

A photograph of a park with a pond in the foreground. The pond is surrounded by a grassy area with several trees, some of which have Spanish moss hanging from their branches. In the background, there is a playground with green equipment. The sky is overcast.

**DESOTO COUNTY**

**ADAPTATION ACTION AREA  
PLAN #1 ARCADIA**

Prepared By:

**Kimley»Horn**



DESOTO COUNTY CVA - AAA PROJECT

# Adaptation Action Area Plan #1 Arcadia

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## Abbreviations

|              |                                                     |                |                                                                                              |
|--------------|-----------------------------------------------------|----------------|----------------------------------------------------------------------------------------------|
| <b>AAA</b>   | Adaptation Action Area                              | <b>FMA</b>     | Flood Mitigation Assistance                                                                  |
| <b>BFE</b>   | Base Flood Elevation                                | <b>GIS</b>     | Geographic Information System                                                                |
| <b>BMAP</b>  | Basin Management Action Plan                        | <b>I&amp;I</b> | Inflow and Infiltration                                                                      |
| <b>BOCC</b>  | Board of County Commissioners                       | <b>LDC</b>     | Land Development Code                                                                        |
| <b>CFRPC</b> | Central Florida Regional Planning Council           | <b>LF</b>      | Linear Feet                                                                                  |
| <b>CHNEP</b> | Coastal & Heartland National Estuary Partnership    | <b>LID</b>     | Low Impact Development                                                                       |
| <b>CIP</b>   | Capital Improvement Program                         | <b>LMI</b>     | Low- and Moderate-Income                                                                     |
| <b>CRS</b>   | Community Rating System                             | <b>LMS</b>     | Local Mitigation Strategy                                                                    |
| <b>CVA</b>   | Comprehensive Vulnerability Assessment              | <b>NFIP</b>    | National Flood Insurance Program                                                             |
| <b>DDCV</b>  | Double Detector Check Value                         | <b>NOAA</b>    | National Oceanic and Atmospheric Administration                                              |
| <b>DOT</b>   | Department of Transportation                        | <b>PROTECT</b> | Promoting Resilient Operations for Transformative, Efficient, and Cost-Saving Transportation |
| <b>DRC</b>   | Disaster Recovery Centers                           | <b>PRV</b>     | Pressure Reduction Valves                                                                    |
| <b>EPA</b>   | U.S. Environmental Protection Agency                | <b>RAP</b>     | Reasonable Assurance Plan                                                                    |
| <b>FCMP</b>  | Florida Coastal Management Program                  | <b>RPC</b>     | Regional Planning Council                                                                    |
| <b>FDEP</b>  | Florida Department of Environmental Protection      | <b>SFHA</b>    | Special Flood Hazard Areas                                                                   |
| <b>FDEM</b>  | Florida Department of Emergency Management          | <b>SWFWMD</b>  | Southwest Florida Water Management District                                                  |
| <b>FEDR</b>  | Florida Office of Economic and Demographic Research | <b>TMDL</b>    | Total Maximum Daily Load                                                                     |
| <b>FEMA</b>  | Federal Emergency Management Agency                 | <b>USDA</b>    | U.S. Department of Agriculture                                                               |
| <b>FFE</b>   | Finished Floor Elevation                            | <b>WWTF</b>    | Wastewater Treatment Facility                                                                |

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## Introduction

DeSoto County (the County) received funding through the Coastal & Heartland National Estuary Partnership (CHNEP) to write three Adaptation Plans for the highest ranking Adaptation Action Areas (AAAs) within the County. This Adaptation Plan is a continuation of the work performed under the County Comprehensive Vulnerability Assessment (CVA) and the Identification and Ranking of AAAs. This Adaptation Plan has been developed for the Arcadia AAA, the highest ranked AAA in DeSoto County, to bridge the gap between identified vulnerable critical assets and the implementation of flood reduction solutions.

The County, Central Florida Regional Planning Council (CFRPC), and CHNEP staff assisted Kimley-Horn in each Adaptation Plan's development. This report outlines specific adaptive strategies, measures, and policies that were developed based on the [Florida Adaptation Planning Guidebook](#) and tailored to the unique needs and challenges of the Arcadia AAA. A location map of the Arcadia AAA is shown in **Figure 1**.

The objectives of this Adaptation Plan are:

- ▶ To highlight DeSoto County's current capacity to address flood resiliency in the Arcadia AAA.
- ▶ To propose implementable adaptation strategies that would reduce flood risk of identified critical assets.
- ▶ To rank proposed adaptation strategies based on their anticipated flood resilience improvements, costs, and feasibility.
- ▶ To develop preliminary (planning level) costs, descriptions, and conceptual representations for proposed projects.
- ▶ To highlight funding opportunities for the proposed adaptation strategies.

This study utilized the latest [Florida Adaptation Planning Guidebook](#) published in collaboration between Florida Department of Environmental Protection (FDEP), the Florida Coastal Management Program (FCMP), and National Oceanic and Atmospheric Administration (NOAA), to guide the development of methodologies, criteria and strategies for this Adaptation Plan.

## Background

Critical assets include infrastructure, community and emergency facilities, transportation and evacuation routes, and natural, cultural, and historical resources that are essential for community function, safety, and resiliency. During the DeSoto County CVA, critical assets were identified and evaluated for physical exposure to rainfall-driven flooding as well as for their social, environmental, and hazard sensitivity.

Based on the results of the CVA, the evaluated list of critical assets was refined to only include County-owned assets that experienced flooding in the 500-Year, 24-Hour 2040 Rainfall event, and did not currently have planned projects to improve flood resiliency. This refined asset list was used in the Identification and Ranking of AAAs project to define AAA boundaries that group critical assets most vulnerable to flooding. AAAs were geographically defined using ArcGIS based on flood extents, critical asset distribution, and municipal and parcel boundaries.

Once the AAA boundaries were identified, they were ranked using a multi-criterion weighted matrix. The criteria used in the matrix to rank the AAAs included:

- ▶ Exposure Analysis (100-Year, 24-Hour 2040 Rainfall)
- ▶ Exposure Analysis (500-Year, 24-Hour 2040 Rainfall)
- ▶ Sensitivity Analysis
- ▶ Asset Ownership
- ▶ Asset Relevancy
- ▶ Asset Group
- ▶ Length of Inundated Roadway
- ▶ Length of Inundated Bridges/Culverts
- ▶ Quantity of Public Comments

An explanation of the criteria, the scoring process, and the weighting factors applied to each criteria can be found in the DeSoto County Identification and Ranking of AAA Technical Memorandum is under separate cover in **APPENDIX 1**. A location map of the DeSoto County AAAs and their rank are shown in **Figure 2**. It should be noted that there were five AAAs identified but Adaptation Plans were only developed for the top three.



Figure 1: Arcadia AAA Boundary with Vulnerable Critical Assets

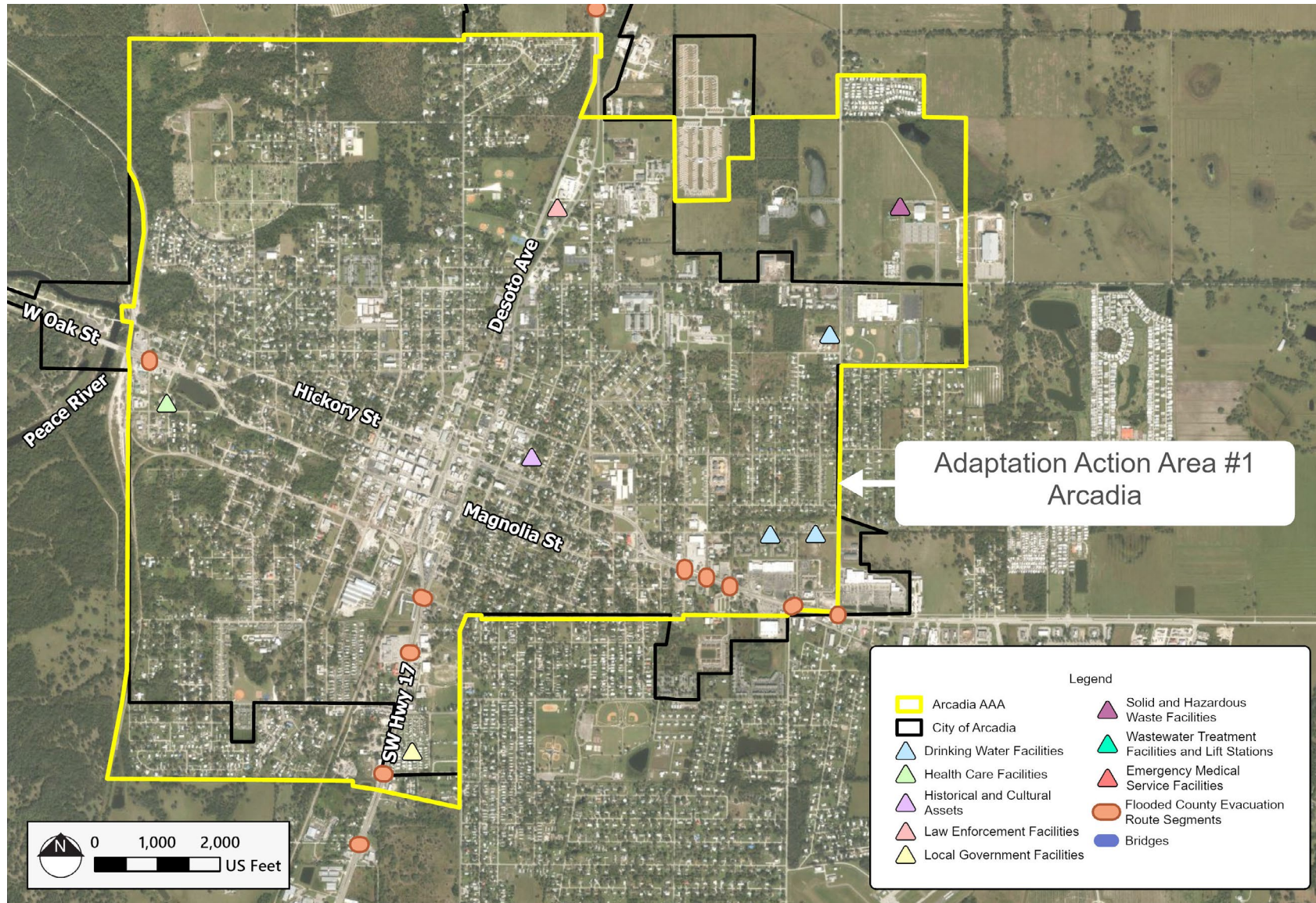
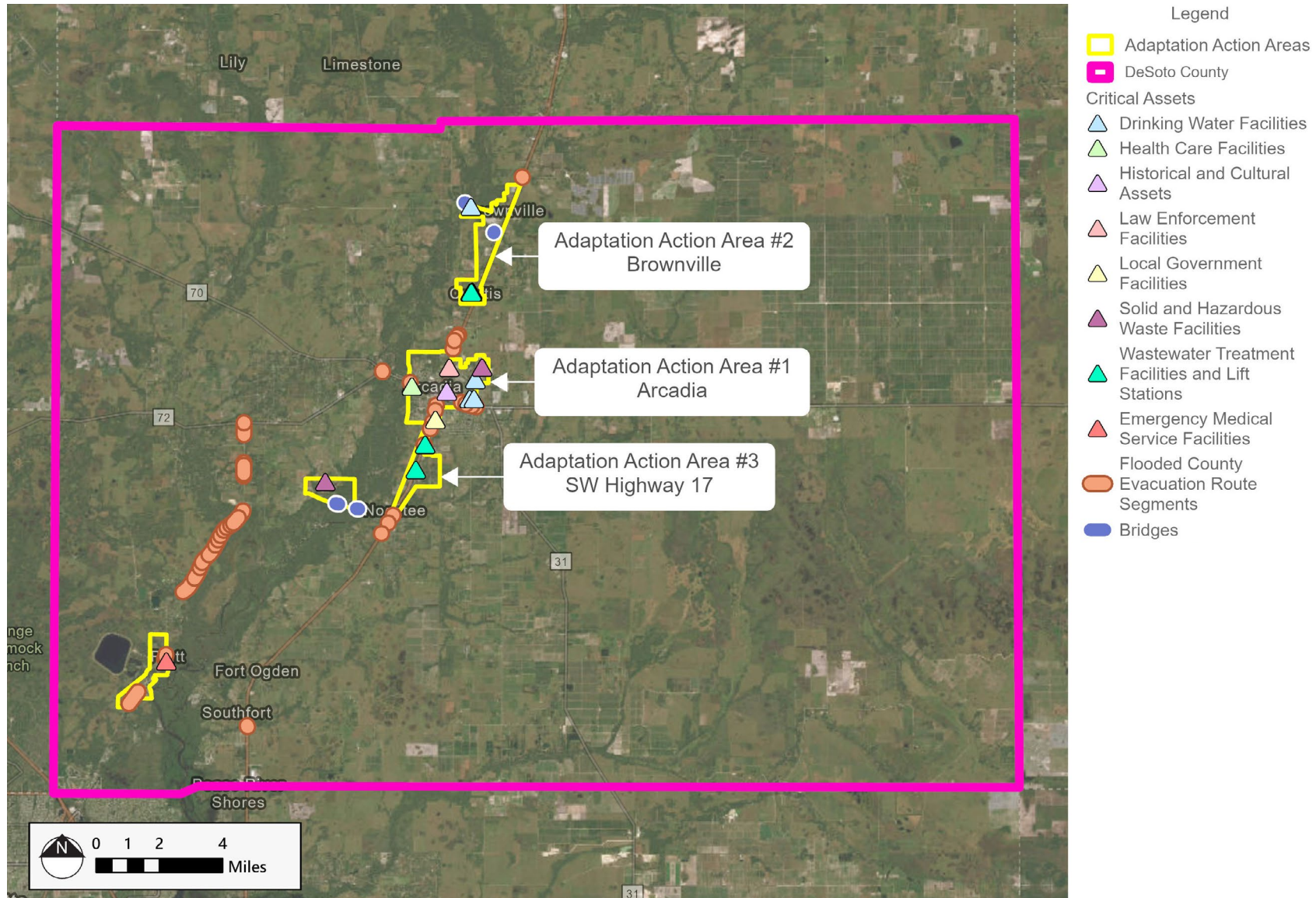




