assessment and implementation of emergency stabilization measures. Moratorium shall remain in effect for a minimum of 2 years or until:</u> <ul style="list-style-type: none"> <u>Emergency stabilization treatments (erosion control, slope stabilization, drainage improvements) are completed</u> <u>Vegetation recovery reaches minimum 50% ground cover</u> <u>Hydrologic monitoring demonstrates substantial recovery toward pre-fire infiltration rates</u> <u>Geotechnical analysis confirms adequate slope stability</u> <u>Exceptions may be granted for emergency repairs, protective measures reducing post-fire risks, and infrastructure necessary for watershed stabilization.</u>
<u>NH 5S-21.28</u>	<u>Post-Fire Debris Flow Protection</u> <u>Establish debris flow hazard zones in burned watersheds with:</u> <ul style="list-style-type: none"> <u>Prohibition of new habitable structures in areas with >10% probability of debris flow impact over 5-year post-fire period</u> <u>Enhanced setbacks from drainage channels and debris flow pathways (minimum 200 feet horizontal distance)</u> <u>Required protection measures for existing structures including: engineered debris deflection berms; reinforced barriers; catch basins; early warning systems with 24-hour monitoring during storm events</u> <u>Drainage improvements including: culvert and bridge upgrades sized for debris-laden flows; debris racks and settling basins; armored channels through vulnerable areas</u> <u>Coordinated emergency response planning with evacuation triggers based on weather forecasts (evacuation when >0.5 inches/hour precipitation forecast)</u>
<u>NH 5S-21.29</u>	<u>Post-Fire Stormwater and Erosion Control</u> <u>Require enhanced stormwater management and erosion control for any development in Post-Wildfire Hazard Areas:</u> <ul style="list-style-type: none"> <u>Stormwater design flows increased by minimum 100% over pre-fire conditions</u> <u>Sediment trapping facilities sized for 5-10 times normal sediment loads</u> <u>Armored conveyance channels and energy dissipation structures</u> <u>Slope stabilization including erosion control blankets, mulching, seeding with native species, and structural measures on steep slopes</u> <u>Construction timing restrictions avoiding wet season (October-May) when erosion risk highest</u> <u>Intensive monitoring and maintenance for minimum 3 years</u>

<u>NH 5S-21.30</u>	<p><u>Post-Fire Air Quality Protection</u> Address air quality hazards in Post-Wildfire Hazard Areas including:</p> <ul style="list-style-type: none"> • <u>Public health advisories during high wind events mobilizing ash and dust</u> • <u>Restrictions on ground-disturbing activities during dry, windy periods</u> • <u>Ash stabilization treatments (mulch, tackifiers, vegetation establishment) on exposed soils near inhabited areas</u> • <u>Indoor air quality improvements in structures with ash contamination</u> • <u>Coordination with Yakima Regional Clean Air Authority on monitoring and public notification</u>
<u>NH 5S-21.31</u>	<p><u>Fire District Coordination</u> Require consultation with local fire protection districts during review of development proposals in wildfire hazard areas, addressing:</p> <ul style="list-style-type: none"> • <u>Adequacy of emergency access, water supply, and turnaround provisions</u> • <u>Appropriateness of defensible space and ignition-resistant construction standards</u> • <u>Evacuation route adequacy and capacity</u> • <u>Fire protection district capability to provide structure protection given available resources and response times</u> • <u>Mutual aid agreements and regional coordination for major fire events</u> • <u>Development contribution to fire protection infrastructure and equipment (proportionate share of station, apparatus, staffing needs generated by development)</u> <p><u>Fire district input shall be given substantial weight in permit decision-making, with deviations from district recommendations requiring specific findings of equivalent or superior fire protection.</u></p>
<u>NH 5S-21.32</u>	<p><u>Community Wildfire Protection Plans</u> Support development and implementation of Community Wildfire Protection Plans (CWPPs) as defined in Healthy Forests Restoration Act, providing:</p> <ul style="list-style-type: none"> • <u>Community-level wildfire risk assessment and prioritization of hazard reduction projects</u> • <u>Collaborative planning involving local governments, fire districts, state and federal agencies, tribes, and community members</u> • <u>Identification of wildland-urban interface boundaries and priority treatment areas</u> • <u>Fuels reduction strategies on federal, state, tribal, and private lands</u> • <u>Coordination of fire protection resources and mutual aid agreements</u> • <u>Structure ignitability reduction programs and public education campaigns</u> • <u>Monitoring and plan updates reflecting changing conditions and completed treatments</u>

