March 2026

Highlands County
Vulnerability Assessment

FDEP AGREEMENT: 23PLN116





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FDEP AGREEMENT NO. 23PLN116

HIGHLANDS COUNTY COMPREHENSIVE VULNERABILITY ASSESSMENT

March 31, 2026

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EXECUTIVE SUMMARY

Project Title

Highlands County Comprehensive Vulnerability Assessment

Project Location

The project is located in Highlands County, Florida. A location map outlining the Highlands County study area for the project has been provided in Figure 1.

Highlands County, designated as one of Florida's Rural Areas of Opportunity (section 288.0656(d)), Florida Statutes, is a rural, inland county in central Florida, covering approximately 1,029 square miles. The county is a prime location providing east/west and north/south market accessibility with close proximity to a number of major tourist attractions. Over 86 percent of the state's population is within a 150-mile radius with access to over 12 million potential customers. The County is home to three growing municipalities: Avon Park, Sebring, and Lake Placid. The Lake Wales Ridge is a globally significant geological feature that runs for about 150 miles north to south through Lake, Orange, Polk, and Highlands Counties. The County also has two improvement districts: Spring Lake Improvement District and Sun N' Lake Improvement District.

The County is known for its diverse landscapes, including agricultural lands, natural preserves, and numerous lakes. The County is bordered by Polk County to the north, Okeechobee County to the east, Glades County to the south, and Hardee and DeSoto counties to the west. Agriculture plays a significant role in the local economy, with citrus groves, cattle ranches, and row crops being prominent. The 2025 estimated population of the county was 107,976 (University of Florida Bureau of Economic and Business Research).

Water resources are a defining feature of Highlands County, with Lake Istokpoga being one of the largest lakes in Florida. The county contains portions of the Kissimmee River, a critical waterway that feeds into Lake Okeechobee and the Everglades. However, like other inland Florida counties, Highlands County is vulnerable to flooding, especially from heavy rainfall and tropical systems. Low-lying areas and lakefront communities are particularly at risk, with flooding events affecting roadways, homes, and agricultural operations.

Highlands County has experienced severe flooding in recent years due to tropical storms and hurricanes. During Hurricane Irma in 2017, heavy rainfall led to widespread flooding, causing road closures and damage to homes and farms. More recently, in September 2022, Hurricane Ian brought significant rainfall and high-water levels, impacting communities around Lake Placid, Sebring, and Avon Park. These events underscore the County's ongoing challenges with flood management and the importance of resilience planning to mitigate future risks.

Project Description

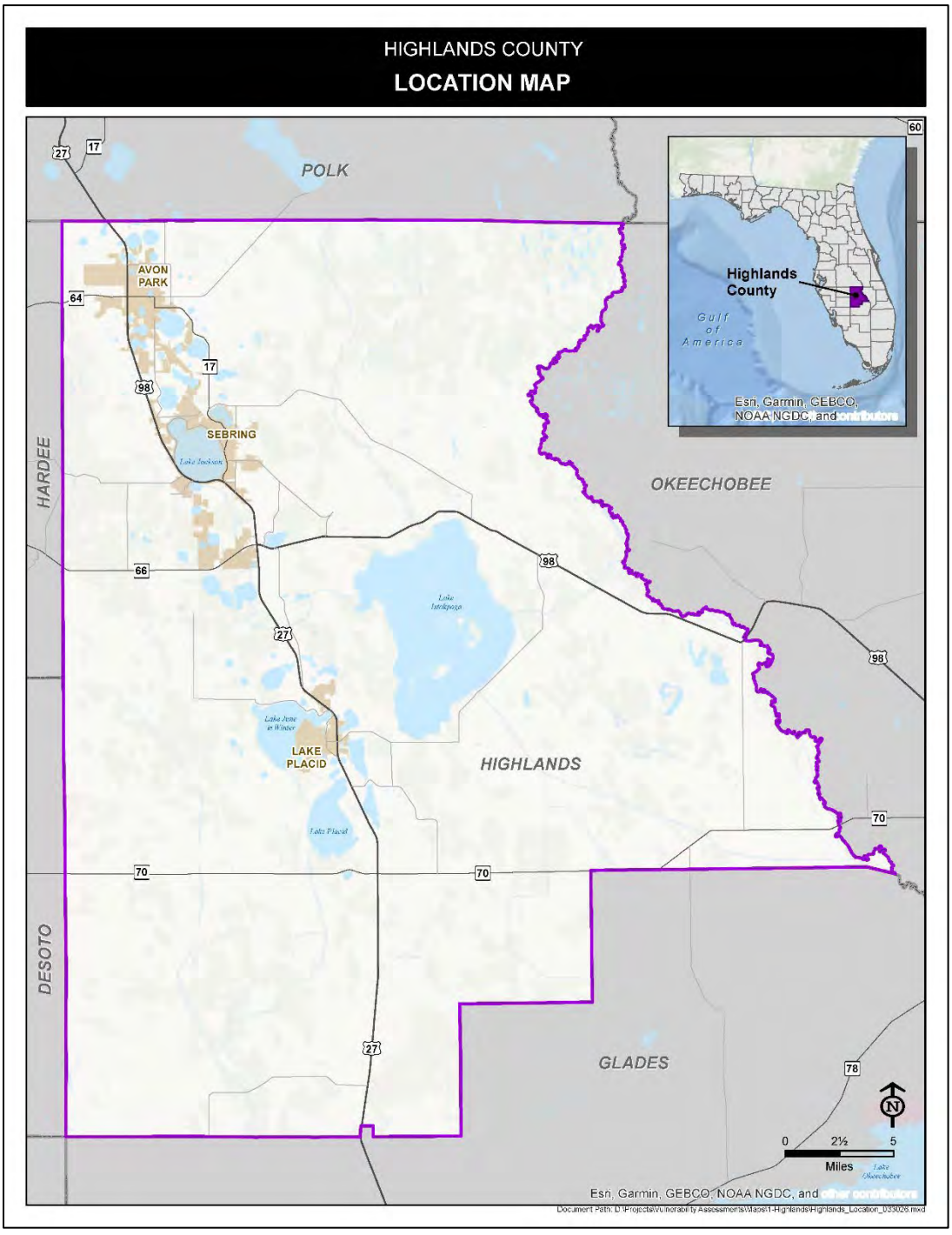
While the title of this project only says Highlands County Comprehensive Vulnerability Assessment, the Assessment includes the municipalities Avon Park, Lake Placid, and Sebring. Highlands County, in partnership with the Central Florida Regional Planning Council, completed the Highlands County Comprehensive Vulnerability Assessment Project (Project) pursuant to Section 380.093, Florida Statutes (F.S.) for Highlands County as well as the municipalities of Avon Park, Lake Placid, and Sebring. The Project also informs a Local Mitigation Strategy and includes stakeholder engagement and public outreach.

Purpose

This document is provided to ensure state-funded Vulnerability Assessments (VAs) are standardized to meet the requirements of the statute, s. 380.093, F.S., and to maximize funding for the Florida Department of Environmental Protection's Resilient Florida Program grant awardees. The standardized scope of work guidance is designed to assist local governments, both coastal and noncoastal, in developing the project, project cost estimates, and assist communicating requirements to consultants, when applicable, in the preparation of a statutorily compliant VA. Additionally, a minimum standard for locally performed VAs are necessary to provide a common framework for the development of a statewide assessment. This guidance will refer to the "project team" which represents either the local government and/or any contracted third parties including consultants, project managers, GIS professionals, engineers, hydrologists, etc.

The purpose of this VA is to systematically analyze the exposure and vulnerability of assets, infrastructure, and populations in Highlands County to various hazards such as flooding and extreme rainfall. The assessment is critical for identifying and evaluating vulnerabilities that natural hazards pose to the County and developing actionable steps to address evolving vulnerabilities.

Figure 1: Highlands County Base Map



ACRONYMS & ABBREVIATIONS

Table 1: Acronyms and Abbreviations

500-year Flood Event	.2% Annual Chance
200-year Flood Event	.5% Annual Chance
100-year Flood Event	1% Annual Chance
AAA	Adaptation Action Area
CA	Critical Asset
CCVI	Climate Change Vulnerability Index
CFRPC	Central Florida Regional Planning Council
CHHA	Coastal High Hazard Area
CIP	Capital Improvement Plan
CPA	Community Planning Act
CRS	Community Rating System
CVI	Coastal Vulnerability Index
DCIA	Directly Connected Impervious Area
DEM	Digital Elevation Model
DSAS	Digital Shoreline Analysis System
EAR	Evaluation and Appraisal Review
EPA	United States Environmental Protection Agency
F.S.	Florida Statutes
FDEM	Florida Division of Emergency Management
FDEP	Florida Department of Environmental Protection
FDOT	Florida Department of Transportation
FEMA	Federal Emergency Management Agency
FFE	First Floor Elevation
FIRM	Flood Insurance Rate Map
GDB	Geodatabase
GI	Green Infrastructure
GIS	Geographic Information System
LID	Low Impact Development
LiDAR	Light Detection and Ranging
LMS	Local Mitigation Strategy
MHHW	Mean Higher High Water
NFIP	National Flood Insurance Program
NHM	National Hydrologic Model
NOAA	National Oceanic and Atmospheric Administration
SFHA	Special Flood Hazard Area
SLOSH	Sea, Lake, and Overland Surges from Hurricanes
SLR	Sea Level Rise
TDR	Transfer of Development Rights
TIA	Total Impervious Area
USACE	United States Army Corps of Engineers
USGS	United States Geological Survey
VA	Vulnerability Assessment
WTP	Water Treatment Plant
WWTP	Wastewater Treatment Plant

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COMMITTEE AND MEETINGS

Kick Off Meeting

A project kickoff meeting was convened on October 23, 2023, with key stakeholders representing Highlands County and the Central Florida Regional Planning Council to formally initiate the Vulnerability Assessment in accordance with the requirements of the Florida Department of Environmental Protection (FDEP) Resilient Florida Program. The purpose of this meeting was to confirm the project's scope, establish a shared understanding of the assessment framework, and review the proposed project schedule to ensure alignment with statutory guidance and grant deliverable timelines. During the meeting, the project team presented an overview of the datasets compiled prior to project initiation, including preliminary critical asset inventories and available hazard data relevant to inland flooding and rainfall-driven impacts. This initial coordination step ensured all participating agencies had a consistent understanding of the methodology and expectations for the vulnerability assessment process.

In addition to scope and data review, the kickoff meeting served as a collaborative working session to identify additional data needs, existing data gaps, and opportunities for interagency coordination consistent with Resilient Florida Program guidance. Stakeholders provided input on locally maintained datasets, including infrastructure, facilities, and transportation networks, which are essential for conducting comprehensive exposure and sensitivity analysis. The group also discussed the formation of a project steering committee to guide decision-making, validate technical assumptions, and support stakeholder engagement throughout the assessment. These efforts established a strong foundation for a data-driven, stakeholder-informed vulnerability assessment that meets the technical standards and intent of the Resilient Florida Program, while ensuring that Highlands County's unique inland characteristics and resilience priorities are appropriately represented.

Steering Committee

Steering Committee members were identified, vetted, and formally confirmed during the initial committee meetings held on January 19 and January 22, 2024. These meetings established the foundation for a coordinated, multi-agency governance structure to guide the vulnerability assessment process. Participation included representatives from Highlands County, regional partners, and technical subject matter experts to ensure a comprehensive and interdisciplinary approach.

Figure 2: Highlands County Steering Committee Meeting March 24, 2024

Following these initial meetings, the Steering Committee convened regularly throughout the duration of the project to review interim findings, evaluate draft deliverables, and provide technical guidance on key analytical components. These iterative meetings facilitated a transparent and collaborative review process, allowing for refinement of methodologies, validation of results, and incorporation of local knowledge. To support stakeholder engagement and enhance data accessibility, an interactive map viewer was developed to visualize spatial datasets, hazard scenarios, and exposure results in a user-friendly format. This tool enabled committee members to explore and assess vulnerabilities in real time, strengthening informed decision-making and ensuring that the final assessment reflects both robust technical analysis and stakeholder input.

Public Outreach Meetings and Presentations

Figure 3: Steering Committee Meeting March 5, 2024

A series of public outreach meetings and presentations were conducted as part of the project to support stakeholder engagement and incorporate community input into the Vulnerability Assessment. The first public outreach meeting was held on January 22, 2024, at the Bert J. Harris Agricultural Center. This meeting served as the initial opportunity for community members to participate in the Vulnerability Assessment process during the early data collection phase. The purpose of the meeting was to gather local knowledge, identify community priorities, and better understand perceived risks and vulnerabilities from a public perspective. Attendees provided valuable input on key guiding factors, including areas of concern related to flooding, infrastructure resilience, and environmental conditions, as well as the identification of critical community assets for further evaluation. This early engagement helped ensure that the assessment reflects both technical analysis and the lived experiences of Highlands County residents.

To support effective outreach and encourage meaningful participation, Highlands County prepared a comprehensive suite of engagement materials. These materials included public notices, social media announcements, meeting invitations, presentations, graphics, and other supporting documentation designed to clearly communicate project objectives and facilitate informed discussion. During the outreach meetings, the project also showcased an interactive GIS-based map viewer, allowing participants to explore spatial data, review preliminary hazard information, and provide location-specific feedback in real time. Additional outreach meetings and presentations were conducted throughout the project to provide updates on progress, share preliminary findings, and solicit ongoing feedback from stakeholders and the public. The continued use of the interactive map enhanced transparency and accessibility by enabling participants to better understand potential vulnerabilities and review analysis results. These efforts helped foster community trust, support informed dialogue, and ensure that public input was meaningfully incorporated into the final Vulnerability Assessment.

ACQUIRE BACKGROUND DATA

The acquisition of background data is a critical foundational step in the development of the Vulnerability Assessment (VA) and was conducted in accordance with the requirements outlined in Section 380.093, Florida Statutes. This task involved the identification, research, and compilation of all relevant datasets necessary to support a comprehensive and technically sound assessment. Consistent with state guidance, three primary categories of data were required:

1. *An inventory of critical and regionally significant assets.*
2. *Topographic and elevation data.*
3. *Flood scenario-related data.*

Given Highlands County's inland location within central Florida and its lack of direct coastal influence, sea level rise and storm surge scenarios were not evaluated as part of this Vulnerability Assessment. Consistent with the guidance of the Florida Department of Environmental Protection Resilient Florida Program, the

analysis instead focused on precipitation-driven flooding, including intense rainfall events, that are more representative of the County's risk profile. The assessment reflects the influence of water behavior and low-lying areas on flood risk conditions within the County. This approach ensures the assessment reflects the most relevant hazard conditions and supports the development of actionable resilience strategies tailored to the County's geographic and hydrologic characteristics. Geographic Information System (GIS) data and associated metadata were developed to include distinct layers representing each of the four asset classes defined in Section 380.093(2)(a)1–4, F.S., ensuring consistency with statewide standards. All GIS files and metadata adhere to the Resilient Florida Program's GIS Data Standards, and original data sources are documented within the metadata to maintain transparency and reproducibility.

Data Gathering Methodology

The County, in partnership with the Central Florida Regional Planning Council, facilitated a series of meetings to support the project's data development and ensure stakeholder engagement. The project team prepared all necessary materials for the meeting, including public notices and social media notifications, meeting invitations, agendas, presentations, graphics, and other supporting documents.

Data Collection Meetings

Throughout the data collection and evaluation process, coordination was conducted among the project Steering Committee, technical staff, Highlands County departments, and municipal partners to identify data needs, validate existing datasets, and promote consistency across jurisdictions. This collaborative effort aligned with Resilient Florida Program expectations for stakeholder engagement and data transparency, while also improving the overall quality and reliability of the analysis. During this process, data gaps were identified, including datasets that were missing, outdated, or lacked sufficient spatial resolution to support detailed modeling and mapping. These limitations were documented and addressed, where feasible, through the incorporation of the best available data and professional judgment. This systematic approach to data validation and gap mitigation supports a technically sound and defensible vulnerability assessment that can inform future planning and investment decisions.

A kickoff meeting with Highlands County and the above-mentioned initial Steering Committee established the project's scope, schedule, and preliminary data inventory, while also identifying key data needs, data gaps, and potential Steering Committee members. Subsequent Steering Committee meetings—held both virtually and in person- provided ongoing opportunities to review project goals, refine methodologies, evaluate available datasets, and guide key decision-making. Additional meetings included the presentation of an interactive GIS platform and preliminary modeling results, supporting continued validation of data and analytical approaches.

The first Steering Committee meeting focused on formally introducing the project, establishing key points of contact, and providing context on local hazard impacts, including significant agricultural losses that underscore the County's vulnerability to weather events. An overview of the VA was presented, including its purpose and alignment with the Resilient Florida framework. A subsequent meeting, which included an opportunity for public participation, supported the data collection phase by gathering input on critical community assets and key factors influencing vulnerability. Additional Steering Committee meetings were conducted to review progress, review the inland rainfall modeling results for the current year and future years of 2040 and 2070, and for including the presentation of an interactive GIS-based map viewer and preliminary model results for planning horizons.

A public workshop was also conducted to gather input on critical assets and local considerations, ensuring that community knowledge was incorporated into the dataset. This comprehensive and iterative approach to data gathering ensured the information used in the Vulnerability Assessment is well-vetted, locally informed, and consistent with Resilient Florida Program expectations.

To support ongoing data coordination, Highlands County and Central Florida Regional Planning Council (CFRPC) staff conducted bi-weekly leadership meetings to track project progress, coordinate data requests, and ensure compliance with statutory requirements. Data collection efforts included collaboration with County departments and municipalities to obtain relevant datasets and identify appropriate data sources.

Vulnerability Assessment Data Collected

Per Section 380.093, F.S., the following data in Table 2: Source Data was collected and evaluated for relevance and use in the Vulnerability Assessment. All data was sourced prior to September 19, 2025.

Multiple data sources were used to develop Highlands County's Critical Assets Database, including reference data and geospatial datasets from a variety of providers. These sources were also used to verify and validate the statewide dataset provided by the Florida Department of Environmental Protection, as well as data submitted by local jurisdictions and public and private agencies. Participating jurisdictions included Highlands County, the City of Avon Park, Town of Lake Placid, and City of Sebring.

The stakeholders reviewed existing data and developed an inventory of critical assets owned and/or maintained by Highlands County and its municipalities. A data gap analysis was conducted to check for completeness and applicability of the data.

Source Data

Table 2: Source Data Table

Data Type	Source	VA Data Submission	Source Data
Precipitation Data	NOAA Atlas 14 (PFDS)	Yes	https://hdsc.nws.noaa.gov/pfds
Groundwater Level Data	USGS NWIS (Groundwater Levels)	No	https://waterdata.usgs.gov/nwis/gw
Sea Level Rise (SLR) Projections	NOAA SLR Viewer (context only)	N/A	https://coast.noaa.gov/slr
Tidal Datums and Tidal Flooding	NOAA CO-OPS (context only)	N/A	https://tidesandcurrents.noaa.gov
Storm Surge	NOAA SLOSH/Probabilistic Surge (context only)	N/A	https://www.nhc.noaa.gov/nationalsurge
Hydro Stratigraphic Information	SWFWMD Geohydrologic Data	No	https://www.swfwmd.state.fl.us/resources/data-maps/geohydrologic-data
River Channel Cross-Section	USGS Gages (WDFN) / StreamStats	No	https://waterdata.usgs.gov/nwis; https://streamstats.usgs.gov
Land Use Data	FDEP FLUCCS (Statewide LULC)	Yes	https://geodata.dep.state.fl.us
Evapotranspiration Data	FAWN Reference ET; USGS SSEBop	No	https://fawn.ifas.ufl.edu/tools/et; https://earlywarning.usgs.gov/ssebop
Digital Elevation Model (DEM)	USGS 3DEP (The National Map)	Yes	https://apps.nationalmap.gov/downloader
Soils (Hydrologic Soil Groups, Ksat)	NRCS SSURGO / Web Soil Survey	Yes	https://websoilsurvey.sc.egov.usda.gov
Hydrography (Streams / Waterbodies)	USGS NHDPlus HR	Yes	https://www.usgs.gov/national-hydrography/nhdplus-high-resolution
Watershed Boundaries	USGS WBD (HUCs)	Yes	https://www.usgs.gov/national-hydrography/watershed-boundary-dataset
Road Centerlines	FDOT GIS / County GIS	Yes	https://gis-fdot.opendata.arcgis.com
Structures (Bridges/Culverts)	FDOT Structures / Local Inventory	Yes	https://gis-fdot.opendata.arcgis.com
Lake/Water-Level Control Points	SWFWMD Hydrologic Data	Yes	https://www.swfwmd.state.fl.us/resources/data-maps/hydrologic-data
Change-Factor Rasters (Mid/End-Century)	CFRPC Scenario Inputs (Internal)	Yes	VA Project Data
2040 (100-Year, 24 Hour Storm Event)	CFRPC	Yes	VA Project Data
2070 (100-Year, 24 Hour Storm Event)	CFRPC	Yes	VA Project Data
FEMA 500 Year	FEMA NFHL / MSC	Yes	https://msc.fema.gov/nfhl

Critical Assets

GIS data containing critical assets as defined in section 380.093, F.S. was downloaded from the Florida Department of Environmental Protection Geospatial Open Data portal. Additional data used to verify and update the statewide dataset was provided by Highlands County, City of Avon Park, Town of Lake Placid, and City of Sebring. As-built information was not available for any of the listed assets at the time of development of this Assessment.

According to section 380.093, F.S., critical assets should be grouped with the four asset classes as defined in statute:

- **Transportation Assets and Evacuation Routes**
  Including airports, bridges, bus terminals, ports, major roadways, marinas, rail facilities, and railroad bridges.

- **Critical Infrastructure**
  Including wastewater treatment facilities and lift stations, stormwater treatment facilities and pump stations, drinking water facilities, water utility conveyance systems, electric production and supply facilities, solid and hazardous waste facilities, military installations, communications facilities, and disaster debris management sites.

- **Critical Community and Emergency Facilities**
  Including schools, colleges, universities, community centers, correctional facilities, disaster recovery centers, emergency medical service facilities, emergency operation centers, fire stations, health care facilities, hospitals, law enforcement facilities, local government facilities, logistical staging areas, affordable public housing, risk shelter inventory, and state government facilities.

- **Natural, Cultural, and Historical Resources**
  Including conservation lands, parks, shorelines, surface waters, wetlands, and historical and cultural assets.

Data obtained was reviewed to determine relevancy and completeness based on statute guidelines.

Tables 3 – 6 provide the available data based on the asset type for the jurisdiction.

- *Yes* indicates the data was available.
- *N/A* indicates not applicable to the jurisdiction.
- *No* indicates data was not available.

Table 3: Transportation Assets and Evacuation Routes

Asset Type	Highlands County	City of Avon Park	Town of Lake Placid	City of Sebring
Airports	Yes	Yes	N/A	Yes
Bridges	Yes	N/A	N/A	Yes
Bus Terminals	N/A	N/A	N/A	N/A
Major Roadways	Yes	Yes	Yes	Yes
Marinas	Yes	Yes	Yes	Yes
Ports	N/A	N/A	N/A	N/A
Rail Facilities	Yes	Yes	Yes	Yes
Railroad Bridges	Yes	Yes	N/A	N/A

Table 4: Critical Infrastructure

Asset Type	Highlands County	City of Avon Park	Town of Lake Placid	City of Sebring
Communications Facilities	Yes	Yes	Yes	Yes
Disaster Debris Management Sites	Yes	N/A	N/A	N/A
Drinking Water Facilities	Yes	Yes	Yes	Yes
Electric Production and Supply Facilities	Yes	Yes	Yes	Yes
Military Installations	Yes	N/A	N/A	N/A
Solid and Hazardous Waste Facilities	Yes	Yes	Yes	Yes
Stormwater Treatment Facilities and Pump Stations	Yes	N/A	N/A	Yes
Wastewater Treatment Facilities and Lift Stations	Yes	Yes	Yes	Yes
Water Utility Conveyance Systems	Yes	Yes	Yes	Yes

Table 5: Critical Community and Emergency Facilities

Asset Type	Highlands County	City of Avon Park	Town of Lake Placid	City of Sebring
Affordable Public Housing	Yes	Yes	Yes	Yes
Colleges / Universities	N/A	Yes	Yes	Yes
Community Centers	Yes	Yes	Yes	Yes
Correctional Facilities	Yes	N/A	N/A	Yes
Disaster Recovery Centers	Yes	N/A	N/A	N/A
Emergency Medical Service Facilities	Yes	Yes	Yes	Yes
Emergency Operation Centers	Yes	N/A	N/A	N/A
Fire Stations	Yes	Yes	Yes	Yes
Health Care Facilities	Yes	Yes	Yes	Yes
Hospitals	Yes	N/A	N/A	Yes
Law Enforcement Facilities	Yes	Yes	Yes	Yes
Local Government Facilities	Yes	Yes	Yes	Yes
Logistical Staging Areas	N/A	N/A	Yes	N/A
Risk Shelter Inventory	Yes	Yes	Yes	Yes
Schools	Yes	Yes	Yes	Yes
State Government Facilities	Yes	Yes	N/A	N/A

Table 6: Natural, Cultural, and Historical Resources

Asset Type	Highlands County	City of Avon Park	Town of Lake Placid	City of Sebring
Conservation Lands	Yes	N/A	N/A	N/A
Historical and Cultural Assets	Yes	Yes	Yes	Yes
Parks	Yes	Yes	Yes	Yes
Shorelines	N/A	N/A	N/A	N/A
Surface Waters	Yes	Yes	Yes	Yes
Wetlands	Yes	Yes	Yes	Yes

Critical Assets Dataset

The County's vulnerability assessment database formed the foundation for developing the list of critical assets for Highlands County, City of Avon Park, Town of Lake Placid, and City of Sebring. The following overview will outline the data, timeline, and considerations made during the development phase.

The initial data utilized was provided by the Florida Division of Emergency Management (FDEM) in 2022. FDEM provided Critical Asset Data for all Florida counties as part of the project Advancing Mitigation Assessment and Planning Through Resilience Collaboration (CDBG-MIT), a collaborative effort between the CFRPC and five other Regional Planning Councils. This data was reviewed and corrected with the project stakeholders for Highlands County, City of Avon Park, Town of Lake Placid, City of Sebring, and other agencies within the county.

In 2023, the County, through the CFRPC, had the opportunity to work with the Florida Department of Environmental Protection to determine which elements of the Statewide Vulnerability Assessment (Balmoral Dataset) would be classified as regional or local. As part of the Highlands County Vulnerability Assessment, CFRPC staff and the stakeholders began identifying features within the Statewide Vulnerability Assessment - Balmoral Dataset that intersected with the Highlands County dataset. These identified features served as the baseline comparison between this data, the local data received, and the FDEM's Critical Asset data.

Table 7: Critical Asset Related Data Table

Data Type	Source	Link
Points	CFRPC	VA GIS Database
Polygons	CFRPC	VA GIS Database
Polylines	CFRPC	VA GIS Database
Polylines Transportation	CFRPC	VA GIS Database

Next, the project categorized various asset types, including but not limited to community centers, correctional facilities, health care facilities, law enforcement facilities, schools, historical and cultural assets, airports, marinas, communications facilities, and utility infrastructure. Additionally, some assets were divided into detailed subtypes. Finally, the data was organized into point, polyline, polylines transportation, and polygon datasets for easier analysis.

Figures 4 - 19 identify critical asset points, polylines, and polygons countywide. Refer to Appendix B for the Vulnerability Assessment Exposure Map Series or Appendix D for Vulnerability Assessment Sensitivity Map Series.

Point Assets are identified as: Critical Infrastructure - wastewater treatment facilities; lift stations; stormwater treatment facilities; pump stations; drinking water facilities; water utility conveyance systems; electric production and supply facilities; solid and hazardous waste facilities; military installations (none in Highlands County); communications facilities; disaster debris management sites; critical community and emergency facilities - schools, colleges, universities, community centers, correctional facilities, disaster recovery centers, emergency medical service facilities, emergency operation centers, fire stations, health care facilities, hospitals, law enforcement facilities, local government facilities, logistical staging areas, affordable public housing, risk shelter inventory, and state government facilities; and natural, cultural, and Historical Resources - conservation lands, parks, shorelines, surface waters, and wetlands assets.

Polyline Assets are identified as: general linear assets and include electric production and supply facilities; stormwater treatment facilities and pump stations; historical and cultural assets; shorelines; and surface waters.

Transportation Polyline Assets are identified as: transportation linear assets and include bridges; major roadways; and rail facilities.

Polygon Assets are identified as: stormwater treatment facilities and pump stations; conservation lands; historical and cultural assets; parks; surface waters; and wetlands.