Figure 2: Location Map of DeSoto County AAAs





## Resiliency in DeSoto County

DeSoto County is a rural, non-coastal, agricultural hub situated in south-central Florida that encompasses approximately 497 square miles and has a population greater than 36,000. In recent years, Florida has seen more frequent and increasingly intense weather events, including heavy rainfall. Inland regions like the County are becoming more vulnerable to the effects of severe and prolonged rainfall. Such events lead to soil saturation, reduced infiltration, increased runoff, and general flooding. Severe flood events pose risks to property and public safety, while also causing disruptions to municipal infrastructure and affecting economic stability. DeSoto County is vulnerable to a range of flooding hazards, including rainfall-induced flooding, riverine flooding, storm surge, and the long-term effects of sea level rise. While the county is predominantly inland, storm surge and sea level rise can influence water levels within the lower reaches of the Peace River watershed and its tributaries.

Recognizing these vulnerabilities, the County has taken proactive steps to identify threats, propose strategic actions, and outline a roadmap for building a more resilient future. The County is actively collaborating to implement adaptation strategies that not only strengthen level of service and mitigate flood risks but also enhance the overall wellbeing and sustained growth of the community.

This Adaptation Plan outlines specific adaptive strategies, measures, and policies that are tailored to the unique needs and challenges of the Arcadia AAA and build upon existing initiatives such as the DeSoto County Comprehensive Plan, DeSoto County CVA, and [DeSoto County Local Mitigation Strategy \(LMS\)](#).

## Arcadia

The Arcadia AAA is centered on the intersection between DeSoto Ave and Hickory St that divides the City of Arcadia. Arcadia is the county seat of DeSoto County and has an approximate population of 8,250. The city is known for its agricultural roots in citrus and cattle ranching.

The Arcadia AAA includes 17 critical assets: three drinking water facilities, a health care facility, a historical and cultural asset, a law enforcement facility, a local government facility, a solid and hazardous waste facility, and nine evacuation route segments shown to flood in the 500-Year, 24-Hour 2040 Rainfall event modeled during the County CVA.

A total of 45 flood risk comments were received from public outreach meetings for locations within the AAA. A map of the Arcadia AAA and the 500-Year, 24-Hour 2040 Rainfall flood depths are shown in **Figure 4**.

*Figure 3: Flooding in DeSoto County during Hurricane Ian*

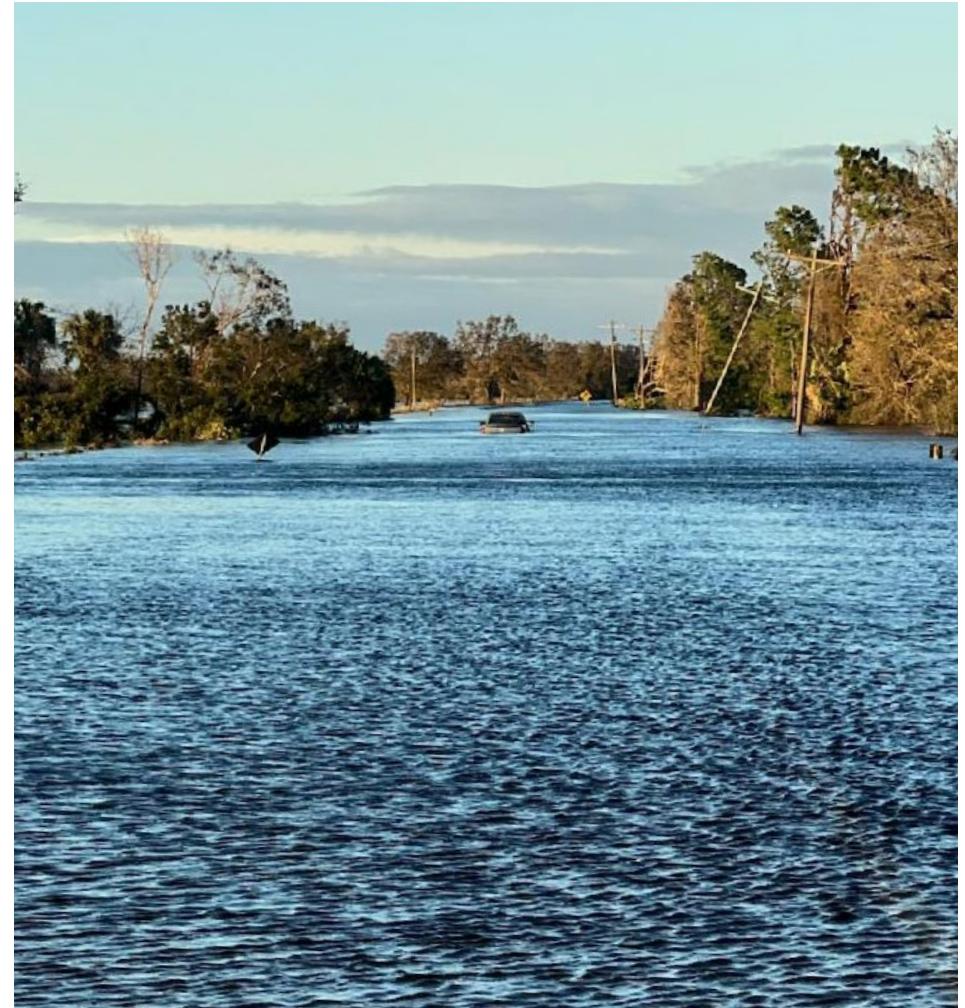
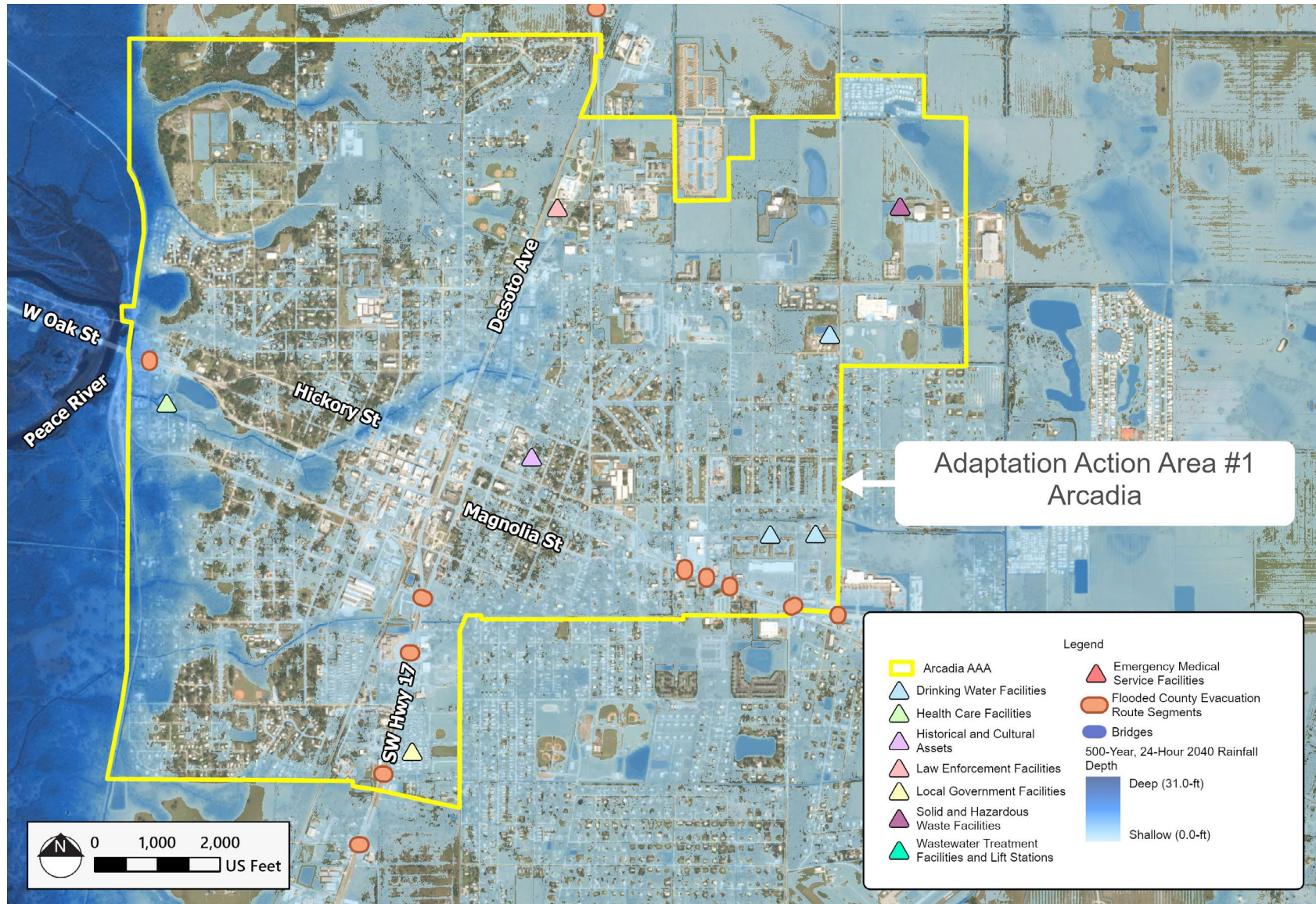






Figure 4: Arcadia AAA 500-Year, 24-Hour 2040 Rainfall Flood Depths





## Assessment of Current Adaptive Capacity

Adaptive capacities are broadly defined by the Florida Adaptation Plan Guidebook to refer to how well a system can adjust and respond to changing conditions and challenges. Adaptive capacity for the County has been assessed in terms of:

- ▶ Regulatory and planning capacity,
- ▶ Administrative and technical capacity,
- ▶ Fiscal capacity, and
- ▶ Infrastructure status.

These four criteria capture the ability of the County and the City of Arcadia to implement, fund, and maintain adaptive strategies and interventions as described in further detail below.

## Regulatory and Planning Capabilities

Current regulatory and planning capabilities within the Arcadia AAA are governed primarily by the City of Arcadia, with additional jurisdictional oversight by DeSoto County in unincorporated portions of the AAA, together with applicable state and federal requirements. Primary regulatory and planning documents applicable to the AAA include:

- ▶ [City of Arcadia Comprehensive Plan](#) (2012, as amended)
- ▶ [City of Arcadia Unified Land Development Code](#) (2014, as amended)
- ▶ [DeSoto County Comprehensive Plan](#) (2007, as amended)
- ▶ [DeSoto County Land Development Regulations](#) (2017, as amended)
- ▶ [DeSoto County Local Mitigation Plan](#)
- ▶ [City of Arcadia](#) and [DeSoto County](#) Capital Improvement Program and annual budgeting processes
- ▶ [Florida Building Code](#)
- ▶ [Federal Emergency Management Agency floodplain management requirement](#)

## Comprehensive Plans

Long-range planning within the AAA is guided primarily by the City of Arcadia Comprehensive Plan, with supporting policies from the DeSoto County Comprehensive Plan applicable to unincorporated areas. Both plans are adopted in accordance with Section 163.3177, Florida Statutes.

