

City of Colorado Springs Hazard Mitigation Strategy 2018 Annual Report



The table below provides the current status of the hazard mitigation actions proposed in the City of Colorado Springs 2016 Hazard Mitigation Plan, as of the end of 2018. The Hazard Mitigation Planning Committee, led by the Colorado Springs Office of Emergency Management (CSOEM), reviews and reports on the status of these actions on an annual basis. A list of the abbreviations and acronyms used in this document follows the table.

The 2016 Hazard Mitigation Plan is available for review on the Office of Emergency Management's website at: <https://coloradosprings.gov/office-emergency-management/page/hazard-plan>.

In accordance with the Americans with Disabilities Act of 1990 ("ADA"), the City will not discriminate against individuals with disabilities. Anyone requiring assistance to view the plan or provide comment should make the request to the City of Colorado Springs Office of Emergency Management at e-mail oem@springsgov.com, or call 719-385-5957.

Mitigation Action Name and Brief	
Action #	Description
Current Status	
Wildfire Actions	
W-01	<p>Wildland-Urban Interface (WUI) action - Formally define the WUI as a different mapped polygon from the Hillside overlay area. Make this distinction clear in the locally adopted codes and information materials.</p>
	<p>The WUI is defined by a geographic map that was determined through the Colorado Springs Fire Department (CSFD) in 1999. This area is primarily west of I-25 and spans from the Air Force Academy south to Cheyenne Mountain Air Force Station (NORAD). This wildfire risk area reflects locations of higher densities of vegetation, increased topographical features, and residential structures. Because of these conditions, the WUI area is more prone to a wildfire. The City of Colorado Springs WUI is identified in the 2015 International Fire Code as amended.</p> <p>The Hillside Overlay is a Zoning Code Overlay for the City of Colorado Springs that was most recently approved in 1996 to preserve the aesthetics of Colorado Springs. The Hillside Overlay seeks to conserve the aesthetic qualities of hillside areas within the City; to provide safe and convenient access to those areas; to minimize water runoff and soil erosion problems; to assure type; distribution and densities of development that are compatible with the hillside; to preserve wildlife habitat and wetland areas; and to encourage innovative, environmentally sensitive design techniques.</p>

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Action #	Description	Current Status
W-02	<p>Wildfire Mitigation Education and Outreach to Neighborhoods at Risk - Continue conducting wildfire presentations to neighborhoods in order to educate them on mitigation concepts. One consideration for project prioritization is based on the receptiveness of the community.</p>	<p>The Colorado Springs Office of Emergency Management (CSOEM) hosted two community meetings focused on wildfire and flood in partnership with a number of organizations including the Division of the Fire Marshal (DFM), Colorado Springs Utilities (Springs Utilities), and others. The Colorado Springs Fire Department Wildfire Mitigation Program provides information to residents within the WUI on vegetation management and fuels reduction continuously throughout the year. Springs Utilities provides community meetings for areas in a prescribed burn zone that includes providing information on fuel reduction.</p>
W-03	<p>Wildfire Mitigation Fuel Reduction Activities - Continue fuels reduction activities to include neighborhood chipping, creating defensible space around homes using residential stipends, prescribed burning in remote areas, and hazard fuel reduction projects in common areas and open spaces.</p>	<p>The Forestry Department is pending implementation of a new project to reduce fuels in the Blodgett Open Space and will be completed by March 2019.</p> <p>The Colorado Springs Fire Department Wildfire Mitigation Program provides neighborhood curbside chipping services on a yearly basis to the residents of the WUI. The program also offers free on-site consultations for homeowner risk reduction; and the program works with the community on landscape level open-space fire mitigation projects.</p> <p>Springs Utilities completed a project in the Broadmoor area to protect water/electric infrastructure.</p>
W-04	<p>Wildfire Mitigation Outreach to the Business Community - Expand Business Education and Outreach about wildfire concerns, evacuation, and business continuity. Continue integration with the DFM's current efforts focused on businesses and healthcare facilities. Explore expanding outreach to adopt an all-hazards perspective in partnership with CSOEM.</p>	<p>This effort is not yet all-hazards focused. Some partners target businesses and some partner with the American Red Cross (ARC) to amplify public education efforts. Current efforts among the DFM and ARC do discuss the importance of maintaining continuity of operations.</p> <p>The Colorado Springs Fire Department Wildfire Mitigation Section provides free development reviews, on-site consultations, vegetation management reviews and inspections, and wildfire mitigation measures to further to reduce wildfire risk to businesses within the WUI.</p>