Figure 4: Highlands County Critical Assets Points

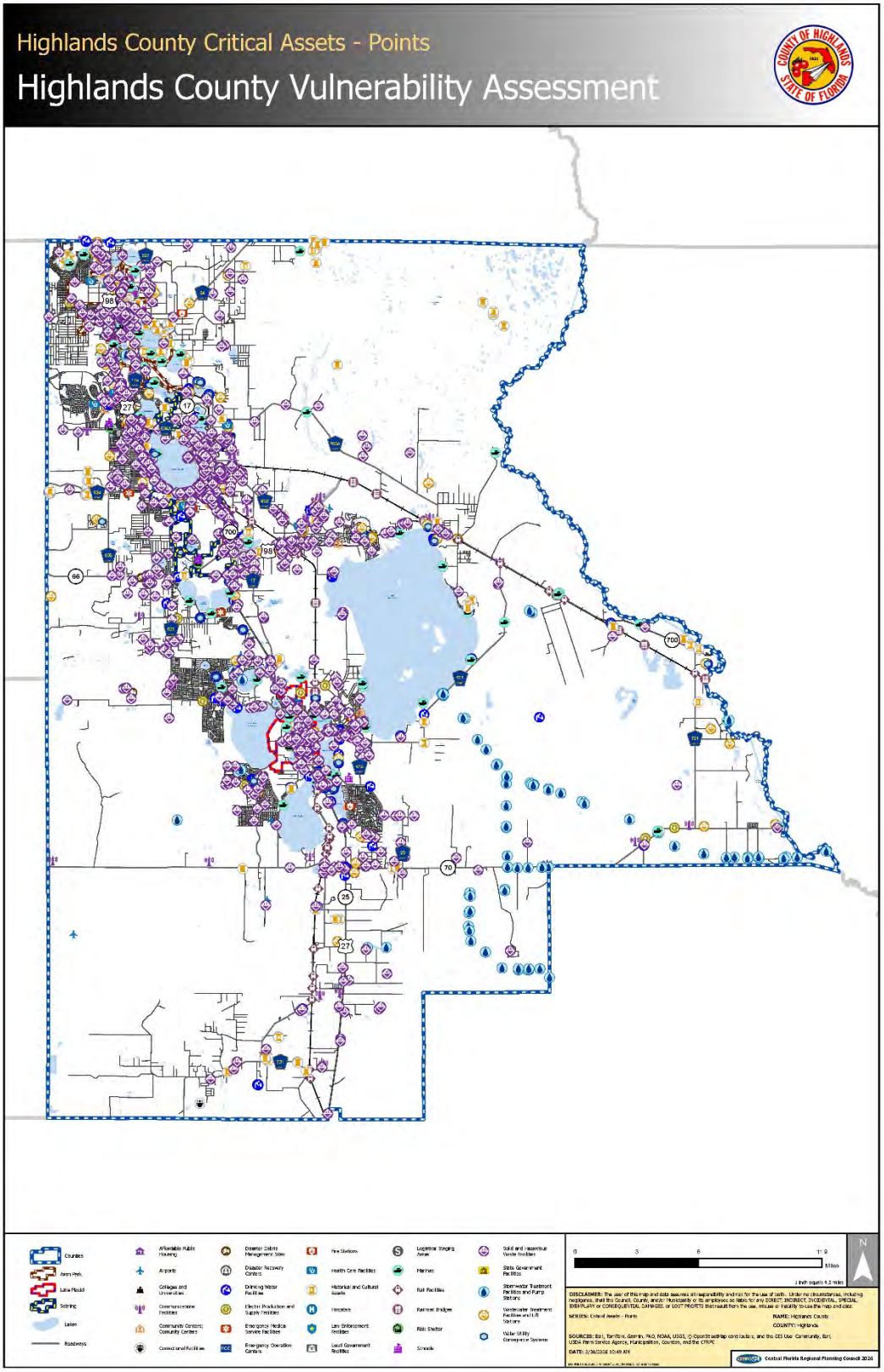


Figure 5: Highlands County Critical Assets Polygons

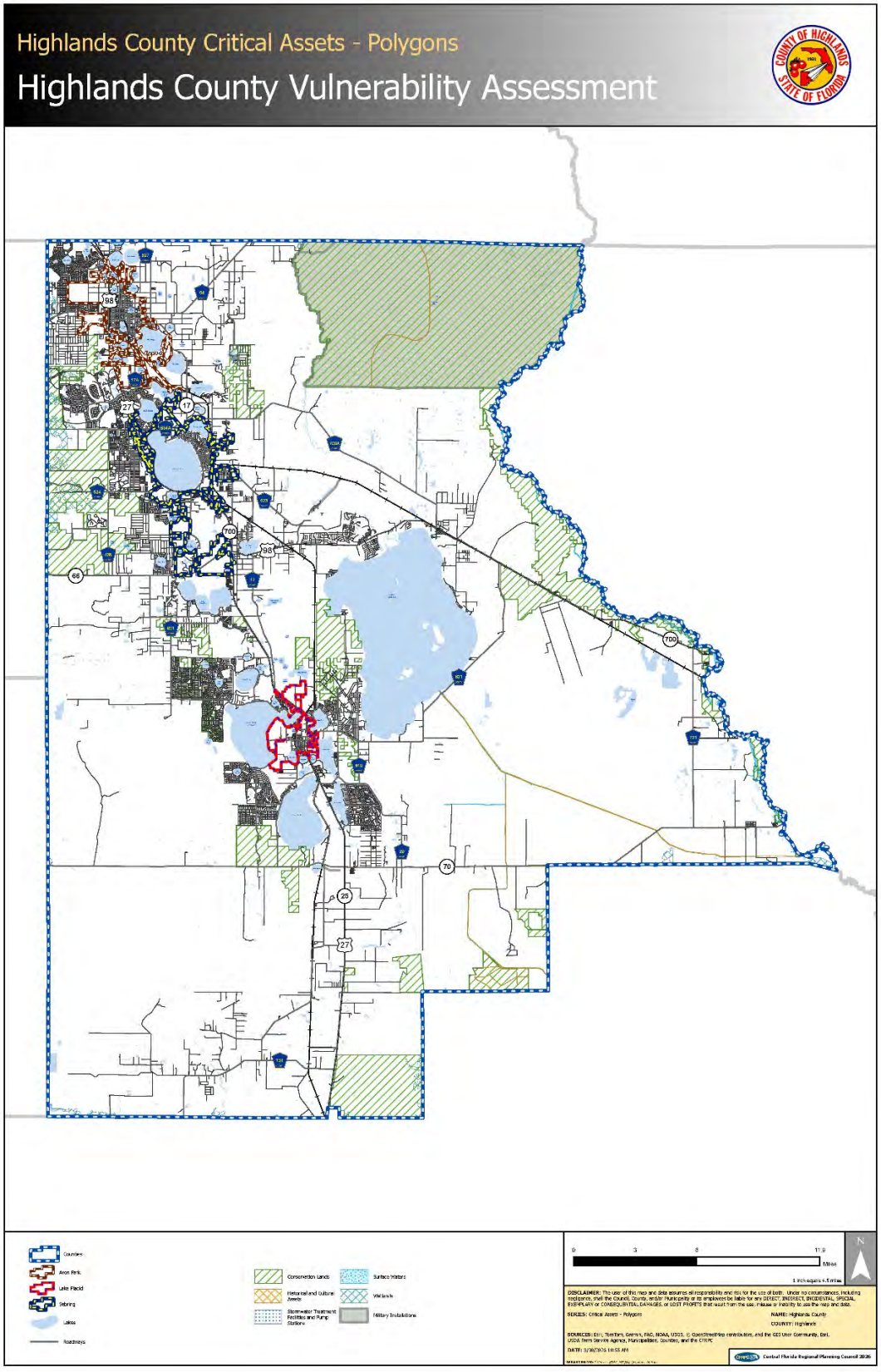


Figure 6: Highlands County Critical Assets Polylines

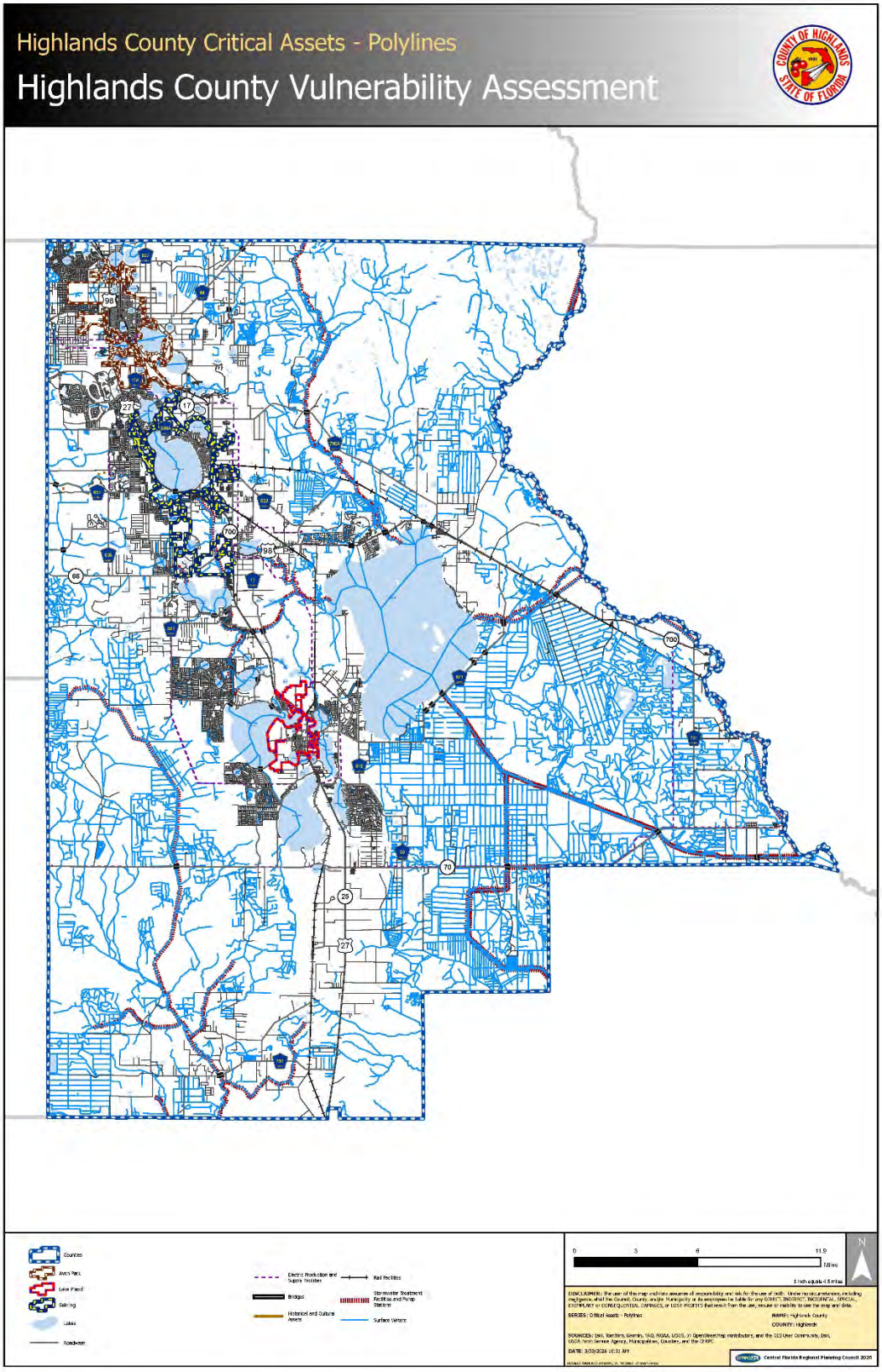


Figure 7: Highlands County Critical Assets Polylines Transportation

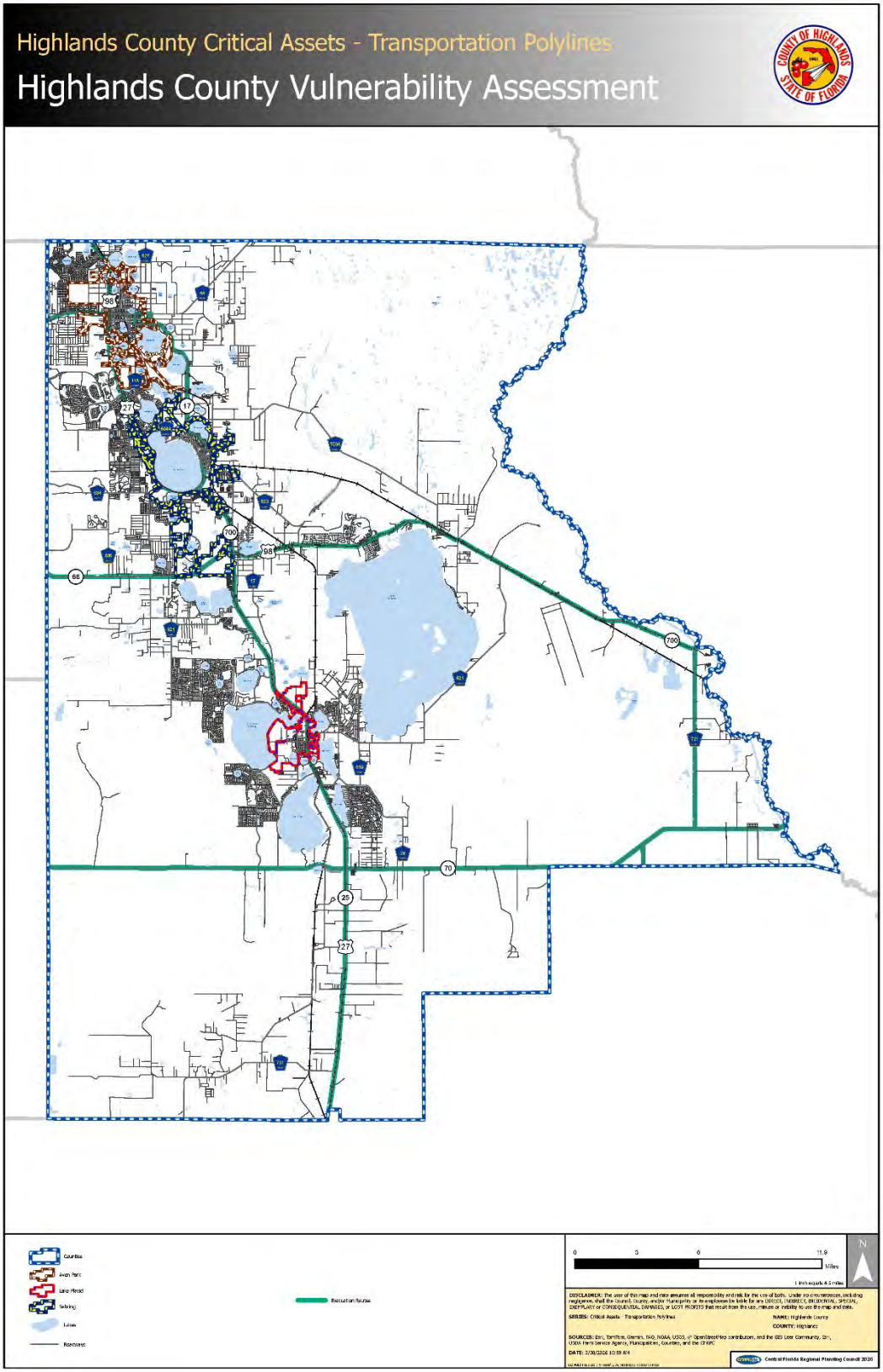


Figure 8: Avon Park Critical Assets Points

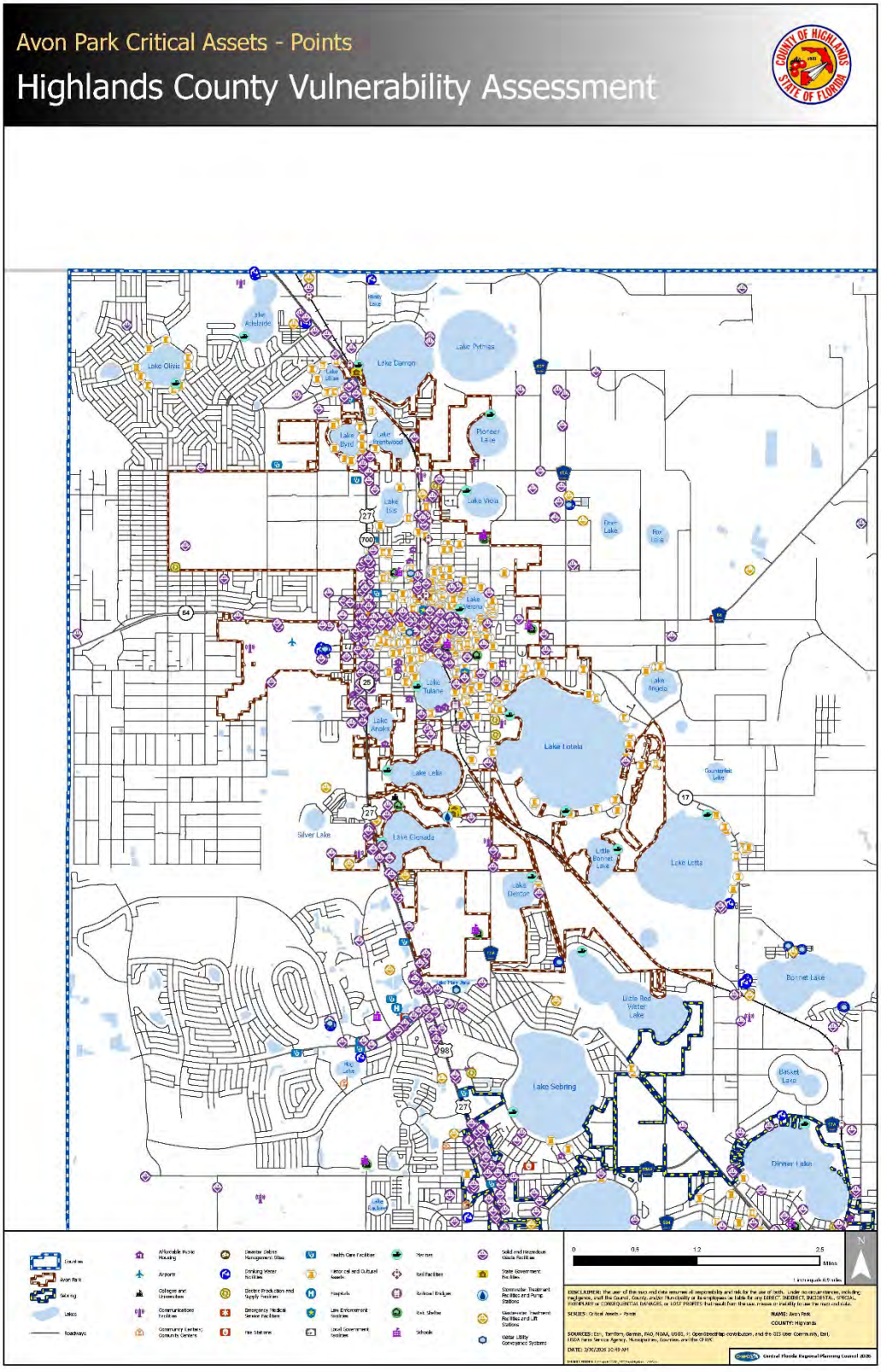


Figure 9: Avon Park Critical Assets Polygons

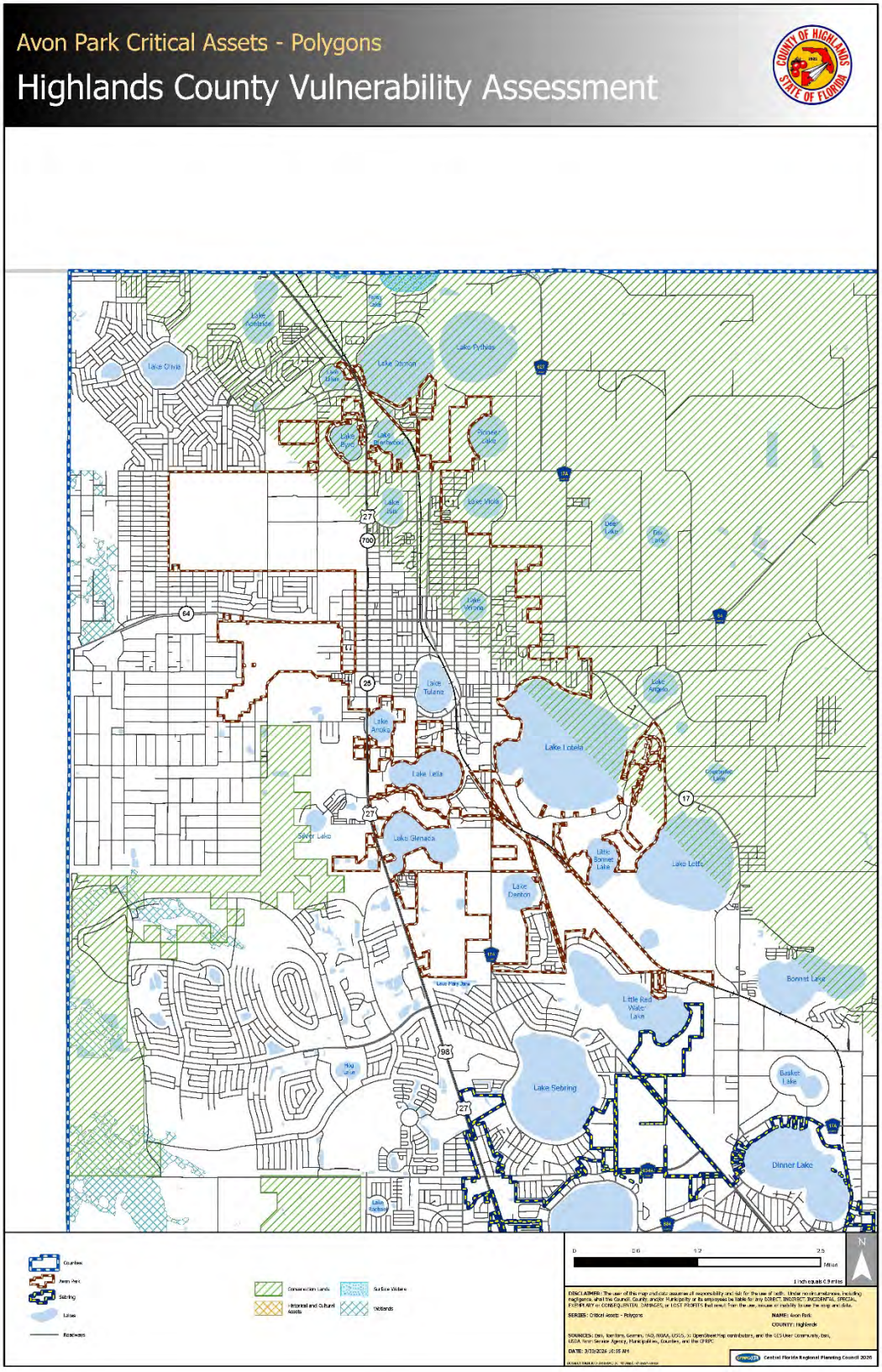


Figure 10: Avon Park Critical Assets Polylines

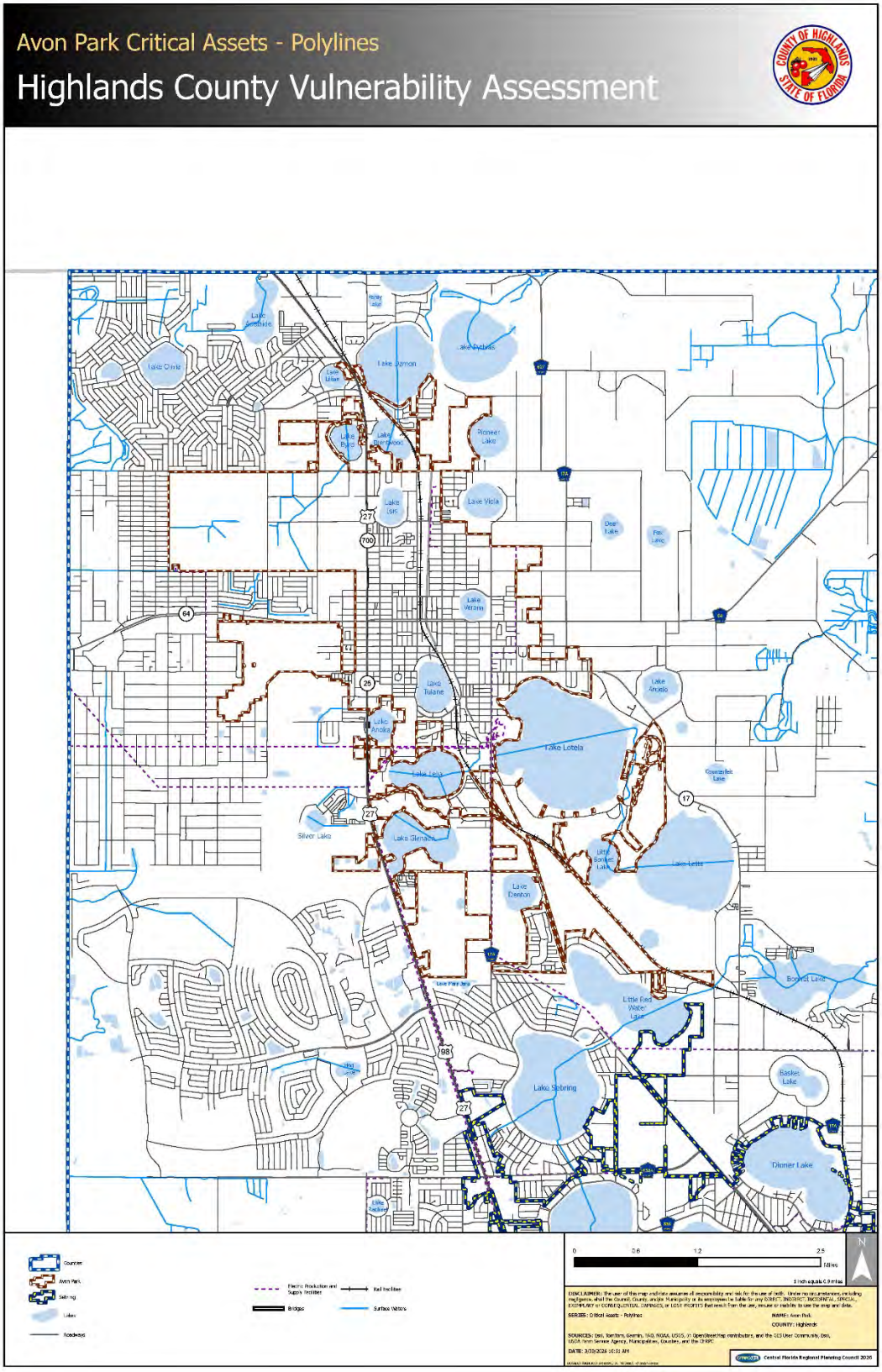


Figure 11: Avon Park Critical Assets Polylines Transportation

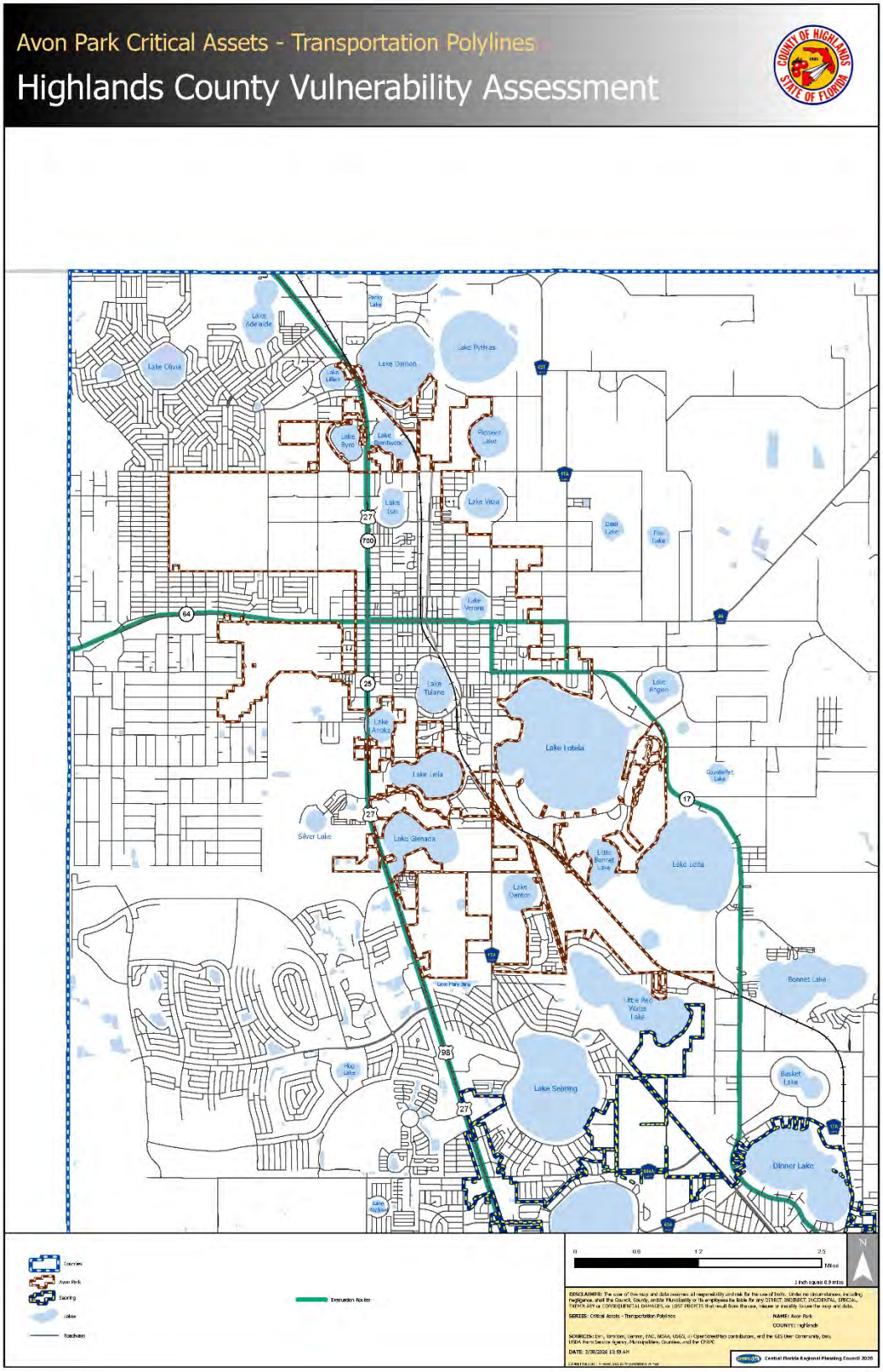


Figure 12: Lake Placid Critical Assets Points

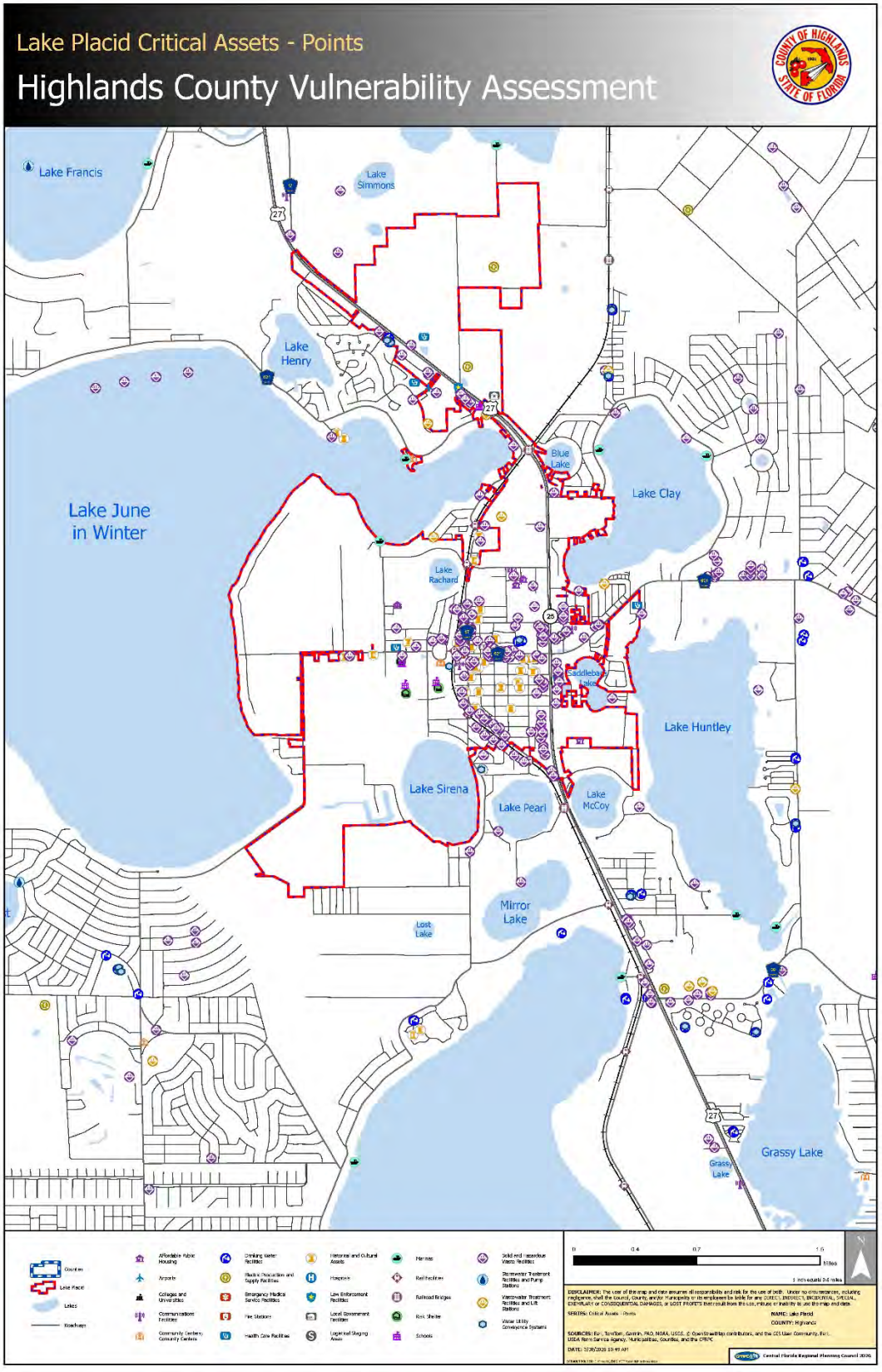


Figure 13: Lake Placid Critical Assets Polygons

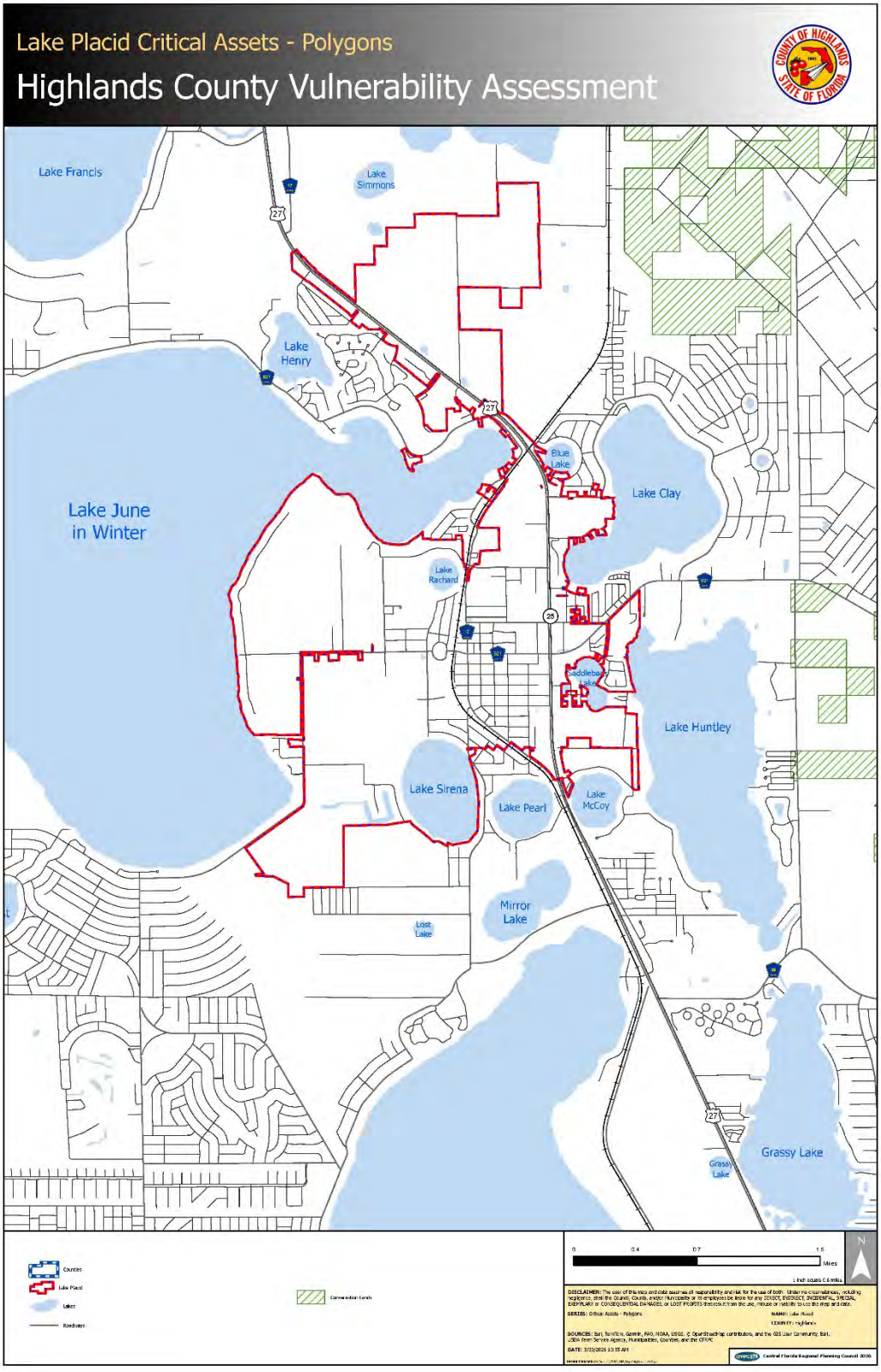


Figure 14: Lake Placid Critical Assets Polylines

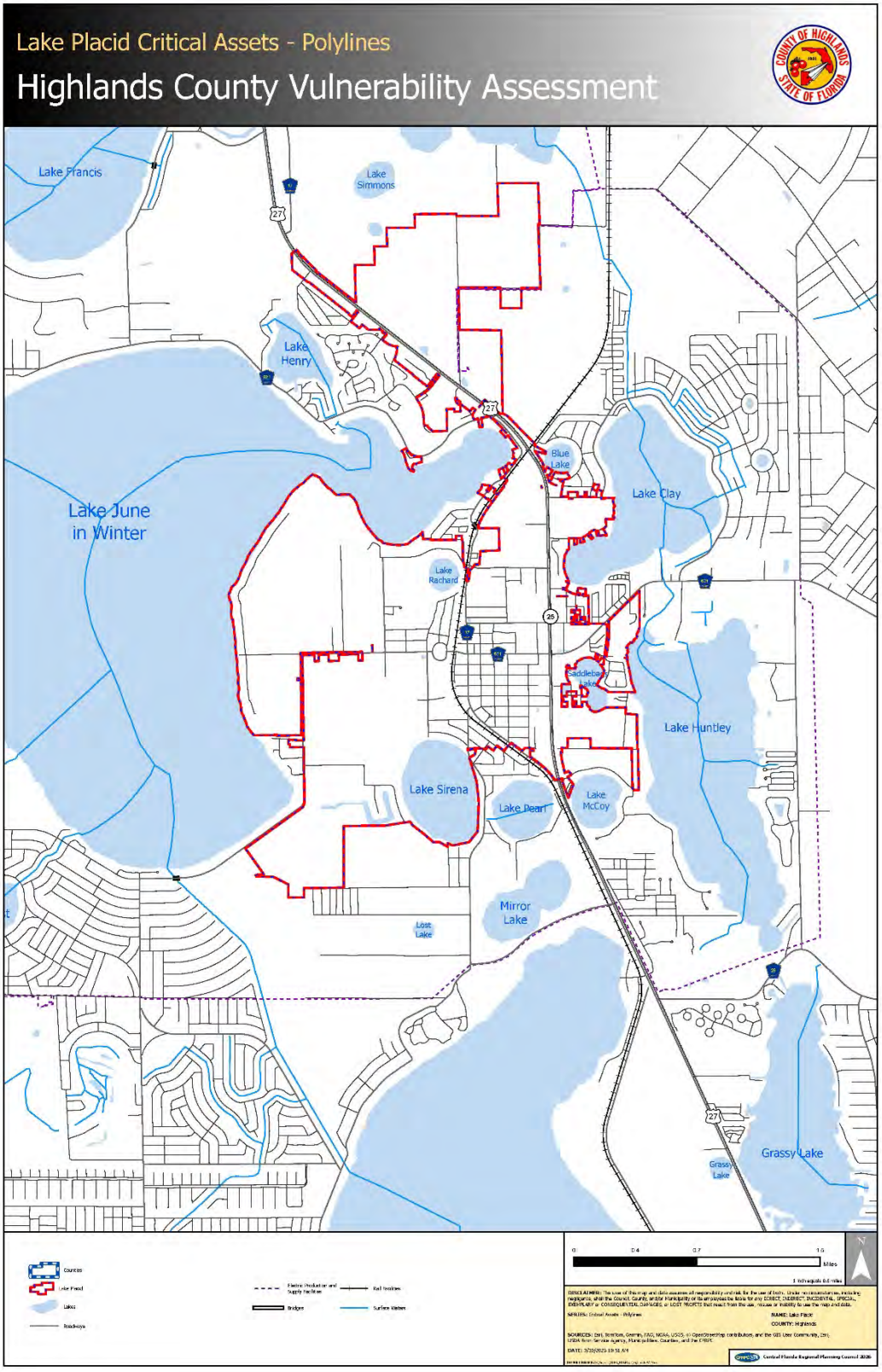


Figure 15: Lake Placid Critical Assets Polylines Transportation

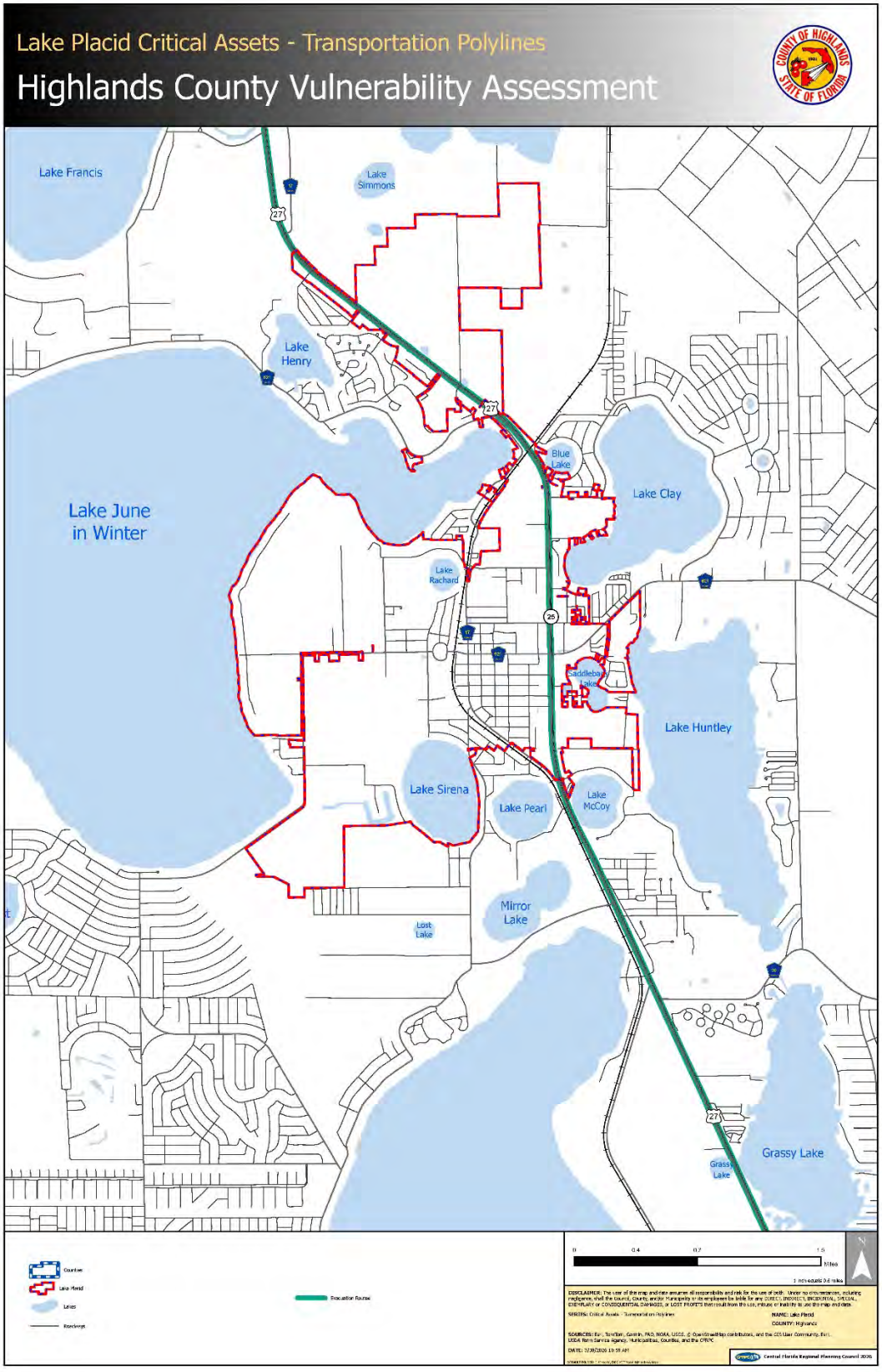


Figure 16: Sebring Critical Assets Points

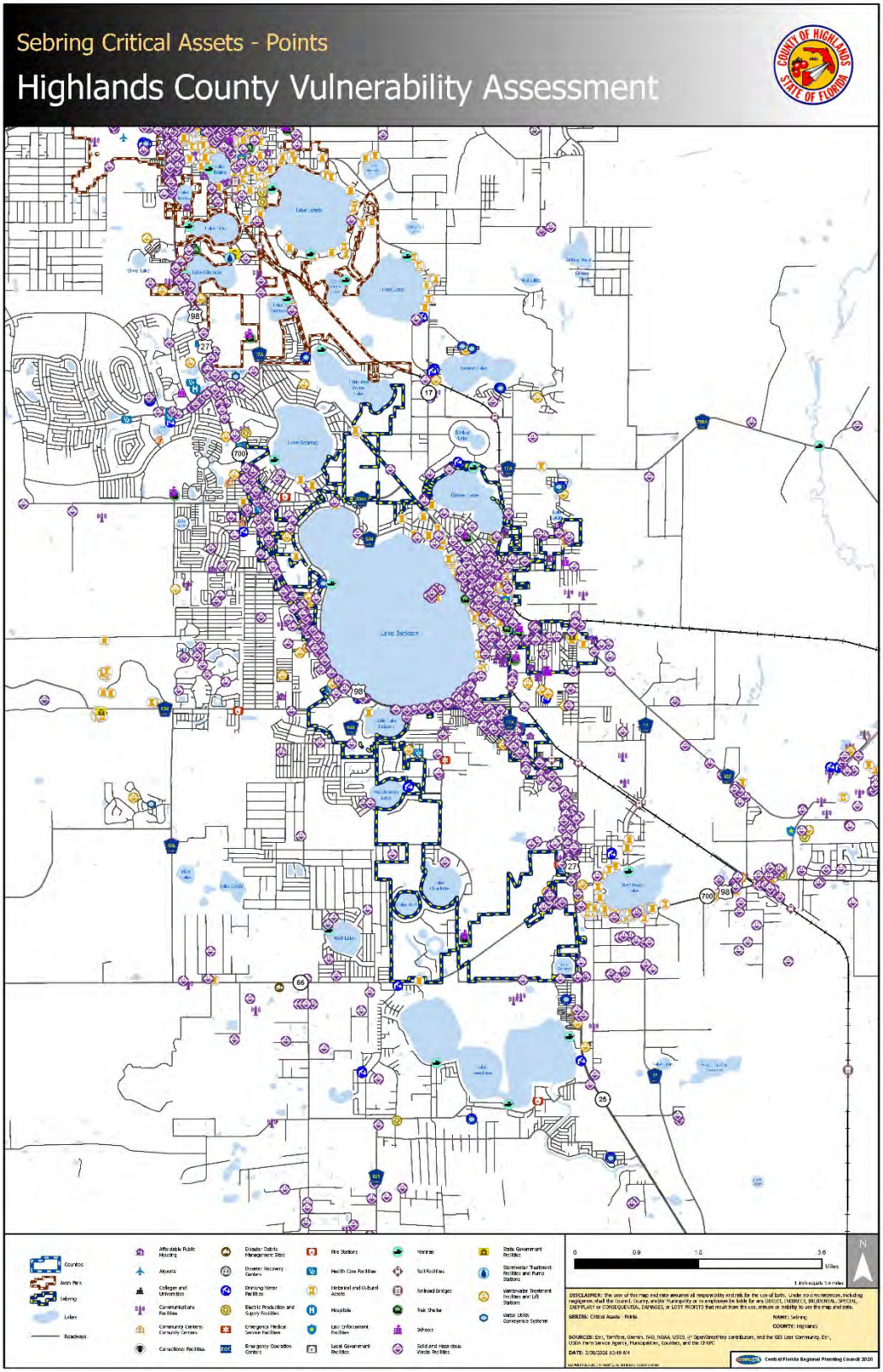


Figure 17: Sebring Critical Assets Polygons

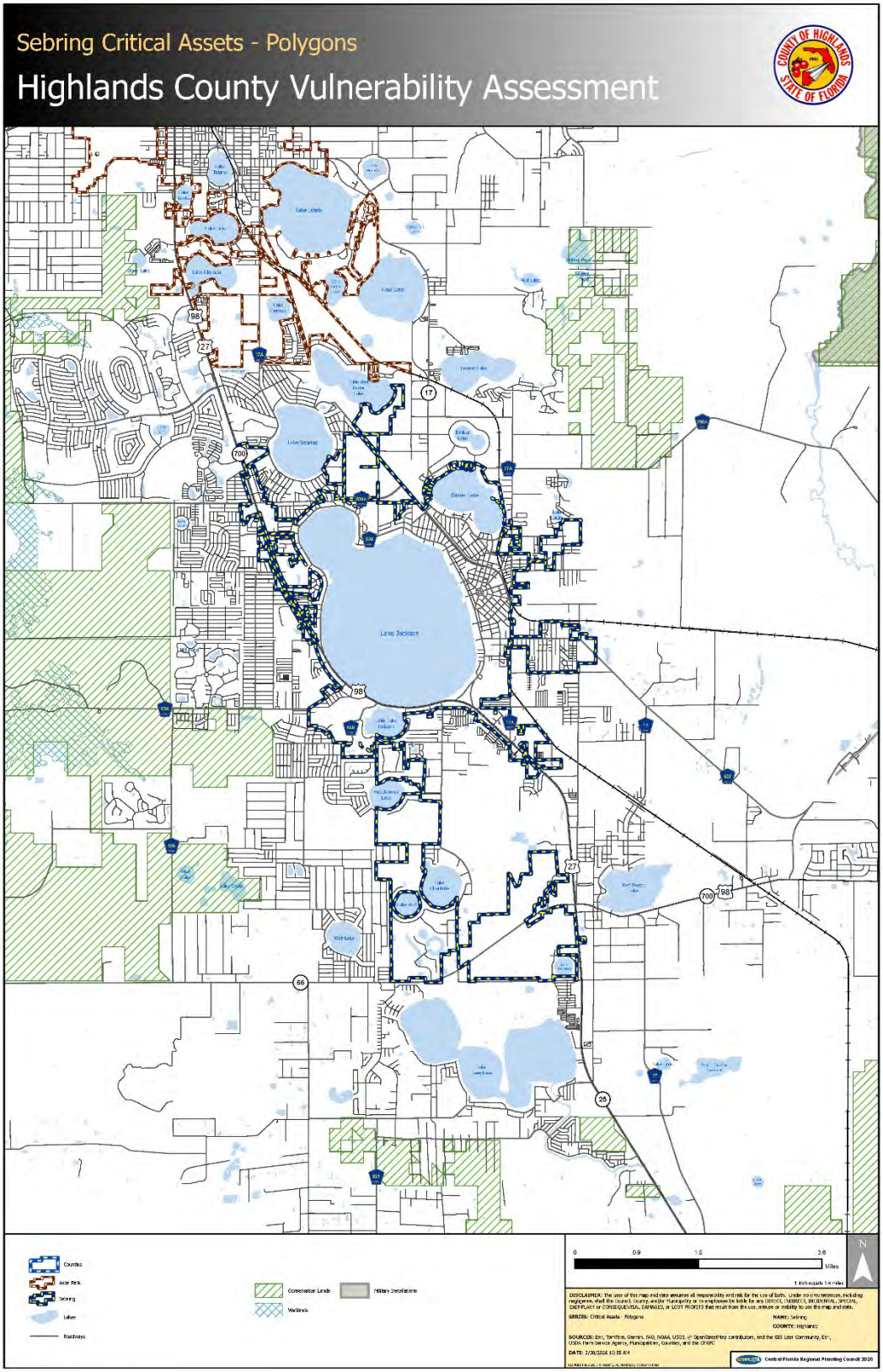


Figure 18: Sebring Critical Assets Polylines

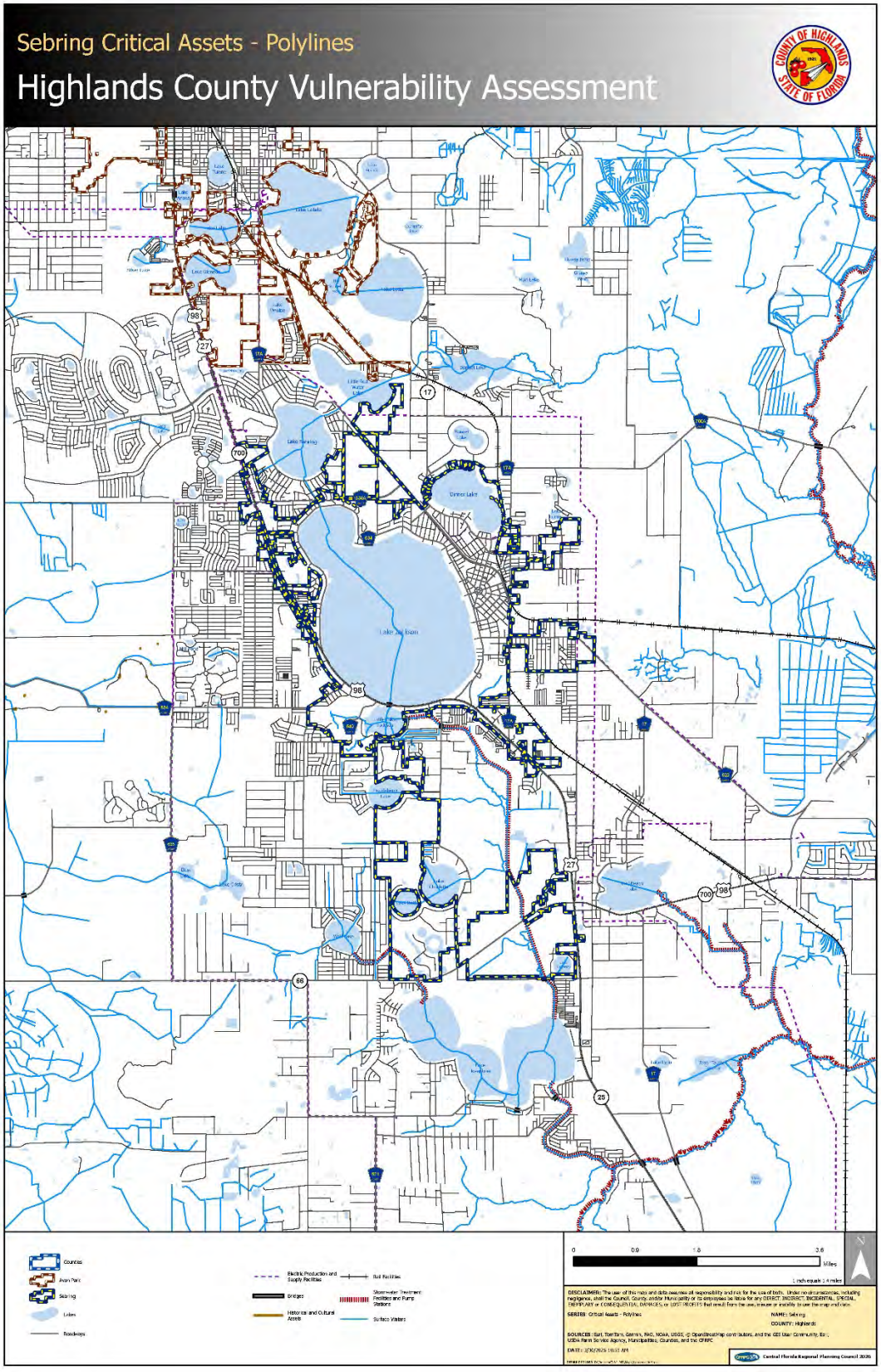
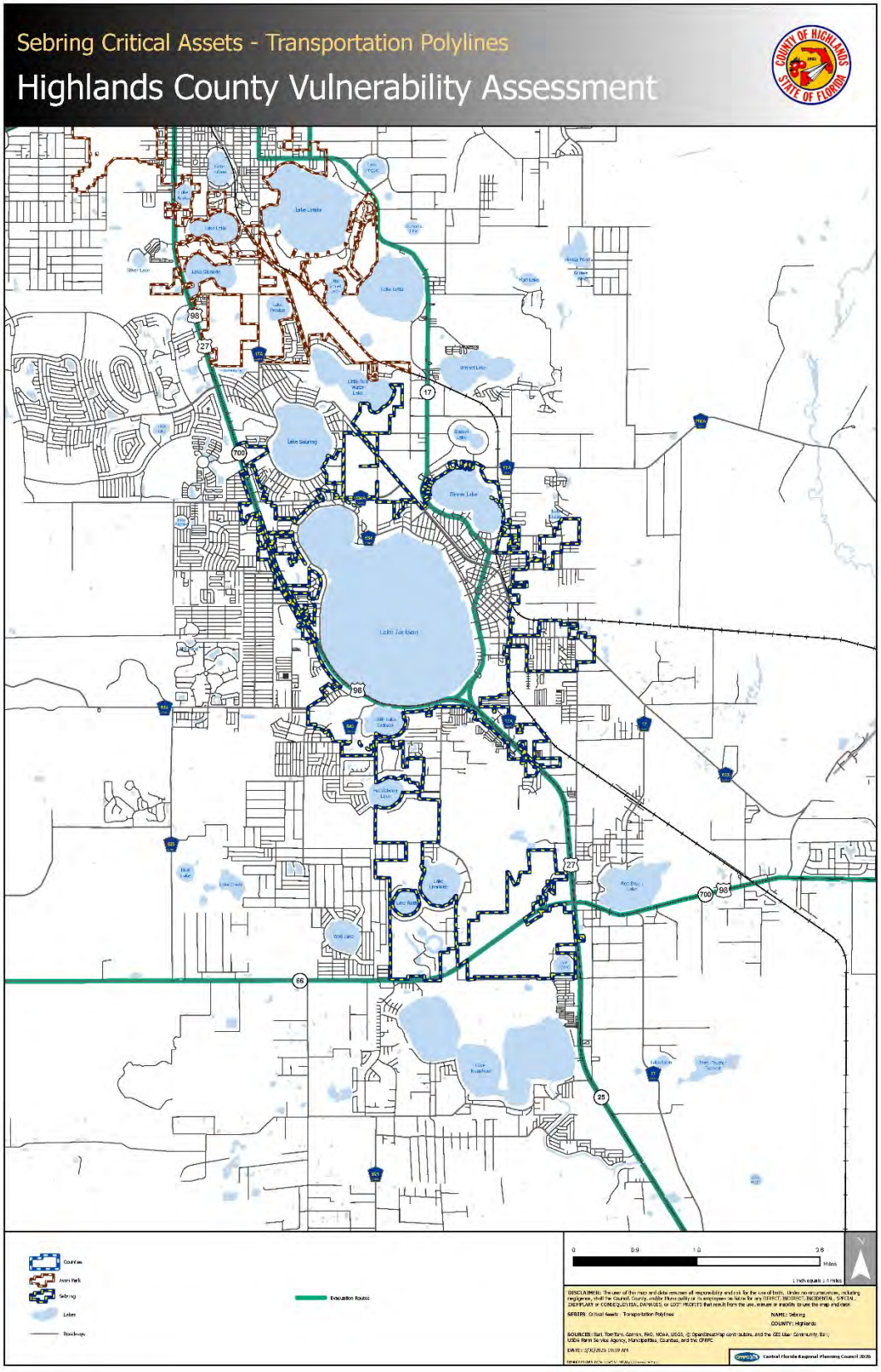


Figure 19: Sebring Critical Assets Polylines Transportation



The following tables (Table 8 – 10) list the critical assets countywide. These have been identified by category type, then by asset type, for each jurisdiction.

