

Project Score	Project Sponsor	County	Project Title	Project Location	Project Summary	Estimated Total Project Cost (dollars)	Cost share	Local Match Amount	Expected ARPA Funding Total	Project Duration (years)	Relevance to Sea Level Rise and/or Flooding
62.35	Polk County Parks & Natural Resources	Polk	Restoring Historic Wetlands to Provide Resiliency and Minimize Flood Risk in the Peace Creek Canal Basin	Peace Creek Canal, Polk County	Wetland restoration improvements to address flooding issues that cause down stream flooding in a rapidly urbanizing basin.	\$ 15,000,000.00	0.53	\$7,950,000.00	\$7,050,000.00	4	"The Sustainable Water Resources Management Plan", for Peace Creek watershed, report concluded that that using the natural infrastructure which provides many hydrologic benefits at a much lower cost, is far preferable to engineered, structural solutions that are expensive to build and maintain, and that generally address single issues. That is precisely what his project proposes. Utilizing existing and restoring historic natural infrastructure will provide a sustainable approach to managing the water in this basin.
59.76	City of Hollywood	Broward	Tidal Flooding Mitigation and Shoreline Protection	Hollywood Lakes area, City of Hollywood	Design, permitting, and construction of seawalls, revetments, berms, living shoreline to protect and area that includes an evacuation route from current flooding and future SLR. Builds off anticipated FRCP grant R2211.	\$ 28,000,000.00	0.496	\$13,888,000.00	\$14,112,000.00	4	A 2014 assessment identified Hollywood Lakes as vulnerable to flooding and 1-2 ft SLR. Flooding and erosion conditions have been experienced and studied in the Hollywood Lakes project area for many years. This Project is addressing these identified risks on the City owned shoreline segments, while adoption of Broward County's regional resilience standard by ordinance and with implementing codes will address these issues on privately owned shoreline segments. Collectively, improvements to public and private tidal flood barriers will address the risks identified in the Citywide Vulnerability Assessment and similar analyses.
57.85	Town of Lake Park	Palm Beach	Storm Water Master Plan 5% Roadway Bioswales Program -- 2nd Street Project	Lake Park, Palm Beach County	Strategic roadside bioswale placement in a flood prone area; green infrastructure, low impact development method will help to meet the Town's impervious surface goals.	\$ 553,758.54	0	\$0.00	\$553,758.54	2	Currently, under normal circumstances, the 2nd Street corridor south of Park Avenue suffers from a lack of drainage capacity for even storm events of low rainfall volume. During rain events, 2nd Street becomes unpassable and there is a potential for road and private property flooding if larger storm events occur during the rainy season. The proposed bioswales to be installed along both sides of the road at two critically flood-prone intersections will provide a sustainable solution to address the flooding problem while also providing water quality treatment of runoff through BAM infiltration to the groundwater.
56.91	City of St. Augustine	St. Johns	City Wide Tidal Backflow Prevention Improvements	City of St. Augustine, St. Johns County	Project to retrofit the remaining 58 city outfalls and 30 FDOT outfalls (total 88). Phased over 10 years. 45 outfall retrofits and improvements have already been made. Improvements include: one way tide check valves to address nuisance flooding.	\$ 461,282.00	0.5	\$230,641.00	\$230,641.00	4	Currently, the City of St. Augustine experiences nuisance tidal flooding between 12-16 times per year during lunar or king tides, with additional flooding during Nor'easter conditions. This frequently inundates the road infrastructure and provides a major flood pathway that can allow for additional flooding of structures. This project will continue those previous efforts to work towards completion of the outfalls with retrofitting and provide a higher level of flood protection and extend the life of the road infrastructure.
56.25	City of Hollywood	Broward	A1A Pump Stations	Hollywood, Broward County	The design and construction of four stormwater pump stations.	\$ 3,650,000.00	0.5	\$1,825,000.00	\$1,825,000.00	3	The models have identified areas of stormwater and tidal flooding extent, depth, and duration from both current storms and design storms. Future sea level rise analysis will show the increased need for additional capacity for these facilities to be retrofit in the future.
55.85	Town of Sewall's Point	Martin	South Sewall's Point Road Phase 3	Sewall's Point, Martin County	The project will elevate the only evacuation road to directly address flood control and sea-level rise and strategically reduce nutrient load by water quality treatment.	\$ 4,370,000.00	0.2175	\$950,475.00	\$3,419,525.00	2	Flooding occurs in most wet season daily rain events. During heavy storms with inadequate sized outfalls without rip-rap/fabric that are subject to heavy flows exhibit a high amount of erosion and backwash (sand). Flooding events cause the road to completely submerge and residents can no longer access South Sewall's Point Road, the only evacuation route out of the Town and the main route of transportation through the peninsula. The proposed improvements will minimize these impacts and reinforce the critical assets for the Town.
52.35	Miami-Dade County Department of Cultural Affairs	Miami Dade	Flood Resiliency for North Side of Vizcaya Museum and Gardens	Vizcaya Museum, Miami	Design, permitting, and construction for increasing seawall height, implementing NNBF for flood control to protect a regional, cultural, and historic asset from flooding.	\$ 521,230.00	0.5	\$260,615.00	\$260,615.00	4	The County's most recent vulnerability assessment, publicly available on the Flooding Vulnerability Viewer, shows Vizcaya Museum and Gardens is vulnerable to several types of coastal flooding, including storm surge inundation, King Tide Flooding, and permanent sea level rise inundation. Due to its coastal location, some parts of the property may be inundated sooner than others. King tide events can cause flooding in the low-lying gardens on the southeast side of the property and heavy rainfall causes water to pool in the main garden.
50.76	City of Key Colony Beach	Monroe	Public Safety Facility Hardening	Key Colony Beach, Monroe County	Key Colony Beach is faced with the immediate threat of rising sea levels. The impacts of recent storms and data from vulnerability studies have led the City to critically reconstruct the facility that is home to the Police Department, EOC, and City offices. The new facility will reduce the impacts of flooding by elevating the structure above the needed 7.9 BFE. Further resiliency objectives of vulnerability assessment and mitigation plans. Funding is being requested for the hardening activities, primarily the elevation of the structure. \$6,714,292 is the estimated total project cost. The project will not be phased.	\$ 6,714,292.00	0.66	\$4,431,432.72	\$2,282,859.28	2	Using a combination of sources, including from the vulnerability assessment, the design of the project elevates the structure three feet above base flood for the area (Coastal A standards). While the Florida building code calls for one foot above base, the City has adopted a minimum of two feet in the City Code. To further protect against storm surge, the foundation will be fortified against V zone wave action. All these resiliency measures are based on the anticipated flood and sea levels identified in the various assessment for the region and will result in effective flood protection for the critical facility. The project site is adjacent to a navigable waterway that provides access to the Atlantic Ocean.
46.75	Miami Shores Village	Miami Dade	Bayfront Park Seawall Elevation Project	Miami Shores Village, Miami-Dade County	Elevation of an existing seawall to protect surrounding residential properties; implement nature based flood control measures to complement it.	\$ 2,000,000.00	0.5	\$1,000,000.00	\$1,000,000.00	3	The Village's Vulnerability Study from June 2018 shows that parts of Miami Shores are highly vulnerable to coastal flooding. As a result, Miami Shores passed regulations requiring new and reconstructed seawalls to be at least 4.1 ft. NAVD88 (5.5 ft. NGVD) and constructed to accommodate increased height in the future. The Village shall meet or exceed height recommendations based on sea-level rise models at the time of design. The existing seawall is not high enough to protect against storm surge. The structure is also showing evidence of erosion that is past the state of repair.

45.75	Miami-Dade County	Miami Dade	Cutler Pit Land Acquisition Project: Nature-based Adaptation Approach to Reduce Risks of Storm Surge and Sea Level Rise	Homestead, Miami-Dade County	Purchase land between Biscayne Bay and developed areas to provide buffer from storm surge and flooding, reduce further development and enhance species habitat.	\$ 600,000.00	0.5	\$300,000.00	\$300,000.00	2	At the base of the Biscayne Aquifer (the source of drinking water for MDC) in southern Miami-Dade County, saltwater intrusion now extends more than six miles inland and gradual SLR will increase the risk of further intrusion. Maintaining water storage and filtration space and the ability to recharge the freshwater aquifers will help MDC protect clean and reliable water supplies into the future. These areas also can help reduce flooding risks by storing or delaying the discharge of water during periods of heavy rain. For these reasons, acquisition of EEL conservation lands from known willing sellers, is one of five main adaptation approaches recommended in the County's Sea Level Rise Strategy. This strategy recommends the purchase of strategic buffer lands in South Miami-Dade to protect the broader community. These acquisitions are listed as one of the future projects of the SLR Strategy.