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W-05	Enhance WHINFOE Risk Model - Enhance the Wildfire Hazard Information Extraction (WHINFOE) risk model to include adjacency of structures and urban conflagration potential.	The Wildfire Hazard Information Extraction model (WHINFOE) is a Colorado Springs Fire Department program that was developed to educate the residents within the WUI about their wildfire risk. This educational tool enables the Wildfire Mitigation Program to help residents reduce their wildfire risk while working with their neighbors to reduce risk to the community. The current model is in the process of being updated to further provide wildfire risk education information that is helpful for homeowners to further understand wildfire risk.
Flood and Dam/Levee Failure Actions		
F-01	Templeton Gap Floodway Accreditation - Obtain documentation regarding the floodway's accreditation status from the U.S. Army Corps of Engineers and the Federal Emergency Management Agency (FEMA). Determine if the City should seek accreditation.	The December 2018 floodplain maps are unchanged for this floodway. FEMA looks at a 100-year flood event for Templeton Gap; obtaining accreditation is a 5-year process and very expensive. A 5-year study is being conducted by FEMA that will more accurately map risk and identify ways to reduce risk.
F-02	Assess Flood Risk for Critical Populations - Assess the risk for facilities with critical populations (schools, nursing homes, etc.). Consider the need for site-specific Emergency Action Plans (EAPs) for locations.	City Planning has the 100- and 500-year floodplain overlay available on the website which shows all facilities potentially impacted. The Pikes Peak Regional Building Department (PPRBD) provides input into plans and permits for buildings within the floodplain. The City maintains EAPs for appropriate dams and has Continuity of Operations Plans for city operations.
F-03	Educate Critical Populations of Flood Risk - Educate critical populations (schools, nursing homes, etc.) of their flood risk and the need to take safety measures. Second step is to assess the risk for critical facilities.	CSOEM held two community meetings in 2018 that focused on flood and wildfire risk and preparedness.
F-04	Address Erosion and Sloughing on Stream Banks - Evaluate additional feasible and functional ways to reduce or eliminate erosion and sloughing on stream banks. Include long-term maintenance considerations in the evaluation.	Work has been completed along several creeks within the city to secure banks eroded by recent floods and the wildfire burn scar. In 2018, the City implemented of the Stormwater Infrastructure Master Plan. The master plan includes an assessment of all City natural channels. Springs Utilities maintains stream banks that impact utilities infrastructure.

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F-05	Mitigation on Non-Burn Scar Streams - Implement mitigation actions on non-burn scar streams including in-channel improvements for stability, detention, and zero run-off increase from new development.	In 2018, the City implemented the Stormwater Infrastructure Master Plan. The master plan includes an annual assessment of all City natural channels. Channels identified by this process as being in critical condition will be prioritized ahead of other capital projects.
F-06	Emergency Action Plans for Streams in Monument Creek Watershed - Monument Creek is the downstream receiving water for many dams where a failure could affect Colorado Springs. Verify that EAPs are available for all higher risk upstream dams.	EAPs for Springs Utilities and City-owned dams are up to date. The City of Colorado Springs Department of Parks, Recreation and Cultural Services (PRCS) has a flood evacuation plan for Garden of the Gods and Midland Trail.
F-07	Evaluation of Enhancements and Enforcement of the Flood Ordinance - Evaluate the potential of implementing revisions to code and/or regulations to further limit or eliminate development in the 100-year floodplain. Enforce current code.	All plans are reviewed and all building permits are evaluated for compliance. Codes and ordinances are reviewed with input from communities. There have been no changes in code from 2017-2018. FEMA floodplain maps show an increase in the number of properties within the floodplain which are due to property improvement; however the structures are actually in safe places. The Planning Department has a stream side overlay that limits impermeable surfaces along the stream. Floodplain preservation is already part of the City planning process and adequate restrictions are in place. Therefore, no new code revisions are required at this time.
F-08	Drainage Criteria Manual Update - Consider updating the Drainage Criteria Manual to provide specific guidelines for accommodating long-term maintenance (access, etc.) in the design requirements for storage (sediment catchment and stormwater detention) basins. Update the City of Colorado Springs Drainage Criteria Manual, Volume 1 & Volume 2, to provide for Sustainable and Resilient Stormwater.	Public Works has been working with consultants and drafting changes in both volumes for future updates.