Across both jurisdictions, the Comprehensive Plans support:

- ▶ Coordination between land use and infrastructure planning
- ▶ Intergovernmental coordination
- ▶ Consideration of environmental constraints in development decisions
- ▶ Planning for public facilities and infrastructure to maintain adopted level of service standards

Both jurisdictions include Future Land Use and Conservation Elements that address land use patterns, environmental protection, stormwater management, and natural resource conservation.

Arcadia's Comprehensive Plan requires development to be served by adequate public facilities concurrent with impacts and includes policies for on-site stormwater management and identification of wetlands and environmentally constrained lands. DeSoto County's Comprehensive Plan includes a Conservation Overlay Designation that identifies environmentally sensitive areas, including floodplains, wetlands, hydric soils, and habitat areas, for careful consideration during development review.

## Land Development Regulations

Land development within the AAA is regulated primarily by the City of Arcadia Unified Land Development Code, with DeSoto County regulations applicable in unincorporated areas.

Across both jurisdictions, land development regulations include:

- ▶ The elevation of structures within Special Flood Hazard Areas (SFHA) to be at least the Base Flood Elevation (BFE) as defined by the Federal Emergency Management Agency (FEMA)
- ▶ Limitations on development within designated floodways
- ▶ Flood-resistant construction standards consistent with FEMA and the Florida Building Code (FBC)

Arcadia's Unified Land Development Code includes a dedicated floodplain management ordinance within Article 9 (Natural Resources), which regulates development within FEMA-designated flood hazard areas using Flood Insurance Rate Maps and Flood Insurance Studies. The ordinance applies to a range of activities, including subdivision, grading, filling, excavation, utilities, and structures.

Arcadia's Unified Land Development Code (Article 6 – Development Design and Improvement Standards) requires consideration of natural features and drainage conditions in site design and includes design principles that encourage avoidance of unnecessary impervious surface. DeSoto County's regulatory framework similarly addresses environmental constraints through its Conservation Overlay and floodplain management regulations, which guide development in environmentally sensitive and flood-prone areas. These standards are implemented through established development review processes, including staff review and coordination with advisory boards.

DeSoto County has adopted floodplain management regulations, administered through the County's Planning and Zoning functions, which rely on FEMA flood hazard mapping and support compliance with the National Flood Insurance Program (NFIP).

### Capital Improvement Program

The City of Arcadia and DeSoto County maintain capital improvement planning and annual budgeting processes that support infrastructure investment and service delivery. Capital planning in both jurisdictions is guided by their respective Capital Improvements Elements within the Comprehensive Plans, which establish the policy framework for capital improvements and link infrastructure planning to the adopted level of service standards.

Both jurisdictions advance capital projects through their annual budgeting processes, which allocate funding for infrastructure, public facilities, and service delivery.

These processes support the implementation of infrastructure improvements and public facility investments, including system upgrades, maintenance, and capacity improvements, and provide a mechanism for incorporating external funding sources such as state and federal grants.

### Local Mitigation Strategy

The DeSoto County Local Mitigation Strategy (Effective February 25, 2025) is a multi-jurisdictional hazard mitigation plan developed and maintained at the local level in coordination with the Florida Division of Emergency Management (FDEM), consistent with FEMA requirements. The LMS includes participation from DeSoto County, the City of Arcadia, and other local stakeholders.

The LMS Working Group meets on a recurring basis to:

- ▶ Assess hazards and vulnerabilities affecting the county and municipalities
- ▶ Identify and prioritize mitigation projects
- ▶ Coordinate implementation across participating jurisdictions

The LMS documents hazard exposure, vulnerability assessments, and a prioritized list of mitigation projects, including drainage improvements, flood mitigation measures, infrastructure protection, and public facility improvements. It provides a framework for coordinating hazard mitigation activities across participating jurisdictions and supports implementation of mitigation projects identified in the plan.

Participation in the LMS is required to maintain eligibility for state and federal mitigation funding and supports implementation of capital-focused adaptation strategies, including flood protection measures, drainage improvements, and facility retrofits.

## **Administrative and Technical Capabilities**

Administrative and technical capabilities of the County are demonstrated by their respective local government departments, divisions, and committees and are defined as the staff available to maintain County operations and perform work. At the time of this assessment, the County employs approximately 211 people across 23 total departments, 14 of which serve in infrastructure planning, capital investments, regulatory implementation, and long-term resilience decision-making roles.

In addition to public partnerships, like the CFRPC, the County maintains continuing service agreements with engineering and consulting firms for larger efforts including numerical modelling, design, permitting, and support services; grant writing and administration services; and GIS support for data and asset management.



## Fiscal Capacity

Current fiscal capacity was reviewed to identify the current measures that can be taken to pay for adaptation strategies and resiliency efforts. The largest sources of revenue for the County are from taxes and miscellaneous non-operating revenue, which make up 49.3% and 32.7% respectively of the total revenue based on the Board of County Commissioners (BOCC) 2025-2026 Budget. Additionally, most funds are allocated to the sheriff's account and saved into a contingency fund which make up 32.3% and 14.7% of the total annual expenditure respectively.

A potential funding matrix has been included in this adaptation plan to provide the County with recommendations for optimal funding opportunities tailored to each strategy. The funding matrix can be found in the Potential Funding Opportunities section of this report.

## Infrastructure

Current infrastructure capacity of the Arcadia AAA was reviewed to identify potential assets that could benefit from adaptation strategies or interventions. The County identified 17 critical assets within the Arcadia AAA for inclusion in this study, three City of Arcadia Drinking Water Facilities, the DeSoto County Health Department, the Arcadia Police Department, the DeSoto County Probation Department, the City of Arcadia Mobile Home Park, the Turner Agri-Civic Center Debris Staging Area, and nine evacuation route segments.

### Drinking Water Facilities

Three drinking water facility critical assets were identified in the Arcadia AAA, two water pressure-reducing valve (PRV) stations (**Figure 5**), and the Arcadia Water Department facility (**Figure 6**). The two PRV stations are located on NE Oak St approximately 2-mi from the Peace River. The asset at 1423 NE Oak St was identified as having 0.12-ft of flood depth during the 500-Year, 24-Hour 2040 Rainfall event and the asset at 1701 was identified as having 0.05-ft of flood depth during the 500-Year, 24-Hour 2040 Rainfall event. The PRV stations are composed of a concrete pad supporting the above ground potable water pipe access, an adjacent electrical cabinet, and a chain link fence protecting the station. PRV stations are used to step down high transmission pressures from large water mains before water enters a neighborhood distribution system.

Figure 5: PRV at 1423 NE Oak St (Top) and PVR at 1701 NE Oak St (Bottom)



The Arcadia Water Department facility is represented with a single asset but is composed of many different structures, tanks, and control panels. The facility is located off of NE Turner Ave and is approximately 2-mi from the Peace River. The asset was identified as having 0.35-ft of flood depth during the 500-Year, 24-Hour 2040 Rainfall event.





Figure 6: Arcadia Water Department Facility



### Law Enforcement, Health Care, and Government Facilities

The DeSoto County Health Department (**Figure 7**) is located on S Baldwin Ave, 1,000-ft from the Peace River, and is surrounded by two ditches that outfall directly to the river. The area is influenced by riverine flooding and limited drainage capacity, increasing the risk of site inundation during major rainfall events. The health care facility was identified as having 4.38-ft of flood depth during the 500-Year, 24-Hour 2040 Rainfall event.

Figure 7: DeSoto County Health Department



The Arcadia Police Department (**Figure 8**) is located on N Brevard Ave approximately 1.5-mi from the Peace River and was identified as having 0.3-ft of flood depth during the 500-Year, 24-Hour 2040 Rainfall event. The DeSoto County Probation Department asset represents several additional nearby Local Government Facilities including the DeSoto County Library and DeSoto County Fire Rescue Administration shown in **Figure 9**. These buildings were identified as having 0.11-ft of flood depth during the 500-Year, 24-Hour 2040 Rainfall event.

Figure 8: Arcadia Police Department



Figure 9: DeSoto County Probation Department





The City of Arcadia Mobile Home Park (**Figure 10**) includes over 100 residences located off of US Highway 17 approximately 1.25-mi from the Peace River, however, almost half of them are vacant due to hurricane damages. The park is in a low-lying area and was identified as having 0.91-ft of flood depth in the 500-Year, 24-Hour 2040 Rainfall event.

Figure 10: City of Arcadia Mobile Home Park



### Solid and Hazardous Waste Facilities

The Turner Agri-Civic Center (**Figure 11**) is located in the northeast corner of the Arcadia AAA off of NE Roan St approximately 2.5-mi from the Peace River. The asset is a large arena facility used to host public community events and is composed of several individual buildings that have been designated as a disaster debris management site, or a temporary location designed to quickly collect, sort, and process debris generated from a disaster.

Figure 11: The Turner Agri-Civic Center



It is important the asset is prepared and resilient for major storm events so that it is capable of fulfilling its purpose in the aftermath. The site was identified as having 0.41-ft of flood depth during the 500-Year, 24-Hour 2040 Rainfall event.



## Roadways and Evacuation Routes

The two primary roadways in the Arcadia AAA are Oak St and US Highway 17 which cross through the center of the AAA. Three of the identified evacuation route segments are on US Highway 17, and six are on Oak St. The 100- and 500-Year, 24-Hour 2040 Rainfall flood depths for the nine evacuation route segment assets are shown in **Table 1**. These segments were included because they intersect with County roads, and therefore impact the accessibility of those County roads due to flooding at these intersections.

Table 1: Evacuation Route Segment Flood Depths

| Evacuation Route Intersection<br>Street Names | 100-Year, 24-Hour<br>2040 Rainfall<br>Flood Depth (ft) | 500-Year, 24-Hour<br>2040 Rainfall<br>Flood Depth (ft) |
|-----------------------------------------------|--------------------------------------------------------|--------------------------------------------------------|
| 11th St & Oak St                              | 0.95                                                   | 1.21                                                   |
| 15th Ave & Oak St                             | 0.90                                                   | 1.22                                                   |
| S Parker Ave & Oak St                         | 0.87                                                   | 6.12                                                   |
| Heard St & US Highway 17                      | 0.67                                                   | 1.05                                                   |
| E Palmetto St & SW Highway 17                 | 0.25                                                   | 0.55                                                   |
| 10th Ave & Oak St                             | 0.17                                                   | 0.38                                                   |
| 17th Ave & Oak St                             | 0.28                                                   | 0.63                                                   |
| 12th St & Oak St                              | 0.17                                                   | 0.45                                                   |
| SW Hibiscus Dr & US Highway 17                | 0                                                      | 0.21                                                   |

**Figure 12** displays the 11th St, 15th Ave, and S Parker Ave evacuation routes. **Figure 13** displays the Heard St, E Palmetto St and 10th Ave evacuation routes. **Figure 14** displays the 17th St, 12th St, and SW Hibiscus Dr evacuation routes.

Figure 12: 11th St & Oak St (Top), 15th Ave & Oak St (Middle), S Parker Ave & Oak St (Bottom)







Figure 13: Heard St & US Highway 17 (Top), E Palmetto St & US Highway 17 (Middle) and 10th Ave & Oak St (Bottom)



Figure 14: 17th Ave & Oak St (Top), 12 St & Oak St (Middle), and SW Hibiscus Dr & US Highway 17 (Bottom)





## Identification of Adaptive Strategies

Adaptive strategies are proposed or planned solutions that aim to increase resiliency and strengthen the AAA against future high-intensity flooding events. Strategies were proposed based on the current adaptive capacity of the AAA and known threats and stressors. Per the Florida Adaptation Planning Guidebook, proposed adaptive strategies were classified as either protection, accommodation, retreat, or avoidance solutions (**Figure 15**).

Figure 15: Types of Adaptation Strategies

### TYPES OF ADAPTATION STRATEGIES



Once major needs and priorities are defined, specific adaptation strategies can be developed, vetted, and defined.



#### 01 Protection

Protection strategies are structurally defensive measures that directly protect vulnerable structures, allowing them to be left largely unaltered.



#### 02 Accommodation

Accommodation strategies alter physical design of vulnerable structures to allow the structure or land use to stay in place with modification.



#### 03 Retreat

Retreat from areas or infrastructure where protection or accommodation will not be efficient or effective can be voluntary, incentivized, or done gradually.



#### 04 Avoidance

Avoidance involves guiding new development away from areas that are subject to coastal hazards and can be done by implementing policy and/or offering of incentives.

## Protection

Protection strategies are structurally defensive measures that directly protect vulnerable structures, allowing them to be left largely unaltered. By prioritizing the protection of vulnerable areas and assets, these strategies help mitigate potential damage, preserve vital resources, and ensure the stability of communities in the face of evolving threats. Ultimately, protection strategies form the first line of defense, enabling a buffer against immediate risks while working towards long-term adaptation and sustainability goals.