	<p><u>Yakima County shall participate in CWPP development and use CWPPs to guide public investments in wildfire risk reduction, priority areas for fuels treatment on public lands, and coordination of regulatory and incentive-based programs.</u></p>
<u>NH 5S-21.33</u>	<p><u>Climate Adaptation for Wildfire Management</u> Implement adaptive management for wildfire hazard as climate impacts intensify:</p> <ul style="list-style-type: none"> <u>Update wildfire hazard area mapping every 5 years based on fire occurrence, climate trends, vegetation conditions, and improved modeling</u> <u>Adjust defensible space requirements, fuel break dimensions, and ignition-resistant construction standards as fire behavior potential increases</u> <u>Enhance evacuation planning as fire spread rates accelerate and simultaneous fire events stress regional response capacity</u> <u>Increase forest health treatment pace and scale to address expanding areas of climate-stressed vegetation vulnerable to insect outbreaks and fire</u> <u>Coordinate with Washington State Department of Natural Resources 20-Year Forest Health Strategic Plan for Eastern Washington and state Climate Resilience Strategy wildfire priorities</u>
<u>NH 5S-21.34</u>	<p><u>Integration with Emergency Management</u> Coordinate wildfire planning with Yakima County Emergency Management and hazard mitigation planning under RCW 38.52:</p> <ul style="list-style-type: none"> <u>Incorporate wildfire risk assessment into County Multi-Hazard Mitigation Plan</u> <u>Develop pre-disaster recovery plans addressing post-fire rebuilding standards, debris management, watershed restoration, and long-term community recovery</u> <u>Establish emergency operations protocols for large wildfire events including evacuation coordination; emergency services staging; public information and warning systems; resource requests through Washington State Emergency Operations Center; damage assessment</u> <u>Conduct tabletop exercises and full-scale drills simulating major wildfire events</u> <u>Integrate wildfire response with other climate-driven emergencies including extreme heat, drought, and smoke events affecting public health</u>
<u>NH 5S-21.35</u>	<p><u>Public Education and Outreach</u> Develop and maintain comprehensive public education programs on wildfire preparedness:</p> <ul style="list-style-type: none"> <u>Annual wildfire preparedness campaigns during spring (April-May) emphasizing defensible space creation, emergency supply preparation, evacuation planning, and home hardening</u>

	<ul style="list-style-type: none"> <u>Multilingual materials and targeted outreach to vulnerable populations including farmworker communities, elderly residents, and non-English speakers</u> <u>Property-specific wildfire risk assessments and action plans available to homeowners</u> <u>School-based education programs teaching children and families about wildfire safety</u> <u>Real estate disclosure requirements ensuring homebuyers are informed of wildfire risks in High and Very High hazard areas</u> <u>Partnerships with insurance industry promoting risk reduction through premium incentives for wildfire-resistant construction and defensible space</u>
NH 5<u>S-24.36</u>	<p><u>Monitoring and Adaptive Management</u> Establish wildfire monitoring systems to track:</p> <ul style="list-style-type: none"> <u>Fire occurrence frequency, size, intensity, and cause</u> <u>Effectiveness of fuel treatments in moderating fire behavior and protecting structures</u> <u>Structure loss statistics and factors contributing to survival or destruction</u> <u>Evacuation performance during actual fire events</u> <u>Climate trends affecting fire season length, fire weather severity, and fuel moisture</u> <u>Post-fire recovery including vegetation reestablishment, erosion rates, and watershed function</u> <p><u>Use monitoring data to implement adaptive management adjustments to wildfire hazard regulations, prioritize public investments in risk reduction, and inform updates to Comprehensive Plan during periodic review cycles (RCW 36.70A.130).</u></p>
NH 5<u>S-24.37</u>	<p><u>Implementation Authority:</u> These policies shall be implemented through new Yakima County Code chapter establishing Wildfire Hazard Area regulations as a critical area type, amendments to building code for ignition-resistant construction, road standards for emergency access, subdivision regulations for wildland-urban interface development, and coordination protocols with fire protection districts and emergency management, consistent with Growth Management Act requirements (RCW 36.70A.060, 36.70A.172) and best available science on climate-driven wildfire risk.</p> <p><u>Cross-Reference:</u> These wildfire policies integrate with and support:</p> <ul style="list-style-type: none"> <u>Frequently Flooded Areas policies (addressing post-fire debris flows and flooding)</u> <u>Geologically Hazardous Areas policies (addressing post-fire landslides and slope stability)</u> <u>Surface Water policies (addressing post-fire water quality and sedimentation)</u>

