



**Eugene City Council**

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# EUGENE CITY COUNCIL AGENDA

September 16, 2015

12:00 PM CITY COUNCIL WORK SESSION

Harris Hall

125 East 8<sup>th</sup> Avenue

Eugene, Oregon 97401

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Meeting of September 16, 2015;  
Her Honor Mayor Kitty Piercy Presiding

### Councilors

George Brown, President	Pat Farr, Vice President
Mike Clark	George Poling
Chris Pryor	Claire Syrett
Betty Taylor	Alan Zelenka

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### CITY COUNCIL WORK SESSION

Harris Hall

12:00 p.m.    A.    **WORK SESSION:  
Earthquake Preparedness**

12:45 p.m.    B.    **WORK SESSION:  
Stormwater Program Update**

*\*time approximate*

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# EUGENE CITY COUNCIL

## AGENDA ITEM SUMMARY




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### Work Session: Earthquake Preparedness

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Meeting Date: September 16, 2015  
 Department: Central Services  
[www.eugene-or.gov](http://www.eugene-or.gov)

Agenda Item Number: A  
 Staff Contact: Myrnie Daut  
 Contact Telephone Number: 541-682-5790

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#### ISSUE STATEMENT

The July 4 magnitude 4.2 earthquake and recent national and local media attention surrounding the Cascadia Subduction Zone has prompted many questions about earthquake preparedness and mitigation activities in Eugene. This item provides information on activities related to earthquake preparedness.

#### BACKGROUND

The City of Eugene is involved in earthquake preparedness on many levels including planning, training, exercises, community outreach and emergency response volunteer coordination, all of which play a part in our preparations for the Cascadia earthquake and other disasters. We are working closely with community partners in all of this work. Key projects are summarized below.

[Eugene-Springfield Multi-Jurisdictional Natural Hazards Mitigation Plan](#): Eugene and Springfield coordinate planning and implementation of a joint Natural Hazards Mitigation Plan (NHMP) that addresses multiple natural hazards including flood, wildfire, and earthquake. The latest update of the *Eugene-Springfield Multi-Jurisdictional Natural Hazards Mitigation Plan*, adopted by the City Council in February 2015, includes a climate and hazards vulnerability assessment of 12 essential sectors of the community, including drinking water, electricity and transportation. The vulnerability assessment involved many community members and City staff and was used to inform the development and prioritization of specific mitigation activities, including earthquake-specific mitigation activities such as seismic evaluation of bridges and critical facilities, as well as other activities that would mitigate earthquake and other risks. The action items in the Eugene-Springfield NHMP are consistent with the priorities identified in the Oregon Resilience Plan, discussed below. Priority earthquake mitigation actions include:

- Conduct seismic evaluations of Eugene and Springfield bridges and prioritize bridges to be retrofitted or replaced;
- Conduct seismic evaluations of critical facilities and prioritize facilities/services to be retrofitted, relocated, or replaced;
- Develop a long-term plan to underground, relocate, or “harden” key electric distribution lines along critical corridors to reduce interruption to the transportation system and to reduce risk of outages from severe winter storms or earthquakes;
- Develop Continuity of Operations (COOP) Plans for City operations;

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- Assess the seismic resiliency of local fossil fuel distribution.

The City is actively working on several of these priority action items. The Public Works Department has contracted with OBEC, an engineering consulting firm, to conduct a seismic analysis of 30 City-owned bridges and prepare a report listing seismic liabilities and recommendations for each bridge along with an estimated cost of their seismic retrofitting or replacement recommendations. The Central Services Department has begun work on a similar analysis of critical City facilities.

[Eugene-Springfield Multi-Jurisdictional Emergency Operations Plan](#): In October 2014, the Cities of Eugene and Springfield adopted the first joint *Eugene-Springfield Multi-Jurisdictional Emergency Operations Plan*. The new plan follows FEMA format and includes a three-year work plan for the development of 19 Emergency Support Functions as well as additional Operational, Support and Incident Annexes. Working with the City of Springfield and community partners, staff updated or developed 14 annexes to the EOP in FY15. Twelve additional annexes are scheduled to be updated or developed in FY16.

Continuity of Operations Plans (COOP): Staff is developing Continuity of Operations Plans for all City departments to help ensure that the most essential missions after a disaster will continue to be able to be fulfilled. The first phase of COOP planning with the Police Department Technical Services Division has been completed, including Central Lane 911, and Central Services Divisions' (HR, Facilities, ISD, Municipal Court and Risk) participation in a pilot project. Phase 2 is underway, with the goal of having plans developed by all departments by the end of 2015.

Community Emergency Response Teams (CERT): The City of Eugene has coordinated the Eugene-Springfield Area CERT program since 2004 and holds semi-annual academies for new volunteers. The next academy begins on October 5. The CERT program provides training to community members to increase pre-disaster preparedness and enhance post-disaster resilience. CERT volunteers are trained to aid first-responders in the event of a disaster and the Eugene Springfield Fire Department pays a key role in the CERT volunteer training program. To date over 450 CERT volunteers have been trained.

Community Outreach Program: Given the expected magnitude of the Cascadia earthquake, it is very important to help community members prepare their homes and families for disaster. The Emergency Management program provides disaster preparedness education and training for the community. In the past year, many preparedness presentations have been made to neighborhood associations and other community groups, and assistance provided to the Southeast Neighbors in the development of a Neighborhood Disaster Plan that is a model for other neighborhood groups. In response to the huge demand following the University of Oregon's (UO) public forum on "The Big One," staff is partnering with the U of O's Oregon Partnership for Disaster Resilience in order to expand the scope of community outreach.

In addition, staff has actively participated in the Lane Preparedness Coalition and this year partnered in the establishment of the Lane County Community Organizations Active in Disaster (COAD), a collaborative effort led by Food for Lane County, the American Red Cross, the City of Eugene and Lane County.

Employee Preparedness: The City provides disaster preparedness training for employees annually and encourages employees to create family emergency plans and acquire emergency supplies for their families. *For the last three years, the City has purchased emergency supplies* which employees can purchase from the City at the City's cost in order to help employees prepare their families and homes for a disaster and increase the likelihood that our essential employees will be able to report to work during a disaster. The employee preparedness emergency supply initiative is currently underway as part of National Preparedness Month activities.

Training and Exercises: The City of Eugene requires FEMA training for employees who will be involved in disaster response and actively sponsors training opportunities. In the past year, nine different trainings have been hosted for City employees and for employees of other agencies. Two major emergency training programs for City staff are being held this year in preparation for the June 2016 FEMA-coordinated Cascadia Subduction Zone exercise called "Cascadia Rising". The exercise is a multi-day simulation in which Emergency Operations Centers at all levels of government and the private sector will activate to coordinate simulated field response operations. Eugene Emergency Management participated in a successful State Homeland Security Grant application with Lane and several other counties which will provide consulting services to assist with planning for and evaluation of the Cascadia Rising exercise.

Community Partnerships: City staff is working on earthquake preparedness with a variety of partners in both the public and private sectors. For example, staff is working with community partners on the following activities:

- National Preparedness Month public outreach;
- Eugene Water & Electric Board's (EWEB) Emergency Water Storage Container distribution program and emergency water points of distribution;
- Emergency Preparedness Fair to be held in conjunction with the Disaster Resilience Trials in October;
- The Natural Hazards Mitigation Plan (NHMP) Subcommittee's work on mitigation activities. Eugene Emergency Management staff coordinates the NHMP subcommittee which includes representatives from EWEB, Lane County, the University of Oregon, Lane County and the local hospitals.

In addition, staff works with the Lane Preparedness Coalition and Community Organizations Active in Disasters (COAD) on preparedness activities, as mentioned above.

## **RELATED CITY POLICIES**

Numerous City policies and plans offer opportunities to mitigate seismic risk, including:

- Eugene Comprehensive Plan
- Capital Improvement Program
- Facility Management and Strategic Plans

## **State Planning Efforts**

*Oregon Resilience Plan*: The State of Oregon developed the 2013 *Oregon Resilience Plan* on reducing risk and improving recovery for the next Cascadia earthquake and tsunami. The *Oregon Resilience Plan* drew on statewide expertise that included Jeff Lankston from Eugene Public Works, Andre LeDuc from the University of Oregon, and Mel Damewood of EWEB. The primary recommendations include:

1. Plan for a 50-year implementation horizon to take advantage of long-term investments and to make large investments affordable;
2. Undertake comprehensive assessments of the key structures and systems that underpin Oregon's economy;
3. Launch a sustained program of capital investment in Oregon's public structures;
4. Craft a package of incentives to engage Oregon's private sector in efforts to advance seismic resilience;
5. Update Oregon's public policies.

