

Hardee County Adaptation Strategies

Introduction

Florida communities face increasing challenges of extreme rainfall, increased temperatures, and extreme storm events, impacting infrastructure, property, and the daily lives of residents. The Adaptation Action Area (AAA) Plan serves as a strategic framework to address vulnerabilities within DeSoto County to enhance community resiliency. To kickoff this effort, the Central Florida Regional Planning Council organized community workshops to understand the concerns of residents. A set of adaptation strategies was developed to address community concerns based on the results of the community meetings. This community outreach effort is followed by a vulnerability assessment which involves identifying socially vulnerable and underserved populations which are disproportionately impacted by the effects of severe weather events by collecting demographic and environmental data. The adaptation strategies and vulnerability assessment along with the quantitative data from the exposure analysis and sensitivity analysis will inform the AAA boundaries and assist the County prioritize investments and guide policymaking decisions.

The vulnerability assessment involves identification of the County's critical community assets such as healthcare facilities, government buildings and libraries/community centers, schools, public health and safety facilities, parks and natural areas, and roads and evacuation routes. The most up-to-date data and information is used to map current and project rainfall flooding to evaluate the potential impacts on those critical assets during future weather events. The protection of these assets will ensure they can continue to serve the community after major weather events. Combined with data related to underserved communities, the County can identify and prioritize critical action areas for investment.



Image 1: Historic Hotel in Bowling Green

Public Outreach

Several meetings were held with municipal staff, community organizations and champions, and the public to gain an understanding of the specific needs of the community in underserved areas based on their experiences. The outcomes of these meetings informed the specific strategies and recommendations of the AAA.

Meeting 1: County and Municipal Staff – December 18, 2024

A virtual meeting was held with staff from Unincorporated Hardee County and surrounding communities including the City of Bowling Green, the City of Wauchula, and the Town of Zolfo Springs, to gain insight regarding vulnerable areas and the challenges they face, particularly related to flooding. Additionally, attendees provided details related to upcoming









plans and projects within each jurisdiction, including a resurfacing project and the installation of street lighting along a portion of US-17.

Meeting 2: Community Organizations – January 6, 2025

Key community organizations and non-profits from the County and City attended this virtual meeting to share their insights based on their services and relationships to the community. Participants included Hardee Help Center, United Way, Hardee County Crisis Center, and Heartland Coalition for the Homeless. They discussed challenges such as transportation, access to food, and flooding.

Meeting 3: Underserved Communities – January 9, 2025

Hosted at the Hardee County Agri-Civic Center, this meeting was open to the public. Participants shared their experiences with flooding, giving specific examples of areas of flooding, poor walkability, and challenges of rehabilitation following a disaster.





Images 2 & 3: Public Meeting hosted at Hardee County Agri-Civic Center

Hardee County Adaptation Strategies

The following strategies are intended to address the climate threats identified by the vulnerability assessment and the concerns discussed during public outreach through protection, accommodation, relocation, and avoidance. The recommendations consider a variety of approaches, including nature-based solutions, policy changes, infrastructure improvements, partnerships and collaboration, and funding mechanisms. Through a comprehensive set of strategies, Hardee County can ensure a resilient future for the entire community.

Policy, Codes, & Standards (including Land Use and Zoning)

- 1. Remove barriers to the installation of green infrastructure and LID features in municipal codes.
- 2. Permit mixed-use development in low-risk areas and encourage neighborhood amenities to serve the surrounding residents.









- 3. Expand tree canopy to contribute towards a quality walking environment by amending the municipal code to require that all new development and redevelopment install street trees.
- 4. Establish standards to require traffic calming measures such as street trees, wide sidewalks, marked pedestrian crossings, narrow lanes, etc.
- 5. Update engineering standards manual to account for climate change impacts and support resilient infrastructure development as necessary.
- 6. Implement Complete Streets serving walkers, bicyclists, transit riders, motorists and freight handlers.
- 7. Facilitate targeted infill development in areas of low flood risk.
 - Increase density or intensity by right or through bonus opportunities.
 - Incentives for adaptive reuse and funding for building and façade improvements in targeted infill areas of low flood risk.
 - Impact fee credits in target area of infill development.
- 8. Permit and encourage small-scale food retailers in residential neighborhoods, focusing on fresh produce and culturally appropriate options.
- 9. Increase requirements to include vulnerability reductions measures such as additional hardening, higher floor elevations or incorporation of natural infrastructure for increased resilience.
- 10. Add or increase requirements in the municipal code for households, utilities, and public facilities to be built or rehabilitated to at least two feet above the BFE for a 100-year storm.
- 11. Consider density bonuses and/or cluster development in appropriate areas of the County to encourage placement of high functional wetlands and other environmentally sensitive lands to Conservation.
- 12. Require Florida Friendly $^{\text{TM}}$ Landscaping for new developments to conserve water and retain runoff.
- 13. Require the removal of invasive species.
- 14. Adopt municipal codes that restrict inappropriate redevelopment or new development in areas damaged by inundation, erosion and flooding to prevent future losses.
- 15. Revise the Land Development Code to allow non-conforming structures to add flood-proofing.