**Table 2** lists the protection strategies identified for the Arcadia AAA. Short-term projects are those that could be implemented in five years or less, and long-term projects are those that require longer than five years to complete.

Table 2: Protection Strategies

| Strategy                                                                        | Term  | Description                                                                                                                                                                           |
|---------------------------------------------------------------------------------|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Install Deployable Flood Barriers at Arcadia Police Department</b>           | Short | Install portable flood barriers ahead of major storm events in front of/around the Arcadia Police Department to prevent floodwater from encroaching into the building finished floor. |
| <b>Implement New Roadside Swales and Detention Ponds</b>                        | Short | Implement engineered swales or detention areas that store runoff during peak storm events to protect major roadways.                                                                  |
| <b>Create a Stormwater Pump Station at the City of Arcadia Mobile Home Park</b> | Short | Create a stormwater pump station to actively remove floodwater during major storm events.                                                                                             |
| <b>Construct Conveyance Systems at the Turner Agri-Civic Center</b>             | Short | Construct a conveyance system in the parking lot of the Turner Agri-Civic Center to collect and divert stormwater to the on-site retention pond.                                      |





## Accommodation

Accommodation strategies modify systems and structures to better cope with the impacts of environmental changes. These strategies focus on adjusting current infrastructure via retrofitting or re-design to reduce vulnerability and enhance resilience. Accommodation strategies alter the physical design of vulnerable structures to allow the element to stay in place with modification. This may involve enhancing infiltration and drainage, increasing storage capacity, or providing maintenance to improve flow or conveyance.

**Table 3** lists the accommodation strategies identified for the Arcadia AAA. Short-term projects are those that could be implemented in five years or less, and long-term projects are those that require longer than five years to complete.

Table 3: Accommodation Strategies

| Strategy                                                                                                     | Term  | Description                                                                                                                                                         |
|--------------------------------------------------------------------------------------------------------------|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Elevate Drinking Water Facility Infrastructure along 1423 NE Oak St</b>                                   | Short | Elevate the PRV station at 1423 NE Oak St to reduce flood service disruptions and protect utilities during major storm events.                                      |
| <b>Elevate Drinking Water Facility Infrastructure along 1701 NE Oak St</b>                                   | Short | Elevate the PRV station at 1701 NE Oak St to reduce flood service disruptions and protect utilities during major storm events.                                      |
| <b>Implement Low Impact Development (LID) Improvements at the DeSoto County Road &amp; Bridge Department</b> | Short | Utilize available space around the probation department, fire rescue administration, and library to implement rain gardens, bioswales, and vegetated filter strips. |
| <b>Expand Channels Adjacent to the County Health Department</b>                                              | Short | Dredge and expand the two ditches adjacent to the County Health Department to increase stormwater storage.                                                          |
| <b>Elevate Roadways Vulnerable to Flooding</b>                                                               | Long  | Elevate roadways vulnerable to flooding to reduce flood service disruptions during major storm events.                                                              |

## Retreat

Retreat strategies focus on relocating people, infrastructure and activities away from areas increasingly at risk due to environmental changes. Retreat strategies are often implemented where protection or accommodation will not be efficient or effective. These strategies involve phased retreat from vulnerable regions. By strategically withdrawing from high-risk areas, future damage can be mitigated, exposure hazards can be reduced, and lives and investments can be protected. These strategies can be voluntary, incentivized, or a phased combination of the two.

**Table 4** lists retreat strategies identified for the Arcadia AAA. Short-term projects are those that could be implemented in five years or less, and long-term projects are those that require longer than five years to complete.

Table 4: Retreat Strategies

| Strategy                                                                     | Term  | Description                                                                                                                                           |
|------------------------------------------------------------------------------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Relocation of City of Arcadia Mobile Home Park</b>                        | Long  | Relocate the City of Arcadia Mobile Home Park above the 500-Year, 24-Hour 2040 Rainfall flood depths.                                                 |
| <b>Convert City of Arcadia Mobile Home Park to a Passive Recreation Area</b> | Long  | Relocate the City of Arcadia Mobile Home Park and construct a passive recreation area to mitigate flood impacts encourage environmental conservation. |
| <b>Managed Retreat of Arcadia Water Department Facilities</b>                | Short | Strategic relocation of vulnerable assets and equipment to higher elevations or locations on the property that are more resilient to flooding.        |
| <b>Managed Retreat of City of Arcadia Mobile Home Park</b>                   | Long  | Demolish vacant or damaged homes and relocate the remaining houses to the most flood resilient locations within the mobile home park.                 |

## Avoidance and Planning

Avoidance strategies focus on limiting development or expansion of infrastructure in areas prone to environmental risks. These strategies are often implemented as policies and often incorporate an incentivization element to encourage participation and compliance. Common avoidance measures include revisions to land-use planning regulations and zoning laws, and enforcement of more restrictive building codes that direct new development away from vulnerable areas or hold them to a higher level of service. These proactive strategies not only help in minimizing future damage but also promote safer, more resilient community growth. By integrating avoidance strategies, adaptation plans can effectively manage risk and ensure that development aligns with long-term sustainability objectives.

**Table 5** lists the Avoidance and Planning Strategies identified for the Arcadia AAA. Short-term projects are those that could be implemented in five years or less, and long-term projects are those that require longer than five years to complete. It should be noted that certain updates to comprehensive plans, land development codes, and other land review processes may be subject to restrictions under F.S. 252.422 and 553.902 as amended by SB 180 (2025).

Figure 16: Flooding in DeSoto County during Hurricane Ian



Table 5: Avoidance and Planning Strategies

| Strategy                                                               | Term  | Description                                                                                                                                                                                                                                                                                 |
|------------------------------------------------------------------------|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Low Impact Development (LID) Ordinance</b>                          | Short | Develop an ordinance supportive of LID and green infrastructure practices that will result in increased water storage, decreased runoff, and water quality improvements.                                                                                                                    |
| <b>Develop a Stormwater Engineering Standards Manual</b>               | Short | Develop a stormwater engineering standards manual to provide consistent infrastructure planning with clear guidelines to minimize the risk of poorly designed stormwater systems that could lead to excessive flooding.                                                                     |
| <b>Future Installation of Resilient and Sustainable Infrastructure</b> | Short | Increase level of service (LOS) and efficiency requirements on newly installed systems. Shift away from “Replace-in-Kind” and opt for systems with improved efficiency and/or resiliency. Raise elevations for existing backup systems (i.e. generators, etc.) and newly installed systems. |
| <b>Finished Floor Elevation (FFE) Ordinance</b>                        | Short | Increase the minimum FFE to 1-ft above the BFE such that any building foundation must be constructed to a minimum standard elevation.                                                                                                                                                       |
| <b>Evacuation Route Drainage Infrastructure Inspections</b>            | Long  | Phased inspections and improvements to drainage infrastructure adjacent to major roadways to identify areas of severe flooding and provide mitigation to the roadway.                                                                                                                       |
| <b>County Land Acquisition Program</b>                                 | Long  | Develop a program for the County to gradually acquire flood prone properties to limit development in locations vulnerable to flooding.                                                                                                                                                      |



## Adaptive Capacity Scoring Criteria

Adaptive capacity scoring criteria were developed with guidance from the Florida Adaptation Planning Guidebook. Adaptive strategies with high scores are those that offer the maximum positive flooding resilience impact for the least cost. Definitions for the scoring criteria used are shown in **Table 6**, **Table 7**, **Table 8**, **Table 9**, and **Table 10**.

Figure 17: Severe flooding and road damage on SR 72 during Hurricane Ian



Table 6: Scoring Criteria – Resilience

| Resilience Criteria |                                                                       |
|---------------------|-----------------------------------------------------------------------|
| 3                   | Strategy is anticipated to greatly increase resilience to flooding    |
| 2                   | Strategy is anticipated to moderately increase resilience to flooding |
| 1                   | Strategy is anticipated to minimally increase resilience to flooding  |

Table 7: Scoring Criteria – Implementation Costs

| Implementation Costs Criteria |                                                     |
|-------------------------------|-----------------------------------------------------|
| 3                             | Implementation costs are anticipated to be minimal  |
| 2                             | Implementation costs are anticipated to be moderate |
| 1                             | Implementation costs are anticipated to be high     |

Table 8: Scoring Criteria – Life Cycle Costs

| Life Cycle Costs Criteria |                                                                           |
|---------------------------|---------------------------------------------------------------------------|
| 3                         | Life cycle costs are balanced; provides significant resilience dividends  |
| 2                         | Life cycle costs are increased; provides significant resilience dividends |
| 1                         | Life cycle costs are increased; provides minimal resilience dividends     |

Table 9: Scoring Criteria – Project Scale

| Project Scale Criteria |                                                                  |
|------------------------|------------------------------------------------------------------|
| 3                      | Strategy is anticipated to have a regional impact                |
| 2                      | Strategy is anticipated to have a local impact                   |
| 1                      | Strategy is anticipated to only impact the target critical asset |

Table 10: Scoring Criteria – Technically Feasible

| Technically Feasible Criteria |                                                             |
|-------------------------------|-------------------------------------------------------------|
| 3                             | Strategy is anticipated to have minimal design constraints  |
| 2                             | Strategy is anticipated to have moderate design constraints |
| 1                             | Strategy is anticipated to have high design constraints     |

## Ranking of Proposed Adaptive Strategies

A ranking matrix for proposed adaptive strategies is shown in **Table 11**.

Table 11: Ranking of Proposed Adaptive Strategies

| Strategy Type          | Strategy Name                                                            | Strategy Description                                                                                                                                                                                                    | Resilience | Implementation Costs | Life Cycle Costs | Project Scale | Technically Feasible | Overall Score | Final Ranking |
|------------------------|--------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------------------|------------------|---------------|----------------------|---------------|---------------|
| Avoidance and Planning | Evacuation Route Drainage Infrastructure Inspections                     | Phased inspections and improvements to drainage infrastructure adjacent to major roadways to identify areas of severe flooding and provide mitigation to the roadway.                                                   | 2          | 3                    | 3                | 3             | 3                    | 14            | 1             |
| Avoidance and Planning | Develop a Stormwater Engineering Standards Manual*                       | Develop a stormwater engineering standards manual to provide consistent infrastructure planning with clear guidelines to minimize the risk of poorly designed stormwater systems that could lead to excessive flooding. | 3          | 3                    | 3                | 3             | 2                    | 14            | 1             |
| Avoidance and Planning | FFE Ordinance*                                                           | Increase the minimum FFE to 1-ft above the BFE such that any building foundation must be constructed to a minimum standard elevation.                                                                                   | 2          | 3                    | 3                | 3             | 3                    | 14            | 1             |
| Avoidance and Planning | County Land Acquisition Program                                          | Develop a program for the County to gradually acquire flood prone properties to limit development in locations vulnerable to flooding.                                                                                  | 3          | 3                    | 2                | 3             | 3                    | 14            | 1             |
| Protection             | Install Deployable Flood Barriers at Arcadia Police Department           | Install portable flood barriers ahead of major storm events in front of/around the Arcadia Police Department to prevent floodwater from encroaching into building finished floor.                                       | 2          | 3                    | 3                | 1             | 3                    | 12            | 2             |
| Protection             | Construct Conveyance Systems at the Turner Agri-Civic Center             | Construct a conveyance system in the parking lot of the Turner Agri-Civic Center to collect and divert stormwater to the on-site retention pond.                                                                        | 2          | 2                    | 3                | 2             | 3                    | 12            | 2             |
| Accommodation          | Elevate Roadways Vulnerable to Flooding                                  | Elevate major roadways vulnerable to flooding to reduce flood service disruptions during major storm events.                                                                                                            | 3          | 1                    | 3                | 3             | 2                    | 12            | 2             |
| Retreat                | Convert City of Arcadia Mobile Home Park to a Passive Recreation Area    | Relocate the City of Arcadia Mobile Home Park and construct a passive recreation area to mitigate flood impacts encourage environmental conservation.                                                                   | 3          | 1                    | 3                | 3             | 2                    | 12            | 2             |
| Avoidance and Planning | LID Ordinance*                                                           | Develop an ordinance supportive of LID and green infrastructure practices that will assist in water storage and control of runoff.                                                                                      | 2          | 3                    | 3                | 2             | 2                    | 12            | 2             |
| Accommodation          | Expand Channels Adjacent to the County Health Department                 | Dredge and expand the two ditches adjacent to the County Health Department to increase stormwater storage.                                                                                                              | 3          | 2                    | 2                | 2             | 2                    | 11            | 3             |
| Accommodation          | Implement LID Improvements at the DeSoto County Probation Department     | Utilize available space around the probation department, fire rescue administration, and library to implement rain gardens, bioswales, and vegetated filter strips.                                                     | 2          | 2                    | 2                | 2             | 3                    | 11            | 3             |
| Avoidance and Planning | Future Installation of Resilient and Sustainable Infrastructure          | Increase LOS and efficiency requirements on newly installed systems. Shift away from “Replace-in-Kind” and opt for systems with improved efficiency and/or resiliency.                                                  | 2          | 1                    | 3                | 3             | 2                    | 11            | 3             |
| Protection             | Implement New Roadside Swales and Detention Ponds                        | Implement engineered swales or detention areas that store runoff during peak storm events to protect major roadways.                                                                                                    | 2          | 1                    | 2                | 3             | 2                    | 10            | 4             |
| Protection             | Create a Stormwater Pump Station at the City of Arcadia Mobile Home Park | Create a stormwater pump station to actively remove floodwater during major storm events.                                                                                                                               | 3          | 1                    | 2                | 2             | 2                    | 10            | 4             |
| Accommodation          | Elevate Drinking Water Facility Infrastructure                           | Elevate infrastructure vulnerable to flooding to reduce flood service disruptions and protect utilities during major storm events.                                                                                      | 3          | 1                    | 2                | 1             | 3                    | 10            | 4             |
| Retreat                | Relocation of City of Arcadia Mobile Home Park                           | Relocate the City of Arcadia Mobile Home Park above the 500-Year, 24-Hour 2040 Rainfall flood depths.                                                                                                                   | 3          | 1                    | 3                | 1             | 2                    | 10            | 4             |
| Retreat                | Managed Retreat of Arcadia Water Department Facilities                   | Strategic relocation of vulnerable assets and equipment to higher elevations or locations on the property that are more resilient to flooding.                                                                          | 3          | 2                    | 3                | 1             | 1                    | 10            | 4             |
| Retreat                | Managed Retreat of City of Arcadia Mobile Home Park                      | Demolish vacant or damaged homes and relocate the remaining houses to the most flood resilient locations within the mobile home park.                                                                                   | 2          | 2                    | 3                | 1             | 2                    | 10            | 4             |

