

APPENDIX D

WORKSHEETS
USED IN
PLANNING PROCESS

Date:

What kinds of natural hazards can affect you?

Task A. List the hazards that may occur.

1. Research newspapers and other historical records
2. Review existing plans and reports.
3. Talk to the experts in your community, state, or region.
4. Gather information on Internet Websites.
5. Next to the hazard list below, put a check mark in the Task A boxes beside all hazards that may occur in your community or state.

Task B. Focus on the most prevalent hazard in your community or state.

1. Go to hazard Websites.
2. Locate your community or state on the Website map.
3. Determine whether you are in a high-risk area. Get more localized information if necessary.
4. Next to the hazard list below, put a check mark in the Task B boxes beside all hazards that post a significant threat.

Use this space to record information you find for each of the hazards you will be **researching**. Attach additional pages as necessary. Note: **Bolded** hazards are addressed in this How-to Guide.

	Task A	Task B
Avalanche		
Coastal Erosion		
Coastal Storm	X	
Dam Failure	X	X
Drought	X	X
Earthquake	X	
Expansive Soils		
Extreme Heat	X	
Flood	X	X
Hailstorm	X	
Hurricane	X	
Land Subsidence		
Landslide		
Severe Winter Storm	X	X
Tornado	X	X
Tsunami		
Volcano		
Wildfire	X	X
Windstorm		
Lightning	X	X
Tropical Storms	X	X
Thunderstorm Winds	X	X

Hazard or Event Description (Type of hazard, date of event, number of injuries, cost and types of damage, etc.)	Source of Information	Map Available for this Hazard?	Scale of Map
Dam Failure See Appendix A for this complete information	USGS, The Sparta Ishmaelite, NCDC	Only map of dams is available See Appendix A	
Drought See Appendix A for complete information	USDA, NCDC, SHELDUS, The Sparta Ishmaelite, Palmer Index	Maps area available for the state as a whole from the Palmer Index See Appendix A	
Flood See Appendix A for this complete information	USGS, NCDC, SHELDUS, The Sparta Ishmaelite,	Flood Plain Maps are available See Appendix A	
Severe Winter Weather See Appendix A for this complete information	SERRC, NCDC, SHELDUS, The Sparta Ishmaelite,	Maps are available in Appendix A	
Hail See Appendix A for this complete information	NCDC, SHELDUS,	No map is available	
Tornado See Appendix A for this complete information	Tornado History Project, NCDC, SHELDUS, The Sparta Ishmaelite,	Map is available See Chapter II. Section V.	
Lightning See Appendix A for this complete information	NCDC, SHELDUS,	No map is available	
Tropical Storms See Appendix A for this complete information	NCDC, SHELDUS,	No map is available	
Thunderstorm Winds See Appendix A for this complete information	NCDC, SHELDUS,	No map is available Map is available for wind zone	
Wildfire See Appendix A for this complete information	GFC	Map is available for fire danger zones	

GEMA Worksheet #3a

Inventory of Assets

Jurisdiction: Hancock County All Jurisdictions

Hazard: Flood

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# in Community or State	# in Hazard Area	% in Hazard Area	\$ in Community or State	\$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	22,014	25	0.114%	457,708,995.00	519,251	0.113%	9,429	53	1%
Commercial	1,038	0	0.000%	56,485,260.00	0	0.000%	9,429	0	0%
Industrial	39	1	2.564%	13,064,207.50	359,318	2.750%	839	126	15%
Agricultural/Forestry	4,624	36	0.779%	441,930,552.50	3,154,789	0.714%	133	12	9%
Religious/Non-profit	269	0	0.000%	6,621,632.50	0	0.000%	9,429	0	0%
Government	219	0	0.000%	18,211,077.50	0	0.000%	784	0	0%
Education	7	0	0.000%	650,677.50	0	0.000%	1,197	0	0%
Utilities	20	1	5.000%	124,370,510.00	367,139	0.295%	5	0	0%
Total	28,230	63	0.223%	1,119,042,912.50	4,400,497	0.393%	9,429	191	

Task B. Determine whether (and where) you want to collect additional inventory data.

	Y	N
1. Do you know where the greatest damages may occur in your area?	Y	
2. Do you know whether your critical facilities will be operational after a hazard event?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?	Y	
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards?	Y	
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?	Y	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?		N

GEMA Worksheet #3a

Inventory of Assets

Jurisdiction: Hancock County All Jurisdictions

Hazard: Drought, Wildfire, Severe Weather, Winter Storm, Dam Failure

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# in Community or State	# in Hazard Area	% in Hazard Area	\$ in Community or State	\$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	22,014	22,014	100.00%	457,708,995.00	457,708,995.00	100.00%	9,429	9,429	100.00%
Commercial	1,038	1,038	100.00%	56,485,260.00	56,485,260.00	100.00%	9,429	9,429	100.00%
Industrial	39	39	100.00%	13,064,207.50	13,064,207.50	100.00%	839	839	100.00%
Agricultural/Forestry	4,624	4,624	100.00%	441,930,552.50	441,930,552.50	100.00%	133	133	100.00%
Religious/Non-profit	269	269	100.00%	6,621,632.50	6,621,632.50	100.00%	9,429	9,429	100.00%
Government	219	219	100.00%	18,211,077.50	18,211,077.50	100.00%	784	784	100.00%
Education	7	7	100.00%	650,677.50	650,677.50	100.00%	1,197	1,197	100.00%
Utilities	20	20	100.00%	124,370,510.00	124,370,510.00	100.00%	5	5	100.00%
Total	28,230	28,230	100.00%	1,119,042,912.50	1,119,042,912.50	100.00%	9,429	9,429	100.00%

Task B. Determine whether (and where) you want to collect additional inventory data.