Table 8: Total Count of Asset Points Countywide

Category	Asset Type	City of Avon Park	City of Sebring	Town of Lake Placid	Unincorporated	Total
Critical Community and Emergency Facilities	Affordable Public Housing	11	10	3	7	**31**
Critical Community and Emergency Facilities	Colleges and Universities	1	0	1	0	**2**
Critical Community and Emergency Facilities	Community Centers	4	4	2	11	**21**
Critical Community and Emergency Facilities	Correctional Facilities	0	1	0	1	**2**
Critical Community and Emergency Facilities	Disaster Recovery Centers	0	0	0	1	**1**
Critical Community and Emergency Facilities	Emergency Medical Service Facilities	1	2	1	8	**12**
Critical Community and Emergency Facilities	Emergency Operation Centers	0	0	0	1	**1**
Critical Community and Emergency Facilities	Fire Stations	2	4	1	14	**21**
Critical Community and Emergency Facilities	Health Care Facilities	5	13	5	16	**39**
Critical Community and Emergency Facilities	Hospitals	0	1	0	2	**3**
Critical Community and Emergency Facilities	Law Enforcement Facilities	2	4	1	2	**9**
Critical Community and Emergency Facilities	Local Government Facilities	3	10	2	7	**22**
Critical Community and Emergency Facilities	Logistical Staging Areas	0	0	1	0	**1**
Critical Community and Emergency Facilities	Risk Shelter Inventory	7	3	3	4	**17**
Critical Community and Emergency Facilities	Schools	5	3	3	12	**23**
Critical Community and Emergency Facilities	State Government Facilities	1	0	0	5	**6**
Critical Infrastructure	Communications Facilities	8	4	3	54	**69**
Critical Infrastructure	Disaster Debris Management Sites	0	0	0	8	**8**

Category	Asset Type	City of Avon Park	City of Sebring	Town of Lake Placid	Unincorporated	Total
Critical Infrastructure	Drinking Water Facilities	10	9	3	197	**219**
Critical Infrastructure	Electric Production and Supply Facilities	3	1	0	19	**23**
Critical Infrastructure	Solid and Hazardous Waste Facilities	247	417	138	737	**1539**
Critical Infrastructure	Stormwater Treatment Facilities and Pump Stations	1	0	0	88	**89**
Critical Infrastructure	Wastewater Treatment Facilities and Lift Stations	4	4	1	67	**76**
Critical Infrastructure	Water Utility Conveyance Systems	4	7	2	61	**74**
Natural, Cultural, and Historical Resources	Historical and Cultural Assets	392	248	30	233	**903**
Transportation and Evacuation Routes	Airports	1	1	0	8	**10**
Transportation and Evacuation Routes	Bus Terminals	0	0	0	0	**0**
Transportation and Evacuation Routes	Marinas	3	1	1	51	**56**
Transportation and Evacuation Routes	Ports	0	0	0	0	**0**
Transportation and Evacuation Routes	Rail Facilities	11	6	2	51	**70**
Transportation and Evacuation Routes	Railroad Bridges	2	0	0	12	**14**
	Total	**728**	**753**	**203**	**1,677**	**3,361**

Table 9: Total Miles of Asset Polyline Countywide

Category	Asset Type	City of Avon Park	City of Sebring	Town of Lake Placid	Unincorporated	Total Miles
Critical Infrastructure	Electric Production and Supply Facilities	11.61	5.36	1.84	201.27	**220.08**
Critical Infrastructure	Stormwater Treatment Facilities and Pump Stations	0.00	2.26	0.00	275.92	**278.18**
Natural, Cultural, and Historical Resources	Historical and Cultural Assets	0.00	0.04	0.00	1.08	**1.12**
Natural, Cultural, and Historical Resources	Shorelines	0.00	0.00	0.00	0.00	**0.00**
Natural, Cultural, and Historical Resources	Surface Waters	5.95	12.36	0.00	3,130.52	**3,148.83**
Transportation and Evacuation Routes	Bridges	0.00	0.03	0.00	1.13	**1.16**
Transportation and Evacuation Routes	Major Roadways	90.65	98.87	36.93	2,254.02	**2,480.47**
Transportation and Evacuation Routes	Rail Facilities	3.13	2.23	1.56	75.21	**82.13**
	Total	**111.34**	**121.15**	**40.33**	**5,939.15**	**6,211.97**

Table 10: Total Square Miles of Asset Polygons Countywide

Category	Asset Type	City of Avon Park	City of Sebring	Town of Lake Placid	Unincorporated	Total Square Miles
Critical Infrastructure	Military Installations	0.00	0.00	0.00	85.05	**85.05**
Critical Infrastructure	Stormwater Treatment Facilities and Pump Stations	0.03	0.20	0.03	47.13	**47.39**
Natural, Cultural, and Historical Resources	Conservation Lands	0.00	0.00	0.00	309.47	**309.47**
Natural, Cultural, and Historical Resources	Historical and Cultural Assets	0.09	0.10	0.05	11.34	**11.58**
Natural, Cultural, and Historical Resources	Parks	0.12	0.39	0.08	1.02	**1.61**
Natural, Cultural, and Historical Resources	Ports	0.00	0.00	0.00	0.00	**0.00**
Natural, Cultural, and Historical Resources	Surface Waters	0.31	5.88	0.25	75.30	**81.74**
Natural, Cultural, and Historical Resources	Wetlands	0.31	0.98	0.04	171.02	**172.35**
	Total	**0.86**	**7.55**	**0.45**	**700.33**	**709.19**

The next step in the process was to evaluate the relevance of each asset. Assets were classified as either locally or regionally significant based on definitions in Florida Statutes. Asset classes identified in F.S. 380.093(4)(e)—including water resource facilities, regional medical centers, emergency operations centers, regional utilities, major transportation hubs and corridors, airports, and seaports—were automatically designated as regionally significant.

For asset types in the regional dataset not explicitly listed in the statute, an evaluation was conducted based on their functional role. If an asset class could reasonably be understood to serve multiple jurisdictions, it was designated as regionally significant. For example, the dataset included "Colleges and Universities" and "Hospitals." Although these are not specifically listed in the statute, both serve multiple jurisdictions; in particular, hospitals fulfill the role of regional medical centers.

Data type is identified by the following:

- Point
- Polyline
- Polyline Transportation
- Polygon

Table 11: Highlands County's Critical Community and Emergency Facilities Asset Relevancy

Data Type	Critical Community and Emergency Facilities	Asset Relevancy
•	Affordable Public Housing	Locally Significant
•	Colleges and Universities	**Reg. Significant**
•	Community Centers	**Reg. Significant**
•	Correction Facilities	**Reg. Significant**
•	Disaster Recovery Centers	**Reg. Significant**
•	Emergency Medical Service Facilities	**Reg. Significant**
•	Emergency Operations Centers (EOCs)	**Reg. Significant**
•	Fire Stations	**Reg. Significant**
•	Health Care Facilities	**RS > Public Health Clinic, Rural Health Clinic, Blood Bank, Crisis Stab. Unit /** Local Sig. > Everything Else
•	Hospitals	**Reg. Significant**
•	Law Enforcement Facilities	**Reg. Significant**
•	Local Government Facilities	**Reg. Significant**
•	Logistical Staging Areas	**Reg. Significant**
•	Risk Shelters	**Reg. Significant**
•	Schools	**Reg. Significant**
•	State Government Facilities	**Reg. Significant**

Table 12: Highlands County's Natural, Cultural, and Historical Resources Asset Relevancy

Data Type	Natural, Cultural, and Historical Resources	Asset Relevancy
•	* Historical and Cultural Assets	**RS > Church/Cemetery Complex, City Hall, Commercial, Courthouse, House of Worship, Meetinghouse, Museum, Temple, /** LS > Everything Else
–	* Historical and Cultural Assets	**RS > Bridges along State Corridors /** LS > Everything Else
▫	* Historical and Cultural Assets	**Reg. Significant**
–	Shorelines	**Reg. Significant**
–	* Surface Waters	**Reg. Significant > Rivers /** Local Sig. > Everything Else
▫	* Surface Waters	**RS > Large Lakes, Features impacting Multiple Counties /** Local Sig. > Everything Else
▫	Conservation Lands	**Reg. Significant**
▫	Parks	**Reg. Significant**
▫	Wetlands	**Reg. Significant**

Table 13: Highlands County's Transportation and Evacuation Routes Asset Relevancy

Data Type	Transportation and Evacuation Routes	Asset Relevancy
•	Airports	**Reg. Significant**
•	Bus Terminals	**Reg. Significant**
•	Marinas	**Reg. Significant > Marinas /** Local Sig. > Boat Ramps
•	* Ports	N/A
▫	* Ports	N/A
•	* Rail Facilities	**Reg. Significant**
–	* Rail Facilities	**Reg. Significant**
•	Railroad Bridges	**Reg. Significant**
–	Bridges	**RS > State Highways /** LS > Non-State Highways
–	Major Roadways (FDOT)	**RS > SIS & Evacuation Routes;** LS > Non-Evac. & Non-SIS
–	Major Roadways (NTD)	Locally Significant
	Evacuation Routes	Identified in Major Highways (FDOT)

With respect to transportation and evacuation routes, the statewide dataset did not include any ports geospatial data (point or polygon) for Highlands County. Evacuation routes identified by the Florida Division of Emergency Management were incorporated through the Major Highways dataset provided by

FDOT. To streamline and optimize the analysis, major roadways were used to represent evacuation routes and identify regionally significant transportation assets.

Table 14: Highlands County's Critical Infrastructure Asset Relevancy

Data Type	Critical Infrastructure	Asset Relevancy
•	Communications Facilities	**Reg. Significant**
•	Drinking Water Facilities	**Reg. Significant**
•	* Electric Production and Supply Facilities	**Reg. Significant**
–	* Electric Production and Supply Facilities	**Reg. Significant**
•	Disaster Debris Management Sites	**Reg. Significant**
•	* Solid and Hazardous Waste Facilities	**RS > Local, Municipal, County, State, Federal /** LS > Private
•	* Solid and Hazardous Waste Facilities (SQG)	Locally Significant
•	* Solid and Hazardous Waste Facilities (TSD)	**Reg. Significant**
•	* Solid and Hazardous Waste Facilities (SB)	Locally Significant
•	Wastewater Treatment Facilities and Lift Stations	**Reg. Significant**
•	Water Utility Conveyance Systems	**Reg. Significant**
•	* Stormwater Treatment Facilities and Pump Stations	**Reg. Significant**
–	* Stormwater Treatment Facilities and Pump Stations	**Reg. Significant**
▫	* Stormwater Treatment Facilities and Pump Stations	**Reg. Significant**
▫	Military Installations	**Reg. Significant**

The remaining asset classes were evaluated on a feature-by-feature basis. For features requiring this level of review, the asset name was a primary consideration. For example, names indicating service to multiple jurisdictions—such as "Courthouse"—supported a designation of regional significance.
Additional factors included the size of the facility, as observed in recent aerial imagery, and its potential role in evacuation routes or as an emergency shelter for large populations.

Next, the County compiled a Critical Asset Dataset in coordination with the local jurisdictions. The locally procured and developed asset dataset was used to verify and supplement the FDEP statewide dataset. As a result, CFRPC added notes to the dataset to track any changes, including additions, edits, and deletions of features. Modifications included adjustments to geography, corrections to asset classifications, and the addition of new regionally significant assets. The statewide categories were then organized into data types, with Highlands County recommending that certain assets be reclassified as either regionally significant or locally significant.

Regionally Significant Assets

The following tables (Tables 15-17) list the regionally significant Critical Assets countywide. These assets have been organized by category and further defined by asset type for each participating jurisdiction.

Table 15:Total Count of Regionally Significant Asset Points Countywide

Category	Asset Type	City of Avon Park	City of Sebring	Town of Lake Placid	Unincorporated	Total
Critical Community and Emergency Facilities	Colleges and Universities	1	0	1	0	**2**
Critical Community and Emergency Facilities	Community Centers	4	4	2	11	**21**
Critical Community and Emergency Facilities	Correctional Facilities	0	1	0	1	**2**
Critical Community and Emergency Facilities	Disaster Recovery Centers	0	0	0	1	**1**
Critical Community and Emergency Facilities	Emergency Medical Service Facilities	1	2	1	8	**12**
Critical Community and Emergency Facilities	Emergency Operation Centers	0	0	0	1	**1**
Critical Community and Emergency Facilities	Fire Stations	2	4	1	14	**21**
Critical Community and Emergency Facilities	Health Care Facilities	3	4	4	6	**17**
Critical Community and Emergency Facilities	Hospitals	0	1	0	2	**3**
Critical Community and Emergency Facilities	Law Enforcement Facilities	2	4	1	2	**9**
Critical Community and Emergency Facilities	Local Government Facilities	3	10	2	7	**22**
Critical Community and Emergency Facilities	Logistical Staging Areas	0	0	1	0	**1**
Critical Community and Emergency Facilities	Risk Shelter Inventory	7	3	3	4	**17**
Critical Community and Emergency Facilities	Schools	5	3	3	12	**23**
Critical Community and Emergency Facilities	State Government Facilities	1	0	0	5	**6**
Critical Infrastructure	Communications Facilities	8	4	3	54	**69**
Critical Infrastructure	Disaster Debris Management Sites	0	0	0	8	**8**
Critical Infrastructure	Drinking Water Facilities	10	9	3	197	**219**
Critical Infrastructure	Electric Production and Supply Facilities	3	1	0	19	**23**
Critical Infrastructure	Solid and Hazardous Waste Facilities	2	5	0	49	**56**
Critical Infrastructure	Stormwater Treatment Facilities and Pump Stations	1	0	0	88	**89**
Critical Infrastructure	Wastewater Treatment Facilities and Lift Stations	4	4	1	67	**76**
Critical Infrastructure	Water Utility Conveyance Systems	4	7	2	61	**74**

Category	Asset Type	City of Avon Park	City of Sebring	Town of Lake Placid	Unincorporated	Total
Natural, Cultural, and Historical Resources	Historical and Cultural Assets	38	19	4	11	**72**
Transportation and Evacuation Routes	Airports	1	1	0	8	**10**
Transportation and Evacuation Routes	Bus Terminals	0	0	0	0	**0**
Transportation and Evacuation Routes	Marinas	0	0	0	4	**4**
Transportation and Evacuation Routes	Rail Facilities	11	6	2	51	**70**
Transportation and Evacuation Routes	Railroad Bridges	2	0	0	12	**14**
	Total	**113**	**92**	**34**	**703**	**942**

Table 16: Total Miles of Regionally Significant Asset Polylines Countywide

Category	Asset Type	City of Avon Park	City of Sebring	Town of Lake Placid	Unincorporated	Total Miles
Critical Infrastructure	Electric Production and Supply Facilities	11.61	5.36	1.84	201.27	**220.08**
Critical Infrastructure	Stormwater Treatment Facilities and Pump Stations	0.00	2.26	0.00	275.92	**278.18**
Natural, Cultural, and Historical Resources	Historical and Cultural Assets	0.00	0.04	0.00	0.86	**0.90**
Natural, Cultural, and Historical Resources	Shorelines	0.00	0.00	0.00	0.00	**0.00**
Natural, Cultural, and Historical Resources	Surface Waters	2.45	2.42	0.00	304.93	**309.80**
Transportation and Evacuation Routes	Bridges	0.00	0.03	0.00	0.55	**0.58**
Transportation and Evacuation Routes	Major Roadways	7.88	14.02	9.09	189.60	**220.59**
Transportation and Evacuation Routes	Rail Facilities	3.13	2.23	1.56	75.21	**82.13**
	Total	**25.07**	**26.36**	**12.49**	**1,048.34**	**1,112.26**

Table 17: Total Square Miles of Regionally Significant Asset Polygons Countywide

Category	Asset Type	City of Avon Park	City of Sebring	Town of Lake Placid	Unincorporated	Total Square Miles
Critical Infrastructure	Military Installations	0.00	0.00	0.00	85.05	**85.05**
Critical Infrastructure	Stormwater Treatment Facilities and Pump Stations	0.03	0.20	0.03	47.13	**47.39**
Natural, Cultural, and Historical Resources	Conservation Lands	0.00	0.00	0.00	309.47	**309.47**
Natural, Cultural, and Historical Resources	Historical and Cultural Assets	0.09	0.10	0.05	11.34	**11.58**
Natural, Cultural, and Historical Resources	Parks	0.12	0.39	0.08	1.02	**1.61**
Natural, Cultural, and Historical Resources	Surface Waters	0.03	5.85	0.22	69.93	**76.03**
Natural, Cultural, and Historical Resources	Wetlands	0.31	0.98	0.04	171.02	**172.35**
	Total	**0.58**	**7.52**	**0.42**	**694.96**	**703.48**

Topographic Data

According to section 380.093, Florida Statutes, the NOAA Lidar data (2018-2020 USGS Lidar: Florida Peninsular FDEM-1) was utilized. Lidar provides precise elevation measurements that enable the creation of detailed digital elevation models (DEMs), which are used to simulate surface water flow, storm surge, and other flood-related impacts. The NOAA Lidar mapping utilizes the NAV88 vertical datum. All topographic and flood related scenario data is referenced in feet and relative to the North American Datum of 1998 (ft-NGVD88).

Table 18 provides the available data based on the topographic data for the jurisdictions.

- *Yes* indicates the data was available.
- *N/A* indicates not applicable to the jurisdiction.
- *No* indicates data are not available.

Table 18: Topographic Data

Data Type	Highlands County	City of Avon Park	City of Sebring	Town of Lake Placid
FDEM Florida Elevation Certificates	No	No	No	No
Digital Elevation Model (DEM)	Yes	Yes	Yes	Yes

Flood Scenario-Related Data

Multiple data sources were used for flood scenario-related data, as shown in the table below.

Table 19 provides the available data based on the flood scenario-related data for the jurisdictions.

- *Yes* indicates the data was available.
- *N/A* indicates not applicable to the jurisdiction.
- *No* indicates data are not available.

Table 19: Flood Scenario-Related Data

Data Type	Highlands County	City of Avon Park	City of Sebring	Town of Lake Plaid
Precipitation Data	Yes	Yes	Yes	Yes
Groundwater Level Data	No	No	No	No
Sea Level Rise (SLR) Projections	N/A	N/A	N/A	N/A
Tidal Datums and Tidal Flooding	N/A	N/A	N/A	N/A
Storm Surge	N/A	N/A	N/A	N/A
Hydro Stratigraphic Information	No	No	No	No
River Channel Cross-Section	No	No	No	No
Land Use Data	Yes	Yes	Yes	Yes
Evapotranspiration Data	No	No	No	No
Modeled Current (100-Year, 24 Hour Storm Event)	Yes	Yes	Yes	Yes
Modeled 2040 (100-Year, 24 Hour Storm Event)	Yes	Yes	Yes	Yes
Modeled 2070 (100-Year, 24 Hour Storm Event)	Yes	Yes	Yes	Yes
Modeled Current (200-Year, 24 Hour Storm Event)	Yes	Yes	Yes	Yes
Modeled 2040 (200-Year, 24 Hour Storm Event)	Yes	Yes	Yes	Yes
Modeled 2070 (200-Year, 24 Hour Storm Event)	Yes	Yes	Yes	Yes
Modeled Current (500-Year, 24 Hour Storm Event)	Yes	Yes	Yes	Yes
Modeled 2040 (500-Year, 24 Hour Storm Event)	Yes	Yes	Yes	Yes
Modeled 2070 (500-Year, 24 Hour Storm Event)	Yes	Yes	Yes	Yes

EXPOSURE ANALYSIS

The exposure analysis for the Highlands County Vulnerability Assessment evaluates the potential impacts of inland flooding using modeled 24-hour rainfall events for the 100-year, 200-year, and 500-year storm frequencies under current conditions and future planning horizons of 2040 and 2070. The objective of this task is to quantify and spatially represent the intersection between identified flood hazards and the critical assets located throughout the County. This analysis serves as the exposure component of the Vulnerability Assessment, providing a clear, data-driven understanding of which assets may be physically impacted by floodwaters under varying storm conditions. Critical asset data was compiled and organized into

Figure 20: The Highlands County Animal Services and Ag Unit rescued 10 horses and one dog from Lakeside Stables on U.S. 98 (Shedden, 2017).

Geographic Information System (GIS) feature classes, including points, polylines, transportation polylines, and polygons. GIS datasets and associated metadata incorporate the four asset classes defined in section 380.093 (2)(a)1–4, Florida Statutes, and all data products adhere to the Resilient Florida Program's GIS Data Standards to ensure consistency, transparency, and reproducibility.

The purpose of this analysis is to move beyond generalized assumptions and establish a standardized, technically robust framework for evaluating flood exposure and supporting local decision-making. Specifically, the exposure analysis is intended to:

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(1) Establish a baseline understanding of rainfall-driven flood risk affecting critical assets across Highlands County.

(2) Evaluate how future conditions may influence the extent and severity of impacts to those assets.

(3) Provide defensible, data-supported justification for prioritizing projects and seeking funding through the Resilient Florida Program.

In addition, the results of this analysis inform adaptation planning by identifying the depth, extent, and frequency of potential flooding, enabling engineers, planners, and decision-makers to determine appropriate resilience strategies, including protection, accommodation, or relocation of vulnerable assets.

Methodology for Exposure Analysis

The intent of the methodology for exposure analysis is to provide a single, defensible technical reference describing how rainfall-driven flood exposure was evaluated and integrated to support planning, prioritization, and decision-making.

The Exposure Analysis quantifies modeled flood depths and spatial extent of inundation at the asset level using depth rasters for multiple rainfall return periods and planning horizons. This analysis ensures that critical assets are evaluated for physical exposure.

Data Inputs

Critical Assets Datasets

Critical assets for Highlands County are organized into the following feature classes:

Table 20: VA Feature Classes

Point Assets	CFRPC_PT: critical assets: points
Polygon (Area) Assets	CFRPC_PG: critical assets: polygon areas
Polyline (Linear) Assets	CFRPC_PL: critical assets: general linear assets CFRPC_PL_TRANS: critical assets: transportation linear assets

All asset classes share a common unique identifier	CFRPC_ID — unique number for all critical assets and is the primary key used for all joins, summaries, and cross-dataset relationships.

Rainfall, Flood, and Inundation Inputs

These input/rasters represent rainfall-driven flooding based on modeling exclusively created for the 100-, 200-, and 500-year events for the current year, 2040, and 2070 forecast year's exposure analysis by HighTide (subcontractor for the CFRPC).

All raster datasets were harmonized to a common coordinate system, resolution, and vertical unit (feet, Foot_US) prior to analysis.

These storm scenarios and planning horizons were selected to comply with the requirements set forth in section 380.093, Florida Statutes. These datasets represent rainfall-driven flood response based on HighTide's proprietary modeling and were used exclusively for each rainfall event surface for exposure analysis.

- **100-Year Rainfall Events (Current, 2040, 2070):** For the 100-year rainfall event, the analysis relies on the modeling completed by HighTide developed for the 100-year rainfall event surfaces for:
  - Current-year conditions
  - 2040 forecast conditions
  - 2070 forecast conditions

- **200-Year Rainfall Events (Current, 2040, 2070):** For the 200-year rainfall event, the analysis relies on the modeling completed by HighTide developed for the 200-year rainfall event surfaces for:
  - Current-year conditions
  - 2040 forecast conditions
  - 2070 forecast conditions

- **500-Year Rainfall Events (Current, 2040, 2070):** For the 500-year rainfall event, the analysis relies on the modeling completed by HighTide developed for the 500-year rainfall event surfaces for:
  - Current-year conditions
  - 2040 forecast conditions
  - 2070 forecast conditions

Asset Geometry Representation for Exposure Analysis

Critical assets exposure analysis within the County uses four primary geometry types (Points, Polylines, Transportation Polylines, and Polygons) to quantify modeled flood depths and spatial extent of inundation at the asset level using modeled flood rasters for multiple rainfall return periods and planning horizons. Each geometry type was handled in a consistent and intentional manner to support the exposure analysis.

Point Assets

Point features represent assets with a discrete geographic location (e.g., facilities or site-specific infrastructure). These point locations were used directly for the exposure analyses. Flood exposure values were extracted at the point of location.

Exposure Analysis Specific Fields include:

- **100-Year**
  - RF_100YR_2025 (Rain flow 100-Year 2025 Scenario)
  - RF_100YR_2040 (Rain flow 100-Year 2040 Scenario)
  - RF_100YR_2070 (Rain flow 100-Year 2070 Scenario)

- **200-Year**
  - RF_200YR_2025 (Rain flow 200-Year 2025 Scenario)
  - RF_200YR_2040 (Rain flow 200-Year 2040 Scenario)
  - RF_200YR_2070 (Rain flow 200-Year 2070 Scenario)

- **500-Year**
  - RF_500YR_2025 (Rain flow 500-Year 2025 Scenario)
  - RF_500YR_2040 (Rain flow 500-Year 2040 Scenario)
  - RF_500YR_2070 (Rain flow 500-Year 2070 Scenario)

Polyline Assets

General polyline features represent linear assets such as utilities or irrigation canals. For exposure purposes, a single representative point was generated at the midpoint of each polyline feature. This midpoint was used to sample the modeled flood exposure value.

Exposure Analysis Specific Fields include:

- **100-Year**
  - RF_100YR_2025 (Rain flow 100-Year 2025 Scenario)
  - RF_100YR_2040 (Rain flow 100-Year 2040 Scenario)
  - RF_100YR_2070 (Rain flow 100-Year 2070 Scenario)

- **200-Year**
  - RF_200YR_2025 (Rain flow 200-Year 2025 Scenario)
  - RF_200YR_2040 (Rain flow 200-Year 2040 Scenario)
  - RF_200YR_2070 (Rain flow 200-Year 2070 Scenario)

- **500-Year**
  - RF_500YR_2025 (Rain flow 500-Year 2025 Scenario)
  - RF_500YR_2040 (Rain flow 500-Year 2040 Scenario)
  - RF_500YR_2070 (Rain flow 500-Year 2070 Scenario)

Transportation Polyline Assets

Transportation features (e.g., roads, rail) were treated consistently with other linear assets. A midpoint was generated for each transportation polyline, and that midpoint served as the representative location for both exposure extraction. This approach ensures uniform treatment across linear asset classes while maintaining a clear, defensible spatial reference.

Exposure Analysis Specific Fields include:

- **100-Year**
  - RF_100YR_2025 (Rain flow 100-Year 2025 Scenario)
  - RF_100YR_2040 (Rain flow 100-Year 2040 Scenario)
  - RF_100YR_2070 (Rain flow 100-Year 2070 Scenario)

- **200-Year**
  - RF_200YR_2025 (Rain flow 200-Year 2025 Scenario)
  - RF_200YR_2040 (Rain flow 200-Year 2040 Scenario)
  - RF_200YR_2070 (Rain flow 200-Year 2070 Scenario)

- **500-Year**
  - RF_500YR_2025 (Rain flow 500-Year 2025 Scenario)
  - RF_500YR_2040 (Rain flow 500-Year 2040 Scenario)
  - RF_500YR_2070 (Rain flow 500-Year 2070 Scenario)

Polygon Assets

Polygon features represent areal assets such as facilities, campuses, or other spatially extensive features. For the exposure analyses, a centroid was calculated for each polygon. The centroid location was used to extract flood exposure value.

Exposure Analysis Specific Fields include:

- **100-Year**
  - RF_100YR_2025 (Rain flow 100-Year 2025 Scenario)
  - RF_100YR_2040 (Rain flow 100-Year 2040 Scenario)
  - RF_100YR_2070 (Rain flow 100-Year 2070 Scenario)

- **200-Year**
  - RF_200YR_2025 (Rain flow 200-Year 2025 Scenario)
  - RF_200YR_2040 (Rain flow 200-Year 2040 Scenario)
  - RF_200YR_2070 (Rain flow 200-Year 2070 Scenario)

- **500-Year**
  - RF_500YR_2025 (Rain flow 500-Year 2025 Scenario)
  - RF_500YR_2040 (Rain flow 500-Year 2040 Scenario)
  - RF_500YR_2070 (Rain flow 500-Year 2070 Scenario)

Rationale

Using a single representative point for each asset ensures methodological consistency across asset types, simplifies exposure results, and supports clear interpretation at the planning scale. This approach allows every asset, regardless of geometry, to be evaluated uniformly within the flood exposure modeling framework.

Limitations and Appropriate Use

This methodology is subject to the following considerations:

- Modeled flood depths represent scenario-based conditions, not observed events.
- Results should be interpreted as planning-level indicators, not site-specific engineering determinations.

Despite these limitations, the combined exposure framework provides a robust, transparent, and defensible basis for regional vulnerability assessment and mitigation planning across the County.

Inundation Scenarios

As part of an effort to identify vulnerabilities due to precipitation events at specific sites of interest throughout Highlands County, the CFRPC contracted with HighTide who contracted with RSS-Hydro to develop a two- dimensional (2D) hydraulic model using United States Army Corps of Engineers (USACE) Hydraulic Engineering Center River Analysis System (HEC-RAS) Version 6.6. The model provided flood depths, water surface elevations, and a visualization of flooding extents to mitigate flood hazards and aid the vulnerability assessment of the county's assets and resources.

A rain-on-mesh modeling approach was used in HEC-RAS to minimize assumptions in developing hydrologic parameters. This method is particularly well-suited for flat terrain, as it allows the model to emphasize terrain-driven flow processes. Rainfall hyetographs are applied at each time step across every mesh cell, incorporating soil infiltration rates and estimated hydrologic losses. These inputs generate a spatially and temporally distributed runoff volume, which HEC-RAS then routes directly through the hydraulic model.

Rainfall is distributed across the computational grid using NOAA Atlas 14 precipitation frequencies at the stations across the watershed. The latest rainfall projection coefficients were downloaded from the USGS Science Base-Catalog. The Florida Flood Hub for Applied Research and Innovation was consulted to get advice on the best dataset to retrieve the projections estimation. The Localized Constructed Analogues version 2 (LOCA2) was the recommended dataset. This dataset contains coefficients retrieved from different weather models for each rain gauge in Florida and defined for several return periods and future year projections. A 100-year (1% annual chance), 200-year (0.5% annual chance) and 500-year (0.2% annual chance) storm events are modeled, consistent with the vulnerability assessment's requirement to simulate future rainfall-induced flooding. The 100-year event was also modeled for validation purposes. Additionally, medium-time horizon (2040) and long-time horizon

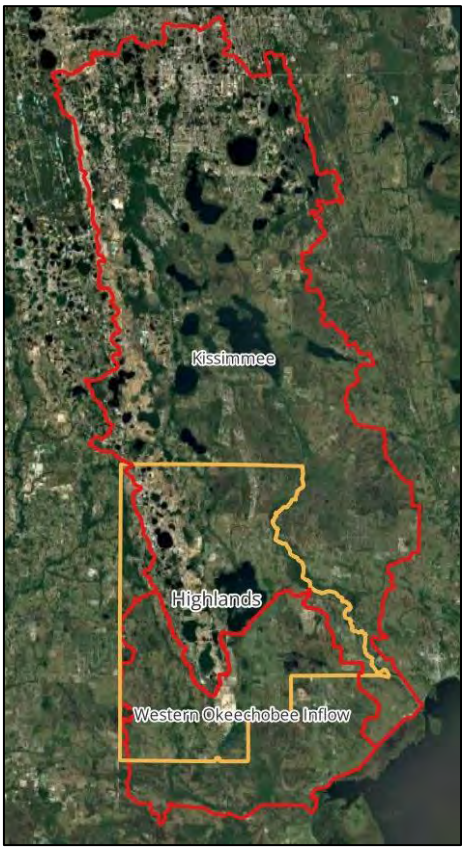

Figure 21: Kissimmee and Western Okeechobee Inflow Watersheds

(2070) scenarios are modeled to understand the potential flood risk in the future.

The rainfall duration was set to 24 hours, and the temporal distribution was obtained also from the NOAA Atlas 14 for each used station.

Precipitation data was applied to the model as a Meteorological Station Point Time Series. The precipitation was consulted in all the stations in Highlands and other counties included upstream within the Kissimmee River and Western Okeechobee Inflow watersheds.

Appendix E includes hydrology and hydraulics assumptions and methods as well as a map series used to assess current flood risks throughout Highlands County for the 100-yr, 200-yr and 500-yr return periods for three (3) scenarios: current (2025), 2040 and 2070 projections.

Current Scenario Rainfall Induced Flooding

For the 100-year return period, highest depths are located as expected along the watercourses of the county. The Kissimmee River shows a large floodplain along all the limits of the county. The flood depths reach 2 m (6.5 feet) in most of the area covered by the floodplain. Similar and higher depth values can be found at Arbuckle Creek all the way to Lake Istokpoga.

The depths at the lakes are not representative of their real total depth. LiDAR technology is not capable of obtaining terrain values when they are under water since the signal bounces over the water table. Therefore, on the DEM formed for the Kissimmee and Western Okeechobee Watersheds, lakes are represented with their water level at the moment of the data acquisition.

For the 200- year and 500-year return period, flooding presents similar situation to the 100-year, however, flood depth increases proportionally to the amount of rainfall for each return period. Depth values above 2 m are only locally found within channels or small lakes.

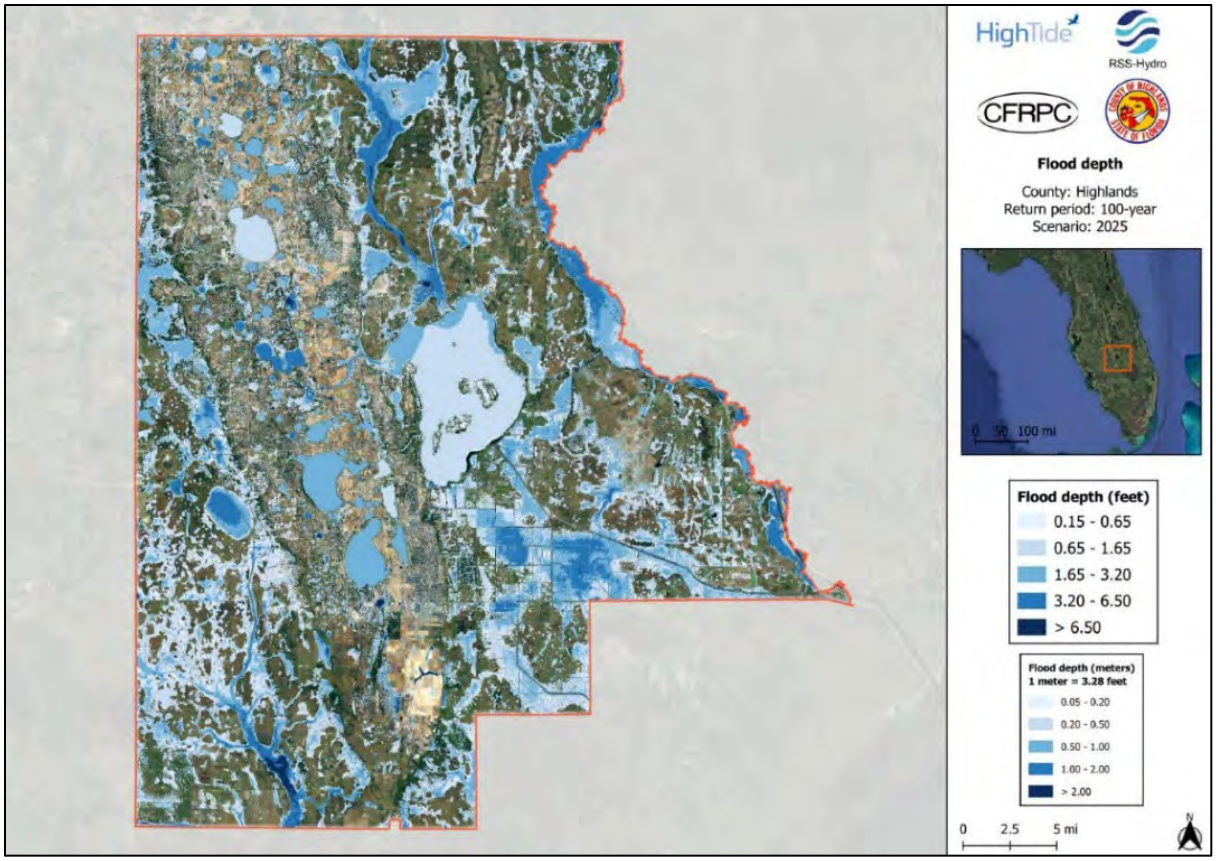

Figure 22: 100 Year Current Scenario Example

2040 and 2070 Scenarios Rainfall Induced Flooding

For both 2040 and 2070 projections for Highlands County, rainfall is expected to be between 0.78 and 1.05 times the current rainfall value. This suggests that lower volumes of rain are predicted to fall, and more specifically, in the 2070 projection. These coefficients are derived from climate models that take into account numerous weather data and possible future scenarios based on climatological and human impact trends. Far-future scenarios may show lower coefficients than near-term projections if global climate trends diverge from current trajectories, including in cases where conditions shift away from worst-case assumptions.

Rainfall coefficients are mostly above 1, and over 2 in some cases, across the upstream area of the Kissimmee River Watershed. Even though rainfall is predicted to be lower for Highlands County, water coming from the north could affect the depth values at the Kissimmee River along Highlands County. Hydraulic behaviors remain the same. Watercourses keep almost the same floodplain extents while increasing the depths.

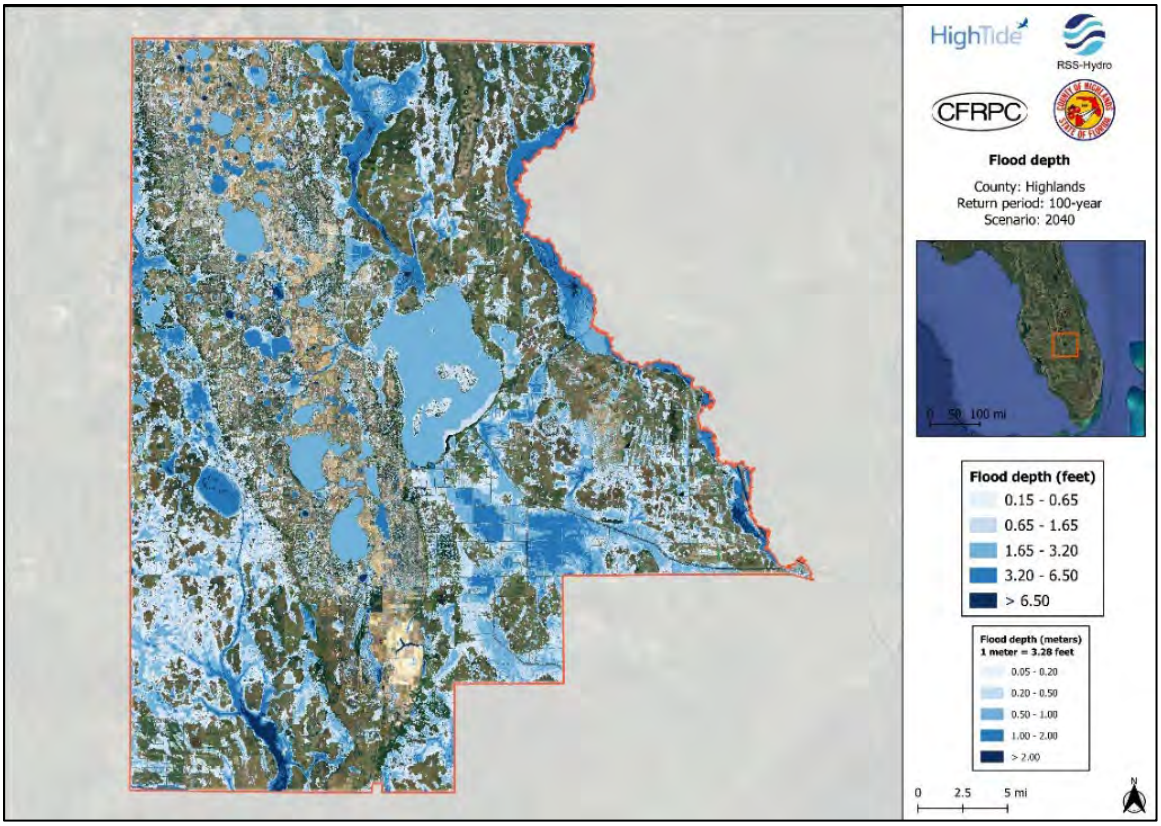

Figure 23: 100 Year 2040 Scenario Example

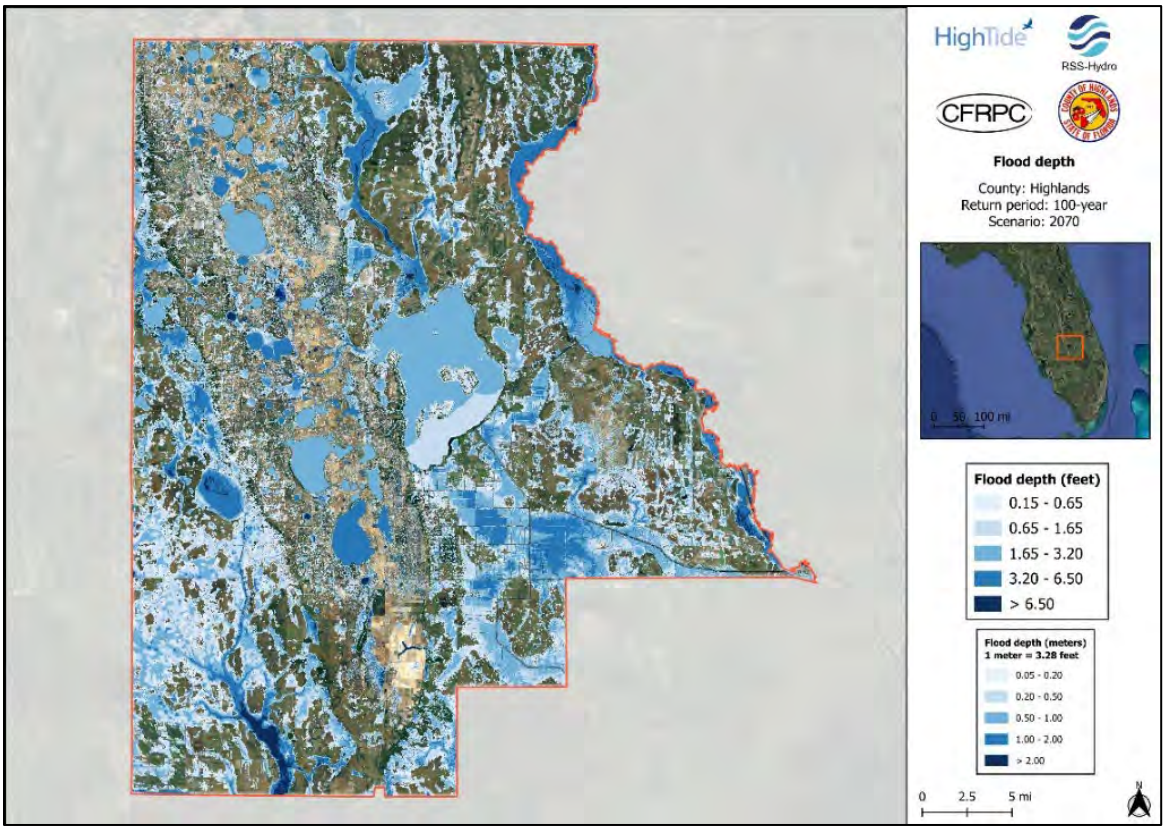

Figure 24: 100 Year 2070 Scenario Example

Critical Asset Exposure Data

Highlands County's Critical Asset Exposure data can be found in the tables below, included in Appendix A, and provided within the accompanying GIS Geodatabase. The Geodatabase includes the Asset Points, Asset Polylines, Asset Polylines Transportation, Asset Polygons, and the above-mentioned Rainfall Induced Flooding Rasters.

Summary Exposure Totals

The Critical Asset Exposure Summary Data Tables were developed to document and quantify the results of the Vulnerability Assessment exposure analysis. These tables identify and categorize critical assets within the County and summarize their potential exposure to applicable hazard scenarios over relevant planning horizons.

The summary tables shown in this section are for the Assets Points. The detailed exposure tables for the Asset Polygons, Asset Polylines, and Asset Polylines Transportation can be found in Appendix A.

- Appendix A includes the detailed exposure result tables.
- Appendix B includes each mapped scenario with exposure results.

Point Assets by 100-Year Scenarios

The tables in this section represent the number of asset points affected by Asset Group in the 100-year scenarios. Appendix A includes detailed tables by Asset Group and Asset Type.

Table 21: 100-Year Summary Table for Unincorporated Point Assets by Asset Group

Unincorporated Asset Points						
Asset Group	**Rainfall Year**	**NONE**	**SHALLOW**	**MEDIUM**	**DEEP**	**TOTAL**
Critical Community and Emergency Facilities	100 Year 2025 Totals	79	9	3	0	**91**
	100 Year 2040 Totals	78	10	3	0	**91**
	100 Year 2070 Totals	78	10	3	0	**91**
Critical Infrastructure	100 Year 2025 Totals	930	216	73	12	**1231**
	100 Year 2040 Totals	865	252	95	19	**1231**
	100 Year 2070 Totals	872	244	98	17	**1231**
Natural, Cultural, and Historical Resources	100 Year 2025 Totals	204	19	10	0	**233**
	100 Year 2040 Totals	194	28	11	0	**233**
	100 Year 2070 Totals	197	25	11	0	**233**
Transportation and Evacuation Routes	100 Year 2025 Totals	60	27	23	12	**122**
	100 Year 2040 Totals	54	25	26	17	**122**
	100 Year 2070 Totals	53	27	26	16	**122**
100 Year 2025 Totals		**1,273**	**271**	**109**	**24**	**1,677**
100 Year 2040 Totals		**1,191**	**315**	**135**	**36**	**1,677**
100 Year 2070 Totals		**1,200**	**306**	**138**	**33**	**1,677**

Table 22: 100-Year Summary Table for Avon Park Point Assets by Asset Group

City of Avon Park Asset Points						
Asset Group	**Rainfall Year**	**NONE**	**SHALLOW**	**MEDIUM**	**DEEP**	**TOTAL**
Critical Community and Emergency Facilities	100 Year 2025 Totals	41	2	0	0	**43**
	100 Year 2040 Totals	39	4	0	0	**43**
	100 Year 2070 Totals	39	4	0	0	**43**
Critical Infrastructure	100 Year 2025 Totals	239	28	8	1	**276**
	100 Year 2040 Totals	231	35	9	1	**276**
	100 Year 2070 Totals	232	34	9	1	**276**
Natural, Cultural, and Historical Resources	100 Year 2025 Totals	311	63	14	4	**392**
	100 Year 2040 Totals	293	80	15	4	**392**
	100 Year 2070 Totals	295	79	14	4	**392**
Transportation and Evacuation Routes	100 Year 2025 Totals	13	2	2	0	**17**
	100 Year 2040 Totals	13	1	2	1	**17**
	100 Year 2070 Totals	13	1	2	1	**17**
100 Year 2025 Totals		**604**	**95**	**24**	**5**	**728**
100 Year 2040 Totals		**576**	**120**	**26**	**6**	**728**
100 Year 2070 Totals		**579**	**118**	**25**	**6**	**728**

Table 23: 100-Year Summary Table for Lake Placid Point Assets by Asset Group

Town of Lake Placid Asset Points						
Asset Group	**Rainfall Year**	**NONE**	**SHALLOW**	**MEDIUM**	**DEEP**	**TOTAL**
Critical Community and Emergency Facilities	100 Year 2025 Totals	22	0	1	0	**23**
	100 Year 2040 Totals	22	0	1	0	**23**
	100 Year 2070 Totals	22	0	1	0	**23**
Critical Infrastructure	100 Year 2025 Totals	142	4	1	0	**147**
	100 Year 2040 Totals	140	6	1	0	**147**
	100 Year 2070 Totals	140	6	1	0	**147**
Natural, Cultural, and Historical Resources	100 Year 2025 Totals	25	5	0	0	**30**
	100 Year 2040 Totals	25	5	0	0	**30**
	100 Year 2070 Totals	25	5	0	0	**30**
Transportation and Evacuation Routes	100 Year 2025 Totals	2	0	1	0	**3**
	100 Year 2040 Totals	2	0	1	0	**3**
	100 Year 2070 Totals	2	0	1	0	**3**
100 Year 2025 Totals		**191**	**9**	**3**	**0**	**203**
100 Year 2040 Totals		**189**	**11**	**3**	**0**	**203**
100 Year 2070 Totals		**189**	**11**	**3**	**0**	**203**

Table 24: 100-Year Summary Table for Sebring Point Assets by Asset Group

Sebring Asset Points						
Asset Group	**Rainfall Year**	**NONE**	**SHALLOW**	**MEDIUM**	**DEEP**	**TOTAL**
Critical Community and Emergency Facilities	100 Year 2025 Totals	43	7	5	0	**55**
	100 Year 2040 Totals	43	7	4	1	**55**
	100 Year 2070 Totals	43	7	4	1	**55**
Critical Infrastructure	100 Year 2025 Totals	324	99	19	0	**442**
	100 Year 2040 Totals	302	113	27	0	**442**
	100 Year 2070 Totals	305	112	25	0	**442**
Natural, Cultural, and Historical Resources	100 Year 2025 Totals	198	39	11	0	**248**
	100 Year 2040 Totals	183	53	12	0	**248**
	100 Year 2070 Totals	185	51	12	0	**248**
Transportation and Evacuation Routes	100 Year 2025 Totals	4	2	2	0	**8**
	100 Year 2040 Totals	4	2	2	0	**8**
	100 Year 2070 Totals	4	2	2	0	**8**
100 Year 2025 Totals		**569**	**147**	**37**	**0**	**753**
100 Year 2040 Totals		**532**	**175**	**45**	**1**	**753**
100 Year 2070 Totals		**537**	**172**	**43**	**1**	**753**

Point Assets by 200-Year Scenarios

The tables in this section represent the number of asset points affected by Asset Group in the 200-year scenarios. Appendix A includes detailed tables by Asset Group and Asset Type.