44.85	City of Miami	Miami Dade	Design & Construction Brickell Bay Drive (BBD) Seawall & Flood Improvements SE 14 St to SE 15 Rd along Biscayne Bay	Eastern Miami	Design and construction for seawall replacement and new stormwater piping plus LID drainage elements.	\$ 27,255,000.00	0.37	\$10,084,350.00	\$17,170,650.00	4	Stormwater overwhelms the current system. The Brickell Bay Drive Project will reduce flooding, pollution, property and infrastructure damage, social displacement and stress; economic losses; emergency response and recovery costs. The project will improve drainage efficacy and system longevity for future climate change adaptivity & sea level rise. Per Stormwater Plan mitigation recommendations, these improvements will capture, retain, and convey stormwater via increased storage capacity, storm inlets/pipes & roadway regrading. The project will minimize flood risk for 5,000 residents & economic impact to 4,483 properties valued @ \$2.5Billion.
44.5	City of St. Augustine	St. Johns	Lake Maria Sanchez Flood Mitigation and Drainage Improvements Project	Lake Maria, St. Augustine	Upgrades to existing stormwater infrastructure, installation of a stormwater pump station, construction of a flood wall and installation of tidal check valves to benefit approximately 200 acres in the city.	\$ 29,830,178.00	0.37	\$11,037,165.86	\$18,793,012.14	3	This project is currently a FEMA HMGP funded project for Phase 1 design. The project will benefit approximately 200 acres of the historic district in the city of St. Augustine. The project will implement a number of resilience strategies to address both rainfall and coastal surge flooding. Strategies include: upgrades to existing stormwater infrastructure, installation of a stormwater pump station, construction of a flood wall, and installation of tide check valves. The project will provide an increased level of flood protection from increasing high tide events, storm surge and future sea level rise by incorporating a combination of resilience strategies.
44.25	Pinellas County	Pinellas	Phillippe Park Living Shoreline Oyster Reef Wave Attenuation	Phillippe Park, Pinellas County	Installation of oyster reef wave attenuation barriers (WABs - domes/riprap) to reduce erosion and protect the coast of Phillippe Park which is a site of a National Historic Landmark (Tocobaga Indian Mound).	\$ 323,000.00	0.6	\$193,800.00	\$129,200.00	1	Phillippe Park is located in the VE flood zone. The area received a "High" vulnerability score and a "Moderate" consequence rating. A living shoreline was one of the adaptive management measures recommended, in addition to promoting wetland accretion by capturing sediment. The wave attenuation barriers will accomplish this recommendation and will increase the resiliency of this coastline to sea level rise and storm surge. The cove where the barriers will be installed is experiencing erosion, and some of the mangroves along the shore are being smothered and dying.
43.35	Manatee County	Manatee	Improving Resilience in Manatee County	Bradenton, Manatee County	Design, permitting, and construction of 3 living shorelines at 3 different parks.	\$ 1,375,000.00	0.472	\$649,000.00	\$726,000.00	2	This project is designed to update the initial vulnerability assessment to comply with the requirements of the statute to assist the County and the Tampa Bay Regional Planning Council in providing data to the State. In addition to updating the VA, the project will also draft any necessary comprehensive plan amendments and implement development regulations and living shorelines. The project addresses risks of flooding and sea level rise to coastal and inland communities by advancing Manatee County's interests in regards to planning for peril of flood, climate change, sea level rise, etc.
43	City of St. Augustine	St. Johns	South Whitney West King Street Flood Mitigation Project	St. Augustine, St. Johns County	Construction project to raise the existing road above base flood elevation, improve the drainage system and increase its size. Aim is to reduce flooding on a series of roads which serve as an evacuation route.	\$ 1,822,600.00	0.34	\$619,684.00	\$1,202,916.00	2	This project is located within the Oyster Creek drainage basin, which is tidally influenced from the San Sebastian River downstream of Oyster Creek. The project goal to eliminate flooding during the 100-year FEMA flood event for West King Street and South Whitney Street by raising both roads at, or above, the 100-year floodplain elevation. In addition to the surge-driven FEMA 100-year flood event, during significant storm events, the box culvert at South Whitney Street restricts the flow of stormwater, creating flooding on the upstream side of the box culvert on South Whitney Street. This flooding results in stormwater overtopping South Whitney Street and a portion of West King Street where these streets intersect making these streets impassable. The proposed improvements consist of raising South Whitney Street and West King Street above the FEMA flood elevation of 7.0' NAVD88, replacing the existing box culvert (40-inch by 56-inch) at South Whitney with a single box culvert (48-inch by 96-inch) that doubles the hydraulic capacity. The project also includes reconstruction of the existing storm sewer system and its outfall at the box culvert on South Whitney Street.
42.85	Santa Rosa County	Santa Rosa	Floridatown Park Living Shoreline Implementation Project	Pace, Santa Rosa County	Construction of a living shoreline with offshore breakwaters, beach renourishment, salt marsh sill, vegetation.	\$ 800,057.00	0	\$0.00	\$800,057.00	1	The Floridatown Park's upland area consists of impervious asphalt drives and parking lots as well as concrete sidewalks and a covered pavilion. This leads to storm water runoff erosion during high intensity rainfall events. The park currently suffers from coast erosion, primarily because of wave action. This erosion occurs during winter storm events as well as hurricanes. The site experiences two to four high-water events per year. The county owned Florida town Park is located within the Pensacola Bay Estuary Watershed. The parcel of land has approximately 780 feet of linear shoreline that has suffered shoreline erosion from historical hurricane and flooding events. To mitigate erosion the project plans to construct a natural resource-based shoreline protection system to prevent and reduce the impacts of storm surge on estuarine processes and improve the environmental value of the shoreline.

42.66	City of Treasure Island	Pinellas	Treasure Bay Living Shoreline and Resiliency Project	Treasure Island, Pinellas County	Design, public outreach, and construction of a seawall, living shoreline and resiliency berm, restoration of stormwater ponds.	\$ 2,300,000.00	0.35	\$805,000.00	\$1,495,000.00	2	The Treasure Bay site floods on a regular basis. Standing water makes nearly one-third of the open space unusable for days at a time. One of the stormwater ponds is hydraulically connected to the bay and discharge is dependent on tidal conditions. The existing seawall is experiencing loss of backfill causing erosion into the bay so much so that a fence along a portion of the perimeter is sinking. Adding the resiliency berm, redesigning the pond and replacing the seawall with a living shoreline will help mitigate these frequent issues.
42.1	Village of El Portal	Miami Dade	El Jardin Storm Water Improvements	El Portal, Miami-Dade County	Installation of stormwater collection systems, hydrodynamic stormwater treatment device and a backflow prevention device to improve drainage system.	\$ 1,748,986.00	0.47	\$822,023.42	\$926,962.58	3	The proposed project consists of drainage improvements to serve the El Jardin subdivision including stormwater collection system, exfiltration trenches, a hydrodynamic stormwater treatment device and intermediate control structures with one primary control structure discharging and one into the SPWMD C-7 Canal. The drainage system is designed to capture and attenuate runoff from the El Jardin northern areas which are higher in elevations and overwhelm the lower lying roads and properties adjacent to the River. The need for this project is expressed by residents experiencing direct and indirect impacts of increased flooding.
41.85	City of Fernandina Beach	Nassau	Historic Fernandina Beach Area 6 Drainage Project	Historic section, City of Fernandina Beach	Upgrading drainage infrastructure increasing capacity of stormwater system in a flood-prone area.	\$ 725,000.00	0.275	\$199,375.00	\$525,625.00	2	The Historic Fernandina Beach Area 6 Drainage Project outcomes will build upon previous upgrades to downtown Fernandina Beach's riverfront and provide a critically-needed capacity increase to the stormwater lines. The project will replace approximately 800 feet of existing clay 18" & 24" pipe that is undersized and has reached the end of its service life. This will be replaced by 36" - 48" HDPE pipe, which will provide an estimated 300% increase in capacity, to reduce future flooding in downtown Fernandina Beach.