	Y	N
1. Do you know where the greatest damages may occur in your area?	Y	
2. Do you know whether your critical facilities will be operational after a hazard event?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?	Y	
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards?	Y	
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?	Y	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?		N

GEMA Worksheet #3a

Inventory of Assets

Jurisdiction: Sparta

Hazard: Drought, Wildfire, Severe Weather, Winter Storm, Dam Failure

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# in Community or State	# in Hazard Area	% in Hazard Area	\$ in Community or State	\$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	1,526	1,526	100.00%	28,846,802.50	28,846,802.50	100.00%	1,400	1,400	100.00%
Commercial	447	447	100.00%	20,536,525.00	20,536,525.00	100.00%	1,400	1,400	100.00%
Industrial	3	3	100.00%	128,760.00	128,760.00	100.00%	41	41	100.00%
Agricultural/Forestry	19	19	100.00%	411,772.50	411,772.50	100.00%	6	6	100.00%
Religious/Non-profit	54	54	100.00%	1,489,775.00	1,489,775.00	100.00%	1,400	1,400	100.00%
Government	60	60	100.00%	5,721,565.00	5,721,565.00	100.00%	139	139	100.00%
Education	3	3	100.00%	499,425.00	499,425.00	100.00%	0	0	100.00%
Utilities	7	7	100.00%	2,569,972.50	2,569,972.50	100.00%	2	2	100.00%
Total	2,119	2,119	100.00%	60,204,597.50	60,204,597.50	100.00%	1,400	1,400	100.00%

Task B. Determine whether (and where) you want to collect additional inventory data.

	Y	N
1. Do you know where the greatest damages may occur in your area?	Y	
2. Do you know whether your critical facilities will be operational after a hazard event?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?	Y	
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards?	Y	
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?	Y	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?		N

GEMA Worksheet #3a

Inventory of Assets

Jurisdiction: Sparta

Hazard: Flood

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# in Community or State	# in Hazard Area	% in Hazard Area	\$ in Community or State	\$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	1,526	2	0.131%	28,846,802.50	37,807	0.131%	1,400	5	0%
Commercial	447	0	0.000%	20,536,525.00	0	0.000%	1,400	0	0%
Industrial	3	0	0.000%	128,760.00	0	0.000%	41	0	0%
Agricultural/Forestry	19	4	21.053%	411,772.50	86,689	21.053%	6	0	0%
Religious/Non-profit	54	0	0.000%	1,489,775.00	0	0.000%	1,400	0	0%
Government	60	0	0.000%	5,721,565.00	0	0.000%	139	0	0%
Education	3	0	0.000%	499,425.00	0	0.000%	0	0	0%
Utilities	7	1	14.286%	2,569,972.50	367,139	14.286%	2	0	0%
Total	2,119	7	0.330%	60,204,597.50	491,635	0.817%	1,400	5	

Task B. Determine whether (and where) you want to collect additional inventory data.

	Y	N
1. Do you know where the greatest damages may occur in your area?	Y	
2. Do you know whether your critical facilities will be operational after a hazard event?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?	Y	
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards?	Y	
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?	Y	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?		N

GEMA Worksheet #3a

Inventory of Assets

Jurisdiction: Unincorporated Hancock County

Hazard: Flood

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# in Community or State	# in Hazard Area	% in Hazard Area	\$ in Community or State	\$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	20,488	23	0.112%	428,862,192.50	481,444	0.112%	8,029	48	1%
Commercial	591	0	0.000%	35,948,735.00	0	0.000%	8,029	0	0%
Industrial	36	1	2.778%	12,935,447.50	359,318	2.778%	798	126	16%
Agricultural/Forestry	4,605	32	0.695%	441,518,780.00	3,068,100	0.695%	127	12	9%
Religious/Non-profit	215	0	0.000%	5,131,857.50	0	0.000%	8,029	0	0%
Government	159	0	0.000%	12,489,512.50	0	0.000%	645	0	0%
Education	4	0	0.000%	151,252.50	0	0.000%	1,197	0	0%
Utilities	13	0	0.000%	121,800,537.50	0	0.000%	3	0	0%
Total	26,111	56	0.214%	1,058,838,315.00	3,908,862	0.369%	8,029	186	

Task B. Determine whether (and where) you want to collect additional inventory data.