Partnerships & Collaborations

- 16. Execute a written agreement for City/County maintenance of the stormwater system on an annual basis so it is prepared for major and unexpected rain events.
- 17. Coordinate with local organizations, including nonprofits and philanthropy.
- 18. Coalition for the Homeless attended the community meeting and currently has funding to support displaced families.
- 19. Partner with local organizations and faith-based groups that already have relationships with migrant workers.
- 20. Engage community leaders and migrant worker representatives to understand their specific needs and vulnerabilities.
- 21. Partner with local organizations to provide transport services to grocery stores for underserved communities.
- 22. Add the annual clearing of the culvert along US-17 to the recurring maintenance list.









23. Partner with local contractors to offer free or low-cost flood-resilient upgrades, such as elevated structures or waterproof materials.

Planning & Management

- 24. Prepare a Bicycle and Pedestrian Master Plan to map the areas where sidewalks exist, understand where connectivity is missing, and prioritize bicycle and pedestrian safety improvements.
- 25. Prepare a County-wide Stormwater Management Plan.
- 26. Pursue shared drainage and water management infrastructure through public-private partnerships.
- 27. Regularly inspect and maintain gutters, drains, and other stormwater infrastructure and adopt a routine maintenance schedule in coordination with cities.
- 28. Adopt or update sediment and erosion-control regulations or practices. Ensure guidelines accommodate changes that may occur due to the anticipated increased, heavier precipitation events.
- 29. Prepare a Bicycle and Pedestrian Master Plan to map the areas where sidewalks exist, understand where connectivity is missing, and prioritize bicycle and pedestrian safety improvements.
- 30. Organize targeted water quality monitoring efforts to identify and evaluate trends related to public health and environmental impacts.
- 31. Connect open spaces and ecosystems to establish habitat corridors and improve water management.
- 32. Identify, establish, and protect corridors that connect fragmented habitats, allowing species to migrate and maintain genetic diversity.
- 33. Increase ecosystem resilience through the removal of invasive species and increase community awareness.
- 34. Incorporate green infrastructure and LID features into drainage specifications in the engineering standards manual to slow and filter runoff.

Capital Improvements

- 35. Stabilize riverbanks with native vegetation to reduce flood risk through riparian restoration efforts.
- 36. Preserve and enhance wetlands in and near Pioneer Park to retain floodwaters and reduce pressure on the berm.
- 37. Retrofit existing curbs and gutters with higher-capacity stormwater drains and pipes.
- 38. Add the installation of piping beyond the existing fencing to a Capital Improvement Program list for Hardee County in order to assist in the efficiency of the water flow adjacent to the City's critical assets.
- 39. Update and advance assessments of the vulnerability of transportation infrastructure.

Transportation & Access

- 40. Perform a transportation network study to identify transit market opportunities.
- 41. Strengthen micro-mobility tactics such as enhanced networks of pedestrian and bicycle facilities, and other means that increase equitable access and emphasize connectivity.









- 42. Improve public transit options to connect residents of food deserts to nearby grocery stores or farmers' markets.
- 43. Pursue traffic calming measures in coordination with FDOT through the addition of an RRFB (rapid flashing beacon), raised crosswalk with a refuge island, or other measures to improve pedestrian safety.
- 44. Pursue a Vision Zero effort in Hardee County.
- 45. Support the expansion of the County's regional trail system to provide pedestrian and bicycle routes off of a main roadway and to connect to adjacent municipalities.
- 46. Connect open spaces and ecosystems to establish habitat corridors and improve water management.
- 47. Upon resurfacing, implement Complete Streets serving pedestrians, bicyclists, transit riders, motorists and freight handlers, and incorporate traffic calming measures such as street trees, wide sidewalks, marked pedestrian crossings, narrow lanes, etc.
- 48. Identify areas of high pedestrian and bicycle traffic in need of lighting and pursue additional funding to improve pedestrian safety.
- 49. Support the continued buildout of and safe connections to the Blueway, Greenway, Equestrian, Hiking, and Bicycle Trails Plan.
- 50. Support the expansion of the County's regional trail system.

Capacity Building

- 51. Plant more climate-adaptive trees to increase shade and ecosystem value. (require Florida Friendly [™] Landscaping and disallow invasives and laurel oaks.)
- 52. Assess and prioritize natural public areas for additional water storage capacity. This action could also support natural habitat resilience.
- 53. Develop a system of inventory and monitor private lift stations to ensure failures are identified in a timely manner.

Preparedness & Response

- 54. Establish a comprehensive awareness program to ensure residents are informed of evacuation zones, clearance times, shelter locations and capacities, and evacuation routes.
- 55. Develop a guide including: family disaster planning, disaster supply kits, home protection tips, evacuation zones, routes and shelters, what to expect after the disaster, etc.
- 56. Coordinate public education and engagement activities.
- 57. Provide climate-related information and warnings in multiple languages.
- 58. Provide residents, property owners and prospective property owners with resources and information about flood risks affecting their property and educate community members about options for mitigating flood risk and of the storm surges in the future.
- 59. Establish procedures and guidelines for assessing the impact of new development and redevelopment on hurricane evacuation times.
- 60. Develop and support public and private projects and programs to retrofit, relocate or acquire properties susceptible to repetitive flooding.









61. Educate, inform, and disclose flood hazards to the public through various mechanisms such as real estate and lease disclosures, public mapping resources, community or citywide public information campaigns, or other innovative and effective approaches.

