EAST-WEST GATEWAY
Council of Governments

Creating Solutions Across Jurisdictional Boundaries

St. Louis Regional Hazard Mitigation Plan
Unincorporated County Questionnaire

Date:

Thank you for filling out the information below. Not only does your contribution help EWG develop and maintain the St. Louis Regional Hazard Mitigation Plan, but it is also a critical step in ensuring your county is eligible to apply for hazard mitigation grants.

Please fill out the questions below as completely as possible and list everyone who contributed information. There are three sections: 1) jurisdiction information, 2) hazard rankings, and 3) mitigation strategies. All must be filled out to be eligible for FEMA hazard mitigation funds.

Questions? Email hazardmit@ewgateway.org or sign up for our online 'office hours' at https://www.ewgateway.org/hazardupdate/.

Name(s) & Title(s)	
County	
Contact name and email	

1. *How many critical facilities are in the incorporated area of your county?*	Critical facilities = schools, hospitals, government buildings, railroads, highways	Number			
2. Please provide your county's property tax valuation/assessment for the most current year.	Year	Valuation			
3. What are your county's expected development trends over the next 5 years? Please list expected development, housing, commercial, retail.	Example: anticipate 5% growth, stay the same, or decrease by 3%, etc.	Why? (Example, new housing development, loss of major employer, etc.)			
4. Please provide the year of your county's adopted building codes (if not all same year, please list each code with year)	Building code	Plumbing code	Mechanical code	Electric code	Fire code
5. Please provide the year your county anticipates adopting newer or current building codes and the code year.	Example, in 2024 County will adopt the 2021 International Building Code (IBC).	Year			
6. Has your county flooded in the past?	Yes	If yes, what years?	No		
7. What rivers/creeks border or run through your county?	Please list:				
8. Do you allow construction/development in your flood zone(s)?	Yes	No	Explanation if needed:		

9. How many critical facilities are in your flood zone(s)?	Critical facilities = Schools, hospitals, government buildings, railroads, bridges, and highways	Number:	
10. Have structures in your county experienced repetitive losses due to flooding?	Yes	If yes, what years?	No
11. Does your county have at-risk populations in flood zones or areas prone to flash flooding?	At risk populations = people without access to transportation, those who speak English as a second language or not at all, those living in poverty, people over 60 years, and persons of color.	If yes, please list percent of total county population	No
12. Does your county participate in the National Flood Insurance Program (NFIP)?	Yes	No	If no, please describe why not and skip to question #17
13. Has your county adopted NFIP minimum floodplain management criteria via county ordinance?	Yes	No	If no, please describe why not
14. Has your county adopted the latest effective Flood Insurance Rate Map (FIRM)?	Yes	No	If no, please describe why not

15. Has your county appointed a designee or agency to implement the addressed commitments and requirements of NFIP?	Yes	No	Please list designee or agency (title and/or department, do not list person by name)
16. Please describe how your county implements the 'substantial improvement/substantial damage' provisions of your floodplain management regulations after a flooding event.			
17. Does your county have any sinkholes or areas of potential ground failure?	Yes	If yes, how many?	No, if no, please skip to #20
18. Are there any critical facilities in ground failure areas?	Yes	If yes, how many?	No
19. Does your county have at-risk populations in areas with potential ground failure?	If yes, please list percent of total county population		No
20. Does your county sit behind any levees? (Unincorporated areas only)	Yes	If yes, how many?	No, if no, please skip to #23
21. Does your county have at-risk populations behind levees?	Yes	If yes, please list percent of total county population	No
22. Are there any critical facilities behind the levees?	Yes	If yes, how many?	No
23. Is your county located downstream/below any high hazard potential dam?*	Yes	If yes, how many?	No, if no, please skip to #28
24. Are there any critical facilities below the high hazard potential dam(s)?	Yes	No	If yes, how many?

25. Does your county have at-risk populations downstream of high hazard potential dams?	Yes	If yes, please list percent of total county population	No	
26. Please describe if/how your county coordinates with local dam owner.				
27. If your county has a high hazard potential dam, please describe your coordination efforts with downstream jurisdictions.				
28. Does your county have at-risk populations living in housing that may be vulnerable to tornadoes?	Yes	If yes, please list percent of total population	No	
29. Has your county completed any hazard mitigation activities/projects in the last 5 years?	Yes	No	What projects?	Budget?
30. Is your county currently receiving funds for hazard mitigation planning or projects?	Yes, please list what plans or projects			No