	<ul style="list-style-type: none"> Fish and Wildlife Habitat policies (addressing fire impacts to cold-water refugia and riparian corridors) Critical Aquifer Recharge Areas policies (addressing post-fire infiltration loss and water supply impacts)
--	---

1

Drought

GOAL NH-6:	Limit the impact of drought on property and safety.
POLICIES:	
NH-6.1	Collaborate with interested agencies to develop a drought mitigation and response plan.
NH-6.2	Ensure sufficient water quantity for new developments.
NH-6.3	Encourage xeriscaping and other landscaping options that limit the need for irrigation.
NH-6.4	Promote design that captures and infiltrates stormwater, meltwater, and irrigation runoff.

3

4

5

6

7

8

9

PURPOSE STATEMENT NS-22

10

11

12

13

14

15

Drought Threat Assessment and Planning Context

16 *Drought poses a serious and intensifying threat to the resilience of communities and ecosystems*
 17 *in Yakima County. Over the past several years, the region has experienced increasingly severe*
 18 *drought conditions, fueled by prolonged periods of reduced precipitation, declining mountain*
 19 *snowpack, and exceptionally warm temperatures. Historical drought years including 1977, 1992-*
 20 *1994, 2001, 2005, and 2015 resulted in significant agricultural losses, widespread domestic well*
 21 *failures, ecosystem degradation, and economic hardship. As documented by the U.S. Geological*
 22 *Survey and University of Washington Climate Impacts Group modeling specific to the Yakima*
 23 *River Basin, as global and regional temperatures continue to rise, the frequency, severity, and*
 24 *duration of droughts are expected to increase dramatically, with particularly acute impacts in*
 25 *semi-arid regions like Yakima County where water resources are already fully appropriated.*

1 Pursuant to ESHB 1181 (2023) requiring drought preparedness and water resource vulnerability
2 assessment under RCW 36.70A.070(8)(c), best available science on wildfire risk in the Yakima
3 Basin, and the increasing frequency and severity of wildfire documented by the University of
4 Washington Climate Impacts Group, and consistent with Growth Management Act critical areas
5 protection requirements under RCW 36.70A.060 and best available science standards under RCW
6 36.70A.172, the following policies guide drought planning, water resource protection, wildfire
7 hazard planning and development regulation:

NH 6S-22.1	<p>Use Best Available Science to develop drought resilience and sustainability policy. Examples include Using climate projections indicate water shortage years—historically occurring 14% of the time—increasing to 32% in the 2020s, 36% in the 2040s, and 77% by the 2080s under moderate-high emissions scenarios. Most significantly, senior water rights holders will experience historically unprecedented supply shortfalls with increasing frequency (2-3% of years by mid-century). These changes are driven by temperature increases of +1.18°C to +3.52°C transforming the basin's hydrology through: declining snowpack (20% loss per 1°C warming); earlier and reduced peak stream flows (shifting from late May to February-March by 2080s, declining 34%); critically reduced summer base flows; increased evapotranspiration demand; and shift from snow-dominant to rain-dominant precipitation creating winter flooding risk but reduced summer water storage.</p> <p>Drought impacts cascade through interconnected systems: agricultural losses of \$23-70 million annually for major crops alone; permanent damage to perennial crops requiring years to replace; domestic well failures affecting rural residents; stream temperature increases threatening cold-water fish; wetland drying and habitat loss; increased wildfire risk; and compounding effects when drought co-occurs with extreme heat. Economic and ecosystem consequences are already manifested in 2025 and will intensify without substantial adaptation measures.</p>
NH 6S-22.2	Critical Aquifer Recharge Area Protection for Drought Resilience Enhance CARA regulations to support drought preparedness: Development restrictions - prohibit or minimize development reducing infiltration through impervious surface limitations, clustered development preserving recharge areas, soil compaction prevention, and drainage maintaining natural flow paths and infiltration;
NH 6S-22.3	Low Impact Development requirements - mandate LID techniques including bioretention facilities, permeable pavement, preservation of natural depressions, dispersion of roof runoff, and retention of native vegetation
NH 6S-22.4	Mandatory Drought Preparedness and Vulnerability Assessment As required by ESHB 1181, conduct comprehensive water resource vulnerability assessment addressing: reduced summer stream flows (projections show June-