\* It should be noted that certain updates to comprehensive plans, land development codes, and other land review projects may be subject to restrictions under F.S. 252.422 and 553.902 as amended by SB 180 (2025).



## Conceptual Planning

This section refines the proposed adaptive strategies with associated construction projects to bridge the gap between identified vulnerable critical assets and the implementation of flood reduction strategies. Proposed strategy descriptions have been supplemented with preliminary costs, planning considerations, and conceptual representations. The adaptive strategies have been organized by the type of critical asset infrastructure they target.

These concepts are not intended to represent engineering designs, however, they provide a planning-level framework to support decision-making, prioritization, and future funding pursuits by translating high-level strategies into specific concepts that could be considered for design and implementation. Preliminary planning-level cost estimates for each strategy were derived from comparable completed projects and are presented as a conservative range encompassing construction costs. It should be noted that costs related to project design, required hydraulic modeling, and future assumptions of inflation, are not included in the cost estimates. Summaries of the proposed adaptive strategy projects elaborated in this section are shown in **Table 12** and **Table 13**. Short-term projects are those that could be implemented in five years or less, and long-term projects are those that require longer than five years to complete.

Figure 18: Flooding in DeSoto County during Hurricane Ian



Table 12: Summary of Proposed Adaptive Strategy Projects

| Strategy Name                                                            | Term  | Planning Construction Cost |
|--------------------------------------------------------------------------|-------|----------------------------|
| Managed Retreat of Arcadia Water Department Facilities                   | Short | \$2,000,000-\$10,000,000   |
| Elevate Drinking Water Facility Infrastructure along 1423 NE Oak St      | Short | \$150,000-\$400,000        |
| Elevate Drinking Water Facility Infrastructure along 1701 NE Oak St      | Short | \$150,000-\$400,000        |
| Install Deployable Flood Barriers at Arcadia Police Department           | Short | \$35,000-\$60,000          |
| Expand Channels Adjacent to the County Health Department                 | Short | \$200,000-\$500,000        |
| Implement LID Improvements at the DeSoto County Probation Department     | Short | \$50,000-\$150,000         |
| Managed Retreat of City of Arcadia Mobile Home Park                      | Long  | \$800,000-\$1,500,000      |
| Create a Stormwater Pump Station at the City of Arcadia Mobile Home Park | Short | \$500,000-\$1,200,000      |
| Relocation of City of Arcadia Mobile Home Park                           | Long  | \$8,000,000-\$12,000,000   |
| Convert City of Arcadia Mobile Home Park to a Passive Recreation Area    | Long  | \$8,750,000-\$12,750,000   |
| Construct Conveyance Systems at the Turner Agri-Civic Center             | Short | \$150,000 to \$300,000     |

Table 13: Summary of Proposed Adaptive Roadway Strategy Projects

| Strategy Name                                            | Term  | Planning Construction Cost |
|----------------------------------------------------------|-------|----------------------------|
| <b>Elevate Roadways Vulnerable to Flooding</b>           |       |                            |
| 10th Ave, 11th St, 12th St and Oak St*                   | Long  | \$1,100,000-\$2,750,000    |
| 15th Ave and Oak St                                      | Long  | \$750,000-\$1,800,000      |
| Heard St and US Highway 17                               | Long  | \$530,000-\$1,300,000      |
| SW Hibiscus Dr and US Highway 17                         | Long  | \$650,000-\$1,650,000      |
| <b>Implement New Roadside Swales and Detention Ponds</b> |       |                            |
| S Parker Ave and Oak St                                  | Short | \$200,000-\$500,000        |
| E Palmetto St and US Highway 17                          | Short | \$200,000-\$500,000        |
| 17th and Oak St                                          | Short | \$200,000-\$500,000        |

\* This strategy would improve three identified critical assets

## Adaptive Strategies: Drinking Water Facilities

### Managed Retreat of Arcadia Water Department Facilities

This strategy would include the managed retreat of vulnerable City of Arcadia Water Department facilities by relocating critical drinking water infrastructure and control panels to more resilient locations on-site. The strategy includes the decommission and demolition of select vulnerable facilities, such as electrical equipment, treatment components, or support buildings, to install at higher-elevations with increased flood resiliency.

Considerations would include determination of vulnerable utilities, identification of target elevations based on projected flood depths, evaluation of structural modifications needed to elevate utilities, and suitable relocation sites on the property. A visual representation of an elevated infrastructure at the Arcadia Water Department is shown in **Figure 19**. The top figure displays existing conditions; the bottom figure illustrates the adaptive strategy.

Preliminary planning-level costs for managed retreat of water utility facilities are highly site-specific and depend on the number of assets relocated, replacement facility size, and system complexity. Based on similar municipal water infrastructure relocation projects completed by FEMA, total costs are expected to range from several million dollars to tens of millions of dollars. Although upfront costs are significant, managed retreat provides permanent flood risk reduction, protects public health, and avoids recurrent flood damages, emergency repairs, and operational interruptions. Ongoing maintenance costs are expected to be comparable to existing maintenance activities.



Figure 19: Visualization of Elevated Arcadia Water Department Utilities



## Adaptive Strategies: Drinking Water Facilities

### Elevate Drinking Water Facility Infrastructure along NE Oak St

This strategy would include the elevation of critical drinking water facilities along NE Oak St to reduce flood-related damage and service interruptions during major storm events. The two facilities include PRV utilities, associated concrete pads, and electrical cabinets. Elevation methods may include reconstruction of the concrete pad at a higher elevation, installation of raised structural platforms for mechanical components, or mounting electrical cabinets on elevated pedestals that meet applicable utility and electrical code requirements.

Considerations would include establishment of target elevation heights based on modeled flood depths and freeboard criteria, consideration of operational access for inspection and maintenance, and coordination of construction to minimize disruption to water service. The design must also ensure compatibility with existing piping connections, electrical conduits, and site constraints, while protecting elevated equipment from wind and debris impacts. A visual representation of the elevated drinking water facility located at 1423 Oak St, and 1701 Oak St are shown in **Figure 20** and **Figure 21** respectively. The top figures display existing conditions; the bottom figures illustrate the adaptive strategy.

Preliminary planning-level costs are driven by the number of components elevated, required elevation height, and complexity of utility reconnections. Based on similar utility elevation projects estimated by the Florida Office of Economic and Demographic Research (FEDR), elevating critical equipment and utilities are estimated to cost between \$150,000 to \$400,000, per PRV. Ongoing maintenance costs are expected to be minimal, as elevating equipment increases resiliency and lowers the likelihood of future repairs following storm events.





Figure 20: Visualization of the Elevated Drinking Water Facility at 1423 Oak St



Figure 21: Visualization of the Elevated Drinking Water Facility at 1701 Oak St





## Adaptive Strategies: Law Enforcement, Health Care, and Government Facilities

### Install Deployable Flood Barriers at Arcadia Police Department

This strategy would include the installation of deployable flood barrier systems at the Arcadia Police Department to reduce flood encroachment into the building during major storm events. Flooding at this facility has the potential to disrupt police operations, damage critical equipment, and compromise the continuity of emergency services. Deployable flood barriers would be temporarily installed ahead of major storm events along identified entry points or portions of the building perimeter vulnerable to flooding. These measures are intended to protect the finished floor elevation and interior spaces without relying on permanently installed flood walls. Barrier systems may include modular panelized flood barriers, water-filled barriers, or similar reusable temporary flood protection systems that can be rapidly deployed and removed as needed.

Considerations would include identification of appropriate barrier extents based on observed flood pathways, assessment of compatibility with the structure, and maintenance of safe access for emergency personnel during deployment and removal. When not in use, barrier components can be stored on site or at a nearby County facility to allow for rapid deployment prior to storm events. A visual representation of the deployed flood barriers located at the Arcadia Police Department is shown in **Figure 22**. The top figure displays existing conditions; the bottom figure illustrates the adaptive strategy.

Preliminary planning level costs for deployable flood barriers are primarily driven by the total linear footage (LF) of barrier required, barrier height, and system style (panelized systems versus water filled barriers). Based on vendor pricing for deployable flood barrier systems, costs typically range from \$35 to \$75 per LF for panelized systems. Based on a perimeter protection length between 600 and 800 LF, total capital costs are estimated to range from \$35,000 to \$60,000 inclusive of barrier materials, design, storage racks, and installation.

Ongoing maintenance costs are approximately \$1,000 to \$2,000 annually as maintenance efforts are generally limited to periodic inspections, cleaning, and replacement of worn seals or components. Deployable systems require operational costs for deployment and removal during storm events. These costs are substantially lower than permanent flood protection measures and provide a cost effective

solution for reducing flood risk at the existing facility. If the barriers are unable to be stored on site, additional costs related to storage and transportation to/from the facility would be incurred.

Figure 22: Visualization of Deployable Flood Barriers at the Arcadia Police Department





## Adaptive Strategies: Law Enforcement, Health Care, and Government Facilities

### Expand Channels Adjacent to the County Health Department

This strategy would include the dredging and stabilization of the two drainage ditches surrounding the County Health Department to increase stormwater storage capacity and reduce flood impacts from the Peace River. The area is influenced by riverine flooding and limited drainage capacity, increasing the risk of site inundation during major storm events.

Improvements would include dredging accumulated sediment from the existing channels, reshaping channel cross-sections to increase conveyance and storage capacity, and stabilizing ditch banks to prevent erosion. Bank stabilization measures may include regrading, vegetative reinforcement, or other stabilization techniques designed to withstand high flows. A visual representation of a widened section of the channel located at the County Health Department stabilized with a planted littoral shelf is shown in **Figure 23**. The top figure displays existing conditions; the bottom figure illustrates the adaptive strategy.

Considerations would include evaluation of downstream impacts, and review of environmental permitting requirements to verify proposed modifications would comply. The design should balance increased storage capacity with water quality, bank stability, and long-term maintenance needs, while minimizing disturbance to adjacent infrastructure and facility operations.

Preliminary planning-level costs are influenced by the length of channel improvements, excavation volumes, sediment disposal requirements, and stabilization methods. Based on FEMA-funded excavation and bank stabilization projects, costs are estimated to range from \$200,000 to \$500,000. Ongoing maintenance costs are expected to include periodic inspection and sediment removal but are offset by reduced flood risk and improved protection of the adjacent Health Department facility.

Figure 23: Visualization of Widened Channels Adjacent to the County Health Department





## Adaptive Strategies: Law Enforcement, Health Care, and Government Facilities

### Implement LID Improvements at the DeSoto County Probation Department

This strategy would include the implementation of LID improvements at the DeSoto County Probation Department and adjacent County facilities to reduce stormwater runoff and localized flooding during major storm events. The strategy would focus on converting impervious surfaces and better utilizing open space to improve stormwater quality and create additional storage. LID improvements are recommended at this location over conventional stormwater collection systems due to the limited available open space.