31. Does your county plan to apply for hazard mitigation grant funds in the next 5 years, and if so, for what kind of projects?	Yes	No	What projects?	Approximate cost?
32. How will your county incorporate the St. Louis Regional Hazard Mitigation Plan into your existing plans?	Example: Emergency Operations Plan, Capital Improvement Plan, Master Plan, etc.	Please list which plans (must include at least one plan)		
33. Please list your county's emergency capabilities	Example: 35 firefighters, 26 police officers			
34. Please list your county's emergency powers	Example: ability to declare emergency, ability to order evacuation, ability to declare curfew, etc.			
35. Does your county have an emergency notification system (e.g. Code Red)?	Yes	If yes, please provide name	If yes, how much does the system cost annually?	No

36. Does your county have emergency alert sirens?	Yes	If yes, how many?	No
37. What methods or mechanisms do you have available to communicate with your citizens for non-emergencies? (e.g., X, Facebook, bill inserts, email subscription, web page, etc.)	Please list:		
38. Please list any mitigation strategies or additions to the St. Louis Regional Hazard Mitigation Plan not included in the Plan Goals and Mitigation Actions section that you would like considered for adoption in plan amendments or future plans.			
For flooding			
For winter storms			
For heat waves			
For tornadoes			
For drought			
For earthquakes			
For ground failure			
For dam/levee failure			
39. What is the natural disaster most likely to most significantly impact your county and why? (can be more than one)			

*High hazard potential dams are those dams that should there be a failure, there is risk to human life. The Inventory of dams can be found here - https://nid.sec.usace.army.mil/#/

Thank you for providing the above information! It is a key part in making your county eligible for hazard mitigation grant funding.

If you have any questions, please email hazardmit@ewgateway.org.

To sign up for virtual office hours to discuss the questionnaire or something else related to hazard mitigation, visit https://www.ewgateway.org/hazardupdate/.

Plan Goals and Mitigation Actions

Please read before proceeding to hazard rankings and mitigation strategies.

The goals for the St. Louis Regional Hazard Mitigation Plan are as follows:

1. Prepare communities in advance of a natural disaster to prevent loss of life, minimize injury, and illness;
2. Preserve and maintain property, including public and private infrastructure, businesses, and individual homes, and improve community vitality; and
3. Encourage regional, county, and local planning and development that reduces future risk from natural disaster and is consistent with the hazard mitigation plan.

Every county must choose at least one mitigation strategy per natural hazard regardless of whether your jurisdiction has that hazard.

▪ Tornadoes	▪ Winter Storms	▪ Flooding
▪ Earthquakes	▪ Severe Thunderstorm	▪ Dam / Levee Failure
▪ Extreme Heat	▪ Ground Failure	▪ Drought
▪ Wildfire		

St. Louis Regional HMP goals are based on grant fundable measures. Although not all mitigation strategies listed below are fundable, most listed below meet those criteria.

4.1 Mitigation Needed to Prepare for Tornadoes

1. Build safe rooms for schools, community centers, mobile home communities, critical municipal and infrastructure operations and require construction of safe rooms within new public buildings.
2. Develop and maintain early warning systems to target public and specific, vulnerable communities.
3. Retrofit one- and two-family residences and infrastructure and essential buildings.
4. Adopt current building codes and adopt ordinances to exceed minimum construction standards for high winds and develop ordinance to require underground utility lines in new developments.
5. Require anchoring of manufactured homes and exterior attachments and incorporate local inspections.
6. Create and improve early warning systems for tornado events including sirens, and targeted response such as Reverse 911, Code Red, Everbridge, Nixle, etc. and integrate communications systems to provide rapid communication and response.
7. Conduct risk assessments for tornado events.
8. Acquire necessary equipment, including generators, tree trimming equipment, and pumps, to secure lives and property.
9. Develop a plan for tornado mitigation.

4.2 Mitigation Needed to Prepare for Winter Storms

1. Create and support neighborhood initiatives for at risk populations, including, but not limited to elderly, unhoused, and those unable to afford their utility bills and establish relief centers and encourage the public and pets to use the centers.
2. Build new or retrofit existing structures for warming centers.
3. Ensure all-weather capabilities for emergency equipment.
4. Acquire necessary equipment, including generators, and pumps, to secure lives and property.
5. Develop a plan for winter storm mitigation.

4.3 Mitigation Needed to Prepare for Extreme Heat

1. Create and support neighborhood initiatives for at risk populations, including, but not limited to elderly, unhoused, and those unable to afford their utility bills and establish relief centers and encourage the public and pets to use the centers.
2. Build new or retrofit existing structures for cooling centers.
3. Increase tree planting and enhance shade availability to mitigate heat impacts.
4. Enforce burn ordinances and audit water loss and incentivize water reuse.
5. Acquire necessary equipment, including generators, and pumps, to secure lives and property.
6. Develop a plan for extreme heat mitigation.