Funding & Finance

- 62. Identify funding mechanisms to plant canopy trees along frequently walked corridors.
- 63. Secure funding for a Vision Zero effort in Hardee County.
- 64. Adopt a Transportation Funding initiative through sales tax.
- 65. Explore the opportunity to designate the Train Depot on the National Register of Historic Places to unlock additional funding mechanisms for improvements on the property.
- 66. Prioritize low-income neighborhoods in disaster recovery funding allocations.
- 67. Aggressively participate in FEMA funding programs to protect private property.







Underserved Communities Adaptation Strategies

Category	Location	Comments from County and Municipal Staff - December 18, 2024	Adaptation Strategies (2d, 2e)
Flooding	Bowling Green	,	Incorporate green infrastructure and LID features into drainage specifications in the engineering standards manual to slow and filter runoff.(34)
Flooding	Bowling Green	Train Depot at Main Street and W. Central Avenue (near the downtown master plan boundary) floods and holds water with any rain event.	Plant more climate-adaptive trees to increase shade and ecosystem value. (require Florida Friendly [™] Landscaping and disallow invasives and laurel oaks.)(51) Explore the opportunity to designate the Train Depot on the National
Flooding	Bowling Green	The median on US-17 by Crews Bank (4821 US-17, Bowling Green, FL 33834) experiences flooding	Register of Historic Places to unlock additional funding mechanisms for improvements on the property.(65) Adopt or update sediment and erosion-control regulations or practices. Ensure guidelines accommodate changes that may occur due to the anticipated increased, heavier precipitation events.(28)
Flooding	Bowling Green	Chester Avenue was washed out in Hurricane Ian, and has since been fixed but experiences flooding behind Crews Bank. New homes are anticipated here.	Plant more climate-adaptive trees to increase shade and ecosystem value. (require Florida Friendly [™] Landscaping and disallow invasives and laurel oaks.)(51)
Flooding	Bowling Green	Jones Street, Doyle Parker Avenue, and Main Street experience flooding. New homes are anticipated here.	Pursue shared drainage and water management infrastructure. (26) Provide residents, property owners and prospective property owners with resources and information about flood risks affecting their property and educate community members about options for mitigating flood risk and of the storm surges in the future. (58) Add or increase requirements in the municipal code for households, utilities, and public facilities to be built or rehabilitated to at least two feet above the BFE for a 100-year storm. (10) Increase requirements to include vulnerability reductions measures such as additional hardening, higher floor elevations or incorporation of natural infrastructure for increased resilience. (9)
Flooding	Bowling Green	Flooding issues at W. Central Avenue and Main Street. The culvert fills up with sand and needs to be vacuumed out. Water overflows out to the centerline of the street for days following a heavy rain event, draining from US-17 to Main Street.	Add the annual clearing of the culvert along US-17 to the recurring maintenance list. (22)

Underserved Communities Adaptation Strategies

	Virtual Meeting with County and Municipal Staff - December 18, 2024 & Bowling Green CRA Tour - January 9, 2025		
Category	Location	Comments from County and Municipal Staff (2a)	Adaptation Strategies (2d, 2e)
Flooding	Bowling Green	Where Main Street dead-ends at its westernmost point (713 E. Main Street) a private drainage system was installed to drain to the roadway into the private agricultural land. Currently the City is dumping into it without a written agreement. During Hurricane lan the water only stood for a couple of hours, but Hurricane Milton and others have caused more flooding in the past. Dirt and sand are clogging the ditch system and impairing its efficiency.	Execute a written agreement for City/County maintenance of the stormwater system to be included on the recurring maintenance list so it is as efficient as possible for major and unexpected rain events. (16)
Infrastructure	Bowling Green	Direct drainage ditch from US-17 on its way to the Peace River crosses Edison Avenue adjacent to the Wastewater Treatment plant at 596 Lake Branch Road and continues through the property south of the treatment plant to the east. 27.628591 N, -81.817660 W on Edison Avenue. Per the Bowling Green Mayor, discussions with Hardee County indicate a promise to install piping beyond the existing fencing, though little to no improvements were made by the County.	Add the installation of piping beyond the existing fencing to a Capital Improvement Program list for Hardee County in order to assist in the efficiency of the water flow adjacent to the City's critical assets.(38)
Infrastructure	Bowling Green	The City of Bowling Green has requested a stoplight at the intersection of US-17 and Hardee Street due to three pedestrian fatalities. FDOT has declined the request. A feedback sign has been added in the interim, yet due to comments from Hardee County Sheriff's office at the community meeting, this feedback sign was placed for the duration of the detour onto County Line Rd and not in response to the pedestrian fatalities.	Pursue traffic calming measures in coordination with FDOT through the addition of an RRFB (rapid flashing beacon), raised crosswalk with a refuge island, or other measures to improve pedestrian safety. (43) Prepare a Bicycle and Pedestrian Master Plan to map the areas where sidewalks exist, understand where connectivity is missing, and prioritize bicycle and pedestrian safety improvements. (24) Secure funding for a Vision Zero effort in Hardee County. (44)
Infrastructure	Bowling Green	Another problematic intersection for pedestrians is Hillcrest Dr. and US-17. There was a pedestrian fatality last night (1/10/25).	Establish standards to require traffic calming measures such as street trees, wide sidewalks, marked pedestrian crossings, narrow lanes, etc. (4) Prepare a Bicycle and Pedestrian Master Plan to map the areas where sidewalks exist, understand where connectivity is missing, and prioritize bicycle and pedestrian safety improvements. (24) Secure funding for a Vision Zero effort in Hardee County. (44)
Infrastructure	Bowling Green	Railroad tracks have been abandoned by CSX. Per the Bowling Green Mayor, they are owned by FDOT and being discussed for a possible roadway or trail. Unlikely to be a roadway, per the Bowling Green City Manager, but there are hopes for it to become a trail.	Support the expansion of the County's regional trail system to provide pedestrian and bicycle routes off of a main roadway and to connect to adjacent municipalities. (45) Connect open spaces and ecosystems to establish habitat corridors and improve water management.(31)

