

Hazard Addressed	Action and Description	Priority Rating
Earthquake Hazard	<p>Conduct a voluntary non-structural earthquake readiness inspection for all critical facilities on an annual basis.</p> <p>Tumwater Staff will ensure that all critical facilities are prepared for the possibility of an earthquake. An annual inspection should be completed.</p>	TUM-EH- 4 (34)
Storm Hazard	<p>Inspect all trees within falling distance of the four City-owned critical facilities.</p> <p>Critical facilities include both fire stations, the public works shop, the Police Department/City Hall building), related equipment such as generators, and utilities such as power and communication lines. The removal of hazard trees that could damage, destroy, or even hinder the operation of critical facilities will help to keep critical facilities functioning properly when they are needed the most.</p>	TUM-SH-8 (29)
Flood Hazard	<p>Floodproof the Tumwater Valley golf course clubhouse structure to FEMA standards to stop the infiltration of floodwaters during a flood event.</p> <p>The clubhouse is a City owned property that underwent a multimillion-dollar remodel in 2009. Floodproofing the structure could prevent damage to the structure. Evaluations on floodproofing methods should include costs, benefits, impacts to nearby properties including the Tumwater Valley Athletic club, as well as impacts to the floodplain as a whole.</p>	TUM-FH- 11 (25)

Hazard Addressed	Action and Description	Priority Rating
Wildfire Hazard	<p>Establish firebreaks and routine maintenance on Tumwater Hill adjacent to City property, the newly created City park, and the elementary school.</p> <p>Tumwater Hill is at high risk for wildfire due to slopes, vegetation and tree cover, and development. Establishing firebreaks next to the new houses in this area and then periodically cutting the remainder brush would help to minimize damages in the event of a localized wildfire.</p>	TUM-WH-10 (27)
Earthquake Hazard	<p>Have a professional engineer or qualified person assess infrastructure for earthquake vulnerability.</p> <p>Inspections and assessments of key infrastructure, such as bridges, water towers and pump stations, sewer lift stations, and water/sewer main lines, should be completed in regards to their ability to withstand earthquakes will help to prioritize projects and upgrades.</p>	TUM-EH-3 (36)
Volcanic/Lahar	<p>Keep a supply of air filters on hand for critical equipment, generators, and vehicles in case of ash fall, fire, or wildfire.</p> <p>In order to keep critical facilities operating during a volcanic ash fall situation or fire, emergency operations equipment such as police vehicles, fire trucks, medic one units, the HVAC system for the Emergency Operations Center, and generators supporting critical facilities, etc., should have extra air filters on hand. Continued operation of emergency response equipment and critical facilities during a disaster is very important to the health, safety, and welfare of the citizens of Tumwater.</p>	TUM-VH-9 (28)

Hazard Addressed	Action and Description	Priority Rating
Flood Hazard	<p>Reforest corridors along the Deschutes River and stream shorelines</p> <p>Reestablish forested edges along river and stream shorelines to reduce the impacts of flood and the force of water. Planting and revegetation will help to reduce erosion and bank stabilization.</p>	TUM-FH- 12 (23)
Flood Hazard	<p>Continue to be actively involved in inter-jurisdictional flood hazard reduction efforts where Tumwater and other jurisdictions are located within the same basin.</p> <p>Tumwater, being located at the mouth of the Deschutes River, is directly affected by activities occurring upstream and "downstream." Tumwater should work closely with upstream jurisdictions as well as Olympia, which is "downstream", to ensure that any activities in these other jurisdictions do not adversely affect Tumwater.</p>	TUM-FH-3 (36)
Flood Hazard	<p>Draft a prioritized list of residences Tumwater would acquire (buyout) if state or federal monies are available.</p> <p>Frequently flooded properties and structures can become a health and life safety issue for both residents, emergency responders, and the community in general. The City of Tumwater should work with regional, state, and federal agencies in determining which residences should be purchased and how the funding for such actions will be acquired.</p>	TUM-FH-12 (23)
Flood Hazard	<p>Mail flood insurance information to owners of properties located within a floodplain and to residents who live in a floodplain.</p> <p>Knowledge of flood insurance opportunities and other related information will be helpful for residents and property owners who may not be aware of the options.</p>	TUM-FH-13 (22)

