

Colorado Springs 2016 Hazard Mitigation Plan

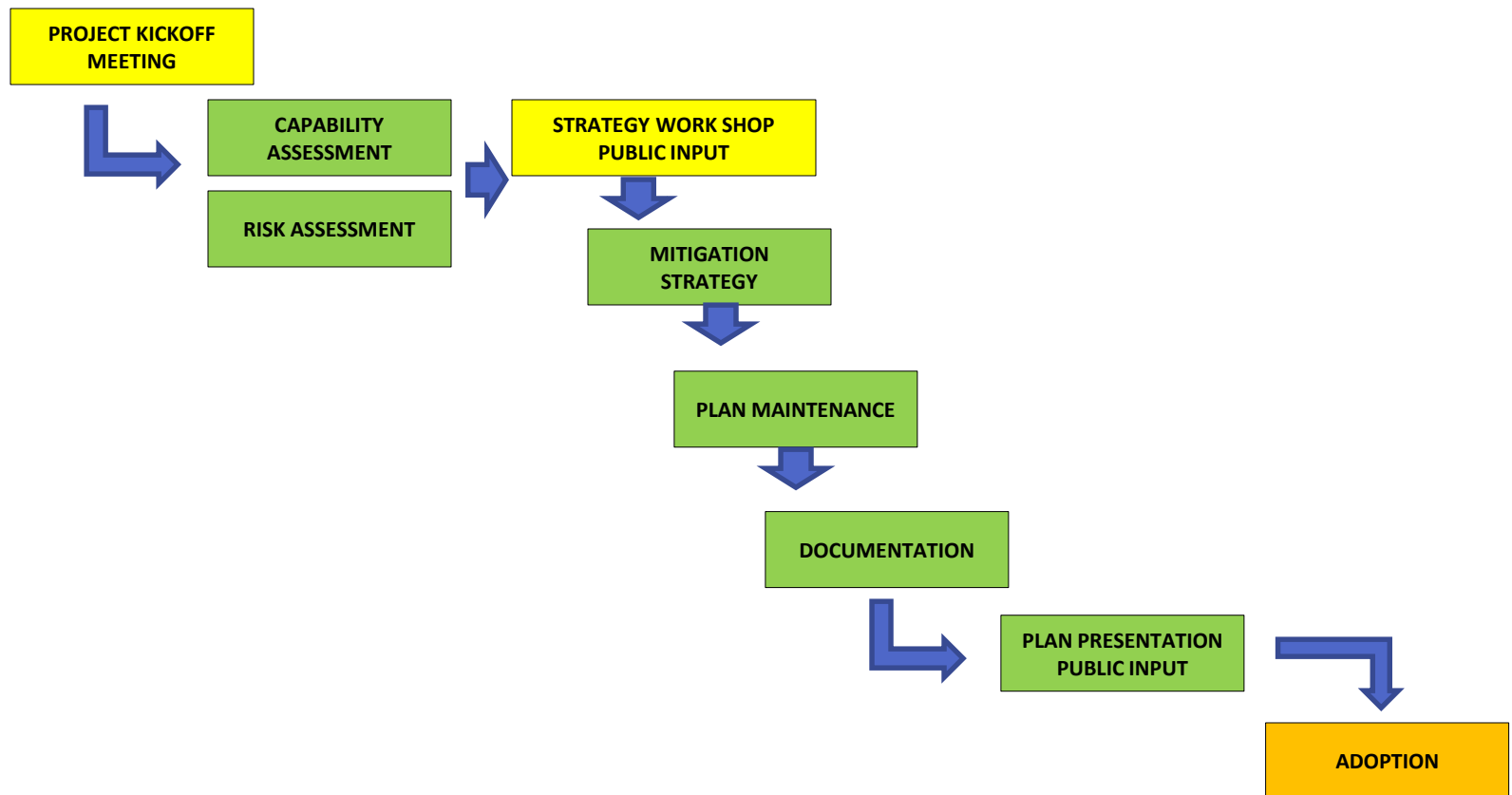
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Background

- FEMA requires state, tribal, and local governments to develop and adopt hazard mitigation plans as a condition for receiving certain types of non-emergency disaster assistance, including funding for mitigation projects.
- Every 5 years, the city goes through a formal process of reviewing and updating its hazard mitigation plan. The last plan was adopted in 2010.
- This year we gathered input from wide array of partners and stakeholders during the plan analysis process.
- The plan was reviewed by the Colorado Department of Homeland Security and Emergency Management (DHS-EM) and FEMA Region VIII.
- The plan is now ready for adoption by City Council.

