

Creating Solutions Across Jurisdictional Boundaries

St. Louis Regional Hazard Mitigation Plan Special Districts Questionnaire

Thank you for fill your contribution Louis Regional Hastep in ensuring ymitigation grants	Date:	
and list everyo three sectio rankings, and 3)	e questions below as completely as possible ne who contributed information. There are ns: 1) jurisdiction information, 2) hazard mitigation strategies. All must be filled out ble for FEMA hazard mitigation funds.	
our online 'office	Il hazardmit@ewgateway.org or sign up for hours' at gateway.org/hazardupdate/.	
Name(s) & Title(s)		
Special District		
Contact name and email		

1. How many critical facilities are owned or operated by and within your district?	Critical facilities = schools, hospitals, government buildings, railroads, highways	Number					
2. Please provide your district's property tax valuation/assessment for the most current year.	Year	Valuatio	on				
3. What are your district's expected development (growth or contraction) trends over the next 5 years? Please list expected reason	Example: anticipate 5% growth, stay the same, or decrease by 3%, etc.	Why? (Example, new housing development, of major employer, etc.)					
4. Have any of your district buildings flooded in the past?	Yes	If yes, w	hat years?	No			
5. What rivers/creeks border or run through your district and are close to any district structures?	Please list:						
6. How many district critical facilities are in your flood zone(s)?		es = Schools, hospitals, Number: uildings, railroads, ighways			:		
7. Have any district structures experienced repetitive losses due to flooding?	Yes		If yes, what years?		If yes, what years?		No
8. Does your district 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 percent of tot district popula	al	No		