Underserved Communities Adaptation Strategies

		Virtual Meeting with County and Municipal Staff - December 18, 2024	<u> </u>
Category	Location	Comments from County and Municipal Staff (2a)	Adaptation Strategies (2d, 2e)
Flooding	Bowling Green	Maple Street was supposed to be handled by the County. As more rainfall has been received in recent years, the ditches are not able to handle it. The ditches are eroding and need to be cleaned out with erosion prevention tactics installed. During Hurricane Irma, you would have thought this was a separate river with approximately 100 feet wide water flowing across the roadway and through peoples yards.	Incorporate green infrastructure and LID features into drainage specifications in the engineering standards manual to slow and filter runoff.(34) Pursue shared drainage and water management infrastructure (26). Prepare a County-wide Stormwater Master Plan.(25)
Flooding	Bowling Green	Creek near Avion Palms is very overgrown. It eventually connects to Haines Creek and the Peace River. The ditches on either side of the road at this location need clearing.	Prepare a County-wide Stormwater Management Plan.(25) Pursue shared drainage and water management infrastructure
Flooding	Bowling Green	US-17 becomes problematic with even one-half inch of rain. It is currently being widened by FDOT and the underground stormwater system is not being improved. FDOT is utilizing ditches on the side of the road to accommodate for the widening, but these are not regularly maintained by the state or the county and are therefore backed up with trash and plantings, and become eroded.	through public-private partnerships.(26) Regularly inspect and maintain gutters, drains, and other stormwater infrastructure and adopt a routine maintenance schedule in coordination with cities.(27) Adopt or update sediment and erosion-control regulations or practices. Ensure guidelines accommodate changes that may occur due to the anticipated increased, heavier precipitation events.(28)
Flooding	Bowling Green	County Line Road is lined with ditches constructed by the County and they are not maintained with any structure. It was an attempt to alleviate the flooding issues, but the ditches are overgrown, eroding, and not maintained. This occurs the worst around Bertha Fulse Street and Doyle Parker Avenue	Stabilize riverbanks with native vegetation to reduce flood risk through riparian restoration efforts.(35)
Infrastructure	Bowling Green	Generally, very few sidewalks, where they exist, they are at grade, no traffic calming measures, speed limits of 60 mph leading into town and abrupt drop to 40 mph. Resurfacing project to occur on US-17 between REA Boulevard and SR-62 to add lighting.	Implement Complete Streets when a roadway is resurfaced to serve pedestrians, bicyclists, transit riders, motorists and freight handlers, and incorporate traffic calming measures such as street trees, wide sidewalks, marked pedestrian crossings, narrow lanes, etc. (47)
Infrastructure	Bowling Green	The City is requesting new street lighting for much of the area of downtown along US-17/ FDOT quoted \$6K to replace the lights. The new lights would be less charming, but would provide appropriate and much needed lighting to help drivers see pedestrians.	Identify areas of high pedestrian and bicycle traffic in need of lighting and pursue additional funding to improve pedestrian safety. (47)

