

PASCO COUNTY HAZARD MITIGATION PLANNING COMMITTEE
LOCAL MITIGATION STRATEGY – QUARTERLY MEETING

December 7, 2018

LMS Agenda



- Welcome and Introductions
- Verify Public Notice
- Approval of Minutes: July 18, 2018
- Guest Speaker: Resilient Tampa Bay Transportation Team
- HMGP Updates
 - Hurricane Hermine
 - Hurricane Irma
- CRS Update: Amy Beams
- LMS 5 year update efforts
 - HIRA Section
- Meeting Frequency (Quarterly 2pm-4:30pm):
 - Annual Update Meeting: January 23, 2019
 - April 24, 2019
 - July 21, 2019
 - October 23, 2019
- Adjournment



Welcome and Introductions



Verify Public Notice

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Public Notice

- [Public Notice of the Intent of Pasco County to Seek FEMA Funding Ct Holiday, Florida](#)
- [December 7, 2018-LMSWG-Quarterly-Meeting-Public-Notice-FIN](#)



October 23, 2018

Public Notice of the Pasco County Local Mitigation Strategy Working Group Quarterly Meeting

December 7, 2018, Meeting (2:00 p.m. to 4:30 p.m.):

Notification is hereby given to the public for the upcoming Local Mitigation Strategy Working Group (LMSWG) meeting to discuss the changes in the Local Mitigation Strategy (LMS) plan, specifically the Hazard Identification Risk Analysis (HIRA) section. This is one of the final steps as Pasco County works to complete the 5-year Federal Emergency Management Agency (FEMA) update. This update is necessary to renew the Pasco County LMS plan for additional 5 years and to ensure FEMA funding remains eligible for the County.

In addition, this meeting will host a guest speaker representing the Metropolitan Planning Organization (MPO) to discuss a regional study regarding roadway infrastructure. Furthermore, there will be status update for the current Hazard Mitigation Assistance grants.

For more information regarding the Pasco County LMS and previous meeting minutes, please visit the [Pasco County Emergency Management Mitigation](http://bit.ly/2Aub3La) website: <http://bit.ly/2Aub3La>.

For questions or more information, please contact Emergency Management Coordinator Ian Eppig at 727.847.8137.

Staff Directory

News Flash

Public Notice

Pasco County Hazards

Flood Information

Volunteering in EM

NOAA Weather Radios

Hurricane Preparedness and
Pets

Health and Medical
Facilities

Approval of Meeting Minutes: July 18, 2018



July 18, 2018

Pasco County Hazard Mitigation Planning Committee
Local Mitigation Strategy Working Group Meeting
Pasco County EOC, 8744 Government Drive, New Port Richey, FL

*Meeting was opened by Ian Eppig, Emergency Management Coordinator @ 2:00 pm.

- Welcome:
 - Reviewed agenda
 - Will be adding projects to LMS this meeting
 - Discuss changes to LMS this meeting
 - Verified public notice
 - Veronica Hanson, Pam Lynch made motions to accept notices
 - Approval of minutes from 4/11/2018
 - Veronica Hanson, Joanne Jaquish motion to approve
 - Introductions
 - Diverse group, departments with a lot of experience
- HMGP:
 - Have been executed and are moving through process
 - They are all Stormwater projects
 - Forest Hills – Modification
 - Zephyr/Port Richey - bids
- Irma HMG
 - Stopped taking applications
 - Wiregrass awarded
 - See PPT for what's been awarded
 - Going in order in ranking list
 - Sometimes out of order to meet deadlines based on what's complete
- Laura Wilcoxon introduced CDBGDR Hermine and Irma
 - Three grants submitted (FR35, Elfers, Utility generator)
 - Over 100 for Elfers area, only 10 came forward
 - Elfers moving forward and moving through application phase (2.5 million)
 - Hoping additional folks join program as it is in process
 - All preliminary and working with Hilary and Paige in Community Development
 - Looking into/preparing projects for Irma funding (future)
 - CDBG-DR can equipment match – 25% local
 - Holding pattern until tour
- New Projects:

