Highlands County

ADAPTATION ACTION AREA PLAN

Downtown Sebring

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ENSAFE

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Executive Summary

Highlands County is experiencing an increase in flooding driven by intense rainfall events, limited drainage capacity, and shallow groundwater conditions. One of the first steps the County has taken to address this challenge is conducting a Comprehensive Vulnerability Assessment and an Adaptation Action Area planning exercise. Together, the assessment and planning exercise help identify areas where focused resilience strategies are needed to reduce risk to critical assets, infrastructure, and community services. This Adaptation Action Area Plan focuses on the Downtown Sebring Adaptation Action Area, one of the highest-priority areas identified through the County's data-driven ranking process.

The Downtown Sebring area includes three critical community and emergency facilities that are vulnerable to current and future rainfall-induced flooding. The area received the second highest cumulative score due to its concentration of County-maintained critical assets and comments from community leaders and residents about flood challenges in the area. Flooding in this area may disrupt emergency services and limit access affecting residents, day-to-day business, and emergency response.

This plan takes the countywide comprehensive vulnerability assessment findings and zooms into the infrastructure and hydrologic conditions of the Downtown Sebring area. It recommends a range of targeted actions, including:

- Policy and regulatory considerations
- Resilience hub planning
- Infrastructure improvements
- Conceptual adaptation strategies

These approaches aim to reduce flood depth and duration, improve infrastructure performance, maintain roadway access, and build community resilience.

1. Introduction

1.1 About Highlands County

Highlands County is an inland County located in south-central Florida that covers about 1,020 square miles. The County includes the cities of Sebring and Avon Park, the Town of Lake Placid, and many unincorporated communities[1]. The landscape is generally flat and characterized by numerous freshwater lakes and wetlands that contribute to the County's natural and environmental functions.

The County's flat geography and dense development patterns are key factors that impact its vulnerability to flooding, particularly during heavy rainfall events. Development in low-lying areas may experience more extreme flooding during major storms because of limited drainage capacity.

As of 2025, Highlands County is home to an estimated 111,122 residents[2]. About 35% of the population is aged 65 or older, almost double the statewide average. Older populations may face more challenges during flood events and recovery periods. They often need assistance to prepare for a flood or to evacuate.

Median household income in the County is lower than the Florida average[2]. Housing is mostly owner-occupied, with a high number of older structures and manufactured housing units. This means that housing may be more susceptible to flooding, but homeowners may not be able to afford repairs[2].

1.2 Countywide Existing Conditions

The existing conditions documented in the Highlands County Comprehensive Vulnerability Assessment (CVA)[3] indicate that flood risk is driven by intense rainfall and long duration flooding events. These flood impacts occur under varying drainage conditions across the County, reflecting differences in how stormwater is stored, conveyed, or infiltrated.

In many areas, stormwater is managed through localized or closed-basin systems that rely on the ground to absorb and store water rather than moving it through pipes or channels to an outlet. These conditions are common in areas where regional drainage outlets are limited, and stormwater management relies primarily on on-site storage and infiltration. These systems generally function well during typical rain events but can become overwhelmed when rainfall is intense, prolonged, or occur over multiple consecutive days, causing soils to become saturated and limiting how much additional water can be absorbed.

In other parts of the County, flooding is influenced by limited surface drainage infrastructure, such as a lack of connected storm sewer systems, swales, or defined drainage pathways. In these areas, flooding is driven less by infiltration capacity and more by the limited ability to convey runoff away from roadways and developed areas. The County's relatively flat terrain

further reduces the ability for water to naturally flow away, which can result in water ponding on roadways and low-lying areas after major storms.

As rainfall intensity and the frequency of back-to-back storms increase, both conditions can lead to flooding. Although these drainage mechanisms differ, they can produce similar flood outcomes during extreme or prolonged rainfall events. Saturated soils reduce infiltration in closed-basin areas, while limited drainage capacity slows water movement in areas with minimal conveyance. Together, these factors contribute to longer-lasting floods that can repeatedly affect the same locations and place added stress on infrastructure throughout both incorporated and unincorporated areas of the County.

The CVA also identified a concentration of regionally and locally important assets in areas vulnerable to rainfall-driven flooding. Flood impacts to these assets can disrupt transportation access, emergency response, and essential services, creating challenges that extend beyond the immediately flooded locations.

1.3 Countywide Resilience Planning and Vulnerability Assessment

Highlands County has taken a number of steps to address flooding. As an inland County, the primary flood risks are associated with intense rainfall events, stormwater system limitations, and rising groundwater levels. These risks can affect homes, transportation networks, utilities, emergency services, and natural resources.

To better understand current and future risks, the County received funding from the Florida Department of Environmental Protection (FDEP) through the Resilient Florida Program to complete a Comprehensive Vulnerability Assessment (CVA). Additional funding from the Coastal & Heartland National Estuary Partnership (CHNEP), part of the U.S. Environmental Protection Agency (EPA) National Estuary Program, supported the development of these Adaptation Action Area (AAA) Plans.

These initiatives build on existing County efforts, including the Multi-Hazard Local Mitigation Strategy[4], Emergency Management planning, and ongoing updates to the Highlands County Comprehensive Plan[5]. Together, these coordinated efforts help ensure that future policies, projects, and investments reduce risk, improve safety, and enhance long-term resilience.

The Highlands County CVA is currently underway and is being conducted in accordance with Section 380.093, Florida Statutes[6]. The CVA covers unincorporated areas of the County as well as the Cities of Avon Park and Sebring and the Town of Lake Placid. The assessment inventories and evaluates the statutorily required critical assets, including:

- Community and Emergency Facilities
- Critical Infrastructure

- Transportation and Evacuation Routes
- Natural, Cultural, and Historical Resources

Using high-resolution light detection and ranging (LiDAR) elevation data and two-dimensional hydraulic modeling, the CVA evaluated flood exposure under current and future conditions across multiple planning horizons. Flood modeling incorporates rainfall-driven flooding scenarios representing varying storm intensities and durations to assess how flood risk may change over time. Flood extents and depths are analyzed with critical asset locations to identify areas and facilities that are most vulnerable.

The results of the CVA provide the technical foundation for identifying AAAs and prioritizing actions that reduce flood risk and strengthen community resilience.

1.4 Adaptation Action Area Planning

AAAs are locally designated geographic areas that experience heightened vulnerability and where focused resilience and adaptation strategies are needed to reduce flood impacts. This data-driven approach focuses on local conditions and priorities while supporting state planning requirements. The AAA designation approach also incorporated public input, bringing local leaders into the process while aligning with the goals of the Resilient Florida Program.

The AAA planning process is intended to:

- Identify areas of the County where critical assets are most exposed to future flooding conditions.
- Prioritize areas for adaptation and mitigation investments, informed by technical analysis and public and stakeholder input.
- Support informed decision-making related to capital improvement planning, land use policy, and infrastructure resilience.
- Strengthen eligibility for further resilience and infrastructure funding.

In Highlands County, AAAs were identified through GIS-based, data-driven methodology that integrates flood exposure, asset sensitivity, land use, asset ownership, and critical assets.

1.5 Common Risks and Recurring Challenges across AAAs

AAA planning builds on Highlands County's ongoing resilience initiatives and the AAA framework translates countywide vulnerability findings into targeted planning areas where coordinated adaptation actions can be implemented. The AAA process also supports goals set in the Highlands County Comprehensive Plan by informing future land use considerations, infrastructure priorities, and long-range resilience strategies. The three highest priority AAAs are primarily located in the City of Sebring and adjacent unincorporated areas of Highlands

County. While each AAA has distinct characteristics and assets, they share several recurring risks related to development patterns and drainage conditions.

- **Rainfall Patterns**: Rainfall-driven flooding is the dominant hazard across the Sebring AAAs, particularly during high-intensity or multi-day rainfall events. Flooding is influenced by soil saturation, limited infiltration capacity, and stormwater system performance. As identified in the CVA, flood risk is dynamic and can occur both within and outside the mapped Special Flood Hazard Areas (SFHAs).
- **Outdated Infrastructure Design**: Aging drainage systems and public facilities were designed for historically lower rainfall amounts, deeper groundwater levels, and higher infiltration capacity. Such systems may experience strain during today's and future major storms with increased rainfall amounts, increasing the likelihood of localized roadway flooding, operational disruptions, and maintenance demands.
- **Assets and Daily Activity**: The concentration of critical facilities, government services, and daily public activity in flood-prone areas increases the consequences of flooding events. These locations are typically highly developed and intensively used, leaving limited physical space for flood mitigation retrofits or stormwater system expansion. Flooding in downtown and civic areas can disrupt emergency response, government operations, transportation access, and community events, resulting in impacts that extend beyond the immediate flood footprint and affect day-to-day life for a large number of residents and visitors.