Hazard Mitigation Planning Process



Survey

- Part of the planning process included **input from the public** to gain an understanding of levels of preparedness within the community.
- To do this OEM developed an **on-line survey** of 15 questions that was open to the public July 27 through August 15.
- Accommodations were made for citizens needing assistance to complete the survey.
- One thousand fifty-seven (1157) people participated in the survey.

Survey Results

- More than 50% of respondents were 50 years or older and have lived in Colorado Springs for at least 20 years.
- More than 65% feel they are “somewhat or very prepared” for an emergency.
- More than 58% said their household is prepared to remain in the home without water, gas, or electricity for 72 hours.
 - ✓ Although prepared to remain at home, 23 percent of respondents can not go without medication or medical treatment after 72 hours.
- Most respondents would rely on **television** to receive public information during an emergency (45%), followed by the **internet** (19%), **social media** (13%) and **radio** (11%).
- Perceived **natural hazards**: Severe Weather, Wildfire and Flooding.
- Perceived **manmade scenarios**: Active Shooter, Epidemic (Infectious Disease), Cyber-attack and Explosive Device.

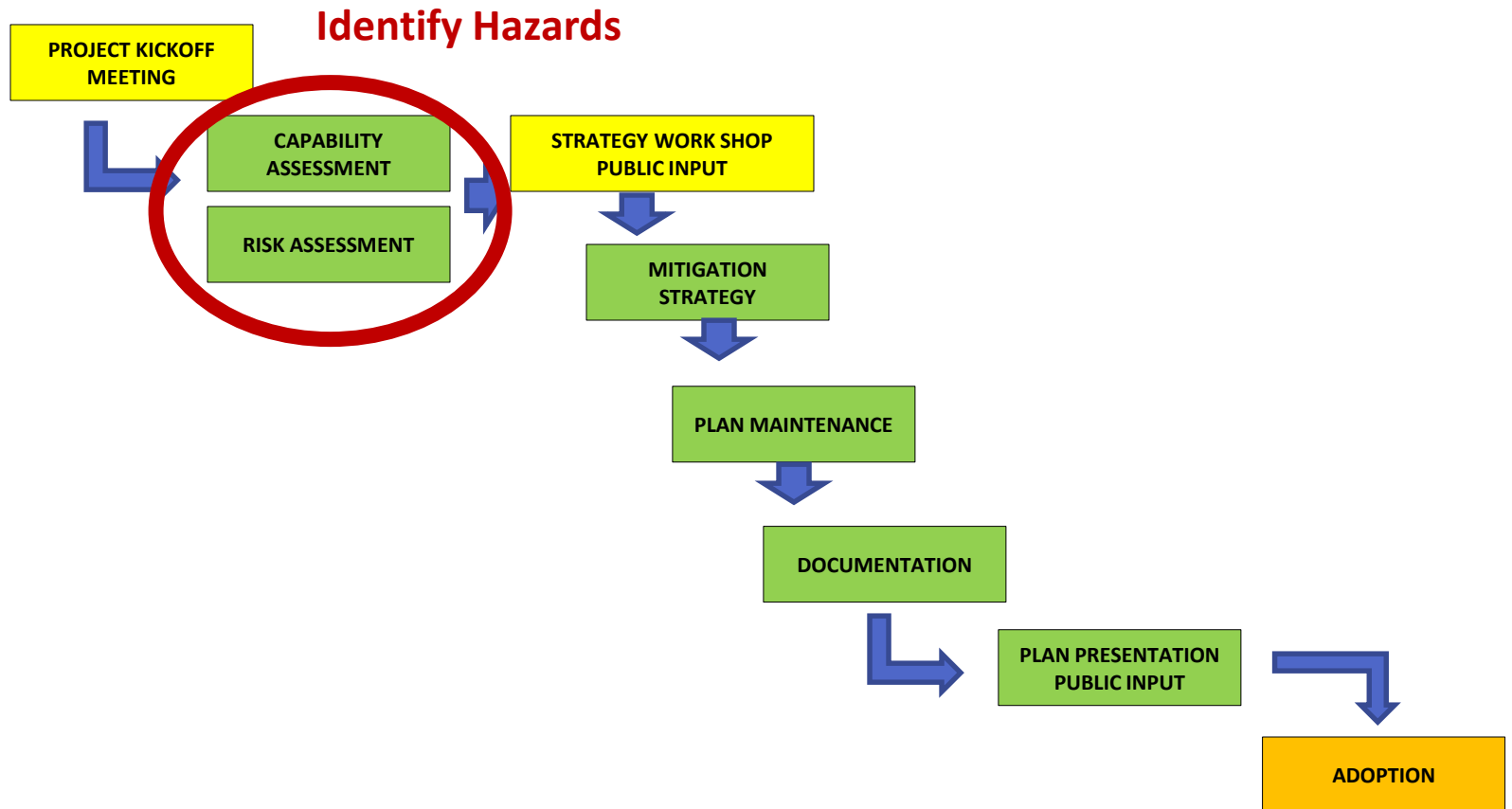
Local Planning Committee

- The City of Colorado Springs Office of Emergency Management (OEM) and AECOM worked together to convene the Local Planning Committee to guide the planning process and make key decisions.