4.4 Mitigation Needed to Prepare for Severe Thunderstorms

1. Regularly inspect and maintain storm drains and storm drainage systems to remove debris and blockages impeding stormwater flows.
2. Review and update building codes to reduce building damage.
3. Improve early warning systems and maintain integrated communications systems for rapid response.
4. Promote student, individual, and household preparation.
5. Create and/or improve early warning systems for severe thunderstorms, including sirens, and targeted response such as Reverse 911, Code Red, Everbridge, Nixle, etc.
6. Acquire necessary equipment, including generators, and pumps, to secure lives and property.
7. Develop a plan for severe thunderstorm mitigation.

4.5 Mitigation Needed to Prepare for Floods

1. Protect stream buffers from development and create setback requirements along streams and encourage and/or engage in wetland restoration.
2. Join or maintain participating status in National Flood Insurance Program (NFIP) and adopt Floodplain Management Plans.
3. Reduce or eliminate development in floodplain and use green Infrastructure best management practices to manage stormwater where it falls in rain gardens, swales, detention ponds, and similar structures.
4. Buy out repetitive loss properties, retrofit or reconstruct infrastructure, and utilize structure elevation to reduce flooding impacts.
5. Removal of public structures from flood zones, use dry flood proofing for historic buildings, and dry flood proofing non-residential structures to reduce flood damage.
6. Use localized and non-localized flood risk reduction and soil stabilization for increased flood resiliency.
7. Use post-disaster code enforcement and implement NFIP Substantial improvement/substantial damage provisions.
8. Update floodplain and flash flood-prone area mapping and maintain list of flood prone structures.
9. Install backflow valves and sump pumps in critical facilities and perform storm drainage system maintenance.
10. Replace inadequate or non-performing culverts and maintain, replace, or improve other stormwater infrastructure, including storm drains.
11. Install and maintain pumping stations in levee systems.
12. Develop ordinances to require best management practices stormwater infrastructure design and construction, with long term maintenance provisions.
13. Create and improve early warning systems for floods, including sirens, and targeted response such as Reverse 911, Code Red, Everbridge, Nixle, etc., and integrate communications systems to provide rapid communication and response.
14. Conduct risk assessments for floods.
15. Acquire necessary equipment, including generators, and pumps, to secure lives and property.
16. Develop a plan for flood mitigation.

4.6 Mitigation Needed to Address Risk of Failure in Dams and Levees

1. Encourage annual inspection of dams and levees.
2. Improve structural integrity of dams, using incentives where feasible.
3. Educate dam and levee owners about responsibilities and liabilities and develop and maintain emergency contact lists for levees.
4. Develop and implement dam/levee failure emergency action plans.
5. Create and improve early warning systems for dam / levee failures, including sirens, and targeted response such as Reverse 911, Code Red, Everbridge, Nixle, etc.
6. Conduct risk assessments for dam / levee failures.
7. Develop a plan for dam / levee failure mitigation.

4.7 Mitigation Needed to Prepare for Earthquakes

1. Improve early warning systems.
2. Review and update building codes.
3. Maintain integrated communications systems for rapid response.
4. Promote student, individual, and household preparation.
5. Use infrastructure retrofit and structural and non-structural retrofit of existing buildings.
6. Adopt Seismic Construction Ordinance.
7. Create and improve early warning systems for earthquakes, including sirens, and targeted response such as Reverse 911, Code Red, Everbridge, Nixle, etc.
8. Integrate communications systems to provide rapid communication and response.
9. Conduct risk assessments for earthquakes.
10. Acquire necessary equipment, including generators, and pumps, to secure lives and property.
11. Develop a plan for earthquake mitigation.

4.8 Mitigation Needed to Prepare for Sinkhole / Ground Failure

1. Review new construction permit applications and reduce or eliminate construction in areas with undermined land or above highly soluble bedrock.
2. Map and assess vulnerable areas and stabilize when feasible.
3. Maintain a list of buildings constructed over underground mines.
4. Develop specially engineered resilient pipelines in areas subject to ground failures.
5. Develop / improve mining regulations.
6. Create and improve early warning systems for ground failures, including sirens, and targeted response such as Reverse 911, Code Red, Everbridge, Nixle, etc.
7. Conduct risk assessments for ground failures.
8. Acquire necessary equipment, including generators, and pumps, to secure lives and property.
9. Develop a plan for sinkhole / ground failure mitigation.