	Y	N
1. Do you know where the greatest damages may occur in your area?	Y	
2. Do you know whether your critical facilities will be operational after a hazard event?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?	Y	
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards?	Y	
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?	Y	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?		N

GEMA Worksheet #3a

Inventory of Assets

Jurisdiction: Unincorporated Hancock County

Hazard: Drought, Wildfire, Severe Weather, Winter Storm, Dam Failure

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# in Community or State	# in Hazard Area	% in Hazard Area	\$ in Community or State	\$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	20,488	20,488	100.00%	428,862,192.50	428,862,192.50	100.00%	8,029	8,029	100.00%
Commercial	591	591	100.00%	35,948,735.00	35,948,735.00	100.00%	8,029	8,029	100.00%
Industrial	36	36	100.00%	12,935,447.50	12,935,447.50	100.00%	798	798	100.00%
Agricultural/Forestry	4,605	4,605	100.00%	441,518,780.00	441,518,780.00	100.00%	127	127	100.00%
Religious/Non-profit	215	215	100.00%	5,131,857.50	5,131,857.50	100.00%	8,029	8,029	100.00%
Government	159	159	100.00%	12,489,512.50	12,489,512.50	100.00%	645	645	100.00%
Education	4	4	100.00%	151,252.50	151,252.50	100.00%	1,197	1,197	100.00%
Utilities	13	13	100.00%	121,800,537.50	121,800,537.50	100.00%	3	3	100.00%
Total	26,111	26,111	100.00%	1,058,838,315.00	1,058,838,315.00	100.00%	8,029	8,029	100.00%

Task B. Determine whether (and where) you want to collect additional inventory data.

	Y	N
1. Do you know where the greatest damages may occur in your area?	Y	
2. Do you know whether your critical facilities will be operational after a hazard event?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?	Y	
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards?	Y	
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?	Y	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?		N

FUJITA SCALE			DERIVED EF SCALE		OPERATIONAL EF SCALE	
F Number	Fastest 1/4-mile (mph)	3 Second Gust (mph)	EF Number	3 Second Gust (mph)	EF Number	3 Second Gust (mph)
0	40-72	45-78	0	65-85	0	65-85
1	73-112	79-117	1	86-109	1	86-110
2	113-157	118-161	2	110-137	2	111-135
3	158-207	162-209	3	138-167	3	136-165
4	208-260	210-261	4	168-199	4	166-200
5	261-318	262-317	5	200-234	5	Over 200

**HANCOCK COUNTY-WIDE INCLUDES SPARTA
HAZARD FREQUENCY TABLE**

Hazard	Number of Events in Historic Record	Number of Years in Historic Record	Number of Events in Past 10 Years	Number of Events in Past 20 Years	Number of Events in Past 50 Years	Historic Recurrence Interval (years)	Historic Frequency % chance/year	20 year Historic Frequency % chance/year	Past 10 Year Record Frequency Per Year	Past 20 Year Record Frequency Per Year	Past 50 Year Record Frequency Per Year
Hurricane Surge - Cat 1						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 2						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 3						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 4						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 5						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Wind						#DIV/0!	#DIV/0!	0.00	0	0	0
Floods	3	69	0	2	3	23.00	4.35	10.00	0	0.1	0.06
Wildfire	123	61	18	49	123	0.50	201.64	245.00	1.8	2.45	2.46
Earthquake						#DIV/0!	#DIV/0!	0.00	0	0	0
Tornado	10	69	7	8	8	6.90	14.49	40.00	0.7	0.4	0.16
Thunderstorm Wind	86	69	17	37	73	0.80	124.64	185.00	1.7	1.85	1.46
Hail	31	69	6	13	18	2.23	44.93	65.00	0.6	0.65	0.36
Drought	34	69	7	28	34	2.03	49.28	140.00	0.7	1.4	0.68
Extreme Heat						#DIV/0!	#DIV/0!	0.00	0	0	0
Snow & Ice	31	69	9	15	22	2.23	44.93	75.00	0.9	0.75	0.44
Lightning	135	69	18	49	126	0.51	195.65	245.00	1.8	2.45	2.52
Dam Failure	0	69	0	0	0	#DIV/0!	0.00	0.00	0	0	0
Tropical Storm	18	69	4	16	17	3.83	26.09	80.00	0.4	0.8	0.34
HazMat Release (fixed)						#DIV/0!	#DIV/0!	0.00	0	0	0
HazMat Release (trans)						#DIV/0!	#DIV/0!	0.00	0	0	0
Radiological Release						#DIV/0!	#DIV/0!	0.00	0	0	0

NOTE: The historic frequency of a hazard event over a given period of time determines the historic recurrence interval.

For example: If there have been 20 HazMat Releases in the County in the past 5 years, statistically you could expect that there will be 4 releases a year.

Realize that from a statistical standpoint, there are several variables to consider. 1) Accurate hazard history data and collection are crucial to an accurate recurrence interval and frequency. 2) Data collection and accuracy has been much better in the past 10-20 years (NCEM weather records). 3) It is important to include all significant recorded hazard events which will include periodic updates to this table.

By updating and reviewing this table over time, it may be possible to see if certain types of hazard events are increasing in the past 10-20 years.