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F-09	Public Awareness and Messaging about Dams - Implement public awareness campaign about dams which includes: develop a public relations plan to increase public awareness about the dams in Colorado Springs, develop Public Safety messages for Dam Failure; and target the spring time (2019) in preparation for the monsoon season.	The newly developed Stormwater Enterprise will be sending out flyers with the residential billing to inform the general public of flood mitigation projects and the dangers of flooding. No messaging was done specific to dam flooding in 2018, however, messaging was done for generalized flooding.
F-10	Gauge-Adjusted Radar Rainfall System - Re-evaluate the cost/benefit of integrating the available rain gauges with the Gauge-Adjusted Radar Rainfall System. Re-evaluate the feasibility and cost/benefit of improving the reporting speed of rain gauges already in place.	The City uses several free and vendor-based weather monitoring services to inform streets and responder actions. These services already use information from precipitation and stream flow gauges. The time lapse between when the information is sent from the gauge to receiving systems often takes more than 10 minutes. Currently, there is not a cost effective solution to speed up obtaining information from the precipitation and stream flow gauges.
F-11	Property Acquisition – Coordinate the acquisition of eligible properties with property owners and State/Federal programs.	This is an ongoing process. Three properties in the Broadmoor Bluffs area were acquired in 2018 due to landslide damage. One additional property acquisition will be completed in early 2019.
Severe Weather Actions		
SW-01	Burial of Utilities - Continue to bury utilities underground as feasible.	Springs Utilities continues operations to bury utilities underground, where feasible.
SW-02	Tree Trimming and Vegetation Management - Continue to trim trees and vegetation along power line corridors and infrastructure. Evaluate whether the City can support vegetation trimming via cost-sharing methods.	Springs Utilities continues to monitor tree growth around power lines and retains a contract with tree trimmers as well as maintaining an in-house team. Due to two significant wind events in 2017, the Forestry Department, Public Works, and Springs Utilities have a revised process for tracking and responding to calls for downed trees/tree limbs to improve response times.
SW-03	Severe Weather Public Outreach and Education - Provide more information and outreach to the public on hazardous weather risks and mitigation actions so they can better protect themselves and property.	The City Communications Public Education plan contains seasonal awareness campaigns that are implemented in an on-going basis through social and traditional media. Colorado Springs Utilities places information on billing statements, on its website, and joint partner opportunities. Water Resources Engineering has the Ditch Playing in Ditches spring/summer campaign.

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SW-04	Evaluate Need for Severe Weather Protection in Design Criteria - Influence building codes to mitigate for severe weather. Evaluate whether certain roof types could be required to mitigate the impacts of hail and damaging winds.	Building codes are already part of the City planning process and adequate restrictions are in place. Therefore, no new code revisions are required at this time.
SW-05	Public Messaging to Avoid Hazardous Areas - Utilize variable message signs for use at key locations to warn motorists of hazardous areas.	All major partners use their standard messaging protocols to include Public Information Offices (PIOs), social media, websites, variable message boards, and media outlets.
SW-06	Evaluate Need to Modify Building Codes for Drought/Water Conservation - Review zoning codes to encourage xeriscape landscapes.	Policies and procedures encouraging the use of xeriscaping methods are incorporated in other regulations. Code changes are not needed.
SW-07	Provide drought and water conservation guidance and public education	Springs Utilities frequently promotes conservation and drought messages in customer bills, on social media, in paid media and other channels.
Geologic Hazard Actions		
G-01	Landslide Monitoring - The City should proactively monitor landslides with Global Positioning System (GPS), pendulum technology, or other appropriate engineering monitoring system.	In 2018 the City's consultant drilled several borings in the Southwest portion of the City. The borings were drilled to better understand the geology in these locations. At some of the boring locations instrumentation consisting of inclinometers and piezometers were installed. The inclinometers measure horizontal displacement of the subsurface. Piezometers monitor the ground water. The monitoring equipment will be read at regular intervals for the first two years after installation.
G-02	Landslide/Earthquake Outreach and Education - Provide outreach to the public on landslide/earthquake risk and mitigation actions they can take to protect themselves and their property.	As part of the preparedness guide revision, add information on landslide and earthquake hazards into the booklet (CSOEM). Once complete the booklet will be added to the csready.org website. Most earthquakes are low risk with a Seismic Category C of 1 percent (%).