PC and Stakeholders responding to survey during Kickoff Meeting.

Hazard Mitigation Planning Process



Hazard Identification

2016 Identified Hazards

Hazard	Hazard Impacts or Variations
Flood	Flood (including Flood Risk after Fire), Dam and Levee Failure
Wildfire	Wildfire
Geologic Hazards	Earthquakes, Landslides, Subsidence, and Rockfall
Severe Weather	Hail, Lightning, Tornadoes, Windstorms, Severe Winter Storms, and Drought
Human-Caused Hazards	Hazardous Materials Incidents, Terrorism, and Infectious Disease Incidents

Wildfire

- **Colorado Springs has also experienced its share of wildfires, dating as far back as 1854.**
- **Two of the largest wildfires in Colorado Springs history struck in consecutive years with the Waldo Canyon fire in 2012 and the Black Forest Fire in 2013.**



Flood

Colorado Springs is at risk to riverine and stormwater flooding. Riverine flooding is defined as when a watercourse exceeds its “bank-full” capacity and generally occurs as a result of prolonged rainfall, or rainfall that is combined with soils already saturated from previous rain events.

Includes Dam and Levee Failure.



Severe Weather

Severe weather hazards refer to dangerous and/or damaging meteorological events resulting from weather systems or prolonged climate patterns which include the following for Colorado Springs: **Hail, Tornado, Lightning, Windstorm, Winter Storm, Drought.**