Considerations would include installation of grass or landscaped bioswales, rain gardens, pervious pavement, or other LID features designed to capture, infiltrate, and treat stormwater closer to its source. These features would be integrated into existing landscaped areas or retrofit portions of paved surfaces to slow runoff, reduce peak flows, and improve overall site drainage performance. A visual representation of LID improvements located at the County Probation Department is shown in **Figure 24**. The top figure displays existing conditions; the bottom figure illustrates the adaptive strategy.

Planning considerations include evaluation of existing site grading and drainage patterns, identification of appropriate locations for LID features without impacting facility access, and selection of vegetation and materials suitable for periodic inundation and low maintenance. Design should ensure LID features are sized to provide meaningful runoff reduction while remaining compatible with existing utilities and building infrastructure.

Preliminary planning level costs for LID retrofits are driven by the type and extent of improvements, excavation requirements, and surface restoration needs. Based on similar LID retrofit projects in case studies published by the Environmental Protection Agency (EPA), costs are estimated to range from \$50,000 to \$150,000. Ongoing maintenance costs would involve routine inspections, vegetation management, and sediment removal.

Figure 24: Visualization of LID Improvements at the County Probation Department





## Adaptive Strategies: Law Enforcement, Health Care, and Government Facilities

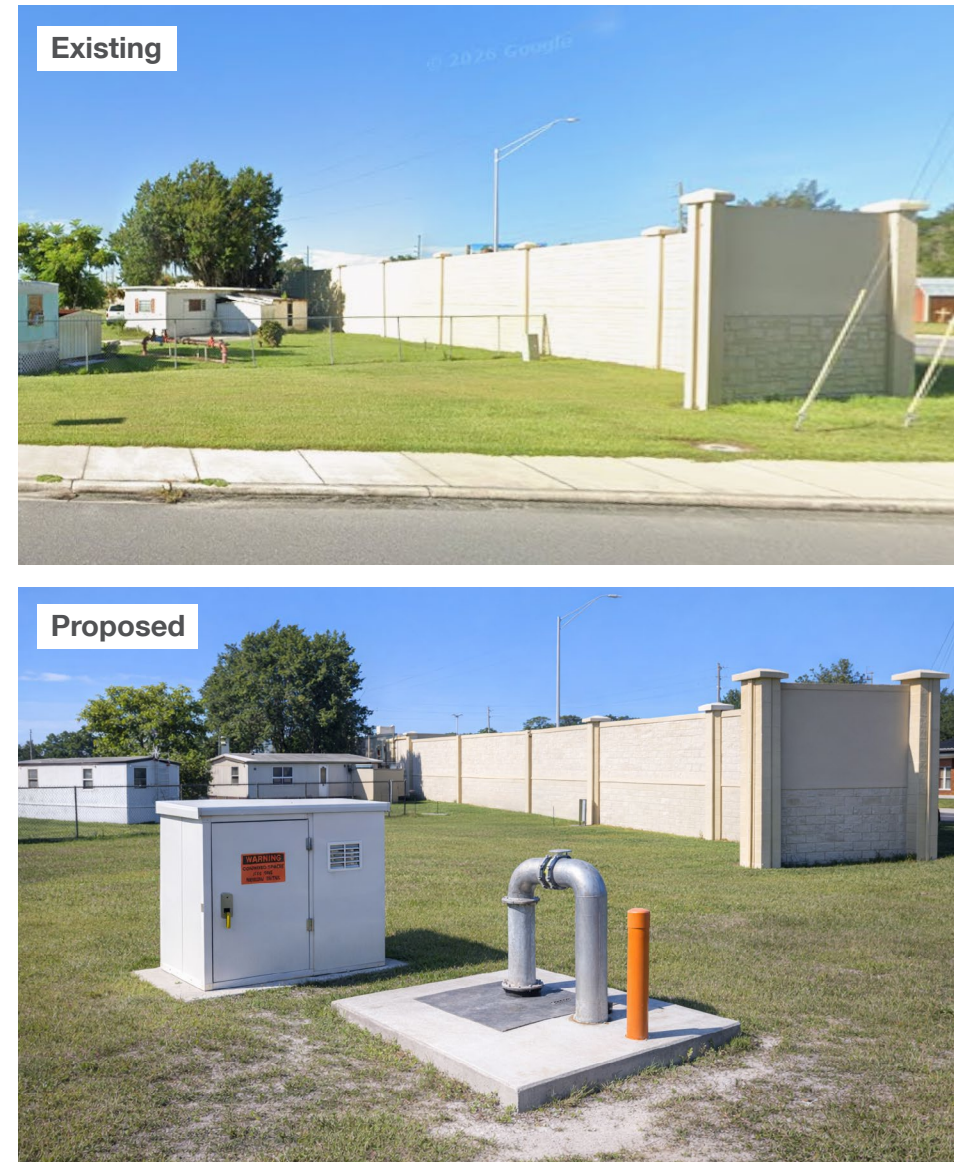
### Create a Stormwater Pump Station at the City of Arcadia Mobile Home Park

This strategy would include the construction of a stormwater pump station at the City of Arcadia Mobile Home Park to actively remove water during major storm events and reduce prolonged inundation within the community. The proposed pump station would consist of a wet well, submersible stormwater pumps, discharge piping, and associated electrical and control infrastructure designed to convey stormwater to an approved downstream discharge point. The system would provide active drainage during high-water conditions when gravity-based systems are overwhelmed or ineffective, helping lower flood depths and reduce the duration of standing water within the community.

Considerations would include determination of appropriate pump capacity based on contributing drainage area and modeled flood depths, and identification of a feasible discharge location that would not increase downstream flooding. Additional considerations include access for maintenance, power reliability, potential backup power needs, and coordination with existing stormwater infrastructure and outfalls. A visual representation of a stormwater pump station located at the City of Arcadia Mobile Home Park is shown in **Figure 25**. The top figure displays existing conditions; the bottom figure illustrates the adaptive strategy.

Preliminary planning-level costs for a small to medium stormwater pump station are driven by pump capacity, electrical requirements, discharge infrastructure, and site constraints. Based on similar municipal stormwater pump station projects funded by FEMA, total costs are estimated to range from \$500,000 to \$1.2 million. Ongoing maintenance costs include routine maintenance, periodic pump inspection, and energy use during storm events.

Figure 25: Visualization of Stormwater Pump Station at the City of Arcadia Mobile Home Park





## Adaptive Strategies: Law Enforcement, Health Care, and Government Facilities

### Managed Retreat of City of Arcadia Mobile Home Park

This strategy would implement a managed retreat approach within the existing City of Arcadia Mobile Home Park (**Figure 26**) by demolishing vacant or flood damaged units and relocating remaining homes to the most flood resilient locations within the park. The existing mobile home park is located in a low lying area that experiences frequent inundation, creating ongoing risks to residents.

The strategy would prioritize the removal of severely damaged or vacant structures that are no longer viable for safe habitation, while strategically relocating occupied homes to higher elevation areas or portions of the site with reduced flood exposure. Relocation efforts within the park would be designed to minimize displacement while reducing flood risk to residents and improving overall site resiliency.

Considerations include site grading and preparation, utility adjustments, road and access improvements, and ensuring relocated homes meet applicable flood resilience and building standards. Coordination with housing and social service providers would be required to support residents during relocation activities. Long term park management and land use controls should prevent re occupation of the most flood prone areas and allow those areas to function as open space or flood storage to reduce re exposure.

Preliminary planning level costs would be driven by demolition of existing units, site preparation, relocation of homes, infrastructure modifications, and resident assistance. Costs are expected to vary significantly depending on the number of units relocated and the extent of infrastructure improvements required. Based on municipal relocation and managed retreat projects, total costs are expected to be substantial, often exceeding millions of dollars depending on the number of units relocated and housing solutions implemented.

### Relocation of City of Arcadia Mobile Home Park

This strategy would include the relocation of the City of Arcadia Mobile Home Park to a site located above the modeled 500 Year, 24 Hour 2040 Rainfall flood depths to reduce long term flood risk and repetitive flooding events. The existing mobile home park is located in a low lying area that experiences frequent inundation, creating ongoing risks to residents.

Considerations would include removal of existing residential units and supporting infrastructure at the current site and relocation of residents to a safer location with greater flood resiliency. Relocation efforts would be coordinated to ensure replacement housing meets applicable standards for flood resilience, infrastructure capacity, and access to essential services, while permanently removing vulnerable residential development from the flood prone area.

Considerations include identification of suitable relocation sites with adequate elevation and infrastructure, coordination with housing and social service providers, and ensuring compliance with state and federal funding, environmental, and fair housing requirements. Long term land use planning for the vacated site should restrict future development and support flood storage or open space functions to prevent re exposure.

Preliminary planning level costs are driven by demolition, site clearance, resident relocation assistance, and development or acquisition of replacement housing. Based on municipal relocation and managed retreat projects, total costs are expected to be substantial, often exceeding tens of millions of dollars depending on the number of units relocated and housing solutions implemented. Relocation provides permanent flood risk reduction benefits and avoids recurring flood damages, emergency response costs, and repeated recovery expenditures.

*Figure 26: Arcadia Mobile Home Park - Street View*



## Adaptive Strategies: Law Enforcement, Health Care, and Government Facilities

### Convert City of Arcadia Mobile Home Park to a Passive Recreation Area

This strategy would include the conversion of the City of Arcadia Mobile Home Park to a passive recreation area to reduce long term flood exposure and mitigate repetitive flood impacts within a highly vulnerable area of the Arcadia AAA. The site is low lying and subject to frequent and prolonged flooding, which poses ongoing risks to residential safety, accessibility, and recovery following major storm events.

The passive recreation area would feature primarily open space, floodable park areas, naturalized landscaping, and a retention pond. Converting the site to passive recreational use would reduce development density within the floodplain, allow the area to safely store and convey floodwaters, and support environmental conservation and stormwater attenuation functions. A visual representation of the 500-Year, 24-Hour 2040 flood depths, and the passive recreation area in place of the City of Arcadia Mobile Home Park is shown in **Figure 27**. The top figure displays existing conditions; the bottom figure illustrates the adaptive strategy.

Considerations would include coordination with housing, redevelopment, and relocation planning efforts to ensure alignment with broader community goals, confirmation of floodplain and environmental constraints, and design of recreational features that maintain flood storage capacity. Design should prioritize native vegetation, minimal impervious surfaces, and features that can withstand periodic inundation without structural damage, while maintaining public access during non flood conditions.

Preliminary planning level costs are primarily driven by the extent of demolition, site restoration, and recreational improvements. Based on FEMA-supported acquisition and conversion of residential properties into open space, costs are estimated to range from \$750,000 to \$1.5 million, inclusive of demolition, debris removal, grading, landscaping, and passive recreational amenities. It should be noted that this estimate does not factor in relocation costs which could increase the estimate to more than tens of millions of dollars. Ongoing maintenance costs are expected to be relatively low and comparable to other park and open space facilities.