4.9 Mitigation Needed to Prepare for Drought

1. Audit water loss and incentivize water reuse.
2. Repair, retrofit, and maintain water supply systems to minimize water loss.
3. Provide soil and water conservation practices education for farmers and/or public.
4. Acquire necessary equipment, including generators, and pumps, to secure lives and property.
5. Develop a plan for drought mitigation.

4.10 Mitigation Needed to Prepare for Wildfire

1. Enforce open burn restrictions and burn ordinances.
2. Use vegetation management to reduce fuel loads.
3. Fire-resistant building retrofit.
4. Acquire necessary equipment, including generators, and pumps, to secure lives and property.
5. Develop a plan for Wildfire mitigation.

Name(s):	PRIORITY			ACTION		
Title(s):	H - High			O - Ongoing		
County:	M - Medium			C - Complete		
Date:	L - Low			D - Deferred		
ACTIONS	**Circle One (L, M, H)**			**Circle One (O, C, D)**		
4.1 – Tornado						
1. Build safe rooms for schools, community centers, mobile home communities, critical municipal and infrastructure operations and require construction of safe rooms within new public buildings	H	M	L	O	C	D
2. Develop and maintain early warning systems to target public and specific, vulnerable communities	H	M	L	O	C	D
3. Retrofit one- and two-family residences and infrastructure and essential buildings	H	M	L	O	C	D
4. Adopt current building codes and adopt ordinances to exceed minimum construction standards for high winds and develop ordinance to require underground utility lines in new developments	H	M	L	O	C	D
5. Require anchoring of manufactured homes and exterior attachments and incorporate local inspections	H	M	L	O	C	D
6. Create and improve early warning systems for tornado events including sirens, and targeted response such as Reverse 911, Code Red, Everbridge, Nixle, etc. and integrate communications systems to provide rapid communication and response	H	M	L	O	C	D
7. Conduct risk assessments for tornado events	H	M	L	O	C	D
8. Acquire necessary equipment, including generators, tree trimming equipment, and pumps, to secure lives and property	H	M	L	O	C	D
9. Develop a plan for tornado mitigation	H	M	L	O	C	D
4.2 – Winter Storms						
1. Create and support neighborhood initiatives for at risk populations, including, but not limited to elderly, unhoused, and those unable to afford their utility bills and establish relief centers and encourage the public and pets to use the centers	H	M	L	O	C	D
2. Ensure all-weather capabilities for emergency equipment	H	M	L	O	C	D
3. Acquire necessary equipment, including generators, and pumps, to secure lives and property	H	M	L	O	C	D
4. Develop a plan for winter storm mitigation	H	M	L	O	C	D
4.3 – Extreme Heat						
1. Create and support neighborhood initiatives for at risk populations, including, but not limited to elderly, unhoused, and those unable to afford their utility bills and establish relief centers and encourage the public and pets to use the centers	H	M	L	O	C	D