#### **Related State Bills Passed in 2015 Legislative Session**

HB2270 created the office of "State Resilience Officer" in office of Governor to direct, coordinate and oversee seismic safety and resilience planning and preparation by state agencies.

HB 5005 makes available \$175 million for seismic improvements at schools across the state. The bill also allocates \$30 million for retrofits of public safety buildings.

SB 85 authorizes local governments to implement programs to make loans or facilitate private financing of seismic rehabilitation of multi-family residential dwellings or commercial or industrial buildings by property owners.

#### **COUNCIL OPTIONS**

No City Council action or recommendations are suggested at this time.

#### **CITY MANAGER'S RECOMMENDATION**

No recommended action at this time. As implementation of the NHMP continues, staff may request funding of specific NHMP action items.

#### **SUGGESTED MOTION**

No council action or motions are suggested. This item is informational only.

#### **ATTACHMENTS**

- A. Eugene-Springfield Natural Hazards Mitigation Plan Action Item Table

#### **FOR MORE INFORMATION**

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Hazard	Action Name	Problem Statement	Mitigation Action	Implementation Leads and Partners	Estimated Cost	Timeline
Dam Failure	Dam safety evacuation	There is not currently an evacuation plan to address dam failure – or other mass evacuation needs. Routes, notification, and awareness are all required.	See Multi Hazard: Evacuation	See Multi Hazard: Evacuation	See Multi Hazard: Evacuation	See Multi Hazard: Evacuation
	Dam safety notification	If electric supply were interrupted (due to an earthquake, for example) there are few methods to communicate with the public if a dam failure were to occur in the Southern Willamette Valley. The method to receive information from the Army Corps of Engineers a dam breach is also susceptible to failure.	Once evacuation routes are established, a) develop and install robust notification system(s); and b) create a community awareness campaign to increase awareness of dam risks among all residents and specifically i) transient student population, and ii) non-English speaking residents.	Lead: City of Eugene Office of Emergency Management, City of Springfield Office of Emergency Management. Partners: Lane County; EWEB; Army Corps of Engineers.	Varies widely depending on notification system used	by 2025
	Inundation Maps For Planning	The Army Corps of Engineers has created inundation maps based on dam failure scenarios. Those maps are available to local emergency managers but are not in local GIS programs to facilitate evacuation planning and other emergency planning needs	Seek digital versions of inundation maps from Army Corps of Engineers. Seek permission to add inundation maps as a layer within local jurisdiction GIS programs.	Lead: City of Eugene Office of Emergency Management, City of Springfield Office of Emergency Management. Partners: Army Corps of Engineers; Lane County	Staff time	By 2016
	Dam Seismic Assessment [ACTION COMPLETED]	The Army Corps of Engineers conducts seismic assessments of dams every 15 years. Eugene and Springfield Emergency Managers are not familiar with the results from the most recent assessment.	Obtain details of the most recent dam seismic assessments for the dams upstream of Eugene/Springfield.	Lead: City of Eugene Office of Emergency Management. Partner: Army Corps of Engineers; Lane County Sheriff's Office.	Staff time	By 2016
Earthquake	Local Transportation Infrastructure Seismic Evaluation [ACTION UNDERWAY]	Long term surface transportation impairments can cause cascading system failures and can inhibit evacuation, response, and recovery. A large-scale earthquake has the potential to severely damage local bridges and other transportation infrastructure. While state and federal bridges may have had seismic inspections, there is currently no coordinated effort to inspect, record, and seismically retrofit local bridges. Additionally, some funding sources may not be available to local jurisdictions unless they have already developed a prioritized list of bridges to be retrofitted, or replaced.	Over the next 5 years, a) utilize accepted Oregon Department of Transportation methodology, as-built drawings, and physical inspections, to evaluate the Eugene and Springfield bridges (Vehicular and pedestrian) for seismic vulnerability, and record results centrally; b) Develop a prioritized list of bridges (cross-referenced with critical travel corridors) to be retrofitted or replaced; c) Seek funding to implement retrofitting/replacement.	Leads: City of Eugene Office of Emergency Management, City of Springfield Development and Public Works. Partners: Oregon Dept. of Transportation; Private engineering firms	\$2,000 - \$3000 per bridge with As-Built drawings; \$3,000 - \$5,000 w/o As-Built drawings. NOTE: Price is for assessing an individual bridge. If assessing more than one bridge, the per-bridge price will be significantly lower.	With as-built drawings, all of Eugene's 54 bridges, and seven of Springfield's 14 bridges, could be assessed in 2-3 months. Eugene has as-built drawings for about 50% of their bridges. Springfield had seismic evaluations performed on six of its' vehicular bridges in 2013/14.

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Hazard	Action Name	Problem Statement	Mitigation Action	Implementation Leads and Partners	Estimated Cost	Timeline
Earthquake	Seismic Evaluation of Critical Facilities [ACTION UNDERWAY]	Many critical facilities in Eugene/Springfield have not been evaluated for seismic stability. A large-scale earthquake has the potential to severely damage local critical facilities, which can inhibit response and recovery efforts. Some funding sources may not be available to local jurisdictions unless they have already developed a prioritized list of critical facilities/services to be retrofitted, replaced, or relocated.	Over the next 5 years, A) Develop a prioritized list of critical facilities, consistent with the Critical Infrastructure and Key Resources developed by the Federal Emergency Management Agency, such as the Eugene Airport, the Eugene/Springfield Metropolitan Wastewater Commission Water Pollution Control Facility, the underground wastewater and stormwater collection and conveyance systems, and regional 9-1-1 and radio communication systems, to be inspected for seismic vulnerability; B) Develop a prioritization of facilities to be evaluated for seismic stability; C) Seek funding for evaluations; D) Utilizing building and infrastructure construction drawings and individual inspections, evaluate these facilities for seismic vulnerability and record the inspection results centrally; and E) Develop a prioritized list of facilities/services to be retrofitted, relocated, or replaced.	Leads: City of Eugene Office of Emergency Management, City of Springfield Office of Emergency Management. Partners: 4J, EWEB, MWMC, Private engineering firms.	\$100k - \$500k	Develop the list within 1 year of plan adoption. Begin to conduct seismic evaluations of priority facilities within 5 years.
	Seismic evaluation of Non-Critical facilities (FEMA 154)	Multiple publicly-owned facilities are crucial for maintaining government operations following an earthquake. This effects both continuity of government, continuity of operations planning and response and recovery planning.	A) Develop a seismic rapid visual screening program for public buildings; B)seek funding to support screening program; C) begin implementing screening to inform local mitigation, response, continuity of operations, and recovery, planning efforts.	Leads: City of Eugene Office of Emergency Management, City of Springfield Office of Emergency Management	unknown	Strive to develop rapid visual screening program by 2020
	Non-Structural seismic evaluation (FEMA E74)	All critical and non-critical facilities have non-structural components that may cause damage or injury during a seismic event.	Develop a program to systematically assess and retrofit non-structural components of public facilities. Seek funding for porgram to conduct evaluations and retrofits.	Leads: City of Eugene Office of Emergency Management, City of Springfield Office of Emergency Management	unknown	Develop program by 2025
	Home seismic retrofits	Most of the homes in Eugene/Springfield were built before requirements existed for seismic construction methods. These homes will be ill prepared when a large Cascadia earthquake hits the area. Impacts to household financial stability and the local economy would be severe.	Explore the possibility of developing a home seismic upgrade/retrofit program for Eugene/Springfield. Consider a marketing program, incentives, loans, rebates, or other support options.	Leads: City of Eugene Office of Emergency Management, City of Springfield Office of Emergency Management. Partner: Lane County	unknown	Consider options by 2020
Flood	Flood Maps [ACTION UNDERWAY]	The Eugene/Springfield metro area flood maps are based on data that is approximately 50 years old. The availability of LIDAR data and other technologies offers superior ability to project and map riverine flooding in the area. FEMA will update maps as resources allow but will prioritize communities that a) indicate an interest in updating local flood maps, and b) provide funding or other resources to support the updating of flood maps.	Actively seek FEMA updates to the Eugene/Springfield floodplain maps	Leads: City of Eugene Office of Emergency Management, City of Springfield Office of Emergency Management. Partners: Lane County, FEMA, Lane Council of Governments	unknown	Depends on FEMA timelines