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G-03	Landslide City Codes and design criteria– Evaluate the need to modify city codes and design criteria for landslide susceptible locations within the city limits. Modify and enforce landslide mitigation requirements and work to ensure against building in areas identified as at-risk to landslides.	Codes will be impacted and informed by study and surveying. - The Colorado Geological Survey (CGS) reviews Geological Hazard reports; requirements are currently enforced. - There is currently no moratorium on development. However, if a consensus is not reached based on CGS’s review then the property owners/developers are required to indemnify the City. This indemnification is included in the title work - More may change based on the results of surveying.
G-04	Property Acquisition – Coordinate the acquisition of eligible properties with property owners and State/Federal programs.	Property procurement is actively in process as part of the Hazard Mitigation Grant Program.
G-05	Subsidence – Gather and analyze information on subsidence for integration into the 2021 Hazard Mitigation Plan.	This goal is added based on increased subsidence occurring within the city. Public Works will be conducting additional investigation in the Cragmoor neighborhood in 2019/2020 depending on funding. Subsidence maps are available on the CGS website.
G-06	Subsidence – Reach out to the affected neighborhoods, Council of Neighbors and Organizations, and Home Owner Associations to provide them with information on subsidence assistance opportunities such as the Mine Subsidence Program.	This goal is added based on the increased subsidence occurring within the city. No change to date.
Human-Caused Hazard Actions		
H-01	Terrorism Public Awareness - Continue Public Awareness on terrorism risk: - Promote public awareness campaign of shared responsibility and how the public should notify law enforcement of suspicious behavior (“See something, Say something”) - Sustain capability to use Integrated Public Alert and Warning System (IPAWS) - Continue support of Civil-Military Emergency Management Collaborative	City Communications uses the State campaigns. The buildings at increased risk have been identified. CSOEM maintains the Integrated Public Alert and Warning System (IPAWS) and Civil Military Emergency Management Collaborative meetings.

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H-02	<p>Collaboration to Address Terrorism Risk - Enhance collaboration and coordination among Law Enforcement, Emergency Management and other intelligence-gathering agencies to address terrorism threats.</p> <ul style="list-style-type: none"> - Increase participation in monthly Regional Threat Working Group meetings with the Colorado Information Analysis Center (CIAC) which are focused on terrorist/criminal threat. Springs Utilities also has a monthly meeting. - Coordinate with Colorado Division of Homeland Security and Emergency Management (DHSEM) security representative. 	<p>CSFD works with private partners and the Civil Support Team to improve hazardous materials (HAZMAT) response coordination. Springs Utilities is still supporting the Regional Threat Working Group and has staff with the clearance to attend CIAC meetings.</p>
H-03	<p>Hazardous Materials Readiness and Warning Capabilities - Continue improving readiness and warning to appropriate officials and public for potential HAZMAT incidents for public safety and to reduce secondary impacts</p> <ul style="list-style-type: none"> - Sustain capability of using IPAWS for public warning - Continue to plan HAZMAT exercises - Prepare pre-scripted messages for IPAWS - Consider ways to quickly inform public. Work with media. 	<p>CSOEM continues to maintain IPAWS. There were no HAZMAT specific exercises conducted this year; however, there are normal HAZMAT responses. City Communications continues to use the Crisis Communications and Joint Information System Plans to organize and disseminate information. CSOEM will work with dispatch to determine the status and content of messages.</p>
H-04	<p>Sustain Tier II Reporting - Sustain Tier II facility reporting using the Hazardous Materials Management and Emergency Reporting System (HAMMERS).</p>	<p>CSFD is working to make facility specific hazardous material information available to the Colorado Springs Police Department (CSPD) to assist and inform police response.</p>
H-05	<p>Coordination with Railroad on Hazardous Materials Incidents - Continue to coordinate with the railroad industry to improve collaboration and response in case of a large HAZMAT incident.</p>	<p>CSFD is verifying that rail partners are on the distribution list for the Local Emergency Planning Committee meetings. CSPD Homeless Outreach Team works with rail partners on a regular basis. CSFD HAZMAT and CSOEM have AskRail app on smartphones. Dispatch has a direct line to the railroads and HAZMAT response staff are sent to rail training.</p>