Figure 27: 500-Year, 24-Hour 2040 Flood Depths and a Visualization of the Passive Recreation Area at City of Arcadia Mobile Home Park





## Adaptive Strategies: Solid and Hazardous Waste Facilities

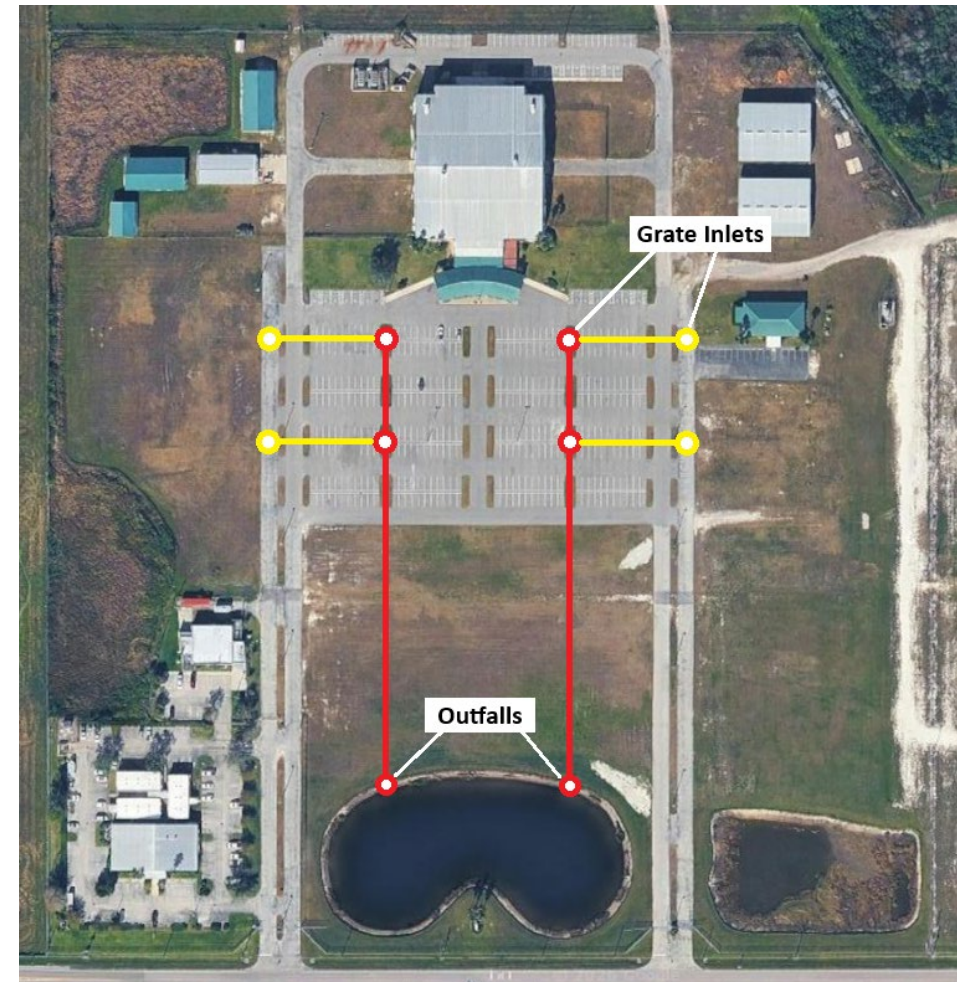
### Construct Conveyance Systems at the Turner Agri-Civic Center

This strategy would include the construction of stormwater conveyance systems within the parking lot of the Turner Agri-Civic Center or modification of the existing system to improve drainage and reduce flooding during major storm events. Improvements could include new surface and subsurface conveyance features, such as inlets and underground piping or re-grading the existing parking lot surface to improve stormwater conveyance if the existing system has sufficient capacity. These improvements would enhance hydraulic connectivity and improve overall stormwater system performance during major rainfall events.

Considerations would include evaluation of existing drainage patterns, and identification of required conveyance infrastructure sizes to accommodate projected runoff volumes with adequate capacity and freeboard within the retention pond. A visual representation of the enhanced conveyance system at the Turner Agri-Civic Center is shown in **Figure 28**.

Preliminary planning-level costs are influenced by the extent of conveyance improvements, pipe sizes, and pavement restoration requirements. Based on similar FDOT stormwater retrofit projects completed in south Florida, costs are estimated to range from \$150,000 to \$300,000. Ongoing maintenance costs are expected to be comparable to existing maintenance activities and are anticipated to include periodic inspection, sediment removal, and debris clearing to maintain system capacity.

Figure 28: Visualization of Conveyance Systems at the Turner Agri-Civic Center



#### Legend

- Existing Stormwater Conveyance System
- Proposed Stormwater Conveyance System

## Adaptive Strategies: Roadways and Evacuation Routes

### Elevate Roadways Vulnerable to Flooding

This strategy would include elevating major roadways that are vulnerable to flooding to reduce service disruptions during major rainfall events. Roadway elevation increases the vertical clearance between the pavement surface and projected flood depths, thereby maintaining access for emergency responses, evacuation, and daily mobility during and after storm events.

Design considerations would include assessment of roadway segments subject to frequent inundation, determination of target elevation increases based on modeled flood depths, and consideration of how the elevated section would tie into the existing system. Elevation measures may include regrading and raising the roadway base, reconstructing pavement sections, adjusting curb profiles, and modifying drainage infrastructure to maintain or improve surface water conveyance. Associated features such as sidewalks, driveways, utility crossings, and intersections would be evaluated and adjusted as needed to accommodate vertical changes while maintaining safety and accessibility.

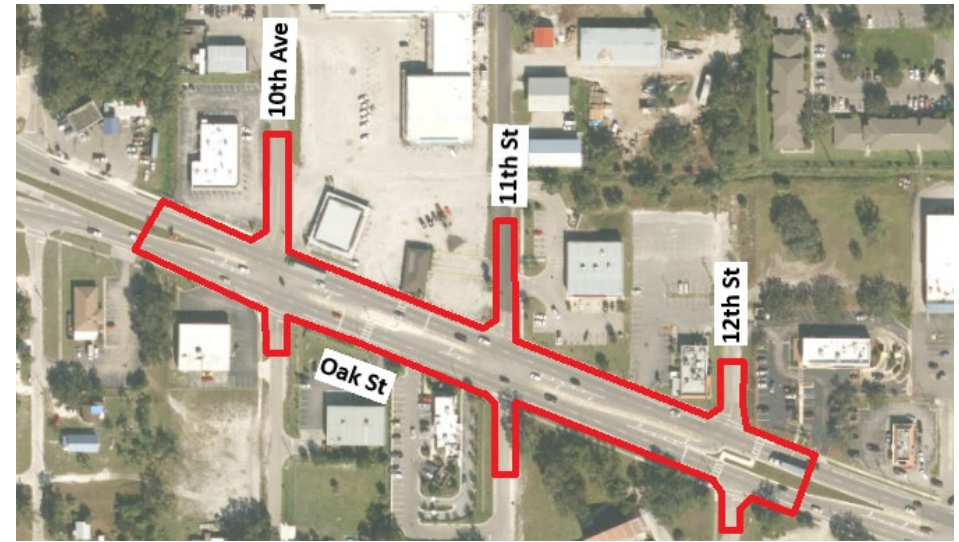
Preliminary planning-level costs for roadway elevation are primarily driven by the length of roadway, height of elevation increase, existing pavement structure, drainage modifications, and impacts to adjacent properties and utilities. Based on similar FDOT projects, costs for elevating a 2-lane roadway can range from approximately \$2 million to \$5 million per mile.

#### 10th Ave, 11th St, 12th St, and Oak St

The boundary of the elevated roadway intersections of 10th Ave, 11th St, and Oak St is shown in **Figure 29**.

The total length of the approaching turn lanes, the intersections, and the sections of 10th Ave, 11th St, and Oak St that will also be required to be elevated are approximately 0.55-mi long in total. The cost of elevating these evacuation route intersections is estimated to cost \$1,100,000 to \$2,750,000. Ongoing maintenance costs are expected to be comparable to existing conditions.

Figure 29: Boundary of Elevated 10th Ave, 11th St, and Oak St Intersections



#### 15th Ave and Oak St

The boundary of the elevated roadway intersection of 15th Ave and Oak St is shown in **Figure 30**.

Figure 30: Boundary of Elevated 15th Ave and Oak St Intersection





The total length of the approaching turn lanes, the intersection, and the sections of 15th Ave and Oak St that will also be required to be elevated are approximately 0.36-mi long in total. The cost of elevating this evacuation route intersection is estimated to cost \$750,000 to \$1,800,000. Ongoing maintenance costs are expected to be comparable to existing conditions.

#### Heard St and US Highway 17

The boundary of the elevated roadway intersection of Heard St and US Highway 17 is shown in **Figure 31**. The total length of the approaching turn lanes, the intersection, and the sections of Heard St and US Highway 17 that will also be required to be elevated are approximately 0.27-mi long in total. The cost of elevating this evacuation route intersection is estimated to cost \$530,000 to \$1,300,000. Ongoing maintenance costs are expected to be comparable to existing conditions.

*Figure 31: Boundary of Elevated Heard St and US Highway 17 Intersection*



#### SW Hibiscus Dr and US Highway 17

The boundary of the elevated roadway intersection of SW Hibiscus Dr and US Highway 17 is shown in **Figure 32**.

The total length of the approaching turn lanes, the intersection, and the sections of SW Hibiscus Dr and US Highway 17 that will also be required to be elevated are approximately 0.33-mi long in total. The cost of elevating this evacuation route intersection is estimated to cost \$650,000 to \$1,650,000. Ongoing maintenance costs are expected to be comparable to existing conditions.

*Figure 32: Boundary of Elevated SW Hibiscus Dr and US Highway 17 Intersection*





## Adaptive Strategies: Roadways and Evacuation Routes

### Implement New Roadside Swales and Detention Ponds

This strategy would include the implementation of roadside swales/detention ponds to temporarily store and attenuate stormwater runoff during peak rainfall events. Open spaces adjacent to or near evacuation routes make for ideal pond locations so that flows can be directly routed away from roads. These features would be designed to slow flow velocities, reduce peak discharge rates, and provide storage during extreme rainfall events, thereby reducing the depth and duration of flooding on roadway surfaces.

Considerations would include identification of locations along evacuation routes with sufficient right of way or nearby County owned parcels to accommodate swales and detention facilities, as well as evaluation of existing drainage patterns and contributing drainage areas. Swales would be graded to maintain positive drainage toward downstream conveyance systems, while detention ponds would be designed to release stored runoff at controlled rates that do not overwhelm downstream infrastructure. Where possible, these features could also be integrated with existing open drainage systems to improve overall network performance.

Preliminary planning level costs for implementing roadside swales and detention ponds are primarily driven by the size of the drainage areas served, required storage volume, and earthwork quantities. Based on similar FDOT stormwater infrastructure construction costs, small to mid sized detention ponds constructed adjacent to roadway corridors generally range from \$45,000 to \$150,000 per pond. Vegetated roadside swales are comparatively lower cost features, with construction costs typically ranging from \$10,000 to \$40,000 per installation, depending on length, grading complexity, and vegetation establishment.

#### S Parker Ave and Oak St Intersection

A visual representation of a detention pond at the intersection of S Parker Ave and Oak St is shown in **Figure 33**. The top figure displays existing conditions; the bottom figure illustrates the adaptive strategy.

For planning purposes, a combined program of strategically placed swales and one detention pond at the intersection of S Parker Ave and Oak St is estimated at

\$200,000 to \$500,000, depending on the number of swales implemented and site specific conditions. Ongoing maintenance costs are expected to be moderate and consist primarily of lawn maintenance and mowing.

*Figure 33: Visualization of Detention Pond at S Parker Ave and Oak St Intersection*





### E Palmetto St and US Highway 17 Intersection

A visual representation of a detention pond at the intersection of E Palmetto St and US Highway 17 is shown in **Figure 34**. The top figure displays existing conditions; the bottom figure illustrates the adaptive strategy.

*Figure 34: Visualization of Detention Pond at E Palmetto St and US Hwy 17 Intersection*



For planning purposes, a combined program of strategically placed swales and one detention pond at the intersection of E Palmetto St and US Highway 17 is estimated at \$200,000 to \$500,000, depending on the number of swales implemented and site specific conditions. Ongoing maintenance costs are expected to be moderate and consist primarily of lawn maintenance and mowing.

### 17th Ave and Oak St Intersection

A visual representation of a detention pond at the intersection of 17th Ave and Oak St is shown in **Figure 35**. The top figure displays existing conditions; the bottom figure illustrates the adaptive strategy.

*Figure 35: Visualization of Detention Pond at 17th Ave and Oak St Intersection*



For planning purposes, a combined program of strategically placed swales and one detention pond at the intersection of 17th Ave and Oak St is estimated at \$200,000 to \$500,000, depending on the number of swales implemented and site specific conditions. Ongoing maintenance costs are expected to be moderate and consist primarily of lawn maintenance and mowing.

## Next Steps

This AAA Plan was developed to highlight existing flood vulnerabilities within the Arcadia AAA, evaluate local adaptive capacity, identify feasible adaptive strategies, and bridge the gap between identified vulnerable critical assets and the implementation of flood reduction solutions. This plan provides DeSoto County and the City of Arcadia with conceptual adaptive strategies to guide near and long term flood resilience improvements.

To advance the implementation of this plan, it is recommended that the County and City of Arcadia review the high scoring, near term adaptive strategies that score favorably across the flood resilience, implementation cost, and feasibility criteria.

Next steps include refining identified projects to be included in the County Capital Improvement Program (CIP), advancing planning level strategies, and coordinating with regional and state partners to position projects for upcoming grant cycles.

A potential funding opportunities matrix has been developed to support implementation of the recommended adaptive strategies by identifying federal, state, regional, and local funding programs. The matrix is intended to serve as a planning and decision making tool that includes funding pathways, highlights application cycles, competitiveness, match requirements, and eligibility considerations. Funding opportunities are organized by primary, supporting, planning level, and conditional sources to help the County pursue grants.