	<p>October flows consistently below historical levels by 2040s); declining snowpack storage (20% loss per 1°C warming, with Yakima Basin losing 12-27% snowpack under +1-2°C scenarios); increased water demand from temperature increases (+1.18°C to +3.52°C by end of century); frequency of water shortage years (increasing from historical 14% to 32-77% depending on scenario and timeframe); unprecedented senior water rights shortfalls (2-3% frequency by mid-century); groundwater sustainability under increased pumping during drought; and ecosystem water needs including in-stream flows and cold-water refugia for temperature-sensitive species.</p> <p>Assessment shall use best available science from University of Washington Climate Impacts Group, U.S. Bureau of Reclamation Yakima Project modeling, USGS streamflow projections, NOAA climate scenarios, and SNOTEL snowpack monitoring. Update assessment every 5 years during Comprehensive Plan periodic review under RCW 36.70A.130 to incorporate new climate projections and observed hydrologic trends.</p>
NH 6S-22.5	Managed Aquifer Recharge support - establish streamlined permitting for MAR projects demonstrating net benefit to aquifer storage, summer base flows, well reliability, and water quality (approaches include surface infiltration basins, aquifer storage and recovery, irrigation efficiency with recharge dedication, and floodplain reconnection). Recognize CARAs' dual function for flood storage and drought resilience through groundwater recharge sustaining summer base flows, domestic wells, agricultural irrigation, and ecosystem water needs.
NH 6S-22.6	Integration with Other Climate Hazards: Wildfire policies (drought increases fire risk); Extreme heat policies (compounding drought-heat stress); Flooding policies (altered precipitation timing); Surface water policies (maintaining flows during low-water); Agricultural viability policies (working lands adaptation); Vulnerable populations policies (equitable resource access).

- 1
- 2 [Extreme Heat](#)
- 3
- 4 [PURPOSE STATEMENT NS-22](#)

1 *Extreme heat hazard areas present increasing risks to public health, vulnerable populations,*
2 *agricultural workers, infrastructure, and ecosystems as climate change intensifies temperature*
3 *extremes, heat wave frequency, and duration across Yakima County. Planning for extreme heat*
4 *hazards is required by ESHB 1181 climate planning mandates under RCW 36.70A.070(8) and*
5 *necessary to protect community health and reduce heat-related mortality and morbidity. Extreme*
6 *heat hazards include urban heat islands with elevated surface and ambient temperatures, areas*
7 *lacking tree canopy and vegetation cooling, outdoor work locations with inadequate worker*
8 *protections, neighborhoods with limited access to cooling resources, areas vulnerable to heat-*
9 *related power outages, and communities with high concentrations of heat-sensitive populations*
10 *including elderly residents, low-income households, outdoor agricultural workers, and individuals*
11 *with chronic health conditions. Management of extreme heat hazards must include approaches*
12 *based on Best Available Science under RCW 36.70A.172, climate-adjusted temperature*
13 *projections and heat wave frequency modeling, urban heat island mitigation through tree canopy*
14 *preservation and expansion, cool surface materials and reflective roofing standards, access to*
15 *cooling centers and public facilities during heat emergencies, heat-health warning systems and*
16 *public education.*