Respectfully Submitted by Renee Chambers, Administrative Assistant

- Stormwater presented 9 projects
- Cypress Creek:
 - David Sua – project not going at this time, other issues with consultant as there is no money
 - Ian Eppig inquired if it would be done using HMGP
 - David Sua – will put it on list
 - 2011 funding corporation studied Cypress Creek and set BFE in water shed and identified what county can do regarding flood plain structures that are in jeopardy which would take some of them out of the flood plain and add storage; no money to fund internally – there is flooding but not as much as FEMA would like
 - Ian Eppig motioned to add to LMS, Patrick Ballinger seconded.
- Lake Padgett:
 - David Sua – 16 homes to remove from flooding, constructing a wall which will protect other homes
 - Drainage issues in community; road is impassable in big storms
 - Ian Eppig made first motion to add to LMS; George Thomas seconded.
- Granite Place:
 - David Sua - in Lake Padgett East subdivision; is experiencing failure with pipe that needs to be replaced and reinforced – existing pipe will be replaced (same location) with more material
 - There is homes near the pipe and a home near the pipe which failed
 - 16 homes on Forest View Dr. – large “wetland” – want to build a wall
 - Ian Eppig motion to add
 - Veronica Hanson asked if price is really 1.4 million
 - Yes, they are doing Reinforced Concrete Pipe which includes design and construction
 - Drainage pipe between two houses has caved in
 - George Thomas seconded motion
- Bear Creek/Griffin Park:
 - David Sua – every rainy season structures around it experience flooding, road closures. There is a partial design to fix this issue – Southside of State Road 52 design storage/retention and move water into the river with pipe
 - Veronica Hanson motion to accept; Patrick Ballinger seconded
- Lake Padgett Estates:
 - David Sua – Lake Saxon Drive and large segments of roads flood and are impassable. Association petitioned for assistance; aging infrastructure that is inadequate for needs. No money to complete design study and construction
 - Veronica Hanson first motion; Joanne Jaquish seconded
- Quail Hollow/Apple Blossom:
 - David Sua – has images if wanted. It is overtopped in two areas – major road route that gets over topped in 500 year storms and south portion has undersized culverts – need to increase culvert size and elevate roads to keep roads dry and meet services.
 - \$2 million and will affect 17 structures

Respectfully Submitted by Renee Chambers, Administrative Assistant

Approval of Meeting Minutes: July 18, 2018 (Cont.)

- Ian Eppig motion, George Thomas second.
- Quail Hollow 1 and 2:
 - David Sua – to be deferred for future as Benefit Cost Analysis is low but wants to keep it on LMS in case it improves with study
 - Flood abatement of shores and connected to Quail Hollow/Apple Blossom
 - Remove three structures from floodplain
 - Ian Eppig motion, Hilary Bruno second
- Plantation Palms Revision:
 - David Sua – consultant did study on drainage flow. The slope on drainage ditch and Irma caused a lot of erosion, threatening 36 homes; ditch is within 30 feet of homes. Add gabion baskets to protect homes.
 - Cost increase to 3.2 million
 - Ian Eppig motion, Allan Biddlecomb second
 - Laura spoke regarding 404 – 406 mitigation
- Duck Lake:
 - Mike Garrett: add automated gate to control flooding
 - East of County; usually dry lake
 - Ian Eppig motion, Patrick Ballinger second
- Parks & Rec
 - Tammy Odierna: Blackwell Project – 158 acres:
 - ELAMP funded for 10 parcels and one homestead; borders Anclote.
 - Hold area as floodplain – keep undeveloped
 - Joanne Jaquish – where is it?
 - Tammy Odierna and Ian Eppig pulled up maps
 - Hilary Bruno asked for Seven Springs reference point
 - Joanne Jaquish – is property donated?
 - Tammy Odierna – no, appraisals will be done, working on costs
 - Ian Eppig, Hilary Bruno, Laura Wilcoxon – consider for CDBG?
 - Tammy Odierna - partnership money is the end goal for this
 - Ian Eppig motion, Hilary Bruno second
- Judy Tear – Florida Forest Service
 - LMS is all hazard plan and would like to include projects regarding
 - State is funding but needs local coordination
 - Fuel reduction projects: mulch, chop, burn
- Indian Echo Girl Scout Camp Wildfire Mitigation:
 - \$6,000; impact 50 homes/mobile homes
 - Regional team to work on this
 - Jared Dorrier is out; Judy Tear is point of contact
 - Loss of property is \$50 million
 - Laura Wilcoxon motion, Patrick Ballinger second
- Judy Tear – Crocket Wildfire Mitigation:
 - County property – Moon Lake; 600 acres
 - Moon Lake/River Ridge – 200 homes
 - 6 fires within 2 two weeks last year; fire plan will enhance community