2. Increase tree planting and enhance shade availability to mitigate heat impacts	H	M	L	O	C	D
3. Enforce burn ordinances and audit water loss and incentivize water reuse	H	M	L	O	C	D
4. Repair, retrofit, and maintain water supply systems to minimize water loss	H	M	L	O	C	D
5. Provide soil and water conservation practices education for farmers	H	M	L	O	C	D
6. Acquire necessary equipment, including generators, and pumps, to secure lives and property	H	M	L	O	C	D
7. Develop a plan for extreme heat event mitigation	H	M	L	O	C	D
4.4 – Severe Thunderstorm						
1. Regularly inspect and maintain storm drains and storm drainage systems to remove debris and blockages impeding stormwater flows	H	M	L	O	C	D
2. Review and update building codes to reduce building damage	H	M	L	O	C	D
3. Improve early warning systems and maintain integrated communications systems for rapid response	H	M	L	O	C	D
4. Promote student, individual, and household preparation	H	M	L	O	C	D
5. Create and/or improve early warning systems for severe thunderstorms, including sirens, and targeted response such as Reverse 911, Code Red, Everbridge, Nixle, etc.	H	M	L	O	C	D
6. Acquire necessary equipment, including generators, and pumps, to secure lives and property	H	M	L	O	C	D
7. Develop a plan for severe thunderstorms mitigation	H	L	L	O	C	D
4.5 – Flood						
1. Protect stream buffers from development and create setback requirements along streams and encourage and/or engage in wetland restoration	H	M	L	O	C	D
2. Join or maintain participating status in National Flood Insurance Program (NFIP) and adopt Floodplain Management Plans	H	M	L	O	C	D
3. Reduce or eliminate development in floodplain and use green Infrastructure best management practices to manage stormwater where it falls with rain gardens, swales, detention ponds, and related structures	H	M	L	O	C	D
4. Buy out repetitive loss properties, retrofit or reconstruct infrastructure, and utilize structure elevation to reduce flooding impacts	H	M	L	O	C	D
5. Removal of public structures from flood zones, use dry flood proofing for historic buildings, and dry flood proofing non-residential structures to reduce flood damage	H	M	L	O	C	D
6. Use localized and non-localized flood risk reduction and soil stabilization for increased flood resiliency	H	M	L	O	C	D
7. Use post-disaster code enforcement and implement NFIP Substantial improvement/substantial damage provisions	H	M	L	O	C	D
8. Update floodplain and flash flood-prone area mapping and maintain list of flood prone structures	H	M	L	O	C	D
9. Install backflow valves and sump pumps in critical facilities and perform storm drainage system maintenance	H	M	L	O	C	D
10. Replace inadequate or non-performing culverts and maintain, replace, or improve other stormwater infrastructure, including storm drains	H	M	L	O	C	D
11. Install and maintain pumping stations in levee systems	H	M	L	O	C	D
12. Develop ordinances to require best management practices stormwater infrastructure design and construction, with long term maintenance provisions	H	M	L	O	C	D
13. Create and improve early warning systems for floods, including sirens, and targeted response such as Reverse 911, Code Red, Everbridge, Nixle, etc., and integrate communications systems to provide rapid communication and response	H	M	L	O	C	D
14. Conduct risk assessments for floods	H	M	L	O	C	D
15. Acquire necessary equipment, including generators, and pumps, to secure lives and property	H	M	L	O	C	D
16.Develop a plan for flood mitigation	H	M	L	O	C	D
4.6 – Dam / Levee Failure						
1. Encourage annual inspection of dams and levees	H	M	L	O	C	D

2. Improve structural integrity of dams, using incentives where feasible	**H**	**M**	**L**	**O**	**C**	**D**
3. Educate dam and levee owners about responsibilities and liabilities and develop and maintain emergency contact list for levees	**H**	**M**	**L**	**O**	**C**	**D**
4. Develop and implement dam/levee failure emergency action plans	**H**	**M**	**L**	**O**	**C**	**D**
5. Create and improve early warning systems for dam / levee failures, including sirens, and targeted response such as Reverse 911, Code Red, Everbridge, Nixle, etc.	**H**	**M**	**L**	**O**	**C**	**D**
6. Conduct risk assessments for dam / levee failures	**H**	**M**	**L**	**O**	**C**	**D**
7. Develop a plan for dam / levee failure mitigation	**H**	**M**	**L**	**O**	**C**	**D**
4.7 – Earthquake						
1. Improve early warning systems	**H**	**M**	**L**	**O**	**C**	**D**
2. Review and update building codes	**H**	**M**	**L**	**O**	**C**	**D**
3. Maintain integrated communications systems for rapid response	**H**	**M**	**L**	**O**	**C**	**D**
4. Promote student, individual, and household preparation	**H**	**M**	**L**	**O**	**C**	**D**
5. Use infrastructure retrofit and structural and non-structural retrofit of existing buildings	**H**	**M**	**L**	**O**	**C**	**D**
6. Adopt Seismic Construction Ordinance	**H**	**M**	**L**	**O**	**C**	**D**
7. Create and improve early warning systems for earthquakes, including sirens, and targeted response such as Reverse 911, Code Red, Everbridge, Nixle, etc.	**H**	**M**	**L**	**O**	**C**	**D**
8. Integrate communications systems to provide rapid communication and response	**H**	**M**	**L**	**O**	**C**	**D**
9. Conduct risk assessments for earthquakes	**H**	**M**	**L**	**O**	**C**	**D**
10. Acquire necessary equipment, including generators, and pumps, to secure lives and property	**H**	**M**	**L**	**O**	**C**	**D**
11. Develop a plan for earthquake mitigation	**H**	**M**	**L**	**O**	**C**	**D**
4.8 – Sinkhole / Ground Failure						
1. Review new construction permit applications and reduce or eliminate construction in areas with undermined land or above highly soluble bedrock	**H**	**M**	**L**	**O**	**C**	**D**
2. Map and assess vulnerable areas and stabilize when feasible	**H**	**M**	**L**	**O**	**C**	**D**
3. Develop specially engineered resilient pipelines in areas subject to ground failures	**H**	**M**	**L**	**O**	**C**	**D**
4. Conduct risk assessments for ground failures	**H**	**M**	**L**	**O**	**C**	**D**
5. Acquire necessary equipment, including generators, and pumps, to secure lives and property	**H**	**M**	**L**	**O**	**C**	**D**
6. Develop a plan for sinkhole / ground failure mitigation	**H**	**M**	**L**	**O**	**C**	**D**
4.9 – Drought						
1.Audit water loss and incentivize water reuse	**H**	**M**	**L**	**O**	**C**	**D**
2. Repair, retrofit, and maintain water supply systems to minimize water loss	**H**	**M**	**L**	**O**	**C**	**D**
3. Provide soil and water conservation practices education for farmers and/or public	**H**	**M**	**L**	**O**	**C**	**D**
4. Acquire necessary equipment, including generators, and pumps, to secure lives and property	**H**	**M**	**L**	**O**	**C**	**D**
5. Develop a plan for drought mitigation	**H**	**M**	**L**	**O**	**C**	**D**
4.10 – Wildfire						
1. Enforce open burn restrictions and burn ordinances	**H**	**M**	**L**	**O**	**C**	**D**
2. Use vegetation management to reduce fuel loads	**H**	**M**	**L**	**O**	**C**	**D**
3. Fire-resistant building retrofit	**H**	**M**	**L**	**O**	**C**	**D**
4. Acquire necessary equipment, including generators, and pumps, to secure lives and property	**H**	**M**	**L**	**O**	**C**	**D**
5. Develop plan for wildfire mitigation	**H**	**M**	**L**	**O**	**C**	**D**