These shared challenges are a key factor for why multiple AAAs in Sebring scored highly as priorities for detailed planning. The individual adaptation strategies in each AAA plan are tailored to the specific conditions in each area.

2. Downtown Sebring Adaptation Action Area

2.1 AAA Overview

The Downtown Sebring AAA encompasses the City's historic downtown and surrounding areas that serve as an important center for community services, public gatherings, and daily business. This area was designated as an AAA due to the concentration of critical assets and its documented and projected vulnerability to flooding driven by intense rainfall events and stormwater system limitations.

The Downtown Sebring AAA includes several critical community assets that support education, emergency response, public safety, and community activities. These assets are essential to maintaining service continuity during and after flooding events. Assets located within the Downtown Sebring AAA are summarized in Table 1, and Figure 1 illustrates the AAA boundary and the locations of these assets. Asset numbers shown in Table 1 correspond to those displayed in Figure 1.

Table 1: Assets Within the Downtown Sebring AAA

Asset No.	Asset Name	Asset Type
1.	Sebring High School	Critical Community and Emergency Facilities
2.	Highlands County Fair Convention Center	Critical Community and Emergency Facilities
3.	Highlands County Fire Rescue EMS #17	Critical Community and Emergency Facilities

The Highlands County Fair Convention Center is a privately owned asset; however, it serves a critical public safety function as a designated emergency shelter. Given its private ownership, an adaptation strategy concept for this site was not developed as part of this study.

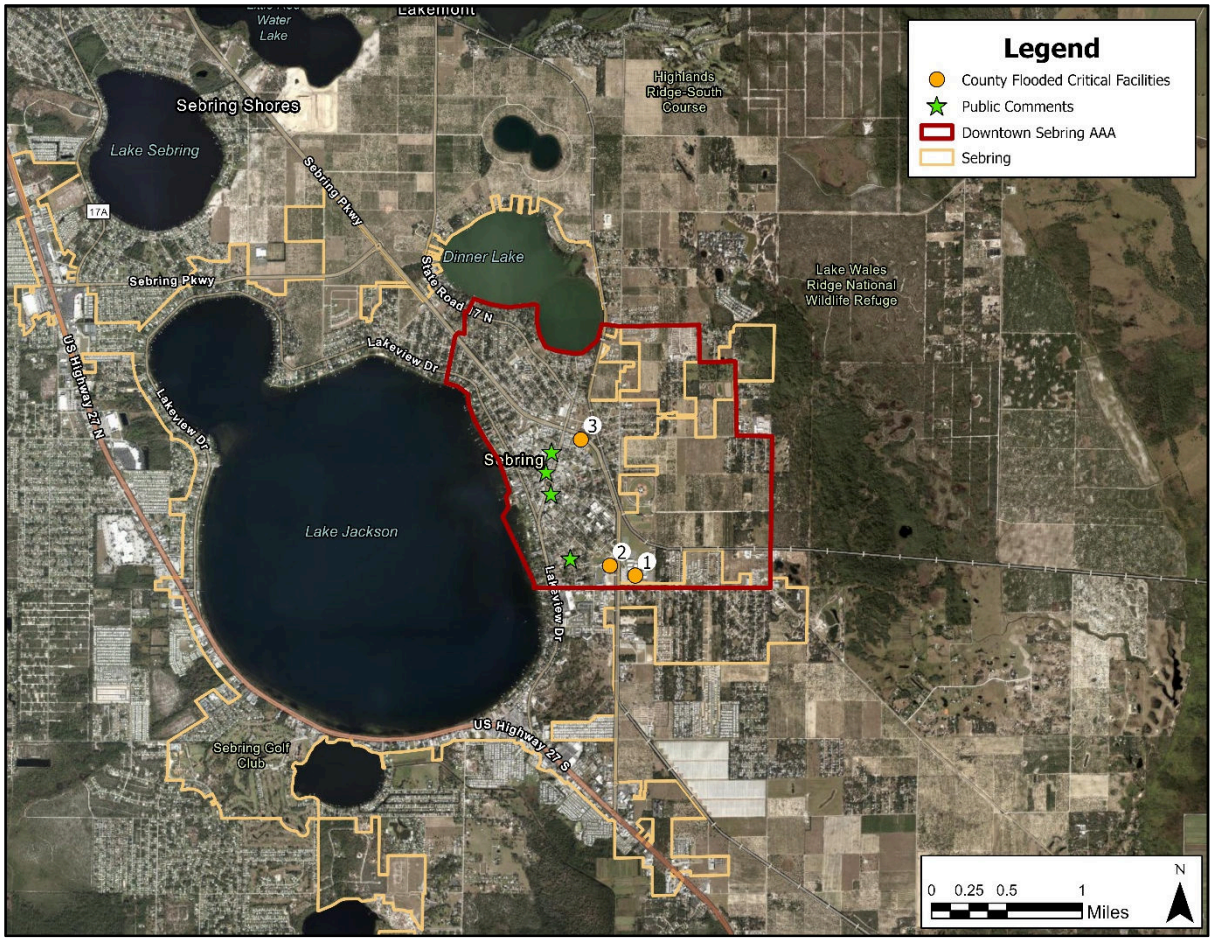

Figure 1: Downtown Sebring Adaptation Action Area, Critical Assets, and Public Comment Locations

2.2 Existing Conditions and Recurring Challenges

The Downtown Sebring area is characterized by moderate topographic changes, aging infrastructure, and a stormwater system that includes conveyance components (catch basins and underground pipes) as well as stormwater management features (retention areas, exfiltration trenches, and natural infiltration)[7].

Conveyance limitations occur where existing catch basins and inlet structures have limited capacity to capture and convey runoff during high-intensity or long-duration rainfall events. In these locations, runoff can exceed inlet capacity, causing water to accumulate on roadways and in low-lying areas before it can enter the drainage network.

Stormwater management limitations are also present, particularly during periods of prolonged rainfall when soils become saturated. Under these conditions, infiltration rates decline and retention or exfiltration features experience reduced recovery time between rainfall events. When available storage capacity is diminished, excess runoff cannot be adequately attenuated, increasing the likelihood of localized flooding.

In combination, constrained conveyance capacity and limited storage or infiltration performance contribute to periodic ponding and localized flooding within Downtown Sebring, especially during high-intensity rainfall events.

Recent and ongoing floodplain modeling efforts by the Southwest Florida Water Management District (SWFWMD)[8] evaluate flood risk in Sebring based on watershed-scale hydrology and multi-day rainfall events, including 100-year storm scenarios that reflect regional rainfall patterns and system response. These modeling efforts provide a more dynamic understanding of flood extents, including areas that may experience flooding due to prolonged rainfall, system capacity limits, or soil saturation.

Federal Emergency Management Agency (FEMA) flood mapping, by contrast, is primarily intended for regulatory and insurance purposes and focuses on identifying Special Flood Hazard Areas (SFHAs)[9] associated with the 1-percent annual chance (100-year) flood. While FEMA maps remain an important regulatory tool, they do not capture all flood mechanisms or localized conditions identified through SWFWMD's watershed-based modeling or local flood hazard data. Together, SWFWMD modeling, FEMA flood maps, and local flood history indicate that flood risk in Sebring extends beyond mapped SFHAs, highlighting the importance of risk-based planning approaches.