- Will cut lines on Moon Lake side creating more access for fire vehicles and reducing fuel
- Florida Forest Service company to assist reduce fuel by mulching, chopping
 - \$27 million at risk, will cost \$10,000 to complete
 - Patrick Ballinger motion, Leigh Cowan seconded
- Judy Tear showed a web-based program – database of registration in Florida; fire map, fire wise
- Judy Tear – Pine Plantation – Dade City:
 - Will be a future submission
 - Not submitted yet – TBD when submitted
- LMS Five-Year Update:
 - Volunteers of a subcommittee formed
 - Sub-committee worked since May 4 to update LMS for five-year update (see slides)
 - Ian Eppig presented on changes
 - Beginning of plan – example: change name to LMS Working Group
 - Maintain consistency with FEMA, State, etc.
 - Identified changes with lined pages
 - This was sent out before
 - Allan Biddlecomb – difference between minor and major, i.e., what's the difference “the group can make minor changes”
 - Laura distinguished minor as items not requiring board action
 - Erin Thomas – including information for Economic Development
 - Ian Eppig used local information
 - Kevin Guthrie – discussing blight vs. economic tourism
 - Erin Thomas used for EDA funds and Hernando County is leading
 - Ian Eppig motion to approve and Dirk Palmer second, accepted.
 - This final chance will be amended by 1 representative from each municipality and 1 LMS Co Chair
 - Joanne Jaquish motion, George Thomas, Veronica Hanson second
- Ian Eppig requested sub-committee volunteers for HIRA update
- Ian Eppig reminded group if it is identified in LMS as hazard that method of mitigation needs to be identified
- Judy Tear – Requests to incorporate Florida Forest Service CWPPs in new LMS plan; add in appendix
- Kevin Guthrie:
 - New five-year plan due 8/28/19
 - Jennifer Stagg – plan due six months after CEMP
 - Leigh Cowan – COOP for Sterling
 - Three distinct but hinged together plans
- Ian Eppig motion to adjourn @3:40pm; Pam Lynch, Joanne Jaquish second

Guest Speaker Series: Marshall Flynn from TBRPC
Resilient Tampa Bay Transportation



HMGP Update

➤ HMGP Hermine:

- Forest Hills
- Port Richey Alternative Outfall Phase 1
- Zephyr Creek Units 1 and 2



HMGP Update

➤ HMGP Irma:

- Wiregrass Sports Complex
- Application have been submitted by FDEM Deadline in August for review:

1. Hidden Lake/Yellow Lake*
2. Plantation Palms
3. Buck & Lanier Flood Abatement
4. PHSC Berm/Boggy Creek*
5. Generators for Critical Pasco Utility Facilities
6. Soni Plaza Drainage
7. Shady Acres Flood Abatement
8. Wavyedge Acquisition
9. Minnieola Acquisition
10. Miles Blvd Mitiation Reconstruction
11. Oelsner Lift Station
12. Ivywood Wind Retrofit
13. Zephyr Creek 3 & 4*



Irma 12 Month Lock-in

County	Regular Projects HMGP Funding	25% Match Required
Lee	\$ 32,201,965.74	\$ 10,733,988.58
Leon	\$ -	\$ -
Levy	\$ 410,177.66	\$ 136,725.89
Liberty	\$ -	\$ -
Madison	\$ -	\$ -
Manatee	\$ 4,191,316.86	\$ 1,397,105.62
Marion	\$ 7,210,106.02	\$ 2,403,368.67
Martin	\$ 1,476,215.86	\$ 492,071.95
Miami-Dade	\$ 85,232,328.29	\$ 28,410,776.10
Monroe	\$ 45,222,191.45	\$ 15,074,063.82
Nassau	\$ 1,395,229.76	\$ 465,076.59
Okaloosa	\$ -	\$ -
Okeechobee	\$ 1,218,798.17	\$ 406,266.06
Orange	\$ 22,160,710.99	\$ 7,386,903.66
Osceola	\$ 6,646,410.45	\$ 2,215,470.15
Palm Beach	\$ 19,956,229.39	\$ 6,652,076.46
Pasco	\$ 5,954,470.70	\$ 1,984,823.57
Pinellas	\$ 16,606,200.81	\$ 5,535,400.27
Polk	\$ 18,970,404.76	\$ 6,323,468.25
Putnam	\$ 3,040,617.77	\$ 1,013,539.26
Santa Rosa	\$ 902.95	\$ 300.98
Sarasota	\$ 4,497,982.95	\$ 1,499,327.65
Seminole	\$ 10,393,480.69	\$ 3,464,493.56
St. Johns	\$ 3,743,009.85	\$ 1,247,669.95
St. Lucie	\$ 5,924,578.46	\$ 1,974,859.49
Sumter	\$ 1,118,715.52	\$ 372,905.17
Suwannee	\$ 571,356.89	\$ 190,452.30
Taylor	\$ -	\$ -
Union	\$ 211,247.63	\$ 70,415.88
Volusia	\$ 9,996,713.28	\$ 3,332,237.76
Wakulla	\$ -	\$ -
Walton	\$ -	\$ -
Washington	\$ -	\$ -
	\$ 469,024,581.00	\$ 156,341,527.00