Hazard	Action Name	Problem Statement	Mitigation Action	Implementation Leads and Partners	Estimated Cost	Timeline
Flood	Flood control levee certification and maintenance [ACTION ONGOING]	Eugene and Springfield both operate flood control structures. Structures need Army Corps of Engineers Certification and FEMA accreditation to be incorporated into updates of floodplain maps. The regulations surrounding certification and accreditation changed in 2013.	Seek and maintain certification of levees and other flood control structures within Eugene and Springfield	Lead: City of Springfield Development and Public Works	Unknown	unknown
Flood	Flood Insurance Study [ACTION UNDERWAY]	Eugene and Springfield do not have updated digital flood maps for Amazon Creek, Cedar Creek, or the McKenzie River. FEMA is in the process of updating the Flood Insurance Study and developing digital flood maps of these waterways.	Continue to support FEMA in updating the Flood Insurance Study, in selected areas, including Amazon and Cedar Creeks and the McKenzie River. Updated digital maps can provide easy access to flood information in the Eugene/Springfield metropolitan area and support a flood program that reflects the actual flood risk faced by the community.	Leads: City of Eugene Public Works Engineering, City of Springfield Development and Public Works. Partner: FEMA	Unknown	Ongoing
Flood	Repetitive Loss Records	While there are no repetitive loss properties in Eugene or Springfield, that may not yet be reflected in State and Federal databases.	Ensure the accurate locations of Repetitive Loss Properties have been accurately registered with FEMA.	Lead: City of Springfield Development and Public Works. Partners: Lane County, FEMA	Staff Time	
Flood	Explore Flood Mitigation Actions With Property Owners (upon request) [ACTION ONGOING]	Eugene and Springfield both have neighborhoods that are in the 100-year floodplain. However, not all structures are at risk of flooding because their main finished floor is above the base flood elevation, or other flood mitigation factors have been developed for the structure. Nevertheless, some property owners that are in the floodplain may want to develop mitigation measures to reduce their flood risk. Providing appropriate mitigation options with property owners upon their request will help inform property owners on how to reduce their risk from flooding and inform the cities of Eugene and Springfield on structures that need flood mitigation.	Provide flood risk literature for outreach. Send annual mailer to residents living within the 100 year floodplain describing actions property owners can take to protect themselves from flooding.	Leads: City of Eugene Public Works Engineering, City of Springfield Development and Public Works	Staff time, printing costs	Ongoing
Flood	Maintain Frequent Stormwater Flooding Location Inventory [ACTION ONGOING]	The cities of Eugene and Springfield have each developed an inventory of locations in the Eugene/Springfield Metro Area that are subject to frequent storm water flooding. In order to remain accurate and useful, the inventory should be updated regularly.	Regularly update inventory of locations in the Eugene/Springfield Metro area subject to frequent stormwater (urban, not riverine) flooding	Leads: City of Eugene Public Works, City of Springfield Development and Public Works	Staff time	Ongoing
Flood	Upgrade culverts [ACTION ONGOING]	Repetitive flooding can cause significant damage to roads and storm water infrastructure such as culverts, and can lead to road closures and expensive repairs. In addition, erosion caused by flooding of roads can degrade water quality.	For locations that experience regular flooding and significant damages or road closures, determine and implement mitigation measures such as upsizing culverts or storm water drainage ditches	Leads: City of Eugene Public Works, City of Springfield Development and Public Works	Varies	Varies

Hazard	Action Name	Problem Statement	Mitigation Action	Implementation Leads and Partners	Estimated Cost	Timeline
Flood	NFIP compliance [ACTION ONGOING]	The National Flood Insurance Program provides communities with federally-backed flood insurance to homeowners, renters, and business owners, provided that communities develop and enforce adequate floodplain management ordinances. In order to retain these benefits, the City of Eugene must continue to comply with NFIP requirements.	Continue compliance with the National Flood Insurance Program (NFIP) through enforcement of local floodplain ordinances.	Leads: City of Eugene Public Works Engineering, City of Springfield Development and Public Works	Staff time	ongoing
HazMat	HazMat Locations [ACTION UNDERWAY]	The Disaster Mitigation Act of 2000 requires communities to identify mitigation actions that address existing buildings and infrastructure [201.6(c)(3)(ii)]. Addressing hazardous materials locations can help minimize secondary hazards following a disaster.	Ensure that first responders continue to have readily available site-specific knowledge of hazardous chemical inventories in the Eugene/Springfield Metro Area through the development of an Extremely Hazardous Substance Plan developed with the Local Emergency Planning Committee.	Lead: Eugene/Springfield Fire/EMS Partner: Oregon State Regional HazMat Response Teams	unknown	ongoing
HazMat	HazMat Preparedness [ACTION UNDERWAY]	In order to provide effective response to hazardous materials incidents and maintain the safety of first responders, the cities of Eugene and Springfield need to continue emergency planning activities, response training, and equipment upgrades.	Enhance emergency planning, emergency response training and equipment to address hazardous materials incidents.	Lead: Eugene/Springfield Fire/EMS. Partners: Oregon State Regional HazMat Response Teams	Varies widely	ongoing
Landslide	Landslide Mapping [ACTION UNDERWAY]	Current landslide risk maps for the Eugene/Springfield area are based on dated topographic maps. LIDAR data is now available that can provide substantially better information about landslide risk in the region.	Update regional landslide risk maps using available lidar data	Lead: City of Eugene Office of Emergency Management, City of Springfield Development and Public Works. Partners: Oregon Department of Geology and Mineral Industries, Lane Council of Governments	\$50k	Seek to complete map updates by 2020
Landslide	Landslide Planning [ACTION UNDERWAY]	Depending on the type, location, severity and area affected, severe property damage, injuries and loss of life can be caused by landslide hazards. In addition, landslides can damage or temporarily disrupt utility services, roads, and other transportation / communication systems, including emergency response, fire, medical, police, etc.	Use available data to determine areas and buildings at risk to landslides and propose Comprehensive Plan and land use policies accordingly.	Leads: City of Eugene Planning Department, City of Springfield Development and Public Works. Partners: Oregon Department of Geology and Mineral Industries, Lane Council of Governments	Unknown	Ongoing during comprehensive land use updates
Multi-Hazard	Emergency Fuel Distribution Plan	Following a significant natural hazard, there are several critical needs for available fossil fuel supplies to a) fuel emergency response vehicles, b) fuel service vehicles to repair communications systems, transportation systems, utilities, and other critical services, and c) operate generators at critical facilities including hospitals, fire stations, police facilities, and more. Many service providers indicate they expect to receive priority access to fuel following an emergency, however it is unclear how limited fuel supplies would be distributed in the wake of a significant disturbance to supplies, such as an earthquake.	Once the Fossil Fuel Sector Assessment is completed, develop a Eugene/Springfield emergency fuel distribution plan that considers 1) the likely local fuel available during specific scenarios (earthquake, winter storm, mass evacuation) 2) the needs for transportation fuels and natural gas (including backup generators) of both public and private (hospital, communications, others) essential systems as well as those of neighboring communities supplied by the Eugene Kinder Morgan / Williams Pipeline fuel terminal, and 3) the existing on-site fuel storage and operation capacity of those critical services.	Leads: City of Eugene Office of Emergency Management, City of Springfield Office of Emergency Management. Partners: Lane Transit District, Lane County, PeaceHealth, McKenzie Willamette Hospital, private hazard response and recovery contractors, EWEB, SUB, and others.	\$10k-\$100k depending on scope	Develop plan by 2020