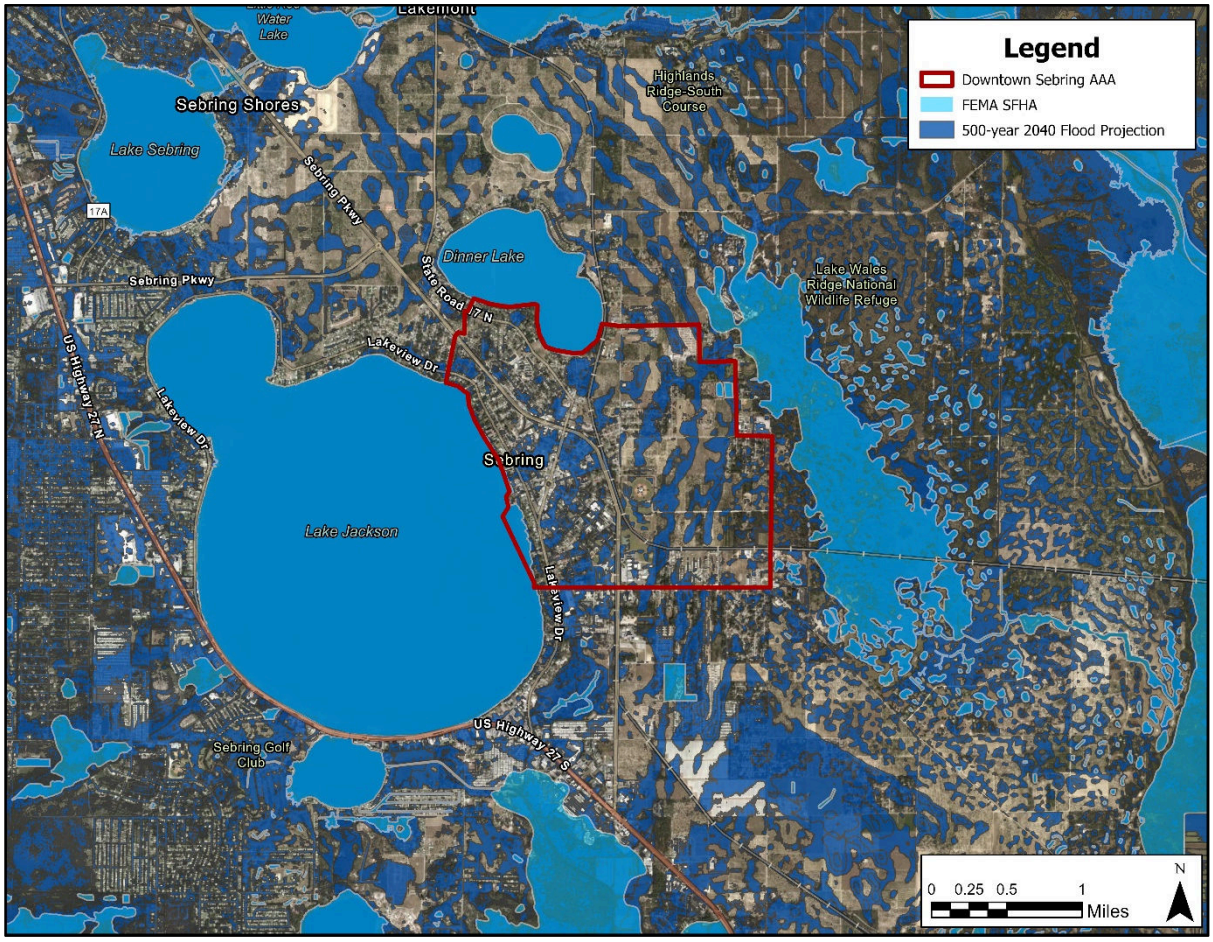

Figure 2: Downtown Sebring AAA and FEMA Special Flood Hazard Areas

2.3 Community Input

Community input informed the identification and prioritization of this AAA through Countywide public meetings and stakeholder engagement conducted as part of the Highlands County broader resilience planning efforts. In contrast to other priority AAAs, this area received multiple location-specific public comments, with four comments submitted directly related to recurring flooding conditions within the AAA boundary. Residents and stakeholders identified parts of the downtown area that experience recurring flooding on county owned property.

These comments reinforced the findings of the County's CVA, which identified this area as experiencing frequent rainfall-induced flooding that affects local mobility and service access. The public feedback helped confirm the presence of chronic flooding issues and emphasized the importance of practical, near-term improvements to reduce repetitive impacts and improve system reliability. This community input supported the prioritization of the AAA and helped inform the development of targeted adaptation strategies focused on localized drainage performance, roadway function, and neighborhood-scale resilience.

3. Adaptation Strategies

3.1 Policy Recommendations

Policy and regulatory strategies can play a critical role in supporting long-term flood risk reduction and resilience, particularly when applied within designated AAAs. The following recommendations focus on aligning land use policies, capital investments, and development standards with identified vulnerabilities to guide future growth and reinvestment in a manner that reduces risk to people, property, and critical infrastructure. As the Downtown Sebring AAA is located within the City of Sebring, these strategies may apply to both Highlands County and the City of Sebring.

Explore Transfer of Development Rights (TDR)

Evaluate the use of Transfer of Development Rights programs to shift development away from flood-prone areas while preserving property value and directing growth toward safer locations.

Integrate Resilience into Comprehensive Plan Updates

Update comprehensive plan policies to incorporate flood risk reduction, climate adaptation, and resilience considerations, ensuring that future land use, infrastructure, and development decisions support long-term community resilience.

Incorporating AAAs into Capital Improvement Program

Integrating AAAs into Capital Improvement Programs helps prioritize infrastructure investments in locations facing the greatest current and future flood risk, supporting more resilient and cost-effective planning.

Adopting Stormwater and Drainage Design Standards

Updating stormwater and drainage design standards ensures new and improved infrastructure accounts for rainfall-driven flooding, groundwater conditions, and future climate stressors, reducing flood impacts and improving long-term system performance.

3.1.1 Adoption of Adaptation Action Areas into Existing Plans and Ordinances

The designation of AAAs within existing Highlands County and the City of Sebring plans and ordinances would establish a clear policy framework for reducing flood risk in the most vulnerable areas. Incorporating AAAs into the Comprehensive Plan, Capital Improvement Program (CIP), hazard mitigation plan, and related policies would support the prioritization of infrastructure investments, help guide redevelopment decisions, and align public funding with established resilience objectives. Formal incorporation of AAAs may also strengthen

eligibility and competitiveness for state and federal resilience and hazard mitigation funding, while promoting consistency across land use, infrastructure planning, and emergency management decisions. In addition, integrating AAAs into the CIP would enable the prioritization of roadway drainage and stormwater improvement projects in flood-prone areas, including targeted investments that address recurring infrastructure and access challenges.

3.1.2 Stormwater Design Standards

Highlands County and the City of Sebring currently rely on stormwater design criteria established by the Florida Department of Environmental Protection (FDEP) and the applicable Water Management Districts (WMDs) which have established the standards required for new and retrofit developments with the intent of managing flooding and protecting water resources and infrastructure. The City of Sebring and portions of Highlands County fall within the Southwest Florida Water Management District (SWFWMD), while other areas of the County are served by the South Florida Water Management District (SFWMD).

In general, local governments should avoid adopting enforceable stormwater design standards that conflict with state permitting requirements; however, they may establish more stringent or supplemental criteria where appropriate to address local conditions, provided these remain consistent with applicable state frameworks. Therefore, it is not recommended broadly to apply enhanced stormwater design requirements beyond current state standards without coordination and technical justification.

Instead, the City and County can work collectively with the local Water Management Districts (WMDs) to identify flood hazard areas and inform where additional floodplain storage may be warranted. Additionally, the City and County can develop more rigorous storm sewer conveyance design requirements for both open channel and closed systems, including considerations for storm frequency, freeboard, erosion control, and maintenance, as these criteria are typically not fully defined by FDEP or the WMDs.

Stormwater Basin Definitions

- **Open Basin System**: A drainage area where rainfall and runoff can flow to a natural outlet, such as a creek, canal, lake, or other downstream drainage feature. In these areas, water has a clear path to move away from roads and developed properties. Under current WMD criteria, open basin stormwater systems are typically designed to manage a 25-year, 24-hour rainfall event.
- **Closed Basin System**: A drainage area or watershed with no surface outfall for rainfall events up to and including the 100-year, 24-hour flood stage. Runoff is retained within the basin and dissipates through infiltration, evaporation, or engineered controls such as pumping or storage. Because water cannot discharge off-site, sufficient storage must be provided to manage stormwater until levels recede. Accordingly, WMD criteria require these systems to be designed for the 100-year, 24-hour rainfall event.

3.1.3 Zoning and Land Use Regulations

Zoning and land development regulations offer an opportunity to reflect localized flood risk within designated AAAs and to guide development toward more resilient outcomes. The use of AAA overlay districts or similar planning tools could allow local governments to apply tailored standards within the most vulnerable areas. These standards may include measures such as limiting increases in density or intensity in flood-prone locations unless appropriate mitigation is provided.

Specific zoning and land use to consider for AAAs may include:

- Preservation of natural drainage features,
- Reducing the allowable impervious surface area amount,
- Incorporation of green infrastructure strategies.

For critical facilities located within or serving AAAs, zoning and development regulations could encourage development in lower-risk areas where feasible and promote enhanced flood protection measures when relocation is not practicable. Together, these approaches would support resilience objectives while maintaining flexibility in local land use decision-making.