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Flood Hazard	<p>Investigate funding sources for projects that will reduce or eliminate damage from flooding for streets, structures, utilities and appurtenances, and other infrastructure within areas prone to flooding.</p> <p>Elevating or other means of floodproofing will reduce damages, reduce or eliminate damages to provision of services (utilities), and allow travel of emergency vehicles as well as daily traffic during periods of flooding.</p>	TUM-FH-5 (33)
Wildfire Hazard	<p>Adopt the Washington Wildland-Urban Interface Code (WWUIC), International Building Code (IBC), and International Residential Code (IRC) to meet WUI requirements.</p> <p>To reduce the loss of life and property due to wildfires, the WWUIC establishes minimum state requirements for land use and built environment in designated wildland-urban interface areas. These requirements include specific fire resistant materials for structures and limiting the amount and type of trees and vegetation in “defensible space” within 30 to 100 feet of structures.</p>	TUM-WH-1
Wildfire Hazard	<p>Update the City of Tumwater map to show wildland urban interface map layers to coincide with the new Building Code Update.</p> <p>All development and building permit applications submitted after the adoption of the WWUIC will need to be evaluated by the City’s building official to determine if they are within the wildland-urban interface area. If development or building permit applications are within these mapped areas, then the WWUIC requirements apply. Updating the City’s online map will help inform citizens and developers if they are within a wildland urban interface area and need to meet WWUIC requirements.</p>	TUM-WH-5 (33)

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Wildfire Hazard	<p>Routinely inspecting the functionality of fire hydrants.</p> <p>Water is a key factor in suppressing fire. Ensuring fire hydrants are functioning correctly is critical in reducing the spread of wildfires and increasing public safety.</p>	TUM-WH-9 (28)
Wildfire Hazard	<p>Incorporate proper species selection, planting, and maintenance practices into City landscape code updates.</p> <p>Establishing a drought tolerant tree and plant species list decreases the chances of landscaping vegetation becoming wildfire fuel.</p>	TUM-WH-2
Storm Hazard	<p>Reduce heat islands.</p> <p>By implementing updates to the City of Tumwater Tree and Vegetation Code, Landscape Code, and Street Tree code, proper tree and vegetation planting and maintenance will help reduce the effects of warming developed urban areas known as “Heat Islands”. Increasing tree and vegetation cover lowers surface and air temperatures by providing shade and cooling and reducing the amount of energy needed to cool buildings, resulting in improved reliability of the electric system, particularly during extreme weather events.</p>	TUM-SH-3 (36)
Landslide Hazards	<p>Review and Update Critical Areas Ordinance during the Periodic Update</p> <p>During the periodic update, staff will review the Critical Area Checklist and City of Tumwater Municipal Code to ensure Geological/Landslide hazards are minimized using the most current development regulations.</p>	TUM-LH-6 (31)

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Storm Hazard	<p>Reduce damage to utilities by updating City development code.</p> <p>By updating land use and environmental regulations to support vegetation management activities that improve reliability in utility corridors, the risk of having critical infrastructure damaged during a storm is reduced. The landscape code and other ordinances will be modified to encourage appropriate plantings near overhead power, cable, and phone lines.</p>	TUM-SH- 7 (30)
Earthquake Hazard	<p>Include retrofitting/replacement of critical system elements in Capital Improvements Plan (CIP)/CFP</p> <p>Repair, replacement, and improvements to existing critical systems and critical infrastructure with seismic retrofits are included as part of the City of Tumwater 2020 Water System Plan. A seismic backbone map was created to identify critical structures and the distribution systems that would be used to serve the public after a seismic event.</p>	TUM-EH-6 (31)
Multiple Hazards	<p>Encourage the public to be prepared to be self-sufficient for the first 72 hours after a disaster.</p> <p>The City continues to promote emergency preparedness through our City website and in partnership with Thurston County Emergency Management. The City will schedule an annual distribution of Emergency Preparation information. On September 23, 2023, the City is participating in the Emergency Preparedness Expo in conjunction with the Thurston County Emergency Management Council.</p>	TUM-MH-4 (34)

Hazard Addressed	Action and Description	Priority Rating
<p>Earthquake Hazard</p>	<p>Install auxiliary generator to power City main Well/Water supply.</p> <p>Water is critical for public health and safety. In case of an earthquake and loss of power, a backup generator will keep the well functioning and in service.</p>	<p>TUM-EH-6 (31)</p>
<p>Storm Hazard</p>	<p>Install solar power and battery storage at City Hall and Tumwater Library (secondary emergency operations center).</p> <p>Tumwater City Hall and Library are critical facilities. In an event of a storm, solar power will keep the Tumwater City Hall and police station functioning during an emergency.</p>	<p>TUM-SH- 7 (30)</p>