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H-06	<p>Enhance Public Education on Infectious Disease - Continue public education for infectious disease on several topics including vaccinations, emerging diseases, and things to avoid (e.g., animal carcasses). Raise awareness of El Paso County Health Department's website.</p>	<p>Public Health publishes Hot Topics and What's Going Around. Information contained in these reports is shared with the Healthcare Coalition as well as all health care and response partners on Public Health's list serve; CSOEM is on this list serve. The information addresses disease trends and preventative measures. This information is also published on the Public Health's website.</p>
H-07	<p>Evaluate Infectious Disease Response Operations - Review response operations to intervene and stop the spread of infectious disease</p> <ul style="list-style-type: none"> - Maintain awareness of infectious disease response roles and responsibilities - Maintain a strong relationship with El Paso County Public Health - Participate in Public Health Exercises - Educate public on what would happen if they were quarantined and resources that can support them during it - Conduct an exercise for setting up Point of Dispensing (POD) locations 	<p>Public Health and CSOEM provided support to United Services Automobile Association's (USAA's) POD exercise. Public Health also coordinates, and CSOEM participates in, call down drills to ensure communications capability needed for POD or other public health response. Public Health also participated in CSOEM's portion of the Rampart Dam Exercise which included a medical surge and other public health considerations. Public Health regularly participates in CSOEM's workshops as well as in plan maintenance efforts. CSOEM supports and serves on the leadership team for the Healthcare Coalition. Information on quarantine and isolation is provided by the Colorado Public Health and Environment website which describes the legal authorities. Support available is tailored to the type and scope of the communicable disease and support information is widely publicized by incident. There were no incidents requiring quarantine in 2018.</p>
H-08	<p>Cyber Threat Education and Awareness - Implement education and awareness activities for City of Colorado Springs employees to reduce cyber threats and hacking via phishing attacks. Formalize training program and Tabletop Cyber Scenarios.</p>	<p>City Information Technology (IT) has rolled out required Cyber training and participated with CSOEM on Cyber exercises. City IT went through an extensive evaluation of the City's IT infrastructure and will be briefing the CSOEM Policy Group on the City's Cyber capabilities and vulnerabilities. Both City IT and Springs Utilities have programs that inform employees about proper measures to mitigate threats.</p>

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Current Status	
H-09	<p>Continuity of Operations - Evaluate Continuity of Operations scenarios if technology is incapacitated (e.g., no phones, no computer)</p> <ul style="list-style-type: none"> - Use of 800 megahertz (MHz), very high frequency, and ham radios, hardline phones, and courier services - Conduct exercises - Explore contracting with mobile companies that can help restore functionality to internet - Mobile telephone companies will provide some cellular service free of charge during an emergency.
<p>The Amateur Radio Emergency Services and 800 MHz radios are used and tested on a regular basis. CSOEM, CSPD, and CSFD have Government Emergency Telecommunications Service cards to help ensure that first responders have priority communication access. CSOEM is also testing First Net and Verizon Priority.</p>	