Based on NEMIS as of 10/15/18



CRS Update – Amy Beams



CRS Update

2019 CRS Recertification Guide

Activity	Description	ISO Provides	Documentation Required	Division/Department/Individual	Status
213	CC-213 form	Yes	Form Signed by BOCCs or delegated authority and the CRS Coordinator attesting that all activities are still being maintained as they were at the previous reverification (2016)	CRS Coordinator	Will receive from ISO approximately 45 days prior to the recertification date May 1, 2019.
213.2	Program Data Table	Yes	Table, pg 2 of the 213, that identifies the number of buildings in the SFHA and other such data about the county's SFHA.	CRS Coordinator	Will receive from ISO approximately 45 days prior to the recertification date May 1, 2019.
310	Elevation Certificates	No	All elevation, floodproof, and vzone certificates for the previous year. A list of the new and SI buildings in the SFHA	CRS Coordinator/Floodplain Coordinator	Continuous review for CRS purposes will be conducted by the CRS Coordinator.
330	Annual Outreach Project	No	Documentation of an annual OP. 2018 Disaster Expo. Plan, pictures, announcement, sign-in. meeting rosters etc., examples of information provided to community.	CRS Coordinator/OEM	Expo complete, need back up documentation.
501	Repetitive Loss List	FEMA	Not required to respond every year but good to keep up for the 3 year reverification.	CRS Coordinator	Currently in review.
504	Annual RL Outreach Project	No	Annual OP, mailer, sent to the identified RLAs.	CRS Coordinator	RLA address list, maps, copy of the brochure that was sent to the RLA, copy of the mailing information (postage). In Progress - 12/7/18
###	Other additional required documentation	Yes	Other documentation for certain activities may be required by ISO. These will be on a checklist sent by ISO about 45 days prior to the recertification date, May 1, 2019.	CRS Coordinator	TBD



LMS 5 Year Update



LMS 5 year Update: HIRA Subcommittee Edits

- Subcommittee was comprised of LMS Working Group volunteers that expressed interest from the last Quarterly Meeting on July 18th, 2018
- The kickoff meeting began on August 14th and the subcommittee members included:
 - Ian Eppig, Emergency Management
 - Charlene (Renee) Borden, Emergency Management
 - Jennifer Stagg, Emergency Management
 - Darryl Johnson, GIS
 - Amy Beams, Central Permitting/CRS Coordinator
 - Judy Tear, Florida Forest Service
 - Jared Dorrier, Florida Forest Service
 - Patrick Ballinger, Office of Management and Budget
 - Kelly Miller, CHCA
 - Jan Martini, Fresh Start for Pasco



LMS 5 year Update: HIRA Subcommittee Edits

- The group went through 4 separate rounds of edits to supply the final version of the Hazard Identification Risk Assessment Update for the LMS
- HIRA Section is approximately 114 pages
 - Presentation designed to cover the main points from this section
- Few similar hazards have been combined:
 - Severe Storms consists of:
 - Lightning
 - Tornadoes
 - Thunderstorms
 - Straight-line Winds
- Renamed Hazards:
 - Sinkholes -> Geological
 - Hurricanes/Coastal Storms -> Tropical Cyclones