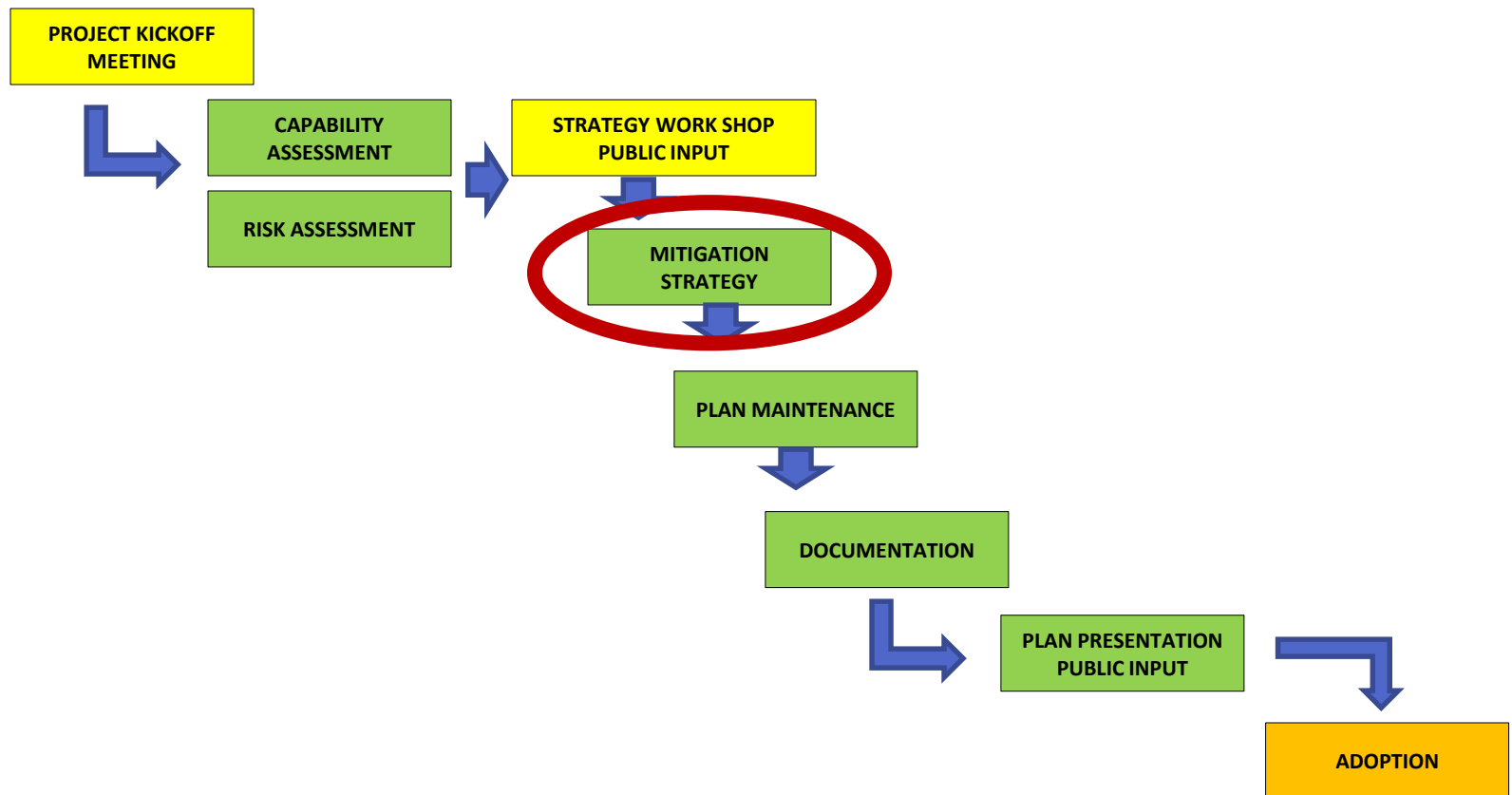


Human Caused

Human-caused hazards refer to threats to life safety and property originating from and caused by people, either inadvertently (from ignorance, accidental, or negligence) or intentionally. Human-caused hazards for Colorado Springs include: **Hazardous Material Incidents, Terrorism and Infectious Disease Incidents.**