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Action #	Description	Current Status
Ongoing Practices (Carried through from Mitigation Actions in 2010 Plan, See Table 6-1 in 2016 Plan)		
O-01	Monitor, inspect, and upgrade as needed, aging infrastructure such as transportation, bridges, drainage, utilities, and others that could be affected during a major disaster.	Hazard mitigation projects in drainages, roads, and bridges are ongoing. The Colorado Department of Transportation (CDOT) is contracted for large inspections. The City now has a Storm Water Advisory Committee as of April 2018. The Water Resources Engineering Division (WRED) is formally an enterprise as of 2018. Springs Utilities has a list of projects that are prioritized in coordination with Public Works. PRCS is looking at approximately 25 trails and bridges to be evaluated in 2019 (total trails/bridges owned is 54). Springs Utilities monitors its infrastructure on a continuous basis.
O-02	Evaluate repetitive loss properties and potential solutions to mitigate existing conditions.	Annually, FEMA sends a list to Pikes Peak Regional Building Department (PPRBD) that documents buildings within the City that have had two or more flood insurance claims over \$1000 paid by the NFIP in 10 years. These buildings are known as repetitive loss properties. Repetitive loss properties can only be removed from the list if the flooding condition has been mitigated and documentation of the mitigation provided to FEMA. Each year, PPRBD must review the list. Possible mitigation activities to solve the flood issues are included in the annual review.
O-03	Continue to expand the capabilities and participation of the Emergency Management Committee and Volunteer Organizations such as the South Central Region Voluntary Organizations Active in Disasters (SCR VOAD).	SCR VOAD continues regular meetings and involvement.
O-04	Complete Geographic Information System (GIS) and other automated inventories for stormwater, problem drainage areas, Digital Flood Insurance Rate Map and other City assets.	GIS has obtained these data sets. The WRED is adding inventories of grade control structures, channels, stream banks, and more. PPRBD has used a new floodplain layer when new floodplain maps were issued in December 2018.
O-05	Coordinate with Springs Utilities to review its current water conservation and drought programs.	Water levels are continuously monitored and evaluated. Based on current information, recommendations are made regarding conservation and drought measures.

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O-06	Achieve and maintain a Class 5 rating in the Community Rating System (CRS) for floodplain management.	The City has achieved a Class 5 rating. Achieving an additional drop in the CRS rating to Class 4 through gaining more credits will equate to \$60,000 worth of NFIP insurance premium cost savings for the City's policy holders. The City can earn more credits through advancing its floodplain, stormwater, and emergency management programs. However, the benefit to cost ratio of doing that needs to be evaluated, as the prerequisites of achieving a Class 4 rating are extensive.
O-07	Review the EAPs provided by Springs Utilities.	CSOEM participated in Springs Utilities Rampart Dam Tabletop (June 20, 2018) and Functional Exercise (September 27, 2018). CSOEM continues to maintain familiarity with Colorado Springs Utilities EAPs.
O-08	Attend EAP exercises coordinated by Springs Utilities.	CSOEM participated in Springs Utilities' Rampart Dam Tabletop (June 20, 2018) and Functional Exercise (September 27, 2018).
O-09	Continue to develop programs and allocate resources for the reduction of fuels in potential wildfire areas. This includes continuing the wildfire mitigation program as well as organizing and providing resources that can be used to reduce natural fuels.	DFM continues to provide landscape fuel treatments within the city. Primary efforts include maintenance of vegetation and chipping for approximately 1,500 acres per year. Springs Utilities focuses are maintaining vegetation around the Rampart reservoir to ensure water supply. Springs Utilities also works with the Colorado Springs Partnership that allows funding for joint projects. The Colorado Springs Forestry Department services about 100-150 acres in addition to providing disease management. Forestry's efforts are about 30% grant funded, but grants are becoming more competitive.
O-10	Continue to develop partnerships with other organizations to implement wildfire mitigation plans and other hazard reduction programs.	The Forestry Department owns about 50% of the Cheyenne Mountain State Park. DFM provides services and education for 115 neighborhoods. Colorado Springs Utilities partners with the United States Forest Service to maintain areas around the watersheds. Colorado Springs Utilities also partners with PRCS and the Coalition for the Upper South Platte (CUSP) to maintain areas around any utilities infrastructure. There are also partnerships between Colorado Springs Utilities, PRCS, El Paso County Sheriff's Office-Wildland Team, and the Colorado Division of Wildlife.