3.1.4 Building Codes, Development Guidelines, and the Relationship Between AAAs and SFHAs

Highlands County and the City of Sebring have adopted strong flood-resistant construction standards through the Florida Building Code (FBC), which establishes a statewide minimum, as well as a locally adopted Floodplain Management Ordinances that exceed these requirements, including freeboard standards greater than the National Flood Insurance Program (NFIP) minimums. These regulations provide important protection for development located within mapped SFHAs. However, the effectiveness of SFHA-based regulations is influenced by the inherent limitations of Federal Emergency Management Agency (FEMA)

flood mapping, which is primarily designed to support insurance and regulatory programs and may not fully capture localized drainage constraints, rainfall-driven flooding, infrastructure conditions, or evolving future conditions.

There are areas of localized flooding within Highlands County and the City of Sebring that are driven by factors beyond the riverine or lake flooding which is the primary flooding source shown on the current FEMA maps (effective date 11/18/2015). Localized conditions, including elevated groundwater, intense or prolonged rainfall, lack of runoff storage, constrained or aging drainage infrastructure, limited system maintenance, removal or modification of drainage features, and land cover changes, can contribute to flooding both within and outside mapped SFHAs. These locally observed conditions, combined with projected changes in rainfall intensity, highlight the importance of incorporating localized knowledge and multiple flood mechanisms into planning and decision-making.

AAAs help address these gaps by identifying areas vulnerable to flooding from multiple mechanisms that may not be fully reflected in FEMA flood maps, including rainfall-driven flooding, drainage limitations, infrastructure performance, groundwater conditions, and other climate-related stressors identified through local and regional analyses. As a result, AAAs provide a planning framework that emphasizes observed and anticipated flood risk in addition to FEMA floodplain designation.

Within this context, the County and City may consider whether certain development standards traditionally applied only within SFHAs, such as minimum finished floor elevations, freeboard, floodproofing techniques, use of flood-resistant materials, and site design considerations, could be encouraged, incentivized, or selectively applied within designated AAAs. Applying enhanced standards within AAAs, without formally designating these areas as SFHAs, allows local governments to proactively reduce flood risk while maintaining regulatory flexibility. This approach enables the use of risk-informed standards without triggering federal regulatory requirements tied to SFHA designation, such as mandatory flood insurance or specific development restrictions under the NFIP. It also allows the County and City to tailor requirements to locally observed flood conditions that may not be reflected in FEMA mapping, supporting more adaptive resilience strategies.

3.1.5 Public Engagement Programs

Two of the assets in the Downtown Sebring AAA have considerable amounts of open land around the buildings and other impervious structures on these sites: Sebring High School and the Highlands County Fair Convention Center (fairgrounds). There may be an opportunity to add green infrastructure in those open spaces, like vegetated swales, rain gardens, tree trenches, and more. These types of retrofit stormwater management practices create opportunities to educate the public and leverage their help with adaptation strategies:

- Sebring High School: Students can get involved with designing and building a rain garden for their campus.
- Convention Center: Similar to the high school, volunteers could help with planting any vegetation associated with a green infrastructure stormwater solution. As a community gathering space, there is an opportunity to install educational signage around the green infrastructure. This way, people can learn more about stormwater drainage, solutions, and how they work in plain sight to reduce flooding. The county can also set up educational displays at different events in the center to teach attendees about the flood risk and potential solutions in the Downtown Sebring AAA.

3.1.6 Stormwater Asset Inventory and Data Integration

Stormwater asset inventory and data integration focus on developing a comprehensive understanding of existing drainage infrastructure to support effective stormwater management and resilience planning. These efforts compile and standardize information on system components such as inlets, pipes, conveyance systems, outfalls, and treatment facilities within a centralized database, typically supported through GIS mapping and data management tools.

Common approaches include field verification of infrastructure, consolidation of existing data sources, and integration of asset information with flood modeling and risk assessment results. By organizing stormwater infrastructure data in a consistent and accessible format, communities can better identify system constraints, prioritize retrofit and maintenance needs, and coordinate improvements across facilities and service areas.

Within AAAs, a comprehensive stormwater asset inventory provides a critical foundation for implementing adaptation strategies. By linking infrastructure data with observed and projected flood conditions, communities can more effectively target investments, improve system performance, and support long-term operations and maintenance. This integrated approach enables coordination across site-level and regional strategies, helping to reduce flood risk, improve water quality, and support more efficient use of public resources.

3.2 Resilience Hub

The Urban Sustainability Directors Network[10] (USDN) describes resilience hubs as physical spaces that address both physical and social goals, offering opportunities to strengthen emergency management, reduce climate-related risks, and enhance community resilience. These hubs are designed to support communities before, during and after flooding events while also providing ongoing benefits during normal conditions.

3.2.1 Resilience Hub Considerations

Ideally, resilience hubs are located outside areas subject to current and future flood risk, including areas projected to experience flooding under 100-year and 500-year rainfall

scenarios. Locating hubs in lower-risk areas can help ensure that facilities remain operational during flooding events and reduce the need for extensive floodproofing measures.

However, in some cases, locating a resilience hub within or near a flood-prone area may be both necessary and appropriate to ensure access for vulnerable populations. If a resource is located too far from the community it is intended to serve, particularly populations with mobility constraints or limited transportation options vulnerability, it may not function as an effective resilience hub. In these situations, fortifying an existing asset within a flood-vulnerable area to improve its resilience and functionality can be a more practical and justifiable approach.

Within flood-prone areas, resilience hubs function as multi-purpose community assets that integrate emergency response capabilities, essential services, and flood-resilient design. In the Downtown Sebring AAA, resilience hub planning should prioritize facilities that can continue serving residents during disruptive events while reinforcing long-term resilience.

Resilience hub facilities within the Downtown Sebring AAA should:

- Remain accessible and functional during localized flooding and heavy rainfall events.
- Be capable of operating independently during power outages or extreme rainfall.
- Provide safe, well-identified locations for emergency staging, public information delivery, distribution of resources, or post-event recovery support.

Potential resilience hub strategies include:

- Enhancing existing public or community-serving facilities (e.g., community centers, public works yards, or emergency service facilities) with flood-resilient site design, building retrofits, and elevation or floodproofing where appropriate.
- Co-locating flood mitigation features, including stormwater storage, green infrastructure, permeable surfaces, or groundwater recharge systems, with hub facilities to reduce localized flooding impacts while providing functional community amenities.
- Ensuring resilience hub locations are supported by reliable and resilient transportation access, clear signage, and visibility during flood events to facilitate safe access for residents and emergency responders.
- Incorporating flexible interior and exterior spaces that can support day-to-day community use and transition quickly to emergency or recovery functions during flood and extreme rainfall events (Figure 3).

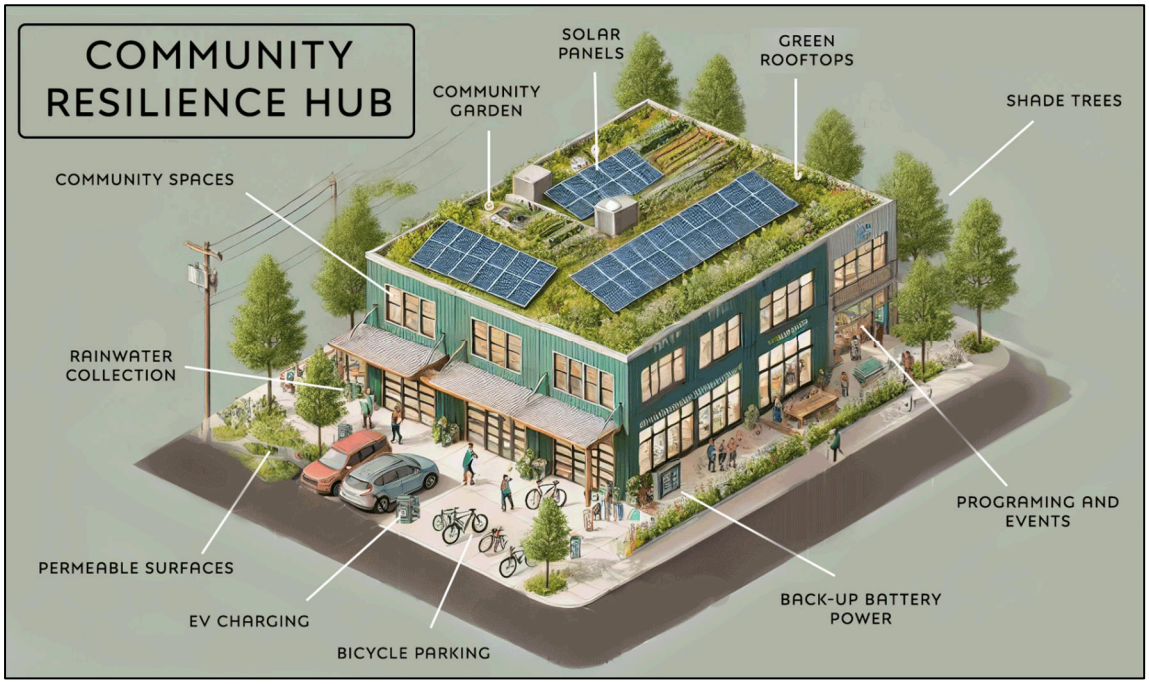

Figure 3: Conceptual resilience hub illustrating flexible space designed for both everyday community use and emergency operations[11].