of potential ground failure near district structures? 10. Are there any critical facilities in ground failure areas? 11. Does your district have at-risk populations in areas with potential ground failure? 12. Does your district sit behind any levees? 13. Does your district have at-risk populations behind levees? 14. Are there any critical facilities behind the levees? 15. Uses, how many? 16. If yes, how many? 17. No 18. If yes, please list percent of total district population how percent of total district population. 19. Ves 10. If yes, how many? 11. Does your district have at-risk populations behind levees? 11. Does your district have at-risk populations helical district population. 12. If yes, please list percent of total district population. 13. Does your district have at-risk populations helical district population. 14. Are there any critical facilities behind the levees? 15. If yes, how many? 16. No				
failure areas? 11. Does your district have at-risk populations in areas with potential ground failure? 12. Does your district sit behind any levees? 13. Does your district have at-risk populations behind levees? 14. Are there any critical facilities behind the levees? 15. Is your district located downstream/below any high hazard potential dam*? 16. Are there any critical facilities below the high hazard potential dam(s)? 17. Does your district have at-risk populations downstream of high hazard potential dams? 18. Please describe if/how your district coordinates with local dam owner. 19. Does your district have at-risk populations living in housing that may be vulnerable to tornadoes? 18. Please list the population lift yes, please list percent of total district population lift yes, please list percent of total district population lift yes, please list percent of total district population lift yes, please list percent of total district population lift yes, please list percent of total district population lift yes, please list percent of total district population lift yes, please list percent of total district population lift yes, please list percent of total district population lift yes, please list percent of total district population lift yes, please list percent of total district lift yes, ple	of potential ground failure near district	Yes	If yes, how many?	No, if no, please skip to #12
areas with potential ground failure? 12. Does your district sit behind any levees? 13. Does your district have at-risk populations behind levees? 14. Are there any critical facilities behind the levees? 15. Is your district located downstream/below any high hazard potential dam*? 16. Are there any critical facilities below the high hazard potential dam(s)? 17. Does your district have at-risk populations downstream of high hazard potential dams? 18. Please describe if/how your district coordinates with local dam owner. 19. Does your district have at-risk populations living in housing that may be vulnerable to tornadoes? Yes If yes, how many? No If yes, how many? Yes If yes, please list percent of total district population listrict coordinates with local dam owner.	· · · · · · · · · · · · · · · · · · ·	Yes	If yes, how many?	No
13. Does your district have at-risk populations behind levees? 14. Are there any critical facilities behind the levees? 15. Is your district located downstream/below any high hazard potential dam*? 16. Are there any critical facilities below the high hazard potential dam*? 17. Does your district have at-risk populations downstream of high hazard potential dams? 18. Please describe if/how your district coordinates with local dam owner. 19. Does your district have at-risk populations living in housing that may be vulnerable to tornadoes? 19. Does your district have at-risk populations living in housing that may be vulnerable to tornadoes? 19. Does your district have at-risk populations living in housing that may be vulnerable to tornadoes?	,		percent of total district	No
behind levees? 14. Are there any critical facilities behind the levees? 15. Is your district located downstream/below any high hazard potential dam*? 16. Are there any critical facilities below the high hazard potential dam*? 17. Does your district have at-risk populations downstream of high hazard potential dams? 18. Please describe if/how your district coordinates with local dam owner. 19. Does your district have at-risk populations living in housing that may be vulnerable to tornadoes? 19. Does your district have at-risk populations living in housing that may be vulnerable to tornadoes?	12. Does your district sit behind any levees?	Yes	If yes, how many?	No, if no, please skip to #15
15. Is your district located downstream/below any high hazard potential dam*?		Yes	percent of total district	No
any high hazard potential dam*? 16. Are there any critical facilities below the high hazard potential dam(s)? 17. Does your district have at-risk populations downstream of high hazard potential dams? 18. Please describe if/how your district coordinates with local dam owner. 19. Does your district have at-risk populations living in housing that may be vulnerable to tornadoes? #19 No If yes, please list percent of total district Population Yes If yes, please list percent of total district percent of total district		Yes	If yes, how many?	No
hazard potential dam(s)? 17. Does your district have at-risk populations downstream of high hazard potential dams? 18. Please describe if/how your district coordinates with local dam owner. 19. Does your district have at-risk populations living in housing that may be vulnerable to tornadoes? Yes If yes, please list percent of total district No Yes If yes, No Please list percent of total district		Yes	If yes, how many?	No, if no, please skip to #19
downstream of high hazard potential dams? percent of total district population 18. Please describe if/how your district coordinates with local dam owner. 19. Does your district have at-risk populations living in housing that may be vulnerable to tornadoes? Yes If yes, please list percent of total district		Yes	No	If yes, how many?
coordinates with local dam owner. 19. Does your district have at-risk populations living in housing that may be vulnerable to tornadoes? Yes If yes, please list percent of total district		Yes	percent of total district	No
living in housing that may be vulnerable to please list percent of total district	, · · · · · · · · · · · · · · · · · · ·			
	living in housing that may be vulnerable to	Yes	please list percent of total district	

20. Has your district completed any hazard mitigation activities/projects in the last 5 years?	Yes	No	What projects?	Budget?
21. Is your district currently receiving funds for hazard mitigation planning or projects?	Yes, please li	st what plan	s or projects	No
22. Does your district 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?
23. How will your district incorporate the St. Louis Regional Hazard Mitigation Plan into your existing plans?	Example: Emergency Operations Plan, Capital Improvemen Plan, Master Plan, etc.	plan)	list which plans (must	t include at least one
24. Please list your district's emergency capabilities	Example: 6 resource officers; 9 trained staff			

25. Please list your districts emergency powers	Example: ability to declare emergency, etc.			
26. Does your district 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
27. Does your district have emergency alert sirens?	Yes	If yes, are they audible?	No	
28. What methods or mechanisms do you have available to communicate with your customers for non-emergencies? (e.g., X, Facebook, bill inserts, email subscription, web page, etc.)	Please list:			
29. 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 district and why? (can be more than one)

Thank you for providing the above information! It is a key part in making your district 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/.

^{*}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/#/

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 district 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.