Table 25: 200-Year Summary Table for Unincorporated Point Assets by Asset Group

Unincorporated Asset Points						
Asset Group	**Rainfall Year**	**NONE**	**SHALLOW**	**MEDIUM**	**DEEP**	**TOTAL**
Critical Community and Emergency Facilities	200 Year 2025 Totals	78	10	3	0	**91**
	200 Year 2040 Totals	77	11	3	0	**91**
	200 Year 2070 Totals	77	11	3	0	**91**
Critical Infrastructure	200 Year 2025 Totals	901	223	95	12	**1231**
	200 Year 2040 Totals	840	259	111	21	**1231**
	200 Year 2070 Totals	836	261	112	22	**1231**
Natural, Cultural, and Historical Resources	200 Year 2025 Totals	201	22	10	0	**233**
	200 Year 2040 Totals	186	35	12	0	**233**
	200 Year 2070 Totals	186	33	14	0	**233**
Transportation and Evacuation Routes	200 Year 2025 Totals	58	25	26	13	**122**
	200 Year 2040 Totals	50	20	30	22	**122**
	200 Year 2070 Totals	50	18	33	21	**122**
200 Year 2025 Totals		**1238**	**280**	**134**	**25**	**1677**
200 Year 2040 Totals		**1153**	**325**	**156**	**43**	**1677**
200 Year 2070 Totals		**1149**	**323**	**162**	**43**	**1677**

Table 26: 200-Year Summary Table for Avon Park Point Assets by Asset Group

City of Avon Park Asset Points						
Asset Group	**Rainfall Year**	**NONE**	**SHALLOW**	**MEDIUM**	**DEEP**	**TOTAL**
Critical Community and Emergency Facilities	200 Year 2025 Totals	41	2	0	0	**43**
	200 Year 2040 Totals	40	2	1	0	**43**
	200 Year 2070 Totals	40	3	0	0	**43**
Critical Infrastructure	200 Year 2025 Totals	235	32	8	1	**276**
	200 Year 2040 Totals	228	38	9	1	**276**
	200 Year 2070 Totals	228	38	9	1	**276**
Natural, Cultural, and Historical Resources	200 Year 2025 Totals	302	72	14	4	**392**
	200 Year 2040 Totals	282	88	18	4	**392**
	200 Year 2070 Totals	289	81	14	4	**388**
Transportation and Evacuation Routes	200 Year 2025 Totals	13	1	2	1	**17**
	200 Year 2040 Totals	11	3	1	2	**17**
	200 Year 2070 Totals	11	3	1	2	**17**
200 Year 2025 Totals		**591**	**107**	**24**	**6**	**728**
200 Year 2040 Totals		**561**	**131**	**29**	**7**	**728**
200 Year 2070 Totals		**568**	**125**	**24**	**7**	**724**

Table 27: 200-Year Summary Table for Lake Placid Point Assets by Asset Group

Town of Lake Placid Asset Points						
Asset Group	**Rainfall Year**	**NONE**	**SHALLOW**	**MEDIUM**	**DEEP**	**TOTAL**
Critical Community and Emergency Facilities	200 Year 2025 Totals	22	0	1	0	**23**
	200 Year 2040 Totals	22	0	1	0	**23**
	200 Year 2070 Totals	22	0	1	0	**23**
Critical Infrastructure	200 Year 2025 Totals	142	4	1	0	**147**
	200 Year 2040 Totals	141	5	1	0	**147**
	200 Year 2070 Totals	141	5	1	0	**147**
Natural, Cultural, and Historical Resources	200 Year 2025 Totals	25	5	0	0	**30**
	200 Year 2040 Totals	25	4	1	0	**30**
	200 Year 2070 Totals	25	4	1	0	**30**
Transportation and Evacuation Routes	200 Year 2025 Totals	2	0	1	0	**3**
	200 Year 2040 Totals	2	0	1	0	**3**
	200 Year 2070 Totals	2	0	1	0	**3**
200 Year 2025 Totals		**191**	**9**	**3**	**0**	**203**
200 Year 2040 Totals		**190**	**9**	**4**	**0**	**203**
200 Year 2070 Totals		**190**	**9**	**4**	**0**	**203**

Table 28: 200-Year Summary Table for Sebring Point Assets by Asset Group

Sebring Asset Points						
Asset Group	**Rainfall Year**	**NONE**	**SHALLOW**	**MEDIUM**	**DEEP**	**TOTAL**
Critical Community and Emergency Facilities	200 Year 2025 Totals	43	7	4	1	**55**
	200 Year 2040 Totals	39	10	5	1	**55**
	200 Year 2070 Totals	40	9	5	1	**55**
Critical Infrastructure	200 Year 2025 Totals	316	102	24	0	**442**
	200 Year 2040 Totals	292	115	35	0	**442**
	200 Year 2070 Totals	292	115	35	0	**442**
Natural, Cultural, and Historical Resources	200 Year 2025 Totals	189	46	13	0	**248**
	200 Year 2040 Totals	174	61	13	0	**248**
	200 Year 2070 Totals	175	61	12	0	**248**
Transportation and Evacuation Routes	200 Year 2025 Totals	4	2	2	0	**8**
	200 Year 2040 Totals	4	1	3	0	**8**
	200 Year 2070 Totals	4	1	3	0	**8**
200 Year 2025 Totals		**552**	**157**	**43**	**1**	**753**
200 Year 2040 Totals		**509**	**187**	**56**	**1**	**753**
200 Year 2070 Totals		**511**	**186**	**55**	**1**	**753**

Point Assets by 500-Year Scenarios

The tables in this section represent the number of asset points affected by Asset Group in the 500-year scenarios. Appendix A includes additional tables by Asset Group and Asset Type.

Table 29: 500-Year Summary Table for Unincorporated Point Assets by Asset Group

Unincorporated Asset Points						
Asset Group	**Rainfall Year**	**NONE**	**SHALLOW**	**MEDIUM**	**DEEP**	**TOTAL**
Critical Community and Emergency Facilities	500 Year 2025 Totals	78	10	3	0	**91**
	500 Year 2040 Totals	73	13	5	0	**91**
	500 Year 2070 Totals	72	16	3	0	**91**
Critical Infrastructure	500 Year 2025 Totals	860	257	94	20	**1231**
	500 Year 2040 Totals	795	270	136	30	**1231**
	500 Year 2070 Totals	805	268	130	28	**1231**
Natural, Cultural, and Historical Resources	500 Year 2025 Totals	195	27	11	0	**233**
	500 Year 2040 Totals	169	48	16	0	**233**
	500 Year 2070 Totals	172	46	15	0	**233**
Transportation and Evacuation Routes	500 Year 2025 Totals	54	24	25	19	**122**
	500 Year 2040 Totals	48	17	31	26	**122**
	500 Year 2070 Totals	49	16	33	24	**122**
500 Year 2025 Totals		**1187**	**318**	**133**	**39**	**1677**
500 Year 2040 Totals		**1085**	**348**	**188**	**56**	**1677**
500 Year 2070 Totals		**1098**	**346**	**181**	**52**	**1677**

Table 30: 500-Year Summary Table for Avon Park Point Assets by Asset Group

City of Avon Park Asset Points						
Asset Group	**Rainfall Year**	**NONE**	**SHALLOW**	**MEDIUM**	**DEEP**	**TOTAL**
Critical Community and Emergency Facilities	500 Year 2025 Totals	39	4	0	0	**43**
	500 Year 2040 Totals	40	2	1	0	**43**
	500 Year 2070 Totals	40	2	1	0	**43**
Critical Infrastructure	500 Year 2025 Totals	229	37	9	1	**276**
	500 Year 2040 Totals	222	43	10	1	**276**
	500 Year 2070 Totals	223	43	9	1	**276**
Natural, Cultural, and Historical Resources	500 Year 2025 Totals	292	80	16	4	**392**
	500 Year 2040 Totals	267	98	23	4	**392**
	500 Year 2070 Totals	270	96	22	4	**392**
Transportation and Evacuation Routes	500 Year 2025 Totals	11	3	2	1	**17**
	500 Year 2040 Totals	10	4	1	2	**17**
	500 Year 2070 Totals	11	3	1	2	**17**
500 Year 2025 Totals		**571**	**124**	**27**	**6**	**728**
500 Year 2040 Totals		**539**	**147**	**35**	**7**	**728**
500 Year 2070 Totals		**544**	**144**	**33**	**7**	**728**

Table 31: 500-Year Summary Table for Lake Placid Point Assets by Asset Group

Lake Placid Asset Points						
Asset Group	**Rainfall Year**	**NONE**	**SHALLOW**	**MEDIUM**	**DEEP**	**TOTAL**
Critical Community and Emergency Facilities	500 Year 2025 Totals	22	0	1	0	**23**
	500 Year 2040 Totals	22	0	1	0	**23**
	500 Year 2070 Totals	22	0	1	0	**23**
Critical Infrastructure	500 Year 2025 Totals	140	6	1	0	**147**
	500 Year 2040 Totals	139	7	1	0	**147**
	500 Year 2070 Totals	139	7	1	0	**147**
Natural, Cultural, and Historical Resources	500 Year 2025 Totals	25	5	0	0	**30**
	500 Year 2040 Totals	25	4	1	0	**30**
	500 Year 2070 Totals	25	4	1	0	**30**
Transportation and Evacuation Routes	500 Year 2025 Totals	2	0	1	0	**3**
	500 Year 2040 Totals	2	0	1	0	**3**
	500 Year 2070 Totals	2	0	1	0	**3**
500 Year 2025 Totals		**189**	**11**	**3**	**0**	**203**
500 Year 2040 Totals		**188**	**11**	**4**	**0**	**203**
500 Year 2070 Totals		**188**	**11**	**4**	**0**	**203**

Table 32: 500-Year Summary Table for Sebring Point Assets by Asset Group

Sebring Asset Points						
Asset Group	**Rainfall Year**	**NONE**	**SHALLOW**	**MEDIUM**	**DEEP**	**TOTAL**
Critical Community and Emergency Facilities	500 Year 2025 Totals	42	7	5	1	**55**
	500 Year 2040 Totals	36	13	5	1	**55**
	500 Year 2070 Totals	36	13	5	1	**55**
Critical Infrastructure	500 Year 2025 Totals	299	113	30	0	**442**
	500 Year 2040 Totals	273	123	46	0	**442**
	500 Year 2070 Totals	275	121	46	0	**442**
Natural, Cultural, and Historical Resources	500 Year 2025 Totals	179	57	12	0	**248**
	500 Year 2040 Totals	164	64	20	0	**248**
	500 Year 2070 Totals	166	64	18	0	**248**
Transportation and Evacuation Routes	500 Year 2025 Totals	4	1	3	0	**8**
	500 Year 2040 Totals	3	2	3	0	**8**
	500 Year 2070 Totals	3	2	3	0	**8**
500 Year 2025 Totals		**524**	**178**	**50**	**1**	**753**
500 Year 2040 Totals		**476**	**202**	**74**	**1**	**753**
500 Year 2070 Totals		**480**	**200**	**72**	**1**	**753**

Top 10 Exposure Assets

The top ten assets were filtered based on the 500-Year 2070 Scenario which provides the most flooding impacts to the County as mentioned earlier in this section.

Table 33: Countywide Top 10 Exposure Point Assets

Asset Group	Asset Type	CFRPC ID	Asset Name	Asset Relevancy	500 Year 2070
Critical Infrastructure	Stormwater Treatment Facilities and Pump Stations	CFRPC_PT:003556	Hickory Branch Dam1	Regionally Significant	17.20
Critical Infrastructure	Solid and Hazardous Waste Facilities	CFRPC_PT:029065	CORRELL 20 SAND MINE/THE GREAT FRUIT COMPANY, INC.	Locally Significant	16.06
Critical Infrastructure	Solid and Hazardous Waste Facilities	CFRPC_PT:029097	RIDGELAND AG CORP	Locally Significant	13.08
Critical Infrastructure	Stormwater Treatment Facilities and Pump Stations	CFRPC_PT:003732	FISHEATING CREEK	Regionally Significant	12.48
Natural, Cultural, and Historical Resources	Historical and Cultural Assets	CFRPC_PT:021182	14 W CHARLES STREET	Locally Significant	11.83
Critical Infrastructure	Solid and Hazardous Waste Facilities	CFRPC_PT:028825	AVON PARK CLASS-3 SLF & TRANS STA	Regionally Significant	10.75
Critical Infrastructure	Solid and Hazardous Waste Facilities	CFRPC_PT:028871	AVON PARK CLASS-3 SLF & TRANS STA	Regionally Significant	10.75
Critical Infrastructure	Solid and Hazardous Waste Facilities	CFRPC_PT:028916	AVON PARK CLASS-3 SLF & TRANS STA	Regionally Significant	10.75
Critical Infrastructure	Stormwater Treatment Facilities and Pump Stations	CFRPC_PT:003436	S65EW	Regionally Significant	9.93
Transportation and Evacuation Routes	Railroad Bridges	CFRPC_PT:019589	WHEELER RD	Regionally Significant	9.80

Table 34: Countywide Top 10 Exposure Polyline Assets

Asset Group	Asset Type	CFRPC ID	Asset Name	Asset Relevancy	500 Year 2070
Natural, Cultural, and Historical Resources	Surface Waters	CFRPC_PL:076682	Hickory Branch	Locally Significant	19.94
Natural, Cultural, and Historical Resources	Surface Waters	CFRPC_PL:065956	(blank)	Locally Significant	19.38
Natural, Cultural, and Historical Resources	Surface Waters	CFRPC_PL:083596	Hickory Branch	Locally Significant	18.87
Natural, Cultural, and Historical Resources	Surface Waters	CFRPC_PL:073886	Hickory Branch	Locally Significant	18.59
Natural, Cultural, and Historical Resources	Surface Waters	CFRPC_PL:074635	(blank)	Regionally Significant	18.52
Natural, Cultural, and Historical Resources	Surface Waters	CFRPC_PL:083355	Hickory Branch	Locally Significant	17.14
Natural, Cultural, and Historical Resources	Surface Waters	CFRPC_PL:074540	FISHEATING CREEK	Regionally Significant	16.71
Natural, Cultural, and Historical Resources	Surface Waters	CFRPC_PL:052074	JACKSON CREEK	Locally Significant	16.66
Natural, Cultural, and Historical Resources	Surface Waters	CFRPC_PL:091307	JACKSON CREEK	Locally Significant	16.50
Natural, Cultural, and Historical Resources	Surface Waters	CFRPC_PL:061272	JACKSON CREEK	Locally Significant	16.49

Table 35: Countywide Top 10 Exposure Polyline Transportation Assets

Asset Group	Asset Type	CFRPC ID	Asset Name	Asset Relevancy	500 Year 2070
Transportation and Evacuation Routes	Roadways	CFRPC_PLT:048117	N NOAH AVE	Locally Significant	13.33
Transportation and Evacuation Routes	Roadways	CFRPC_PLT:099870	CR-731	Locally Significant	13.08
Transportation and Evacuation Routes	Roadways	CFRPC_PLT:048121	E MOSES ST	Locally Significant	12.46
Transportation and Evacuation Routes	Roadways	CFRPC_PLT:034107	ROBBINS RD	Locally Significant	12.10
Transportation and Evacuation Routes	Roadways	CFRPC_PLT:048116	N NOAH AVE	Locally Significant	11.81
Transportation and Evacuation Routes	Roadways	CFRPC_PLT:001480	CR-17	Locally Significant	11.36
Transportation and Evacuation Routes	Roadways	CFRPC_PLT:157800	US-98	Regionally Significant	11.23
Transportation and Evacuation Routes	Roadways	CFRPC_PLT:157801	US-98	Regionally Significant	11.17
Transportation and Evacuation Routes	Roadways	CFRPC_PLT:124276	GLADES ST	Locally Significant	11.05
Transportation and Evacuation Routes	Roadways	CFRPC_PLT:066789	BYRD RD	Locally Significant	10.98

Table 36: Countywide Top 10 Exposure Polygon Assets

Asset Group	Asset Type	CFRPC ID	Asset Name	Asset Relevancy	500 Year 2070
Natural, Cultural, and Historical Resources	Surface Waters	CFRPC_PG:021825	(blank)	Locally Significant	31.50
Natural, Cultural, and Historical Resources	Surface Waters	CFRPC_PG:022774	(blank)	Locally Significant	29.06
Natural, Cultural, and Historical Resources	Wetlands	CFRPC_PG:045571	6410: Freshwater Marshes	Regionally Significant	26.35
Natural, Cultural, and Historical Resources	Wetlands	CFRPC_PG:052040	6410: Freshwater Marshes	Regionally Significant	25.61
Natural, Cultural, and Historical Resources	Surface Waters	CFRPC_PG:023119	(blank)	Locally Significant	21.95
Natural, Cultural, and Historical Resources	Wetlands	CFRPC_PG:039188	6400: Vegetated Non-Forested Wetlands	Regionally Significant	19.84
Natural, Cultural, and Historical Resources	Wetlands	CFRPC_PG:039221	6400: Vegetated Non-Forested Wetlands	Regionally Significant	19.62
Critical Infrastructure	Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:017680	(blank)	Regionally Significant	19.61
Natural, Cultural, and Historical Resources	Wetlands	CFRPC_PG:045572	6410: Freshwater Marshes	Regionally Significant	18.91
Natural, Cultural, and Historical Resources	Wetlands	CFRPC_PG:078844	6440: Emergent Aquatic Vegetation	Regionally Significant	18.83

Countywide to Include Municipalities Total Exposure Assets

The detailed tables can be found in Appendix A for the full details.

Regionally Significant Asset Exposure Data

Summary Exposure Totals

The Regionally Significant Critical Asset Exposure Summary Data Tables were developed to document and quantify the results of the Vulnerability Assessment exposure analysis. These tables identify and categorize the regionally significant critical assets within the County and summarize their potential exposure to applicable hazard scenarios over relevant planning horizons.

- Appendix A includes the detailed exposure tables.
- Appendix B includes each mapped scenario with exposure results.

Regionally Significant Affected Point Assets by Asset Group and Asset Subtype

Table 37: Regionally Significant Summary Table for Unincorporated Point Assets by Asset Group and Asset Subtype

Unincorporated Regionally Significant Affected Point Assets										
	Total Assets	**100 Year 2025**	**100 Year 2040**	**100 Year 2070**	**200 Year 2025**	**200 Year 2040**	**200 Year 2070**	**500 Year 2025**	**500 Year 2040**	**500 Year 2070**
Critical Community and Emergency Facilities	**74**	**69**	**72**	**71**	**69**	**72**	**72**	**72**	**72**	**72**
Community Centers	11	10	11	10	10	11	11	11	11	11
Correctional Facilities	1	1	1	1	1	1	1	1	1	1
Disaster Recovery Centers	1	1	1	1	1	1	1	1	1	1
Emergency Medical Service Facilities	8	6	7	7	6	7	7	7	7	7
Emergency Operation Centers	1	1	1	1	1	1	1	1	1	1
Fire Stations	14	12	13	13	12	13	13	13	13	13
Health Care Facilities	6	6	6	6	6	6	6	6	6	6
Hospitals	2	2	2	2	2	2	2	2	2	2
Law Enforcement Facilities	2	2	2	2	2	2	2	2	2	2
Local Government Facilities	7	7	7	7	7	7	7	7	7	7
Risk Shelter Inventory	4	4	4	4	4	4	4	4	4	4
Schools	12	12	12	12	12	12	12	12	12	12
State Government Facilities	5	5	5	5	5	5	5	5	5	5

Unincorporated Regionally Significant Affected Point Assets										
	Total Assets	**100 Year 2025**	**100 Year 2040**	**100 Year 2070**	**200 Year 2025**	**200 Year 2040**	**200 Year 2070**	**500 Year 2025**	**500 Year 2040**	**500 Year 2070**
Critical Infrastructure	**543**	**414**	**417**	**414**	**414**	**420**	**416**	**415**	**424**	**423**
Communications Facilities	54	45	45	45	45	46	46	45	46	46
Disaster Debris Management Sites	8	7	7	7	7	7	7	7	7	7
Drinking Water Facilities	197	176	177	176	176	179	177	177	181	181
Electric Production and Supply Facilities	19	17	17	17	17	17	17	17	18	18
Solid and Hazardous Waste Facilities	49	43	45	43	43	45	43	43	45	45
Stormwater Treatment Facilities and Pump Stations	88	8	8	8	8	8	8	8	8	8
Wastewater Treatment Facilities and Lift Stations	67	60	60	60	60	60	60	60	61	60
Water Utility Conveyance Systems	61	58	58	58	58	58	58	58	58	58
Natural, Cultural, and Historical Resources	**11**	**9**	**9**	**9**	**9**	**9**	**9**	**9**	**10**	**9**
Historical and Cultural Assets	11	9	9	9	9	9	9	9	10	9
Transportation and Evacuation Routes	**75**	**72**	**73**	**72**	**72**	**73**	**73**	**73**	**73**	**73**
Airports	8	7	7	7	7	7	7	7	7	7
Marinas	4	3	4	3	3	4	4	4	4	4
Rail Facilities	51	51	51	51	51	51	51	51	51	51
Railroad Bridges	12	11	11	11	11	11	11	11	11	11
Grand Total	**703**	**564**	**571**	**566**	**564**	**574**	**570**	**569**	**579**	**577**

Table 38: Regionally Significant Summary Table for Avon Park Point Assets by Asset Group and Asset Subtype

City of Avon Park Regionally Significant Affected Point Assets										
	Total Assets	**100 Year 2025**	**100 Year 2040**	**100 Year 2070**	**200 Year 2025**	**200 Year 2040**	**200 Year 2070**	**500 Year 2025**	**500 Year 2040**	**500 Year 2070**
Critical Community and Emergency Facilities	**30**	**21**	**26**	**23**	**23**	**26**	**26**	**26**	**26**	**26**
Colleges and Universities	1	1	1	1	1	1	1	1	1	1
Community Centers	4	2	2	2	2	2	2	2	2	2
Emergency Medical Service Facilities	1	0	1	0	0	1	1	1	1	1
Fire Stations	2	1	2	1	1	2	2	2	2	2
Health Care Facilities	3	2	3	2	2	3	3	3	3	3
Law Enforcement Facilities	2	0	0	0	0	0	0	0	0	0
Local Government Facilities	3	1	3	3	3	3	3	3	3	3
Risk Shelter Inventory	7	7	7	7	7	7	7	7	7	7
Schools	5	5	5	5	5	5	5	5	5	5
State Government Facilities	1	1	1	1	1	1	1	1	1	1
Wastewater Treatment Facilities and Lift Stations	1	1	1	1	1	1	1	1	1	1
Critical Infrastructure	**31**	**27**	**27**	**27**	**27**	**28**	**28**	**27**	**28**	**28**
Communications Facilities	8	6	6	6	6	6	6	6	6	6
Drinking Water Facilities	10	10	10	10	10	10	10	10	10	10
Electric Production and Supply Facilities	3	3	3	3	3	3	3	3	3	3
Solid and Hazardous Waste Facilities	2	2	2	2	2	2	2	2	2	2
Stormwater Treatment Facilities and Pump Stations	1	0	0	0	0	0	0	0	0	0
Wastewater Treatment Facilities and Lift Stations	3	3	3	3	3	3	3	3	3	3
Water Utility Conveyance Systems	4	3	3	3	3	4	4	3	4	4
Natural, Cultural, and Historical Resources	**38**	**29**	**32**	**32**	**30**	**33**	**33**	**32**	**34**	**34**
Historical and Cultural Assets	38	29	32	32	30	33	33	32	34	34
Transportation and Evacuation Routes	**14**	**14**	**14**	**14**	**14**	**14**	**14**	**14**	**14**	**14**
Airports	1	1	1	1	1	1	1	1	1	1

City of Avon Park Regionally Significant Affected Point Assets										
	Total Assets	**100 Year 2025**	**100 Year 2040**	**100 Year 2070**	**200 Year 2025**	**200 Year 2040**	**200 Year 2070**	**500 Year 2025**	**500 Year 2040**	**500 Year 2070**
Rail Facilities	11	11	11	11	11	11	11	11	11	11
Railroad Bridges	2	2	2	2	2	2	2	2	2	2
Grand Total	**113**	**91**	**99**	**96**	**94**	**101**	**101**	**99**	**102**	**102**

Table 39: Regionally Significant Summary Table for Lake Placid Point Assets by Asset Group and Asset Subtype

Town of Lake Placid Regionally Significant Affected Point Assets										
	Total Assets	**100 Year 2025**	**100 Year 2040**	**100 Year 2070**	**200 Year 2025**	**200 Year 2040**	**200 Year 2070**	**500 Year 2025**	**500 Year 2040**	**500 Year 2070**
Critical Community and Emergency Facilities	**19**	**13**	**13**	**13**	**13**	**13**	**13**	**13**	**16**	**16**
Colleges and Universities	1	1	1	1	1	1	1	1	1	1
Community Centers	2	2	2	2	2	2	2	2	2	2
Emergency Medical Service Facilities	1	0	0	0	0	0	0	0	1	1
Fire Stations	1	0	0	0	0	0	0	0	1	1
Health Care Facilities	4	2	2	2	2	2	2	2	2	2
Law Enforcement Facilities	1	0	0	0	0	0	0	0	0	0
Local Government Facilities	2	1	1	1	1	1	1	1	2	2
Logistical Staging Areas	1	1	1	1	1	1	1	1	1	1
Risk Shelter Inventory	3	3	3	3	3	3	3	3	3	3
Schools	3	3	3	3	3	3	3	3	3	3
Critical Infrastructure	**9**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**
Communications Facilities	3	3	3	3	3	3	3	3	3	3
Drinking Water Facilities	3	0	0	0	0	0	0	0	0	0
Wastewater Treatment Facilities and Lift Stations	1	1	1	1	1	1	1	1	1	1
Water Utility Conveyance Systems	2	0	0	0	0	0	0	0	0	0

Town of Lake Placid Regionally Significant Affected Point Assets										
	Total Assets	**100 Year 2025**	**100 Year 2040**	**100 Year 2070**	**200 Year 2025**	**200 Year 2040**	**200 Year 2070**	**500 Year 2025**	**500 Year 2040**	**500 Year 2070**
Natural, Cultural, and Historical Resources	**4**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
Historical and Cultural Assets	4	2	2	2	2	2	2	2	2	2
Transportation and Evacuation Routes	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
Rail Facilities	2	2	2	2	2	2	2	2	2	2
Grand Total	**34**	**21**	**21**	**21**	**21**	**21**	**21**	**21**	**24**	**24**

Table 40: Regionally Significant Summary Table for Sebring Point Assets by Asset Group and Asset Subtype

City of Sebring Regionally Significant Affected Point Assets										
	Total Assets	**100 Year 2025**	**100 Year 2040**	**100 Year 2070**	**200 Year 2025**	**200 Year 2040**	**200 Year 2070**	**500 Year 2025**	**500 Year 2040**	**500 Year 2070**
Critical Community and Emergency Facilities	**36**	**31**	**31**	**31**	**31**	**31**	**31**	**31**	**31**	**31**
Community Centers	4	3	3	3	3	3	3	3	3	3
Correctional Facilities	1	1	1	1	1	1	1	1	1	1
Emergency Medical Service Facilities	2	1	1	1	1	1	1	1	1	1
Fire Stations	4	4	4	4	4	4	4	4	4	4
Health Care Facilities	4	3	3	3	3	3	3	3	3	3
Hospitals	1	1	1	1	1	1	1	1	1	1
Law Enforcement Facilities	4	4	4	4	4	4	4	4	4	4
Local Government Facilities	10	8	8	8	8	8	8	8	8	8
Risk Shelter Inventory	3	3	3	3	3	3	3	3	3	3
Schools	3	3	3	3	3	3	3	3	3	3
Critical Infrastructure	**30**	**27**	**27**	**27**	**27**	**27**	**27**	**27**	**27**	**27**
Communications Facilities	4	3	3	3	3	3	3	3	3	3
Drinking Water Facilities	9	7	7	7	7	7	7	7	7	7

City of Sebring Regionally Significant Affected Point Assets										
	Total Assets	**100 Year 2025**	**100 Year 2040**	**100 Year 2070**	**200 Year 2025**	**200 Year 2040**	**200 Year 2070**	**500 Year 2025**	**500 Year 2040**	**500 Year 2070**
Electric Production and Supply Facilities	1	1	1	1	1	1	1	1	1	1
Solid and Hazardous Waste Facilities	5	5	5	5	5	5	5	5	5	5
Wastewater Treatment Facilities and Lift Stations	4	4	4	4	4	4	4	4	4	4
Water Utility Conveyance Systems	7	7	7	7	7	7	7	7	7	7
Natural, Cultural, and Historical Resources	**19**	**12**	**13**	**13**	**13**	**14**	**14**	**13**	**15**	**15**
Historical and Cultural Assets	19	12	13	13	13	14	14	13	15	15
Transportation and Evacuation Routes	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**
Airports	1	1	1	1	1	1	1	1	1	1
Rail Facilities	6	6	6	6	6	6	6	6	6	6
Grand Total	**92**	**77**	**78**	**78**	**78**	**79**	**79**	**78**	**80**	**80**

Regionally Significant Affected Polyline Assets by Asset Group and Asset Subtype

Table 41: Regionally Significant Summary Table for Unincorporated Polyline Assets by Asset Group and Asset Subtype

Unincorporated Regionally Significant Affected Polyline Assets										
	Total Assets	**100 Year 2025**	**100 Year 2040**	**100 Year 2070**	**200 Year 2025**	**200 Year 2040**	**200 Year 2070**	**500 Year 2025**	**500 Year 2040**	**500 Year 2070**
Critical Infrastructure	**64**	**54**	**54**	**54**	**54**	**54**	**54**	**54**	**57**	**56**
Electric Production and Supply Facilities	23	19	19	19	19	19	19	19	20	20
Stormwater Treatment Facilities and Pump Stations	41	35	35	35	35	35	35	35	37	36
Natural, Cultural, and Historical Resources	**986**	**978**	**979**	**980**	**979**	**981**	**981**	**980**	**981**	**981**
Historical and Cultural Assets	11	11	11	11	11	11	11	11	11	11
Surface Waters	975	967	968	969	968	970	970	969	970	970
Transportation and Evacuation Routes	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**

Unincorporated Regionally Significant Affected Polyline Assets										
	Total Assets	**100 Year 2025**	**100 Year 2040**	**100 Year 2070**	**200 Year 2025**	**200 Year 2040**	**200 Year 2070**	**500 Year 2025**	**500 Year 2040**	**500 Year 2070**
Bridges	15	15	15	15	15	15	15	15	15	15
Grand Total	**1,065**	**1,047**	**1,048**	**1,049**	**1,048**	**1,050**	**1,050**	**1,049**	**1,053**	**1,052**

Table 42: Regionally Significant Summary Table for Avon Park Polyline Assets by Asset Group and Asset Subtype

City of Avon Park Regionally Significant Affected Polyline Assets										
	Total Assets	**100 Year 2025**	**100 Year 2040**	**100 Year 2070**	**200 Year 2025**	**200 Year 2040**	**200 Year 2070**	**500 Year 2025**	**500 Year 2040**	**500 Year 2070**
Critical Infrastructure	**9**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**	**8**
Electric Production and Supply Facilities	9	8	8	8	8	8	8	8	8	8
Natural, Cultural, and Historical Resources	**11**	**11**	**11**	**11**	**11**	**11**	**11**	**11**	**11**	**11**
Surface Waters	11	11	11	11	11	11	11	11	11	11
Transportation and Evacuation Routes	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Rail Facilities	1	1	1	1	1	1	1	1	1	1
Grand Total	**21**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**	**20**

Table 43: Regionally Significant Summary Table for Lake Placid Polyline Assets by Asset Group and Asset Subtype

Town of Lake Placid Regionally Significant Affected Polyline Assets										
	Total Assets	**100 Year 2025**	**100 Year 2040**	**100 Year 2070**	**200 Year 2025**	**200 Year 2040**	**200 Year 2070**	**500 Year 2025**	**500 Year 2040**	**500 Year 2070**
Critical Infrastructure	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**	**2**
Electric Production and Supply Facilities	2	2	2	2	2	2	2	2	2	2
Transportation and Evacuation Routes	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**	**1**
Rail Facilities	1	1	1	1	1	1	1	1	1	1
Grand Total	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**	**3**

Table 44: Regionally Significant Summary Table for Sebring Polyline Assets by Asset Group and Asset Subtype

City of Sebring Regionally Significant Affected Polyline Assets										
	Total Assets	**100 Year 2025**	**100 Year 2040**	**100 Year 2070**	**200 Year 2025**	**200 Year 2040**	**200 Year 2070**	**500 Year 2025**	**500 Year 2040**	**500 Year 2070**
Critical Infrastructure	**11**	**11**	**11**	**11**	**11**	**11**	**11**	**11**	**11**	**11**
Electric Production and Supply Facilities	8	8	8	8	8	8	8	8	8	8
Stormwater Treatment Facilities and Pump Stations	3	3	3	3	3	3	3	3	3	3
Natural, Cultural, and Historical Resources	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**	**12**
Historical and Cultural Assets	1	1	1	1	1	1	1	1	1	1
Surface Waters	11	11	11	11	11	11	11	11	11	11
Transportation and Evacuation Routes	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**	**4**
Bridges	2	2	2	2	2	2	2	2	2	2
Rail Facilities	2	2	2	2	2	2	2	2	2	2
Grand Total	**27**	**27**	**27**	**27**	**27**	**27**	**27**	**27**	**27**	**27**

Regionally Significant Affected Polyline Transportation Assets by Asset Group and Asset Subtype

Table 45: Regionally Significant Summary Table for Unincorporated Polyline Transportation Assets by Asset Group and Asset Subtype

Unincorporated Regionally Significant Asset Point Assets										
	Total Assets	**100 Year 2025**	**100 Year 2040**	**100 Year 2070**	**200 Year 2025**	**200 Year 2040**	**200 Year 2070**	**500 Year 2025**	**500 Year 2040**	**500 Year 2070**
Transportation and Evacuation Routes	**1,652**	**324**	**391**	**391**	**351**	**448**	**452**	**397**	**531**	**516**
Roadways	**1,652**	**324**	**391**	**391**	**351**	**448**	**452**	**397**	**531**	**516**
Evacuation Route	585	93	117	116	101	136	134	120	158	152
Evacuation Route - SIS	1,067	231	274	275	250	312	318	277	373	364
Grand Total	**1,652**	**324**	**391**	**391**	**351**	**448**	**452**	**397**	**531**	**516**

Table 46: Regionally Significant Summary Table for Avon Park Polyline Transportation Assets by Asset Group and Asset Subtype

City of Avon Park Regionally Significant Asset Point Assets										
	Total Assets	**100 Year 2025**	**100 Year 2040**	**100 Year 2070**	**200 Year 2025**	**200 Year 2040**	**200 Year 2070**	**500 Year 2025**	**500 Year 2040**	**500 Year 2070**
Transportation and Evacuation Routes	**331**	**150**	**165**	**162**	**157**	**173**	**172**	**169**	**193**	**189**
Roadways	**331**	**150**	**165**	**162**	**157**	**173**	**172**	**169**	**193**	**189**
Evacuation Route	175	57	68	68	64	73	72	71	86	85
Evacuation Route - SIS	156	93	97	94	93	100	100	98	107	104
Grand Total	**331**	**150**	**165**	**162**	**157**	**173**	**172**	**169**	**193**	**189**

Table 47: Regionally Significant Summary Table for Lake Placid Polyline Transportation Assets by Asset Group and Asset Subtype

Town of Lake Placid Regionally Significant Asset Point Assets										
	Total Assets	**100 Year 2025**	**100 Year 2040**	**100 Year 2070**	**200 Year 2025**	**200 Year 2040**	**200 Year 2070**	**500 Year 2025**	**500 Year 2040**	**500 Year 2070**
Transportation and Evacuation Routes	**213**	**43**	**45**	**45**	**45**	**50**	**51**	**45**	**52**	**52**
Roadways	**213**	**43**	**45**	**45**	**45**	**50**	**51**	**45**	**52**	**52**
Evacuation Route	27	5	6	6	6	8	8	6	8	8
Evacuation Route - SIS	186	38	39	39	39	42	43	39	44	44
Grand Total	**213**	**43**	**45**	**45**	**45**	**50**	**51**	**45**	**52**	**52**

Table 48: Regionally Significant Summary Table for Sebring Polyline Transportation Assets by Asset Group and Asset Subtype

City of Sebring Regionally Significant Asset Point Assets										
	Total Assets	**100 Year 2025**	**100 Year 2040**	**100 Year 2070**	**200 Year 2025**	**200 Year 2040**	**200 Year 2070**	**500 Year 2025**	**500 Year 2040**	**500 Year 2070**
Transportation and Evacuation Routes	**377**	**76**	**86**	**85**	**79**	**86**	**86**	**83**	**101**	**99**
Roadways	**377**	**76**	**86**	**85**	**79**	**86**	**86**	**83**	**101**	**99**
Evacuation Route	171	33	42	42	36	42	42	41	49	47
Evacuation Route - SIS	206	43	44	43	43	44	44	42	52	52
Grand Total	**377**	**76**	**86**	**85**	**79**	**86**	**86**	**83**	**101**	**99**

Regionally Significant Affected Polygon Assets by Asset Group and Asset Subtype

Table 49: Regionally Significant Summary Table for Unincorporated Polygon Assets by Asset Group and Asset Subtype

Unincorporated Regionally Significant Affected Polygon Assets										
	Total Assets	**100 Year 2025**	**100 Year 2040**	**100 Year 2070**	**200 Year 2025**	**200 Year 2040**	**200 Year 2070**	**500 Year 2025**	**500 Year 2040**	**500 Year 2070**
Critical Infrastructure	**3,192**	**3,082**	**3,036**	**3,082**	**3,058**	**3,096**	**3,103**	**3,085**	**3,118**	**3,116**
Military Installations	2	2	2	2	2	2	2	2	2	2
Stormwater Treatment Facilities and Pump Stations	3,190	3,080	3,034	3,080	3,056	3,094	3,101	3,083	3,116	3,114
Natural, Cultural, and Historical Resources	**8,444**	**8,327**	**8,276**	**8,324**	**8,298**	**8,354**	**8,357**	**8,332**	**8,377**	**8,376**
Conservation Lands	138	121	120	121	120	125	125	121	129	129
Historical and Cultural Assets	52	45	45	45	45	45	45	45	46	46
Surface Waters	36	36	36	36	36	36	36	36	36	36
Wetlands	8,218	8,125	8,075	8,122	8,097	8,148	8,151	8,130	8,166	8,165
Grand Total	**11,636**	**11,409**	**11,312**	**11,406**	**11,356**	**11,450**	**11,460**	**11,417**	**11,495**	**11,492**

Table 50: Regionally Significant Summary Table for Avon Park Polygon Assets by Asset Group and Asset Subtype

City of Avon Park Regionally Significant Affected Polygon Assets										
	Total Assets	**100 Year 2025**	**100 Year 2040**	**100 Year 2070**	**200 Year 2025**	**200 Year 2040**	**200 Year 2070**	**500 Year 2025**	**500 Year 2040**	**500 Year 2070**
Critical Infrastructure	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**	**15**
Stormwater Treatment Facilities and Pump Stations	15	15	15	15	15	15	15	15	15	15
Natural, Cultural, and Historical Resources	**97**	**97**	**97**	**97**	**97**	**96**	**96**	**96**	**96**	**96**
Historical and Cultural Assets	4	4	4	4	4	4	4	4	4	4
Parks	29	29	29	29	29	28	28	28	28	28
Surface Waters	7	7	7	7	7	7	7	7	7	7
Wetlands	57	57	57	57	57	57	57	57	57	57
Grand Total	**112**	**112**	**112**	**112**	**112**	**111**	**111**	**111**	**111**	**111**

Table 51: Regionally Significant Summary Table for Lake Placid Polygon Assets by Asset Group and Asset Subtype

Town of Lake Placid Regionally Significant Affected Polygon Assets										
	Total Assets	**100 Year 2025**	**100 Year 2040**	**100 Year 2070**	**200 Year 2025**	**200 Year 2040**	**200 Year 2070**	**500 Year 2025**	**500 Year 2040**	**500 Year 2070**
Critical Infrastructure	**14**	**14**	**14**	**14**	**14**	**14**	**14**	**14**	**14**	**14**
Stormwater Treatment Facilities and Pump Stations	14	14	14	14	14	14	14	14	14	14
Natural, Cultural, and Historical Resources	**65**	**63**	**62**	**63**	**62**	**63**	**64**	**63**	**64**	**64**
Historical and Cultural Assets	2	2	2	2	2	2	2	2	2	2
Parks	35	34	33	34	33	34	35	34	35	35
Surface Waters	5	5	5	5	5	5	5	5	5	5
Wetlands	23	22	22	22	22	22	22	22	22	22
Grand Total	**79**	**77**	**76**	**77**	**76**	**77**	**78**	**77**	**78**	**78**

Table 52: Regionally Significant Summary Table for Sebring Polygon Assets by Asset Group and Asset Subtype

City of Sebring Regionally Significant Affected Polygon Assets										
	Total Assets	**100 Year 2025**	**100 Year 2040**	**100 Year 2070**	**200 Year 2025**	**200 Year 2040**	**200 Year 2070**	**500 Year 2025**	**500 Year 2040**	**500 Year 2070**
Critical Infrastructure	**28**	**27**	**27**	**27**	**27**	**27**	**27**	**27**	**27**	**27**
Stormwater Treatment Facilities and Pump Stations	28	27	27	27	27	27	27	27	27	27
Natural, Cultural, and Historical Resources	**187**	**180**	**179**	**180**	**179**	**180**	**180**	**180**	**181**	**181**
Conservation Lands	1	1	1	1	1	1	1	1	1	1
Historical and Cultural Assets	6	5	5	5	5	5	5	5	6	6
Parks	48	42	41	42	41	42	42	42	42	42
Surface Waters	5	5	5	5	5	5	5	5	5	5
Wetlands	127	127	127	127	127	127	127	127	127	127
Grand Total	**215**	**207**	**206**	**207**	**206**	**207**	**207**	**207**	**208**	**208**

SENSITIVITY ANALYSIS

The Sensitivity Analysis evaluates the severity of flooding across each asset class and flood scenario by assigning risk levels based on the percentage of land area inundated and the number of critical assets affected. This analysis supports the identification of relative vulnerability among asset types and geographic areas, allowing for prioritization of those most at risk. By applying consistent metrics across scenarios, the Sensitivity Analysis provides a structured approach to comparing how different flood conditions influence asset exposure throughout Highlands County.

The objective of this task is to quantify and spatially represent the variation in risk levels associated with rainfall-driven flooding hazards and their interaction with critical assets identified by Highlands County stakeholders. This task serves as the sensitivity and mapping component of the Vulnerability Assessment, producing GIS-based outputs that illustrate how changes in flood extent and depth affect overall risk. The critical asset data was organized into Geographic Information System (GIS) feature classes, including points, polylines, transportation polylines, and polygons. GIS datasets and associated metadata incorporate the four asset classes defined in section 380.093 (2)(a)1–4, F.S., and adhere to the Resilient Florida Program's GIS Data Standards to ensure consistency and reproducibility.

The purpose of the Sensitivity Analysis is to evaluate how variations in key assumptions, datasets, and modeling inputs used in the Vulnerability Assessment may influence flood exposure results and the identification of vulnerable assets. This analysis provides important context regarding the level of uncertainty associated with the assessment and helps validate that the results are reasonable and consistent with methodologies recommended under the Resilient Florida Program. By strengthening confidence in the findings, the Sensitivity Analysis supports informed, data-driven decision-making and reduces reliance on generalized assumptions in resilience planning.

Methodology for Sensitivity Analysis

This section presents a Sensitivity Analysis Methodology applied consistently to all critical assets in Highlands County, Florida. The intent is to provide a single, technical reference describing how rainfall-driven flood exposure and regional sensitivity were evaluated and integrated into planning, prioritization, and decision-making. Together, these analyses ensure that the critical assets included are evaluated for physical exposure to rainfall-driven flooding as well as the social, environmental (hydrological), and hazard sensitivity context.

The sensitivity analysis characterizes relative regional sensitivity using a framework incorporating social vulnerability (SOVI), population distribution, FEMA flood hazard extent, and natural environmental (hydrological - canals, ditches, stormwater facilities, lakes, rivers, and streams) features, and exposure inundation.

The sensitivity analysis applies to a standardized framework where the inputs are used to derive a relative sensitivity index representing baseline conditions for each exposure rainfall event and forecast year. The inputs needed to determine the Sensitivity Analysis include the following inputs:

- Social Vulnerability (SOVI)
- Population Distribution
- FEMA Flood Hazard Extent
- Natural Environmental features
- Exposure Inundation

Tables 53 through 56 used hexagon grid frameworks to ensure uniform comparison across the County. Hexagons intersecting the regional boundary were retained while open-water areas (lakes, reservoirs) were removed. Wetlands were also retained. Each hexagon serves as a container for aggregated scores derived from multiple assets. Input 57 was developed by computing inundation exposure percentages.

Social Vulnerability (SOVI)

SOVI data at the Census tract level were spatially joined to a hexagon grid. Each hexagon was assigned a SOVI score based on a five-class system from low to high.

Table 53: SOVI Scoring

SOVI Class	Score
Low	1
Medium Low	2
Medium	3
Medium High	4
High	5

Population Distribution

Population was estimated using Census block data and redistributed into hexagons through a weighted point-based approach. Hexagon population totals were then classified into a five-tier score reflecting relative population concentration.