Hazard	Action Name	Problem Statement	Mitigation Action	Implementation Leads and Partners	Estimated Cost	Timeline
Multi-Hazard	Community Recovery Planning	Eugene and Springfield currently do not maintain recovery plans to inform the recovery from any natural hazards.	List and prioritize the hazards likely to warrant recovery plans. Develop appropriate and necessary community recovery plans starting with the highest priority hazards.	Leads: City of Eugene Office of Emergency Management, City of Springfield Office of Emergency Management. Partner: Lane County.	Depends on scope, number of hazards addressed, and number of partners involved	List and prioritize hazards for recovery planning by 2016. Begin working on at least one recovery plan by 2017
Multi-Hazard	Local Electricity Generation [ACTION UNDERWAY]	Relatively little of the electricity used in the Eugene/Springfield area is generated locally, resulting in a) dependency on extensive transmission lines, b) little local influence on maintenance and reliability of electric generation infrastructure, c) little influence on prioritization of service restoration following a major hazard event or regional outage.	1) Develop a plan to increase local control of EWEB electric generation in the event of a regional outage (for example: given a regional outage, develop ability to direct locally generated power to critical facilities such as water treatment plants and hospitals).  2) Encourage small scale local electricity generation that can be operated independently of the regional and/or local grid in the event of a local or regional power outage (for example: install local renewable electricity generation in support of critical facilities so they can operate during an outage).	Leads: Eugene Water and Electric Board; Springfield Utility Board. Partners: City of Eugene Office of Emergency Management, City of Springfield Office of Emergency Management. Bonneville Power Administration, Bonneville Environmental Foundation	Varies widely depending on scale.	Develop plan (part 1) by 2020. Begin implementation of part 2 by 2020
Multi-Hazard	Downed Power Lines	Downed power lines result in power failures and block critical transportation routes. The loss of electric power for a long period of time (more than 72 hours) can lead to failures of multiple critical systems including health care, water filtration, wastewater treatment, communications, transportation, and others. Impassable roadways from downed lines also inhibit emergency response and restoration of critical services, such as drinking water and health care, and is particularly problematic if fuel for backup generators cannot be delivered. The hazards most likely to impair surface transportation and disrupt electric service are severe winter storm (snow, ice, downed trees, utility pole, and wire failures) and earthquake, (downed trees, utility pole and wire failures).	Over the next five years, a) identify critical transportation corridors (including primary emergency, evacuation, and access routes) and electric distribution routes b) develop a list of key backbone transmission and distribution routes that serve critical customers and enable efficient restoration to the broader distribution system c) develop a long-term plan to underground, relocate, or "harden" key electric distribution lines along critical corridors (including feasibility assessment and prioritization) d) seek funds and opportunities to relocate power poles and power lines, or harden existing facilities, where feasible and appropriate, to reduce interruption to the transportation system and to reduce risk of outages from severe winter storms or earthquakes.	Leads: City of Eugene Public Works, City of Springfield Development and Public Works. Eugene Water and Electric Board, Springfield Utility Board, City of Eugene Public Works, Springfield Public Works, Lane Transit District.	Plan development: \$10-\$60k plus staff time. The cost of implementation will be estimated within the plan.	Develop plan by 2020.
Multi-Hazard	Credentials	Some critical private-party service providers may not be allowed into emergency areas following a hazard event. Several private entities such as cellular phone service providers, cable service providers and others, may need access to emergency personnel or restricted locations in order to restore service and support emergency operations in the wake of a hazard event.	Explore a strategy to facilitate credentialing of non-traditional partners during an emergency hazard event	Leads: City of Eugene Office of Emergency Management, City of Springfield Office of Emergency Management. Partner: Lane County Sheriff's Office	Staff time	Lower priority. Implement by 2025.

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Hazard	Action Name	Problem Statement	Mitigation Action	Implementation Leads and Partners	Estimated Cost	Timeline
Multi-Hazard	Broadcast Radio communications	Broadcast radio is one of the least expensive and most resilient forms of mass communication available in our area. Significant federal investments have been made to harden local radio infrastructure. During an emergency, Broadcast Radio announcers rely on phone and internet to get reliable, timely information. If internet access and phone are not available, broadcast radio may continue to function but will not be able to access the important information in order to share it.	Review existing communication tools between Emergency Managers and radio stations. Develop a low-tech, direct communication line (such as HAM radio) between staff at Bicoastal Media (1120 KPNW, the radio station that has been heavily hardened with FEMA dollars) and Eugene/Springfield and Lane County Emergency Managers.	City of Eugene Office of Emergency Management. Partners: City of Springfield, 1120 KPNW, Lane County Sheriff's Office	\$5,000 - \$10,000 plus staff time	Implement by 2020.
Multi-Hazard	Continuity of operations plans [ACTION UNDERWAY]	Continuity of operations plans (COOP) and procedures are necessary to assure that essential public services are provided during disasters and to provide for continuity of government. Few City work groups or facilities have COOP plans in place.	A) Identify priority work groups and facilities in need of Continuity of Operations Plans. B) Develop Continuity of Operations Plans for the top priority work groups or facilities.	Leads: City of Eugene Office of Emergency Management, City of Springfield Office of Emergency Management. Partner: Lane Preparedness Coalition	Varies widely depending on scope	Begin developing COOP plans by 2015
Multi-Hazard	Staffing for critical systems	In the aftermath of a large earthquake or other large-scale hazard event, critical staff are likely to prioritize the health and wellbeing of their families and may leave work or not report to work. Response and recovery operations for crucial services like electric, water, sanitation, transportation, and others, will be severely hampered without adequate, appropriately trained staff available.	Review policies, procedures and plans from other public agencies with high seismic vulnerability. Research their strategies to ensure staff availability following a significant hazard event. Assess options to apply these strategies in Eugene/Springfield to ensure the availability of critical staff following a significant hazard event.	Leads: City of Eugene Office of Emergency Management, City of Springfield Office of Emergency Management. Partners: Community Organizations Active in Disasters (COAD) partners	Policy review: \$10,000	Policy Review by 2020
Multi-Hazard	Local food availability	Some 90% of food consumed locally is produced outside of the area. The vast majority of food consumed in Eugene/Springfield is brought in by truck and trailer on I-5 from distribution centers in San Francisco and Portland. Local grocery stores have a three-day supply of food at any one time. Severe flooding, severe winter storm or severe earthquake event can cause disruption to the resupply of local grocery stores.	Work with coalition of food suppliers to consider options to address these food supply concerns. Consider developing common messaging and marketing strategies to increase awareness of the need for individuals to store adequate emergency food and water supplies. There is some large-scale food storage in the area in the form of food storage businesses and food processors. If organized in advance, these stored food supplies could be distributed to residents in the aftermath of an emergency event. This could be developed into an "Emergency Food Distribution" plan.	Leads: City of Eugene Office of Emergency Management, City of Springfield Office of Emergency Management. Partners: Food storage businesses, food processors, Food For Lane County	Unknown	Investigate options by 2020

Hazard	Action Name	Problem Statement	Mitigation Action	Implementation Leads and Partners	Estimated Cost	Timeline
Multi-Hazard	Water Source [ACTION UNDERWAY]	Homes and businesses in Eugene are served primarily by one publicly owned utility, EWEB. EWEB draws water from one single source on the McKenzie River and transports the water to Eugene through two large, co-located transmission pipelines. If a) the river water became contaminated or otherwise unusable, b) the filtration facility at Hayden Bridge were disrupted for any reason, or c) the transmission lines bringing water to Eugene were disrupted, water supply to Eugene residents and businesses (including water for fire suppression) could be compromised. Currently, on summer days EWEB has only enough emergency water storage to provide one or two days of water if something happens to the McKenzie River water source, EWEB's water treatment plant or transmission lines. Emergency interties with nearby utilities cannot provide enough water to meet Eugene's minimum water needs.	EWEB is actively seeking to develop alternate sources of drinking water. EWEB's Strategic Plan and Water Capital Improvement Plan call for alternate sources to be developed over the next ten years. EWEB has been issued a conditional permit on the Willamette River and has obtained a groundwater use permit. EWEB is assessing interest of potential partners, and will develop at least one additional water supply by 2022. The Cities of Eugene and Springfield support EWEB's purchase of property, construction of infrastructure, and financing of this project.	Lead: Eugene Water and Electric Board Water Operations	See EWEB for cost estimates	Develop at least one additional water supply by 2022
Multi-Hazard	Evacuation Plans	There is not currently a designated and widely known evacuation plan for mass evacuation needs, including dam safety. Designated routes, a notification system, and community awareness are all required.	Develop a community evacuation plan to address multiple hazards. Develop routes, notification system, and community awareness plan. Work with Lane County to coordinate routes and evacuation plans.	Leads: City of Eugene Office of Emergency Management, City of Springfield Office of Emergency Management. Partners: Lane County Sheriff's Office, ODOT, LTD, School Districts, auto fleet owners.	varies depending on scope	Develop community evacuation plan by 2020
Multi-Hazard	Fossil Fuel Sector Assessment	During the process of conducting a community-wide hazards and climate vulnerability assessment, there emerged a gap in information regarding private fossil fuel distributors. The community as a whole, and emergency response functions depend heavily on fossil fuels to function. In order to better plan for and reduce the risk of disruptions, Eugene and Springfield need to acquire better information about the supply of fossil fuels in the area.	Develop a list of critical information needs pertaining to the regional fuel transmission and distribution system. Develop a plan to acquire the necessary information to a) better understand the factors that could disrupt the regional fossil fuel supply and b) ensure essential emergency functions can be sustained.	Leads: City of Eugene Office of Emergency Management, City of Springfield Office of Emergency Management. Partners: Lane County, DOGAMI, and private fossil fuel providers including Williams Pipeline.	Unknown	Complete assessment by the end of 2017.
Multi-Hazard	Water Storage	The supply of drinking water could be interrupted by an earthquake, water supply contamination, long-term power outage, or other natural hazards. Most locations that could serve as sheltering facilities do not currently store potable water on site, creating a need for fresh water when these sites are employed as shelters.	Explore options to increase drinking water storage in public buildings including a) essential facilities and b) potential public sheltering facilities.	Leads: City of Eugene Office of Emergency Management, City of Springfield Office of Emergency Management. Partners: Eugene Water and Electric Board, Springfield Utility Board, Rainbow Water District.	Varies widely depending on scale.	2020