Underserved Communities Adaptation Strategies

Category	Location	Virtual Meeting with County and Municipal Staff - December 18, 2024 Comments from County and Municipal Staff (2a)	
Category	Location	Comments from County and Municipal Staff (2a)	Adaptation Strategies (2d, 2e)
Flooding	Wauchula	Culvert for the tributary running down the west side of town washed out where it crosses Louisiana Avenue, flooding the houses in Sunset Park. Some of these homes are being reconstructed due to flooding, and should be elevated.	Partner with local contractors to offer free or low-cost flood-resilient upgrades, such as elevated structures or waterproof materials.(23) Increase requirements to include vulnerability reductions measures such as additional hardening, higher floor elevations or incorporation of natural infrastructure for increased resilience.(9)
Flooding	Wauchula	The City's maintenance shop, yard, WWTP Griffin Road, E. Bay Street and Green Street all flooded impacting houses and city infrastructure (not warehouses)	Pursue shared drainage and water management infrastructure. (26) Partner with local contractors to offer free or low-cost flood-resilient upgrades, such as elevated structures or waterproof materials. (23)
Infrastructure	Wauchula	East side of town between the unincorporated areas along S. 1st Ave to where the road is labeled "private" has a large culvert that was washed out, limiting access to the couple of residential properties in that area. The dirt road has since been fixed, but remains a concern as the fix took a long time.	Update engineering standards manual to account for climate change impacts and support resilient infrastructure development as necessary.(5) Pursue shared drainage and water management infrastructure.(26)
Response & Rehabilitation	Wauchula	Homes in Sunset Park are not being reconstructed. They were mucked and gutted but not to where they could be elevated at this time.	Prioritize low-income neighborhoods in disaster recovery funding allocations.(66)
Flooding	Zolfo Springs	Cracker Lake RV Park experiences regular flooding.	Partner with local contractors to offer free or low-cost flood-resilient upgrades, such as elevated structures or waterproof materials. (23)
Flooding	Zolfo Springs	Peace River trailers along Parkview, South of 64, flooded in Ian and have experienced issues since then.	Revise Land Development Code to allow non-conforming structures to add flood-proofing. (15)
Flooding	Zolfo Springs	Duplexes along Suwanee Street and 9th Street experience flooding issues.	Partner with local contractors to offer free or low-cost flood-resilient upgrades, such as elevated structures or waterproof materials.(23)
Flooding	Zolfo Springs	E. 4th Street and Palmetto Street flood with heavy rain	Incorporate green infrastructure and LID features into drainage specifications in the engineering standards manual to slow and filter runoff.(34)
Infrastructure	Zolfo Springs	SR-64 Overflow Bridge, South of Pioneer Park- Berm at Pioneer Park needs to be repaired to protect the SR-64 Overflow Bridge. It also provides water quality treatment before it discharges to Peace River. Hurricane Ian funding opportunities	Organize targeted water quality monitoring efforts to identify and evaluate trends related to public health and environmental impacts. (30) Incorporate green infrastructure and LID features into drainage specifications in the engineering standards manual to slow and filter runoff. (34) Adopt or update sediment and erosion-control regulations or practices. Ensure guidelines accommodate changes that may occur due to the anticipated increased, heavier precipitation events. (28)

Underserved Communities Adaptation Strategies

Category	Location	Virtual Meeting with County and Municipal Staff - December 18, 2024	<u>, </u>
Category	Location	Comments from County and Municipal Staff (2a)	Adaptation Strategies (2d, 2e)
			Support the continued buildout of and safe connections to the Blueway, Greenway, Equestrian, Hiking, and Bicycle Trails Plan. (49) Support the expansion of the County's regional trail system. (50)
Flooding	Zolfo Springs	Pioneer Park at Wildlife Refuge Area- Flooding occurs at this location during a major storm event since it's a low-lying area.	Connect open spaces and ecosystems to establish habitat corridors and improve water management. (46)
Ē	Zolfe		Increase ecosystem resilience through the removal of invasive species.(13)
			Identify, establish, and protect corridors that connect fragmented habitats, allowing species to migrate and maintain genetic diversity.(32)
Flooding	Unincorporated	Wauchula Hills experiences major flooding. This area experiences flooding from Hog Branch Creek that runs into Peace River due to drainage issues which causes wash outs on roads and issues with the operations of the Lift Station from Lost Acres to Wauchula Hills	Consider density bonuses and/or cluster development in appropriate areas of the County to encourage placement of high functional wetlands and other environmentally sensitive lands to Conservation.(11)
Ē	Subdivision. Residential area population is in an underlying community serving approx. 2,000 residents. 27.57721 N, 81.83726 W	Develop a system to inventory and monitor private lift stations to ensure failures are identified in a timely manner. (53)	
cture	orated	need to be upgraded and installed. No proper drainage locations in this area and is being surrounded by wetlands that run into the Peace River. FDOT currently utilizes this area to convey water flow from US-17 that contributes to increased flooding. 27 52897 N. 81 79887 W.	Require Florida Friendly [™] Landscaping for new developments to conserve water and retain runoff. (12)
Infrastructure	Unincorporated		Adopt or update sediment and erosion-control regulations or practices. Ensure guidelines accommodate changes that may occur due to the anticipated increased, heavier precipitation events. (28)
Flooding	Unincorporated	Limestone area experiences flooding due to the major creeks	Require Florida Friendly [™] Landscaping for new developments to conserve water and retain runoff. (12)
Flor			Stabilize riverbanks with native vegetation to reduce flood risk through riparian restoration efforts. (35)
Flooding	Unincorporated	Bronco Drive experiences major flooding as it is in a wetland and low-	Require Florida Friendly™ Landscaping for new developments to conserve water and retain runoff. (12)
Flo	Uninco	lying area	Incorporate green infrastructure and LID features into drainage specifications in the engineering standards manual to slow and filter runoff.(34)
Flooding	Unincorporated		Assess and prioritize natural public areas for additional water storage capacity. This action could also support natural habitat resilience. (52)
	Uni		Adopt municipal codes that restrict inappropriate redevelopment or new development in areas damaged by inundation, erosion and flooding to prevent future losses.(14)
Flooding	Unincorporated	Griffin Road- tributary creek that leads to Peace River overtopped that causes flooding to this community	Stabilize riverbanks with native vegetation to reduce flood risk through riparian restoration efforts. (35)