St. Louis Regional Hazard Mitigation Plan Action Ranking Sheet

Name(s):	PRIORITY		ACTION		N		
Title(s):	Н-	Hig	;h	O - Ongoin			
District:	M - Medium					Coi	ete
Date:	L-	Lov	v	D - Deferre		od.	
ACTIONS	Circ (L,	le O M, I		Circ	cle C)ne	
4.1 – Tornado							
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	Н	М	L	o	С	D	
2. Develop and maintain early warning systems to target public and specific, vulnerable communities	н	М	L	О	С	D	
3. Retrofit one- and two-family residences and infrastructure and essential buildings	Н	М	L	0	С	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	Н	М	L	О	С	D	
5. Require anchoring of manufactured homes and exterior attachments and incorporate local inspections	Н	М	Г	0	С	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	Н	М		0	С	D	
7. Conduct risk assessments for tornado events	Н	М	L	0	С	D	
8. Acquire necessary equipment, including generators, tree trimming equipment, and pumps, to secure lives and property	н	М	L	О	С	D	
9. Develop a plan for tornado mitigation	н	М	L	o	С	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	Н	М	L	o	С	D	
2. Ensure all-weather capabilities for emergency equipment	Н	М	L	0	С	D	
3. Acquire necessary equipment, including generators, and pumps, to secure lives and property	Н	М	L	0	С	D	
4. Develop a plan for winter storm mitigation	Н	M	L	0	С	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	Н	М	L	o	С	D	

2. Increase tree planting and enhance shade availability to mitigate heat impacts	н	м	L	0	С	Ъ
3. Enforce burn ordinances and audit water loss and incentivize water reuse	Н	М	L	0	С	D
4. Repair, retrofit, and maintain water supply systems to minimize water loss	Н	М	L	0	С	D
5. Provide soil and water conservation practices education for farmers	Н	М	L	0	С	D
6. Acquire necessary equipment, including generators, and pumps, to secure lives and property	Н	М	L	0	С	D
7. Develop a plan for extreme heat event mitigation	Н	М	L	0	С	D
4.4 – Severe Thunderstorm	••		_		·	
	ı	1				
1. Regularly inspect and maintain storm drains and storm drainage systems to remove debris and blockages impeding stormwater flows	н	М	L	0	С	D
2. Review and update building codes to reduce building damage	Н	М	L	0	С	D
3. Improve early warning systems and maintain integrated communications systems for rapid response	Н	М	L	0	С	D
4. Promote student, individual, and household preparation	Н	М	L	0	С	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.	Н	М	L	0	С	D
6. Acquire necessary equipment, including generators, and pumps, to secure lives and property	Н	М	L	0	С	D
7. Develop a plan for severe thunderstorms mitigation	Н	L	L	0	С	D
4.5 – Flood						
	ı	1				
1. Protect stream buffers from development and create setback requirements along streams and encourage and/or engage in wetland restoration	Н	М	L	0	С	D
2. Join or maintain participating status in National Flood Insurance Program (NFIP) and adopt Floodplain Management Plans	н	М	L	0	С	D
3. Reduce or eliminate development in floodplain and use green Infrastructure best management practices	Н	М	L	0	С	D
to manage stormwater where it falls with rain gardens, swales, detention ponds, and related structures 4. Buy out repetitive loss properties, retrofit or reconstruct infrastructure, and utilize structure elevation to						
reduce flooding impacts	Н	М	L	0	С	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	Н	М	L	0	С	D
6. Use localized and non-localized flood risk reduction and soil stabilization for increased flood resiliency	Н	М	L	0	С	D
7. Use post-disaster code enforcement and implement NFIP Substantial improvement/substantial damage provisions	н	М	L	0	С	D
8. Update floodplain and flash flood-prone area mapping and maintain list of flood prone structures	Н	М	L	0	С	D
9. Install backflow valves and sump pumps in critical facilities and perform storm drainage system maintenance	н	М	L	0	С	D
10. Replace inadequate or non-performing culverts and maintain, replace, or improve other stormwater infrastructure, including storm drains	н	М	L	0	С	D
11. Install and maintain pumping stations in levee systems	Н	М	L	0	С	D
12. Develop ordinances to require best management practices stormwater infrastructure design and construction, with long term maintenance provisions	н	М	L	0	С	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	н	М	L	О	С	D
14. Conduct risk assessments for floods	Н	М	L	0	С	D
15. Acquire necessary equipment, including generators, and pumps, to secure lives and property	Н	М	L	0	С	D
16.Develop a plan for flood mitigation	Н	М	L	0	С	D
4.6 – Dam / Levee Failure						
Encourage annual inspection of dams and levees	Н	М	L	0	С	D