Submit at least one for each hazard (1 – 10); extra blank worksheets at end for additional actions.

List any current or planned hazard mitigation grant project as a mitigation action to remain eligible for funding.

FYI - To remain eligible for FEMA hazard mitigation funds, regardless of BRIC, FMA, or HMGP, your specific project mitigation strategy must be: 1) in the hazard mitigation plan in your jurisdiction's section that was in place when you submitted your NOI to SEMA, 2) when you submitted your full application materials, and 3) throughout the life of the grant.

See next page for a sample worksheet with instructive notes.

EXAMPLE Mitigation Action Worksheet with INSTRUCTIONS	
Name of Jurisdiction:	City of Happy Trails
Risk / Vulnerability	
Hazard Addressed: (one of the 10 listed, do not use unique wording)	Flood
Action or Project	
Applicable Goal Statement: (one of three listed at the beginning of the Plan Goals and Mitigation Actions section)	1.Prepare communities in advance of a natural disaster to prevent loss of life, minimize injury, and illness
Action/Project Number: (From the list of mitigation actions – must have 3 numbers)	4.7.4
Name of Action or Project: (Be as specific as possible)	Example Street Home Buyouts
Action or Project Description: (Be specific)	City of Happy Trails will buy out eight homes on Example Street and construct a detention pond/wetland on the location
Estimated Cost: (Must be a reasonable estimate (or actual cost if existing project), can also be a range, if reasonable)	$1,400,000 based on 2023 county appraisals
Benefit versus Cost: (Must have a statement evaluating benefits vs. costs of project, does not have to be a full analysis)	Project has a high cost but is expected to eliminate repetitive losses for eight properties in perpetuity, in addition to eliminating city emergency response costs for evacuations, monitoring abandoned properties, and related activities.
Plan for Implementation	
Responsible Organization/Department: (Must list responsible department(s) or staff position(s); just jurisdiction name is not sufficient)	Planning Department, Public Works, and Floodplain Manager/Administrator
Supporting Organization/Department: (For additional departments or positions if needed)	City Manager / Administration, Grant Accountant
Action/Project Priority: (Should reflect same score as given in strategy rankings section)	High

Timeline for Completion: (If for existing grant or project, be specific; range is acceptable if grant funding is pending)	2027- 2030
Potential/Existing Fund Sources: (Funding sources must be specific. Just "grant funding" is not acceptable)	FMA and/or BRIC. HMGP, if a flood disaster is declared; stormwater fee funds for the match
Local Planning Mechanisms to be Used in Implementation, if any: (List powers if needed for project and/or ordinances, specific plans, such as Stormwater Master Plan)	Repetitive loss ordinance, power to eminent domain
Progress Report	
Action Status: (If current project, provide status; pending with explanation is acceptable; if project is funding dependent, can say so)	Project pending grant funding
Report of Progress: (If current project, 'awarded, pending funding; 50% complete, etc., if a planned project, '2026 anticipated start date' will work. For a theoretical project, N/A)	N/A