Hazard	Action Name	Problem Statement	Mitigation Action	Implementation Leads and Partners	Estimated Cost	Timeline
Multi-Hazard	Vulnerable Populations [ACTION ONGOING]	Within section 3, Maps, The Eugene/Springfield NHMP contains valuable information regarding vulnerable populations. This information has not been directly compared with each hazard or mitigation action. Mitigation actions will be more effective and will enhance community social equity when mitigation actions are analyzed through the lens of vulnerable populations.	Compare relevant NHMP hazard risk maps with the relevant vulnerable population maps developed for the Lane Livability Consortium. Prioritize map combinations to provide results most informative to the mitigation actions within the NHMP.	Leads: City of Eugene Office of Emergency Management, City of Springfield Office of Emergency Management. Partners: Lane Council of Governments, Lane County	Staff time and cost varies widely depending on scope	Complete by end of 2015
Multi-Hazard	Lane Preparedness Coalition [ACTION ONGOING]	Emergency Management and hazard mitigation is less effective if done without effective collaboration and coordination.	Continue working with the Lane Preparedness Coalition to support public and private sector partnerships that result in successful hazard mitigation activities.	Lane Preparedness Coalition Members	Staff time	ongoing
Multi-Hazard	Community Education and Outreach [ACTION ONGOING]	Not all community members are prepared for hazard events	Continue to deliver existing education programs aimed at increasing awareness and mitigating the risk posed by hazards. At least twice each year a) provide information about the NHMP, b) describe progress toward implementation, and c) collect feedback on the NHMP from audiences. Accomplish these tasks through the Eugene Springfield CERT program training events, and the Lane Preparedness Coalition Full Coalition Meetings (that include general public).	Leads: City of Eugene Office of Emergency Management, City of Springfield Office of Emergency Management. Partners: Lane Council of Governments, Eugene Water and Electric Board, Springfield Utility Board, COAD members, and others.	Staff time	ongoing
Multi-Hazard	72 Hour Kits [ACTION ONGOING]	Eugene and Springfield are vulnerable to a number of natural hazards that could disrupt services such as utilities, transportation networks, and businesses. In some cases it may take days until vital services are restored. Preparing a 72 hour kit can help community members survive on their own without relying too heavily on emergency services.	Encourage community members and city employees to prepare and maintain 72 hour kits.	Leads: City of Eugene Office of Emergency Management, City of Eugene Public Works, City of Springfield Office of Emergency Management. Partners: Lane County, Lane Council of Governments, Eugene Water and Electric Board, Springfield Utility Board, and others.	Staff time	ongoing



Hazard	Action Name	Problem Statement	Mitigation Action	Implementation Leads and Partners	Estimated Cost	Timeline
Wildfire	Springfield Wildfire Plan	The City of Springfield does not have a specific plan completed that addresses wildfire in the urban interface zones of Springfield.	Eugene/Springfield Fire/EMS continue development of a Springfield-specific wildfire hazard plan that is consistent with mutual and automatic response agreements for the region. This plan will include a) threshold events that require evacuation notification; b) fire management plans that include all county wide fire resources until they are exhausted; and c) a requirement for escalation to State conflagration response. The plan will include coordination with aerial suppression resources and hourly costs for suppression aircraft during initial stages of an incident.	Lead: Eugene/Springfield Fire/EMS. Partners: City of Springfield; Lane County Fire Defense Board	This project will utilize light duty fire crews that have a working knowledge of local Wild land Urban Interface (WUI) response including the deployment of resources throughout Lane County	2017
	Wildfire risk and building codes	The south hills of Eugene and Springfield both contain heavy forest cover that results in a high fire risk, particularly at the end of a long, hot summer. Red flag warnings have occurred recently indicating high fire weather risk. Changes in climate patterns are projected to increase the risk of wildfire over time. Oregon State Building Code contains a provision for increased requirements for building construction materials and methods in areas of high fire risk. In order to be implemented locally, the area of high fire risk must be mapped and a regulatory map formally adopted by the local municipality. Currently, neither Eugene nor Springfield have created a formal map of high fire risk for the purpose of implementing this component of the Oregon Building Code.	A) Over the next 5 years, utilize the Oregon Department of Forestry’s Criteria (OAR Chapter 629, Division 44) to develop a “Fire hazard zone” map of the areas of high fire danger in the Eugene/Springfield area. B) Cities of Eugene and Springfield adopt the "fire hazard zoning" map; C) Implement increased building code requirements for construction/repair in the identified high fire risk areas.	Leads: City of Eugene Office of Emergency Management and Building and Permit Services. Partners: City of Springfield Development and Public Works; Eugene/Springfield Fire/EMS; Oregon Department of Forestry; Lane Council of Governments; City of Eugene; City of Springfield.	unknown	2020
Winter Storm	Downed Power Lines	See Multi-Hazard Action: Downed Power Lines	See Multi-Hazard Action: Downed Power Lines	See Multi-Hazard Action: Downed Power Lines	See Multi-Hazard Action: Downed Power Lines	See Multi-Hazard Action: Downed Power Lines
Winter Storm	Tree Trimming [ACTION ONGOING]	High winds and ice during winter storms can topple trees and break limbs which in turn can result in power outages and disrupt telephone, computer, and TV and radio service.	Continue tree trimming efforts especially for transmission lines and trunk distribution lines.Both the Eugene Water and Electric Board (EWEB) and the Springfield Utility Board (SUB) trim trees on public property, as well as private property when necessary, to reduce the likelihood that tree limbs will cause future power outages. Continuing proper tree trimming for transmission lines and trunk distribution lines will help prevent power outages and damage to property from winter storms.	Leads: EWEB, SUB, BlachlyLane, EPUD, BPA	Varies	Ongoing

-15-

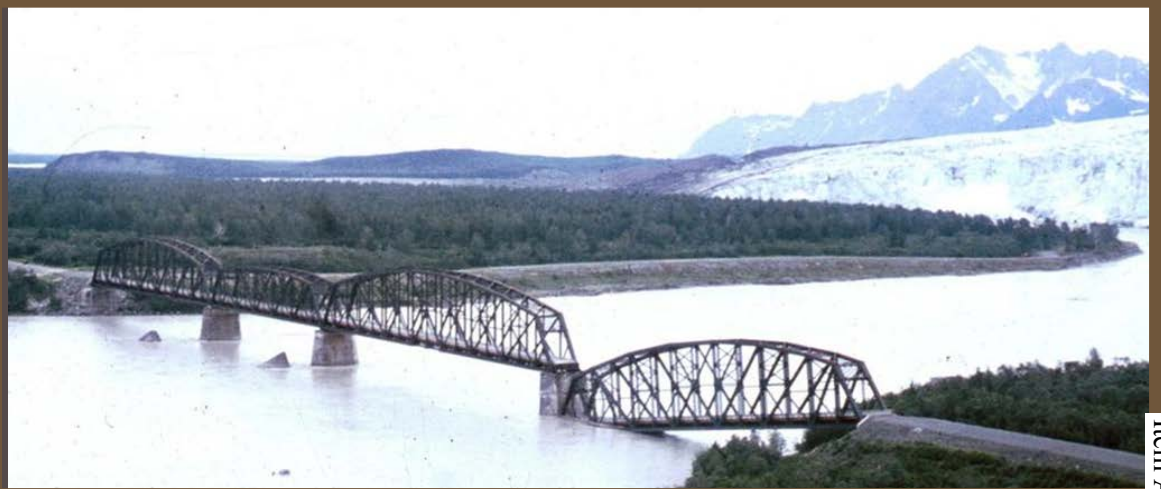
Hazard	Action Name	Problem Statement	Mitigation Action	Implementation Leads and Partners	Estimated Cost	Timeline
Winter Storm	Property Owner Education [ACTION ONGOING]	High winds and ice during winter storms can topple trees and break limbs which in turn can result in power outages and disrupted telephone, internet, and cable service. While the Eugene Water and Electric Board (EWEB) and the Springfield Utility Board (SUB) manage vegetation near power lines in public areas, private property owners are responsible for informing the utility companies about vegetation on their property that must be removed.	Continue to educate private property owners about dangers of vegetation near distribution lines and service drops.	Leads: EWEB, SUB, EPUD, BPA, BlachlyLane	Low	Ongoing
Winter Storm	Backup Power	High winds and ice during winter storms can topple trees and break limbs which in turn can result in power outages, disrupting telephone, computer, and TV and radio service. Encouraging critical facilities to have backup power and/or emergency operations plans to deal with power outages will allow for continuous service.	Encourage critical facilities in the Eugene/Springfield Metro Area to have backup power and emergency operations plans to deal with power outages.	Leads: City of Eugene Office of Emergency Management, City of Springfield Development and Public Works. Partners: EWEB, SUB	Varies	Ongoing
Winter Storm	Undergrounding Utilities In New Developments [ACTION ONGOING]	High winds and ice during winter storms can topple trees and break limbs which in turn can result in power outages and disrupt telephone, computer, and TV and radio service.	Continue policy requiring new developments to locate power lines underground.	Leads: City of Eugene Public Works, City of Springfield Development and Public Works. Partners: EWEB, SUB	Varies	Ongoing
Volcano	Ash Fall	Ash fall is considered a low probability event that occurs with plenty of warning in the Cascades. Actions have been taken to develop public emergency notification procedures. Water treatment capacity is deemed adequate to deal with ashfall events. Therefore, the cities of Eugene/Springfield do not have any priority actions in this category.	None at this time	n/a	n/a	n/a