3.2.2 Downtown Sebring Resilience Hub

The Highlands County Fair Convention Center, located within the Downtown Sebring AAA, represents a strong candidate for resilience hub planning due to its location within a flood-vulnerable area and its role as a major public facility that can support the community before, during, and after flooding and extreme rainfall events.

As part of the Downtown Sebring AAA, resilience hub enhancements at or near the Convention Center could support residents by providing:

- A safe, accessible location for shelter-in-place during localized flooding, severe storms, or emergency events.
- Access to backup power, communications, and potable water during power outages or service disruptions.
- Space for emergency operations, including the distribution of information, emergency supplies, and post-event recovery resources.
- In addition to emergency functions, the Convention Center could support resilience year-round during “blue-sky” conditions through uses such as:
    - Community space for preparedness education, flood awareness, and seasonal readiness activities.
    - Cooling space during periods of extreme heat or poor air quality.
    - Access to information on flood insurance, home retrofits, and available assistance programs.

- Partnerships for periodic food distribution or other essential resource access.

Potential strategies for advancing the Highlands County Fair Convention Center as a resilience hub include:

- Retrofitting existing facilities to support resilience hub functions, such as installing backup power generation, enhancing drainage and floodproofing measures, and improving accessibility.
- Integrating stormwater and green infrastructure improvements on and around the site to reduce localized flooding impacts and enhance system performance.
- Coordinating with County emergency management, public works, social service providers, and regional partners to ensure the facility can effectively support both emergency response and everyday community resilience needs.

3.3 Infrastructure Improvements

The proposed infrastructure improvements provided for the Downtown Sebring AAA focus on addressing localized flooding driven by high-intensity rainfall rates and total rainfall volumes, shallow groundwater conditions, and drainage systems that function as closed or semi-closed basins at the site and neighborhood level. While portions of the AAA are located within a broader open basin that ultimately discharges to Lake Jackson, many roadways and critical assets do not have drainage conveyance systems to convey the water to this outfall. In these locations, flooding is largely controlled by the inability of the local system to store stormwater, convey runoff, and to efficiently infiltrate stormwater into the ground between rainfall events. Unlike coastal areas where flooding is governed by tidal conditions and downstream outfall constraints, flooding in Downtown Sebring is primarily influenced by local stormwater storage and the groundwater interactions which enable this storage to recover between rainfall events.

Existing drainage infrastructure in the area was largely designed based on historical rainfall patterns and groundwater conditions. As rainfall events occur in closer succession, available storage and system recovery are increasingly constrained. Stormwater systems rely on time between storms for pond levels to draw down and soils to drain. When events occur in rapid succession, storage features may already be partially full and soils saturated. This reduces overall system capacity and increases the likelihood of localized flooding.

In response, infrastructure adaptation strategies within the Downtown Sebring AAA should prioritize enhanced stormwater storage, improved conveyance efficiency, and groundwater-aware design practices to maintain roadway functionality, reduce repetitive flooding, and support long-term resilience. The infrastructure approaches outlined in this section

emphasize incremental and scalable improvements that can be implemented individually or coordinated with planned roadway projects, drainage retrofits, and routine maintenance activities.

Individually, these improvements can provide localized reductions in flood risk; when implemented in combination, they can further reduce peak flood elevations, shorten flood duration, and improve the reliability of critical transportation corridors and drainage infrastructure serving the Downtown Sebring AAA.

The following recommendations introduce key resilience concepts applicable to the area, with select strategies discussed in greater detail in subsequent sections of this report.

Localized Stormwater Management Enhancements

Implement site-scale and neighborhood-scale stormwater improvements to reduce localized flooding, manage runoff, and minimize impacts from heavy rainfall events.

Groundwater Awareness Design

Incorporate design approaches that account for high groundwater levels to reduce flood risk and improve long-term performance of public and private developments.

Expand Green Spaces

Increase and enhance parks, open spaces, and landscaped areas, including the acquisition of flood-prone properties, to preserve open land so that it would not be developed while providing stormwater storage, reducing runoff, and improving infiltration where feasible. Expanded green spaces also support improved water quality and provide co-benefits such as heat mitigation, habitat enhancement, and expanded community amenities.

Promote Low-Impact Development

Encourage development practices that minimize impervious surfaces and preserve natural hydrology, including permeable pavements, rain gardens, and on-site infiltration, to reduce flooding and support sustainable growth within AAAs.

Elevate Critical Equipment

Raise essential mechanical, electrical, and communications equipment above anticipated flood levels to reduce damage, maintain functionality during flood events, and support rapid post-event recovery.

Update Building and Roadway Standards

Revise building and roadway design standards to account for current and future flood conditions to reduce damage and maintain access during flood events.

3.3.1 Local Stormwater Management Enhancements

Where closed-basin drainage conditions occur within the Downtown Sebring AAA, infrastructure strategies focus on storing stormwater on site, managing how water moves through the system, and allowing sufficient time for water levels to recede between rainfall events. Key approaches include:

- Implement stormwater retrofits, which may include expanding existing pond capacity and modifying or upgrading existing drainage systems to improve storage efficiency, conveyance, and overall system performance.
- Incorporate passive stormwater features, such as conveyance-oriented swales (including bioswales designed to maintain or enhance flow capacity), enhanced roadside drainage, and shallow storage areas, to improve stormwater movement while providing additional temporary storage where feasible.
- Improving inlet spacing, conveyance continuity, and maintenance access to reduce localized bottlenecks.

3.3.2 Groundwater-Awareness Design

Rising groundwater levels reduce the effectiveness of infiltration-based systems which are prevalent in the closed-basin areas of the AAA. Future infrastructure improvements within these areas should:

- Account for seasonal high and long-term groundwater elevations in drainage and roadway design.
- Use lined or partially lined stormwater storage systems designed to remain dry under normal conditions, such as systems that rely on subsurface filtration layers beneath the pond bottom. Liners prevent groundwater intrusion while allowing these systems to function effectively for stormwater filtration, controlled drawdown, and storage recovery.
- Incorporate controlled discharge strategies, including pumping systems with defined operating controls consistent with County or State regulations, where gravity outfall is not feasible.

3.3.3 Roadway and Transportation Resilience

Roadways within the AAA experience flooding that can disrupt access and emergency response, even when structural damage is minimal. Adaptation measures include:

- Targeted roadway elevation increases in areas with repetitive flooding.
- Designing road profiles that safely convey shallow flooding without damaging pavements or adjacent properties.
- Coordinating roadway improvements with underground drainage and utility upgrades to maximize long-term benefits.

4. Proposed Adaptation Strategies

4.1 Concept Designs

4.1.1 Roadway Stormwater Retrofits

Roadway stormwater retrofits enhance the resilience of existing transportation corridors by improving drainage capacity and managing runoff more effectively during heavy rainfall events. These improvements are typically implemented within existing rights-of-way and can be coordinated with routine roadway maintenance or safety projects.

Common retrofit strategies include raising low-lying roadway segments, adding or upgrading stormwater inlets, and incorporating nature-based features such as rain gardens or bioretention areas along medians, shoulders, or adjacent corridors. Together, these measures reduce roadway flooding, improve water quality, and limit downstream impacts by increasing stormwater capture, storage, and infiltration.

Within AAAs, roadway stormwater retrofits help maintain critical access, support evacuation routes, and reduce flood risk while providing flexible, cost-effective resilience upgrades to existing infrastructure. Figure 4 includes examples of different types of roadway stormwater retrofits.

Figure 4: Examples of Roadway Stormwater Retrofits

4.1.2 Site-Level Stormwater Retrofits

Site-level stormwater retrofits improve flood resilience at County-owned facilities, including County offices, schools, and public community centers, by reducing on-site flooding to protect these critical assets. These retrofits focus on managing stormwater close to where it is generated and are particularly effective for mitigating localized flooding impacts within developed areas.

Common retrofit measures include raising or hardening critical infrastructure, installing or upgrading stormwater inlets and conveyance, and incorporating green infrastructure such as rain gardens, bioretention areas, permeable pavement, and enhanced drainage controls. These improvements help capture, store, and treat runoff while reducing peak flows and runoff volumes to downstream systems.