GOAL NHS 7²³:	Protect public health, safety, and welfare by identifying and mitigating extreme heat hazards, prioritizing vulnerable populations and outdoor workers, through climate-resilient planning, equitable resource distribution, and evidence-based heat adaptation strategies.
POLICIES:	
NH 7S-23.1	Apply Best Available Science, including climate-adjusted temperature projections, heat wave frequency modeling, and local heat vulnerability assessments, when planning for extreme heat hazards as required by RCW 36.70A.172.
NH 7S-23.2	Identify and map extreme heat hazard areas, including urban heat islands, areas with inadequate tree canopy, neighborhoods with limited cooling access, and locations with high concentrations of heat-vulnerable populations.
NS23.3	DELETED
NS23.4	DELETED
NH 7S-23.35	Preserve and expand urban tree canopy in high-heat areas through tree preservation ordinances, planting programs, and development standards that prioritize shade in parking lots, streetscapes, and public spaces.
NH 7S-23.46	Promote cool surface materials and reflective roofing in new development and redevelopment projects, particularly in urban heat islands and areas with concentrated vulnerable populations.
NH 7S-23.57	Integrate green infrastructure, including parks, green roofs, permeable surfaces, and vegetated corridors, into land use and capital facilities planning to reduce ambient temperatures and provide cooling benefits.
NH 7S-23.68	Reduce impervious surfaces and urban hardscape through Low Impact Development (LID) standards and design guidelines that minimize heat retention.

Commented [KW4]: Mainly a "City" task. ID County Heat Islands

<u>NH 7S-23.79</u>	Prioritize extreme heat mitigation resources and investments in neighborhoods with high concentrations of elderly residents, low-income households, individuals with chronic health conditions, and communities with limited access to air conditioning or cooling facilities.
<u>NH 7S-23.810</u>	Ensure equitable distribution of cooling resources, including proximity to shade, tree canopy, parks, and cooling centers, across all communities with emphasis on environmental justice areas.
<u>NH 7S-23.911</u>	Coordinate with social service providers, community health centers, and emergency management to identify heat-vulnerable individuals and provide targeted outreach, assistance, and resources during extreme heat events.
<u>NH 7S-23.102</u>	Enhance energy system reliability and resilience to prevent heat-related power outages that would compromise access to cooling, particularly during extreme heat events when demand peaks and vulnerable populations depend on air conditioning.
<u>NH 7S-23.113</u>	Adaptively manage extreme heat programs based on monitoring results, emerging climate science, evolving Best Available Science, and lessons learned from heat events to continuously improve community resilience.
<u>NH 7S-23.124</u>	Update extreme heat hazard assessments and adaptation strategies periodically to reflect changing climate conditions, demographic shifts, and new scientific understanding as required by ongoing climate planning mandates.

1

2 **Multi-Hazard**

3

4 *Multiple natural hazards threaten Yakima County communities, often occurring simultaneously*
 5 *or in cascading sequences. Comprehensive hazard planning is required by the Growth*
 6 *Management Act and ESHB 1181 climate mandates and essential to public safety. Multi-hazard*
 7 *planning addresses flooding, wildfire, drought, extreme heat, geologic hazards, and their*
 8 *interactions and cumulative effects. Multi-hazard approaches must include coordination based*
 9 *on Best Available Science, integrated risk assessment, and comprehensive emergency*
 10 *management systems for implementation.*

11

GOAL NH 87:	Protect property, life, and health from impacts of multiple and cumulative natural hazards.
POLICIES:	
NH 87.1	Ensure proposed subdivisions, other development, and associated infrastructure are designed at a density, level of site coverage, and occupancy to preserve the structure, values, and functions of the natural environment or to safeguard the public from hazards to health and safety.
NH 87.2	Encourage mechanisms to restrict or minimize development in high-risk hazard areas to protect public health and safety.
NH 87.3	Maintain existing infrastructure to reduce the risk of infrastructure fail during a natural disaster.

NH 87.4	Locate critical facilities and infrastructure outside of high-risk hazard areas.
NH 7.5	Ensure new developments in high-risk hazard areas include secondary egress.
NH 7.6	Develop processes and procedures for streamlining projects intended to mitigate for natural hazards.

1
2 **Disaster Recovery**
3

4 *Disaster recovery planning is essential to helping Yakima County communities rebuild safely and
5 equitably after natural disasters. Recovery planning is required by emergency management law
6 and critical to long-term community resilience. Disaster recovery includes post-event response
7 coordination, damage assessment, rebuilding standards, economic recovery support, and long-
8 term adaptation strategies. Recovery planning must include approaches based on Best Available
9 Science, pre-disaster recovery frameworks, and Build Back Better principles for implementation.*

GOAL	NH	Be prepared to recover from a major natural disaster.
POLICIES:		
NH 98.1		Implement Recovery Plan to guide the redevelopment, public participation process, and long-term recovery after a natural disaster.
NH 98.2		Provide a process and procedure to streamline projects intended to provide relief and recovery from a natural disaster while still complying with local, state and federal regulations.