41.25	Town of Bay Harbor Islands	Miami Dade	Seawall Replacement - 9600 West Bay Harbor Drive	Bay Harbor Islands, Miami-Dade County	Design, permitting, and construction to replace a dilapidated seawall owned by the Town.	\$ 225,000.00	0	\$0.00	\$225,000.00	2	The erosion at this area is significant, due to the condition of the seawall and impacts from hurricane Irma in 2017, specially to the old concrete dock that was damaged at this location. On this specific project, sea level rise is being addressed with the new seawall (higher).
40	Miami-Dade County	Miami Dade	Water Reset: Increasing the Resiliency of Drinking Water Infrastructure to Flooding and Storms	Countywide, Miami-Dade County	This project addresses flooding and sea level rise at regionally critical drinking water facilities including the 3 drinking water plants serving more than 2.3 million residents by producing 300+ million gallons per day. Other critical components of the water system include wellfields, pump stations, and smaller remote water plants. Proposed projects have been prioritized based on likelihood and consequences of failure. The continuity of drinking water service is essential and life-sustaining.	\$ 20,250,000.00	0.25	\$5,062,500.00	\$15,187,500.00	4	There are areas within the water treatment plants and remote facilities that are low-lying and experience flooding during heavy rain events. In addition, the access road to the Northwest wellfield has been compromised from the influences of the adjacent wetland and storm events. Half of the roadway has been lost. This asset requires a long-term design solution that will allow it to function under increasing pressures from storm surge, sea level rise, and rising groundwater levels. The proposed projects are part of the Water Reset program. This initiative will repair, replace, or modernize critical infrastructure to increase the sustainability and resilience of the water system serving 2.3 million residents.
39.85	Pinellas County Utilities	Pinellas	Mobile Home Park Wastewater Collection System Improvements	Countywide, Pinellas County	Construction of critical wastewater infrastructure at 15 mobile home parks to reduce impacts from flooding. Design and permitting underway (funded by federal RESTORE Act funding through the utility).	\$ 25,000,000.00	0	\$0.00	\$25,000,000.00	5	Given that a large portion of the sanitary sewer collection system is located below-grade, it is particularly vulnerable to infiltration under current and projected conditions. This project directly addresses human and environmental health risks from I&I that will be exacerbated by an increased frequency and intensity of wet weather events. By replacing the sanitary sewer collection systems in the area with more weather-resistant, water-tight technologies, the system will be more resilient in the face of future events and trends. The project construction will follow County standard specifications and details for erosion control, flood protection, and environmental pollution controls. The construction contractor will obtain an MS4 stormwater pollution prevention permit for construction.
39	City of Miami Beach	Miami Dade	North Beach Town Center	North Miami Beach	As part of the North Beach Master Plan includes raising emergency roads to reduce tidal flooding, upsized the gravity collection system, pump station, outfalls, improve water quality with a stormwater treatment system, and upgrade failing water/sewer mains. 1) Address current flooding, avoiding at least 30 tidal events yearly and 600 by 2040 (NOAA), 2) Increase from a low-functioning stormwater system to a 10-year storm LOS, for 95% of storms that cause flooding, 3) Integrate green infrastructure and improve water quality before stormwater is discharged to Biscayne Bay, 4) Reduce water/sewer infiltration & prevent water main breaks and sewer overflows. 5) Stimulate development for the 7 approved properties meeting high elevation standards. The \$10 million request is for Phase 1 design and permitting which is scheduled to begin in Oct 2022. Phase 2 construction is expected to begin Dec 2024. The planning level estimate of Phase 1 and 2 is expected to be \$125 million.	\$ 10,000,000.00	0	\$0.00	\$10,000,000.00	4	The project area currently experiences flooding due to both heavy rainfall and king-tide events. Tidal flooding is projected to increase significantly with sea-level rise. This project is intended to mitigate both issues through the design of new stormwater systems and increase of roadway elevation in select areas.
38.35	Bal Harbour Village	Miami Dade	Bal Harbour Village Stormwater Pump Station Upgrades- Design and Construction	Bal Harbour Village	Design and construction for upgrades to different portions of the Bal Harbor stormwater system. These include specific mechanical, structural, electrical, and design improvement to the system in response to an evaluation of vulnerabilities to the system that was performed in 2020.	\$ 3,000,000.00	0.3333	\$999,900.00	\$2,000,100.00	3	Due to the potential impacts of sea-level rise especially in coastal areas, the Village's engineering consultant evaluated the stormwater system under sea-level rise conditions using the predicted groundwater and tailwater levels to assess the vulnerability to flooding of the system and to determine whether the required level of service will be provided. Based on the results of this analysis, it was determined that the existing drainage system and pump station will not provide the required level of service under these conditions, and upgrades are warranted. In heavy rainstorms, the Village stormwater system is surcharged with groundwater. The stormwater system improvements will reduce the cost associated with flood damage, provide increased access to the mainland and safety during times of heavy flooding and storm activities, and help bring the Village's stormwater system infrastructure into compliance with all local, state, and federal requirements.

38.35	City of St. Augustine	St. Johns	Groundwater Monitoring Network for Sea Level Rise Impacts	City of St. Augustine, St. Johns County	Install a groundwater monitoring network to accurately measure rates of change in current ground water levels to predict additional impacts for sea level rise. This will also include analysis and monitoring of nutrients (nitrate and/or nitrite) to better determine water quality impacts with sea level rise.	\$ 217,100.00	0.07	\$15,197.00	\$201,903.00	3	The permeable nature of the surficial aquifer system in St. Johns County, especially in areas along the coast where sediments consist of limestone, make St. Augustine more susceptible to sea-level driven water table rise and saltwater contamination. An in-depth qualitative analysis of anticipated changes in the water table in St. Augustine would require a long-term groundwater-level monitoring network with dense coverage in order to study past trends and forecast future scenarios. This project works to establish the recommended long-term groundwater-level monitoring network that is needed.
37.5	City of Miami Beach	Miami Dade	Miami Beach Dune Enhancements	Miami Beach, Miami-Dade County	Dune enhancements including removing non-native vegetation, planting native species, and re-grading the lower areas to ensure function in storm surge protection.	\$ 1,300,000.00	0.23	\$299,000.00	\$1,001,000.00	2	The City has experienced hurricanes that reshaped the beach and coastline. After the passage of Hurricane Irma, the equivalent of 12,000 truckloads of sand were washed away from the County's beaches. In March of the following year (2018), winter storms hit the northeastern United States and as a result, strengthened waves in South Florida, further eroding Miami Beach's shoreline. Erosional hotspots at 44th Street and 55th Street were renourished prior to the consecutive storms between August 2016 and March 2017, and then in 2018, Miami-Dade County completed an emergency renourishment between 66th Street and 68th Street after wind and rain from Hurricane Irma battered the shoreline. A strong dune system, in conjunction with renourishment activities, will armor the coasts and prevent flooding and erosion due to sea level rise.
37.35	Broward County Parks and Recreation	Broward	Hardening of Seawalls of Intracoastal at Hollywood North Beach	Hollywood, Broward County	Project will harden the seawalls along the intracoastal waterway to prevent flooding of the A1A corridor which is a regional emergency evac route. (4,300 ft of shoreline).	\$ 18,000,000.00	0	\$0.00	\$18,000,000.00	4	Tidal fluctuation and rainfall events cause flooding at the Hollywood North Beach shoreline natural areas, and the adjacent evacuation route roadway. Hollywood North Beach hardening is intended to stabilize the 4,300 feet of shoreline without degrading the natural areas and prevent flooding of the A1A corridor, a regional emergency evacuation route. The proposed shoreline hardening will minimize erosion from sea level rise and minimize damage from frequent flooding.