Within AAAs, site-level stormwater retrofits help ensure the continued operation of essential public services during and after rainfall events. By protecting buildings that serve emergency, educational, and community functions, these strategies enhance public safety, reduce repair and maintenance costs, and support long-term resilience of public assets. Figure 5 illustrates examples of different types of site-level flood protection and stormwater retrofits.

Figure 5: Examples of Site-Level Flood Protection Stormwater Retrofits

4.1.3 Open Space and Nature-Based Solutions

Open space and nature-based solutions leverage parks, school grounds, community centers, and other publicly accessible lands to manage stormwater while delivering environmental and community co-benefits. These strategies use natural systems and landscape features to slow, store, and treat runoff, reducing flood risk and improving water quality within developed areas.

Common approaches include rain gardens, bioretention areas, vegetated swales, expanded green space, and permeable walkways or plazas that intercept stormwater from roofs, sidewalks, and parking areas. When integrated into schools and community centers, these features can also support passive recreation, urban cooling, and outdoor learning opportunities.

Within AAAs, open space and nature-based solutions provide flexible, scalable flood mitigation that complements traditional infrastructure. By restoring or enhancing natural hydrologic functions, these strategies help reduce localized flooding, increase neighborhood resilience, and improve quality of life while supporting long-term adaptation goals. Figure 6 includes examples of different types of open space and natural-based solutions for public spaces.

Figure 6: Examples of Open Space and Nature-Based Solutions

4.1.4 Regional and Interconnected Solutions

Regional and interconnected stormwater solutions focus on managing runoff at a broader watershed or multi-facility scale, rather than solely within individual parcels or corridors. These systems typically serve multiple contributing areas and public facilities, such as county offices, libraries, schools, and community centers, through shared stormwater infrastructure designed to reduce flood risk and improve systemwide performance.

Common regional strategies include regional stormwater ponds, centralized treatment and detention facilities, and coordinated drainage networks that accept runoff from nearby roadways, parking areas, and developed sites. By consolidating stormwater storage and control into fewer, strategically located facilities, regional systems can more effectively attenuate peak flows, improve water quality, and reduce downstream flooding impacts.

Within AAAs, regional and interconnected stormwater solutions provide a scalable and efficient approach to resilience planning. These systems are particularly well-suited for redevelopment areas and publicly owned lands, where coordinated planning can maximize benefits while minimizing maintenance complexity. Regional facilities also offer opportunities for integration with open space and passive recreation, supporting both flood mitigation and community goals. By shifting from isolated, site-by-site solutions to coordinated regional infrastructure, communities can improve long-term flood resilience, reduce cumulative impacts, and make more effective use of limited public resources. Figure 7 illustrates an example of a regional and interconnected stormwater management system for public facilities.

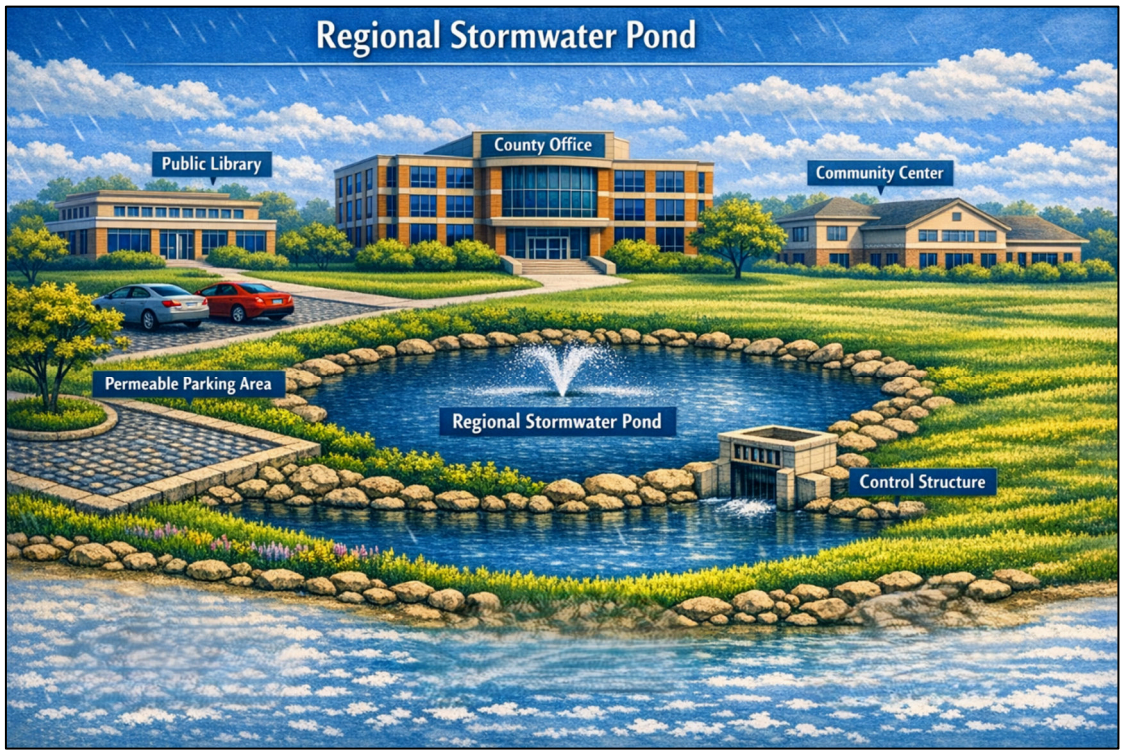

Figure 7: Example of a Regional Stormwater Management System

4.2 Conceptual Capital Improvement Projects

This section presents a series of conceptual capital improvement projects intended to illustrate potential adaptation strategies within the Downtown Sebring AAA. These concepts are provided to demonstrate how resilience-focused design approaches may be applied to address localized flooding, drainage limitations, and long-term infrastructure performance. The associated visuals are conceptual and were generated using artificial intelligence (AI) tools to support high-level planning discussion. Images may not fully reflect existing site conditions and may depict elements or modifications that are beyond the scope of the proposed improvements. These visuals are intended for illustrative purposes only and should not be interpreted as final design recommendations.

4.2.1 Sebring High School

Estimated Project Cost: $1.2M – $1.6M

Lead Agency: Highlands County School Board, Facilities and Maintenance

Supporting Agencies: County Public Works / Stormwater Division

Anticipated Implementation Timeframe: 6-12 months of design and permitting, followed by approximately 9-12 months of construction

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Project Overview

Existing Conditions

Sebring High School is a developed educational campus characterized by large buildings, paved access drives, parking areas, and athletic facilities. The site relies primarily on surface drainage, shallow swales, and onsite ponding areas to manage stormwater runoff. Existing stormwater features provide limited detention capacity and are constrained by flat topography and surrounding development.

During moderate to heavy rainfall events, portions of the campus experience localized ponding and slow percolating soils that reduce the recovery of onsite drainage, particularly in low-lying areas near existing outfalls and along campus frontage. These conditions increase the potential for water encroachment toward building perimeters and pedestrian access routes.

Critical electrical and mechanical equipment serving campus facilities is currently located at or near grade, making it vulnerable to damage during flood events. Existing drainage conveyance features are functional but lack redundancy and capacity to manage increased rainfall intensity associated with extreme rainfall events.

The combination of expansive impervious surfaces, limited vertical relief, and aging drainage infrastructure contributes to elevated flood risk for buildings, utilities, and site access during

extreme rainfall. Without targeted site-level improvements, these conditions are expected to worsen over time, increasing operational disruptions, maintenance costs, and infrastructure vulnerability.

Figure 8: Existing Conditions of Sebring High School

Adapted Conditions

Sebring High School is a critical public facility that serves not only as an educational campus but also as an important community asset during emergency and recovery operations. The proposed project consists of a series of site-level flood protection and stormwater management improvements designed to reduce localized flood risk, protect critical electrical and mechanical systems, and improve the overall resilience of the campus to extreme rainfall events.

The recommended improvements, illustrated in Figure 9, combine traditional stormwater infrastructure with nature-based solutions designed to be compatible with existing campus operations, long-term maintenance capabilities, and future capital improvements.

Figure 9: Adapted Conditions of Sebring High School

Proposed Improvements

Elevated Critical Electrical and Mechanical Assets: Critical electrical and mechanical equipment, including transformers and control panels, will be elevated on reinforced concrete pads above anticipated flood elevations. This measure will reduce damage during flooding events and support continuity of operations during and after major storms.

Flood Protection Berms and Localized Grading Enhancements: Low-profile earthen berms and strategic grading improvements will be installed between stormwater storage areas and school buildings. These passive protection measures redirect shallow floodwaters away from structures while maintaining campus access, safety, and aesthetics.