Tornado Mitigation Action Worksheet	
Name of Jurisdiction:	
Risk / Vulnerability	
Hazard(s) Addressed:	
Action or Project	
Applicable Goal Statement:	
Action/Project Number:	
Name of Action or Project:	
Action or Project Description:	
Estimated Cost:	
Benefit versus Cost:	
Plan for Implementation	
Responsible Organization/Department:	
Supporting Organization/Department:	
Action/Project Priority:	
Timeline for Completion:	
Potential/Existing Fund Sources:	
Local Planning Mechanisms to be Used in Implementation, if any:	
Progress Report	
Action Status:	
Report of Progress:	

Winter Storm Mitigation Action Worksheet	
Name of Jurisdiction:	
Risk / Vulnerability	
Hazard(s) Addressed:	
Action or Project	
Applicable Goal Statement:	
Action/Project Number:	
Name of Action or Project:	
Action or Project Description:	
Estimated Cost:	
Benefit versus Cost:	
Plan for Implementation	
Responsible Organization/Department:	
Supporting Organization/Department:	
Action/Project Priority:	
Timeline for Completion:	
Potential/Existing Fund Sources:	
Local Planning Mechanisms to be Used in Implementation, if any:	
Progress Report	
Action Status:	
Report of Progress:	

Extreme Heat Mitigation Action Worksheet	
Name of Jurisdiction:	
Risk / Vulnerability	
Hazard(s) Addressed:	
Action or Project	
Applicable Goal Statement:	
Action/Project Number:	
Name of Action or Project:	
Action or Project Description:	
Estimated Cost:	
Benefit versus Cost:	
Plan for Implementation	
Responsible Organization/Department:	
Supporting Organization/Department:	
Action/Project Priority:	
Timeline for Completion:	
Potential/Existing Fund Sources:	
Local Planning Mechanisms to be Used in Implementation, if any:	
Progress Report	
Action Status:	
Report of Progress:	

Severe Thunderstorm Mitigation Action Worksheet	
Name of Jurisdiction:	
Risk / Vulnerability	
Hazard(s) Addressed:	
Action or Project	
Applicable Goal Statement:	
Action/Project Number:	
Name of Action or Project:	
Action or Project Description:	
Estimated Cost:	
Benefit versus Cost:	
Plan for Implementation	
Responsible Organization/Department:	
Supporting Organization/Department:	
Action/Project Priority:	
Timeline for Completion:	
Potential/Existing Fund Sources:	
Local Planning Mechanisms to be Used in Implementation, if any:	
Progress Report	
Action Status:	
Report of Progress:	

Flood Mitigation Action Worksheet	
Name of Jurisdiction:	
Risk / Vulnerability	
Hazard(s) Addressed:	
Action or Project	
Applicable Goal Statement:	
Action/Project Number:	
Name of Action or Project:	
Action or Project Description:	
Estimated Cost:	
Benefit versus Cost:	
Plan for Implementation	
Responsible Organization/Department:	
Supporting Organization/Department:	
Action/Project Priority:	
Timeline for Completion:	
Potential/Existing Fund Sources:	
Local Planning Mechanisms to be Used in Implementation, if any:	
Progress Report	
Action Status:	
Report of Progress:	

Flood Mitigation Action Worksheet (Extra)	
Name of Jurisdiction:	
Risk / Vulnerability	
Hazard(s) Addressed:	
Action or Project	
Applicable Goal Statement:	
Action/Project Number:	
Name of Action or Project:	
Action or Project Description:	
Estimated Cost:	
Benefit versus Cost:	
Plan for Implementation	
Responsible Organization/Department:	
Supporting Organization/Department:	
Action/Project Priority:	
Timeline for Completion:	
Potential/Existing Fund Sources:	
Local Planning Mechanisms to be Used in Implementation, if any:	
Progress Report	
Action Status:	
Report of Progress:	

Dam / Levee Mitigation Action Worksheet	
Name of Jurisdiction:	
Risk / Vulnerability	
Hazard(s) Addressed:	
Action or Project	
Applicable Goal Statement:	
Action/Project Number:	
Name of Action or Project:	
Action or Project Description:	
Estimated Cost:	
Benefit versus Cost:	
Plan for Implementation	
Responsible Organization/Department:	
Supporting Organization/Department:	
Action/Project Priority:	
Timeline for Completion:	
Potential/Existing Fund Sources:	
Local Planning Mechanisms to be Used in Implementation, if any:	
Progress Report	
Action Status:	
Report of Progress:	