36.5	City of St. Augustine	St. Johns	Inlet Drive Shoreline Resiliency	City of St. Augustine, St. Johns County	Combination of structural and non-structural based solutions (living shoreline enhancement, thin layer placement of dredged material etc.) to elevate and protect a section of shoreline that is subject to coastal erosion, increasing flood protection for a critical residential road in the North Davis Shores neighborhood. Upgrade the existing storm infrastructure and installation of a tide check valve. Design, permitting and construction to address coastal erosion, storm surge and sea level rise. Elevation of existing shoreline top of bank to 7.0 feet NAVD88 to provide an additional 2 feet of surge and sea level rise protection. The City has committed some design dollars to help continue the project development, design and permitting. The City is seeking the remaining design and construction funding for the project.	\$ 711,090.00	0	\$0.00	\$711,090.00	4	This project plans to include a combination of structural and non-structural based solutions (living shorelines enhancement, thin layer placement of dredged material, etc.) to elevate and protect a section of shoreline that is subjected to coastal erosion that would provide a higher level of flood protection for a critical residential road in the North Davis Shores neighborhood. This would also include upgrading the existing storm infrastructure and installation of a tide check valve. Given its existing elevation already being below the current base flood elevation, the vulnerability of this area will continue to increase with sea level rise if no action is taken. The City had an opportunity to evaluate the shoreline for flood mitigation options as a result of the hurricane impacts and also address vulnerable infrastructure that was identified in the CVA.
36.26	Walton County Board of County Commissioners	Walton	Construction of a regional stormwater management system within the Choctawhatchee Bay watershed in Santa Rosa Beach, Florida	Santa Rosa Beach, Walton County	Multi year project using different funding. The construction of a regional stormwater management facility that will address water quality and flood attenuation for a large drainage basin (>1200 acres).	\$ 31,000,000.00	0.52	\$16,120,000.00	\$14,880,000.00	2	The proposed regional stormwater facility will provide both treatment and attenuation of 1200 acres of previously untreated stormwater within the southern portion of Walton County. It will collect 6-7 mosquito control ditches into a large treatment pond prior to discharging into the Choctawhatchee Bay.
36	Pinellas County Utilities	Pinellas	Utilities Reliability Improvements	Countywide, Pinellas County	Implement improvements to mitigate flood and wind vulnerability at four facilities: Logan Laboratory, South Cross Bayou Water Reclamation Facility (SCBWRF) Operations Support Center, SCBWRF Dewatering Education Center, and the General Maintenance Operations Center.	\$10,165,237.00	0.662	\$6,729,387.00	\$3,435,850.00	3	The goal of this project is to maintain viable potable water and wastewater treatment processes operational during extreme weather events. The improvement of critical infrastructure is critical for households in Pinellas County to ensure continuous fire protection, potable water delivery, and wastewater collection, conveyance and treatment through improved service to residents. The project will be achieved by both retrofitting and new construction of four critical facilities necessary to continue operations during hurricanes and emergencies.
35.85	Village of Wellington	Palm Beach	Environmental Preserve at Marjorie Stoneman Douglas Habitat	City of Wellington	Develop a new 45 acre stormwater facility as a part of the larger 365 acre preserve to collect, move, and treat stormwater draining through natural features (retention areas).	\$ 3,403,266.00	0.5	\$1,701,633.00	\$1,701,633.00	2	The project will provide increased drainage for the Basin B area. Basin B is a 9,230-acre area that drains south and west into the adjacent natural lands. Currently, the Basin experiences flood conditions only during significant rainfall events such as a tropical storm or hurricane. While the existing system meets current requirements and provides the designed level of service, future conditions are anticipated to overwhelm many systems designed to current standards. As such, proactively establishing additional stormwater runoff storage within the service area will reduce the risk of losses resulting from the more frequent and/or intense rainfall events. The project addresses the long-term need to develop drainage facilities capable of protecting both people and property.
35.25	Wakulla County Board of County Commissioners	Wakulla	Wakulla County Coastal Evacuation Route Improvement	Coastal Wakulla County	Repaving of an intersection that is a part of the evacuation route, that currently experiences flooding during storms making it impassable.	\$ 459,547.00	0	\$0.00	\$459,547.00	2	Wakulla county engages the Local Mitigation Strategy to identify countywide projects that are vulnerable to different conditions and/or hazards. This route has been identified as a priority for the county to improve as an alternative to US 98 during times of flooding from rainfall and eventually sea level rise. The entirety of Panacea is either located in FEMA flood zone A or VE. During natural disasters or extreme weather conditions, this coastal community faces flooding and erosion conditions. Paving and resurfacing this route will protect the integrity of the route and allow safe passage for residents, visitors and businesses to seek a safer environment.

34.85	City of Pensacola	Escambia	Main Street Flooding and Adaptation Project	Downtown Pensacola, Escambia County	Increase in the storm drain pipe size and improve stormwater management on a segment of Main Street which is at a low elevation and has deficient pipe capacity for the flood conditions.	\$ 3,982,000.00	0.5	\$1,991,000.00	\$1,991,000.00	2	The City completed a Vulnerability Assessment, June 2021, funded by the DEP Resilience Planning Grant. Primary vulnerability was identified in areas of low shoreline protection, low or leaky seawalls, or other shoreline protection, as well as stormwater inlets and pipes without back flow prevention. Transportation maps and associated datasets highlight vulnerable transportation networks. This assessment is based on the occurrence of an estimated ground elevation lower than the critical elevations identified in the model. Features such as roads, bridges, causeways, and railroads were analyzed for inundation due to rising sea levels. The analysis performed for this report established "Tidal Flooding Areas" (TFA) for the 2040 planning horizon. West Main Street was identified as TFA #36 based on this modeling approach which coalesced with the City's previous efforts in identifying it as a critical area in the City's 2019 Stormwater Master Plan.
34.5	Broward County Board of County Commissioners	Broward	Broward County C-4 Canal Conveyance Improvements	Near Coconut Creek, Broward County	This projects looks to mitigate the threats of erosion and channel sedimentation in the C-4 Canal. This would help to prevent losses in flood protection, aquifer recharge, and improvements in saltwater intrusion. This project would seek to dredge the C-4 canal to increase conveyance capacity.	\$ 932,400.00	0.5	\$466,200.00	\$466,200.00	2	The C-4 Canal Conveyance Improvements project will restore water flow and storage in the canal, providing capacity to increase recharge to the Biscayne aquifer which provides raw water for public water supply, and will strengthen canal banks in the area against more intense storm-driven rainfall resulting from climate change. Shoreline bank hardening will mitigate against future weather extremes and decrease the canal's sedimentation processes. Maintenance activities along the C-4 canal have noted the loss of canal capacity evidenced by repeated treatment of algae and littoral vegetation growth. Repeated vegetation treatments indicated an accumulation of sediments in the vicinity of interconnecting pipes at NW 40th Avenue and NW 58th Street in Coconut Creek, Florida. A bottom elevation survey was conducted in the area and found that sediments had accumulated in a 1,000-foot-long area of the canal causing a loss of conveyance capacity. A geotechnical analysis of the bottom sediments found that the sediments were suitable to be pumped and placed into geotube bladders and used to shore up the erosion present on the northern canal bank providing a safer, stronger slope.
34.25	City of Homestead	Miami Dade	6th Avenue Drainage Improvements	City of Homestead	Installation of new and resilient stormwater facilities in a high priority area, defined by planners due to previous flooding. Installation of catch basins, manholes, pipelines and exfiltration trenches all with an aim to minimize destruction and increase personal safety.	\$ 2,500,000.00	0.5	\$1,250,000.00	\$1,250,000.00	2	This project was identified as the second highest priority by the City's Stormwater Master Plan, which included the assessment of vulnerabilities and utilized modeling to make recommendations on activities that would result in the greatest impact. As one of the oldest neighborhoods in the City, the 6th Avenue corridor has a history of repetitive flooding events. During recent storms, the area experienced extensive flooding that resulted in damaged structures and roadways that were almost inaccessible.
33.75	City of Dania Beach	Broward	SW 37th Terrace Stormwater Project	Dania Beach, Broward County	Project consists of construction of a stormwater infrastructure along the SW 37th Terr. Roadway. Project will reduce flooding and provide additional water quality in residential area.	\$ 750,000.00	0.5	\$375,000.00	\$375,000.00	1	A stormwater model was constructed for the project area which concluded that the maximum flood elevation decreases after stormwater infrastructure is installed, reducing the risk of flooding onto existing buildings and houses. The project addresses this risk by installing a stormwater pipe system that can transfer stormwater from SW 37th Terrace and discharge it to a lake west of the project area. During the existing site conditions, stormwater floods over the roadway centerline an average of 23 hours for a 10-year, 24-hour design storm.