**HANCOCK COUNTY UNINCORPORATED AREAS
HAZARD FREQUENCY TABLE**

Hazard	Number of Events in Historic Record	Number of Years in Historic Record	Number of Events in Past 10 Years	Number of Events in Past 20 Years	Number of Events in Past 50 Years	Historic Recurrence Interval (years)	Historic Frequency % chance /year	20 year Historic Frequency % chance/ year	Past 10 Year Record Frequency Per Year	Past 20 Year Record Frequency Per Year	Past 50 Year Record Frequency Per Year
Hurricane Surge - Cat 1						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 2						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 3						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 4						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 5						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Wind						#DIV/0!	#DIV/0!	0.00	0	0	0
Floods	3	69	0	2	3	23.00	4.35	10.00	0	0.1	0.06
Wildfire	123	61	18	49	123	0.50	201.64	245.00	1.8	2.45	2.46
Earthquake						#DIV/0!	#DIV/0!	0.00	0	0	0
Tomado	10	69	6	7	7	6.90	14.49	35.00	0.6	0.35	0.14
Thunderstorm Wind	71	69	14	28	58	0.97	102.90	140.00	1.4	1.4	1.16
Hail	26	69	6	11	13	0.23	433.33	55.00	1.1	0.55	0.26
Drought	34	69	7	28	34	2.03	49.28	140.00	0.7	1.4	0.68
Extreme Heat						#DIV/0!	#DIV/0!	0.00	0	0	0
Snow & Ice	31	58	9	15	22	1.87	53.45	75.00	0.9	0.75	0.44
Lightning	135	69	18	49	126	0.51	195.65	245.00	1.8	2.45	2.52
Dam Failure						#DIV/0!	#DIV/0!	0.00	0	0	0
Tropical Storm	18	69	4	16	17	3.83	26.09	80.00	0.4	0.8	0.34
HazMat Release (fixed)						#DIV/0!	#DIV/0!	0.00	0	0	0
HazMat Release (trans)						#DIV/0!	#DIV/0!	0.00	0	0	0
Radiological Release						#DIV/0!	#DIV/0!	0.00	0	0	0

NOTE: The historic frequency of a hazard event over a given period of time determines the historic recurrence interval.

For example: If there have been 20 HazMat Releases in the County in the past 5 years, statistically you could expect that there will be 4 releases a year.

Realize that from a statistical standpoint, there are several variables to consider. 1) Accurate hazard history data and collection are crucial to an accurate recurrence interval and frequency. 2) Data collection and accuracy has been much better in the past 10-20 years (NCEM weather records). 3) It is important to include all significant recorded hazard events which will include periodic updates to this table.

By updating and reviewing this table over time, it may be possible to see if certain types of hazard events are increasing in the past 10-20 years.

**SPARTA
HAZARD FREQUENCY TABLE**

Hazard	Number of Events in Historic Record	Number of Years in Historic Record	Number of Events in Past 10 Years	Number of Events in Past 20 Years	Number of Events in Past 50 Years	Historic Recurrence Interval (years)	Historic Frequency % chance /year	20 year Historic Frequency % chance/ year	Past 10 Year Record Frequency Per Year	Past 20 Year Record Frequency Per Year	Past 50 Year Record Frequency Per Year
Hurricane Surge - Cat 1						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 2						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 3						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 4						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Surge - Cat 5						#DIV/0!	#DIV/0!	0.00	0	0	0
Hurricane Wind						#DIV/0!	#DIV/0!	0.00	0	0	0
Floods	2	69	0	2	2	34.50	2.90	10.00	0	0.1	0.04
Wildfire						#DIV/0!	#DIV/0!	0.00	0	0	0
Earthquake						#DIV/0!	#DIV/0!	0.00	0	0	0
Tornado	1	69	1	1	1	0.00	1.45	5.00	0.1	0.05	0.02
Thunderstorm Wind	69	59	6	23	56	0.86	116.95	115.00	0.6	1.15	1.12
Hail	19	59	0	3	6	0.00	#DIV/0!	15.00	0.3	0.15	0.12
Drought	34	69	7	28	34	2.03	49.28	140.00	0.7	1.4	0.68
Extreme Heat						#DIV/0!	#DIV/0!	0.00	0	0	0
Snow & Ice	31	69	9	15	22	2.23	44.93	75.00	0.9	0.75	0.44
Lightning	12	69	0	0	3	5.75	17.39	0.00	0	0	0.06
Dam Failure						#DIV/0!	#DIV/0!	0.00	0	0	0
Tropical Storm	18	69	4	16	17	3.83	26.09	80.00	0.4	0.8	0.34
HazMat Release (fixed)						#DIV/0!	#DIV/0!	0.00	0	0	0
HazMat Release (trans)						#DIV/0!	#DIV/0!	0.00	0	0	0
Radiological Release						#DIV/0!	#DIV/0!	0.00	0	0	0

NOTE: The historic frequency of a hazard event over a given period of time determines the historic recurrence interval.

For example: If there have been 20 HazMat Releases in the County in the past 5 years, statistically you could expect that there will be 4 releases a year.