# CITY OF EUGENE EARTHQUAKE PREPAREDNESS

**Myrnie Daut, ARM**  
Risk Services Director

**Matt McRae**  
Natural Hazards Mitigation Specialist  
Emergency Management Program

-17-



Item A.

# OUTLINE

- **Emergency Preparedness Overview**
- **Oregon Resilience Plan**
- **Eugene/Springfield Natural Hazards Mitigation Plan and Vulnerability Assessment**
- **Priority Mitigation Actions**

# EMERGENCY PREPAREDNESS

- **Planning**
  - Emergency Operations Plan
  - Natural Hazards Mitigation Plan
  - Continuity of Operations Plan (COOP)
- **Training & Exercises**
  - “Cascadia Rising” – June 2016
- **Community Outreach**
- **Volunteer Training & Coordination**
  - Community Emergency Response Teams (CERT)
- **Mitigation Actions**
- **Community Partnerships**

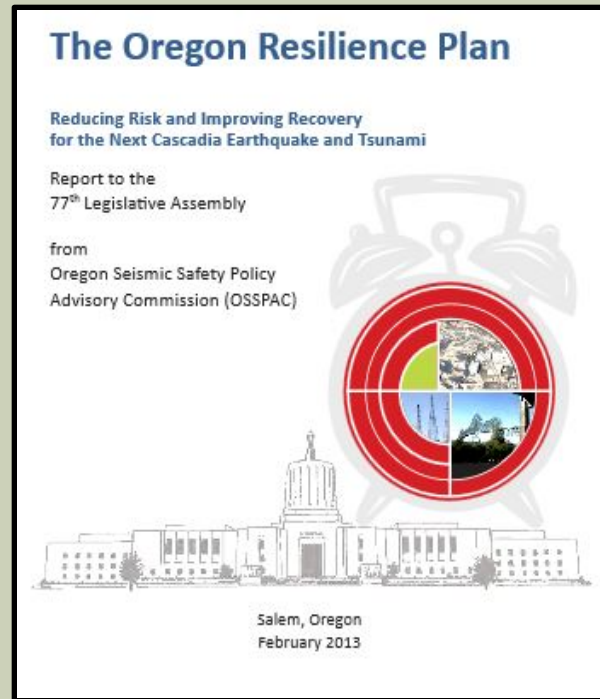
# COMMUNITY PARTNERSHIPS

- UO
- EWEB
- Lane County
- Springfield
- Red Cross
- Food for Lane County
- PeaceHealth
- McKenzie Willamette
- Oregon Partnership for Disaster Resilience
- ...and many others



# OREGON RESILIENCE PLAN

## Oregon Resilience Plan 2013



# OREGON RESILIENCE PLAN

## Estimated time to restore critical services

Electricity  
1 to 3 months

Police and Fire Stations  
2 to 4 months





# OREGON RESILIENCE PLAN NESS

## Estimated time to restore critical services

Water and Sewer  
1 month to 1 year

Priority Highways  
6 to 9 months

Healthcare Facilities  
18 months



# OREGON RESILIENCE PLAN

## Key Recommendations:

Plan for a 50 year time horizon

2015

2025

2035

2045

2055

2065

# OREGON RESILIENCE PLAN

## Key Recommendations: Inspect infrastructure

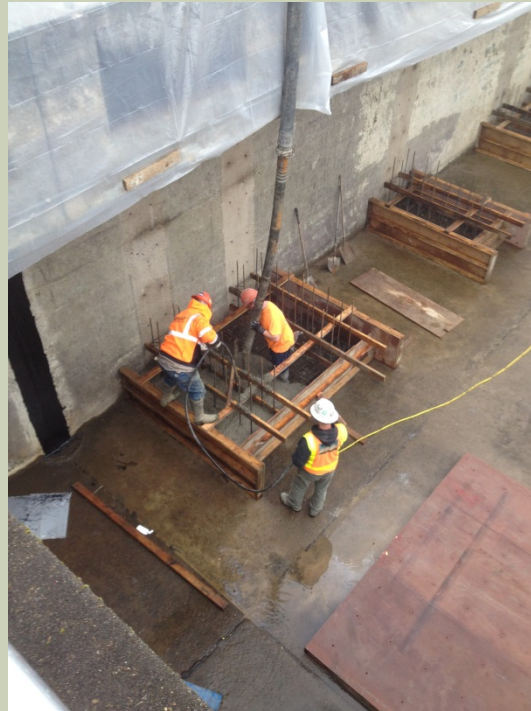


# OREGON RESILIENCE PLAN

## Key Recommendations:

Make public sector investment in upgrading infrastructure

-26-



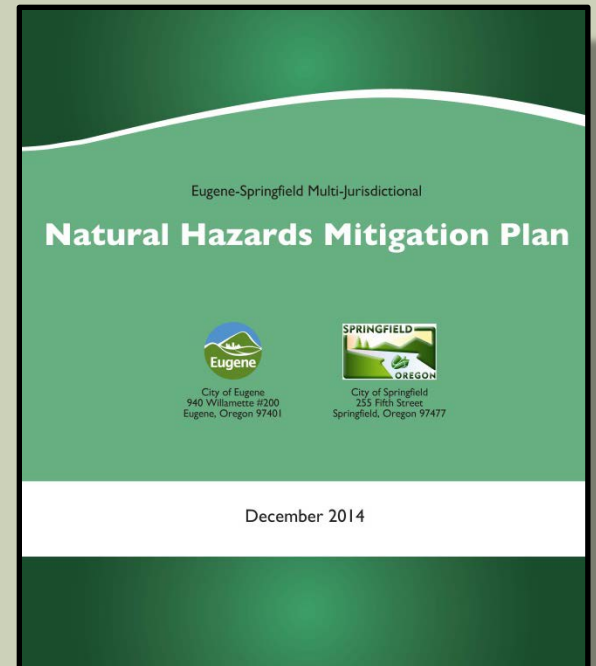
# NATURAL HAZARDS MITIGATION PLAN

Updated and approved by FEMA in 2015

Developed in partnership with Springfield

-27-

Prioritizes mitigation actions for multiple hazards





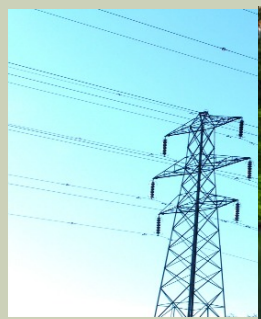
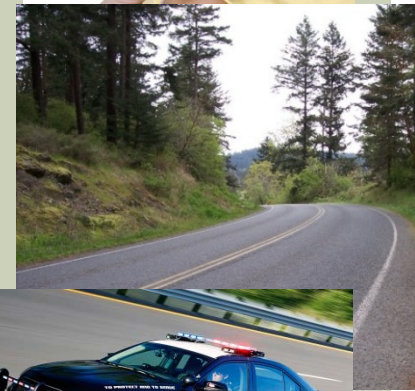
# NATURAL HAZARDS MITIGATION PLAN

Item A.