Enhanced Onsite Stormwater Detention and Outfall Improvements: Existing detention areas will be expanded and regraded to increase stormwater storage capacity during heavy rainfall events. Culvert outfalls will be stabilized and upgraded to improve hydraulic performance, reduce upstream ponding, and minimize erosion.

Roadside and Perimeter Swales: Shallow swales will be installed along the campus frontage and perimeter to capture roadway and offsite runoff before it enters the campus, reducing nuisance flooding and managing external drainage contributions.

Vegetated Bioswales and Naturalized Drainage Features: Vegetated bioswales and naturalized channels will be installed to intercept runoff from paved and landscaped areas. These systems reduce flow velocities, provide water quality treatment through filtration and infiltration, and improve overall drainage efficiency.

Permeable Pavement Walkways: Select pedestrian walkways and access routes will be retrofitted with permeable pavement to reduce surface runoff, improve drainage near building entrances, and enhance pedestrian safety during rainfall events.

Project Benefits

The proposed improvements will:

- Reduce flood risk to school buildings and critical infrastructure
- Improve onsite stormwater storage and conveyance capacity
- Enhance protection of a critical public facility during extreme rainfall events
- Reduce operational disruptions and repair costs following rainfall events
- Improve water quality and downstream stormwater impacts
- Provide visible, community-supported resilience investments consistent with regional planning goals

The improvements are designed to be scalable and may be implemented in phases depending on available funding.

Preliminary Cost Estimate (Planning-Level)

Improvement Category	Estimated Cost Range
Elevated electrical and mechanical equipment	$250,000 - $350,000
Flood protection berms and grading	$200,000 - $300,000
Detention enhancements and culvert upgrades	$300,000 - $400,000
Bioswales and vegetated conveyance	$150,000 - $250,000
Permeable pavement walkways	$100,000 - $150,000
Roadside and perimeter swales	$75,000 - $125,000
Estimates Total Project Cost	**$1.2 - $1.6 M**

Costs include planning-level assumptions for design, permitting, and construction and will be refined during project design.

4.2.2 Highlands County Fire Rescue EMS #17

Estimated Project Cost: $1.1 – $1.9M
Lead Department/Agency: Highlands County Fire Rescue / Emergency Medical Services
Supporting Agencies/Departments: Highlands County Public Works / Stormwater; Facilities Management; Emergency Management; Utilities (as applicable)
Anticipated Implementation Timeframe: 6-12 months for design and permitting, followed by approximately 6-9 months of construction

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Project Overview

Existing Conditions

The Highlands County Fire Rescue/EMS facility consists of an active emergency response building with vehicle bays, paved access drives, parking areas, and utility infrastructure located adjacent to public roadways. The site is generally flat, with little elevation difference between the building, access drive, and surrounding landscape.

Stormwater runoff from roofs, pavement, and adjacent right-of-way drains across hard-paved surfaces and turf areas toward low points near the building frontage and driveway entrance. Drainage infrastructure appears limited to surface grading and roadside conveyance, with no visible flood barriers or detention features adjacent to critical assets.

Electrical service equipment, communications infrastructure, and mechanical systems serving the station are located at or near grade, including near building walls and drive areas subject to runoff. These conditions increase exposure to shallow flooding and localized ponding during intense rainfall events.

Given the facility's role in emergency response, medical transport, and disaster operations, any flood-related disruption to access, power, or communications represents a significant operational and public safety risk.

Figure 10: Existing Conditions of Highlands County Fire Rescue EMS #17

Adapted Conditions

This project proposes site-level flood protection and critical infrastructure resilience improvements for the Highlands County Fire Rescue / EMS facility. The focus is on protecting emergency operations, maintaining access during rainfall events, and hardening essential systems against flood damage.

Improvements emphasize elevation, floodproofing, and controlled drainage using proven engineering solutions appropriate for emergency facilities, while ensuring uninterrupted response capability before, during, and after extreme rainfall events.

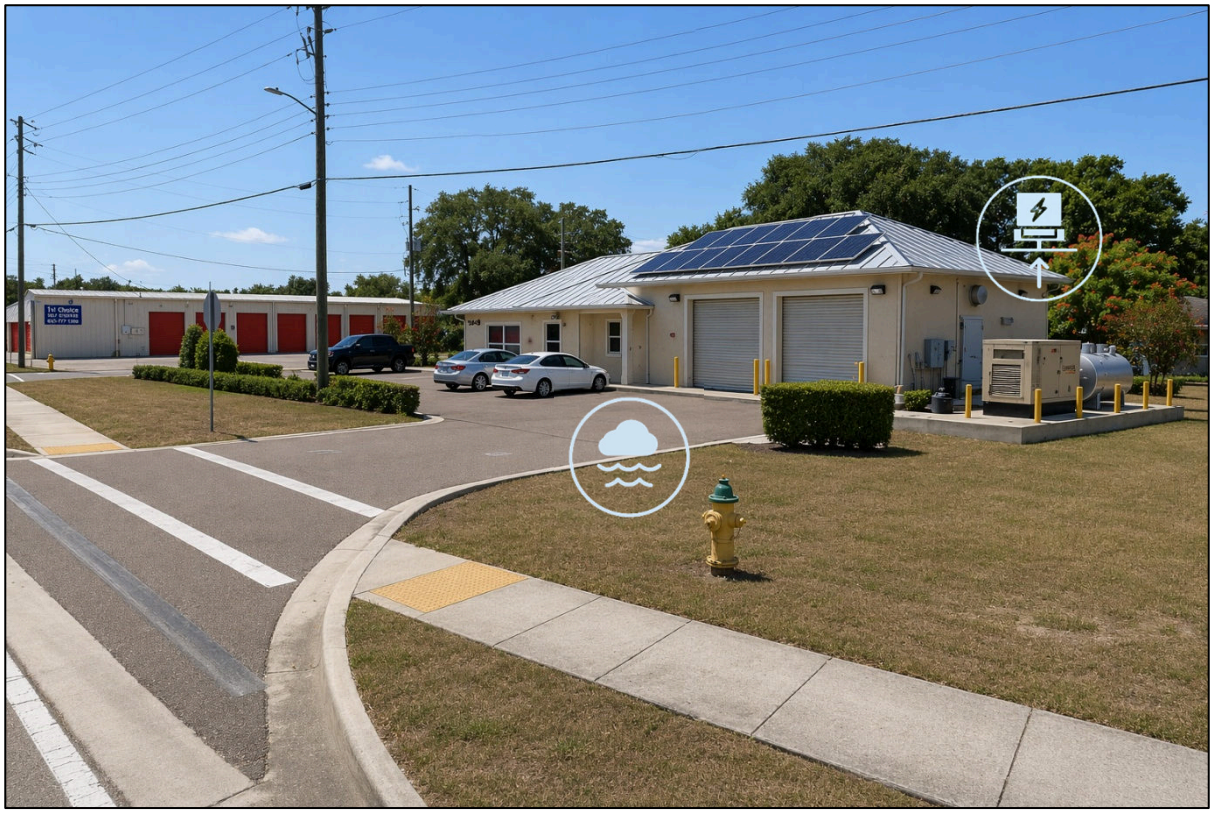

Figure 11: Adapted Conditions of Highlands County Fire Rescue EMS #17

Proposed Improvements

Resilient Operations Features: Operational resilience would be enhanced by coordinating infrastructure improvements with existing backup power systems and facility layouts. Site design would support continued EMS and fire operations during rainfall events while minimizing disruptions to critical services.

Elevation and Hardening of Critical Equipment: Critical electrical, backup power, and communications equipment would be elevated above anticipated flood levels. Where feasible, vulnerable controls would be relocated to raised pads or platforms, and water-resistant enclosures and quick-disconnect systems would be installed to reduce damage and facilitate rapid recovery.

Emergency Access Protection: Emergency access would be protected through minor reinforcement and elevation adjustments at driveway approaches to maintain vehicle access during rainfall events. Improved drainage slopes and clear identification of emergency routes would support reliable access under adverse conditions.

Improved Site Drainage, Conveyance, and Flood Protection for Building Perimeter: Flood protection efforts would emphasize preserving the performance of the existing onsite stormwater management system through consistent custodial and maintenance practices. Routine activities such as debris removal, sediment cleanout, and inspection of inlets, conveyance features, and control structures would ensure the system continues to function as designed and effectively manage runoff during rainfall events. In conjunction with these efforts, site drainage improvements would address localized ponding along driveways and access areas through the addition or retrofit of inlets, trench drains, and other surface collection features. These improvements would enhance capture and provide positive conveyance to downstream systems, reducing the potential for runoff to reach the building. Maintaining positive drainage patterns around the structure through minor grading repairs and upkeep of curb and gutter infrastructure would further support proper flow routing away from the building and minimize the risk of onsite flooding.