Realize that from a statistical standpoint, there are several variables to consider. 1) Accurate hazard history data and collection are crucial to an accurate recurrence interval and frequency. 2) Data collection and accuracy has been much better in the past 10-20 years (NCDC weather records). 3) It is important to include all significant recorded hazard events which will include periodic updates to this table.

By updating and reviewing this table over time, it may be possible to see if certain types of hazard events are increasing in the past 10-20 years.

STAPLEE Criteria	S	T	A	P	L	E	E																			
	(Social)	(Technical)	(Administrative)	(Political)	(Legal)	(Economic)	(Environmental)																			
	Effect on Segment of Population	Technical Feasibility	Funding Allocated	Local Champion	Existing Local Authority	Benefit of Action	Effect on Endangered Species																			
		Long-term Solution	Maintenance / Operations	Public Support	Potential Legal Challenge	Cost of Action	Effect on HAZMAT / Waste Sites																			
		Secondary Impacts	Political Support	State Authority		Contributes to Economic Goals	Consistent with Community Environmental Goals																			
		Staffing	Local Champion	Existing Local Authority		Outside Funding Required	Consistent With Federal Laws																			
		Funding Allocated	Public Support	Potential Legal Challenge		Effect on Land / Water																				
		Maintenance / Operations	State Authority	Benefit of Action		Effect on Endangered Species																				
		Political Support	Existing Local Authority	Cost of Action		Effect on HAZMAT / Waste Sites																				
		Local Champion	Potential Legal Challenge	Contributes to Economic Goals		Consistent with Community Environmental Goals																				
		Public Support	Benefit of Action	Outside Funding Required		Consistent With Federal Laws																				
		State Authority	Effect on Land / Water	Effect on Endangered Species																						
		Existing Local Authority	Effect on HAZMAT / Waste Sites	Consistent with Community Environmental Goals																						
		Potential Legal Challenge	Consistent With Federal Laws																							
		Benefit of Action	Alternative actions																							
		Cost of Action																								
		Contributes to Economic Goals																								
		Outside Funding Required																								
		Effect on Land / Water																								
		Effect on Endangered Species																								
		Effect on HAZMAT / Waste Sites																								
		Consistent with Community Environmental Goals																								
		Consistent With Federal Laws																								
		Alternative actions																								
		Comments																								
Considerations → for Alternative Actions ↓	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance / Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land / Water	Effect on Endangered Species	Effect on HAZMAT / Waste Sites	Consistent with Community Environmental Goals	Consistent With Federal Laws	Alternative actions	Comments	
Equip all county and city recreation parks with adequate early severe weather warning and lightning detection devices.	P	P	P	P	P	P	P	P	P					P	P			N				P				
Inspects public buildings and critical facilities and retrofit to reinforce windows, doors, and roofs as needed	P	P	P	P	P	P	P	P	P					P	P			N	P			P				
Enforce building codes for all new buildings and critical facilities.	P	P	P	P	P	P	P	P	P					P	P			N				P				
Inspect all county and municipal critical facilities for proper grounding.	P	P	P	P	P	P	P	P	P					P	P			N				P				
Install lightning rods in high value critical facilities.	P	P	P	P	P	P	P	P	P					P	P			N				P				
Review current Emergency Response Plan and update when needed.	P	P	P	P	P	P	P	P	P					P	P							P				
Review current evacuation plans paying particular attention to vulnerable populations and update as needed.	P	P	P	P	P	P	P	P	P					P	P							P				
Develop a public awareness program about the installation of lightning grounding systems on critical infrastructure, residential and business properties.	P	P	P	P	P	P	P	P	P					P	P							P				
Inventory all critical facilities and assess generator needs. Install generators where needed.	P	P	P	P	N	P	P	P	P					P	P							P				
Seek funding to ensure all current and future emergency shelters have back-up generators.	P	P	P	P	P	P	P	P	P					P	P							P				
Educate the public on shelter locations and evacuation routes	P	P	P	P	N	P	P	P	P					P	P							P				
Develop public education and awareness programs regarding severe weather events to include home safety measures, purchase of weather radio and personal safety measures before, during and after an event.	P	P	P	P	P	P	P	P	P					P	P							P				
Implement a winter storm education program to include winterization of home and/or business and what to do before, during and after.	P	P	P	P	N	P	P	P	P					P	P							P				