## Sector by Sector Vulnerability Assessment:

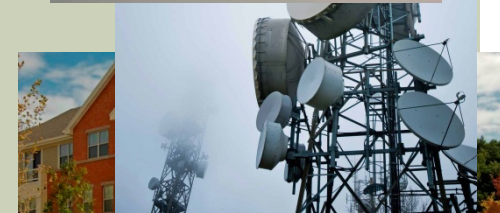
- Drinking Water
- Health Care and Public Health
- Sanitary Sewer
- Electricity
- Natural Systems
- Housing
- Food
- Transportation
- Stormwater
- Communications
- Public Safety
- Fossil Fuels



# NATURAL HAZARDS MITIGATION PLAN

## Sector by Sector Vulnerability Assessment:

- Drinking Water
- Health Care and Public Health
- Sanitary Sewer
- Electricity
- Natural Systems
- Housing
- Food
- Transportation
- Stormwater
- Communications
- Public Safety
- Fossil Fuels



# ACTIVE EARTHQUAKE MITIGATION ACTIONS

## ■ City of Eugene Actions:

### ■ Seismic Evaluation

- Critical City owned bridges
- Critical City owned buildings

### ■ Departmental Continuity of Operations Planning

- Mission Essential Functions

## ■ EWEB Actions:

- Develop alternative sources of drinking water
- Encourage small scale local electricity generation

## ■ Community Outreach and Education with Partners



# IN SUMMARY

- **Following Oregon Resilience Plan Recommendations**
- **Long Term Vision & Commitment**
- **Actively Working Many Strategies**
- **Leveraging Community Partnerships**

# CITY OF EUGENE EARTHQUAKE PREPAREDNESS

## Questions?

**Myrnie Daut, ARM**  
Risk Services Director

**Matt McRae**  
Natural Hazards Mitigation Specialist  
Emergency Management Program

# EUGENE CITY COUNCIL

## AGENDA ITEM SUMMARY




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### Work Session: Stormwater Program Update

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Meeting Date: September 16, 2015  
 Department: Public Works  
[www.eugene-or.gov/pw](http://www.eugene-or.gov/pw)

Agenda Item Number: B  
 Staff Contact: Mark Schoening / Craig Carnagey  
 Contact Telephone Number: 541-682-5243 / 541-682-4930

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#### **ISSUE STATEMENT**

This work session is an opportunity for the council to review the current stormwater program and rate structure and to consider an amendment to the definition of stormwater service to include the operations and maintenance of parks to address the systemic funding gap in parks services. The council will be requested to direct the City Manager to schedule a public hearing on an ordinance to allow the use of stormwater service funds for the operations and maintenance of parks.

#### **BACKGROUND**

In 2010, the council reviewed a report which described the funding gap to operate and maintain City parks and recreation facilities. At that time, the council passed a motion requesting the City Manager to develop funding options to sustainably maintain parks and recreation facilities for FY12 budget consideration. Due to increasing budget pressures for that fiscal year, no specific funding options were brought back to the council for consideration.

On January 28, 2013, the council directed the City Manager to revise a proposed stormwater ordinance related to parks services funding so that the ordinance would postpone until fiscal year 2014 any decision by the council to actually establish a monthly fee for FY14. At a February 4, 2013, work session, the council tabled the motion for adopting an ordinance creating a mechanism for a monthly stormwater and parks service fee.

On October 29, 2014, the council received an update to the 2010 report, reviewed the current state of Eugene's parks and natural areas, and unanimously requested the City Manager present funding options for council consideration for the FY16 budget to sustainably operate and maintain the City's park system.

On February 11, 2015, the council reviewed short- and long-term funding options to address the systemic funding gap for operations and maintenance of parks. The council requested a continuance of the discussion after the FY16 budget process and requested additional information on the current stormwater fee mechanism.

### **Stormwater Program and Rate Structure**

The City's stormwater system includes pipes and other constructed features such as catch basins and curb inlets as well as "green infrastructure," a combination of constructed and natural features such as planters, swales, wetlands, streams, rivers, and open channels. Rainwater that does not soak into the ground runs off the land and is conveyed by the stormwater system to local area waterways such as Amazon Creek and the Willamette River.

The stormwater program supports services that provide clean water, flood protection and healthy habitat for fish and wildlife including the following activities -

- Maintain and repair more than 600 miles of stormwater pipes and waterways
- Clean over 15,000 catch basins and curb inlets
- Collect and recycle over 18,000 cubic yards of leaves each year
- Eliminate illegal connections and discharges
- Sweep more than 40,000 curb miles of streets each year
- Provide stormwater education to 3,000 students each year
- Protect, restore, and maintain streams, rivers, and wetlands
- Plant over 600 trees along local streams and rivers each year
- Remove garbage from streams and the banks of the Willamette River
- Improve how rainfall runoff is managed in developed areas through system retrofits
- Replace public drywells to protect groundwater quality
- Administer clean water regulations for construction sites, industries, and new development
- Plant, preserve, and maintain street trees and median vegetation
- Monitor water quality in the local waterways through sampling and data analysis

Developed properties in Eugene pay stormwater fees to support the stormwater program. There are three components to the stormwater rate structure. The impervious service component is based upon the measured impervious area on a developed property. Small residential properties (building footprint is equal to or less than 1,000 square feet) and medium residential properties (building footprint is greater than 1,000 square feet and less than 3,000 square feet) are two user categories with all properties within a specific category paying the same amount for the impervious area component. Large residential properties (building footprint is 3,000 square feet or greater) and commercial/industrial properties are two user categories in which properties within either category pay the same rate per 1,000 square feet of impervious area.

The second component of the stormwater rate structure is the street-related component. The impervious area of the street network is segregated into two components. The curb and gutter and a portion of the pavement is considered part of the stormwater system. The remainder of the pavement is considered impervious area and residential properties are assessed a flat fee for this portion of the street network. Commercial/industrial developed properties pay a rate per 1,000 square feet.

The final component of the stormwater rate structure is the administrative component. All developed properties are assessed a flat fee for this component.

Developed properties that pay stormwater fees may qualify for reduced fees if the quantity of stormwater discharge to the public system is reduced or the quality impact is reduced through on-site stormwater treatment.

### **Stormwater and Parks Fee**

At the February 11, 2015, work session, the council discussed one option for addressing both short- and long-term funding needs through an amendment to the current stormwater ordinance. The previous proposal from 2013 included numerous changes to the ordinance. However, a narrow change to the definition of “stormwater service” to include the “operation and maintenance of City-owned parks and open spaces” would allow the current revenue collection mechanism to fund parks. The incremental cost of administration would be insignificant since the collection mechanism already exists.

A proposed change to the ordinance provides the policy framework of funding for parks costs by amending the stormwater fee to a fee for stormwater and parks. The specific amount of the stormwater and parks fee would be set, as it currently is for the stormwater fee, through the administrative ratemaking process specified in the Eugene Code and based on costs included in the budget. An update to the definition of stormwater service to include park operations and maintenance would not have an effect on stormwater rates for FY16. Potential rate or service increases would occur during the FY17 budget process with input from the public, budget committee and council. Funds could be used to pay for current services or reinstate parks services that have been cut in recent years.

### **TRIPLE BOTTEM LINE ANALYSIS**

#### **Social Equity (Positive Effect)**

The importance of parks ranks high in determining the livability people feel about their community. The use of parks and open space is free to all community members regardless of socioeconomic levels or age groups. Each month over 90,000 people use City parks. The proposed use of stormwater funds for park operations and maintenance would help offset the reduction of services over the last several years, including reopening park restrooms, restoring park custodial work, and increasing park security. These improvements to the safety and cleanliness of parks will have a positive effect across the entire system and benefit a broad spectrum of the population of Eugene.

#### **Environmental Health (Positive Effect)**

A stormwater service fee to include the operations and maintenance of parks and natural areas would enable the Parks and Open Space (POS) Division to do more to protect the environment and conserve resources. Two examples would be cleaning up more of the trash and debris associated with illegal camps, and constructing more efficient irrigation systems in parks. The trash and debris from illegal camps in parks along local waterways pose significant environmental health hazards. Having more resources to clean up and provide outreach to prevent these camps from occurring in sensitive locations would help reduce the impact to the environment and risks to public health in parks. Replacing outdated, inefficient irrigation systems in parks would help reduce water usage and utility costs and establish more drought-resistant landscapes. Cleaner waterways and water-wise landscapes in parks have multiple positive benefits to the health of the urban environment.