Table 54: Population Scoring

Score	Population
1	0 to 100
2	101 - 400
3	401 - 700
4	701 – 1,000
5	1,001 – 4,100

FEMA Flood Hazard Extent

FEMA 100-year and 500-year flood zones were combined and summarized within each hexagon after removing open-water areas. The percentage of each hexagon intersecting flood hazard zones was calculated and translated into five-class flood sensitivity scores.

Table 55: FEMA Scoring

Score	Percentage Flood Zone
1	0 - 1%
2	1.01 25%
3	25.01 – 49.99%
4	50 – 74.99%
5	75 – 100%

Natural Environmental (Hydrology) Factors

Environmental sensitivity was captured by incremental scoring hexagons intersecting natural environmental hydrological features including wetlands, lakes, and rivers. Coastal boundaries and coastal erosion/critical erosion zones are not applicable as Highlands County is an inland county.

Table 56: Intersecting Natural Hydrology Scoring

Boundary Touching	Score	Coastal
Every Hexagon	1	-
Lakes and Wetlands	2	-
River	3	-
Ocean and Lagoons	4	*Not applicable*
Coastline	5	*Not applicable*

Exposure Inundation

Inundation Hazard Inputs (Rainfall-Based Surfaces Only)

Flood exposure is derived from modeled rainfall depth rasters as discussed earlier representing storm intensity and projected climate conditions. Surfaces were generated for the following:

Storm Recurrence Intervals (provided for each planning horizon)

- 100-year
- 200-year
- 500-year

Planning Horizons

- Current
- 2040
- 2070

The rasters represent expected rainfall depth and intensity under present and future climate scenarios. They serve as the foundation hazard layer for inundation analysis.

Percent Inundation Computation (Raster-to-Polygon Method)

To compute inundation percentages, rainfall depth rasters were first converted into area polygon surfaces. This provides for area-based spatial intersection with critical asset geometries. The process is described as follows. The asset polygons are separated from various area polygon surfaces used for analysis. Different analyses were run on the four asset groups utilizing various geoprocesses, scripts, tools, temporary features, and tables. Ultimately, the analyses and results are always ascribed and populated back to the primary four asset features. Any working and temporary tables or asset features (like the area of polygon surfaces) used during analysis processes are temporary and simply are referenced to clarify the process used. The geometries refer to the Point Assets (PT), Polyline Assets (PL), Transportation Polyline (PLT), and Polygon Assets (PG).

Process Overview

- ✓ Rainfall depth rasters were converted to polygon flood extent layers.
- ✓ Each asset geometry was spatially intersected with the inundation polygons.
- ✓ The area of inundated portions was calculated.
- ✓ Percent inundation was computed as:

$$\textit{Percent Inundated} = (\textit{Area of Asset Intersecting Flood Polygon}) / (\textit{Total Asset Area}) \times 100$$

Advantages to this Approach

This method produces proportional inundation, avoiding sampling bias, and ensuring percentage exposure values which are important for large polygons and complex asset footprints.

Scenario-Specific Fields include:

- 100-Year
  - PCT_100_C (Percent 100-Year Current Scenario)
  - PCT_100_40 (Percent 100-Year 2040 Scenario)
  - PCT_100_70 (Percent 100-Year 2070 Scenario)
- 200-Year
  - PCT_200_C (Percent 200-Year Current Scenario)
  - PCT_100_40 (Percent 200-Year 2040 Scenario)
  - PCT_100_70 (Percent 200-Year 2070 Scenario)
- 500-Year
  - PCT_500_C (Percent 500-Year Current Scenario)
  - PCT_100_40 (Percent 500-Year 2040 Scenario)
  - PCT_100_70 (Percent 500-Year 2070 Scenario)

Risk-Sensitive Exposure Scoring (0-5 Scale)

Percent inundation values are translated into a non-linear risk-sensitive exposure score, indicating that higher flood coverage increases risk at an accelerated rate. The scale in Table 57 ensures partial flooding does not over inflate risk, while near-total inundation is prioritized.

Table 57: Percent Inundated Exposure Score Interpretation

Percentage %	Score	Level of Exposure
0%	0	None
>0 – 10%	1	Minimal
>10 – 30%	2	Low
>30 – 60%	3	Moderate
>60 – 90%	4	High
>90 – 100%	5	Severe

Sensitivity Calculation

The final sensitivity score integrates: Social Vulnerability (1-5), Population Distribution (1-5), FEMA Flood Hazard Extent (1-5), Natural Environmental (Hydrology) features (1-5), and exposure Inundation (0-5).

Sensitivity = Social Vulnerability (1-5) + Population Distribution (1-5) + FEMA Flood Hazard Extent (1-5) + Natural Environmental (Hydrology) features (1-5) + and Exposure Inundation (0-5)

Table 58: Sensitivity Scoring

Factor	Scoring
SOVI	1-5
Population Distribution	1-5
FEMA Flood Hazard Extent	1-5
Natural Environmental (Hydrology) Features	1-5
Exposure Inundation	0-5
Total Possible Sensitivity Score	***Up to 25***

Scenario-specific total score fields include:

- 100-Year
  - STOT_100_C (Sensitivity Total 100-Year Current Scenario)
  - STOT_100_40 (Sensitivity Total 100-Year 2040 Scenario)
  - STOT_100_70 (Sensitivity Total 100-Year 2070 Scenario)

- 200-Year
  - STOT_200_C (Sensitivity Total 200-Year Current Scenario)
  - STOT_100_40 (Sensitivity Total 200-Year 2040 Scenario)
  - STOT_100_70 (Sensitivity Total 200-Year 2070 Scenario)

- 500-Year
  - STOT_500_C (Sensitivity Total 500-Year Current Scenario)
  - STOT_100_40 (Sensitivity Total 500-Year 2040 Scenario)
  - STOT_100_70 (Sensitivity Total 500-Year 2070 Scenario)

This provides that:

- ✓ Highly sensitive assets escalate priority.
- ✓ Moderate flood exposure can yield high overall risk.
- ✓ Final rankings reflect both hazard magnitude and asset consequences.

Priority Rating (0-225 Scale)

The priority rating is based on the summation of each Scenario Specific Sensitivity Score out of a total of 225 (9 Scenarios times 25 total points). This score is then broken into priority rating categories found in Table 8. The Priority Rating can be found on each asset in the Vulnerability Assessment. Appendix C includes the details of each asset where each jurisdiction is sorted from the highest rating to lowest rating.

Table 59: Priority Rating

Sensitivity Rating Values	Priority Rating Categories
0-45	Very Low
46-90	Low
91-135	Moderate
136-180	High
181-225	Very High

Summary Tables

Highlands County's Critical Asset Sensitivity data can be found in the tables below and in the Appendix as well as the provided GIS Geodatabase. The Geodatabase includes Asset Points, Asset Polylines, Asset Polylines Transportation, and Asset Polygons.

The Critical Asset Sensitivity Summary Data Tables were developed to document and quantify the results of the Vulnerability Assessment sensitivity analysis. These tables identify and categorize critical assets within the County and summarize their potential sensitivity to applicable hazard scenarios over relevant planning horizons.

The summary tables shown in this section are for the Assets Points. Asset Polygons, Asset Polylines, and Asset Polylines Transportation can be found in Appendix C.

Appendix C: Highlands Countywide Detailed Sensitivity Tables
Appendix D: Highlands Countywide Sensitivity Maps

Summary Table – Top Sensitivity Assets – Highlands County

The top assets were filtered based on the Sensitivity for the 500-Year 2070 Scenario which provides the greatest sensitivity to the County.

Table 60: Unincorporated Top Sensitivity Point Assets - Critical, Community and Emergency Facilities

Unincorporated Top Sensitivity Point Assets					
Critical Community and Emergency Facilities					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Risk Shelter Inventory	CFRPC_PT:000778	Fred Wild Elementary School	Regionally Significant	15	24.2
Schools	CFRPC_PT:000947	Fred Wild Elementary School	Regionally Significant	15	24.2
Affordable Public Housing	CFRPC_PT:019969	Hope Villas	Locally Significant	14	84.6
Community Centers	CFRPC_PT:000221	MOBILE HEALTHWISE LIBRARY	Regionally Significant	14	98.5
Community Centers	CFRPC_PT:019639	Sun 'n Lake of Sebring Community Center	Regionally Significant	14	80.9
Community Centers	CFRPC_PT:019665	Bishop Park Clubhouse	Regionally Significant	14	65.9
Emergency Medical Service Facilities	CFRPC_PT:019832	HIGHLANDS COUNTY FIRE RESCUE EMS #29	Regionally Significant	14	43.2
Fire Stations	CFRPC_PT:000332	HIGHLANDS COUNTY FIRE DEPARTMENT #29	Regionally Significant	14	43.2
Schools	CFRPC_PT:000961	THE ACADEMY AT YOUTH CARE LANE	Regionally Significant	14	80.3
Community Centers	CFRPC_PT:019666	Sun N Lakes of Lake Placid Clubhouse	Regionally Significant	13	76

Table 61: Unincorporated Top Sensitivity Point Assets – Critical Infrastructure

Unincorporated Top Sensitivity Point Assets					
Critical Infrastructure					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Drinking Water Facilities	CFRPC_PT:001733	KISSIMMEE RIVER FISHING RESORT	Regionally Significant	19	99.8
Drinking Water Facilities	CFRPC_PT:002597	KISSIMMEE RIVER FISHING RESORT	Regionally Significant	19	99.8
Solid and Hazardous Waste Facilities	CFRPC_PT:032680	KISSIMMEE RIVER FISHING RESORT	Locally Significant	19	99.8
Wastewater Treatment Facilities and Lift Stations	CFRPC_PT:008890	KISSIMMEE RIVER FISHING RESORT	Regionally Significant	19	99.8
Water Utility Conveyance Systems	CFRPC_PT:009359	KISSIMMEE RIVER FISHING RESORT - CLEARWELL	Regionally Significant	19	99.8
Water Utility Conveyance Systems	CFRPC_PT:009360	KISSIMMEE RIVER FISHING RESORT - HYDRO TANK	Regionally Significant	19	99.8
Communications Facilities	CFRPC_PT:001334	AMERICAN TOWERS, INC.	Regionally Significant	16	99.3
Solid and Hazardous Waste Facilities	CFRPC_PT:029498	HUNTER WINDOW CLEANING & JANIT	Locally Significant	16	98.6
Solid and Hazardous Waste Facilities	CFRPC_PT:032445	PICKARDS GROVES, I	Locally Significant	16	93.3
Solid and Hazardous Waste Facilities	CFRPC_PT:032681	F.Y. SOD, INC.	Locally Significant	16	97.2
Stormwater Treatment Facilities and Pump Stations	CFRPC_PT:003389	G-90	Regionally Significant	16	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PT:003436	S65EW	Regionally Significant	16	48.2

Unincorporated Top Sensitivity Point Assets					
Critical Infrastructure					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Stormwater Treatment Facilities and Pump Stations	CFRPC_PT:003511	C39A_PC34S	Regionally Significant	16	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PT:003512	C39A_PC35S	Regionally Significant	16	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PT:003513	C39A_PC36S	Regionally Significant	16	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PT:003514	C39A_PC37S	Regionally Significant	16	100

Table 62: Unincorporated Top Sensitivity Point Assets – Natural, Cultural, and Historical Resources

Unincorporated Top Sensitivity Point Assets					
Natural, Cultural, and Historical Resources					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Historical and Cultural Assets	CFRPC_PT:021307	1128 FAIRMONT DRIVE	Locally Significant	16	97.6
Historical and Cultural Assets	CFRPC_PT:021308	1122 FAIRMONT DRIVE	Locally Significant	16	100
Historical and Cultural Assets	CFRPC_PT:011094	QUONSET HUT	Locally Significant	14	70.1
Historical and Cultural Assets	CFRPC_PT:021197	OUTBUILDING OFF SR 70	Locally Significant	14	81.8
Historical and Cultural Assets	CFRPC_PT:021405	COACHMAN GUEST HOUSE	Locally Significant	14	99.6

Unincorporated Top Sensitivity Point Assets					
Natural, Cultural, and Historical Resources					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Historical and Cultural Assets	CFRPC_PT:010579	3645 C R 621 EAST	Regionally Significant	13	46.7
Historical and Cultural Assets	CFRPC_PT:021175	HG01398	Locally Significant	13	94.9
Historical and Cultural Assets	CFRPC_PT:021299	KARNSTEIN HOUSE	Locally Significant	13	100
Historical and Cultural Assets	CFRPC_PT:021335	2417 GARDENVIEW ROAD	Locally Significant	13	100
Historical and Cultural Assets	CFRPC_PT:021356	HENDRIX HOUSE	Locally Significant	13	93.5
Historical and Cultural Assets	CFRPC_PT:021357	646 DEEN BOULEVARD	Locally Significant	13	99.9
Historical and Cultural Assets	CFRPC_PT:021404	COACHMAN-POLLARD HOUSE	Locally Significant	13	75.8
Historical and Cultural Assets	CFRPC_PT:021631	00073 CE MAINTENANCE SHOP	Locally Significant	13	83.4
Historical and Cultural Assets	CFRPC_PT:021666	05023 RUNWAY	Locally Significant	13	58.4
Historical and Cultural Assets	CFRPC_PT:021680	AZALEA DRIVE WATER TOWER	Locally Significant	13	94.1
Historical and Cultural Assets	CFRPC_PT:021681	CRACKER HOUSE	Locally Significant	13	93.3
Historical and Cultural Assets	CFRPC_PT:021682	CRACKER BARN	Locally Significant	13	93.3
Historical and Cultural Assets	CFRPC_PT:021762	12706 US 98	Locally Significant	13	97.7

Unincorporated Top Sensitivity Point Assets					
Natural, Cultural, and Historical Resources					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Historical and Cultural Assets	CFRPC_PT:021763	12626 (A) US 98	Locally Significant	13	94.8
Historical and Cultural Assets	CFRPC_PT:021764	12626 (B) US 98	Locally Significant	13	94.8
Historical and Cultural Assets	CFRPC_PT:021765	12612 US 98	Locally Significant	13	98.5
Historical and Cultural Assets	CFRPC_PT:021766	12526 US 98	Locally Significant	13	93.4
Historical and Cultural Assets	CFRPC_PT:021767	12524 US 98 (12514)	Locally Significant	13	93.4
Historical and Cultural Assets	CFRPC_PT:021787	12150 US 98	Locally Significant	13	99.6

Table 63: Unincorporated Top Sensitivity Point Assets – Transportation and Evacuation Routes

Unincorporated Top Sensitivity Point Assets					
Transportation and Evacuation Routes					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Marinas	CFRPC_PT:033413	KISSIMMEE RIVER FISHING RESORT	Locally Significant	19	99.8
Marinas	CFRPC_PT:033395	Kissimmee River Public Use Area S-65D Gravel Ramp	Locally Significant	17	100
Railroad Bridges	CFRPC_PT:019589	WHEELER RD	Regionally Significant	17	100

Unincorporated Top Sensitivity Point Assets					
Transportation and Evacuation Routes					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Marinas	CFRPC_PT:033388	Lake Francis Public Boat Ramp (Highlands County) - FWC # 70	Locally Significant	15	99.7
Marinas	CFRPC_PT:033392	Lake Lelia (Gator Lake) Public Boat Ramp	Locally Significant	15	94.7
Marinas	CFRPC_PT:033393	Istokpoga Canal at CR 621 Primitive Access (Small Boats Only)	Locally Significant	15	100
Marinas	CFRPC_PT:033402	Arbuckle Creek Road Public Boat Ramp (Sebring)	Locally Significant	15	100
Marinas	CFRPC_PT:033404	Slough Ditch (C-41A) at State Road 70	Locally Significant	15	100
Marinas	CFRPC_PT:033405	Lake Viola Public Boat Ramp	Locally Significant	15	100
Marinas	CFRPC_PT:033407	Lake Sebring Public Boat Ramp - FWC # 122	Locally Significant	15	100
Marinas	CFRPC_PT:033408	Lake Persimmon Public Boat Ramp	Locally Significant	15	98
Marinas	CFRPC_PT:033411	Arbuckle Creek - Burnt Out Bridge Public Boat Ramp (Avon Park)	Locally Significant	15	100
Marinas	CFRPC_PT:033414	Istokpoga Canal Boat Ramp Area - Outboard Ramp	Locally Significant	15	100
Marinas	CFRPC_PT:033427	Istokpoga Canal Boat Ramp Area - Dry Launch Airboat Ramp	Locally Significant	15	97.3
Marinas	CFRPC_PT:033430	Kissimmee River Public Use Area - 4 E's Canoe and Kayak Launch	Locally Significant	15	94.4

Table 64: Unincorporated Top Sensitivity Polyline Assets – Critical Infrastructure

Unincorporated Top Sensitivity Polyline Assets					
Critical Infrastructure					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Stormwater Treatment Facilities and Pump Stations	CFRPC_PL:050454	C-38	Regionally Significant	18	85.1
Stormwater Treatment Facilities and Pump Stations	CFRPC_PL:050451	G91 CANAL	Regionally Significant	16	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PL:050470	KISSIMMEE RIVER	Regionally Significant	16	88.8
Stormwater Treatment Facilities and Pump Stations	CFRPC_PL:050481	SNAKE RIVER	Regionally Significant	16	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PL:050495	G91 OVERFLOW	Regionally Significant	16	98.6
Electric Production and Supply Facilities	CFRPC_PL:000686	ELECTRIC BULK POWER TRANSMISSION AND CONTROL, MORRIS	Regionally Significant	15	90.8
Stormwater Treatment Facilities and Pump Stations	CFRPC_PL:050439	C-41A	Regionally Significant	15	99.9
Stormwater Treatment Facilities and Pump Stations	CFRPC_PL:050448	JACK CREEK	Regionally Significant	15	99.7
Stormwater Treatment Facilities and Pump Stations	CFRPC_PL:050453	ISTOKPOGA CANAL	Regionally Significant	15	99.9
Stormwater Treatment Facilities and Pump Stations	CFRPC_PL:050483	C-39A	Regionally Significant	15	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PL:050489	C-41	Regionally Significant	15	99.1
Stormwater Treatment Facilities and Pump Stations	CFRPC_PL:050498	ARBUCKLE CREEK	Regionally Significant	15	100

Table 65: Unincorporated Top Sensitivity Polyline Assets – Natural, Cultural, and Historical Resources

Unincorporated Top Sensitivity Polyline Assets					
Natural, Cultural, and Historical Resources					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Surface Waters	CFRPC_PL:053989	(blank)	Locally Significant	19	100
Surface Waters	CFRPC_PL:061644	(blank)	Locally Significant	19	93.4
Surface Waters	CFRPC_PL:101954	(blank)	Locally Significant	19	100
Surface Waters	CFRPC_PL:103187	(blank)	Locally Significant	19	98.1
Surface Waters	CFRPC_PL:051163	(blank)	Locally Significant	18	100
Surface Waters	CFRPC_PL:051784	(blank)	Locally Significant	18	100
Surface Waters	CFRPC_PL:052907	(blank)	Locally Significant	18	100
Surface Waters	CFRPC_PL:053286	(blank)	Locally Significant	18	100
Surface Waters	CFRPC_PL:057392	(blank)	Regionally Significant	18	100
Surface Waters	CFRPC_PL:060989	(blank)	Locally Significant	18	99.6
Surface Waters	CFRPC_PL:061215	SNAKE RIVER	Locally Significant	18	100
Surface Waters	CFRPC_PL:062724	SNAKE RIVER	Locally Significant	18	100

Unincorporated Top Sensitivity Polyline Assets					
Natural, Cultural, and Historical Resources					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Surface Waters	CFRPC_PL:064310	(blank)	Locally Significant	18	100
Surface Waters	CFRPC_PL:082121	(blank)	Locally Significant	18	100
Surface Waters	CFRPC_PL:083032	Maple River	Regionally Significant	18	100
Surface Waters	CFRPC_PL:083033	Maple River	Regionally Significant	18	100
Surface Waters	CFRPC_PL:083082	Maple River	Regionally Significant	18	100
Surface Waters	CFRPC_PL:090892	(blank)	Locally Significant	18	100
Surface Waters	CFRPC_PL:090916	(blank)	Regionally Significant	18	100
Surface Waters	CFRPC_PL:091377	(blank)	Locally Significant	18	100
Surface Waters	CFRPC_PL:091877	(blank)	Locally Significant	18	100
Surface Waters	CFRPC_PL:091926	(blank)	Locally Significant	18	100
Surface Waters	CFRPC_PL:094098	(blank)	Locally Significant	18	100
Surface Waters	CFRPC_PL:096522	(blank)	Locally Significant	18	100
Surface Waters	CFRPC_PL:098314	(blank)	Locally Significant	18	100

Unincorporated Top Sensitivity Polyline Assets					
Natural, Cultural, and Historical Resources					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Surface Waters	CFRPC_PL:099964	(blank)	Regionally Significant	18	100
Surface Waters	CFRPC_PL:100316	SNAKE RIVER	Locally Significant	18	91.9
Surface Waters	CFRPC_PL:103201	(blank)	Locally Significant	18	100
Surface Waters	CFRPC_PL:103484	(blank)	Locally Significant	18	100

Table 66: Unincorporated Top Sensitivity Polyline Assets – Transportation and Evacuation Routes

Unincorporated Top Sensitivity Polyline Assets					
Transportation and Evacuation Routes					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Bridges	CFRPC_PL:000214	910001	Regionally Significant	17	92.8
Bridges	CFRPC_PL:000328	090028	Regionally Significant	16	97.3
Bridges	CFRPC_PL:000338	090054	Regionally Significant	16	97.3
Bridges	CFRPC_PL:000323	090032	Regionally Significant	15	91.9
Bridges	CFRPC_PL:000331	090007	Locally Significant	15	94.2

Unincorporated Top Sensitivity Polyline Assets					
Transportation and Evacuation Routes					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Bridges	CFRPC_PL:000317	094031	Locally Significant	14	78.2
Bridges	CFRPC_PL:000334	094016	Locally Significant	14	100
Bridges	CFRPC_PL:000339	094046	Locally Significant	14	59.9
Bridges	CFRPC_PL:000342	090011	Locally Significant	14	100
Bridges	CFRPC_PL:000346	090016	Regionally Significant	14	95.4
Bridges	CFRPC_PL:000347	094007	Locally Significant	14	100

Table 67: Unincorporated Top Sensitivity Polyline Transportation Assets – Transportation and Evacuation Routes

Unincorporated Top Sensitivity Polyline Transportation Assets						
Transportation and Evacuation Routes						
500 Year 2070						
Asset Type	**Asset Sub-Type**	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Roadways	Non-Evacuation Route	CFRPC_PLT:048808	CATFISH PL	Locally Significant	19	100
Roadways	Non-Evacuation Route	CFRPC_PLT:048809	PORPOISE AVE	Locally Significant	19	100

Unincorporated Top Sensitivity Polyline Transportation Assets						
Transportation and Evacuation Routes						
500 Year 2070						
Asset Type	**Asset Sub-Type**	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Roadways	Non-Evacuation Route	CFRPC_PLT:057323	SHELLCRACKER LOOP	Locally Significant	19	100
Roadways	Non-Evacuation Route	CFRPC_PLT:065270	SHELLCRACKER LOOP	Locally Significant	19	100
Roadways	Non-Evacuation Route	CFRPC_PLT:065271	BLUEGILL CIR	Locally Significant	19	100
Roadways	Non-Evacuation Route	CFRPC_PLT:125292	PORPOISE AVE	Locally Significant	19	100
Roadways	Non-Evacuation Route	CFRPC_PLT:125441	LARGEMOUTH AVE	Locally Significant	19	100
Roadways	Non-Evacuation Route	CFRPC_PLT:125442	CATFISH PL	Locally Significant	19	100
Roadways	Non-Evacuation Route	CFRPC_PLT:125741	CRANK BAIT AVE	Locally Significant	19	100
Roadways	Non-Evacuation Route	CFRPC_PLT:125831	SELMAS PL	Locally Significant	19	98.3
Roadways	Non-Evacuation Route	CFRPC_PLT:125895	TACKLE LN CT	Locally Significant	19	100
Roadways	Non-Evacuation Route	CFRPC_PLT:125924	NW RIVERSIDE RD	Locally Significant	19	96.6
Roadways	Non-Evacuation Route	CFRPC_PLT:128928	TACKLE LN CT	Locally Significant	19	100
Roadways	Non-Evacuation Route	CFRPC_PLT:128929	TACKLE LN CT	Locally Significant	19	100

Unincorporated Top Sensitivity Polyline Transportation Assets						
Transportation and Evacuation Routes						
500 Year 2070						
Asset Type	**Asset Sub-Type**	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Roadways	Non-Evacuation Route	CFRPC_PLT:128930	BEAM CV	Locally Significant	19	94.9
Roadways	Non-Evacuation Route	CFRPC_PLT:128931	BEAM CV	Locally Significant	19	100
Roadways	Non-Evacuation Route	CFRPC_PLT:128932	SHELLCRACKER LOOP	Locally Significant	19	96.4
Roadways	Non-Evacuation Route	CFRPC_PLT:128933	SHELLCRACKER LOOP	Locally Significant	19	100
Roadways	Non-Evacuation Route	CFRPC_PLT:128936		Locally Significant	19	94.1
Roadways	Non-Evacuation Route	CFRPC_PLT:128937	SHELLCRACKER LOOP	Locally Significant	19	100
Roadways	Non-Evacuation Route	CFRPC_PLT:128938	TACKLE LN CT	Locally Significant	19	100
Roadways	Non-Evacuation Route	CFRPC_PLT:128939		Locally Significant	19	100
Roadways	Non-Evacuation Route	CFRPC_PLT:128940	CATFISH PL	Locally Significant	19	100
Roadways	Non-Evacuation Route	CFRPC_PLT:128941	CATFISH PL	Locally Significant	19	100

Table 68: Unincorporated Top Sensitivity Polygon Assets – Critical Infrastructure

Unincorporated Top Sensitivity Polygon Assets					
Critical Infrastructure					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:006189	(blank)	Regionally Significant	17	99.1
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:010289	(blank)	Regionally Significant	17	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:012599	(blank)	Regionally Significant	17	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:017691	(blank)	Regionally Significant	17	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:006179	(blank)	Regionally Significant	16	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:006266	(blank)	Regionally Significant	16	99.7
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:006351	(blank)	Regionally Significant	16	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:006617	(blank)	Regionally Significant	16	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:006623	(blank)	Regionally Significant	16	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:006724	(blank)	Regionally Significant	16	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:007515	(blank)	Regionally Significant	16	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:011680	(blank)	Regionally Significant	16	100

Unincorporated Top Sensitivity Polygon Assets					
Critical Infrastructure					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:013156	(blank)	Regionally Significant	16	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:015741	(blank)	Regionally Significant	16	99.8
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:016306	(blank)	Regionally Significant	16	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:016986	(blank)	Regionally Significant	16	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:018025	(blank)	Regionally Significant	16	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:018404	(blank)	Regionally Significant	16	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:019024	(blank)	Regionally Significant	16	100

Table 69: Unincorporated Top Sensitivity Polygon Assets – Natural, Cultural, and Historical Resources

Unincorporated Top Sensitivity Polygon Assets					
Natural, Cultural, and Historical Resources					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Wetlands	CFRPC_PG:080044	6520: Shorelines	Regionally Significant	16	100

Unincorporated Top Sensitivity Polygon Assets					
Natural, Cultural, and Historical Resources					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Wetlands	CFRPC_PG:080046	6520: Shorelines	Regionally Significant	16	100
Wetlands	CFRPC_PG:039898	6400: Vegetated Non-Forested Wetlands	Regionally Significant	15	100
Wetlands	CFRPC_PG:039904	6400: Vegetated Non-Forested Wetlands	Regionally Significant	15	100
Wetlands	CFRPC_PG:080008	6520: Shorelines	Regionally Significant	15	100
Wetlands	CFRPC_PG:023943	6150: Stream and Lake Swamps (bottomland)	Regionally Significant	14	92
Wetlands	CFRPC_PG:039838	6400: Vegetated Non-Forested Wetlands	Regionally Significant	14	100
Wetlands	CFRPC_PG:051111	6410: Freshwater Marshes	Regionally Significant	14	100
Wetlands	CFRPC_PG:054016	6410: Freshwater Marshes	Regionally Significant	14	100
Wetlands	CFRPC_PG:054934	6410: Freshwater Marshes	Regionally Significant	14	95.7
Wetlands	CFRPC_PG:079214	6440: Emergent Aquatic Vegetation	Regionally Significant	14	100

Summary Table – Top Sensitivity Assets – Avon Park

The top assets were filtered based on the Sensitivity for the 500-Year 2070 Scenario which provides the greatest sensitivity to the County.

Table 70: Avon Park Top Sensitivity Point Assets - Critical Community and Emergency Facilities

City of Avon Park Top Sensitivity Point Assets					
Critical Community and Emergency Facilities					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Affordable Public Housing	CFRPC_PT:019951	Highland Palms	Locally Significant	15	85.2
Wastewater Treatment Facilities and Lift Stations	CFRPC_PT:000713	AVON PARK WASTEWATER TREATMENT PLANT	Regionally Significant	14	81.1
Affordable Public Housing	CFRPC_PT:019950	Cornell Colony	Locally Significant	13	22.5
Affordable Public Housing	CFRPC_PT:019956	Palms At Lake Tulane	Locally Significant	13	23.6
Affordable Public Housing	CFRPC_PT:019958	Whispering Pines	Locally Significant	13	28.3
Risk Shelter Inventory	CFRPC_PT:000761	Avon Elementary School	Regionally Significant	13	64
Schools	CFRPC_PT:000957	Avon Elementary School	Regionally Significant	13	64
Affordable Public Housing	CFRPC_PT:019949	Castle Hill Of Avon Park	Locally Significant	12	20.8
Colleges and Universities	CFRPC_PT:000171	SOUTH FLORIDA STATE COLLEGE - AVON PARK	Regionally Significant	12	47.8
Community Centers	CFRPC_PT:000202	Boys & Girls Club of Highlands County	Regionally Significant	12	23.1
Fire Stations	CFRPC_PT:000344	CITY OF AVON PARK FD ST 5	Regionally Significant	12	23

City of Avon Park Top Sensitivity Point Assets					
Critical Community and Emergency Facilities					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Local Government Facilities	CFRPC_PT:019658	Highlands County Tax Collector Avon Park Office	Regionally Significant	12	27.3
Risk Shelter Inventory	CFRPC_PT:000758	South Florida State College	Regionally Significant	12	47.8
Risk Shelter Inventory	CFRPC_PT:000900	Avon Park Recreation Center	Regionally Significant	12	23.1

Table 71: Avon Park Top Sensitivity Point Assets - Critical Infrastructure

City of Avon Park Top Sensitivity Point Assets					
Critical Infrastructure					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Solid and Hazardous Waste Facilities	CFRPC_PT:030168	WORLD OF FLOWERS	Locally Significant	15	77.6
Communications Facilities	CFRPC_PT:001338	CROWN CASTLE GT COMPANY LLC	Regionally Significant	14	93.2
Solid and Hazardous Waste Facilities	CFRPC_PT:029719	CITY OF AVON PARK H20 & SEWER	Locally Significant	14	81.1
Solid and Hazardous Waste Facilities	CFRPC_PT:029822	JOES SERVICE CENTER	Locally Significant	14	42.2
Solid and Hazardous Waste Facilities	CFRPC_PT:029384	AVON TV CENTER	Locally Significant	14	97.6
Solid and Hazardous Waste Facilities	CFRPC_PT:029493	OAKTREE INN	Locally Significant	14	55.8

City of Avon Park Top Sensitivity Point Assets					
Critical Infrastructure					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Solid and Hazardous Waste Facilities	CFRPC_PT:029642	VACANT	Locally Significant	14	42.2
Solid and Hazardous Waste Facilities	CFRPC_PT:029788	STOP & SHOP	Locally Significant	14	56.5
Solid and Hazardous Waste Facilities	CFRPC_PT:029808	LOPEZ & ASSOCIATES BUSINESS CONSULTANTS	Locally Significant	14	31.8
Solid and Hazardous Waste Facilities	CFRPC_PT:029817	ROSES AUTO SALES INC	Locally Significant	14	42.2
Solid and Hazardous Waste Facilities	CFRPC_PT:029892	WINN DIXIE	Locally Significant	14	30.7
Solid and Hazardous Waste Facilities	CFRPC_PT:029906	BILL OWENS AUTO SALES	Locally Significant	14	57.3
Solid and Hazardous Waste Facilities	CFRPC_PT:029915	VACANT STORE	Locally Significant	14	31.8
Solid and Hazardous Waste Facilities	CFRPC_PT:029916	SAVE A LOT	Locally Significant	14	31.8
Solid and Hazardous Waste Facilities	CFRPC_PT:030182	PERSONAL TOUCH INC	Locally Significant	14	31.8
Solid and Hazardous Waste Facilities	CFRPC_PT:030262	GREAT FLORIDA INSURANCE	Locally Significant	14	31.8

Table 72: Avon Park Top Sensitivity Point Assets - Natural, Cultural, and Historical Resources

City of Avon Park Top Sensitivity Point Assets					
Natural, Cultural, and Historical Resources					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Historical and Cultural Assets	CFRPC_PT:021137	1005 W CANFIELD AVENUE	Locally Significant	16	100
Historical and Cultural Assets	CFRPC_PT:010356	HENDRICK'S GROCERY STORE	Regionally Significant	15	97.8
Historical and Cultural Assets	CFRPC_PT:021092	618 S LAKE BOULEVARD	Locally Significant	15	65.8
Historical and Cultural Assets	CFRPC_PT:021118	312 E PINE STREET	Locally Significant	15	97
Historical and Cultural Assets	CFRPC_PT:021119	324 E PINE STREET	Locally Significant	15	96.3
Historical and Cultural Assets	CFRPC_PT:021291	121 S DELANEY AVENUE	Locally Significant	15	100
Historical and Cultural Assets	CFRPC_PT:021596	STEBBINS HOUSE	Locally Significant	15	99.3
Historical and Cultural Assets	CFRPC_PT:021747	238 E CANFIELD STREET	Locally Significant	15	91
Historical and Cultural Assets	CFRPC_PT:021748	243 E CAMPHOR STREET	Locally Significant	15	100
Historical and Cultural Assets	CFRPC_PT:021769	336 E CAMPHOR STREET	Locally Significant	15	94.5
Historical and Cultural Assets	CFRPC_PT:021782	312 E CANFIELD STREET	Locally Significant	15	99.4

Table 73: Avon Park Top Sensitivity Point Assets – Transportation and Evacuation Routes

City of Avon Park Top Sensitivity Point Assets					
Transportation and Evacuation Routes					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Marinas	CFRPC_PT:033435	Lake Tulane Public Boat Ramp	Locally Significant	16	100
Rail Facilities	CFRPC_PT:018981	(blank)	Regionally Significant	14	30.5
Railroad Bridges	CFRPC_PT:019567	TULANE DR	Regionally Significant	14	30.5
Rail Facilities	CFRPC_PT:019469	105-107 ALICE NELSON ST	Regionally Significant	13	30.5
Railroad Bridges	CFRPC_PT:019568	E 6TH ST	Regionally Significant	13	30.5
Airports	CFRPC_PT:018726	AVON PARK EXECUTIVE AIRPORT	Regionally Significant	12	82.5
Marinas	CFRPC_PT:033420	Lake Verona Public Boat Ramp	Locally Significant	12	46.4
Rail Facilities	CFRPC_PT:019087	(blank)	Regionally Significant	12	30.5
Rail Facilities	CFRPC_PT:019088	(blank)	Regionally Significant	12	30.5
Rail Facilities	CFRPC_PT:019464	(blank)	Regionally Significant	12	30.5
Rail Facilities	CFRPC_PT:019467	(blank)	Regionally Significant	12	30.5

Table 74: Avon Park Top Sensitivity Polyline Assets – Critical Infrastructure

City of Avon Park Top Sensitivity Polyline Assets					
Critical Infrastructure					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Electric Production and Supply Facilities	CFRPC_PL:000462	ELECTRIC BULK POWER TRANSMISSION AND CONTROL, AVON PARK	Regionally Significant	13	60.4
Electric Production and Supply Facilities	CFRPC_PL:000514	ELECTRIC BULK POWER TRANSMISSION AND CONTROL, UNKNOWN120588	Regionally Significant	13	66.4
Electric Production and Supply Facilities	CFRPC_PL:000668	ELECTRIC BULK POWER TRANSMISSION AND CONTROL, FISHEATING CREEK	Regionally Significant	11	64.8
Electric Production and Supply Facilities	CFRPC_PL:000530	ELECTRIC BULK POWER TRANSMISSION AND CONTROL, UNKNOWN108530	Regionally Significant	10	44.4
Electric Production and Supply Facilities	CFRPC_PL:000571	ELECTRIC BULK POWER TRANSMISSION AND CONTROL, AVON PARK	Regionally Significant	10	44.3
Electric Production and Supply Facilities	CFRPC_PL:000725	ELECTRIC BULK POWER TRANSMISSION AND CONTROL, AVON PARK	Regionally Significant	10	27.1
Electric Production and Supply Facilities	CFRPC_PL:000728	ELECTRIC BULK POWER TRANSMISSION AND CONTROL, AVON PARK	Regionally Significant	10	0
Electric Production and Supply Facilities	CFRPC_PL:000733	ELECTRIC BULK POWER TRANSMISSION AND CONTROL, AVON PARK	Regionally Significant	10	38.6
Electric Production and Supply Facilities	CFRPC_PL:000705	ELECTRIC BULK POWER TRANSMISSION AND CONTROL, AVON PARK	Regionally Significant	8	17.8

Table 75: Avon Park Top Sensitivity Polyline Assets – Natural, Cultural, and Historical Resources

City of Avon Park Top Sensitivity Polyline Assets					
Natural, Cultural, and Historical Resources					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Surface Waters	CFRPC_PL:085178	(blank)	Locally Significant	15	100
Surface Waters	CFRPC_PL:096504	(blank)	Regionally Significant	15	94.6
Surface Waters	CFRPC_PL:098070	(blank)	Regionally Significant	15	100
Surface Waters	CFRPC_PL:104811	(blank)	Regionally Significant	15	97.5
Surface Waters	CFRPC_PL:061626	(blank)	Locally Significant	14	50.9
Surface Waters	CFRPC_PL:092977	(blank)	Locally Significant	14	100
Surface Waters	CFRPC_PL:062866	(blank)	Locally Significant	13	92.9
Surface Waters	CFRPC_PL:056883	(blank)	Locally Significant	12	100
Surface Waters	CFRPC_PL:059046	(blank)	Regionally Significant	12	94.1
Surface Waters	CFRPC_PL:074458	(blank)	Locally Significant	12	95.8
Surface Waters	CFRPC_PL:074461	(blank)	Locally Significant	12	99.3
Surface Waters	CFRPC_PL:085120	(blank)	Regionally Significant	12	100

City of Avon Park Top Sensitivity Polyline Assets					
Natural, Cultural, and Historical Resources					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Surface Waters	CFRPC_PL:089815	(blank)	Locally Significant	12	100
Surface Waters	CFRPC_PL:090548	(blank)	Locally Significant	12	99.8
Surface Waters	CFRPC_PL:096971	(blank)	Regionally Significant	12	100
Surface Waters	CFRPC_PL:103936	(blank)	Locally Significant	12	96.2

Table 76: Avon Park Top Sensitivity Polyline Assets – Transportation and Evacuation Routes

City of Avon Park Top Sensitivity Polyline Assets					
Transportation and Evacuation Routes					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Rail Facilities	CFRPC_PL:050308	CSXT Mainline	Regionally Significant	11	16.5

Table 77: Avon Park Top Sensitivity Polyline Transportation Assets – Transportation and Evacuation Routes

City of Avon Park Top Sensitivity Polyline Transportation Assets						
Transportation and Evacuation Routes						
500 Year 2070						
Asset Type	**Asset Sub-Type**	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Roadways	Evacuation Route	CFRPC_PLT:031541	W HALL ST	Regionally Significant	16	100
Roadways	Evacuation Route	CFRPC_PLT:033965		Regionally Significant	16	100
Roadways	Evacuation Route	CFRPC_PLT:112468		Regionally Significant	16	100
Roadways	Evacuation Route - SIS	CFRPC_PLT:001465	US-27 S	Regionally Significant	16	100
Roadways	Evacuation Route - SIS	CFRPC_PLT:001466	US-27 S	Regionally Significant	16	100
Roadways	Evacuation Route - SIS	CFRPC_PLT:001467	US-27 S	Regionally Significant	16	100
Roadways	Evacuation Route - SIS	CFRPC_PLT:001468	US-27 S	Regionally Significant	16	100
Roadways	Evacuation Route - SIS	CFRPC_PLT:097211	US-27 S	Regionally Significant	16	100
Roadways	Evacuation Route - SIS	CFRPC_PLT:097212	US-27 S	Regionally Significant	16	100
Roadways	Evacuation Route - SIS	CFRPC_PLT:112469	US-27 S	Regionally Significant	16	100
Roadways	Evacuation Route - SIS	CFRPC_PLT:112470	US-27 S	Regionally Significant	16	100
Roadways	Evacuation Route - SIS	CFRPC_PLT:156546	US-27 S	Regionally Significant	16	95.2

City of Avon Park Top Sensitivity Polyline Transportation Assets						
Transportation and Evacuation Routes						
500 Year 2070						
Asset Type	**Asset Sub-Type**	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Roadways	Evacuation Route - SIS	CFRPC_PLT:158732	US-27 S	Regionally Significant	16	100
Roadways	Evacuation Route - SIS	CFRPC_PLT:158734	US-27 S	Regionally Significant	16	100
Roadways	Evacuation Route - SIS	CFRPC_PLT:158735	US-27 S	Regionally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:020562	DYAL ST	Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:020612	S FLORIDA AVE	Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:020642	S FLORIDA AVE	Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:020678	W HALL ST	Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:020713	S HART AVE	Locally Significant	16	94.4
Roadways	Non-Evacuation Route	CFRPC_PLT:020846	S FLORIDA AVE	Locally Significant	16	94.3
Roadways	Non-Evacuation Route	CFRPC_PLT:020847	JANE ST	Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:061681	W HAL MCRAE BLVD	Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:061682	W HAL MCRAE BLVD	Locally Significant	16	100

City of Avon Park Top Sensitivity Polyline Transportation Assets						
Transportation and Evacuation Routes						
500 Year 2070						
Asset Type	**Asset Sub-Type**	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Roadways	Non-Evacuation Route	CFRPC_PLT:061683	BREEZEWAY TOWNHOMES	Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:098854	W CORNELL ST	Locally Significant	16	94.5
Roadways	Non-Evacuation Route	CFRPC_PLT:126466	SYDNEY PL	Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:153870	W HALL ST	Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:154080	S FLORIDA AVE	Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:154081		Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:154082		Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:154085		Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:154087		Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:154088		Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:154089		Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:154090		Locally Significant	16	100

City of Avon Park Top Sensitivity Polyline Transportation Assets						
Transportation and Evacuation Routes						
500 Year 2070						
Asset Type	**Asset Sub-Type**	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Roadways	Non-Evacuation Route	CFRPC_PLT:156526		Locally Significant	16	98.6
Roadways	Non-Evacuation Route	CFRPC_PLT:156527		Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:156530		Locally Significant	16	98.3
Roadways	Non-Evacuation Route	CFRPC_PLT:156531		Locally Significant	16	98.3
Roadways	Non-Evacuation Route	CFRPC_PLT:156544	W HAL MCRAE BLVD	Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:156545	W HAL MCRAE BLVD	Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:156552		Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:156574	W CORNELL ST	Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:156578		Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:156579	W CORNELL ST	Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:156580	W CORNELL ST	Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:156582	W MORRILL ST	Locally Significant	16	100

City of Avon Park Top Sensitivity Polyline Transportation Assets						
Transportation and Evacuation Routes						
500 Year 2070						
Asset Type	**Asset Sub-Type**	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Roadways	Non-Evacuation Route	CFRPC_PLT:156584		Locally Significant	16	98.6
Roadways	Non-Evacuation Route	CFRPC_PLT:156586	W CORNELL ST	Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:158675	HEAD ST	Locally Significant	16	96.9
Roadways	Non-Evacuation Route	CFRPC_PLT:158682		Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:158707		Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:158708		Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:158711		Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:158712		Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:158713		Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:158728		Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:158745		Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:158748		Locally Significant	16	100

City of Avon Park Top Sensitivity Polyline Transportation Assets						
Transportation and Evacuation Routes						
500 Year 2070						
Asset Type	**Asset Sub-Type**	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Roadways	Non-Evacuation Route	CFRPC_PLT:158752		Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:158753		Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:158776		Locally Significant	16	96.7
Roadways	Non-Evacuation Route	CFRPC_PLT:158779		Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:158780		Locally Significant	16	99.1
Roadways	Non-Evacuation Route	CFRPC_PLT:158782		Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:158785		Locally Significant	16	100
Roadways	Non-Evacuation Route	CFRPC_PLT:158790		Locally Significant	16	100

Table 78: Avon Park Top Sensitivity Polygon Assets – Critical Infrastructure

City of Avon Park Top Sensitivity Polygon Assets					
Critical Infrastructure					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:015585	(blank)	Regionally Significant	15	96.3
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:017159	(blank)	Regionally Significant	15	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:006873	(blank)	Regionally Significant	14	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:007197	(blank)	Regionally Significant	13	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:007204	(blank)	Regionally Significant	13	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:007933	(blank)	Regionally Significant	13	96.1
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:016191	(blank)	Regionally Significant	13	71.6
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:011489	(blank)	Regionally Significant	12	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:012256	(blank)	Regionally Significant	12	99
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:017426	(blank)	Regionally Significant	12	99.6
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:018925	(blank)	Regionally Significant	12	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:019652	(blank)	Regionally Significant	12	100

City of Avon Park Top Sensitivity Polygon Assets					
Critical Infrastructure					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:019727	(blank)	Regionally Significant	12	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:010055	(blank)	Regionally Significant	10	60
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:016442	(blank)	Regionally Significant	10	58.8

Table 79: Avon Park Top Sensitivity Polygon Assets – Natural, Cultural, and Historical Resources

City of Avon Park Top Sensitivity Polygon Assets					
Natural, Cultural, and Historical Resources					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Surface Waters	CFRPC_PG:020628	Lake Tulane	Locally Significant	16	100
Surface Waters	CFRPC_PG:022109	Lake Anoka	Locally Significant	16	99.9
Wetlands	CFRPC_PG:080032	6530: Intermittent Ponds	Regionally Significant	16	100
Wetlands	CFRPC_PG:080044	6520: Shorelines	Regionally Significant	16	100
Wetlands	CFRPC_PG:080046	6520: Shorelines	Regionally Significant	16	100
Parks	CFRPC_PG:080984	ARBUCKLE CREEK (BURNT OUT BRIDGE) BOAT RAMP	Regionally Significant	15	100

City of Avon Park Top Sensitivity Polygon Assets					
Natural, Cultural, and Historical Resources					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Parks	CFRPC_PG:081001	LAKE VIOLA BOAT RAMP	Regionally Significant	15	100
Parks	CFRPC_PG:081019	LAKE TULANE BOAT RAMP	Regionally Significant	15	86.9
Parks	CFRPC_PG:081041	DURRAH MARTIN COMPLEX	Regionally Significant	15	100
Parks	CFRPC_PG:081425	LAKE TULANE LAKESIDE PARK	Regionally Significant	15	60.2
Surface Waters	CFRPC_PG:021961	(blank)	Locally Significant	15	100
Surface Waters	CFRPC_PG:022561	Lake Lelia	Regionally Significant	15	100
Wetlands	CFRPC_PG:050559	6410: Freshwater Marshes	Regionally Significant	15	97.3
Wetlands	CFRPC_PG:050817	6410: Freshwater Marshes	Regionally Significant	15	98.7
Wetlands	CFRPC_PG:050941	6410: Freshwater Marshes	Regionally Significant	15	100
Wetlands	CFRPC_PG:073228	6430: Wet Prairie	Regionally Significant	15	100
Wetlands	CFRPC_PG:080009	6520: Shorelines	Regionally Significant	15	100
Wetlands	CFRPC_PG:080010	6520: Shorelines	Regionally Significant	15	83.6
Wetlands	CFRPC_PG:080011	6520: Shorelines	Regionally Significant	15	100

City of Avon Park Top Sensitivity Polygon Assets					
Natural, Cultural, and Historical Resources					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Wetlands	CFRPC_PG:080012	6520: Shorelines	Regionally Significant	15	100
Wetlands	CFRPC_PG:039898	6400: Vegetated Non-Forested Wetlands	Regionally Significant	15	100
Wetlands	CFRPC_PG:039904	6400: Vegetated Non-Forested Wetlands	Regionally Significant	15	100
Wetlands	CFRPC_PG:080008	6520: Shorelines	Regionally Significant	15	100

Summary Table – Top Sensitivity Assets – Town of Lake Placid

The top assets were filtered based on the Sensitivity for the 500-Year 2070 Scenario which provides the greatest sensitivity to the County.