Hazard Mitigation Planning Process



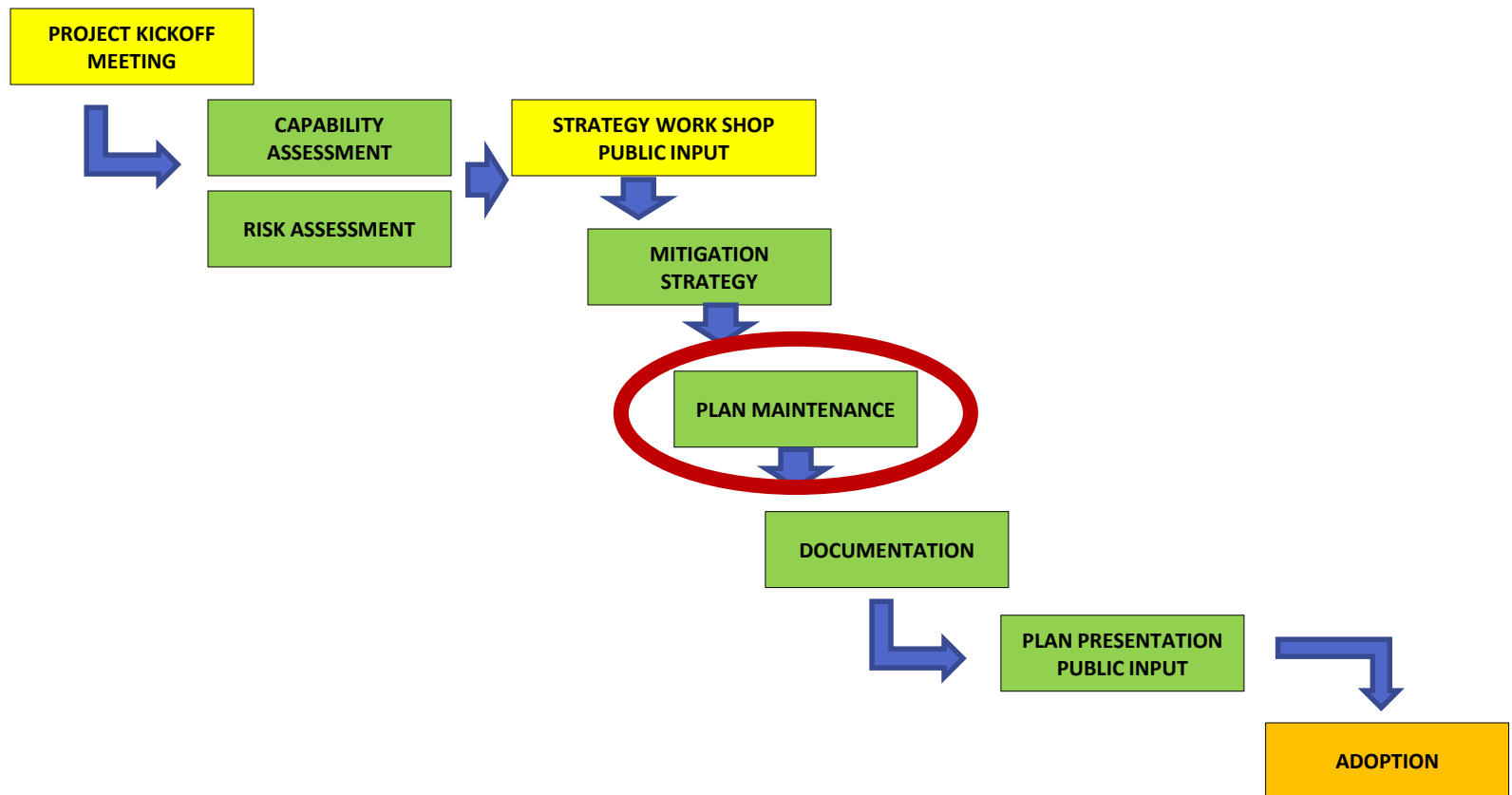
Mitigation Actions

- Mitigation is the effort to reduce loss of life and property by lessening the impact of disasters.
- The ***Local Planning Committee*** reviewed mitigation actions from the 2010 plan ***and developed new actions*** for the 2016 Plan.
- ***58 Actions identified for the 2016 Plan.***

Example Mitigation Action

H5. Coordination with Railroad on Hazardous Materials Incidents	
Project Description/Comments:	Continue to coordinate with the railroad industry to improve collaboration and response in case of large HAZMAT incident
Multi-Criteria Evaluation:	No concerns
Hazard(s) Addressed:	Human-caused hazards
Responsible Organization:	OEM, CSFD
Estimated Costs:	Staff time to Low
Possible Funding Sources:	Staff budget, DHS
Timeline for Implementation:	Immediate and on-going - HAZMAT Tabletop and Functional Exercises (one planned in Spring 2016)
Cost-Benefit Review	Due to relatively low cost and life safety benefits, the overall benefits are anticipated to outweigh costs
Priority	High

Hazard Mitigation Planning Process



Plan Maintenance

The Local Planning Committee **will meet annually to evaluate the implementation** of the City of Colorado Springs Hazard Mitigation Plan.