33.75	City of Gulfport	Pinellas	Gulfport Marina Living Shoreline Project - Phase I	Gulfport, Pinellas County	Phase 1 of a living shoreline that includes oyster bags. Designed but not yet permitted.	\$ 350,000.00	0.5	\$175,000.00	\$175,000.00	2	The Pinellas County Sea Level Planning Tool was used to assess the vulnerability of this project. The tool uses NOAA 2017 projections and 2040/2070-time horizons. For 2040 the SLR is 1.21 feet and the 2070 SLR is 3.21 feet. The results from the tool indicated a 100-year storm surge of 13 feet, thus considering the area highly vulnerable. The living shoreline approach was one of the adaptive management measures recommended for this site. The proposed wave attenuation barrier will accomplish this recommendation and will increase the resiliency of this peninsula inclusive of the infrastructure behind it, during SLR coupled with storm surge events.
33.66	City of Lauderdale Lakes	Broward	Canal Rehabilitation	Lauderdale Lakes, Broward County	The City has initiated a comprehensive stormwater improvement effort that includes enhancing the drainage canals throughout the community. The City's Stormwater personnel have identified several of the canals that are in the greatest need of improvements to not only maintain but increase capacity. The miles of work completed will result in drainage facilities that will be able to provide protection well into the future as water levels rise from the coast and storms become more frequent.	\$ 3,000,000.00	0.5	\$1,500,000.00	\$1,500,000.00	2	The City has initiated a comprehensive stormwater improvement effort that focuses on rehabilitation of the canal system as a priority mitigation activity. The planning documents provided in-depth assessments and recommendations that led to the development of the proposed project. The first step to address the increasing and long-term threat of flooding was the development of a Stormwater Management and Flood Protection Master Plan. The plan focused on the current and future flood protection level of service of the City's stormwater management infrastructure. Using a fully integrated one-dimensional (1D) and two-dimensional (2D) hydrologic/hydraulic (H&H) model for each of the five basins within the City, the plan analyzed all the drainage needs of the City. Using the data, the plan developed a 5-, 10- and 15-year capital improvement plan to implement high-priority stormwater improvement projects in a systematic, objective, and cost-effective manner. Using the plan, the City's Stormwater personnel have identified a series of canal sections that are in the greatest need of improvements to not only maintain current levels but increase capacity. The significant amount of planning for the proposed project will result in drainage facilities that will be able to provide protection well into the future as water levels rise from the coast and storms become more frequent. The project will be designed using the modeling from the planning reports to concentrate on the areas of canals that will alleviate conveyance disruptions and where improving the

33.35	Broward County Aviation Department	Broward	FLL Ravenwood System Interconnection	Ft. Lauderdale Airport area, Broward County	Improvements and upgrade to the stormwater management system at the FLL North System to mitigate major flooding during storm events which can cause the airfield to shutdown. The outcome of this project will be: 1) reduction in peak flood stages, 2) reduction in flood duration, 3) increased water quality treatment volume, 4) maintain a constant discharge capacity via stormwater outfalls during elevated tailwater conditions due to projected sea level rise, 5) reduced possibility of airport shutdowns due to airfield flooding during future significant storm events. Multi-year funding breakdown: 2022 (Design phase)-\$1,172,451.50; 2023-2024 (Construction phase)-\$4,156,873.50	\$ 11,406,888.00	0.5	\$5,703,444.00	\$5,703,444.00	3	The FLL North System encompasses the northwest quadrant of the active airfield areas at Fort Lauderdale Hollywood International Airport. This system and critical facility experience significant flooding during major storm events. Based on analysis during the FLL Stormwater Master Plan, the existing stormwater management within the FLL North System does not meet design criteria established by the FAA for stormwater management within airfield areas or sufficient stormwater retention areas for flood attenuation/ water quality treatment. The proposed stormwater improvements will address the flood control deficiencies within the FLL North System.
33.35	Miami-Dade County	Miami Dade	Little River Basin Phase 1 Improvements to Raise Canal Banks Elevations to Enhance Storage to Meet 2060 Sea Level Rise	Little River Neighborhood, Miami	Improvements to six canals (6 miles) under Miami-Dade County control, C-7 Basin. Improvements include raising top of bank elevations (enhance storage), upgrade culverts (enhance conveyance), and improve outfalls.	\$ 14,000,000.00	0.5	\$7,000,000.00	\$7,000,000.00	3	The project are currently experiences flooding during intense storm events and anticipates increased impacts in the future due to sea level rise. During heavy rainfall and king tides, drainage infrastructure is overwhelmed, septic tanks fail and cause untreated sewage to backup into home or leak into waterways and Biscayne Bay. The latest 2019-2020 comprehensive update to the Stormwater Master Plan has identified improvements to a number of secondary canals necessary to enhance storage and conveyance capabilities throughout the County's secondary canal system. Design criteria is based on meeting conveyance and storage capacity for a 25 YR/ 72 HR 2060 future model scenario with sea level rise. This will improve canal conveyance and storage, thereby increasing resilience and flood protection. This project will be highly effective in mitigating flood risks by reducing or eliminating damage to property and/or loss of life in the project area, while also implementing water quality and reduced flooding.
33.25	Town of Golden Beach	Miami Dade	Pump Station at Tweddle Park	Tweddle Park, Town of Golden Beach, Miami-Dade County	Repair elements of the stormwater system to reduce flooding at several gov't buildings including their EOC.	\$ 1,000,000.00	0.5	\$500,000.00	\$500,000.00	2	There has been an approximately a 90% reduction in drainage well capacity at Tweddle Park. Engineers have recommended abandoning the current well system and installing an underground pump and water treatment system. By replacing the system, the town's critical facilities will not be highly vulnerable to flooding. The vulnerability assessment determined that this region is at high risk of flooding, ground saturation and impact from sea level rise. By installing a new pump station, the town will be further protected from flood risk. Implementing a more robust stormwater system is needed to keep up with increasing vulnerability, replacing fittings in the existing outfall system will not account for flood threats.
33	Peace River Manasota Regional Water Supply Authority	DeSoto	Peace River Regional Reservoir No. 3 (PR3) Project - Preliminary Engineering	Southwest DeSoto County	Design, permitting, and construction of a new 9 billion gallon raw water reservoir including new intake structure and pump station to increase SLR resiliency.	\$ 7,250,000.00	0.724	\$5,249,000.00	\$2,001,000.00	1	The Authority developed an Emergency Response Plan (ERP) and as part of our Integrated Regional Water Supply Plan, included the PR3 Project as the recommended project to address water supply resiliency in the region. The SWFWMD has also included this project in their Regional Water Supply Plan 2020 Update. The RV Griffin Reserve, where the new reservoir will be located, encompasses a total of 5,913 acres in southwestern DeSoto County. Elevations range between a low of approximately 25 feet NGVD and a high approaching 40 feet NGVD. The flat terrain and poorly drained soils result in a landscape that lacks any well-defined natural drainage features. Generally, drainage occurs as sheet flow through the on-site flatwoods and pastures, and through a series of marshes linked by shallow sloughs, and eventually finds its way into either the Peace River or the Myakka River as the property straddles the natural drainage divide between the two watersheds.
32.85	Broward County Board of Commissioners	Broward	Installation of dewatering pumps to address the remediation of SRA1A tidal flooding to maintain access to Hollywood North Beach Park.	Hollywood, Broward County	Project to place 4 dewatering pumps in low-lying areas where tidal flooding and SS are impacting arterial roadways. This is a critical part of a larger FDOT led project.	\$ 9,810,566.67	0.97	\$9,516,249.00	\$294,317.00	3	This project is in direct response to a full engineering study of SR A1A from South of Hallandale Beach Boulevard to North of Dania Beach Boulevard in Broward County. Flooding is observed predominately from high tide events, either backflowing through the storm sewer system onto the streets, or with rainfall events during high tide, where head differentials prevent runoff from draining to the Intracoastal Waterway.
32.6	City of Dania Beach	Broward	Southeast Drainage Project	Central Dania Beach, Broward County	Implementing stormwater improvements to reduce flooding within the neighborhood by upgrading pump stations, construction of injection wells, additional piping and sail/road improvements.	\$ 14,500,000.00	0.76	\$11,020,000.00	\$3,480,000.00	2	The proposed project design criteria address flooding risks to withstand a 3-day duration 25-year event, with flooding duration of less than 6 hours and less than 2 inches of flooding at the crown of the road. The design's water elevation has been set to the projected groundwater elevation of 2060 which addresses future sea level rise. The project site is a fully developed neighborhood where the summer water table can rise as high as ground level. Flood issues are exacerbated by super moons and king tides. Flooding of SW 2nd Avenue can prevent access to several high-rise condominiums that are heavily populated with seniors.