*Figure 36: Flooding in DeSoto County during Hurricane Ian*





## Potential Funding Opportunities

A funding matrix that highlights funding opportunities for the proposed adaptation strategies is shown in **Table 14, Table 15, Table 16, Table 17, Table 18, and Table 19.**

Table 14: Primary Funding Opportunities (Most Aligned with AAA Strategies)

| Funding Opportunity                                             | Funding Type                 | Funding Available                                                                        | Competitiveness                                                                          | Application Cycle                                                         | Match Requirements                                    | Project Recommendations                                                                                                                                                                           | Additional Considerations                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------------------------------------------|------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FEMA - Building Resilient Infrastructure and Communities (BRIC) | Federal Grant                | Up to tens of millions per project; varies based on national allocation and project type | High - Application requires cost-benefit analysis, and application process is exhaustive | Open: September<br><br>Due to FDEM: November<br><br>FDEM submits: January | 30% Waived if under \$200,000                         | Flood barriers; stormwater pump stations; evacuation route drainage improvements; conveyance systems; stormwater detention and swales; critical facility protection; elevation of infrastructure. | <b>Purpose:</b> To increase resilience and public safety; reduce injuries, loss of life, and damage to infrastructure from natural hazards.<br><br><b>Funding Types:</b> Mitigation Plans, Project Scoping, Infrastructure Projects, Flood Risk Reduction.<br><br><b>Eligibility:</b> Local governments via FDEM; must be in LMS and meet FEMA Benefit-Cost Analysis (BCA) requirements. |
| FDEP - Resilient Florida Grants Program                         | State Grant                  | Varies annually based on appropriations and project type                                 | Medium - Requires readiness to proceed                                                   | Varies every year<br>Open: July<br><br>Due: September (approx.)           | 50% - Cost-share may be reduced for rural communities | Targeted vulnerability assessments; flood modeling; drainage system planning; infrastructure adaptation strategies                                                                                | <b>Purpose:</b> Supports projects addressing flooding, rainfall, and climate impacts.<br><br><b>Funding Types:</b> Planning and Implementation tied to vulnerability assessments.<br><br><b>Eligibility:</b> Local governments; projects aligned with resilience priorities.                                                                                                             |
| SWFWMD - Cooperative Funding Initiative                         | Regional Cost Share          | Varies by project and funding cycle                                                      | Medium - Requires that project is ready for construction                                 | Open: August<br><br>Due: October                                          | Typically ~50%                                        | Roadside drainage improvements; culvert replacement; channel expansion; stormwater retrofits; conveyance system improvements; flood protection projects                                           | <b>Purpose:</b> To provide funds for projects that assist in creating sustainable water resources and provide flood protection.<br><br><b>Funding Types:</b> Stormwater and watershed projects.<br><br><b>Eligibility:</b> Local sponsor required; must provide regional water resource benefit.                                                                                         |
| FDEP - Water Quality Improvement Grant Program                  | State Grant                  | Not reported                                                                             | Medium - Requires that the project is ready to proceed and nutrient removal calculations | Varies every year<br>Open: July<br><br>Due: August (approx.)              | Up to 50% (may be waived for rural communities)       | Sanitary sewer re-routing (I&I reduction); WWTF upgrades; stormwater improvements improving water quality                                                                                         | <b>Purpose:</b> To address wastewater, stormwater, or nutrient sources in waterbodies.<br><br><b>Funding Types:</b> Implementation grants.<br><br><b>Eligibility:</b> Projects must improve waters not meeting standards, TMDLs, or within BMAP/ RAP areas.                                                                                                                              |
| Florida Commerce - Small Cities CDBG                            | Federal (State-administered) | Varies based on state allocation and project type                                        | Medium                                                                                   | Annual                                                                    | Typically none or low                                 | Drainage infrastructure; roadside drainage improvements; utilities; neighborhood-scale stormwater improvements                                                                                    | <b>Purpose:</b> Community development and infrastructure improvements.<br><br><b>Funding Types:</b> Public infrastructure and utilities.<br><br><b>Eligibility:</b> Non-entitlement communities; must meet Low- and Moderate-income (LMI) benefit criteria.                                                                                                                              |

Table 15: Supporting Funding Opportunities (Can fund portions of AAA projects depending on eligibility and project type)

| Funding Opportunity                                                             | Funding Type             | Funding Available                                                                              | Competitiveness                                                                      | Application Cycle                                                 | Match Requirements                                      | Project Recommendations                                                                                    | Additional Considerations                                                                                                                                                                                                                |
|---------------------------------------------------------------------------------|--------------------------|------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|---------------------------------------------------------|------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Federal Emergency Management Agency - Flood Mitigation Assistance (FMA)         | Federal Grant            | Varies annually based on NFIP prioritization                                                   | High - Application requires cost-benefit analysis                                    | Open: September<br>Due to FDEM: November<br>FDEM submits: January | Typically 30%                                           | Elevation of drinking water facilities; floodproofing of critical structures; targeted facility protection | <b>Purpose:</b> Reduce repetitive flood damage to buildings and infrastructure.<br><b>Funding Types:</b> Planning, Infrastructure, Mitigation Projects.<br><b>Eligibility:</b> Must benefit NFIP-insured properties; must be in LMS.     |
| FDEP - Non-Point Source Funds (319 Grants)                                      | Federal and State Grants | Awards vary                                                                                    | Medium - Requires that project is ready to proceed and nutrient removal calculations | Rolling / periodic cycles                                         | 40% non-federal match (i.e., 60% federal share maximum) | Stormwater retrofits; LID/green infrastructure; runoff reduction projects; watershed improvements          | <b>Purpose:</b> Reduce nonpoint source pollution from land use activities.<br><b>Funding Types:</b> Implementation grants.<br><b>Eligibility:</b> Local governments and water management entities; must demonstrate pollutant reduction. |
| US DOT - PROTECT Program                                                        | Federal Grant            | Not reported                                                                                   | High - Application process is lengthy and detailed                                   | Open: April<br>Due: August (approx.)                              | Implementation: 20%<br>Planning: 0%                     | Evacuation route drainage improvements (US 17, SR 64); roadway flood mitigation; resilience upgrades       | <b>Purpose:</b> Strengthen transportation systems against flooding and extreme weather.<br><b>Funding Types:</b> Planning and infrastructure.<br><b>Eligibility:</b> All levels of government; must tie to transportation resilience.    |
| US DOT - Rebuilding American Infrastructure with Sustainable and Equity (RAISE) | Federal Grant            | Awards vary from \$5,000,000 to \$25,000,000                                                   | High - Application requires cost-benefit analysis                                    | Open: November<br>Due: February (approx.)                         | Typically 20%                                           | Roadway drainag improvements; multimodal infrastructure supporting flood resilience                        | <b>Purpose:</b> Support transportation projects with regional impact.<br><b>Funding Types:</b> Planning and capital.<br><b>Eligibility:</b> Must demonstrate significant local or regional benefit.                                      |
| Florida Commerce - Rural Infrastructure Fund (RIF)                              | State Grant              | Funding awarded up to \$300,000 - varies based on project scope and state funding availability | Medium                                                                               | Opens: July<br>Closes: September                                  | Typically none                                          | Water, wastewater, and stormwater infrastructure                                                           | <b>Purpose:</b> Support infrastructure tied to economic development.<br><b>Funding Types:</b> Planning, design, engineering, construction.<br><b>Eligibility:</b> Rural communities; must demonstrate economic benefit.                  |

Table 16: Planning & Policy Funding Opportunities (Funds planning, policy, and regulatory updates supporting AAA strategies)

| Funding Opportunity                                               | Funding Type | Funding Available | Competitiveness | Application Cycle             | Match Requirements | Project Recommendations                                                                                             | Additional Considerations                                                                                                                                                                  |
|-------------------------------------------------------------------|--------------|-------------------|-----------------|-------------------------------|--------------------|---------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Florida Commerce - Community Planning Technical Assistance (CPTA) | State Grant  | Up to \$75,000    | Medium          | Varies every year<br>Due: May | Typically none     | Engineering standards manual; LID ordinance; FFE ordinance updates; development policies for reduced flood exposure | <b>Purpose:</b> Planning and policy development for resilience and growth management.<br><b>Funding Types:</b> Planning grants.<br><b>Eligibility:</b> Counties, municipalities, and RPCs. |



Table 17: Local Implementation Funding Source (Used to implement projects and meet match requirements)

| Funding Opportunity                | Funding Type                   | Funding Available                      | Competitiveness | Application Cycle | Match Requirements | Project Recommendations                                                                         | Additional Considerations                                                                                                                                                |
|------------------------------------|--------------------------------|----------------------------------------|-----------------|-------------------|--------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| County & City CIP/Annual Budgeting | Local Funding / Implementation | Varies annually based on County budget | Low             | Annual budgeting  | N/A                | Local match funding; phased implementation of drainage, stormwater, and infrastructure projects | <b>Purpose:</b> Implement local infrastructure priorities.<br><b>Funding Types:</b> Capital projects.<br><b>Eligibility:</b> Determined by County priorities and budget. |

Table 18: Loans/Financing Programs (Used for large capital projects where grant funding is insufficient; requires repayment)

| Funding Opportunity                                                | Funding Type        | Funding Available                 | Competitiveness                                                             | Application Cycle                                 | Match Requirements                                                                                                | Project Recommendations                                                         | Additional Considerations                                                                                                                                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------------|---------------------|-----------------------------------|-----------------------------------------------------------------------------|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EPA - Water Infrastructure Finance and Innovation Act (WIFIA)      | Federal Loan        | Not reported                      | High - Requires credit worthiness analysis, pro-formas and extensive review | Rolling (Letters of Interest accepted year-round) | Finances up to 49% of total project cost; requires application fee (which is used as a down payment for the loan) | Large WWTF upgrades; major stormwater systems; regional drainage infrastructure | <b>Purpose:</b> Large-scale water infrastructure.<br><b>Funding Types:</b> Low-interest federal financing for large-scale water infrastructure (design, construction, rehabilitation)<br><b>Eligibility:</b> Typically, >\$20M projects; requires strong financial capacity. Application fee: \$100,000 for most applicants and \$25,000 for small communities (with population less than 25,000.) |
| Florida Commerce - Rural Community Development Revolving Loan Fund | State Loan          | Varies based on project type      | Medium                                                                      | Rolling; Requests accepted quarterly              | 0% match; interest rates ~1-2.5%; up to 30-year terms                                                             | Water, wastewater, stormwater, generators                                       | <b>Purpose:</b> Infrastructure projects.<br><b>Funding Types:</b> Low-interest state financing for infrastructure projects (planning, design, engineering, construction)<br><b>Eligibility:</b> Rural communities; repayment required.                                                                                                                                                             |
| USDA Rural Development                                             | Federal Grant/ Loan | Varies by program and eligibility | Medium                                                                      | Rolling / Annual                                  | Varies                                                                                                            | Water systems; public facilities; rural infrastructure                          | <b>Purpose:</b> Support infrastructure in rural communities.<br><b>Funding Types:</b> Loan and grant combinations for rural infrastructure (water, wastewater, public facilities)<br><b>Eligibility:</b> Rural areas; income thresholds apply.                                                                                                                                                     |

Table 19: Additional Conditional Funding Opportunities (Not consistently available; dependent on disasters, special allocations, or timing)

| Funding Opportunity                           | Funding Type                 | Funding Available                                            | Competitiveness | Application Cycle           | Match Requirements | Project Recommendations                                                                 | Additional Considerations                                                                                                                                                                                                                         |
|-----------------------------------------------|------------------------------|--------------------------------------------------------------|-----------------|-----------------------------|--------------------|-----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| FEMA - Hazard Mitigation Grant Program (HMGP) | Federal Grant                | Available only after federally declared disaster             | Medium-High     | Post-disaster only          | Typically 25%      | Property acquisition; relocation; elevation; drainage improvements (retreat strategies) | <b>Purpose:</b> Post-disaster mitigation funding.<br><b>Funding Types:</b> Post-disaster mitigation grants (property acquisition, elevation, infrastructure mitigation).<br><b>Eligibility:</b> Only available after disaster; must be in LMS.    |
| Florida Commerce - CDBG-MIT                   | Federal (State-administered) | Varies based on federal disaster allocation                  | High            | Periodic / Program-specific | Varies             | Regional drainage; large-scale mitigation infrastructure                                | <b>Purpose:</b> Long-term mitigation after disasters.<br><b>Funding Types:</b> Large-scale mitigation and infrastructure projects (state-administered federal disaster recovery funds).<br><b>Eligibility:</b> Only during active funding cycles. |
| FDOT Work Program                             | State Program                | Not reported at project level; programmed by FDOT priorities | Medium          | Annual                      | None               | Roadway drainage improvements along state corridors (US 17, SR 64)                      | <b>Purpose:</b> Maintain and improve state transportation infrastructure.<br><b>Funding Types:</b> State-programmed transportation and drainage improvements (not a competitive grant program)<br><b>Eligibility:</b> Limited to FDOT facilities. |

# APPENDIX 1

## DESOTO COUNTY IDENTIFICATION AND RANKING OF AAA - TECHNICAL MEMORANDUM

*Under Separate Cover*