**Economic Prosperity (Neutral Effect)**

Well maintained parks contribute to the local economy by attracting tourists, as well as being part of what many businesses and people look for when considering where to relocate. Good parks also have a positive impact on nearby property values. [One study](#) estimates the overall economic value of Eugene’s parks at more than \$40 million a year. A stormwater service fee to include the operations and maintenance of parks and open spaces on the Eugene Water & Electric Board (EWEB) utility bill may be viewed as a negative impact on low-income utility users. EWEB offers a number of programs to help income-eligible customers who are having trouble paying their utility bills. The economic impact can be further mitigated for all ratepayers by setting the fee at a generally affordable level.

**RELATED CITY POLICIES**

Council goal for Accessible and Thriving Culture and Recreation - a community where arts and outdoors are integral to our social and economic well-being and are available to all.

Council goal for Fair, Stable and Adequate Financial Resources - a government whose ongoing financial resources are based on a fair and equitable system of revenues and are adequate to maintain and deliver municipal services.

**COUNCIL OPTIONS**

1. Direct the City Manager to schedule a public hearing on an ordinance to change the definition of stormwater service to include the operations and maintenance of parks and open spaces.
2. Direct the City Manager to pursue additional short-term and long-term funding options.
3. Take no action.

**CITY MANAGER’S RECOMMENDATION**

The City Manager recommends that the council agree to schedule a public hearing on a revision to the stormwater ordinance that amends the definition of stormwater service to include the operations and maintenance of parks and open spaces.

**SUGGESTED MOTION**

Move to direct the City Manager to schedule a public hearing on an ordinance to amend the definition of stormwater service to include the operations and maintenance of parks and open spaces.

**ATTACHMENTS**

- A. Fiscal Year 2016 Stormwater Rate Brochure

**FOR MORE INFORMATION**

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Staff E-Mail: [Craig.T.Carnagey@ci.eugene.or.us](mailto:Craig.T.Carnagey@ci.eugene.or.us)





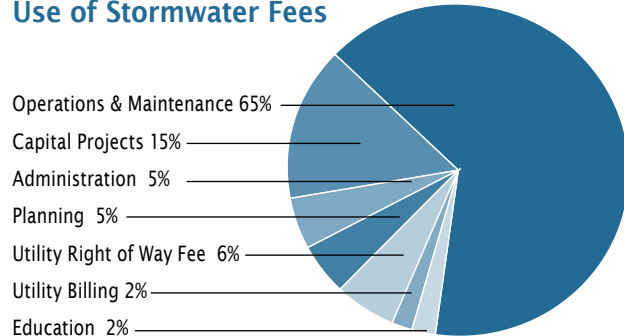


## Stormwater Fees

Developed properties in Eugene pay stormwater fees to support services that provide clean water, flood protection and healthy habitat for fish and wildlife. The stormwater system includes pipes and other constructed features such as catch basins and curb inlets as well as “green infrastructure,” a combination of constructed and natural features such as planters, swales, wetlands, streams, rivers, and open channels. Rainwater that does not soak into the ground runs off the land and is conveyed by the stormwater system to local area waterways such as Amazon Creek and the Willamette River.

Beginning in July 2015, stormwater rates will increase by 6.5% or \$0.78 for a typical residential customer. The increase is needed to continue to be able to provide clean water, protect public health and safety, enhance fish and wildlife habitat, and meet the other objectives of Eugene’s stormwater program. For the latest information about stormwater user fees, go to: [eugene-or.gov/swfees](http://eugene-or.gov/swfees)

## Use of Stormwater Fees



**Total Stormwater Budget = \$18,047,903 (FY16)**

## Stormwater Monthly Fee Schedule (effective July 1, 2015)

Fees for residential stormwater customers are based on the size of the building footprint. Footprint is the combined square footage of the garage/carport and the first floor of the home.

User Category <sup>1</sup>	Small Residential <sup>2</sup>	Medium Residential <sup>3</sup>	Large Residential <sup>4</sup>	Commercial/Industrial
<b>Rate Components:</b>				
Impervious Surface	\$6.55	\$10.56	\$3.64 per 1,000 sf	\$3.64 per 1,000 sf
Street-Related	\$1.81	\$1.81	\$1.81	\$1.28 per 1,000 sf
Administrative (per account)	\$0.54	\$0.54	\$1.69	\$1.69
<b>Total Monthly Fee</b>	<b>\$8.90</b>	<b>\$12.91</b>	<b>Varies</b>	<b>Varies</b>

Users may qualify for reduced stormwater fees if the quantity of stormwater discharge to the public system is reduced or the quality impact is reduced through on-site stormwater treatment.

<sup>1</sup> Duplex rates are modified, based on the building footprint and building configuration

<sup>2</sup> Building footprint is equal to or less than 1,000 square feet (sf).

<sup>3</sup> Building footprint is greater than 1,000 sf and less than 3,000 sf.

<sup>4</sup> Building footprint is 3,000 sf or greater

## How Stormwater Fees are Used

- ◆ Maintain and repair more than 600 miles of stormwater pipes and waterways
- ◆ Clean over 15,000 catch basins and curb inlets
- ◆ Collect and recycle over 18,000 cubic yards of leaves each year
- ◆ Eliminate illegal connections and discharges
- ◆ Sweep more than 40,000 curb miles of streets each year
- ◆ Provide stormwater education to 3,000 students each year
- ◆ Protect, restore, and maintain streams, rivers, and wetlands
- ◆ Plant over 600 trees along local streams and rivers each year
- ◆ Remove garbage from streams and the banks of the Willamette River
- ◆ Improve how rainfall runoff is managed in developed areas through system retrofits
- ◆ Replace public drywells to protect groundwater quality
- ◆ Administer clean water regulations for construction sites, industries, and new development
- ◆ Plant, preserve, and maintain street trees and median vegetation
- ◆ Monitor water quality in our local waterways through sampling and data analysis



**Stormwater** from rain and runoff flows directly from storm drains to waterways (creeks, rivers).

**It is not treated.**

## City Fees on EWEB Bill

The City of Eugene adopts and administers the stormwater and wastewater service fees. EWEB has no relationship with the City’s wastewater or stormwater system operation or rates and acts only as the City’s billing agent.

## For more information

### Stormwater and Wastewater Fees:

Public Works Administration  
Utility Customer Service Office, 541-682-4900

### Stormwater Programs and Services:

Stormwater Public Education and Outreach, 541-682-2739  
Stormwater Maintenance Services, 541-682-4800

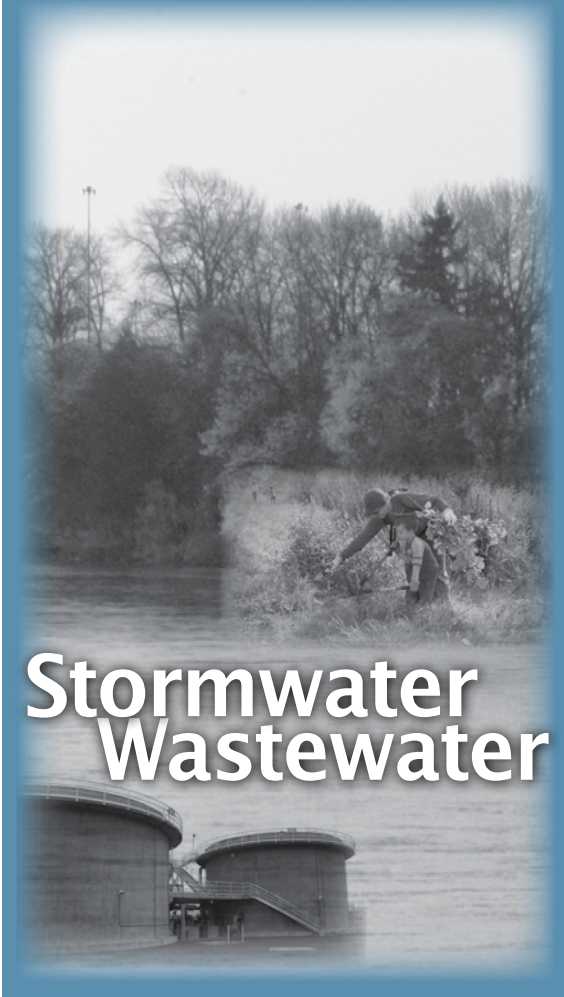
### Wastewater Services and Programs:

Local Wastewater/Stormwater Systems  
Public Works Maintenance, 541-682-4800  
Regional Wastewater System and Treatment  
Public Works Wastewater, 541-682-8600



# City of Eugene User Fees

July 2015



City of Eugene Public Works  
101 E Broadway, Suite 400  
Eugene OR 97401  
[eugene-or.gov](http://eugene-or.gov)