Underserved Communities Adaptation Strategies

Category	Location	Comments from County and Municipal Staff (2a)	Adaptation Strategies (2d, 2e)
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Flooding	Uninco	Cross Creek Lane- Drainage Issue	
Flooding	Unincorporated	Circle Drive- Road Flooding not major	
Flooding	Uninco	Murphy Road - Road Flooding not major	
Flooding	Unincorporated	Jim Williams Road - Road Flooding not major	
Flooding	Unincorporated	CR-665- Road Flooding not major	
Flooding	Unincorporated	Pine Level Road- Road Flooding not major	
Flooding	Unincorporated	Ridge Rainey- Road Flooding not major	
Flooding	Unincorporated	Goose Pond Road - Road Flooding not major	
Flooding	Unincorporated	Center Hil Road - Road Flooding not major	
Flooding	Unincorporated	Tolbert Stephens Road - Road Flooding not major	
Flooding	Unincorporated	Fish Branch Road - Road Flooding not major	

Underserved Communities Adaptation Strategies

Catagon	Location	Virtual Meeting with County and Municipal Staff - December 18, 2024 Comments from County and Municipal Staff (2a)	
Category	Location	Comments from County and Municipal Staff (2a)	Adaptation Strategies (2d, 2e)
Flooding	Unincorporated	Crewsville Road - Road Flooding not major	
Flooding	Unincorporated	Ten-Mile Grade Road- Road Flooding not major	Execute a written agreement for City/County maintenance of the stormwater system on an annual basis so it is prepared for major and unexpected rain events. (16) Incorporate green infrastructure and LID features into drainage
Flooding	Unincorporated	Sweetwater Road - Road Flooding not major	specifications in the engineering standards manual to slow and filter runoff. (34) Retrofit existing curbs and gutters with higher-capacity stormwater drains and pipes. (37)
Flooding	Unincorporated	Old Town Creek Road - Road Flooding not major	
Flooding	Unincorporated	Locklar Road-Road Flooding not major	
Flooding	Unincorporated	Parnell Road- Road Flooding not major	
Flooding	Unincorporated	Steve Roberts and Kelly Roberts Road - Road Flooding not major	
Flooding	Unincorporated	Clifton Bryan Road- Road Flooding not major	
Flooding	Unincorporated	Maude Road- Road Flooding not major	
Flooding	Unincorporated	Rest Haven Road - Road Flooding not major	
Flooding	Unincorporated	Gillete Road - Road Flooding not major	

Underserved Communities Adaptation Strategies

O-t	1 41 -	Virtual Meeting with County and Municipal Staff - December 18, 2024	
Category	Location	Comments from County and Municipal Staff (2a)	Adaptation Strategies (2d, 2e)
Flooding	Unincorporated	S. Barlow Road - Road Flooding not major	
Flooding	Unincorporated	John Carlton Road - Road Flooding not major	
Flooding	Unincorporated	Van Simmons Road - Road Flooding not major	
Flooding	Unincorporated	Gordon Road - Road Flooding not major	
Economic and Policy	AII	Open to regulations to require elevated housing types.	Establish procedures and guidelines for assessing the impact of new development and redevelopment on hurricane evacuation times. (59) Develop and support public and private projects and programs to retrofit, relocate or acquire properties susceptible to repetitive flooding. (60) Facilitate targeted infill development in areas of low flood risk. - Increase density or intensity by right or through bonus opportunities Incentives for adaptive reuse and funding for building and façade improvements in targeted infill areas of low flood risk Impact fee credits in target area of infill development.(7)
Response & Rehabilitation	AII	Need identified funding sources for both the Cities/Counties to access to address municipally owned properties as well as for homeowners to tap into for damages from flooding.	Coordinate with local organizations, including nonprofits and philanthropy. (17) Aggressively participate in FEMA funding programs to protect private property. (67)

Underserved Communities Adaptation Strategies

Category	Location	Comments from County and Municipal Staff - December 18, 2024 Comments from County and Municipal Staff (2a)	Adaptation Strategies (2d, 2e)
			Coordinate with local organizations, including nonprofits and philanthropy. (17)
			Coordinate public education and engagement activities.(56)
Community Engagement	Communication strategies to disseminating information to the public include: local newspaper, Facebook pages, County Community Development Office, door-to-door engagement (especially in Zolfo Springs), printed information on back of utility bills, text messages to the whole municipality. E. V. D. D. D. K. D. D. C. D	Communication strategies to disseminating information to the public include: local newspaper, Facebook pages, County Community Development Office, door-to-door engagement (especially in Zolfo Springs), printed information on back of utility bills, text messages to the whole municipality	Establish a comprehensive awareness program to ensure residents are informed of evacuation zones, clearance times, shelter locations and capacities, and evacuation routes.(54)
			Develop a guide including: family disaster planning, disaster supply kits, home protection tips, evacuation zones, routes and shelters, what to expect after the disaster, etc. (55)
		Educate, inform, and disclose flood hazards to the public through various mechanisms such as real estate and lease disclosures, public mapping resources, community or city-wide public information campaigns, or other innovative and effective approaches.(61)	