2. Improve structural integrity of dams, using incentives where feasible	Н	М	L	0	С	D
3. Educate dam and levee owners about responsibilities and liabilities and develop and maintain	Н	М	L	0	С	D
emergency contact list for levees			_			
4. Develop and implement dam/levee failure emergency action plans	Н	M	L	0	С	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.	Н	M	L	0	С	D
6. Conduct risk assessments for dam / levee failures	Н	М	L	0	С	D
7. Develop a plan for dam / levee failure mitigation	Н	М	L	0	С	D
4.7 – Earthquake						
1. Improve early warning systems	Н	M	L	0	С	D
2. Review and update building codes	Н	М	L	0	С	D
3. Maintain integrated communications systems for rapid response	Η	M	L	0	С	D
4. Promote student, individual, and household preparation	Н	М	L	0	С	D
5. Use infrastructure retrofit and structural and non-structural retrofit of existing buildings	Η	M	L	0	С	D
6. Adopt Seismic Construction Ordinance	Н	М	L	0	С	D
7. Create and improve early warning systems for earthquakes, including sirens, and targeted response such as Reverse 911, Code Red, Everbridge, Nixle, etc.	Н	М	L	0	С	D
8. Integrate communications systems to provide rapid communication and response	Н	М	L	0	С	D
9. Conduct risk assessments for earthquakes	Н	М	L	0	С	D
10. Acquire necessary equipment, including generators, and pumps, to secure lives and property	Н	М	L	0	С	D
11. Develop a plan for earthquake mitigation	Н	М	L	0	С	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	Н	М	L	0	С	D
2. Map and assess vulnerable areas and stabilize when feasible	Н	М	L	0	С	D
3. Develop specially engineered resilient pipelines in areas subject to ground failures	Н	M	L	0	С	D
4. Conduct risk assessments for ground failures	Н	М	L	0	С	D
5. Acquire necessary equipment, including generators, and pumps, to secure lives and property	Н	М	L	0	С	D
6. Develop a plan for sinkhole / ground failure mitigation	Н	М	L	0	С	D
4.9 – Drought						
1.Audit water loss and incentivize water reuse	Н	М	L	0	С	D
2. Repair, retrofit, and maintain water supply systems to minimize water loss	Н	М	L	0	С	D
3. Provide soil and water conservation practices education for farmers and/or public	Н	М	L	0	С	D
4. Acquire necessary equipment, including generators, and pumps, to secure lives and property	Н	М	L	0	С	D
5. Develop a plan for drought mitigation	Н	М	L	0	С	D
4.10 – Wildfire					L L	
1. Enforce open burn restrictions and burn ordinances	Н	М	L	0	С	D
2. Use vegetation management to reduce fuel loads	Н	М	L	0	С	D
	Н	М	L	0	С	D
3. Fire-resistant building retrofit					\vdash	
 Fire-resistant building retrofit Acquire necessary equipment, including generators, and pumps, to secure lives and property 	Н	М	L	0	С	D

Mitigation Strategy Worksheets

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 <u>must</u> 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.

EXAMPLI	EXAMPLE Mitigation Action Worksheet with INSTRUCTIONS					
Name of Jurisdiction:	Happy Trails Special District					
	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)	Metropolis Street Home Buyouts for District Flood Control Project					
Action or Project Description: (Be specific)	Happy Trails Special District will buy out eight homes on Metropolis Street in the City of Happy Trails for flood control 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 emergency repairs to adjacent District facilities.					
	Plan for Implementation					
Responsible Organization/Department: (Must list responsible department(s) or staff position(s); just jurisdiction name is not sufficient)	City of Happy Trails Planning Department, Public Works, and Floodplain Manager/Administrator; District Stormwater Conveyance and Communications Department					
Supporting Organization/Department: (For additional departments or positions if needed)	Happy Trails Collective NPO					

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.