STAPLEE Criteria	S	T	A	P	L	E	E		
	(Social)	(Technical)	(Administrative)	(Political)	(Legal)	(Economic)	(Environmental)		
	Community Acceptance	Technical Feasibility	Funding Allocated	Local Champion	Existing Local Authority	Cost of Action	Effect on Endangered Species		
	Effect on Segment of Population	Long-term Solution	Maintenance / Operations	Public Support	Potential Legal Challenge	Contributes to Economic Goals	Effect on HAZMAT / Waste Sites		
		Secondary Impacts	Political Support	State Authority	Benefit of Action	Outside Funding Required	Consistent with Community Environmental Goals		
		Staffing	Local Champion	Public Support	Cost of Action	Effect on Land / Water	Consistent With Federal Laws		
		Funding Allocated	Public Support	State Authority	Benefit of Action	Effect on Endangered Species			
		Maintenance / Operations	Local Champion	Public Support	Benefit of Action	Effect on HAZMAT / Waste Sites			
		Political Support	Public Support	State Authority	Benefit of Action	Effect on Land / Water			
		Local Champion	Public Support	State Authority	Benefit of Action	Effect on Endangered Species			
		Public Support	Public Support	State Authority	Benefit of Action	Effect on HAZMAT / Waste Sites			
		State Authority	Public Support	State Authority	Benefit of Action	Effect on Land / Water			
		Existing Local Authority	Public Support	State Authority	Benefit of Action	Effect on Endangered Species			
		Potential Legal Challenge	Public Support	State Authority	Benefit of Action	Effect on HAZMAT / Waste Sites			
		Benefit of Action	Public Support	State Authority	Benefit of Action	Effect on Land / Water			
		Cost of Action	Public Support	State Authority	Benefit of Action	Effect on Endangered Species			
		Contributes to Economic Goals	Public Support	State Authority	Benefit of Action	Effect on HAZMAT / Waste Sites			
		Outside Funding Required	Public Support	State Authority	Benefit of Action	Effect on Land / Water			
		Effect on Land / Water	Public Support	State Authority	Benefit of Action	Effect on Endangered Species			
		Effect on Endangered Species	Public Support	State Authority	Benefit of Action	Effect on HAZMAT / Waste Sites			
		Effect on HAZMAT / Waste Sites	Public Support	State Authority	Benefit of Action	Effect on Land / Water			
		Consistent with Community Environmental Goals	Public Support	State Authority	Benefit of Action	Effect on Endangered Species			
		Consistent With Federal Laws	Public Support	State Authority	Benefit of Action	Effect on HAZMAT / Waste Sites			
		Alternative actions							
		Comments							
Considerations → for Alternative Actions ↓									
Create a data base to record hazard event information.	P	P	P	N		P			
Conduct dam breach analysis to identify assets and population at risk in the event of a failure.	P	P	N	P		P			
Draft ordinance prohibiting development in dam breach zone.	P	P	N	P		P			
Install dam failure alert systems.	P	P	P	P		P			
Inventory existing road equipment and purchase needed equipment to maintain roads before, during and after a hazard event.	P	P	P	P		P			
Develop coordinated management strategies for detting, snow plowing, and clearing roads of fallen trees and debris	P	P	P	P		P			
Promote the construction of safe rooms in shelter areas and in public buildings.	P	P	N	P		P			
Update 911 equipment as needed.	P	P	P	P		P			
Request that all new education facilities be designed to serve as public shelters for emergency purposes.	P	P	P	P		P			
Promote and participate in the following American Red Cross Programs									
• Disaster Resistant Neighborhoods Program									
• Business and Industry Preparedness Seminar									
• Community Disaster Education Preparedness presentations	P	P	N	P		P			
Create a Facebook Page with information pertaining to Emergency Preparedness.	P	P	N	P		P			
Implement GIS technology on fire and emergency management vehicles so data can be readily available in the field so more accurate, timely assessments for future mitigation planning activities.	P	P	P	P		P			
Purchase a Bucket Truck to Remove Limbs along county road rights-of-way.	P	P	P	P		P			
Pave Roads in county that are impassable due to flooding.	P	P	P	P		P			

STAPLEE Criteria	S	T	A	P	L	E	E																		
	(Social)	(Technical)	(Administrative)	(Political)	(Legal)	(Economic)	(Environmental)																		
Considerations → for Alternative Actions ↓	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance / Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land / Water	Effect on Endangered Species	Effect on HAZMAT / Waste Sites	Consistent with Community Environmental Goals	Consistent With Federal Laws	Alternative actions	Comments
Provide NOAA weather radios to elderly and handicap populations (moved to all hazards). Perform procurement to contract with debris removal firm to have contract in place before hazards to ensure firm can move in immediately.	P	P	P	P	P	P	P	P	P						P	P		N				P			

HANCOCK COUNTY HAZARD MITIGATION PLAN UPDATE

Documentation of Labor Match

NAME (Please Print): _____

ORGANIZATION: _____

DATE(S): _____

EVENT: Hazard Mitigation Plan Update

HOURLY SALARY: _____

BENEFITS PER HOUR: _____

HOURS CONTRIBUTED (Include travel time): _____

TOTAL LABOR MATCH: _____

(Hourly Salary + Benefits Per Hour) X Hours Contributed = Total Labor Match

SIGNATURE: _____

(FORM IS NOT VALID WITHOUT SIGNATURE)

"I authorize GEMA/HS to use the value identified for federal costs sharing matching purposes and do not otherwise believe that I am currently paid with federal funds or that my salary is being used to satisfy any other federal costs sharing obligation."

For use by Committee Members (e.g. EMA Director, County Engineer ...)

GEMA Worksheet #2

Profile Hazard Events Step 2

County:

Date:

How Bad Can It Get?

Task A. Obtain or create a base map.