HARDEE COUNTY **Underserved Communities Adaptation Strategies** Virtual Meeting with Community Organizations - January 6, 2025 Comments from Community Organizations (2b) Category Location Adaptation Strategies (2d, 2e) Perform a transportation network study to identify transit market opportunities. (40) Upon resurfacing, implement Complete Streets serving pedestrians, bicyclists, transit riders, motorists and freight handlers, and incorporate traffic calming measures such as street trees, wide sidewalks, marked pedestrian crossings, narrow lanes, etc. (47) **Fransportation Bowling Green** Transportation challenges us greatly. Prepare a Bicycle and Pedestrian Master Plan to map the areas where sidewalks exist, understand where connectivity is missing, and prioritize bicycle and pedestrian safety improvements. (24) Secure funding for a Vision Zero effort in Hardee County. (64) Update engineering standards manual to account for climate change impacts and support resilient infrastructure development as necessary. (5) Implement Complete Streets serving pedestrians, bicyclists, transit riders, motorists and freight handlers. (6) Bowling Green **Fransportation** United Way Needs Assessment identified that 73% of the sample size agreed that they would be willing to fund more transportation Perform a transportation network study to identify transit market options. opportunities. (40) Adopt a Transportation Funding initiative through sales taxes. (63) Land Use and Urban Design 30wling Green School Zone was relocated to Banana Street in attempt to protect the students and make it more safe. The relocation was also moved Implement Complete Streets serving pedestrians, bicyclists, transit closer to future residential/infill projects anticipating new students. riders, motorists and freight handlers. (6) Speeding through the school zone is still an active issue. Land Use and Urban Design Facilitate targeted infill development in areas of low flood risk. 30wling Green Infill and residential developments are coming in within Bowling Increase density or intensity by right or through bonus opportunities. Green (through 2020) Denise Grimsley with The Development Group Incentives for adaptive reuse and funding for building and façade can provide additional insights into rezoning/permitting/growth areas improvements in targeted infill areas of low flood risk. in Bowling Green. Impact fee credits in target area of infill development. (7) Community Engagement Hardee County population is not growing per the Census data Partner with local organizations and faith-based groups that already **Bowling Green** (seasonal migrant farm workers are moving to this area and are not have relationships with migrant workers. (21) being counted within the census data) CFRPC did a study on the registered programs for Farm Worker Engage community leaders and migrant worker representatives to

understand their specific needs and vulnerabilities. (20)

Housing. (likely through 2020)

HARDEE COUNTY **Underserved Communities Adaptation Strategies** Virtual Meeting with Community Organizations - January 6, 2025 Comments from Community Organizations (2b) Category Location Adaptation Strategies (2d, 2e) Implement Complete Streets serving pedestrians, bicyclists, transit riders, motorists and freight handlers. (6) **Transportation Bowling Green** Bowling Green only has one doctors office. Difficult to obtain transportation from family/friend/strangers to Wauchula to get to the Perform a transportation network study to identify transit market doctor. opportunities. (39) Adopt a Transportation Funding initiative through sales tax. (64) Wauchula Incorporate green infrastructure and LID features into drainage Flooding Dip in the road on MLK Avenue at E. Bay Street floods in any rain specifications in the engineering standards manual to slow and filter events. runoff. (34) Infrastructure Street lighting is lacking in many areas - sidewalks needed along MLK Wauchula Avenue from Baker Street to Bay Street. Many have witnessed pushing strollers at night in the roadway as the grass on either side of the road is overgrown and not maintained. Implement Complete Streets serving pedestrians, bicyclists, transit riders, motorists and freight handlers. (6) Transportation Wauchula New traffic circle in front of Winn Dixie (1133 S 6th Ave, Wauchula, FL 33873) has no pedestrian crossing or consideration for pedestrian access. Community Engagement Communication is very difficult. Any type of communication or Zolfo Springs messaging - newspaper only runs once per week. Tend to rely on Provide climate-related information and warnings in multiple social media (Facebook) - always find messaging that needs to go out languages. (57) to the whole population (Spanish, English, and Creole) challenging across the board in a timely manner. **Economic and Policy Bowling Green** No traditional grocery stores within the City of Bowling Green, creating a food dessert. Permit and encourage small-scale food retailers in residential neighborhoods, focusing on fresh produce and culturally appropriate Community Engagement options. (8) Zolfo Springs Residents by and large reported that they know where to go for help they know how to access food - but they are not able to choose what is culturally or nutritionally appropriate Improve public transit options to connect residents of food deserts to Transportation Zolfo Springs nearby grocery stores or farmers' markets. (42) Carrying their meals home is difficult so they need to go multiple times per week. Partner with local organizations to provide transport services to grocery stores for underserved communities. (21) **Fransportation** Zolfo Springs Migrant/labor buses are the only transportation options they have Permit and encourage small-scale food retailers in residential unless they have a friend. Run through a specific program and only

open to those people. People complain about the number of them

going to Walmart - the food they eat is often out of stock.

neighborhoods, focusing on fresh produce and culturally appropriate

options. (8)