Earthquake Mitigation Action Worksheet	
Name of Jurisdiction:	
Risk / Vulnerability	
Hazard(s) Addressed:	
Action or Project	
Applicable Goal Statement:	
Action/Project Number:	
Name of Action or Project:	
Action or Project Description:	
Estimated Cost:	
Benefit versus Cost:	
Plan for Implementation	
Responsible Organization/Department:	
Supporting Organization/Department:	
Action/Project Priority:	
Timeline for Completion:	
Potential/Existing Fund Sources:	
Local Planning Mechanisms to be Used in Implementation, if any:	
Progress Report	
Action Status:	
Report of Progress:	

Sinkhole / Ground Failure Mitigation Action Worksheet	
Name of Jurisdiction:	
Risk / Vulnerability	
Hazard(s) Addressed:	
Action or Project	
Applicable Goal Statement:	
Action/Project Number:	
Name of Action or Project:	
Action or Project Description:	
Estimated Cost:	
Benefit versus Cost:	
Plan for Implementation	
Responsible Organization/Department:	
Supporting Organization/Department:	
Action/Project Priority:	
Timeline for Completion:	
Potential/Existing Fund Sources:	
Local Planning Mechanisms to be Used in Implementation, if any:	
Progress Report	
Action Status:	
Report of Progress:	

Drought Mitigation Action Worksheet	
Name of Jurisdiction:	
Risk / Vulnerability	
Hazard(s) Addressed:	
Action or Project	
Applicable Goal Statement:	
Action/Project Number:	
Name of Action or Project:	
Action or Project Description:	
Estimated Cost:	
Benefit versus Cost:	
Plan for Implementation	
Responsible Organization/Department:	
Supporting Organization/Department:	
Action/Project Priority:	
Timeline for Completion:	
Potential/Existing Fund Sources:	
Local Planning Mechanisms to be Used in Implementation, if any:	
Progress Report	
Action Status:	
Report of Progress:	

Wildfire Mitigation Action Worksheet	
Name of Jurisdiction:	
Risk / Vulnerability	
Hazard(s) Addressed:	
Action or Project	
Applicable Goal Statement:	
Action/Project Number:	
Name of Action or Project:	
Action or Project Description:	
Estimated Cost:	
Benefit versus Cost:	
Plan for Implementation	
Responsible Organization/Department:	
Supporting Organization/Department:	
Action/Project Priority:	
Timeline for Completion:	
Potential/Existing Fund Sources:	
Local Planning Mechanisms to be Used in Implementation, if any:	
Progress Report	
Action Status:	
Report of Progress:	

_____ Mitigation Action Worksheet	
Name of Jurisdiction:	
Risk / Vulnerability	
Hazard(s) Addressed:	
Action or Project	
Applicable Goal Statement:	
Action/Project Number:	
Name of Action or Project:	
Action or Project Description:	
Estimated Cost:	
Benefit versus Cost:	
Plan for Implementation	
Responsible Organization/Department:	
Supporting Organization/Department:	
Action/Project Priority:	
Timeline for Completion:	
Potential/Existing Fund Sources:	
Local Planning Mechanisms to be Used in Implementation, if any:	
Progress Report	
Action Status:	
Report of Progress:	

_____ Mitigation Action Worksheet	
Name of Jurisdiction:	
Risk / Vulnerability	
Hazard(s) Addressed:	
Action or Project	
Applicable Goal Statement:	
Action/Project Number:	
Name of Action or Project:	
Action or Project Description:	
Estimated Cost:	
Benefit versus Cost:	
Plan for Implementation	
Responsible Organization/Department:	
Supporting Organization/Department:	
Action/Project Priority:	
Timeline for Completion:	
Potential/Existing Fund Sources:	
Local Planning Mechanisms to be Used in Implementation, if any:	
Progress Report	
Action Status:	
Report of Progress:	

_____ Mitigation Action Worksheet	
Name of Jurisdiction:	
Risk / Vulnerability	
Hazard(s) Addressed:	
Action or Project	
Applicable Goal Statement:	
Action/Project Number:	
Name of Action or Project:	
Action or Project Description:	
Estimated Cost:	
Benefit versus Cost:	
Plan for Implementation	
Responsible Organization/Department:	
Supporting Organization/Department:	
Action/Project Priority:	
Timeline for Completion:	
Potential/Existing Fund Sources:	
Local Planning Mechanisms to be Used in Implementation, if any:	
Progress Report	
Action Status:	
Report of Progress:	

If you need additional mitigation action sheets, please email hazardmit@ewgateway.org.