32.6	Miami Dade County, RER-DERM	Miami Dade	Little River Basin Phase 2 Improvements to Raise Canal Banks Elevations to Enhance Storage to Meet 2060 Sea Level Rise	Little River Neighborhood, Miami	Phase II of Phase I project: to make improvements to four canals (C-7 basin). This includes raising top of bank elevations, upgrade culverts, and improve outfalls. Have used 2060 SLR scenarios to design this criteria. Project also includes: survey, soil testing, permitting, construction, and management.	\$ 10,400,000.00	0.5	\$5,200,000.00	\$5,200,000.00	4	The latest 2019-2020 comprehensive update to the Stormwater Master Plan has identified that improvements to a number of secondary canals are necessary to enhance storage and conveyance capabilities throughout the County's secondary canal system. Currently, some of the secondary canal banks are below this criteria. Design criteria will improve canal conveyance and storage, thereby increasing resilience and flood protection. The project area is currently impacted during higher intensity storm events, and is anticipated to experience increased impacts in the future with the forecasted sea level rise. Because some areas near the Little River are naturally low-lying, the area is susceptible to flooding.
32.5	Brevard County Board of County Commissioners	Brevard	Max Brewer Causeway Hurricane and Storm Damage Reduction and Restoration Project	Titusville, Brevard County	Restoration of approximately 2,200 linear feet of shoreline to fortify a highly eroded roadway, a high use public access area and a unique ecological use area.	\$ 1,000,000.00	0.5	\$500,000.00	\$500,000.00	3	The Titusville Max Brewer Causeway is specifically identified in The Resilient Brevard: Planning for Resilience, Vulnerability Analysis report. Leaving this 2,200-ft popular recreational sandy stretch of shoreline in its current eroded state will allow the adjacent waterway to encroach on and ultimately overcome the roadway as determined in the extreme storm event and future sea-level rise scenarios identified in the Resilient Brevard study.

32.5	Brevard County Natural Resources Management Department	Brevard	Restoring Seagrass and Oyster Habitat for Improved Natural Resilience	Indian River Lagoon, Brevard County	Permitting, seagrass planting and oyster bar installation to address erosion and wave attenuation as well as water quality over 1.5 acres as well as monitoring	\$ 500,000.00	0.5	\$250,000.00	\$250,000.00	3	The East Central Florida Regional Planning Council conducted an FDEP grant funded vulnerability assessment for Brevard County. This assessment supported restoration of the coastal zone and generation of living shorelines. Both seagrasses and oyster reef structures are components of living shorelines. The Indian River Lagoon National Estuary Program's Comprehensive Conservation and Management Plan (C.C.M.P.) also includes support of pilot projects for seagrass restoration. In the Brevard County vulnerability assessment, 100-year flood scenarios, category 1 storm surge, and the NOAA 2070 sea level rise predictions all resulted in flooding at the restoration site.
32.25	Miami-Dade County	Miami Dade	North Dade Chiller Plant - Critical Infrastructure Hardening	Overtown, Miami	Flood mitigation improvements for a critical asset which is currently flood prone. Improvements will ensure function of multiple critical assets effected by the chiller during and after flood events	\$ 600,000.00	0.5	\$300,000.00	\$300,000.00	2	The County's Vulnerability Viewer tool, shows that the area around North Dade Chiller Plant, particular areas just east of the facility are vulnerable to flooding. This facility, as with others, could be negatively impacted if we were affected by and extreme rainfall event. Additionally, the County's Sea Level Rise Strategy identified flood proofing vulnerability critical facilities as a key recommendation to support adaptation to sea level rise. The property houses critical infrastructure. The chilled water system provides cooling capacity to critical infrastructure including county servers and office space allowing for continued operations delivering services and aid during major events.
31.85	City of Anna Maria	Manatee	City of Anna Maria City Hall Hardening Project	Anna Maria Island, Manatee County	Project to add flood barriers, storm windows, storm doors and other hardening improvements to protect the city hall which is a critical asset and houses many of the City's offices. These improvements will allow the city hall to meet the Florida Building Code criteria.	\$ 155,465.00	0.5	\$77,732.50	\$77,732.50	1	This project will provide improvements to the storm and flooding resistance of the critical facility. The City of Anna Maria and the local area in general regularly experiences nuisance flooding, compound flooding, and is located at an average elevation that makes it vulnerable to flooding, tidal and storm erosion, sediment transport, and accretion that impacts the local community.
31.25	Miami-Dade County	Miami Dade	County Government Center (Stephen P. Clark Center) Stormwater Drainage Improvements	Miami	Assessment, design, and construction of stormwater improvements to a drainage system that serves a critical County Gov building. The existing system is compromised and has been identified as vulnerable to storm surge	\$ 800,000.00	0.5	\$400,000.00	\$400,000.00	2	The County's own vulnerability assessment, the "Sea Level Rise and Storm Surge Rapid Action Plan" demonstrated that approximately 46%, or 508 of the 1,090 County-owned assets analyzed, are vulnerable to impacts from sea level rise and storm surge inundation. In that assessment, this ISD facility ranked #4 out of all ISD facilities in terms of it's combined criticality and vulnerability. This project would provide increased storm water drainage to mitigate flooding and maintain clear and safe access to this critical local government facility.
31.25	City of New Port Richey	Pasco	South Gateway Inundation Park	New Port Richey, Pasco County	The construction of a detention pond and redevelop two fully paved parcels; redirect drainage from 23.5 acres of impervious surface for storage and treatment.	\$ 1,600,000.00	0.5	\$800,000.00	\$800,000.00	3	The project was originally developed as a site-specific vulnerability assessment and a rapid design exercise completed by the Tampa Bay Regional Planning Council (TBRPC) to demonstrate potential innovative features that could be incorporated into new development projects in community redevelopment areas (CRAs) where responses to the threat of flood were needed. TBRPC overlaid the water inundation that would occur in the future during a category one hurricane and the opportunities that innovative design concepts could control or reduce outfall from the pond by lowering its level in advance of a storm event so that upon the occurrence of the storm surge, the project site would not add to the rising of the river. The creation of the floodable retention pond will redirect stormwater runoff from 23.50 acres for storage and treatment.
31	Miami-Dade County	Miami Dade	Miami-Dade County/Fairchild Tropical Botanic Garden	Fairchild Botanical Garden, Miami	This project will mitigate & harden seawalls, islands, barriers, collections, trails, and landmarks in portions of the Fairchild Tropical Botanic Garden to prevent the erosion of critically vulnerable assets. The focus will be on the areas of the park's lowlands that is considered significantly exposed to climate change, SLR, King Tides, and storm surge.	\$ 25,000,000.00	0.5	\$12,500,000.00	\$12,500,000.00	3	The following information is cited directly from the Vulnerability Assessment conducted by Hazen showing the current effect of flooding: "The storm surge has a significant impact to FTBG. The model shows that even under current conditions, the S5 flood would cover all areas on the east side of the park." A Parkwide analysis clearly shows that the lowlands are significantly exposed to climate change. By the year 2065, North East, South and Islands Zones will be more than 90% inundated as a result of the SLR, and 100% by storm surge. The Vulnerability Scores for these zones are extremely high (4.32/5, 4.25/5 and 4.08/5, respectively). This fact suggests a revision of the current Park Vision to adapt it to the future conditions.
30.75	City of Miami	Miami Dade	Edgewater Flood Improvements (EFI) - NE 4 Ave to Biscayne Bay, NE 22 to NE 24 St	Edgewater area, Miami	Design, permitting and construction of a stormwater collection system including a pump with outfall to Miami River.	\$ 17,111,976.00	0.5	\$8,555,988.00	\$8,555,988.00	3	Stormwater Master Plan identified Edgewater as critical priority due to flooding caused by rain, storms & tides. Recommendations based on modelling of the water management system with a watershed basin approach and identified system upgrades needed for next 30+Yrs. Located in flood zone VE the project area is severely lacking in adequately sized drainage infrastructure. This mitigation project will enhance the built environment to significantly reduce risks and vulnerability to flood hazards; and improve the environmental and economic resilience of the Eighth Street Flood Improvements Project. The stormwater overwhelms the current system and floods residential and commercial areas. Per Flood Factor, properties in this area are at major and extreme risk of flooding, with approximately 529 properties already at risk in the project area. The project will minimize flood risk for over 2,665 residents in a primarily residential service area with a 50% LMI. It will also reduce the economic impact due to flooding to 529 properties valued at \$346 million.