LMS 5 year Update: HIRA Subcommittee Edits

- Majority of hazard rankings remained the same for vulnerability
 - Two separate probability sections
 - Low probability hazards
 - Earthquakes
 - Dam/Levees
 - Landslides
 - Tsunamis
 - Moderate – to high probability hazards
 - Tropical Cyclones
 - Floods
 - Coastal/River Erosion
 - Geological
 - Wildfire
 - Severe Storms
 - Drought/Heat Wave
 - Winter Storm/Freezes
 - Cyber Incident
 - Hazardous Materials



LMS 5 year Update: HIRA Subcommittee Edits

- All hazards have been revised:
 - Historical occurrences have been updated to reflect 2012 to 2017 events
 - Previous 5 year adoption: majority of events ended in 2012
 - Not all 2018 data is accessible at the time of update
 - Vulnerabilities were assessed based on economic/human/facility impacts
 - Probabilities were assessed based on the likelihood of occurrence, or based on the occurrences between 2012 - 2017
 - Extents are revised to explain what measurement/units assess the vulnerability and probabilities of the hazard



LMS 5 year Update: HIRA Subcommittee Edits

➤ Main Points from Low Probability Hazards:

- Reviewable natural hazards that defined in The Enhanced State of Florida Hazard Mitigation Plan 2018
- Earthquakes have a 1% chance of occurrence and have rarely occurred in Pasco and there are no identified mitigation projects
- Dam/Levees are mainly privately owned, do not meet FEMA definition, and there are no identified mitigation projects for this hazard
- Landslides by definition are extremely rare to occur in the State of Florida due to flat terrain, and there are no identified mitigation projects for this hazard
- Tsunamis are a rare occurrence for Florida, specifically for Pasco County, and there are no identified mitigation project for this hazard



LMS 5 year Update: HIRA Subcommittee Edits

➤ Main Points from *Tropical Cyclones*:

- Saffir Simpson Scale figure was revised visually
- New table to show the difference between TS/Hurricane Watch and Warning
- New Evacuation Zone map included, with an explanation on how the map was created
- Updates to storm surge information
- New Tropical Cyclone Data added to include
 - TS Colin
 - H Hermine
 - TS Julia
 - H Matthew
 - TS Emily
 - H Irma
- Updated figures on mobile homes located in evacuation zones and flood zones
- Updated structures built by year, 2002 or later are least vulnerable
- Statewide probability figures for tropical storm/hurricane wind risks
- Detailed probabilities of Tropical Cyclone occurrence for Pasco and Region from a Colorado State University/Bridgewater State University tool



LMS 5 year Update: HIRA Subcommittee Edits

➤ Tropical Cyclones Risk Analysis:

Location	Probability of Occurrence	Economic Impact	Sig # People Impacted	Sig # Structures Impacted	Overall Level of Vulnerability
Unincorporated Pasco	High	High	Yes	Yes	High
Dade City	High	Moderate	Yes	No	High
New Port Richey	High	High	Yes	Yes	High
Port Richey	High	High	Yes	Yes	High
San Antonio	High	High	Yes	Yes	High
St. Leo	High	High	Yes	Yes	High
Zephyrhills	High	Moderate	Yes	No	High

Probability of occurrence is based on historical occurrences and predicted likelihood where high=multiple occurrences and/or predictions of likelihood; moderate=single occurrence and/or predictions of likelihood; low=no occurrences and/or predictions of likelihood

Economic impacts = High if > 30% of exposure is lost; moderate if 15-30 of exposure is lost; low if 15% or less of exposure is lost

Significant number of people/structures affected at risk = Yes if greater than 25% are impacted

Level of Vulnerability is calculated by assigning a value to probability and economic impacts where low =1, moderate =2, high = 3 and where Yes = 1 for Significant# of people and structures are impacted. Final value is established as high if cumulative score =6-8; moderate if cumulative score =3-5; low if cumulative score =1-2



LMS 5 year Update: HIRA Subcommittee Edits

➤ Main Points from *Severe Storms*:

- Description on how thunderstorms are created and the types and criteria of what makes a thunderstorms “severe”
- Description of lightning, hail, tornadoes, waterspouts, and straight-line winds
- Updated Fujita and Enhanced Fujita Scale Comparison table
- New Table to describe difference between Severe Thunderstorm/Tornado Watch and Warning
- Revised historical reports of Thunderstorms had wind of 58mph or greater, hail 1” in diameter, lightning that led to a fire or life threatening event, tornadoes, and waterspouts
- Revised mobile homes subject to winds/tornadoes by location within County
- New table to detail measurements/units for each severe storm element