Town of Lake Placid does not have any Polyline Assets – Natural, Cultural, and Historical Resources.

Table 80: Lake Placid Top Sensitivity Point Assets – Critical Community and Emergency Facilities

Town of Lake Placid Top Sensitivity Point Assets					
Critical Community and Emergency Facilities					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Affordable Public Housing	CFRPC_PT:019962	Thornbury	Locally Significant	12	34.8
Community Centers	CFRPC_PT:000224	FRIENDS OF LAKE PLACID PUBLIC LIBRARY	Regionally Significant	12	24.4
Community Centers	CFRPC_PT:000228	LAKE PLACID MEMORIAL BR LIB	Regionally Significant	12	24.4

Town of Lake Placid Top Sensitivity Point Assets					
Critical Community and Emergency Facilities					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Health Care Facilities	CFRPC_PT:019655	Highlands County Health Department (Lake Placid Annex)	Regionally Significant	12	23.9
Local Government Facilities	CFRPC_PT:019654	Highlands County Lake Placid Annex Building	Regionally Significant	12	23.9
Risk Shelter Inventory	CFRPC_PT:000780	Lake Placid Elementary School	Regionally Significant	12	16.6
Schools	CFRPC_PT:000945	Lake Placid Elementary School	Regionally Significant	12	16.6
Emergency Medical Service Facilities	CFRPC_PT:000288	LAKE PLACID FIRE RESCUE EMS 36	Regionally Significant	11	3.6
Fire Stations	CFRPC_PT:000336	LAKE PLACID FIRE DEPARTMENT 36	Regionally Significant	11	3.6
Local Government Facilities	CFRPC_PT:019656	Highlands County Tax Collector	Regionally Significant	11	0.5
Risk Shelter Inventory	CFRPC_PT:000783	Lake Placid Senior High School	Regionally Significant	11	31.2
Schools	CFRPC_PT:000944	LAKE PLACID HIGH SCHOOL	Regionally Significant	11	31.2
Schools	CFRPC_PT:000955	Lake Placid Middle School	Regionally Significant	11	31.2

Table 81: Lake Placid Top Sensitivity Point Assets – Critical Infrastructure

Town of Lake Placid Top Sensitivity Point Assets					
Critical Infrastructure					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Solid and Hazardous Waste Facilities	CFRPC_PT:032466	FOSTER PAINTING	Locally Significant	15	100
Solid and Hazardous Waste Facilities	CFRPC_PT:032570	SEEBER AUTOMOTIVE	Locally Significant	15	91.3
Solid and Hazardous Waste Facilities	CFRPC_PT:033135	PARK AVENUE ANTIQUES	Locally Significant	15	99.7
Communications Facilities	CFRPC_PT:001356	HIGHLANDS COUNTY BCC	Regionally Significant	14	84.3
Communications Facilities	CFRPC_PT:001244	Lake Placid Post Office	Regionally Significant	13	45.7
Solid and Hazardous Waste Facilities	CFRPC_PT:032517	TRINITY LUTHERAN CHURCH	Locally Significant	13	43.4
Solid and Hazardous Waste Facilities	CFRPC_PT:032548	U S POST OFFICE	Locally Significant	13	45.7
Solid and Hazardous Waste Facilities	CFRPC_PT:032558	VACANT	Locally Significant	13	41.8
Solid and Hazardous Waste Facilities	CFRPC_PT:032601	J & M EQUIPMENT	Locally Significant	13	30.1
Solid and Hazardous Waste Facilities	CFRPC_PT:032607	STEVEN M. GUELFF, D.M.D.	Locally Significant	13	40.3
Solid and Hazardous Waste Facilities	CFRPC_PT:032707	VACANT	Locally Significant	13	30.1

Table 82: Lake Placid Top Sensitivity Point Assets – Natural, Cultural, and Historical Resources

Town of Lake Placid Top Sensitivity Point Assets					
Natural, Cultural, and Historical Resources					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Historical and Cultural Assets	CFRPC_PT:021371	307 SOUTH MAIN STREET	Locally Significant	15	93.6
Historical and Cultural Assets	CFRPC_PT:021390	YUSKO HOUSE	Locally Significant	15	93.6
Historical and Cultural Assets	CFRPC_PT:021370	SHAKELFORD GAS STATION	Locally Significant	13	50
Historical and Cultural Assets	CFRPC_PT:019691	Lake Placid Historical Society Depot Museum	Regionally Significant	12	23.3
Historical and Cultural Assets	CFRPC_PT:021363	13 SOUTH PINE STREET	Locally Significant	12	18.6
Historical and Cultural Assets	CFRPC_PT:021368	423 MAIN STREET	Locally Significant	12	10.6
Historical and Cultural Assets	CFRPC_PT:021394	SADLER HOUSE	Locally Significant	12	100
Historical and Cultural Assets	CFRPC_PT:021397	NICHOL HOUSE	Locally Significant	12	97.4
Historical and Cultural Assets	CFRPC_PT:021401	32 LAKEVIEW AVENUE	Locally Significant	12	14.3
Historical and Cultural Assets	CFRPC_PT:021362	LAKE PLACID PRESBYTERIAN CHURCH	Regionally Significant	11	6.4
Historical and Cultural Assets	CFRPC_PT:021391	202 SOUTH MAIN STREET	Locally Significant	11	1.8
Historical and Cultural Assets	CFRPC_PT:021426	LAKE PLACID ARTS LEAGUE	Locally Significant	11	4.4

Table 83: Lake Placid Top Sensitivity Point Assets – Transportation and Evacuation Routes

Town of Lake Placid Top Sensitivity Point Assets					
Transportation and Evacuation Routes					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Marinas	CFRPC_PT:033400	Lake June Point Park Ramp	Locally Significant	12	52.1
Rail Facilities	CFRPC_PT:019131	(blank)	Regionally Significant	12	23.3
Rail Facilities	CFRPC_PT:019132	(blank)	Regionally Significant	12	23.3

Table 84: Lake Placid Top Sensitivity Polyline Assets – Critical Infrastructure

Town of Lake Placid Top Sensitivity Polyline Assets					
Critical Infrastructure					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Electric Production and Supply Facilities	CFRPC_PL:000484	ELECTRIC BULK POWER TRANSMISSION AND CONTROL, LAKE PLACID NORTH	Regionally Significant	10	52.1
Electric Production and Supply Facilities	CFRPC_PL:000612	ELECTRIC BULK POWER TRANSMISSION AND CONTROL, LAKE PLACID NORTH	Regionally Significant	10	50.6

Table 85: Lake Placid Top Sensitivity Polyline Assets – Transportation and Evacuation Routes

Town of Lake Placid Top Sensitivity Polyline Assets					
Transportation and Evacuation Routes					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Rail Facilities	CFRPC_PL:050298	SCXF Mainline SG Rail Corridor	Regionally Significant	9	21.6

Table 86: Lake Placid Top Sensitivity Polyline Transportation Assets – Transportation and Evacuation Routes

Town of Lake Placid Top Sensitivity Polyline Transportation Assets						
Transportation and Evacuation Routes						
500 Year 2070						
Asset Type	**Asset Sub-Type**	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Roadways	Non-Evacuation Route	CFRPC_PLT:001333	S MAIN AVE	Locally Significant	15	90.2
Roadways	Non-Evacuation Route	CFRPC_PLT:026198		Locally Significant	15	100
Roadways	Non-Evacuation Route	CFRPC_PLT:026206	W PARK ST	Locally Significant	15	100
Roadways	Non-Evacuation Route	CFRPC_PLT:026220	LAKE RACHARD DR	Locally Significant	15	100
Roadways	Non-Evacuation Route	CFRPC_PLT:026244	LAKE RACHARD DR	Locally Significant	15	98.9
Roadways	Non-Evacuation Route	CFRPC_PLT:026270		Locally Significant	15	100
Roadways	Non-Evacuation Route	CFRPC_PLT:058373	W PHOENIX ST	Locally Significant	15	98.5

Town of Lake Placid Top Sensitivity Polyline Transportation Assets						
Transportation and Evacuation Routes						
500 Year 2070						
Asset Type	**Asset Sub-Type**	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Roadways	Non-Evacuation Route	CFRPC_PLT:064683	PARK ST	Locally Significant	15	100
Roadways	Non-Evacuation Route	CFRPC_PLT:076980	W HIBISCUS ST	Locally Significant	15	97
Roadways	Non-Evacuation Route	CFRPC_PLT:089792	W INTERLAKE BLVD	Locally Significant	15	94.3
Roadways	Non-Evacuation Route	CFRPC_PLT:089800	W INTERLAKE BLVD	Locally Significant	15	100
Roadways	Non-Evacuation Route	CFRPC_PLT:089805	W INTERLAKE BLVD	Locally Significant	15	100
Roadways	Non-Evacuation Route	CFRPC_PLT:122492		Locally Significant	15	100
Roadways	Non-Evacuation Route	CFRPC_PLT:122495		Locally Significant	15	100
Roadways	Non-Evacuation Route	CFRPC_PLT:154588	E HIBISCUS ST	Locally Significant	15	90.2
Roadways	Non-Evacuation Route	CFRPC_PLT:154596	S MAIN AVE	Locally Significant	15	100
Roadways	Non-Evacuation Route	CFRPC_PLT:154606	S MAIN AVE	Locally Significant	15	100
Roadways	Non-Evacuation Route	CFRPC_PLT:154643	N PINE AVE	Locally Significant	15	95.8
Roadways	Non-Evacuation Route	CFRPC_PLT:154648		Locally Significant	15	100
Roadways	Non-Evacuation Route	CFRPC_PLT:154650		Locally Significant	15	96.6

Town of Lake Placid Top Sensitivity Polyline Transportation Assets						
Transportation and Evacuation Routes						
500 Year 2070						
Asset Type	**Asset Sub-Type**	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Roadways	Non-Evacuation Route	CFRPC_PLT:159793	W PARK ST	Locally Significant	15	98.8
Roadways	Non-Evacuation Route	CFRPC_PLT:160380	W INTERLAKE BLVD	Locally Significant	15	100
Roadways	Non-Evacuation Route	CFRPC_PLT:160381	W INTERLAKE BLVD	Locally Significant	15	100
Roadways	Non-Evacuation Route	CFRPC_PLT:160382	SERENITY AVE	Locally Significant	15	100
Roadways	Non-Evacuation Route	CFRPC_PLT:160383	SERENITY AVE	Locally Significant	15	96.3
Roadways	Non-Evacuation Route	CFRPC_PLT:160384	SERENITY AVE	Locally Significant	15	100
Roadways	Non-Evacuation Route	CFRPC_PLT:160385		Locally Significant	15	100

Table 87: Lake Placid Top Sensitivity Polygon Assets – Critical Infrastructure

Town of Lake Placid Top Sensitivity Polygon Assets					
Critical Infrastructure					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:006688	(blank)	Regionally Significant	15	99.3
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:006658	(blank)	Regionally Significant	14	68.3

Town of Lake Placid Top Sensitivity Polygon Assets					
Critical Infrastructure					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:006691	(blank)	Regionally Significant	14	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:006693	(blank)	Regionally Significant	14	86.8
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:019271	(blank)	Regionally Significant	14	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:006218	(blank)	Regionally Significant	13	97.4
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:006254	(blank)	Regionally Significant	13	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:006687	(blank)	Regionally Significant	13	38.3
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:006694	(blank)	Regionally Significant	13	32.9
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:014759	(blank)	Regionally Significant	13	99.7

Table 88: Lake Placid Top Sensitivity Polygon Assets – Natural, Cultural, and Historical Resources

Town of Lake Placid Top Sensitivity Polygon Assets					
Natural, Cultural, and Historical Resources					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Parks	CFRPC_PG:080950	LAKE PERSIMMON BOAT RAMP	Regionally Significant	15	97.9

Town of Lake Placid Top Sensitivity Polygon Assets					
Natural, Cultural, and Historical Resources					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Surface Waters	CFRPC_PG:021015	Lake LaChard	Locally Significant	15	100
Surface Waters	CFRPC_PG:023119	(blank)	Locally Significant	15	100
Wetlands	CFRPC_PG:037790	6300: Wetland Forested Mixed	Regionally Significant	15	100
Wetlands	CFRPC_PG:045910	6410: Freshwater Marshes	Regionally Significant	15	100
Wetlands	CFRPC_PG:048161	6410: Freshwater Marshes	Regionally Significant	15	98.1
Wetlands	CFRPC_PG:026251	6150: Stream and Lake Swamps (bottomland)	Regionally Significant	15	88.5
Wetlands	CFRPC_PG:043090	6410: Freshwater Marshes	Regionally Significant	15	100
Parks	CFRPC_PG:081008	LAKE CARRIE BOAT RAMP	Regionally Significant	14	100
Parks	CFRPC_PG:081009	LAKE CLAY (EAST SIDE) BOAT RAMP	Regionally Significant	14	96.7
Parks	CFRPC_PG:081051	HL BISHOP PARK AND LAKE JUNE BOAT RAMP	Regionally Significant	14	66.4
Parks	CFRPC_PG:081056	LAKE FRANCIS BOAT RAMP	Regionally Significant	14	99.7
Parks	CFRPC_PG:081115	BICENTENNIAL PARK	Regionally Significant	14	89
Surface Waters	CFRPC_PG:022600	Lake June in Winter	Regionally Significant	14	100

Town of Lake Placid Top Sensitivity Polygon Assets					
Natural, Cultural, and Historical Resources					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Surface Waters	CFRPC_PG:022720	Lake Sirena	Regionally Significant	14	100
Wetlands	CFRPC_PG:039604	6400: Vegetated Non-Forested Wetlands	Regionally Significant	14	100
Wetlands	CFRPC_PG:079984	6520: Shorelines	Regionally Significant	14	100
Wetlands	CFRPC_PG:079985	6520: Shorelines	Regionally Significant	14	81
Wetlands	CFRPC_PG:024872	6150: Stream and Lake Swamps (bottomland)	Regionally Significant	14	98.7

Summary Table – Top Sensitivity Assets – Sebring

The top assets were filtered based on the Sensitivity for the 500-Year 2070 Scenario which provides the greatest sensitivity to the County.

Table 89: Sebring Top Sensitivity Point Assets – Critical Community and Emergency Facilities

City of Sebring Top Sensitivity Point Assets					
Critical Community and Emergency Facilities					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Affordable Public Housing	CFRPC_PT:019971	Park Crest Terrace I	Locally Significant	18	93.5
Affordable Public Housing	CFRPC_PT:019972	Park Crest Terrace II	Locally Significant	18	93.5

City of Sebring Top Sensitivity Point Assets					
Critical Community and Emergency Facilities					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Affordable Public Housing	CFRPC_PT:019966	Fair Havens Village	Locally Significant	15	62.8
Affordable Public Housing	CFRPC_PT:019968	Highlands Co Voa	Locally Significant	15	15.4
Health Care Facilities	CFRPC_PT:020105	MAGNOLIA RETIREMENT HOME, INC.	Locally Significant	14	60.2
Affordable Public Housing	CFRPC_PT:019975	The Villas Ltd	Locally Significant	13	14.9
Community Centers	CFRPC_PT:019681	Sebring Recreation Club	Regionally Significant	13	100
Health Care Facilities	CFRPC_PT:000490	SERALDE MEDICAL WALK-IN CLINIC	Regionally Significant	13	33.7
Affordable Public Housing	CFRPC_PT:019964	Briarwood Of Sebring	Locally Significant	12	8.9
Community Centers	CFRPC_PT:000190	SEBRING CIVIC CENTER	Regionally Significant	12	22.3
Correctional Facilities	CFRPC_PT:000244	HIGHLANDS CO JAIL/SHERIFF DEPT	Regionally Significant	12	32.6
Emergency Medical Service Facilities	CFRPC_PT:019830	HIGHLANDS COUNTY FIRE RESCUE EMS #17	Regionally Significant	12	83.5
Fire Stations	CFRPC_PT:000341	CITY OF SEBRING FD ST 15	Regionally Significant	12	91.2
Fire Stations	CFRPC_PT:000354	HIGHLANDS COUNTY FIRE DEPARTMENT #17	Regionally Significant	12	83.5

City of Sebring Top Sensitivity Point Assets					
Critical Community and Emergency Facilities					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Health Care Facilities	CFRPC_PT:020108	GOOD SHEPHERD HOSPICE	Locally Significant	12	42.9
Health Care Facilities	CFRPC_PT:020118	PALMS OF SEBRING (THE)	Locally Significant	12	21.7
Health Care Facilities	CFRPC_PT:020119	PALMS OF SEBRING, THE	Locally Significant	12	21.7
Local Government Facilities	CFRPC_PT:019652	Highlands County Children's Advocacy Center	Regionally Significant	12	63.6
Risk Shelter Inventory	CFRPC_PT:000781	SEBRING CIVIC CENTER	Regionally Significant	12	22.3

Table 90: Sebring Top Sensitivity Point Assets – Critical Infrastructure

City of Sebring Top Sensitivity Point Assets					
Critical Infrastructure					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Communications Facilities	CFRPC_PT:001321	COHAN RADIO GROUP, INC.	Regionally Significant	15	84.7
Solid and Hazardous Waste Facilities	CFRPC_PT:029337	VACANT	Locally Significant	15	96.5
Solid and Hazardous Waste Facilities	CFRPC_PT:029385	FEATHERS' DRY CLEANING	Locally Significant	15	100
Solid and Hazardous Waste Facilities	CFRPC_PT:029408	WJCM INC	Locally Significant	15	84.7

City of Sebring Top Sensitivity Point Assets					
Critical Infrastructure					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Solid and Hazardous Waste Facilities	CFRPC_PT:029523	K.D. KABINETS	Locally Significant	15	22.4
Solid and Hazardous Waste Facilities	CFRPC_PT:032290	RESIDENTIAL HOME/ OLD ERIX COMPUTERS	Locally Significant	15	100
Electric Production and Supply Facilities	CFRPC_PT:003270	DINNER LAKE	Regionally Significant	14	99.8
Solid and Hazardous Waste Facilities	CFRPC_PT:028822	CITY OF SEBRING LAND CLEARING DEBRIS FACILITY	Regionally Significant	14	57.9
Solid and Hazardous Waste Facilities	CFRPC_PT:028878	CITY OF SEBRING LAND CLEARING DEBRIS FACILITY	Regionally Significant	14	57.9
Solid and Hazardous Waste Facilities	CFRPC_PT:028917	CITY OF SEBRING LAND CLEARING DEBRIS FACILITY	Regionally Significant	14	57.9
Solid and Hazardous Waste Facilities	CFRPC_PT:029057	CITY OF SEBRING LAND CLEARING DEBRIS FACILITY	Regionally Significant	14	57.9
Solid and Hazardous Waste Facilities	CFRPC_PT:029102	CITY OF SEBRING LAND CLEARING DEBRIS FACILITY	Regionally Significant	14	57.9
Solid and Hazardous Waste Facilities	CFRPC_PT:029355	BOB HOLLINGER SIGNS	Locally Significant	14	85.1
Solid and Hazardous Waste Facilities	CFRPC_PT:029381	TAYLOR'S BP SOUTHGATE	Locally Significant	14	95.5
Solid and Hazardous Waste Facilities	CFRPC_PT:029515	LABOR SOLUTIONS	Locally Significant	14	4.8
Solid and Hazardous Waste Facilities	CFRPC_PT:029600	SUNSHINE NURSERY LANDSCAPING & SOD	Locally Significant	14	98.8
Solid and Hazardous Waste Facilities	CFRPC_PT:029615	CARDIOLOGY CONSULTANTS	Locally Significant	14	100

City of Sebring Top Sensitivity Point Assets					
Critical Infrastructure					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Solid and Hazardous Waste Facilities	CFRPC_PT:029698	W A P R RADIO STATION	Locally Significant	14	99.7
Solid and Hazardous Waste Facilities	CFRPC_PT:029704	ANDREWS AMOCO	Locally Significant	14	99.9
Solid and Hazardous Waste Facilities	CFRPC_PT:029757	COOLS AUTOMOTIVE	Locally Significant	14	90.7
Solid and Hazardous Waste Facilities	CFRPC_PT:029791	JIMMY'S GREEK GRILL	Locally Significant	14	80.3
Solid and Hazardous Waste Facilities	CFRPC_PT:029807	PAT'S PORCELAIN DOLL STUDIO	Locally Significant	14	0.1
Solid and Hazardous Waste Facilities	CFRPC_PT:029881	VACANT	Locally Significant	14	76.7
Solid and Hazardous Waste Facilities	CFRPC_PT:029909	ODDS & ENDS APPLIANCE	Locally Significant	14	94.1
Solid and Hazardous Waste Facilities	CFRPC_PT:029919	TRIANGLE IRON WORKS, INC.	Locally Significant	14	99.8
Solid and Hazardous Waste Facilities	CFRPC_PT:029931	COLON AND MCNELIS	Locally Significant	14	70.6
Solid and Hazardous Waste Facilities	CFRPC_PT:030129	AMERICAN SERVICE TITLE & ESCROW INC	Locally Significant	14	68.5
Solid and Hazardous Waste Facilities	CFRPC_PT:030144	DIANA D. CARR, M.D.	Locally Significant	14	100
Solid and Hazardous Waste Facilities	CFRPC_PT:032289	RESIDENTIAL HOME (OLD LOWES TRUCKING)	Locally Significant	14	100
Solid and Hazardous Waste Facilities	CFRPC_PT:032299	COOL'S AUTOMOTIVE	Locally Significant	14	90.7

City of Sebring Top Sensitivity Point Assets					
Critical Infrastructure					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Solid and Hazardous Waste Facilities	CFRPC_PT:032325	GAIL'S BEAUTY SHOP	Locally Significant	14	9
Wastewater Treatment Facilities and Lift Stations	CFRPC_PT:008922	City of Sebring Cemetery Road WWTP	Regionally Significant	14	57.9

Table 91: Sebring Top Sensitivity Point Assets – Natural, Cultural, and Historical Resources

City of Sebring Top Sensitivity Point Assets					
Natural, Cultural, and Historical Resources					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Historical and Cultural Assets	CFRPC_PT:021031	237 LAKEVIEW DR. S.	Locally Significant	15	100
Historical and Cultural Assets	CFRPC_PT:021051	418 LAKEVIEW DR. S.	Locally Significant	15	100
Historical and Cultural Assets	CFRPC_PT:021053	426 LAKEVIEW DR. S.	Locally Significant	15	100
Historical and Cultural Assets	CFRPC_PT:021061	211 MAGNOLIA AVE.	Locally Significant	15	100
Historical and Cultural Assets	CFRPC_PT:021062	221 MAGNOLIA AVE.	Locally Significant	15	100
Historical and Cultural Assets	CFRPC_PT:021064	229 MAGNOLIA AVE.	Locally Significant	15	95.5

City of Sebring Top Sensitivity Point Assets					
Natural, Cultural, and Historical Resources					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Historical and Cultural Assets	CFRPC_PT:021066	236 OAK AVE.	Locally Significant	15	100
Historical and Cultural Assets	CFRPC_PT:021452	722 S. PINE ST.	Locally Significant	15	100
Historical and Cultural Assets	CFRPC_PT:021032	1327 OSCEOLA AVE.	Locally Significant	14	99.6
Historical and Cultural Assets	CFRPC_PT:021054	434 LAKEVIEW DR. S.	Locally Significant	14	77.8
Historical and Cultural Assets	CFRPC_PT:021058	466 LAKEVIEW DR. S.	Locally Significant	14	85.6
Historical and Cultural Assets	CFRPC_PT:021060	507 LAKEVIEW DR. S.	Locally Significant	14	39.7
Historical and Cultural Assets	CFRPC_PT:021069	405 MAGNOLIA AVE.	Locally Significant	14	71.7
Historical and Cultural Assets	CFRPC_PT:021071	413 MAGNOLIA AVE.	Locally Significant	14	74.7
Historical and Cultural Assets	CFRPC_PT:021077	1217 NAHAW AVE.	Locally Significant	14	100
Historical and Cultural Assets	CFRPC_PT:021078	1223 NAHAW AVE.	Locally Significant	14	100
Historical and Cultural Assets	CFRPC_PT:021081	1322 OSCEOLA AVE.	Locally Significant	14	99.7
Historical and Cultural Assets	CFRPC_PT:021082	1323 OSCEOLA AVE.	Locally Significant	14	100
Historical and Cultural Assets	CFRPC_PT:021301	WOLF HOUSE	Locally Significant	14	66.1

City of Sebring Top Sensitivity Point Assets					
Natural, Cultural, and Historical Resources					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Historical and Cultural Assets	CFRPC_PT:021440	305 S. PINE ST.	Locally Significant	14	94.4
Historical and Cultural Assets	CFRPC_PT:021442	313 S. PINE ST.	Locally Significant	14	94.4
Historical and Cultural Assets	CFRPC_PT:021523	560 VIOLET AVENUE	Locally Significant	14	100

Table 92: Sebring Top Sensitivity Point Assets – Transportation and Evacuation Routes

City of Sebring Top Sensitivity Point Assets					
Transportation and Evacuation Routes					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Rail Facilities	CFRPC_PT:018991	(blank)	Regionally Significant	12	39.4
Rail Facilities	CFRPC_PT:019135	(blank)	Regionally Significant	12	39.4
Rail Facilities	CFRPC_PT:019377	(blank)	Regionally Significant	12	39.4
Rail Facilities	CFRPC_PT:019516	AMTRAK-SEBRING	Regionally Significant	12	39.4
Marinas	CFRPC_PT:033394	Veteran's Beach Park and Public Boat Ramp - Sebring	Locally Significant	11	70.7
Rail Facilities	CFRPC_PT:019116	RRX @ FORTUNE BLVD	Regionally Significant	11	65.2

City of Sebring Top Sensitivity Point Assets					
Transportation and Evacuation Routes					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Rail Facilities	CFRPC_PT:019331	(blank)	Regionally Significant	11	100
Airports	CFRPC_PT:018667	HIGHLANDS REGIONAL MEDICAL CENTER HELIPORT	Regionally Significant	10	76.8

Table 93: Sebring Top Sensitivity Polyline Assets – Critical Infrastructure

City of Sebring Top Sensitivity Polyline Assets					
Critical Infrastructure					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Stormwater Treatment Facilities and Pump Stations	CFRPC_PL:050455	JACKSON CREEK	Regionally Significant	14	99.7
Electric Production and Supply Facilities	CFRPC_PL:000580	ELECTRIC BULK POWER TRANSMISSION AND CONTROL, UNKNOWN108535	Regionally Significant	12	55.9
Electric Production and Supply Facilities	CFRPC_PL:000528	ELECTRIC BULK POWER TRANSMISSION AND CONTROL, UNKNOWN120588	Regionally Significant	11	66.1
Electric Production and Supply Facilities	CFRPC_PL:000647	ELECTRIC BULK POWER TRANSMISSION AND CONTROL, DINNER LAKE	Regionally Significant	11	39.8

City of Sebring Top Sensitivity Polyline Assets					
Critical Infrastructure					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Electric Production and Supply Facilities	CFRPC_PL:000668	ELECTRIC BULK POWER TRANSMISSION AND CONTROL, FISHEATING CREEK	Regionally Significant	11	64.8
Stormwater Treatment Facilities and Pump Stations	CFRPC_PL:050472	WOLF CREEK MARSH	Regionally Significant	11	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PL:050502	WOLF CREEK	Regionally Significant	11	100
Electric Production and Supply Facilities	CFRPC_PL:000530	ELECTRIC BULK POWER TRANSMISSION AND CONTROL, UNKNOWN108530	Regionally Significant	10	44.4
Electric Production and Supply Facilities	CFRPC_PL:000641	ELECTRIC BULK POWER TRANSMISSION AND CONTROL, TAP169146	Regionally Significant	10	48.4
Electric Production and Supply Facilities	CFRPC_PL:000733	ELECTRIC BULK POWER TRANSMISSION AND CONTROL, AVON PARK	Regionally Significant	10	38.6
Electric Production and Supply Facilities	CFRPC_PL:000663	ELECTRIC BULK POWER TRANSMISSION AND CONTROL, TAP169146	Regionally Significant	9	42

Table 94: Sebring Top Sensitivity Polyline Assets – Natural, Cultural, and Historical Resources

City of Sebring Top Sensitivity Polyline Assets					
Natural, Cultural, and Historical Resources					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Surface Waters	CFRPC_PL:052074	JACKSON CREEK	Locally Significant	15	100
Surface Waters	CFRPC_PL:055169	(blank)	Locally Significant	15	100
Surface Waters	CFRPC_PL:093313	JACKSON CREEK	Locally Significant	15	100
Surface Waters	CFRPC_PL:096190	JACKSON CREEK	Locally Significant	15	100
Surface Waters	CFRPC_PL:050659	(blank)	Locally Significant	14	99.5
Surface Waters	CFRPC_PL:061707	(blank)	Locally Significant	14	100
Surface Waters	CFRPC_PL:099977	(blank)	Locally Significant	14	100
Surface Waters	CFRPC_PL:104399	(blank)	Locally Significant	14	100
Surface Waters	CFRPC_PL:091555	(blank)	Regionally Significant	14	99

Table 95: Sebring Top Sensitivity Polyline Assets – Transportation and Evacuation Routes

City of Sebring Top Sensitivity Polyline Assets					
Transportation and Evacuation Routes					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Rail Facilities	CFRPC_PL:050308	CSXT Mainline	Regionally Significant	11	16.5
Bridges	CFRPC_PL:000335	090051	Regionally Significant	10	35.8
Bridges	CFRPC_PL:000395	090050	Regionally Significant	10	35.8
Rail Facilities	CFRPC_PL:050298	SCXF Mainline SG Rail Corridor	Regionally Significant	9	21.6

Table 96: Sebring Top Sensitivity Polyline Transportation Assets – Transportation and Evacuation Routes

City of Sebring Top Sensitivity Polyline Transportation Assets						
Transportation and Evacuation Routes						
500 Year 2070						
Asset Type	**Asset Sub-Type**	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Roadways	Non-Evacuation Route	CFRPC_PLT:022829	WIGHTMAN AVE	Locally Significant	18	92.4
Roadways	Non-Evacuation Route	CFRPC_PLT:022831	MELADY AVE	Locally Significant	18	96.1
Roadways	Non-Evacuation Route	CFRPC_PLT:022832	E JOSEPHINE ST	Locally Significant	18	100
Roadways	Non-Evacuation Route	CFRPC_PLT:022880	WIGHTMAN AVE	Locally Significant	18	100

City of Sebring Top Sensitivity Polyline Transportation Assets						
Transportation and Evacuation Routes						
500 Year 2070						
Asset Type	**Asset Sub-Type**	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Roadways	Non-Evacuation Route	CFRPC_PLT:022882	MYRA ST	Locally Significant	18	91.4
Roadways	Non-Evacuation Route	CFRPC_PLT:022999	COLMAR AVE	Locally Significant	18	94.1
Roadways	Non-Evacuation Route	CFRPC_PLT:049722	CORNELIA AVE	Locally Significant	18	100
Roadways	Non-Evacuation Route	CFRPC_PLT:066677	PARK CREST TER	Locally Significant	18	100
Roadways	Non-Evacuation Route	CFRPC_PLT:066680	PARK CREST TER	Locally Significant	18	100
Roadways	Non-Evacuation Route	CFRPC_PLT:066681	PARK CREST TER	Locally Significant	18	100
Roadways	Non-Evacuation Route	CFRPC_PLT:066682	PARK CREST TER	Locally Significant	18	100
Roadways	Non-Evacuation Route	CFRPC_PLT:066683	PARK CREST TER	Locally Significant	18	100
Roadways	Non-Evacuation Route	CFRPC_PLT:066685	CODY WAY	Locally Significant	18	100
Roadways	Non-Evacuation Route	CFRPC_PLT:066686	CODY WAY	Locally Significant	18	100
Roadways	Non-Evacuation Route	CFRPC_PLT:066687	CODY WAY	Locally Significant	18	100
Roadways	Non-Evacuation Route	CFRPC_PLT:066688	STEPHANIE LN	Locally Significant	18	100

City of Sebring Top Sensitivity Polyline Transportation Assets						
Transportation and Evacuation Routes						
500 Year 2070						
Asset Type	**Asset Sub-Type**	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Roadways	Non-Evacuation Route	CFRPC_PLT:066689	SHANNON WAY	Locally Significant	18	100
Roadways	Non-Evacuation Route	CFRPC_PLT:071173	IRUN CT	Locally Significant	18	98.1
Roadways	Non-Evacuation Route	CFRPC_PLT:071174	LAS VILLAS BLVD	Locally Significant	18	100
Roadways	Non-Evacuation Route	CFRPC_PLT:071175	GIGON CT	Locally Significant	18	100
Roadways	Non-Evacuation Route	CFRPC_PLT:071176	LAS VILLAS BLVD	Locally Significant	18	100
Roadways	Non-Evacuation Route	CFRPC_PLT:071177	ALICANTE CT	Locally Significant	18	100
Roadways	Non-Evacuation Route	CFRPC_PLT:071178	LAS VILLAS BLVD	Locally Significant	18	100
Roadways	Non-Evacuation Route	CFRPC_PLT:071179	ALLAMBRA CT	Locally Significant	18	93.8
Roadways	Non-Evacuation Route	CFRPC_PLT:089576	KENILWORTH BLVD	Locally Significant	18	100
Roadways	Non-Evacuation Route	CFRPC_PLT:109949	KENILWORTH BLVD	Locally Significant	18	100
Roadways	Non-Evacuation Route	CFRPC_PLT:109950	KENILWORTH BLVD	Locally Significant	18	100

Table 97: Sebring Top Sensitivity Polygon Assets - Critical Infrastructure

City of Sebring Top Sensitivity Polygon Assets					
Critical Infrastructure					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:018019	(blank)	Regionally Significant	16	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:006479	(blank)	Regionally Significant	15	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:010735	(blank)	Regionally Significant	15	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:006162	(blank)	Regionally Significant	13	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:006270	(blank)	Regionally Significant	13	99.4
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:006630	(blank)	Regionally Significant	13	92.9
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:006640	(blank)	Regionally Significant	13	91.2
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:010154	(blank)	Regionally Significant	13	96.3
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:010960	(blank)	Regionally Significant	13	97.2
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:011766	(blank)	Regionally Significant	13	82.6
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:012081	(blank)	Regionally Significant	13	99.6
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:012095	(blank)	Regionally Significant	13	89.2

City of Sebring Top Sensitivity Polygon Assets					
Critical Infrastructure					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:013325	(blank)	Regionally Significant	13	100
Stormwater Treatment Facilities and Pump Stations	CFRPC_PG:017744	(blank)	Regionally Significant	13	100

Table 98: Sebring Top Sensitivity Polygon Assets – Natural, Cultural, and Historical Resources

City of Sebring Top Sensitivity Polygon Assets					
Natural, Cultural, and Historical Resources					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Parks	CFRPC_PG:081043	LAKE SEBRING BOAT RAMP	Regionally Significant	15	100
Parks	CFRPC_PG:081491	SPRING LAKE DOG PARK	Regionally Significant	15	100
Surface Waters	CFRPC_PG:021157	Lake Sebring	Regionally Significant	15	100
Surface Waters	CFRPC_PG:023546	(blank)	Locally Significant	15	96.6
Wetlands	CFRPC_PG:036251	6300: Wetland Forested Mixed	Regionally Significant	15	99.7
Wetlands	CFRPC_PG:038185	6400: Vegetated Non-Forested Wetlands	Regionally Significant	15	100

City of Sebring Top Sensitivity Polygon Assets					
Natural, Cultural, and Historical Resources					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Wetlands	CFRPC_PG:039245	6400: Vegetated Non-Forested Wetlands	Regionally Significant	15	100
Wetlands	CFRPC_PG:039246	6400: Vegetated Non-Forested Wetlands	Regionally Significant	15	100
Wetlands	CFRPC_PG:039250	6400: Vegetated Non-Forested Wetlands	Regionally Significant	15	100
Wetlands	CFRPC_PG:039251	6400: Vegetated Non-Forested Wetlands	Regionally Significant	15	100
Wetlands	CFRPC_PG:039308	6400: Vegetated Non-Forested Wetlands	Regionally Significant	15	100
Wetlands	CFRPC_PG:039310	6400: Vegetated Non-Forested Wetlands	Regionally Significant	15	100
Wetlands	CFRPC_PG:050398	6410: Freshwater Marshes	Regionally Significant	15	100
Wetlands	CFRPC_PG:050833	6410: Freshwater Marshes	Regionally Significant	15	100
Wetlands	CFRPC_PG:051281	6410: Freshwater Marshes	Regionally Significant	15	100
Wetlands	CFRPC_PG:051446	6410: Freshwater Marshes	Regionally Significant	15	100
Wetlands	CFRPC_PG:051605	6410: Freshwater Marshes	Regionally Significant	15	100
Wetlands	CFRPC_PG:051657	6410: Freshwater Marshes	Regionally Significant	15	100
Wetlands	CFRPC_PG:051833	6410: Freshwater Marshes	Regionally Significant	15	100

City of Sebring Top Sensitivity Polygon Assets					
Natural, Cultural, and Historical Resources					
500 Year 2070					
Asset Type	**CFRPC ID**	**Asset Name**	**Asset Relevancy**	**Sensitivity Score**	**Inundation Percentage**
Wetlands	CFRPC_PG:051998	6410: Freshwater Marshes	Regionally Significant	15	100
Wetlands	CFRPC_PG:052025	6410: Freshwater Marshes	Regionally Significant	15	99.9
Wetlands	CFRPC_PG:060694	6410: Freshwater Marshes	Regionally Significant	15	93
Wetlands	CFRPC_PG:079860	6530: Intermittent Ponds	Regionally Significant	15	72.6
Wetlands	CFRPC_PG:023788	6150: Stream and Lake Swamps (bottomland)	Regionally Significant	15	89
Wetlands	CFRPC_PG:026165	6150: Stream and Lake Swamps (bottomland)	Regionally Significant	15	90.4
Wetlands	CFRPC_PG:039851	6400: Vegetated Non-Forested Wetlands	Regionally Significant	15	100
Wetlands	CFRPC_PG:053045	6410: Freshwater Marshes	Regionally Significant	15	99.9
Wetlands	CFRPC_PG:053203	6410: Freshwater Marshes	Regionally Significant	15	99.8
Wetlands	CFRPC_PG:060415	6410: Freshwater Marshes	Regionally Significant	15	94

SUMMARY & RECOMMENDATIONS

Table 98 summarizes how exposure metrics and sensitivity are used together. Assets inherit the sensitivity score of the hexagon in which they are located, allowing asset-level exposure to be interpreted within a broader regional context.

Table 99: Exposure-Sensitivity Crosswalk Table

Component	Spatial Unit	Primary Metrics	Purpose
Exposure Analysis	Asset (point, line, polygon)	Depth (MIN / MEAN / MAX), % Exposed	Quantifies physical flood impact
Sensitivity Analysis	Hexagon	Composite sensitivity score (1–5)	Provides regional vulnerability context
Integrated Review	Asset + Hexagon	Exposure metrics + Sensitivity score	Supports prioritization and decision-making

Considerations and Appropriate Use

This methodology is subject to the following considerations:

- Modeled flood depths represent scenario-based conditions, not observed events.
- Sensitivity scores are relative, dependent on classification thresholds and input data resolution.
- SOVI represents baseline social conditions and does not reflect future demographic change.
- Results should be interpreted as planning-level indicators, not site-specific engineering determinations.

The sensitivity analysis produces a relative index. This is designed to support comparative planning, prioritization, and contextual interpretation. When paired with asset-level exposure results, the sensitivity analysis provides where exposure intersects with social, environmental, and hazard-related vulnerabilities, supporting more informed mitigation and investment strategies.

Integrating Exposure and Sensitivity Analyses for Planning Decisions

- Exposure and Sensitivity serve distinct, but complimentary roles within the modeling framework.

- Exposure analysis identifies how much flooding a critical asset could potentially experience under a given rainfall scenario.

- Sensitivity analysis identifies how sensitive the surrounding area is to flooding impacts based on social vulnerability (SOVI), population distribution, FEMA flood hazard extent, natural environmental features and constructed hydrological (canals, ditches, stormwater facilities, lakes, rivers, and streams), and exposure inundation.

- By evaluating exposure and sensitivity together, critical assets may be prioritized not solely on modeled depth, but also on contextual importance and potential impacts. Example applications include:
    - Prioritizing mitigation for assets with high exposure located within high-sensitivity hexagons.
    - Identifying critical assets with moderate exposure but elevated social or environmental (hydrological) sensitivity.
    - Supporting funding, phasing, and project justification decisions

ADAPTATION ACTION AREA PLANS

Adaptation Action Areas (AAA) are defined in section 163.3177, Florida Statutes, as geographic areas identified by a local government that experiences coastal flooding and are prioritized for the funding and implementation of adaptation strategies to improve resilience. While AAAs are traditionally applied in coastal communities, the concept can be adapted for inland jurisdictions, such as Highlands County, to identify areas subject to repetitive or high-risk flooding associated with rainfall events, drainage limitations, and watershed conditions.

For Highlands County, potential AAAs were identified based on the results of the exposure and sensitivity analyses conducted as part of this Vulnerability Assessment. These areas represent locations where critical and regionally significant assets are subject to higher levels of flood exposure and risk under the VAs modeled storm scenario 500-year 2070. Factors considered in identifying these areas are identified in the methodology below. Although not formally designated through a comprehensive plan amendment as outlined in statute, these areas serve as planning-level equivalents to AAAs and provide a framework for prioritizing resilience actions.

The identification of these priority areas supports targeted decision-making and aligns with the objectives of the Resilient Florida Program by providing a defensible basis for project development and funding. Areas identified through this process may be used to guide future infrastructure investments, stormwater management improvements, and hazard mitigation strategies. In addition, these areas may inform updates to local planning documents, including comprehensive plans, capital improvement programs, and emergency management strategies.

By applying the AAA concept in an inland context, Highlands County can proactively address flood risk, enhance community resilience, and position itself for future state and federal funding opportunities.

Highlands County contracted with the Central Florida Regional Planning Council (CFRPC) to develop the Adaptation Action Areas (AAAs). CFRPC received funding for this effort from the Coastal & Heartland National Estuary Partnership through Bipartisan Infrastructure Law (BIL) funding provided by the U.S. Environmental Protection Agency. To support implementation, CFRPC engaged EnSafe to assist with the development of the AAAs.

Highlands County identified the top three Adaptation Action Areas. These plans can be found in Appendix F.

LOCAL MITIGATION STRATEGY

The results of the Vulnerability Assessment have been coordinated with the Local Mitigation Strategy (LMS) planning process in accordance with the requirements of the Florida Division of Emergency Management. The findings were reviewed with the Highlands County Local Mitigation Strategy Working Group (LMSWG) to ensure consistency with the existing County LMS Plan and to support the integration of risk-informed, resilience-focused planning efforts. Through this coordination, the VA has been positioned to inform future updates to the LMS by providing enhanced data, analysis, and identification of vulnerabilities relevant to both natural and man-made hazards. During the next update of the County's LMS the VA will be incorporated in the document.

GAP ANALYSIS AND RECOMMENDATIONS

Throughout this project, every effort has been made to compile a comprehensive inventory of features designated as critical assets important to Highlands County, its municipalities, and the Highlands County Vulnerability Assessment Steering Committee members. It is important to note that the compiled dataset is the best available data and should not be seen as authoritative or unchangeable.

Efforts have been made to avoid duplicated assets in the dataset. However, this does not guarantee the accuracy of feature locations, only that they have been considered. Ideally, features should be located in a parcel if suitable, rather than at the street level, although this may not always be feasible. Further review of such features is recommended.

Sensitive Data Gap

Some critical asset data required under Section 380.093, F.S., could not be obtained because of its sensitive nature. This includes critical infrastructure such as drinking water facilities, water utility systems, electric production, and supply facilities, which are part of the 16 critical infrastructure sectors identified by the Cybersecurity and Infrastructure Security Agency (CISA). Since these assets are essential to security, health, and the economy, detailed information is restricted and not publicly available. As a result, the vulnerability assessment is limited by the absence of certain sensitive datasets.