30.75	Town of Juno Beach	Palm Beach	Universe Boulevard	Town of Juno Beach, Palm Beach County	Installation of a new drainage system to mitigate damage from flooding and sea level rise	\$ 2,100,000.00	0.5	\$1,050,000.00	\$1,050,000.00	2	In 2013, the potential for a flood event to overwhelm the system on Universe Boulevard was discovered and failures to the facility were identified. The Town utilized FEMA funding to develop a Flood Mitigation Plan. The plan identified the project as a priority. It will protect the public's safety and health from the effects caused by natural hazards and for the purpose of this plan, as a result of flooding, flash flooding, and storm surge incidents. It will also reduce or eliminate the impact of flooding hazards to identified at-risk locations, including repetitive loss areas and critical facilities through mitigation or acquisition. To date, \$157,285 has been spent on this system and has resulted in the partial mitigation of only 124 feet of the 5,000-foot system. The need for the complete removal and replacement of the stormwater pipe has been determined by the Town's engineers.

30.66	City of Jacksonville	Duval	City of Jacksonville stormwater pump station	City of Jacksonville	To design and construct a storm water pump station. Will also make upgrades to the collection system that will address chronic flooding in the street drainage basin by allowing flood water to travel faster to pump station. Storm water pump: combo of back-flow prevention and pump station design.	\$ 40,000,000.00	0.5	\$20,000,000.00	\$20,000,000.00	3	The 149-acre LaSalle Street outfall drainage basin is located in the historic San Marco area of Jacksonville, Florida (Zip Code 32207, Census Tracts #7 and #8). San Marco includes a mix of residential and commercial properties (neighborhoods and business districts). For many years it has been subject to severe flooding, even with relatively moderate rainfall events, especially along the streets fronting the river and often extending beyond the outfall boundaries. This project will help address the flooding incidents caused from daily rain fall.
30.66	Palm Beach County	Palm Beach	Australian Avenue Drainage Improvements	West Palm Beach	The project will install a necessary new drainage system for the Australian Avenue corridor from Banyan Boulevard to 45th Street to increase drainage capacity and to mitigate and alleviate flooding. The new drainage system will eliminate the shallow roadside swales, and will replace them with a new storm sewer system comprised of curb and gutter, inlets, pipes, additional water quantity storage, additional water quality treatment required by permit, and outfall locations.	\$ 31,063,067.44	0.57	\$17,705,949.00	\$13,357,119.00	3	The City of West Palm Beach identified this area in the assessment of vulnerability and risk in its February 2021 Climate Resilience Plan. This project falls within the Twin Lakes and Surrounding Neighborhoods areas that were identified as susceptible to rainfall induced flooding impacts on the transportation and mobility system. The project is located in an area that was identified as potentially losing access in a rainfall induced flooding event. Installation of the new drainage system and its subsequent reconstruction of the roadway and bridges at an increased elevation will alleviate known flooding, account for historical offsite drainage from adjacent properties, allow critical medical, energy and transportation services to continue operations to the adjacent community during storm events, and will protect and prolong the useful lives of critical utility and transportation infrastructure and assets within the corridor.
30.5	City of Miami Beach	Miami Dade	Citywide Gravity Sewer Mains Replacement	Miami Beach, Miami-Dade County	Design, permitting, and construction to replace aging sewer mains in areas where rehab isn't possible to reduce vulnerability to inundation	\$ 12,500,000.00	0.39	\$4,875,000.00	\$7,625,000.00	5	In 2020, the City adopted Neighborhood Project Prioritization, a vulnerability assessment that considered flood risk management, public safety, and supply reliability for services like maintaining adequate water systems for fire suppression. The North Shore Neighborhood, where part of this project is located, was ranked as our #2 priority. According to data from the County's Vulnerability Viewer and the City's 2017 SLR Vulnerability Assessment, parts of this area are as low as 1.3' NAVD, making them vulnerable to current King Tide flooding, and by 2070, the majority of the west half of the site experiences flooding of depths up to 2'. The project areas include neighborhoods that are all are prone to frequent flooding from heavy rain events and high tides. Given their low elevation and proximity to Biscayne Bay, flooding issues are exacerbated when both events combine. Flooding can cause erosion discharges, which would be worsened by sanitary sewer overflows – this project would ensure no sanitary sewer overflows occur.
30.25	Escambia County	Escambia	Ellyson Industrial Park Drainage Improvements	Near Pensacola, Escambia County	Project design to refine an existing basin study, with the goal of reducing or eliminating flood risk for up to 10 existing facilities in the industrial park.	\$ 289,736.00	0.5	\$144,868.00	\$144,868.00	1	A Coastal Vulnerability Assessment Report was generated in 2016 showing expected higher flooding events due to increased rainfall due to climate change. This project will help to mitigate these expectations. Multiple properties within the project area have been documented to experience repeated flooding. Escambia County has received multiple resident complaints offloading a property damage in this area.
30.25	Town of Bay Harbor Islands	Miami Dade	West Bay Harbor Terrace Stormwater Improvements	Bay Harbor Islands, Miami-Dade County	The replacement of outfalls and installation of check-valves throughout the community as an effective method of reducing the impacts from these conditions. The improvements to all 47 outfall structures will protect both people and property through a resilient drainage system.	\$ 310,000.00	0	\$0.00	\$310,000.00	2	The vulnerability assessment performed evaluated sea level rise and future flooding. The current flooding condition on this area is severe. During heavy rain events, the intersections of W Bay Harbor Drive with the Burth Alley, 95th Street and 94th Street get flooded. In this project, sea level rise is being addressed with the new tide valves (backflow preventers). Flooding from rainfall is being addressed with the proposed Drainage Report/Evaluation. The capacity of the existing infrastructure will be increased for this purpose.
30.25	Wakulla County Board of County Commissioners	Wakulla	Wakulla County Coastal Lift Stations Flood Mitigation	Coastal Wakulla County	Elevate and waterproof electric panels on 3 lift stations, all of which are located in a Special Flood Hazard Area.	\$ 915,469.00	0	\$0.00	\$915,469.00	3	These lift stations have been identified in the County's Local Mitigation Strategy as at-risk for flooding from rainfall and eventually from sea level rise. Elevating and hardening these critical assets will ensure function of the system is maintained during flood events by reducing flood risk.
29.85	City of Pensacola	Escambia	9th Avenue Flooding Retrofit Project	Pensacola, Escambia County	Increase the size of the storm drain pipe and raise part of 9th avenue to help solve the flooding problems. 9th street is currently only 4 feet at its lowest elevation, so this means reconstruction of approx 500 feet of roadway	\$ 1,174,977.00	0.5	\$587,488.50	\$587,488.50	2	For the 9th Avenue Flooding and Adaptation Project, 9th Avenue has significant standing water from Bayfront Parkway up to Colfax Street. This flooding also extends about 250' west into the Aragon Community. This flooding issue is most definitely exacerbated by tidal flooding from sea level rise diminishing capacity in the system overall. The current flooding occurs due to low elevations, deficient pipe capacity and loss of downstream capacity due to increasing tidal flooding. Increasing the size of the piping and elevating the road will alleviate the existing flood risk.
29.85	Martin County	Martin	SW Mockingbird Lane Flood Mitigation	Palm City, Martin County	Project consists of a public workshop, roadway elevation, and seawall/weir with check valve construction. Project will increase resilience and mitigate flooding to provide safe road access.	\$ 1,620,000.00	0.5	\$810,000.00	\$810,000.00	2	Martin County completed two recent county-wide vulnerability assessments: the 2021 Sea Level Rise Report (updated 8/24/2021) and the 2020 Resilience and Watershed Management Plan, funded by DEP agreement No. R1911. SW Mockingbird Lane was identified in the assessments as part of Priority Area #5 in the County's resilience planning efforts due to repetitive inundation. The proposed project will involve raising the roadway to mitigate the risk of flooding, installing a weir with check valve discharge at the discharge of the existing stormwater channel—this will allow the area to discharge when the head pressure at the weir is higher than the tidal pressure while preventing backflow during sunny-day high tide events. The project will also install sheet pile along the length of the road bordering the existing stormwater channel.