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O-11	Maintain the Community Wildfire Protection Plan (CWPP) including the assessment of parcels identified in the WUI.	DFM is in the process of updating the CWPP. DFM anticipates it will be available by Spring 2019.
O-12	Work with the State Division of Water Resources to evaluate the dams that are not managed by Springs Utilities to determine high or significant impact and current conditions.	High and significant impact dams are identified. Evaluation of dams is conducted on an ongoing basis. PRCS has modified Quail Lake to make it safer based on state input. The State Dam Engineer inspected PRCS dams in 2017. City dams were inspected in 2018.
O-13	Collaborate with other stakeholders (public, businesses, non-profit organizations, government and regulatory agencies, and others) for public outreach efforts.	Pikes Peak United Way and Colorado Springs Utilities support and assist the City. WRED now performs outreach efforts to keep the storm drains clear. The City has multiple messaging campaigns regarding mitigation. CSOEM, CSPD, CSFD, and Springs Utilities are all involved in the Terrorism Liaison Officer program through the CIAC and are able to push and pull information as needed. An ordinance to prevent camping within 100 feet of the creek was passed to ensure the safety of the campers, and water quality for downstream users.
O-14	Restructure the public outreach strategy to share responsibilities amongst the citizens, federal, state, and local governments.	CSOEM continues work to closely with the El Paso County Office of Emergency Management and community-based partners such as The Independence Center, ARC, VOAD; numerous other community-based and faith-based organizations; regional; and state partners to unify, coordinate, and share responsibilities. Colorado DHSEM shares monthly National Preparedness messaging via Ready Colorado with the City and provides source information as requested. Messages target what the public can and cannot do and are often based on state and federal messages. Springs Utilities has several programs that encourage wise water use. WRED holds community meetings, public service announcements, and news videos. Many partners are able to disseminate seasonal messaging. Many use state and Federal seasonal campaign information. City Planning will refer people to PPRBD as appropriate.

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O-15	Continue to operate the City's OEM hazards website.	CSOEM's website, csready.org, is updated regularly for hazards based on the time of year. Public messaging is also shared to encourage preparedness for the targeted hazard topics such as severe weather, wildfire, flooding, etc. In September, CSOEM is created and posted several videos addressing emergency preparedness topics.
O-16	Pursue additional grants to implement risk reduction projects.	<p>This process is on-going. The City actively applies for and receives grants and funding to assist with projects. Examples include three grants from CDOT, Pre-Disaster Mitigation (PDM), and other flood mitigation projects. DHSEM continues to work with the City on the following currently awarded mitigation projects: Cottonwood Creek (PDM '11) - Complete; Greencrest (PDM '12) - Complete; Wildfire Mitigation Project (PDM '16) Wolf Ranch - Complete; Mt. Washington & Custer Avenue property acquisitions (Hazard Mitigation Grant Program [HMGP] 4145) - Complete; Manitou Incline Erosion Control (HMGP 4145) - Complete; Camp Creek/Garden of the Gods (HMGP 4145) - Complete; Platte Avenue Bridge Stabilization (HMGP 4145) - Complete.</p> <p>DHSEM strongly encourages the City to continue to identify projects for potential FEMA Hazardous Materials Accident funding and working with DHSEM staff to submit said project applications for funding. DFM is working on approximately five different grants (Forest Restoration, Allstate, PDM, El Pomar, Anschutz, and applying with the United States Automobile Association foundation). Springs Utilities works with CUSP to get grants and implement with Springs Utilities providing the required local funding match. The Forestry Department has been able to get grant funding for mitigation equipment through the State. Homeland Security funding is used to support OEM, CSPD (Explosive Ordnance Disposal Tactical), and CSFD (Communications and Hazmat). CSOEM also received 911 Authority funding for two Gold Elite Consoles in the Emergency Operations Center Dispatch Room. WRED was able to obtain three recent PDM grants to assist with stormwater-related projects.</p>