Sensitive Data Recommendation

Clear guidance should be established for handling datasets that are not publicly available, sensitive in nature, or pose national security risks. This guidance should outline appropriate methods for incorporating these datasets into vulnerability assessments without compromising security, such as anonymization or alternative representation strategies.

When sensitive assets cannot be mapped directly, visualization techniques such as heat maps can reveal patterns or concentrations of assets without exposing their exact locations. Another alternative is to allow grantees to conduct the required analysis internally but censor illustrative maps by providing the results in table format only, ensuring compliance without jeopardizing security.

General Data Gap

Many asset records contain incomplete, outdated, or missing address information, making it difficult to geocode accurately or link assets to parcel data, zoning, and jurisdictional boundaries. This limitation reduced the ability to evaluate potential impacts across jurisdictions. The issue is further complicated by

the sensitive nature of certain critical infrastructure, as specific locations cannot always be disclosed due to national security concerns.

The initial dataset also lacked Florida Department of Environmental Protection (FDEP) identification numbers for facilities, which created confusion when matching records across systems or validating assets. Although IDs were later added, some workflows had already been built on incomplete or mismatched data. For sensitive assets, the absence of consistent identifiers presents additional challenges, since these records cannot always be verified or cross-referenced against publicly available information.

The vulnerability assessment also drew from multiple sources, including state agencies, utilities, and local governments, each using different formats, standards, and coordinate systems. This fragmentation resulted in inconsistent field names, missing values, and difficulties in integrating the data. Sensitive or restricted datasets further amplified these challenges, as some stakeholders were unable to share information openly, requiring reliance on proxy data or alternative representations. Collectively, these inconsistencies weakened the overall assessment and risk leaving critical vulnerabilities underrepresented.

Several datasets lacked adequate metadata detailing their sources, update frequency, accuracy, or assumptions. Without this information, it is difficult to assess the reliability of the data or apply it consistently in planning. A metadata template should be created for all layers including source, date, accuracy, vertical datum, and update cycle. Then a Quality Assurance/Quality Control (QA/QC) script should be run to flag missing fields, null values, or coordinate mismatches.

General Data Recommendation

All assets should be assigned a unique, persistent identifier—such as an FDEP ID—to ensure consistency, cross-system validation, and continuity over time. Standardized metadata requirements should also be implemented for all datasets, including documentation of source, update cycles, accuracy, and assumptions. These practices will strengthen reliability and ensure sensitive data is properly cataloged and understood by authorized users. In addition, asset data should be cross-referenced with parcel records or utility service areas to address missing or incomplete information.

Improved coordination with regional stakeholders, combined with greater investment in the initial data collection phase, will produce stronger and more consistent assessments. Standardizing formats, domains, and coded values for asset types, jurisdictions, and vulnerability scores will reduce inconsistencies and enhance the ability to integrate sensitive data securely and collaboratively.

Elevation Data Gap

Digital Elevation Models (DEMs) used for vulnerability analysis were outdated, incomplete, or missing, requiring manual input to fill gaps where LiDAR datasets were unavailable. This reduces precision in flood modeling, sensitivity scoring, and exposure analysis, particularly in low-lying areas. Because elevation data frequently intersects with critical infrastructure, outdated models pose both technical challenges and sensitivity risks, as public release of infrastructure vulnerabilities could be exploited if not carefully managed.

Elevation Data Recommendation

Elevation datasets should be updated with the latest LiDAR available from FDOT or county GIS portals, ensuring consistent use of NAVD88 and eliminating reliance on interpolated surfaces. Using more current

and precise DEMs will improve flood and vulnerability modeling while reducing the risk of inaccurate exposure assessments, particularly in sensitive critical infrastructure areas.

Modeled Data Gap

Given the large spatial extent of the watershed and the volume of data processed, there are inherent limitations in the modeled rainfall-runoff simulations. While the elevation data is of high quality due to LiDAR acquisition, providing sufficient resolution to identify major infrastructure and topographic features, some drainage features may not be fully represented. Additionally, localized terrain modifications (e.g., grading, berms, or undocumented alterations) may not be captured within the available datasets.

To maintain computational efficiency and numerical stability across the full watershed, a relatively coarse mesh cell size was utilized in the model. While appropriate for regional-scale analysis, this resolution may not fully capture localized hydrologic and hydraulic processes, particularly those influencing overland flow paths and small-scale drainage behavior during rainfall events.

Modeled Data Recommendation

To improve the accuracy and reliability of rainfall-driven flood modeling, the development of a comprehensive drainage infrastructure dataset is recommended. This dataset should include feature type, dimensions, invert elevations, and connectivity of systems such as culverts, ditches, and stormwater networks. Incorporating these data would enhance the model's ability to simulate flow conveyance and storage throughout the watershed.

Additionally, refinement of the computational mesh, particularly in areas of interest or known flooding concerns, is recommended to better represent localized flow dynamics and flood extents. Targeted mesh refinement would allow for more detailed assessment of flood risk at the neighborhood or asset level while maintaining overall model performance.

OUTCOMES

The outcomes of the Vulnerability Assessment (VA) provide a standardized, data-driven evaluation of flood risk to critical and regionally significant assets within Highlands County in accordance with section 380.093, Florida Statutes. Through the application of exposure and sensitivity analyses, this assessment identifies the extent, depth, and frequency of rainfall-driven flooding and its potential impacts on assets across the four statutorily defined asset classes. The results establish a defensible and reproducible methodology for determining which assets are most vulnerable under existing and future conditions, supporting consistency with Resilient Florida Program guidance and GIS Data Standards.

The VA outcomes support the identification and prioritization of assets and infrastructure that may require adaptation actions. Assets determined to have higher levels of exposure and sensitivity are considered candidates for further evaluation, including feasibility analyses and conceptual project development. These findings provide the technical basis for advancing resilience strategies such as protection, accommodation, or relocation, and directly support the County's ability to pursue implementation funding through the Resilient Florida Program and other applicable state and federal funding sources.

In addition, the assessment produces GIS-based datasets, metadata, and mapping products that enhance transparency and usability of results for ongoing planning and decision-making. These data products are structured to meet Resilient Florida Program GIS requirements and can be updated as new information becomes available. The outcomes of this assessment may also inform local and regional planning efforts,

including capital improvement planning, stormwater management strategies, and hazard mitigation initiatives, ensuring that resilience considerations are integrated into future policy and investment decisions.

Project Identification and Planning Integration

While this Vulnerability Assessment VA does not include a standalone or prioritized list of specific mitigation or adaptation projects, the results of the assessment are intended to directly inform and support project identification and development through existing County, municipal, regional, and state planning frameworks. Consistent with the objectives of the Resilient Florida Program, the VA provides a data-driven foundation for understanding risk to critical assets and infrastructure, which can be used by Highlands County and its partners to guide future resilience investments, policy decisions, and capital planning efforts. The findings of this assessment are designed to be actionable and transferable to other planning processes where project development and prioritization occur. Detailed Sensitivity Ratings on the VA's critical assets, including risk considerations, are documented in Appendix C – Detailed Sensitivity Tables and are intended to support the identification of priority areas and rating of each asset to help identify resiliency/mitigation projects.

The VA is closely aligned with the County's Local Mitigation Strategy (LMS), coordinated through the County's LMS Working Group, and is intended to inform the identification and prioritization of mitigation projects included in the LMS. Additionally, the assessment supports Highlands County and its municipalities' Capital Improvement Program/Element (CIP/E) by providing critical risk information that can be incorporated into infrastructure planning, budgeting, and project scoping. The results may also be used to support updates to comprehensive plans, stormwater master plans, and other local planning efforts where resilience considerations are increasingly integrated.

At the regional and state level, the VA findings are compatible with and can support project development under planning initiatives led by agencies such as the Water Management Districts' CIP and Resiliency Plans, particularly where watershed management, flood protection, and water resource planning intersect with identified vulnerabilities. The findings of this assessment will also be coordinated with the Heartland Regional Transportation Planning Organization to support the integration of resilience considerations into regional transportation planning efforts and future projects in the county. Coordination with municipalities, Central Florida Regional Planning Council's Heartland Resiliency Coalition, and other partner agencies further ensures the results of this assessment can be leveraged across jurisdictions to support a cohesive and strategic approach to resilience planning. Through these connections, the VA serves as a foundational tool to guide future project identification, prioritization, and funding pursuits without duplicating or replacing existing planning efforts.

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APPENDIX A

Vulnerability Assessment Detailed Exposure Tables

APPENDIX B

Vulnerability Assessment Exposure Maps

City of Avon Park
City of Sebring
Town of Lake Placid
Highlands County

APPENDIX C

Vulnerability Assessment Detailed Sensitivity Tables

APPENDIX D

Vulnerability Assessment Sensitivity Maps

City of Avon Park
City of Sebring
Town of Lake Placid
Highlands County

APPENDIX E

Highlands County Inundation Flood Report

APPENDIX F
Highlands County Adaptation Action Areas

THIS IS A PLACE HOLDER FOR WHEN THE AAAs ARE COMPLETE NEAR SUMMER 2026

Highlands County

ADAPTATION ACTION AREA PLAN

Sebring Parkway

June 2026

ENSAFE

Michael Baker INTERNATIONAL

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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 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 Sebring Parkway Adaptation Action Area, one of the highest priority areas identified through the County's data-driven ranking process.

The Sebring Parkway area includes critical community and emergency assets and essential transportation segments that are vulnerable to current and future rainfall-induced flooding. The area received the highest cumulative score due to its concentration of County-maintained critical assets and vulnerability to flooding. Flooding in this area may disrupt emergency services and limit access affecting residents and day-to-day business.

This plan takes the countywide comprehensive vulnerability assessment findings and zooms into the infrastructure and hydrologic conditions of the Sebring Parkway 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 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 flooding 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. Sebring Parkway AAA Overview

2.1 AAA Overview

The Sebring Parkway AAA is centered on the Sebring Parkway corridor and adjacent roadways, and includes public facilities, residential areas, and critical infrastructure. Among all identified AAAs, the Sebring Parkway AAA received the highest cumulative score due to the concentration of County-maintained critical assets and its documented and projected vulnerability to flooding driven by intense rainfall events and stormwater system limitation.

The area includes multiple publicly owned assets and critical transportation routes that support routine mobility and transportation response operations. Assets located within the Sebring Parkway 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 Sebring Parkway AAA

Asset No.	Asset Name	Asset Type
1	Railroad Crossing at Fortune Boulevard	Transportation and Evacuation Routes
2	Highlands County Fire Rescue EMS #18	Critical Community and Emergency Facilities
3	Hope Villas	Critical Community and Emergency Facilities
5	Segment of Sebring Drive	Transportation and Evacuation Routes
4; 6-12	Segments of SE Lakeview Drive	Transportation and Evacuation Routes

The Transportation and Evacuation Route assets used in this assessment represent a refined subset of the broader transportation and evacuation route assets originally developed in the Highlands County CVA. This refinement ensured that only features relevant to the County were included.

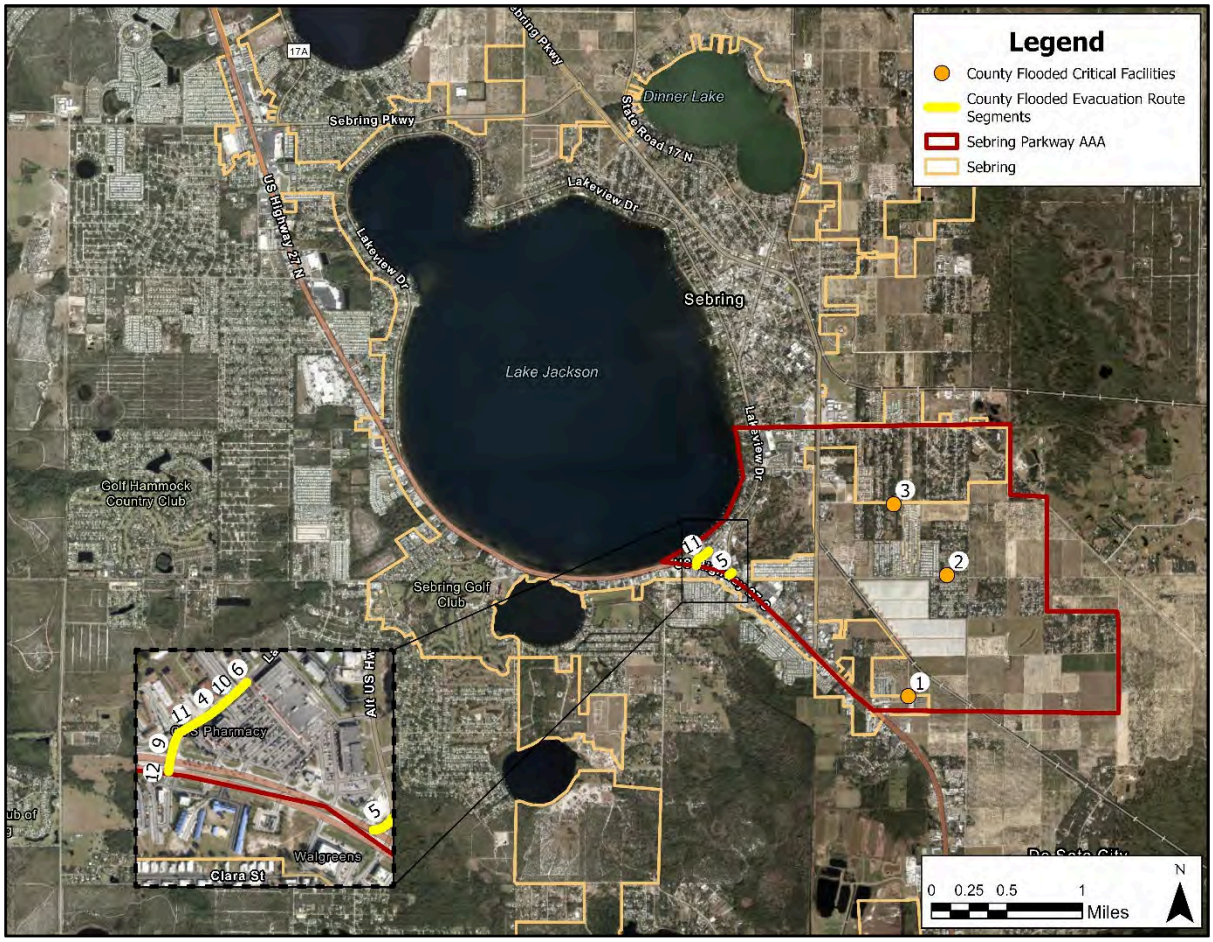

Figure 1: Sebring Parkway Adaptation Action Area and Critical Assets

2.2 Existing Conditions and Recurring Challenges

The Sebring Parkway 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 the Sebring Parkway area, 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.

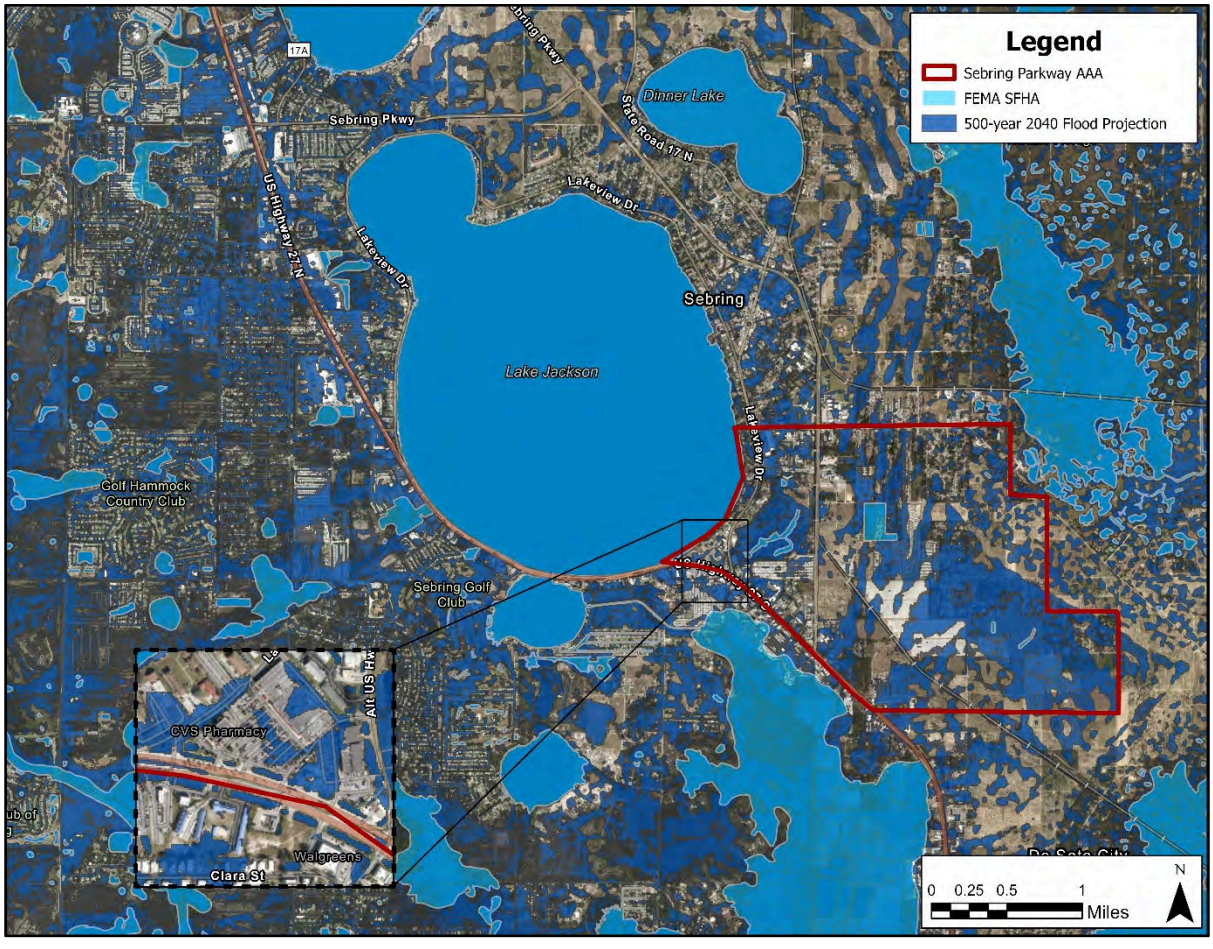

Figure 2: Sebring Parkway AAA and FEMA Special Flood Hazard Areas

2.3 Community Input

Community input was incorporated into the AAA identification and prioritization process through multiple Countywide public meetings and stakeholder coordination efforts. Feedback focused on locations that have experienced recurring flooding and was considered as a qualitative factor in the AAA prioritization. While the Sebring Parkway AAA received limited location-specific public comments, its prioritization is strongly supported by the results of the Highlands County CVA, which identify a high concentration of critical assets with exposure to modeled future rainfall-driven flooding under both the 100- and 500-year 2040 scenarios.

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 Sebring Parkway 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/Drainage 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 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 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 Sebring Parkway 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 Sebring Parkway 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).

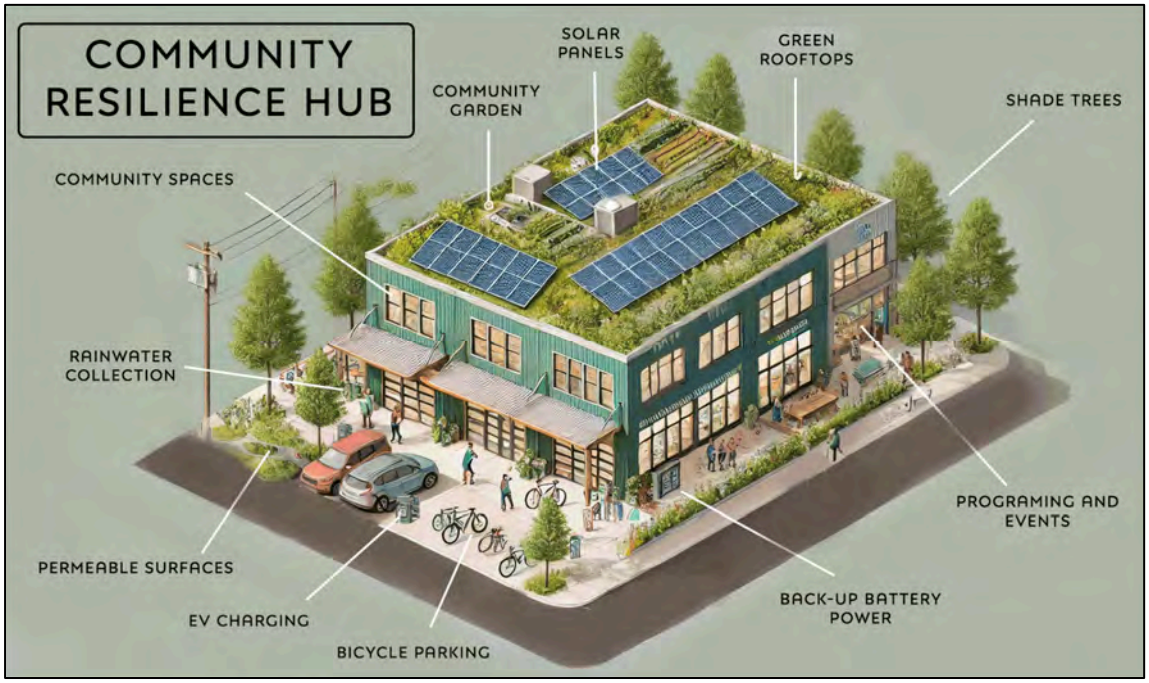

Figure 3: Conceptual resilience hub illustrating flexible space designed for both everyday community use and emergency operations[11].

3.2.2 Sebring Parkway Resilience Hub

Hope Villas, an affordable housing community located within the Sebring Parkway AAA, represents a strong candidate for resilience hub planning due to its location within a flood-vulnerable area and its potential to support residents before, during, and after flooding and extreme rainfall events.

As part of the Sebring Parkway AAA, resilience hub enhancements at or near Hope Villas could support residents by providing:

- A safe location for shelter-in-place during localized flooding or severe rainfall events.
- Access to backup power, communications, and potable water during power outages or service disruptions.
- Space for distribution of information, emergency supplies, flood preparedness, or post-event recovery assistance.
- Year-round services that support resilience in “blue-sky conditions,” 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 Hope Villas resilience hub include:

- Retrofitting existing common spaces or identifying nearby public facilities to incorporate resilience hub functions.
- Integrating flood mitigation and green infrastructure improvements to reduce localized flooding impacts around the housing site.
- Coordinating with affordable housing providers, emergency management, and social service partners to ensure the hub meets both emergency response and everyday community needs.

3.3 Infrastructure Improvements

The proposed infrastructure improvements within the Sebring Parkway AAA focus on addressing localized flooding driven by high-intensity rainfall rates and total rainfall volumes, shallow groundwater conditions, and the limitations of closed or semi-closed drainage basins. Semi-closed drainage basins are areas where stormwater discharge is constrained by a limited number of outlet points and reduced downstream conveyance capacity, resulting in a system that relies heavily on internal storage, infiltration, and controlled release. While not completely closed, these basins function with restricted hydraulic connectivity, which can be exceeded during moderate to heavy rainfall events. In contrast, open basin drainage systems

are characterized by well-defined and hydraulically efficient conveyance pathways with adequate outfall capacity, allowing stormwater to be readily conveyed downstream with minimal reliance on localized storage. Unlike coastal systems that are governed by tidal control and outfall capacity, flooding in this area is driven by the inability of the local system to adequately store, convey, and recover from stormwater during and 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 Sebring Parkway 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 Sebring Parkway 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 conditions occur within the Sebring Parkway AAA, infrastructure strategies focus on maximizing on-site stormwater, managing flow pathways, and allowing sufficient time for water levels to recede. Key approaches include:

- Implement stormwater retrofits, which may include expanding existing pond capacity and modifying or updating 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 where feasible.
- Improve 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 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 strategies 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 benefit.

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 and protecting 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 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 Sebring Parkway 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 Railroad Crossing at Fortune Boulevard

Estimated Project Cost: $0.8M – $1.2M

Lead Agency: Highlands County Public Works / Engineering

Supporting Agencies: Railroad Operator; Florida Department of Transportation; Emergency Management

Anticipated Implementation Timeframe: Preliminary engineering and coordination followed by approximately 6-9 months of construction, subject to railroad approvals

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Project Overview

Existing Conditions

The railroad crossing at Fortune Boulevard is a critical transportation asset that supports local circulation, freight access, and emergency connectivity. The crossing is located in a low-lying area and is susceptible to flooding during intense rainfall events due to limited roadway elevation, minimal stormwater storage, and constrained drainage conveyance. Stormwater runoff from Fortune Boulevard and adjacent areas can accumulate at the crossing, creating temporary roadway inundation and disrupting vehicular access.

Existing conditions are further constrained by the presence of active railroad infrastructure. Track geometry, operating requirements, and safety standards significantly limit the ability to raise the railroad profile, necessitating a cautious and highly coordinated approach to any resilience improvements.

Figure 8: Existing Conditions at Railroad Crossing at Fortune Boulevard

Adapted Conditions

Under adapted conditions, the Fortune Boulevard railroad crossing would remain largely at its existing elevation, with incremental and targeted improvements focused on reducing flood frequency and duration rather than eliminating inundation entirely. The roadway approaches and the railroad spur would be selectively raised where feasible, combined with enhanced drainage and localized stormwater management to improve passability during rainfall events. These improvements would reduce disruption to transportation and emergency access while respecting railroad operational constraints.

Figure 9: Adapted Conditions at Railroad Crossing at Fortune Boulevard

Proposed Improvements

Given the operational and regulatory limitations associated with railroad infrastructure, proposed improvements emphasize minimal yet meaningful adaptations, including:

Surface Water Management

Managing runoff through improved drainage, storage, and infiltration to reduce surface flooding and enhance system performance.

Critical Infrastructure Protection

Protecting and elevating critical infrastructure components to maintain functionality during flood events and reduce service disruptions.

Stormwater and Rainfall Impacts

Addressing rainfall-driven flooding through design strategies that account for storm intensity, duration, and system capacity.

Final design would be contingent on detailed engineering, hydraulic analysis, and coordination agreements with the railroad operator.

Project Benefits

- Decrease frequency and duration of roadway inundation at the railroad interface during heavy rainfall events.
- Enhance accessibility and reliability of a key roadway connection without major disruption to rail operations.
- Improve passability for emergency vehicles during rainfall events.
- Apply resilience measures that respect physical and regulatory constraints of railroad infrastructure.
- Provide a pragmatic approach to resilience where full avoidance or elevation is not feasible.

Preliminary Cost Estimate (Planning-Level)

Improvement Category	Estimated Cost Range
Roadway approach raising and profile adjustment	$300,000 - $450,000
Railroad spur elevation adjustments (limited)	$150,000 - $250,000
Drainage and stormwater conveyance improvements	$150,000 - $250,000
Pavement rehabilitation and surface restoration	$100,000 - $150,000
Engineering, permitting, and railroad coordination	$100,000 - $150,000
Estimates Total Project Cost	**$0.8 - $1.2 M**

Costs are planning-level estimates and will be refined through coordination with the railroad operator and completion of preliminary engineering.

4.2.2 Highlands County Fire Rescue EMS #18

Estimated Project Cost (Order of Magnitude): $0.9M – $1.4M
Lead Department/Agency: Highlands County Fire Rescue
Supporting: Highlands County Facilities and Maintenance; County Stormwater / Public Works
Anticipated Implementation Timeframe: Design and permitting followed by approximately 9-12 months of construction

Project Overview

Existing Conditions

Highlands County Fire Rescue EMS #18 is a critical emergency response facility that provides life-safety services to the surrounding community. The site includes a single-story building with paved access and limited on-site stormwater management. Existing drainage relies primarily on surface flow across impervious areas and surrounding turf, offering little detention or attenuation during heavy rainfall events.

While the structure itself is operationally functional, key mechanical, electrical, and operational equipment, including emergency power systems and heavy response equipment, are located at or near grade. During intense rainfall or localized flooding, these conditions create vulnerability to service disruption, delayed emergency response, and potential equipment damage.

Figure 10: Existing Conditions of Highlands County Fire Rescue EMS #18

Adapted Conditions

Under adapted conditions, EMS #18 would function as a more resilient emergency services facility with enhanced protection of critical assets and improved on-site stormwater performance. The site would incorporate modest low-impact development (LID) features and dry retention areas to manage runoff, while prioritizing elevation and hardening of critical equipment to ensure continued operations during and after flood events. These improvements strengthen facility reliability without altering core operations or emergency access.

Figure 11: Adapted Conditions of Highlands County Fire Rescue EMS #18

Proposed Improvements

Proposed improvements focus on asset protection first, supplemented by site-level stormwater retrofits:

Site Resilience and Groundwater-Aware Design

Incorporating site-level adaptations to reduce flood exposure and improve drainage performance, including minor grading adjustments, use of vegetated areas, and limited low impact development (LID) features to promote infiltration and direct runoff away from critical structures.

Critical Infrastructure Protection and Elevation

Elevating and hardening critical equipment, including generators, electrical panels, and communications systems, to maintain functionality during flood events. This may include installation of raised platforms, reinforced pads, and modifications to utility connections to support continued operations.

Stormwater Storage and Drainage Improvements

Enhancing stormwater management through construction of dry retention areas, improved drainage features, and optional runoff capture strategies. Thes measures are intended to reduce standing water, improve drawdown, and minimize localized flooding during rainfall events.

Final design would be informed by site-specific flood assessments and coordination with Fire Rescue operational requirements.

Project Benefits

- Elevation of critical equipment significantly reduces the likelihood of service interruption during flood events.
- Reduce risk of damage to generators, electrical systems, and response equipment.
- On-site storage and drainage upgrades reduce nuisance flooding and improve stormwater management.
- Focus on targeted, high-impact adaptations rather than full facility reconstruction.
- Emphasize asset protection and emergency function continuity, which are highly competitive criteria for resilience funding.

Preliminary Cost Estimate (Planning-Level)

Improvement Category	Estimated Cost Range
Elevation of generators, electrical, and communications equipment	$350,00 - $550,000
Elevated equipment pads and structural supports	$200,000 - $300,000
Dry retention area and site-level stormwater improvements	$150,000 - $250,000
Minor grading and drainage adjustments	$100,000 - $150,000
Engineering, permitting, and construction administration	$100,000 - $150,000
Estimates Total Project Cost	**$1.8 - $2.7 M**

Costs are planning-level estimates and will be refined during project design.

4.2.3 Hope Villas

Estimated Project Cost: $1.5 – $2.4M
Lead Department/Agency: Highlands County Housing / Community Services
Supporting Agencies/Departments: Highlands County Public Works; Emergency Management; Stormwater Division
Anticipated Implementation Timeframe: Design and permitting followed by approximately 12-18 months of phased construction

Project Overview

Existing Conditions

Hope Villas is a residential development serving elderly and mobility-limited residents, making it a critical community asset during extreme rainfall events. The facility includes single-story residential buildings, internal roadways, sidewalks, and open landscaped areas.

Existing site drainage relies primarily on shallow surface conveyance, limited roadside swales, and a small outlet structure that provides minimal storage and attenuation.

The current configuration offers limited flood resilience. During heavy rainfall events, runoff accumulates along internal roadways and landscaped margins, potentially restricting access and creating safety concerns for residents with limited mobility. While green space is present, it is not currently optimized for stormwater storage, nor is it explicitly designed to support resilience hub functionality such as emergency access, passive cooling, or temporary refuge during rainfall events.

Figure 12: Existing Conditions of Hope Villas

Adapted Conditions

Under adapted conditions, Hope Villas would function as both a more flood-resilient residential community and a neighborhood-scale resilience hub. Stormwater management features would be integrated into the site in a manner that prioritizes safety, accessibility, and ease of maintenance, while avoiding features that could pose fall hazards or impede mobility. Green infrastructure would provide distributed storage, improve drainage performance, and enhance the site's ability to remain functional during and after rainfall events.

Figure 13: Adapted Conditions of Hope Villas

Proposed Improvements

Proposed improvements emphasize gentle, accessible, and multi-benefit adaptations appropriate for an elderly population:

Green Infrastructure and Bioretention Enhancements

Expanding the use of linear bioretention areas and vegetated swales to improve runoff management and water quality. This includes replacing narrow ornamental rain gardens with broader, shallow, grass-forward systems designed with low side slopes, minimal ponding depths, and clear edge definition to support safety, visibility, and ease of maintenance.

Site Functionality and Resilience Hub Support

Maintaining safe and reliable site operations through flood-resilient access, improved internal circulation, and enhanced open space. These improvements support emergency response and resident movement while incorporating shaded, landscaped areas that contribute to passive cooling and usability during power outages or extreme heat events.

Stormwater Storage and Drainage Improvements

Enhancing stormwater performance through distributed dry retention areas and improved outlet and conveyance systems. Landscaped areas are modified to temporarily store runoff during rainfall events and drain between storms, increasing storage without introducing standing water hazards. Improvements to outlet structures and conveyance pathways support controlled discharge, faster drawdown, and reduced erosion. Flat curbs may be incorporated to allow stormwater runoff to enter adjacent systems, reducing ponding in low-lying roadway areas and improving overall drainage efficiency.

Final design would coordinate stormwater function with accessibility standards, emergency planning, and long-term maintenance considerations.

Project Benefits

- Reduce flood risk and access disruptions for elderly and mobility-limited residents.
- Support Hope Villas' potential role as a neighborhood-scale resilience hub during extreme rainfall events.
- Provide additional on-site storage and improved drainage performance during intense rainfall.
- Avoid steep slopes, deep ponding, or hard infrastructure that could pose safety concerns.
- Enhance aesthetics, thermal comfort, and quality of life while delivering stormwater function.

Preliminary Cost Estimate (Planning-Level)

Improvement Category	Estimated Cost Range
Expanded bioretention and vegetated swales	$450,000 - $700,000
Distributed dry retention enhancements	$400,000 - $600,000
Roadside curb retrofits and drainage collection improvements	$200,000 – $400,000
Outlet structure and conveyance improvements	$250,000 - $400,000
Site grading and accessibility adjustments	$200,000 - $350,000
Engineering, permitting, and construction administration	$200,000 - $350,000
Estimates Total Project Cost	**$1.1 - $1.9 M**

Costs represent planning-level estimates and will be refined during project design.

4.2.4 Segment of Sebring Drive

Estimated Project Cost: $1.1 – $1.5M
Lead Department/Agency: City of Sebring Public Works / Engineering
Supporting Agencies/Departments: Stormwater Division; Emergency Management
Anticipated Implementation Timeframe: Design and permitting followed by approximately 9-12 months of construction

Project Overview

Existing Conditions

This segment of Sebring Drive functions as a key arterial roadway and signalized intersection serving commercial properties, neighborhood traffic, and regional travel. The corridor is highly impervious and characterized by curb-and-gutter drainage with minimal on-site stormwater storage or infiltration. Run off from travel lanes, turn lanes, and adjacent commercial driveways are rapidly conveyed to downstream systems with limited attenuation or treatment.

The intersection geometry and surrounding development create localized low points that are susceptible to surface ponding during high-intensity rainfall events. Under these conditions, roadway flooding can impede traffic movement, reduce safety, and disrupt access to nearby commercial and residential areas. As rainfall events become more frequent and occur in closer succession, existing drainage infrastructure provides limited resilience.

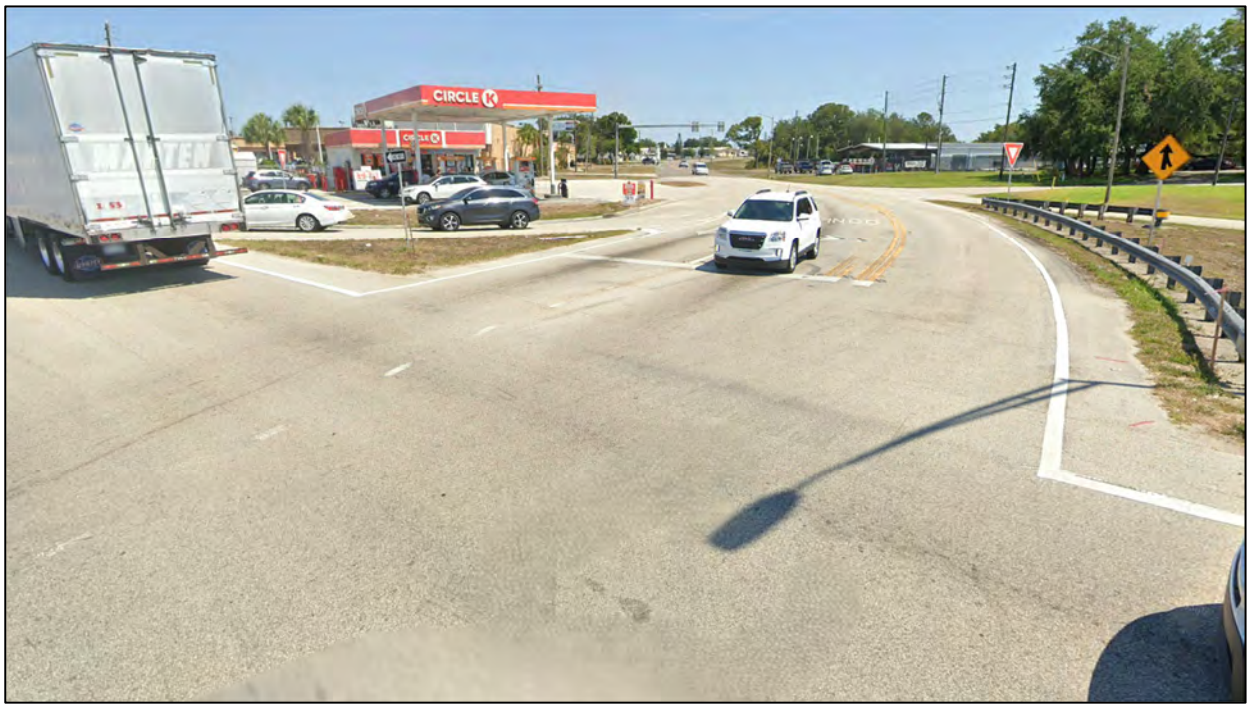

Figure 14: Existing Conditions of the segment of Sebring Drive

Adapted Conditions

Under adapted conditions, Sebring Drive would function as a more resilient transportation corridor and intersection capable of managing stormwater closer to its source. Adaptations would focus on improving stormwater capture, localized storage, and conveyance efficiency within the existing right-of-way, reducing roadway flooding risk while maintaining traffic operations and access. Improvements would also reduce the volume and rate of untreated runoff conveyed downstream.

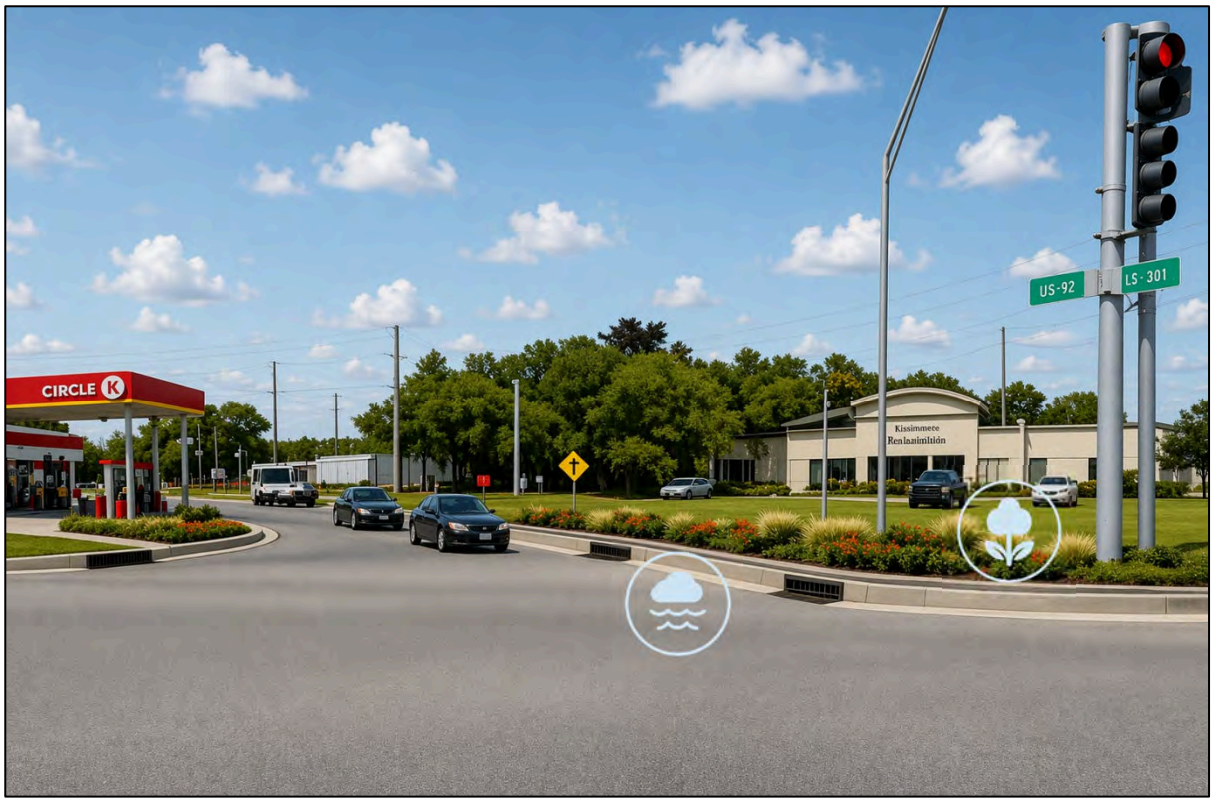

Figure 15: Adapted Conditions of the segment of Sebring Drive

Proposed Improvements

Proposed improvements mirror those applied to SE Lakeview Drive and emphasize localized, implementable retrofits, including:

Stormwater Storage and Conveyance Improvements

Enhancing localized stormwater management through improved runoff capture and conveyance. This includes installation of additional or retrofitted curb inlets at low points to reduce surface ponding within travel lanes, along with targeted upgrades to stormwater conveyance systems to improve flow efficiency and reduce backwater effects during heavy rainfall. Minor roadway grading and profile adjustments may also be incorporated to promote positive drainage and reduce nuisance flooding.

Green Infrastructure and Water Quality Improvements

Incorporating median and roadside green infrastructure features to provide localized storage, pretreatment, and water quality benefits. Shallow, linear bioretention areas and grassed stormwater features are designed to function under normally dry conditions, with gentle side slopes and compatibility with roadway safety requirements. These vegetated systems help reduce pollutant loading and improve the quality of runoff prior to discharge to downstream systems.

Final design would be refined through detailed engineering analysis and coordination with applicable roadway and stormwater design standards.

Project Benefits

- Reduce frequency and duration of localized roadway flooding during heavy rainfall events.
- Improve functionality and safety at a busy commercial intersection by maintaining passable lanes during rainfall events.
- Improvements can be implemented in phases or coordinated with future roadway or signalization projects.
- Reduce volume and pollutant load of untreated roadway runoff entering downstream receiving waters.
- Focus on targeted retrofits rather than full roadway reconstruction.

Preliminary Cost Estimate (Planning-Level)

Improvement Category	Estimated Cost Range
Additional and retrofitted stormwater inlets	$300,000 - $400,000
Conveyance upgrades and drainage improvements	$200,000 - $300,000
Median and roadside bioretention features	$250,000 - $350,000
Roadway grading and profile adjustments	$150,000 - $250,000
Engineering, permitting, and construction administration	$200,000 - $300,000
Estimates Total Project Cost	**$1.1 - $1.5 M**

Costs represent planning-level estimates and will be refined during project design.

4.2.5 Segments of SE Lakeview Drive

Estimated Project Cost: $1.2 – $1.6M
Lead Department/Agency: Highlands County Public Works / Engineering
Supporting Agencies/Departments: Stormwater Division; Emergency Management
Anticipated Implementation Timeframe: Design and permitting followed by approximately 9-12 months of construction

Project Overview

Existing Conditions

SE Lakeview Drive is a critical transportation corridor that functions as a primary evacuation and emergency access route. The roadway and adjacent areas are highly impervious and provide little to no on-site stormwater storage or infiltration. Stormwater runoff is rapidly conveyed via curb-and-gutter systems and inlets, discharging directly to Lake Jackson with minimal attenuation or treatment.

These conditions increase vulnerability to roadway flooding during high-intensity rainfall events, limiting access during emergencies and accelerating the delivery of pollutants to the receiving waterbody. The lack of distributed storage and treatment reduces overall corridor resilience as rainfall events become more frequent and occur in closer succession.

Figure 16: Existing Conditions of SE Lakeview Drive

Adapted Conditions

Under adapted conditions, SE Lakeview Drive would operate as a more resilient transportation and evacuation corridor capable of managing stormwater closer to its source. The corridor would incorporate enhanced stormwater capture, localized storage, and vegetated treatment features to reduce surface flooding, improve conveyance performance, and decrease direct runoff impacts to Lake Jackson. These improvements would enhance roadway reliability during rainfall events while maintaining critical access for emergency response and evacuation.

Figure 17: Adapted Conditions of SE Lakeview Drive

Proposed Improvements

Proposed improvements along SE Lakeview Drive focus on targeted roadway and stormwater retrofits within the existing corridor and right-of-way, including:

Stormwater Storage and Conveyance Improvements

Enhancing localized stormwater management through improved runoff capture and conveyance. This includes installation of additional or retrofitted curb inlets at low points to reduce surface ponding within travel lanes, along with targeted upgrades to stormwater conveyance systems to improve flow efficiency and reduce backwater effects during heavy rainfall. Minor roadway grading and profile adjustments may also be incorporated to promote positive drainage and reduce nuisance flooding.

Green Infrastructure and Water Quality Improvements

Incorporation of curbside stormwater collection and subsurface storage systems to provide localized detention, pretreatment, and water quality benefits. Runoff is captured through curb inlets and conveyed to underground chamber systems, where it is temporarily stored, filtered, and slowly released through controlled outlet structures. These systems function below grade and under normally dry surface conditions, maintaining compatibility with roadway operations while improving runoff quality and reducing downstream pollutant loading.

Final design would be refined through detailed engineering analysis and coordination with applicable roadway and stormwater design standards.

Project Benefits

- Reduce frequency, depth, and duration of roadway flooding during heavy rainfall events.
- Improve functionality of a critical evacuation and emergency access route during storm conditions.
- Decrease untreated runoff and pollutant loading to Lake Jackson.
- Improvements may be phased or coordinated with future roadway or utility projects.
- Vegetated features provide aesthetic enhancements and potential heat-mitigation benefits.