11
12 **NATURAL HAZARDS RESILIENCY IMPLEMENTATION**
13
14 *Effective implementation of this Climate Resiliency Element requires coordinated action across multiple county departments, integration with all Comprehensive Plan elements, updates to development regulations, capital facility investments, interagency coordination, community engagement, and sustained commitment to climate-informed decision-making. The County shall develop an implementation strategy that identifies priority actions, responsible departments, timelines, funding sources, and performance metrics. Implementation will be coordinated with updates to Critical Areas Ordinances, Shoreline Master Program provisions where applicable, Capital Facilities Plan, and other development regulations to ensure consistency and mutual support of climate resilience objectives. The Climate Resiliency Element establishes one overarching goal and fifteen implementing policies that guide Yakima County's response to climate change impacts. These goals and policies are detailed here in the Policy and Goals section of this chapter and address the following topic areas:*

GOAL	NHS	Provide guidance and reasonable processes to implement effective resiliency and sustainability policies.
POLICIES:		
NHS 10.1		Revise Natural Hazard programs and policy to be compatible with Critical Areas Ordinances, Comprehensive Flood Hazard Management Plans, Multi-

	<u>Jurisdictional Hazard Mitigation Plans, and other Comprehensive Plan elements as necessary.</u>
<u>NHS 10.2</u>	<u>Incorporate climate-informed flood projections, post-wildfire hazards, temperature impacts on fish and wildlife habitat, and other climate considerations.</u>
<u>NHS 10.3</u>	<u>Update development regulations to address wildfire risk in high-hazard areas.</u>
<u>NHS 10.4</u>	<u>Integrate climate resilience standards into capital facilities planning and design manuals</u>
<u>NHS 10.5</u>	
<u>NHS 10.6</u>	<u>Develop stormwater management standards emphasizing green infrastructure</u>
<u>NHS 10.7</u>	<u>Coordinate with agencies and use BAS to develop a water resource vulnerability assessment accounting for projected changes in snowpack, streamflow timing, and demand</u>
<u>NHS 10.8⁷</u>	<u>Complete wildland-urban interface mapping and wildfire risk assessment for areas within and adjacent to forestlands.</u>
<u>NHS 10.9⁷</u>	<u>Assess infrastructure vulnerability to extreme heat, flooding, and other climate hazards</u>
<u>NHS 10.10⁷</u>	<u>Establish coordination protocols with State Conservation Commission and local conservation districts for agricultural technical assistance programs</u>
<u>NHS 10.11⁷</u>	<u>Partner with Washington State Department of Ecology on implementation of Climate Resilience Strategy actions</u>
<u>NHS 10.12⁷</u>	<u>Coordinate with irrigation districts, tribes, and adjacent jurisdictions on water resource planning and drought preparedness</u>
<u>NHS 10.13⁷</u>	<u>Work with Yakima Health District and community organizations to develop extreme heat response and wildfire smoke protection programs</u>
<u>NHS 10.14⁷</u>	<u>Create online resources and mapping tools to help property owners understand climate risks and adaptation options</u>
<u>NHS 10.15⁷</u>	<p><u>The County will pursue multiple funding strategies to support implementation including:</u></p> <ul style="list-style-type: none"> <u>State grants from Department of Ecology, Commerce, Conservation Commission, and other agencies</u> <u>Federal funding through FEMA hazard mitigation programs, US Bureau of Reclamation, National Oceanic and Atmospheric Association, US Fish and Wildlife Service, US Geological Survey, USDA conservation programs, and infrastructure legislation</u> <u>Climate Commitment Act revenues where available for eligible projects</u> <u>Integration of climate resilience into existing capital improvement programs</u> <u>Partnership leverage with irrigation districts, conservation districts, tribes, flood control zone districts, and non-profit organizations and other special purpose districts.</u> <u>Private sector engagement for agricultural adaptation and working lands conservation</u>

<u>NHS 10.16</u>	<u>Prepare progress reports on implementation of Climate Resiliency Element policies and actions</u>
<u>NHS 10.17</u>	<u>Update Comprehensive Plan during periodic reviews required under RCW 36.70A.130 to incorporate new climate projections and lessons learned</u>

1
2
3
4