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O-17	Continue to involve the CGS in land use reviews and hazard assessments.	Completed the project to identify and monitor land movement in a limited area of southwest Colorado Springs. Ongoing efforts integrated with Action G-01 to monitor landslide.
O-18	Maintain Emergency Management Accreditation Program (EMAP) certification.	An EMAP Assessment Team reviewed CSOEM's program in January 2018 and CSOEM received formal accreditation in April 2018.
O-19	Ensure the effectiveness of large-scale evacuation plans through full-scale tests.	CSOEM, along with other partners, hosted the Neighborhood Evacuation Drill on September 9, 2018. Participants practiced evacuating their homes to an information center where preparedness information from multiple community partners was available. Many participants included their pets in the drill allowing the Humane Society of the Pikes Peak Region to test its animal shelter capabilities.
O-20	Ensure that plans and procedures consider the whole community. Ensure that information is available and accessible by the whole community.	As a best practice, Access and Functional needs considerations are integrated throughout plans and procedures for the Emergency Management program. The City ensures that department websites are Americans with Disabilities Act compliant. The Forestry Department has a public process for specific projects. DFM has written scopes of work and printed procedures on its website and during public processes. CSPD, CSFD, American Medical Response, and CSOEM all have processes in place to quickly obtain interpreters as needed. CSOEM and the 911 Authority released videos on preparedness with captioning and a sign language interpreter. The City uses a variety of tools to help ensure accessibility. CSPD's Homeless Outreach Team works to ensure that those experiencing homelessness are informed about available resources through direct contact as well as through coordination with homeless service providers. CSOEM released several preparedness videos that included an American Sign Language interpreter. CSOEM has an emergency preparedness guide available online and in hard copy. Springs Utilities' corporate communications team provides information in a number of formats to make information more accessible. WRED does outreach with the schools to 'Ditch playing in Ditches'.

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O-21	Develop preparedness guides for Colorado Springs residents and businesses.	The preparedness guide had slight revisions in 2018 and a grant was obtained to partially fund reprinting the guide. The guide is also available for download on csready.org in both English and Spanish.
O-22	Continue to improve the communication of severe weather warnings, flood warning, and related information.	CSOEM is working on expanding the use of a mass notification system to disseminate emergency information for the long term. A mass notification system by a different service provider is employed in the short term, but the City is quickly approaching our maximum number of contacts. City Public Information Officers (PIOs) from CSPD, CSFD, CSOEM, the Mayor's Office, and response partners (Offices of Emergency Management in neighboring communities, ARC, El Paso Teller 911 Authority) regularly encourage people to register their phones with the 911 Authority. Messages are coordinated based on alert and warning information. PRCS has a process to inform staff and close gates to certain areas.
O-23	Continue the use of a resource management system to capture the financial data for hazard events.	CSOEM continues to use the WebEOC 213RR electronic resource request form process to track resource requests and associated costs. This year, CSOEM is evaluating the feasibility of having information from the 213RR form populate a spreadsheet that allows easy manipulation by the Finance Section.

City of Colorado Springs Hazard Mitigation Strategy 2018 Annual Report



ABBREVIATIONS AND ACRONYMS LIST

Acronym	Definition
%	percent
ARC	American Red Cross
CDOT	Colorado Department of Transportation
CGS	Colorado Geological Survey
CIAC	Colorado Information Analysis Center
City	City of Colorado Springs
CRS	Community Rating System
CSFD	Colorado Springs Fire Department
CSOEM	Colorado Springs Office of Emergency Management
CSPD	Colorado Springs Police Department
CUSP	Coalition for the Upper South Platte
CWPP	Community Wildfire Protection Plan
DFM	Division of the Fire Marshal
DHSEM	Division of Homeland Security and Emergency Management
EAP	Emergency Action Plan
EMAP	Emergency Management Accreditation Program
FEMA	Federal Emergency Management Agency
Forestry Department	Colorado springs Forestry Department
GIS	Geographic Information System
HAMMERS	Hazardous Materials Management and Emergency Reporting System
HAZMAT	hazardous materials
HMGP	Hazard Mitigation Grant Program
IPAWS	Integrated Public Alert and Warning System
IT	Information Technology
MHz	megahertz
PDM	Pre-Disaster Mitigation
PIO	Public Information Office
POD	Point of Dispensing
PPRBD	Pikes Peak Regional Building Department
PRCS	City of Colorado Springs Department of Parks, Recreation and Cultural Services
SCR VOAD	South Central Region Volunteer Organizations Active in Disaster
USAA	United States Automobile Association
WHINFOE	Wildfire Hazard Information Extraction
WRED	Water Resources Engineering Division
WUI	Wildland-Urban Interface