LMS 5 year Update: HIRA Subcommittee Edits

➤ Severe Storms Risk Analysis:

Location	Probability of Occurrence	Economic Impact	Sig # People Impacted	Sig # Structures Impacted	Overall Level of Vulnerability
Unincorporated Pasco	High	High	Yes	Yes	High
Dade City	High	High	Yes	Yes	High
New Port Richey	High	High	Yes	Yes	High
Port Richey	High	High	Yes	Yes	High
San Antonio	High	High	Yes	Yes	High
St. Leo	High	High	Yes	Yes	High
Zephyrhills	High	High	Yes	Yes	High

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LMS 5 year Update: HIRA Subcommittee Edits

➤ Main Points from *Flooding*:

- Additional; public reference to FloodIQ to help the public understand what riverine storm surge can do to the area
- Updated flooding history and financial costs, events are separated by Coastal flood, heavy rain, and generic flooding
- Update properties located within a flood zones, including residential properties, and critical facilities
- Update structures vulnerable to flood, with number of structures built after 2004
- Revised Countywide 2014 FEMA Flood Zones map
- Visual revision of the County Watersheds
- Updated numbers for insurance loss and policies
- Discussion on upcoming Coastal FIRM map revision (coastal AE)
- Updated information referring back to the Repetitive Loss Information revised last year in Appendix D



LMS 5 year Update: HIRA Subcommittee Edits

➤ Flooding Risk Analysis:

Location	Probability of Occurrence	Economic Impact	Sig # People Impacted	Sig # Structures Impacted	Overall Level of Vulnerability
Unincorporated Pasco	High	High	Yes	Yes	High
Dade City	High	High	Yes	Yes	High
New Port Richey	High	High	Yes	Yes	High
Port Richey	High	High	Yes	Yes	High
San Antonio	Moderate	Moderate	Yes	Yes	High
St. Leo	Moderate	Moderate	Yes	Yes	High
Zephyrhills	High	High	Yes	Yes	High

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LMS 5 year Update: HIRA Subcommittee Edits

➤ Main Points from *Erosion*:

- Revised definition of erosion
- Updated statewide erosion ranking visual
- New figure that shows the coastal erosion areas (Hudson Beach and Anclote Key)
- Very difficult to show historical evidence as erosion is a slow process
- Not too much to change in terms of erosion, majority of the information remained pertinent and we remain high due to our vast watershed system, swamps, rivers, coastline, and bodies of water



LMS 5 year Update: HIRA Subcommittee Edits

➤ Coastal/Riverine Erosion Risk Analysis:

Location	Probability of Occurrence	Economic Impact	Sig # People Impacted	Sig # Structures Impacted	Overall Level of Vulnerability
Unincorporated Pasco	High	Moderate	No	Yes	High
Dade City	Moderate	Moderate	No	No	Moderate
New Port Richey	High	Moderate	No	Yes	High
Port Richey	High	Moderate	No	Yes	High
San Antonio	Low	Moderate	No	No	Low
St. Leo	Moderate	High	Yes	Yes	High
Zephyrhills	Moderate	High	No	Yes	High

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LMS 5 year Update: HIRA Subcommittee Edits

➤ Main Points from *Geological*:

- Revised the definition to account for depressions/sinkholes
- Updated reports of specific sinkhole repairs
- Updated reports of depression/sinkhole reports with an estimated annual report rate of 844 countywide
- Revised depression report to response process for how public reports to a geologist deeming a depression a sinkhole
- Updated reports by location, including incorporated areas (majority in NPR and Hudson)
- New figure added to show voluntary reports by location, soil makeup with forecasted depression formation type by location in County
- Ne figure to show favorable areas statewide, majority of Pasco County included
- Information regarding the Sinkhole of 2017
- New figure and detail on the estimated insurance costs due to sinkholes by County



LMS 5 year Update: HIRA Subcommittee Edits

➤ Geological Risk Analysis:

Location	Probability of Occurrence	Economic Impact	Sig # People Impacted	Sig # Structures Impacted	Overall Level of Vulnerability
Unincorporated Pasco	High	Moderate	Yes	Yes	High
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New Port Richey	High	High	Yes	Yes	High
Port Richey	High	Moderate	Yes	Yes	High
San Antonio	High	Moderate	Yes	Yes	High
St. Leo	Moderate	High	Yes	Yes	High
Zephyrhills	High	Moderate	Yes	Yes	High

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LMS 5 year Update: HIRA Subcommittee Edits

➤ Main Points from *Wildfire*:

- Updated description of wildfire types (surface, ground, crown, wildland-urban interface)
- Updated response numbers for brush fire from PCFR, and larger wildfire responses by FFS
- New map to show PCFR response countywide, and FFS response
- Updated FFS information regarding response and damages based on the 2013 and 2017 wildfire seasons
- Updated the Wildland Urban Interface Risk Index
- New figure on FFS mitigation project efforts since 2013
- Updated countywide communities at risk figure (ranked high, medium, and low by FFS)
- New rainfall graph to show rainfall discrepancy in 2017
- Updated information regarding KBDI and how it is used to predict wildfire potential



LMS 5 year Update: HIRA Subcommittee Edits

➤ Wildfire Risk Analysis:

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Level of Vulnerability is calculated by assigning a value to probability and economic impacts where low =1, moderate =2, high = 3 and where Yes = 1 for Significant# of people and structures are impacted. Final value is established as high if cumulative score =6-8; moderate if cumulative score =3-5; low if cumulative score =1-2



LMS 5 year Update: HIRA Subcommittee Edits

➤ Main Points from *Drought/Heat Wave*:

- Revised definition of a drought to include four ways to define drought (meteorological, agricultural, hydrological, and socioeconomic)
- Updated definition of a heat wave defined by NWS
- Additional information regarding the KBDI and how it relates to drought/excessive heat
- Revised information based on precipitation and drought index
- New figures to show historical evidence of drought conditions since 2012
- Information explaining that the NWS definition of heat wave has not been met, despite how temps
- Updating statewide drought ranking (Pasco is classed high)
- Updated figure for rainfall totals by year and how it compares to the droughts experienced in 2013 and 2017
- Updated figure to show the potential crop loss if impacted by a severe drought (estimated 2,423,380)



LMS 5 year Update: HIRA Subcommittee Edits

➤ Drought/Heat Wave Risk Analysis:

Location	Probability of Occurrence	Economic Impact	Sig # People Impacted	Sig # Structures Impacted	Overall Level of Vulnerability
Unincorporated Pasco	High	Moderate	Yes	No	High
Dade City	High	Moderate	Yes	No	High
New Port Richey	High	Moderate	Yes	No	High
Port Richey	High	Moderate	Yes	No	High
San Antonio	High	Moderate	Yes	No	High
St. Leo	High	Moderate	Yes	No	High
Zephyrhills	High	Moderate	Yes	No	High

Probability of occurrence is based on historical occurrences and predicted likelihood where high=multiple occurrences and/or predictions of likelihood; moderate=single occurrence and/or predictions of likelihood; low=no occurrences and/or predictions of likelihood

Economic impacts = High if > 30% of exposure is lost; moderate if 15-30 of exposure is lost; low if 15% or less of exposure is lost

Significant number of people/structures affected at risk = Yes if greater than 25% are impacted

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LMS 5 year Update: HIRA Subcommittee Edits

➤ Main Points from *Winter Storms/Freezes*:

- Revised definition of severe winter weather
- Updated historical information that expresses that Pasco County experiences freezing/subfreezing temperatures
- Updated figure for historical frost, freeze, and hard freeze warnings issued by NWS for Pasco since 2012 (total of 40)
- Updated information regarding crop loss due to severe winter weather
- New graphic to show the number of days the Cold Weather Shelter was open since 2013 (approximately 173 days)
- Majority of the information updated and changed under drought and heat applied to winter storms/freezes



LMS 5 year Update: HIRA Subcommittee Edits

➤ Winter Storm/Freezes Risk Analysis:

Location	Probability of Occurrence	Economic Impact	Sig # People Impacted	Sig # Structures Impacted	Overall Level of Vulnerability
Unincorporated Pasco	High	Moderate	Yes	No	High
Dade City	High	Moderate	Yes	No	High
New Port Richey	Moderate	Moderate	Yes	No	Moderate
Port Richey	Moderate	Moderate	Yes	No	Moderate
San Antonio	High	Moderate	Yes	No	High
St. Leo	High	Moderate	Yes	No	High
Zephyrhills	High	Moderate	Yes	No	High

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LMS 5 year Update: HIRA Subcommittee Edits

➤ Main Points from *Cyber Incident*.