Preliminary Cost Estimate (Planning-Level)

Improvement Category	Estimated Cost Range (Per LF)
Drainage and inlet retrofits (curb inlets, collection system)	$497.65 – $710.93 / LF
Subsurface stormwater storage system (modular chamber system)	$710.93 – $1,279.67 / LF
Outlet structure and controlled discharge improvements	$355.46 – $568.74 / LF
Roadway grading and profile adjustments	$284.37 – $426.56 / LF
Curb modifications and roadside drainage treatments	$213.28 – $355.46 / LF
Water quality and roadside drainage treatments	$284.37 – $497.65 / LF
Estimates Total Project Cost (Per LF)	**$2,417.15 - $3,839.01 LF**

Total Length of the SE Lakeview Drive segment = 703.1 LF. *Costs reflect 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 Sebring Parkway 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 Sebring Parkway AAA represents a critical opportunity for Highlands County and the City of Sebring to translate vulnerability assessment findings into actionable resilience. Flooding in this area is driven by intense rainfall events, groundwater, and limited drainage capacity, requiring targeted and context-specific solutions. The strategies outlined in this plan emphasize practical, scalable actions that can be implemented incrementally while improving long-term flood resilience.

Successful implementation may be dependent on continued coordination across departments, integration of AAA priorities into existing planning and capital programs and leveraging external funding sources. While many recommendations can be applied independently, benefits will be achieved when projects are planned and implemented as a coordinated, long-term resilience strategy.

5.1 Recommended Next Steps

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

- **Formalize AAA planning into County frameworks** – Incorporate the Sebring Parkway AAA into applicable Comprehensive Plan policies, Capital Improvement Programs, stormwater planning documents, and hazard mitigation efforts to establish consistency and guide future investment decisions.
- **Advance priority projects to feasibility and design** – Evaluate near-term, high-impact roadway and site-level stormwater improvements for feasibility or preliminary engineering to support grant readiness and capital budgeting.
- **Coordinate with the City of Sebring and key partners** – Continue coordination between the County, City, emergency management, public works, housing providers, and utility partners to align responsibilities and implementation pathways, particularly for shared assets and facilities.
- **Secure funding and phase implementation** – Package projects to align with state and federal funding programs, including the Resilient Florida Program, FEMA Hazard Mitigation Assistance, and water management district cost-share opportunities, while advancing lower-cost improvements through local funding sources.

Through continued investment, coordination, and adaptive management, the Sebring Parkway AAA provides a clear example of how Highlands County can apply the Adaptation Action Area framework to reduce flood risk, protect critical assets, and strengthen long-term community resilience.

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Highlands County

ADAPTATION ACTION AREA PLAN

Downtown Sebring

June 2026

ENSAFE

Michael Baker INTERNATIONAL

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Figure 11: Adapted Conditions of Highlands County Fire Rescue EMS #17 34

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.

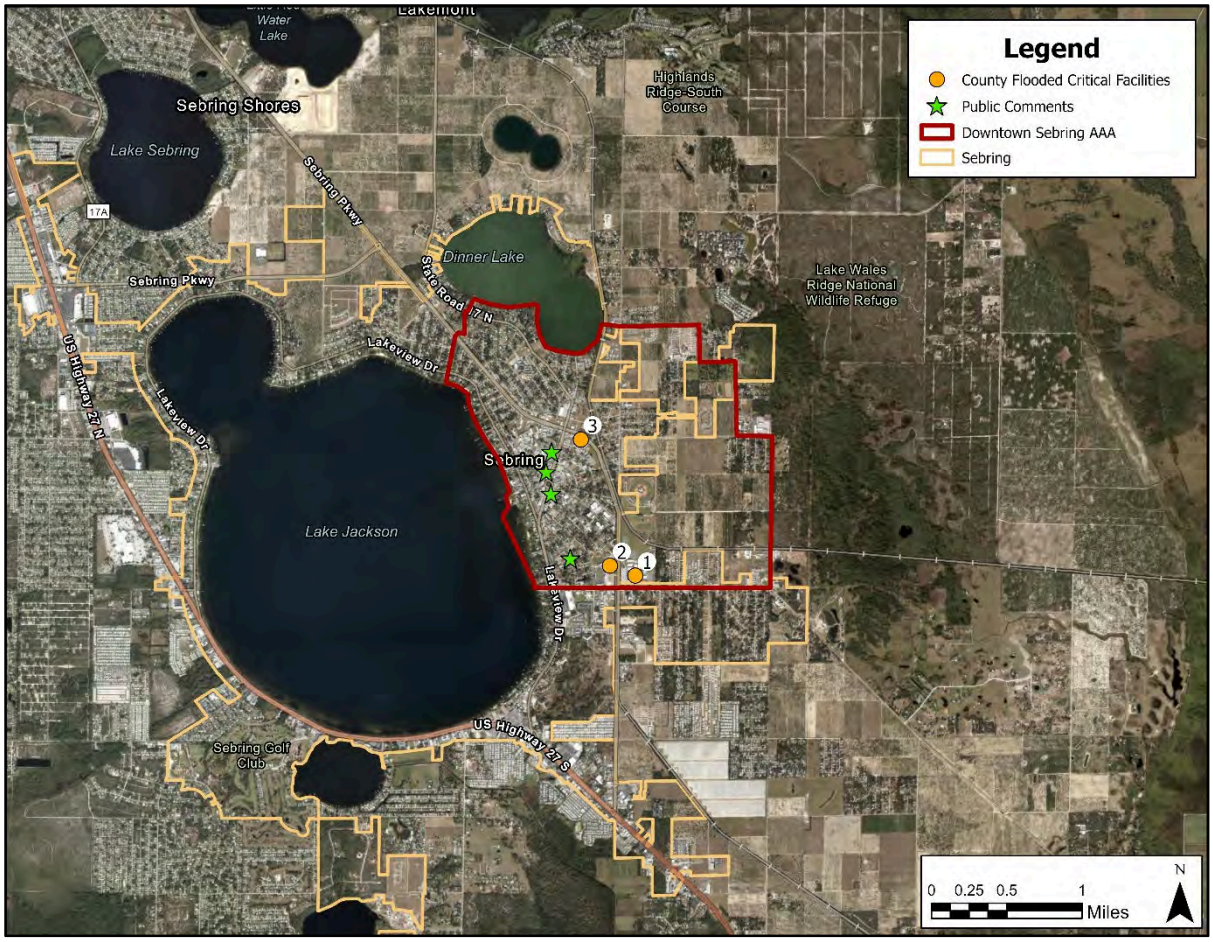

Figure 1: Downtown Sebring Adaptation Action Area, Critical Assets, and Public Comment Locations

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.

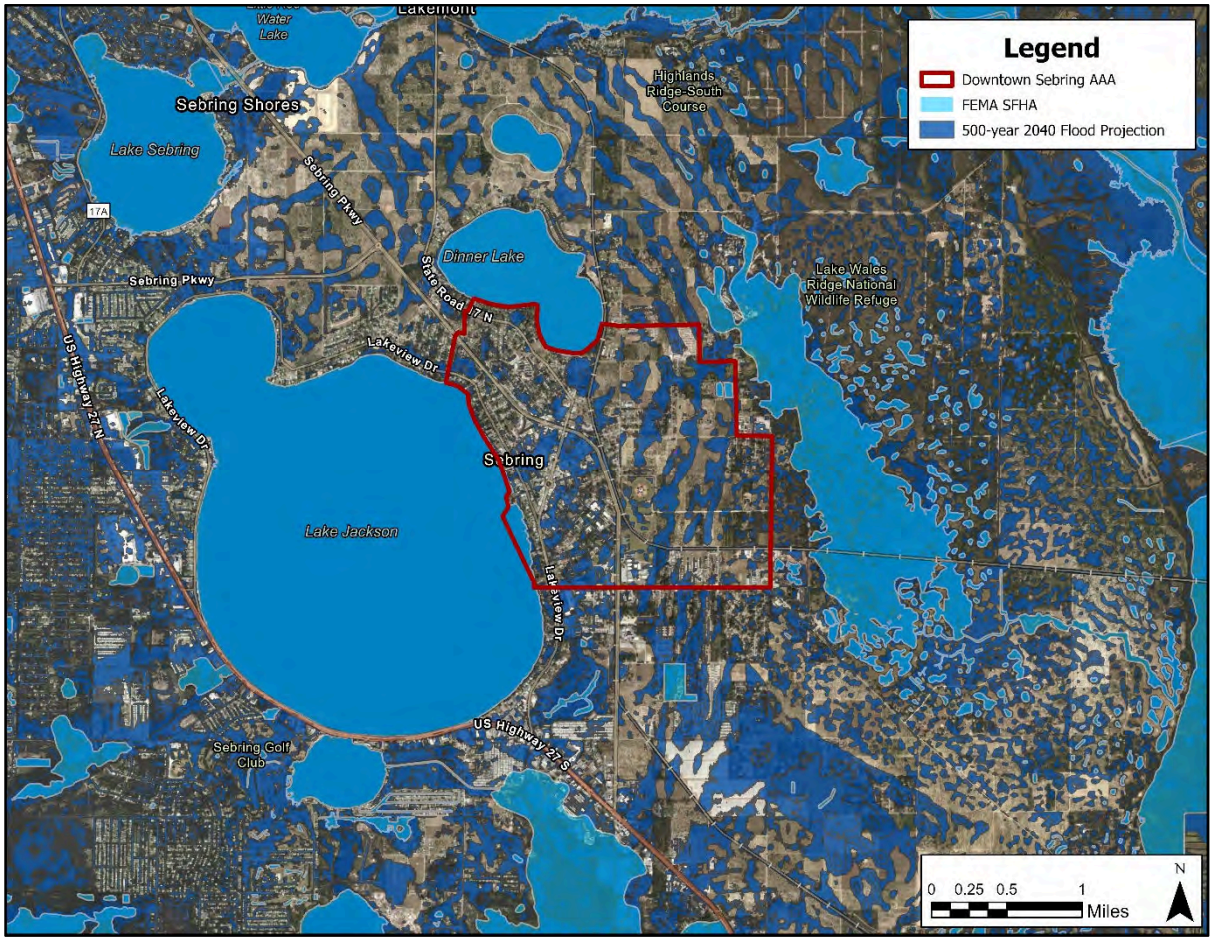

Figure 2: Downtown Sebring AAA and FEMA Special Flood Hazard Areas

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).

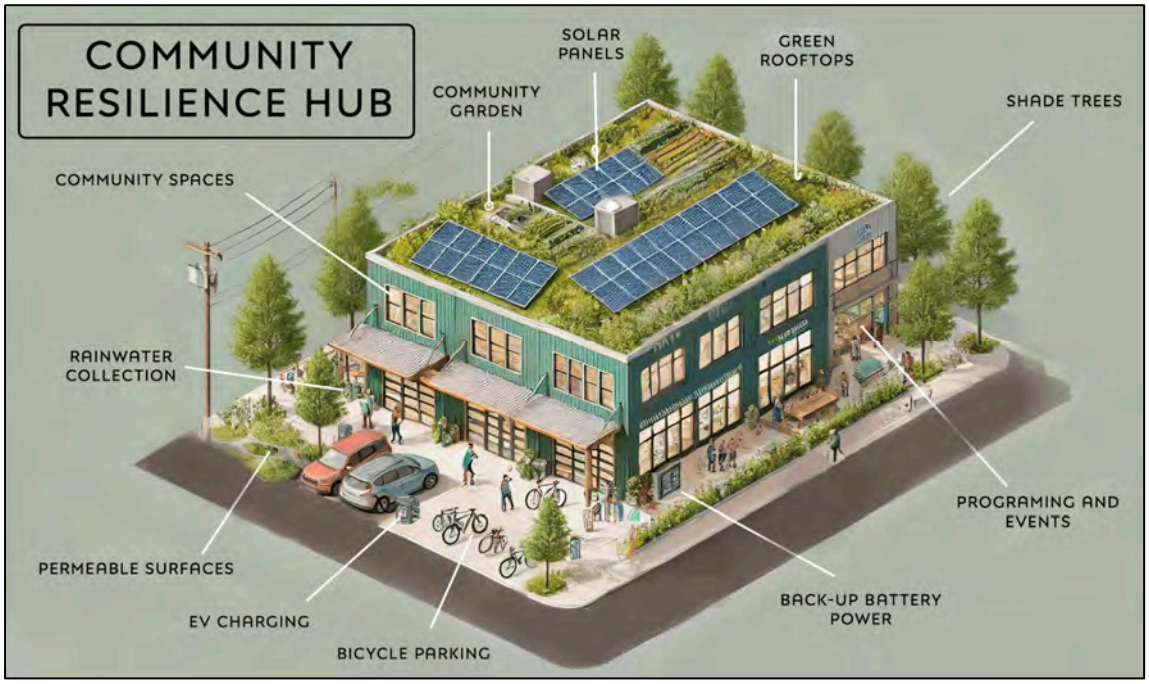

Figure 3: Conceptual resilience hub illustrating flexible space designed for both everyday community use and emergency operations[11].

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.

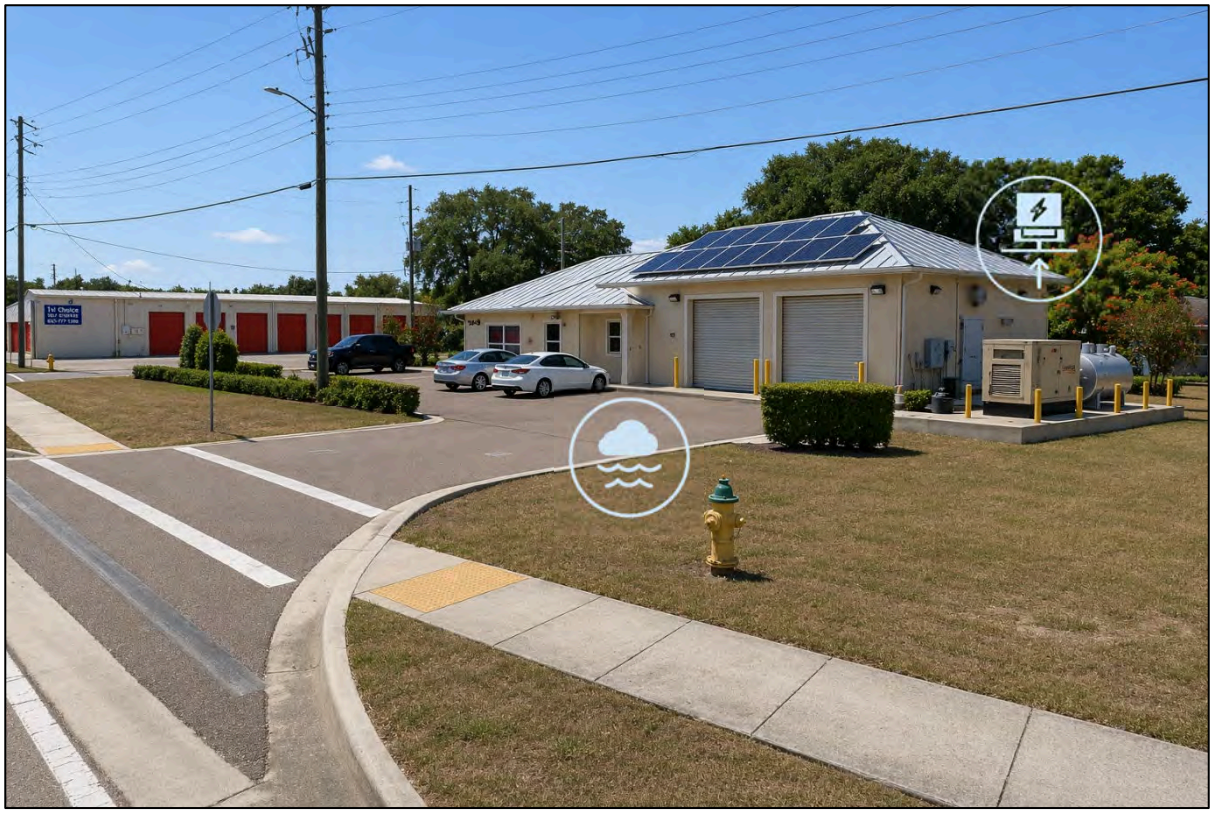

Figure 11: Adapted Conditions of Highlands County Fire Rescue EMS #17

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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Highlands County

ADAPTATION ACTION AREA PLAN

Little Lake Jackson

June 2026

ENSAFE

Michael Baker INTERNATIONAL

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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 Little Lake Jackson Adaptation Action Area, one of the highest-priority areas identified through the County's data-driven ranking process.

The Little Lake Jackson area includes three critical community and emergency facilities that are vulnerable to current and future rainfall-induced flooding. The area received the third 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 Little Lake Jackson 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 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 flooding 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. Little Lake Jackson Adaptation Action Area

2.1 AAA Overview

The Little Lake Jackson AAA encompasses the southern shoreline of Lake Jackson, the Little Lake Jackson basin, and adjacent residential and transportation corridors within the City of Sebring. This area was designated as an AAA due to its exposure to localized flooding associated with intense rainfall events, low-lying topography near lake systems, and stormwater conveyance limitations, particularly along U.S. Highway 27 corridor and surrounding neighborhoods.

The Little Lake Jackson AAA includes a mix of critical community and transportation assets that are essential for emergency response, evacuation, and maintaining connectivity during flood events. Assets located within the Little Lake Jackson AAA are summarized in Table 1, and Figure 1 illustrates the AAA boundary and locations of these assets. Asset numbers shown in Table 1 correspond to those displayed in Figure 1.

Table 1: Assets Within the Little Lake Jackson AAA

Asset No.	Asset Name	Asset Type
1.	City of Sebring FD ST 15	Critical Community and Emergency Facilities
2.	US Highway 27 S	Transportation and Evacuation Routes
3.	Ryant Blvd	Transportation and Evacuation Routes

The Transportation and Evacuation Route assets used in this assessment represent a refined subset of the broader transportation and evacuation route assets originally developed in the Highlands County CVA. This refinement ensured that only features relevant to the County were included.

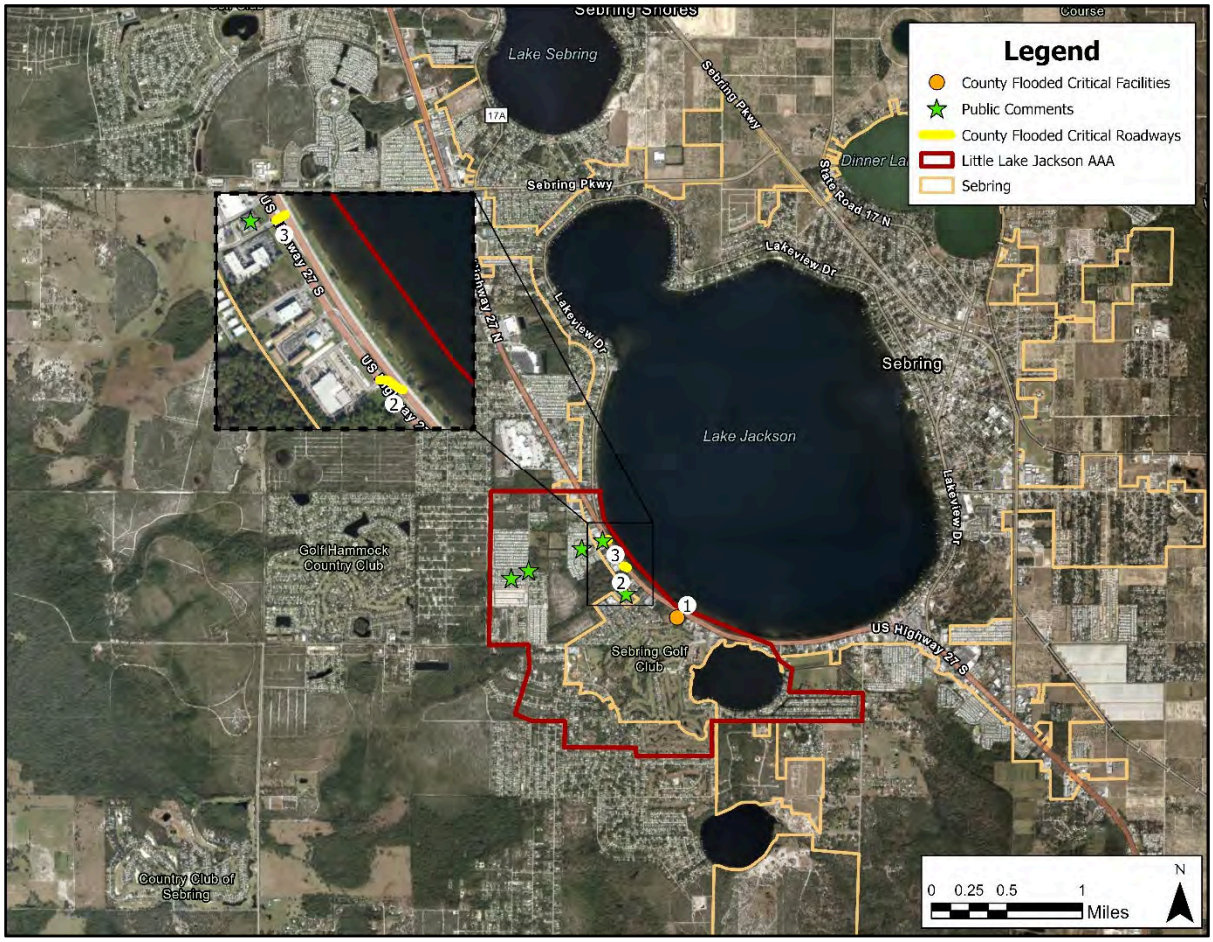

Figure 1: Little Lake Jackson Adaptation Action Area, Critical Assets, and Public Comment Locations

2.2 Existing Conditions and Recurring Challenges

The Little Lake Jackson area is characterized by relatively low-lying areas adjacent to Lake Jackson and Little Lake Jackson, aging drainage infrastructure, and a stormwater system that includes both conveyance components (catch basins and underground pipes) and 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 the Little Lake Jackson AAA, 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.

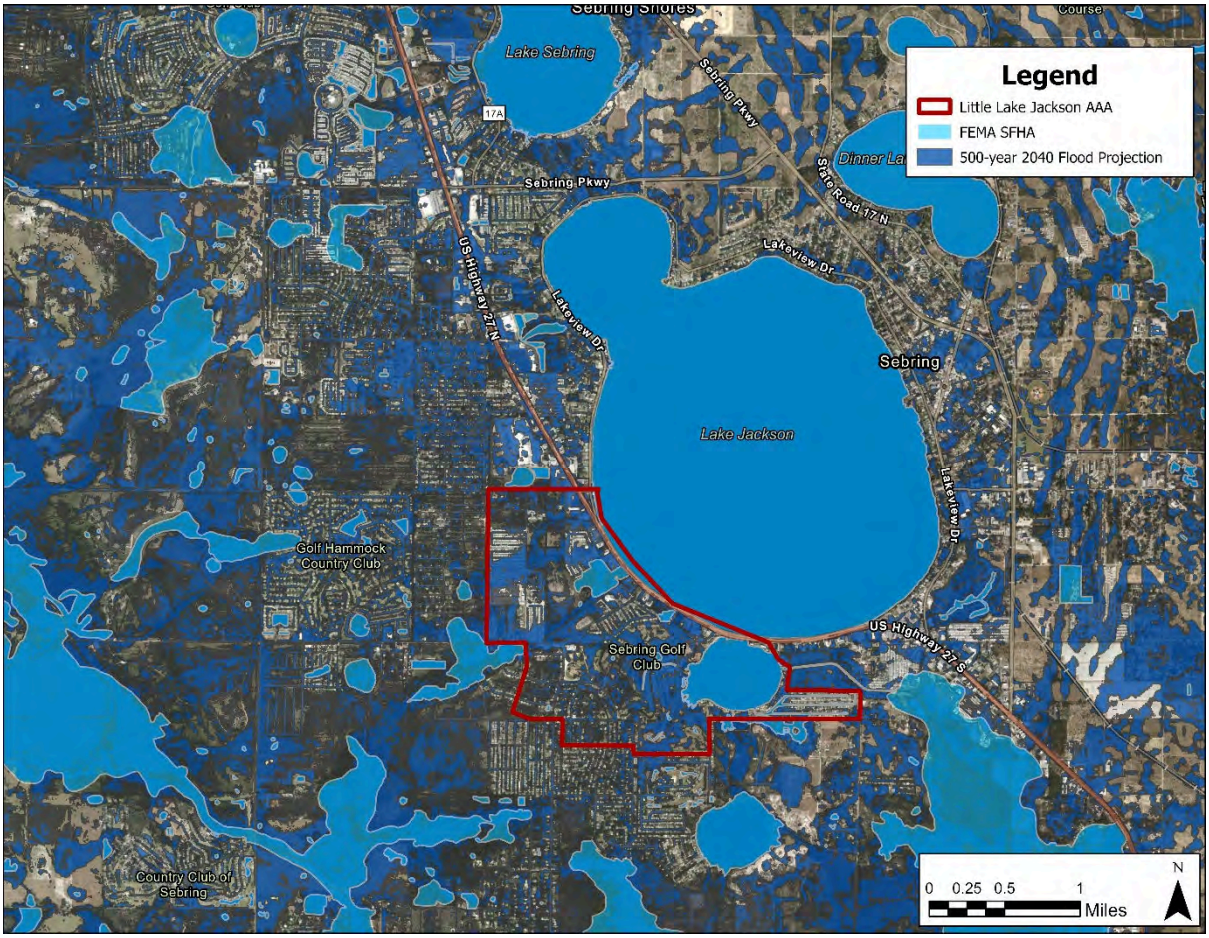

Figure 2: Little Lake Jackson AAA and FEMA Special Flood Hazard Areas

2.3 Community Input

The Little Lake Jackson AAA received five location-specific public comments identifying areas that experience recurring flooding during rainfall events. These comments generally align with mapped low-lying areas and known drainage constraints near the Lake Jackson shoreline, Little Lake Jackson basin, and adjacent residential streets.

Public input highlights localized flooding concerns along key transportation corridors and neighborhood roadways, including areas near US Highway 27 and Ryant Boulevard, where ponding can affect roadway passability and access. Residents noted that flooding can occur during high-intensity rainfall events as well as during prolonged storm periods, when drainage systems are slow to recover and water levels remain elevated.

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 Little Lake Jackson 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 established a statewide minimum, as well as 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 reclassifying these areas as SFHAs, allows local governments to proactively reduce flood risk while maintaining regulatory flexibility. This approach avoids triggering mandatory flood insurance requirements or formal floodplain designation changes, while still supporting risk-informed development and long-term resilience goals.

3.1.5 Public Engagement Programs

Within the Little Lake Jackson AAA, opportunities for public engagement and education are more closely tied to transportation corridors and nearby community areas rather than large institutional campuses. While the critical assets identified in this AAA, such as the City of Sebring Fire Department Station 15 and key evacuation routes, have limited open space for large-scale retrofits, there are still opportunities to incorporate smaller-scale green infrastructure and public education elements within adjacent rights-of-way and community spaces.

Green infrastructure practices such as roadside bioswales, enhanced roadside planting, and stormwater-friendly landscaping could be integrated along corridors like U.S. Highway 27 and

Ryant Boulevard to improve drainage performance while also demonstrating visible flood mitigation strategies. These types of improvements can serve as educational tools by showing how stormwater can be managed in everyday spaces.

Public engagement opportunities may include:

- Fire Station 15: As a critical community facility, the site could incorporate educational signage or small demonstration features (e.g., rain gardens or native landscaping) to highlight the role of stormwater management in emergency preparedness and community resilience.
- Transportation Corridors (U.S. 27 and Ryant Boulevard): Visible green infrastructure improvements along these routes provide an opportunity to educate residents and visitors on flood mitigation strategies through signage, corridor beautification efforts, or partnerships with local organizations.

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 Little Lake Jackson 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 Little Lake Jackson 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).

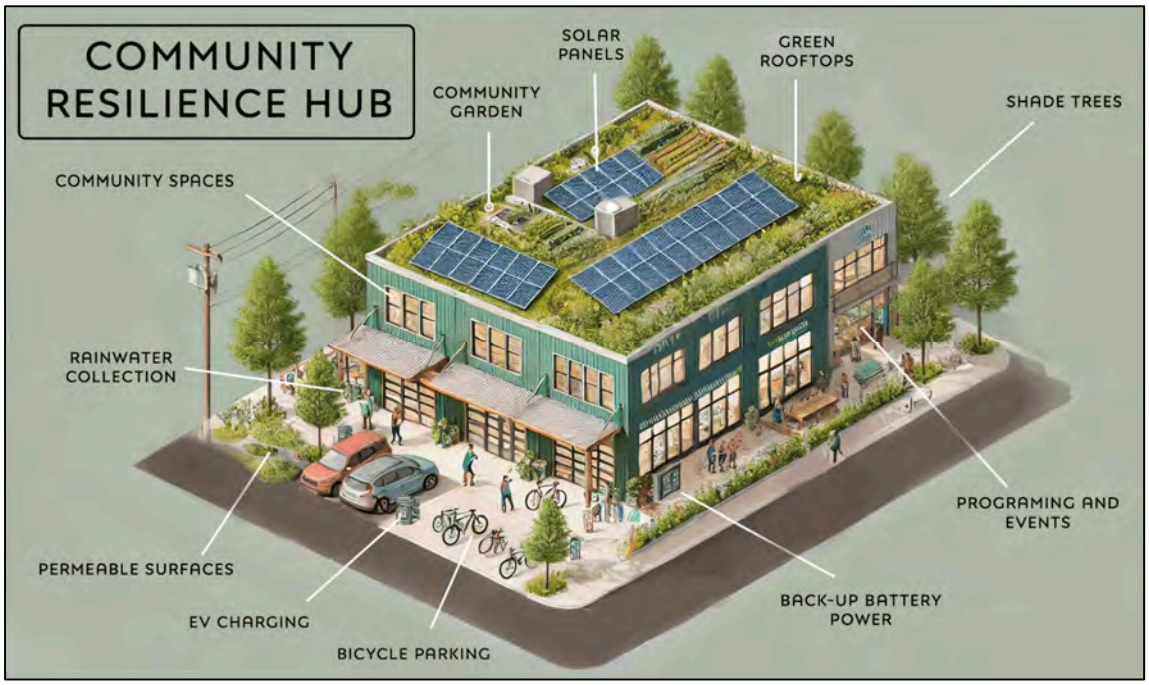

Figure 3: Conceptual resilience hub illustrating flexible space designed for both everyday community use and emergency operations[11].

3.2.2 Little Lake Jackson Resilience Hub

Sebring Fire Station 15, located within the Little Lake Jackson AAA, represents a strong candidate for resilience hub planning due to its role as a critical emergency service facility and its ability to support response and recovery during flooding and extreme rainfall events. As an established public safety asset, the station provides a reliable foundation for expanded resilience hub functions that can benefit the surrounding community.

As part of the Little Lake Jackson AAA, resilience hub enhancements at or near Fire Station 15 could support residents by providing:

- A safe, reliable location for emergency coordination and community support during localized flooding, severe storms, or emergency events.
- Access to backup power, communication systems, and essential services during power outages or service disruptions.

- A staging area for emergency operations, including coordination of first responders and the distribution of information, emergency supplies, and post-event recovery resources. Space for emergency operations, including the distribution of information, emergency supplies, and post-event recovery resources.

In addition to emergency response functions, Fire Station 15 could support resilience year-round during “blue sky” conditions through uses such as:

- Community outreach and preparedness education, including flood risk awareness and seasonal readiness activities.
- A designated location for disseminating information on emergency preparedness, evacuation planning, and available assistance programs.
- Partnerships with local agencies and organizations to support periodic resource distribution or public safety initiatives.

Potential strategies for advancing Sebring Fire Station 15 as a resilience hub include:

- Retrofitting the facility to enhance resilience hub capabilities, such as expanding backup power capacity, hardening critical infrastructure, and improving site drainage and flood protection.
- Enhancing on-site and nearby infrastructure to improve access, including maintaining passability of surrounding roadways during rainfall events.
- Coordinating with County emergency management, public works, and community partners to integrate the facility into broader hazard response and community resilience efforts.

3.3 Infrastructure Improvements

The proposed infrastructure improvements provided for the Little Lake Jackson 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 the Little Lake Jackson AAA is primarily influenced by local stormwater storage and the groundwater interactions which enable this storage to recover between.

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 Little Lake Jackson 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 Little Lake Jackson 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 Little Lake Jackson AAA, infrastructure strategies focus on storing stormwater on site, managing how water moves through the system, and allowing sufficient time for water levels to prioritize on-site storage, controlled conveyance, and system recovery time. 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 Little Lake Jackson 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 City of Sebring Fire Station #15

Estimated Project Cost: $2.5M – $4.5M

Lead Agency: City of Sebring

Supporting Agencies: Highlands County, South Florida Water Management District (SFWMD), Florida Division of Emergency Management (FDEM)

Anticipated Implementation Timeframe: Mid-Term (3–7 Years)

Project Overview

Existing Conditions

Fire Station #15 is located within an area subject to localized flooding driven by heavy rainfall, flat topography, and limited conveyance capacity. The site includes a high percentage of impervious surfaces, resulting in rapid runoff and inadequate on-site storage. Existing drainage systems provide limited attenuation and are influenced by elevated groundwater levels, reducing their effectiveness during rain events. Critical equipment, including electrical and mechanical systems, may be vulnerable to flood exposure due to their current elevation.

Figure 8: Existing Conditions of City of Sebring Fire Station #15

Figure 9: Existing Conditions of City of Sebring Fire Station #15c

Adapted Conditions

Under adapted conditions, the fire station site is reconfigured to better manage stormwater, reduce flood exposure, and maintain operational continuity. Drainage improvements increase on-site storage and conveyance capacity while accounting for groundwater constraints. Green infrastructure and low-impact development features reduce runoff and promote infiltration. Critical infrastructure is elevated above anticipated flood levels, ensuring continued functionality during rainfall events and enabling rapid recovery.

Figure 10: Adapted Conditions of City of Sebring Fire Station #15

Figure 11: Adapted Conditions of City of Sebring Fire Station #15

Proposed Improvements

Localized Stormwater Management Enhancements: Install upgraded inlets, conveyance systems, and on-site retention/detention to reduce ponding and improve stormwater routing and onsite storage.

Groundwater-Aware Design: Incorporate underdrain systems, lined or partially lined storage features, and adjust design elevations to maintain functionality in high groundwater conditions.

Expand Green Spaces: Introduce landscaped areas, bioswales, and vegetated buffers to provide additional stormwater storage, improve water quality, and reduce heat island effects.

Promote Low-Impact Development: Remove hardened structures, such as the curb and gutter system that restricts and channelizes runoff along the eastern side of the property, to restore natural sheet flow toward the adjacent low-lying area. Integrate rain gardens and distributed infiltration practices to minimize runoff and preserve existing hydrologic conditions.

Elevate Critical Equipment: Raise electrical panels, generators, communication systems, and other essential infrastructure above projected flood elevations to ensure resilience and continuous operation.

Project Benefits

- Maintains continuous emergency response capabilities during flood events
- Reduces localized flooding and improves site drainage performance
- Enhances long-term resilience to extreme rainfall and rising groundwater conditions
- Improves water quality and reduces runoff through green infrastructure
- Extends the service life of critical infrastructure and reduces maintenance costs
- Provides co-benefits such as heat mitigation, improved aesthetics, and community value

Preliminary Cost Estimate (Planning-Level)

Improvement Category	Estimated Cost Range
Stormwater Infrastructure Upgrades	$0.8M - $1.5M
Green Infrastructure & LID Features	$0.3M - $0.7M
Site Regrading & Drainage Modifications	$0.4M - $0.8M
Elevation of Critical Equipment	$0.5M - $1.0M
Design, Permitting, and Contingency	$0.5M - $0.8M
Estimates Total Project Cost	**$2.5M - $4.5M**

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

4.2.2 U.S. Highway 27 S

Estimated Project Cost: $4.0M – $7.5M
Lead Agency: Florida Department of Transportation (FDOT)
Supporting Agencies: City of Sebring, Highlands County, South Florida Water Management District (SFWMD), Florida Division of Emergency Management (FDEM)
Anticipated Implementation Timeframe: Mid-Term (3–7 Years)

Project Overview

Existing Conditions

Highway 27 South is a multi-lane arterial roadway that supports high traffic volumes and serves as a key evacuation route. The surrounding area consists of commercial development and limited available space for stormwater storage.

The corridor is influenced by flat topography and high groundwater levels associated with nearby Lake Jackson, which reduces the effectiveness of traditional drainage systems. In addition, during major rainfall events, elevated lake stages can result in backwater conditions and overtopping, contributing to flooding along portions of Highway 27 South. Existing inlets and conveyance systems are spaced widely and have limited capacity, further exacerbating localized ponding in travel lanes and along shoulders during moderate to heavy rainfall events. These combined factors can reduce roadway capacity and create hazardous driving conditions, particularly during critical evacuation periods.

Figure 12: Existing Conditions of Highway 27 S

Adapted Conditions

Under adapted conditions, Highway 27 South is supported by a combination of enhanced stormwater infrastructure and shoreline protection measures that improve resilience to both rainfall and elevated lake levels.

An improved drainage network rapidly captures and conveys stormwater away from travel lanes, even under high groundwater conditions, through increased inlet coverage and upgraded conveyance systems that do not rely on infiltration. Backflow prevention measures are incorporated to limit tailwater effects from Lake Jackson and maintain system performance during elevated lake stages.

In addition, a low-profile protective wall along the lake edge helps reduce backwater impacts and overtopping during major storm events. Together, these improvements reduce roadway flooding, allowing the corridor to remain operational during rainfall events and maintain safe travel speeds and reliable evacuation access.

Figure 13: Adapted Conditions of Highway 27 S

Proposed Improvements

Localized Stormwater Management Enhancements: Add strategically spaced inlets along roadway edges and medians to improve runoff collection. Install underground storm sewer systems with increased capacity to convey flow away from the roadway. Eliminate low points through minor roadway profiles and shoulder grading adjustments.

Corridor Drainage System Upgrades: Improve roadside conveyance to direct runoff efficiently toward inlet structures. Stabilize downstream discharge points near Lake Jackson. Retrofit existing infrastructure to increase hydraulic capacity without full roadway reconstruction.

Groundwater-Aware Design: Utilize lined or watertight conveyance systems to limit groundwater intrusion and maintain system integrity in areas with high water tables. Install backflow prevention devices at outfalls and key control structures to prevent tailwater impacts from Lake Jackson and avoid reverse flow into the drainage system during elevated lake stages. Adjust pipe invert elevations and outfall controls to support reliable gravity flow where feasible and maintain consistent system performance under varying groundwater and tailwater conditions.

Project Benefits

- Maintains reliability of a critical hurricane evacuation route
- Reduces roadway flooding and improves public safety during rainfall events
- Enhances drainage performance in high groundwater environments
- Supports emergency response and evacuation operations during extreme rainfall
- Improves stormwater quality prior to discharge to Lake Jackson
- Reduces long-term maintenance needs and system failures

Preliminary Cost Estimate (Planning-Level)

(*Normalized per Linear Foot*)

Improvement Category	Estimated Cost Range per Linear Foot (LF)
Stormwater Collection (Inlets & Structures)	($1.0M ÷ L) – ($2.0M ÷ L) per LF
Conveyance System Upgrades (Piping, Outfalls)	($1.5M ÷ L) – ($3.0M ÷ L) per LF
Groundwater Mitigation (Lining, Backflow Preventor)	($0.8M ÷ L - $1.5M ÷ L) per LF
Roadway Regrading & Drainage Improvements	($0.5M ÷ L - $1.0M ÷ L) per LF
Design, Permitting, and Contingency	($0.2M ÷ L - $0.5M ÷ L) per LF
Estimates Total Project Cost	**($4.0M ÷ L - $ 7.5M ÷ L) per LF**

***L = total project length (in linear feet)**. Costs include planning-level assumptions for design, permitting, and construction and will be refined during project design.*

4.2.3 Ryant Boulevard

Estimated Project Cost: $1.5M – $3.5M
Lead Agency:
Supporting Agencies: FDOT, Emergency Management, Local Utilities, Water Management District
Anticipated Implementation Timeframe: Mid-Term (3 – 7 Years)

Project Overview

Existing Conditions

During heavy rainfall events, the roadway and intersection is influenced by flat topography and high groundwater conditions, as well as elevated water levels within the adjacent lake system. Increased lake stages can create backwater conditions within the drainage network, reducing the effectiveness of existing inlets and limiting the ability to convey runoff away from the roadway. As a result, portions of the roadway and intersection experience localized ponding during moderate to heavy rainfall events, particularly where inlet capacity is limited and hydraulic gradients are minimal. These combined factors reduce overall drainage performance and contribute to standing water within travel lanes. The corridor currently lacks infrastructure specifically designed to maintain operational reliability under these conditions, which can reduce roadway capacity and create hazardous driving conditions, particularly during emergency response or evacuation scenarios.

Figure 14: Existing Conditions of Ryant Boulevard

Adapted Conditions

Under adapted conditions, the intersection will operate with signalized control and improved geometric design, providing controlled traffic flow, reduced conflicts, and increased throughput during evacuation and peak conditions.

Drainage enhancements and groundwater-aware design will reduce localized flooding and improve system recovery following rainfall events. Expanded landscaped areas and low-impact development features will help manage runoff onsite, while critical infrastructure components, including signal equipment—will be elevated or protected to maintain functionality during rainfall events.

These improvements collectively increase the corridor's resilience, reliability, and safety, particularly during extreme weather and evacuation scenarios.

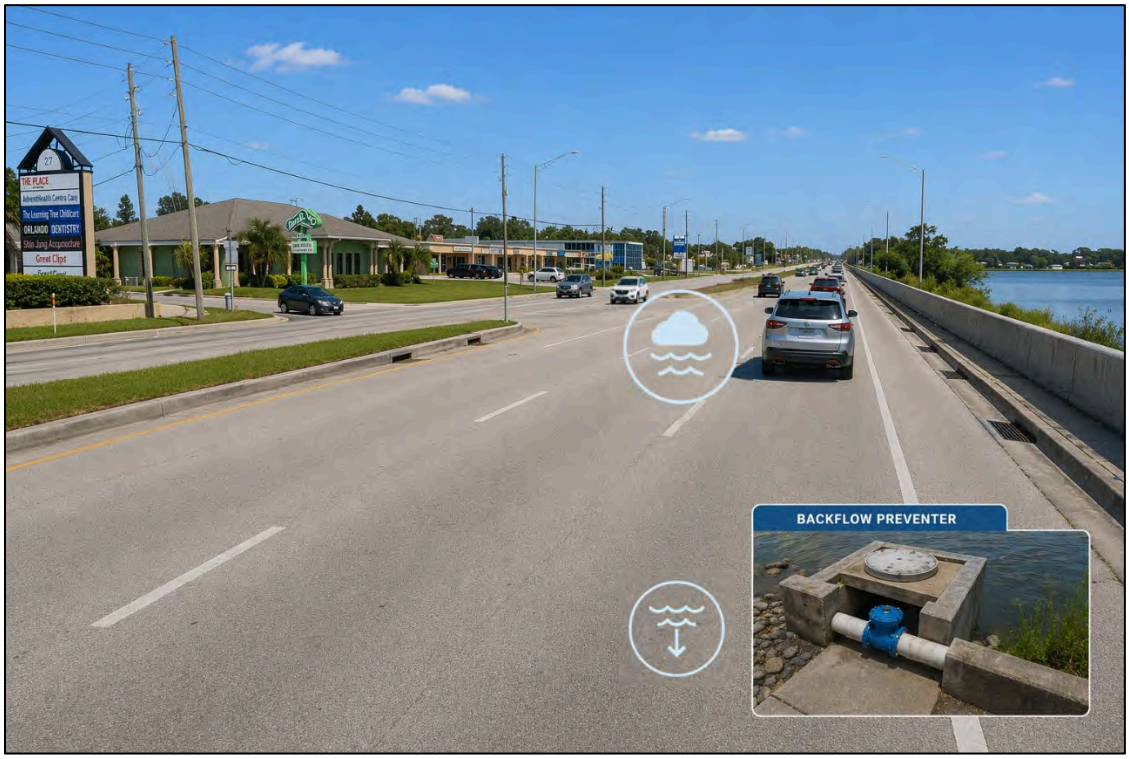

Figure 15: Adapted Conditions of Ryant Boulevard

Proposed Improvements

Localized Stormwater Management Enhancements: Localized stormwater improvements, including additional curb inlets, are recommended to increase runoff capture and reduce ponding in travel lanes and along shoulders. These enhancements target flat areas with limited drainage capacity to improve roadway safety and maintain operations during rainfall events.

Groundwater Awareness

High groundwater levels in the area reduce the effectiveness of traditional drainage systems by limiting subsurface storage and slowing system drawdown. Design approaches should account for these conditions to ensure reliable performance, particularly during periods of elevated lake stages.

Project Benefits

- Improves evacuation route reliability and reduces congestion during peak and emergency conditions
- Enhances traffic safety by reducing standing water and improving roadway operating conditions
- Reduces roadway flooding through increased inlet capacity and improved stormwater capture
- Protects the roadway from lake overtopping through installation of a low flood barrier
- Prevents backflow from the adjacent lake during high stages, improving system performance
- Increases overall corridor resilience to extreme rainfall events and elevated groundwater conditions

Preliminary Cost Estimate (Planning-Level)

Improvement Category	Estimated Cost Range
Roadway & Geometric Improvements	$300K – $900K
Stormwater & Drainage Enhancements (Inlets, Conveyance)	$600K – $1.8M
Flood Protection (Low Wall/Overtopping Barrier)	$300K – $900K
Backflow Prevention System (Outfall Improvements)	$100K – $300K
Green Infrastructure / LID Features	$100K – $300K
Utility Adjustments & Equipment Hardening	$100K – $250K
Design, Permitting, Contingency	$200K – $500K
Estimates Total Project Cost	**$1.7M – $4.9M**

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

4.3 Potential Funding Sources

Implementation of adaptation strategies within the Little Lake Jackson 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 Little Lake Jackson 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 Little Lake Jackson 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 Little Lake Jackson AAA from planning to implementation, the following actions are recommended:

- **Integrate the AAA into County and City planning frameworks** – Incorporate the Little Lake Jackson 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 Little Lake Jackson 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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