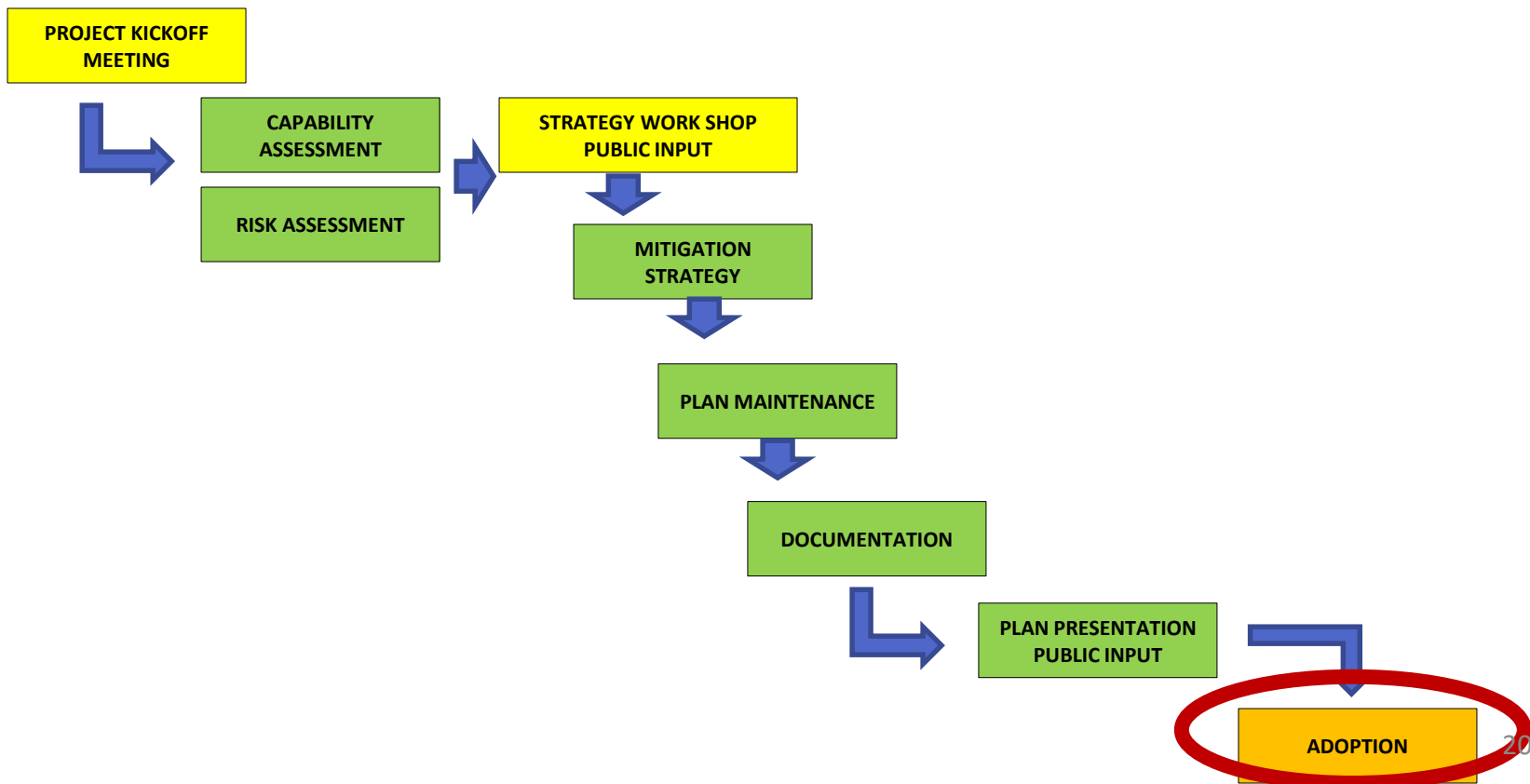
Plan Maintenance Checklist Year Reviewed:

Action #	Mitigation Action Name and Brief Description	Objective	Responsible Agency	Current Status
Wildfire Actions				
W1	Wildland-Urban Interface (WUI) action - Formally define the WUI as a different polygon than the hillside overlay. Make this distinction clear in the locally adopted codes and information materials.	A, C and E	Division of the Fire Marshal	
W2	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.	B, C and F	Division of the Fire Marshal	
W3	Wildfire Mitigation Fuel Reduction Activities - Continue fuels reduction activities to include neighborhood chipping, creating defensible around homes using residential stipends, prescribed burning in remote areas, and hazard fuel reduction projects in common areas and open spaces.	A and D	Division of the Fire Marshal	
W4	Wildfire Mitigation Outreach to the Business Community - Expand Business Education and Outreach about wildfire concerns, evacuation, and business continuity. Continue integration with the Division of the Fire Marshal's current efforts focused on businesses and healthcare facilities. Explore expanding outreach to adopt an all-hazards perspective in partnership with OEM.	B and C	Division of the Fire Marshal/ OEM	
W5	Enhance WHINFOE Risk Model - Enhance the Wildfire Hazard Information Extraction (WHINFOE) risk model to include adjacency of structures and urban configuration potential.	A, B, C and E	Division of the Fire Marshal/ Colorado Springs IT Department	
Flood and Dam/Levee Failure Actions				
F1	Templeton Gap Floodway Accreditation - Obtain documentation regarding the floodway's accreditation status from USACE and FEMA. Determine if the City should seek accreditation.	A and E	City Public Works/ Stormwater	
F2	Assess Flood Risk for Critical Populations - Assess the risk for facilities with critical populations (schools, nursing homes, etc.). Consider the need for site-specific EAPs for locations.	A, B and D	City Planning/ Pikes Peak Regional Building Department	

Plan Maintenance Checklist



Hazard Mitigation Planning Process



Recommendation

That the Colorado Springs City Council **approve the adoption** of the 2016 Hazard Mitigation Plan.

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