- Added as a result of our new goal identified last year
- New definition to describe the violation of security with examples
- Included information referencing billions of dollars as a result of data breaches in the United States
- Figure to show the overall intention of attack is a malicious outsider (2015 to 2017 data)
- Figure to show Government, Healthcare, and technology industries are the top three targets
- Figure to show that the number one motivation is Identity Theft
- Included information explaining the vulnerability is high due to interconnectivity of public/private sectors and connections to social media and computer/internet dependence



LMS 5 year Update: HIRA Subcommittee Edits

➤ Cyber Incident Risk Analysis:

Location	Probability of Occurrence	Economic Impact	Sig # People Impacted	Sig # Structures Impacted	Overall Level of Vulnerability
Unincorporated Pasco	High	High	Yes	No	High
Dade City	High	High	Yes	Yes	High
New Port Richey	High	High	Yes	Yes	High
Port Richey	High	High	Yes	Yes	High
San Antonio	High	High	Yes	Yes	High
St. Leo	High	High	Yes	Yes	High
Zephyrhills	High	High	Yes	Yes	High

Probability of occurrence is based on historical occurrences and predicted likelihood where high=multiple occurrences and/or predictions of likelihood; moderate=single occurrence and/or predictions of likelihood; low=no occurrences and/or predictions of likelihood

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LMS 5 year Update: HIRA Subcommittee Edits

➤ Main Points from *Hazardous Materials*:

- The majority of this section remains unchanged
- Our main threat lies along our transportation networks, especially along SR 54, I-75, and railways
- No significant reports incidents at facilities or railways
- Revision advising that hazardous material spills/releases occur everyday
 - Main cause is vehicle crashes
 - Result approximately 5 gallon or less releases



LMS 5 year Update: HIRA Subcommittee Edits

➤ Hazardous Materials Risk Analysis:

Location	Probability of Occurrence	Economic Impact	Sig # People Impacted	Sig # Structures Impacted	Overall Level of Vulnerability
Unincorporated Pasco	High	Low	Yes	No	Moderate
Dade City	High	High	Yes	No	High
New Port Richey	Moderate	Low	No	No	Low
Port Richey	Low	Low	Yes	No	Low
San Antonio	Low	Low	Yes	No	Low
St. Leo	Low	Low	Yes	No	Low
Zephyrhills	Moderate	Low	Yes	No	Moderate

Probability of occurrence is based on historical occurrences and predicted likelihood where high=multiple occurrences and/or predictions of likelihood; moderate=single occurrence and/or predictions of likelihood; low=no occurrences and/or predictions of likelihood

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LMS 5 year Update: Reminders and Upcoming Items

- 5-Year update due to FDEM August 28, 2019
- In order to for all LMS Working Group members/departments/municipalities to remain eligible for Federal grant awards, you **must** show that you were involved and cooperated in the update process
 - By attending meetings, providing feedback, and accepting changes, you are cooperating in the update process



LMS 5 year Update: Reminders and Upcoming Items

- Emergency Management will be polishing the remaining portions of the LMS and will have a document ready for the LMSWG by the Annual Update Meeting in January
- The final draft will be sent to FDEM no later than February for review
- Post review, the updated LMS will be approved/adopted by BCC and the municipalities:
 - New Port Richey
 - Port Richey
 - Zephyrhills
 - Dade City
 - San Antonio
 - St. Leo



Annual Update



- Even though Pasco County is conducting a 5 year update, Pasco County must submit annual update documentation to FDEM by the final workday in January.
- Documentation includes:
 - 2018 meeting minutes
 - 2018 sign-in sheets
 - Changes to the LMS made during 2018



Meeting Frequency

- Meeting Frequency:
 - Annual Update Meeting: January 23, 2019
 - 2pm to 4:30pm
 - Quarter Meeting: April 24, 2019
 - 2pm to 4pm
 - Quarter Meeting: July 21, 2019
 - 2pm to 4pm
 - Quarter Meeting: October 23, 2019
 - 2pm to 4pm



Adjournment

➤ Closing Comments