GEMA will be providing you with a base map, USGS topos and DOQQ as part of our deliverables to local government for the planning process. Additionally, we will be providing you with detailed hazard layer coverages. These data layers originate from state or nationwide coverage or datasets. Therefore, it is important for local government to assess what you already have at the local level. It is important for you at the local level to have an idea of what existing maps you have available for the planning process. Some important things to think about:

- 1) What maps do we already have in the county that would be relevant to the planning process?
- 2) Have other local plans used maps or mapping technology where there is specific data that is also needed in my local plan?
- 3) What digital maps do we have?
- 4) Do we have any Geographic Information System (GIS) data, map themes or layers or databases here at the local level (or regional) that we can use?
- 5) If we do have any GIS data, where is it located at, and who is our local expert?
- 6) Are there any ongoing GIS or mapping initiatives at the local level in other planning or mapping efforts? If so, what are they, and what are the timetables for completion?
- 7) Are there mapping needs that have been identified at the local level in the past? If so, what are they and when were they identified?
- 8) Of the existing maps, GIS data and other digital mapping information, what confidence do we have at the local level that it is accurate data?

Please answer the above questions on a separate sheet of paper and attach to this worksheet.

It is important to realize that those counties that already have GIS and digital mapping, (ie: parcel level data, GPS fire hydrants, etc) higher levels of spatial accuracy and detail will exist for some data layers at the local level. However, for this planning process, that level of detail will not be needed on all layers in the overall mapping and analysis.

You can use existing maps from:

- Road Maps
- USGS topographic maps or Digital Orthophoto Quarter Quads (DOQQ)
- Topographic and/or planimetric maps from other agencies
- Aerial topographic and/or planimetric maps
- Field Surveys
- GIS software
- CADD software
- Digitized paper map

Title of Map	Scale	Date

Facility Name

Location

Longitude

Latitude

Location Method: Geocode GPS GPS-closed GPS - dnr Manual add

Address 1:

Address 2: (PO BOX)

City:

Zip:

Jurisdiction:

Daytime Occupancy:

Night Occupancy:

Building Value

Number of Stories:

Functional Use Value:

Year Constructed:

Displacement Cost Per Day:

Area Sq Ft:

Contents Value:

Bldg Value:

Contents Value Year:

Valuation Year:

Contents Description:

Building Valuation Type:

0 = Unknown

1 = Market Value

2 = Assessed Value

3 = Replacement Value

99 = Other

*Mark any or all that apply. See back of page for details.

- Essential Facility
 - Transportation Facility
 - Lifeline System
 - High Potential Loss
 - HazMat Facility
 - Important Facility
 - Vulnerable Population
 - Economic Asset
 - Special Consideration
 - Historical Consideration
 - Other Facility
- Other Details:

See back of page for codes.

Building Type Code:

Occupancy Code:

*Choose Only One Facility Type

Facility Type:

- Pre-kindergarten
- Kindergarten
- Primary School
- Elementary School
- Middle School
- Middle/High School
- High School, Public
- Private School
- Other School
- Alternative Division
- Alternative School
- Private Two-Year College
- Private Four-Year College
- Public Four-Year College
- Private University
- Public University
- Public Vocational Technical School
- Psychoeducational
- Adult Edu. Center
- Airport
- City Hall
- City Jail
- County Correctional Institution
- County Jail
- Courthouse
- Federal Penitentiary
- Fire Station
- Wastewater Treatment Plant
- Water System
- C and D Construction and Demolition Landfill
- L (Dry Trash) Landfill
- MSWL (Municipal Solid Waste Landfill)
- SL (Sanitary Waste) Landfill
- Recycling Center
- Transfer Station
- Hospital, Admissions Entrance
- Hospital, Emergency Entrance
- Library
- Marshals Office
- Police Station
- Sheriffs Office
- Emergency Services
- State Prison
- Other

Building Type Code:

- C1 = Concrete Moment Frame
- C2 = Concrete Shear Walls
- C3 = Concrete Frame with Unreinforced Masonry Infill Walls
- MH = Manufactured Housings
- O = Other Building Type
- P1 = Precast Concrete Tilt-Up Walls
- P2 = Precast Concrete Frames with Cast-in-Place Concrete Shear Walls
- RM1 = Reinforced Masonry Bearing Walls with Wood or Metal Deck Diaphragms
- RM2 = Reinforced Masonry Bearing Walls with Precast Concrete Diaphragms
- S1 = Steel Moment Frame
- S2 = Steel Braced Frame
- S3 = Steel Light Frame
- S4 = Steel Frame with Cast-in-Place Concrete Shear Walls
- S5 = Steel Frame with Unreinforced Masonry Infill Walls
- URM = Unreinforced Masonry Bearing Walls
- UNK = Unknown Building Type

Occupancy Code:

- AGR1 = Agriculture Facilities and Offices
- COM1 = Retail Trade
- COM2 = Wholesale Trade
- COM3 = Personal and Repair Services
- COM4 = Professional/Technical Services
- COM5 = Banks
- COM6 = Hospital
- COM7 = Medical Office and Clinic
- COM8 = Entertainment, Recreation
- COM9 = Theaters
- COM10 = Parking Garages
- EDU1 = Grade Schools and Admin. Offices
- EDU2 = Colleges and Universities
- GOV1 = Government - General Services
- GOV2 = Government - Emergency Response
- UNK = Unknown
- IND1 = Heavy Industrial
- IND2 = Light Industrial
- IND3 = Food/Drugs/Chemicals
- IND4 = Metals/Minerals Processing
- IND5 = High Technology
- IND6 = Construction Facilities and Offices
- REL1 = Churches and Non-Profit Organizations
- RES1 = Single Family Dwellings
- RES2 = Manufactured Housing
- RES3A = Duplex
- RES3B = 3 to 4 Units
- RES3C = 5 to 9 Units
- RES3D = 10 to 19 Units
- RES3E = 20 to 49 Units
- RES3F = > 50 Units
- RES4 = Temporary Lodging
- RES5 = Institutional Dormitories
- RES6 = Nursing Homes

Definitions:

Essential Facility
An essential facility is a critical facility that is essential to the health and welfare of the population. The potential consequences of losing functions or services from this type of facility are higher than any other type of structures. Interruption or loss of function from these types of facilities would jeopardize human life and public safety. Essential facilities include: hospitals and other medical facilities, police and fire stations, emergency operations centers, evacuation shelters and schools, and other structures that house first responder equipment or personnel.

Transportation Systems
Transportation infrastructure or facilities. Examples include: Airways: airports, heliports, Highways: bridges, tunnels, roadbeds, overpasses, transfer stations. Railways: tracks, tunnels, bridges, rail yards, depots, switching stations. Waterways: canals, locks, ports, ferries, dry-docks, piers.

Lifeline System
Corridors of flow for equipment, supplies and services. Transportation systems can also be Lifeline Systems. The best physical example of a lifeline would be a bridge and right-of-way that could include utilities and communication. Examples include: potable water, wastewater, oil, natural gas, electric power, and communication.

High Potential Loss Facility

Facilities that would have a high human loss associated with their damage or failure. Examples include: nuclear power plants, dams and military installations.

Hazardous Materials Facility

Facilities that produce or house industrial/hazardous materials, such as corrosives, explosives, flammable materials, radioactive materials, and toxins. Check to see if your county has a Local Emergency Planning Committee (LEPC) and an existing Hazardous Material listing.

Important Facility

These types of facilities are vital for overall day to day community functions, and ensure full recovery in the wake of a hazard or disaster event. Examples include: government buildings and functions, major employers in the area, bank and financial institutions, non-nuclear power generators, certain commercial establishments such as grocery stores, hardware stores and gas stations, technical schools, colleges, and universities.

Vulnerable Population

Is there a vulnerable human population that occupies the structure that would need special assistance, medical care or other actions before, during or after a hazard event or disaster? Examples include: elderly people, jail populations, people with mental, physical or mobility problems, and non-English speaking populations.

Economic Assets

Larger economic assets that are vital to the prosperity of the community. Examples include major employers and financial centers in your community or area that impact the local or regional economy if significantly disrupted.

Special Considerations

High-density areas (residential or commercial development), if damaged or impacted in a hazard event or disaster, could result in high death tolls or injury rates. Examples include: larger factories or industries, large vertical apartment or housing complexes.

Historic Considerations

Historic, cultural or natural resources, including structures and areas that are identified and protected under state or federal law. Examples include: state parks, federal parks, museums and historic districts.

Other Facilities

Any other significant locally identified facility that does not fit into another category of those listed above.

Comments:

Georgia Emergency Management Agency Labor Expense Summary

1. APPLICANT

2. Disaster Number

3. Period Covering

Page Of

4. Purpose/Work Performed

5. Program

STAFF		DATES AND HOURS WORKED							COSTS			
NAME	TITLE	DATE							TOTAL HOURS	HOURLY RATE	TOTAL COSTS	
NAME	TITLE	Hours							0	\$ -	\$ -	
NAME	TITLE	Hours							0	\$ -	\$ -	
NAME	TITLE	Hours							0	\$ -	\$ -	
NAME	TITLE	Hours							0	\$ -	\$ -	
NAME	TITLE	Hours							0	\$ -	\$ -	
NAME	TITLE	Hours							0	\$ -	\$ -	
NAME	TITLE	Hours							0	\$ -	\$ -	
NAME	TITLE	Hours							0	\$ -	\$ -	
NAME	TITLE	Hours							0	\$ -	\$ -	
NAME	TITLE	Hours							0	\$ -	\$ -	
Total Cost for Labor Time											\$	-

I CERTIFY THAT THE ABOVE INFORMATION WAS OBTAINED FROM PAYROLL RECORDS, INVOICES OR OTHER DOCUMENTS THAT ARE AVAILABLE FOR AUDIT.

I CERTIFY THAT THE ABOVE COSTS ARE NOT BEING USED FOR LOCAL MATCH FOR ANOTHER FEDERAL GRANT.

Signature _____ TITLE _____ DATE _____