HARDEE COUNTY **Underserved Communities Adaptation Strategies** Virtual Meeting with Community Organizations - January 6, 2025 Adaptation Strategies (2d, 2e) Location Comments from Community Organizations (2b) Category Unincorporated **Fransportation** Permit mixed-use development in low-risk areas and encourage neighborhood amenities to serve the surrounding residents. (2) Transportation and Access are issues throughout the County. Perform a transportation network study to identify transit market opportunities. (40) Strengthen micro-mobility tactics such as enhanced networks of pedestrian and bicycle facilities, and other means that increase Unincorporated **Transportation** Transportation is the key - if people need to get to Hardee County equitable access and emphasize connectivity. (41) Crisis Center, how are they going to do so? Everywhere in Hardee County there is a need. I wish there was a trolly to run from Dollar General in Zolfo to Dollar General in Bowling Green. Facilitate targeted infill development in areas of low flood risk. (7) Pursue shared drainage and water management infrastructure. (26) Unincorporated Provide residents, property owners and prospective property Flooding Flooding all over the County - both daughters living in Riverview owners with resources and information about flood risks affecting Heights Subdivision and the Peace River (Diane) their property and educate community members about options for mitigating flood risk and of the storm surges in the future. (58) Increase requirements to include vulnerability reductions measures such as additional hardening, higher floor elevations or incorporation of natural infrastructure for increased resilience. (9)

Underserved Communities Adaptation Strategies

Meeting with Public in Underserved Areas - January 9, 2025

Category	Location	Comments from the Public (2c)	Adaptation Strategies (2d, 2e)
		Confinence from the rubile (26)	Adaptation Strategies (24, 26)
Flooding	Wauchula	Ditches flood during regular thunderstorms on Griffin Road.	
Flooding	Wauchula	Flooding around the Sheriff's Department during regular thunderstorms.	Incorporate green infrastructure and LID features into drainage specifications in the engineering standards manual to slow and filter runoff. (34)
Flooding	Wauchula	The rerouted drains by the old baseball fields on Hawaiian Drive and Citrus Valley flood during regular thunderstorms. The flow is so fast that it washes out the land and clogs ditches.	Plant more climate-adaptive trees to increase shade and ecosystem value. (require Florida Friendly TM Landscaping and disallow invasives and laurel oaks.) (51)
Flooding	Wauchula	Flooding on US-17 Northbound near Will Duke Road. The water just sits after a storm even instead of draining away.	
Infrastructure	Bowling Green	Many county roads have stormwater, but it is not maintained.	Execute a written agreement for City/County maintenance of the private system to be included on an annual clearing and snagging of
Infrastructure	Bowling Green	The Train depot drain needs to be cleaned out, as it causes flooding onto CR-17	the ditch system on a regular basis so it is prepared for major and unexpected rain events. (16)
Flooding	Zolfo Springs	Bronco Drive experiences flooding.	Incorporate green infrastructure and LID features into drainage specifications in the engineering standards manual to slow and filter runoff. (34) Plant more climate-adaptive trees to increase shade and ecosystem
Flooding	Zolfo Springs	Cracker Lake floods during major storm events.	value. (require Florida FriendlyTM Landscaping and disallow invasives and laurel oaks.) (51)
Response & Rehabilitation	Sprin	Pioneer Park has a damaged berm near the bridge. Hurricane lan made the river overflow with sinkholes at the wildlife refuge and barreled through the berm and took a month to rebuild the bridge. The berm has yet to be rebuilt.	Preserve and enhance wetlands in and near Pioneer Park to retain floodwaters and reduce pressure on the berm. (36) Stabilize riverbanks with native vegetation to reduce flood risk through riparian restoration efforts. (35)
Infrastructure	Zolfo Springs	25 bridges were overtaken by the river in the whole county.	Update and advance assessments of the vulnerability of transportation infrastructure. (39)

Underserved Communities Adaptation Strategies

Meeting with Public in Underserved Areas - January 9, 2025

Category	Location	Comments from the Public (2c)	Adaptation Strategies (2d, 2e)
Transportation	All	Entire County faces transportation challenges to access their needs, often relying on family, friends, or walking.	Permit mixed-use development in low-risk areas and encourage neighborhood amenities to serve the surrounding residents. (2) Perform a transportation network study to identify transit market opportunities. (40) Strengthen micro-mobility tactics such as enhanced networks of pedestrian and bicycle facilities, and other means that increase equitable access and emphasize connectivity. (41) Expand tree canopy to contribute towards a quality walking environment by amending the municipal code to require that all new development and redevelopment install street trees. (3) Identify funding mechanisms to plant canopy trees along frequently walked corridors. (62)
Response & Rehabilitation	All	Hurricane lan affected 200 homes, and 10 families are still displaced to hotels.	Coordinate with local organizations, including nonprofits and philanthropy. (17) Coalition for the Homeless attended the community meeting and currently has funding to support displaced families. (18)
Infrastructure	All	Stormwater in city centers collects along roads with curbing and gutters.	Retrofit existing curbs and gutters with higher-capacity stormwater drains and pipes. (37) Regularly inspect and maintain gutters, drains, and other stormwater infrastructure and adopt a routine maintenance schedule in coordination with cities. (27) Incorporate green infrastructure and LID features into drainage specifications in the engineering standards manual to slow and filter runoff. (34)
Emergency Preparedness	All	Lack of education regarding evacuation routes, location of shelters, and resources following a disaster.	Establish a comprehensive awareness program to ensure residents are informed of evacuation zones, clearance times, shelter locations and capacities, and evacuation routes. (54) Develop a guide including: family disaster planning, disaster supply kits, home protection tips, evacuation zones, routes and shelters, what to expect after the disaster, etc. (55) Coordinate public education and engagement activities. (56)