Project Benefits

- Protects a critical emergency response facility from flood-related disruption
- Reduces risk of damage to electrical, communications, and life-safety systems
- Maintains emergency vehicle access during severe rainfall events
- Lowers future repair and downtime costs associated with flooding
- Enhance community resilience and continuity of essential services
- Aligns facility condition with modern standards for emergency infrastructure resilience

Preliminary Cost Estimate (Planning-Level)

Improvement Category	Estimated Cost Range
Building floodproofing and grade modifications	$250,000 - $400,000
Elevation/flood hardening of electrical and communications equipment	$300,000 - $500,000
Driveway, access, and drainage retrofits	$250,000 - $450,000
Drainage structures (inlets, trench drains, outfalls)	$150,000 - $300,000
Design, permitting, and construction management	$150,000 - $250,000
Estimates Total Project Cost	**$1.1 - $1.9 M**

Costs include planning-level assumptions for design, permitting, and construction and will be refined during project development.

4.3 Potential Funding Sources

Implementation of adaptation strategies within the Downtown Sebring AAA may be supported through a combination of state, federal, and local funding sources, as well as partnerships with public and private entities. When a project addresses multiple benefits including flood mitigation, stormwater management, water quality, emergency access, or infrastructure resilience, they are more competitive for a variety of funding opportunities.

4.3.1 Grant and Public Funding Opportunities

Florida Department of Environmental Protection (FDEP) – Resilient Florida Program

The Resilient Florida Program provides planning and implementation grants to local governments for projects that reduce flood risk and improve community resilience to sea level rise, storm surge, and rainfall-driven flooding. Eligible projects include stormwater improvements, drainage upgrades, floodproofing, and nature-based solutions. Access to funding typically requires an adopted vulnerability assessment or adaptation plan and submittal of a competitive grant application during FDEP's annual Resilient Florida funding cycle.

FEMA Hazard Mitigation Assistance (HMA) Programs

FEMA-administered Hazard Mitigation Assistance programs—including the Building Resilient Infrastructure and Communities (BRIC), Hazard Mitigation Grant Program (HMGP), and Flood Mitigation Assistance (FMA)—support projects that reduce long-term risk from flooding. Eligible activities include stormwater infrastructure improvements, roadway elevation, protection of critical facilities, and drainage enhancements. Applications are submitted through the State of Florida as the funding applicant, and projects must demonstrate cost-effectiveness and consistency with local hazard mitigation plans.

Florida Department of Transportation (FDOT) Resilience and Drainage Programs

FDOT offers funding opportunities for resilience, drainage, and flood mitigation improvements when projects are located along or adjacent to State roadway corridors. These programs may support drainage retrofits, stormwater capacity enhancements, or roadway resilience measures that protect transportation infrastructure. Access typically occurs through coordination with FDOT District staff during project planning, inclusion in FDOT work programs, or partnership agreements when local adaptations align with state transportation priorities.

South Florida Water Management District (SFWMD)

The South Florida Water Management District provides cost-share and cooperative funding for projects that improve regional water management, drainage efficiency, flood protection, and water resource sustainability. Eligible projects may include stormwater conveyance improvements, regional drainage enhancements, or projects with benefits beyond local jurisdictional boundaries. Funding is generally pursued through SFWMD's cooperative funding programs and coordination during annual budget and work plan cycles.

EPA or FDEP Water Quality Grant Programs

Projects that provide water quality benefits—such as nutrient reduction, stormwater treatment, or green infrastructure—may be eligible for funding through U.S. Environmental Protection Agency (EPA) or Florida DEP water quality grant programs. These programs often prioritize projects that reduce pollutant loads to impaired waters or improve stormwater treatment performance. Local governments typically access these funds through competitive grant applications coordinated with DEP or regional watershed initiatives.

4.3.2 Local and Partnership-Based Funding

County and Municipal Capital Improvement Programs (CIPs)

Local Capital Improvement Programs provide a primary mechanism for funding priority adaptation projects over a multi-year planning horizon. Incorporating AAA projects into adopted CIPs can help leverage matching funds for state or federal grants and ensure long-term implementation.

Interlocal Agreements

Interlocal agreements between Highlands County, municipalities, and special districts can facilitate shared funding responsibilities and coordinated implementation for projects with cross-jurisdictional benefits, such as drainage systems or roadway corridors.

Public–Private Partnerships

Public–private partnerships may support site-specific or redevelopment-related mitigation improvements, particularly where adaptation strategies align with private investment, redevelopment plans, or infrastructure upgrades.

Developer Contributions and Mitigation

Developer contributions, impact fees, or mitigation measures associated with redevelopment projects may provide opportunities to implement stormwater, drainage, or resilience enhancements consistent with AAA objectives. Strategically packaging projects that address flood mitigation, water quality, emergency access, and community benefit can improve competitiveness across multiple funding programs and increase the likelihood of successful implementation.

4.4 Implementation Timeline

Implementation of adaptation strategies is anticipated to occur over a phased, multi-year timeline, allowing flexibility as data, funding, and partnerships evolve. Policy and regulatory recommendations supporting these actions are outlined in Section 3.1; this section focuses on the sequencing and implementation of capital, programmatic, and coordination-based strategies.

4.4.1 Near-Term (0–3 Years)

- Complete stormwater asset inventory and data integration
- Advance conceptual designs to feasibility or preliminary engineering
- Implement low-cost, high-impact site-level retrofits
- Integrate AAA priorities into local CIP planning and grant applications

4.4.2 Mid-Term (3–7 Years)

- Design and construct priority roadway and storage improvements
- Implement nature-based solutions within parks and public lands
- Coordinate drainage improvements with scheduled roadway or utility projects
- Secure implementation funding through state and federal programs

4.4.3 Long-Term (7+ Years)

- Implement regional or interconnected drainage solutions
- Continue phased upgrades tied to redevelopment and infrastructure renewal
- Reassess priorities using updated data and performance monitoring
- Adapt strategies to reflect changing rainfall patterns and groundwater conditions

5. Next Steps and Conclusion

The Downtown Sebring AAA presents an opportunity for Highlands County and the City of Sebring to translate countywide and localized vulnerability assessment findings into targeted, implementable resilience actions. Flooding within the Downtown Sebring AAA is primarily driven by intense and prolonged rainfall events, shallow groundwater conditions, and localized drainage constraints within a largely developed, urban environment. These conditions necessitate context-specific solutions that prioritize system storage, recovery time, and protection of critical roadways and community assets.

The strategies outlined in this plan emphasize practical, scalable actions that can be implemented incrementally and coordinated with planned roadway projects, drainage retrofits, and routine infrastructure maintenance. While many recommendations can be undertaken as standalone improvements, the greatest resilience benefits will be realized through coordinated implementation as part of a long-term, adaptive strategy. Successful implementation will depend on continued interagency coordination, integration of AAA priorities into existing planning and capital programs, and strategic leveraging of available funding sources.

5.1 Recommended Next Steps

To advance the Downtown Sebring AAA from planning to implementation, the following actions are recommended:

- **Integrate the AAA into County and City planning frameworks** – Incorporate the Downtown Sebring AAA into applicable Comprehensive Plan policies, Capital Improvement Programs, stormwater master plans, and hazard mitigation initiatives to ensure consistency and guide future investment decisions.
- **Advance priority projects to feasibility and design** – Identify near-term, high-impact drainage and roadway resilience improvements for feasibility evaluation or preliminary engineering to improve grant readiness and support capital programming.
- **Strengthen coordination among local partners** – Continue coordination between Highlands County, the City of Sebring, public works, utilities, emergency management, and other key stakeholders to align roles, responsibilities, and implementation pathways, particularly for shared infrastructure and facilities.
- **Pursue funding and phase implementation** – Package priority projects to align with state and federal funding opportunities, including the Resilient Florida Program, FEMA Hazard Mitigation Assistance programs, and water management district cost-share initiatives, while advancing lower-cost or maintenance-based improvements through local funding sources.

- **Monitor conditions and adapt over time** – Use updated rainfall data, drainage performance observations, and future vulnerability assessments to refine priorities and adjust strategies as conditions evolve.

Through continued investment, coordination, and adaptive management, the Downtown Sebring AAA demonstrates how the Adaptation Action Area framework can be used to proactively reduce flood risk, support safe and reliable transportation, protect critical community assets, and strengthen long-term resilience in a developed, inland urban setting.

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