29.66	North Bay Village	Miami Dade	North Bay Village Coastal Resiliency Project	North Bay Village, Miami-Dade County	Elevate 4000 linear feet of seawall which would protect an evacuation route in order to meet recent Village building code modifications that are aimed at reducing flooding.	\$ 15,000,000.00	0.8	\$12,000,000.00	\$3,000,000.00	3	North Bay Village faces severe risks from storm surges and flooding given its location and lack of man-made or nature-based protection. To help mitigate this risk, the Village modified its building code requiring all seawalls to be installed at the height of 5.94' NAVD. The proposed project protects 13 properties and the NE 79th Street/Kennedy Causeway/State Road 934 from flooding by elevating the seawalls.

29.5	Brevard County Natural Resources Management Department Stormwater Program	Brevard	West Cocoa Stormwater Flood Protection and Infrastructure Upgrades	West Cocoa area, Brevard County	In 2014 the County obtained a master plan, for the 18.33 square mile West Cocoa community, that assessed flooding vulnerability and forecasting, prioritized areas needing improvements. The project addresses the most vulnerable areas identified and consists of the design, permitting, and construction of stormwater infrastructure improvements such as culverts, ponds and ditches, and additional secondary conveyance systems, to protect the safety, health and welfare of the West Cocoa residents. Increases the level of flood protection to homes and critical public infrastructure and reduces risk to public.	\$ 7,020,000.00	0.5	\$3,510,000.00	\$3,510,000.00	5	The West Cocoa master plan identified the need to install new conveyance pipes, inlets, swales, weirs, and restore and widen some drainage ditches, to provide a much needed flood relief for the presently affected drainage area. The proposed work will address documented and predicted structural flooding, roadway overtopping, and/or localized repetitive flooding problems, resulting from more frequent and more intense rainfall events, and the increasing groundwater elevations.
29.5	Miami-Dade County Parks, Recreation and Open Spaces Department	Miami Dade	Haulover Park Western Shoreline Sea Level Rise and Flood Mitigation Project	Miami Beach, Miami-Dade County	First phase to include design, permitting and procurement to elevate the western shoreline +5 ft with potential to incorporate a living shoreline to mitigate the effects of SLR on the Park, identified in various analyses	\$ 1,340,280.00	0.5	\$670,140.00	\$670,140.00	3	Haulover Park's western extent currently experiences periods of inundation, rendering the public access inaccessible to users. The western shoreline is relatively low lying, with elevations generally below +6.0 feet (NAVD88), and the majority of the area below +3.0 feet (NAVD88). This grade puts much of the western extent of the Park at risk of inundation during existing King Tide events. This project mitigates risks posed by flooding and sea level rise by adding additional height to existing revetments to address flooding and sea level rise risks, and living shorelines to protect, restore, and enhance the natural shoreline habitat.
29.5	Monroe County	Monroe	Harry Harris Park Resilient Redesign	Harry Harris Park, Monroe County	Conceptual design of an elevated public access boat ramp to allow flood waters to pass through	\$ 200,000.00	0.5	\$100,000.00	\$100,000.00	2	The project addresses risks identified in the vulnerability assessment completed by the County in June 2021. Harry Harris Park was significantly impacted by Hurricane Irma and heavily damaged. The Park and its facilities were flooded by surge and tidal flooding at that time. Apart from that event, the Park does receive tidal flooding impacts during the fall King Tides which can impact the surrounding community as well. Access to the overall Park is severely diminished during these events and elevating the existing public access structure will make the Park more resilient to these conditions.
29.25	Town of Greenville	Madison	Town of Greenville Southside Flooding Mitigation Project	Greenville, Madison County	Increasing the capacity of a culvert as recommended by a 2021 USACE study	\$ 660,000.00	0	\$0.00	\$660,000.00	1	The south flooding area in Greenville is within a 100-year floodplain and experiences flooding during major storms or hurricanes. With rainfall increasing, having an effective culvert system is vital to a municipality and the existing culvert does not function properly under current conditions, observed to have zero or low flow during these flood events. The proposed project is to remediate the culvert system into one that can handle an increase in rainfall and major storm events as well as average rainfall events.
28.85	City of Sunny Isles Beach	Miami Dade	Central Island Area Pump Stations and Drainage Improvements: 174th Street to 183rd Street and Atlantic Avenue to North Bay Road	City of Sunny Isles Beach	Installation of 2 stormwater pumping stations and an upgraded gravity stormwater collection system to address existing flooding	\$ 4,000,000.00	0.5	\$2,000,000.00	\$2,000,000.00	2	Currently, the City streets get flooded at King Tides and are severely flooded when local storm events occur at the same time. Installing 2 additional stormwater pump stations and improving the existing system will alleviate this flooding.
28.75	Miami-Dade County Parks, Recreation and Open Spaces Department	Miami Dade	Black Point Park and Marina Sea Level Rise and Flood Mitigation Shoreline Stabilization Project	Homestead, Miami-Dade County	Phase 1 to include design, permitting and procurement for revetments with green infrastructure	\$ 1,530,000.00	0.5	\$765,000.00	\$765,000.00	3	Black Point Park and Marina currently experiences periods of inundation over the southeastern end of Black Creek Trail, preventing public access. Much of the banks along the shoreline of the Trail lie at approximately +2.3 feet (NAVD88). This grade puts much of the trail at risk of inundation during existing King Tide events. This project mitigates risks posed by flooding and sea level rise by adding additional height to existing revetments to address flooding and sea level rise risks, and living shorelines to protect, restore, and enhance the natural shoreline habitat. The use of revetments to higher elevations over the existing revetments and natural shorelines along Black Creek Canal will reduce current inundation. This project also improves access and viability of the waterfront areas and provides protection to nearby communities.
28.75	Miami-Dade County, Department of Transportation and Public Works	Miami Dade	Elevation of Roadway, Infrastructure and Drainage Resilience Improvements to NE 159 St from NE 6Ave to West Dixie Highway	Northern Miami area	This is a road widening project from 2 to 4 lanes. Mitigation measures being built into the project include higher road elevation, continuous storm drainage system, and curb/gutter system. Road elevation will be to 2060 requirements with Future Sea Level Rise.	\$ 15,000,000.00	0.5	\$7,500,000.00	\$7,500,000.00	3	Numerical models are utilized to facilitate the evaluation of drainage scenarios. The latest 2019-2020 comprehensive update to the Stormwater Master Plan has identified that improvements to a number of secondary canals and other stormwater drainage infrastructure are necessary to enhance storage and conveyance capabilities throughout the County. This project will improve canal conveyance and storage, thereby increasing resilience and flood protection. Canal conveyance affects ground water levels, and determines the retention capability of roadway drainage systems. Additional storage to detain flows is a key stormwater management strategy under storm event conditions.
28.25	City of Lauderdale Lakes	Broward	Citywide Drainage Improvements	Lauderdale Lakes, Broward County	As sea levels rise and tidal flooding is an immediate threat for the coastal communities adjacent to Lauderdale Lakes, the impacts from the changes in climate will begin to impact the City's stormwater system sooner and with more severity. To address the immediate and future flooding issues, the City has planned for a comprehensive drainage enhancement that will protect public safety, protect infrastructure, improve water quality, and provide resilient facilities for the future.	\$ 7,000,000.00	0.5	\$3,500,000.00	\$3,500,000.00	3	The City has initiated a comprehensive stormwater improvement effort that includes replacing and installing new facilities within the community-wide conveyance system, including the development of a Stormwater Management and Flood Protection Master Plan. Using the plan, the City's Stormwater personnel have identified a series of elements such as inlets, swales, and drainage pipes that are in the greatest need of improvements to not only maintain current levels but increase capacity. The significant amount of planning for the proposed project will result in drainage facilities that will be able to provide protection well into the future as water levels rise from the coast and storms become more frequent.
28.25	City of Miami	Miami Dade	Design, Permitting, Construction: Shorecrest South Flood Improvements (SSF) - NE 8 Ct-NE Bayshore Ct, NE Little River Dr-NE 79 St	Shorecrest Neighborhood, Miami	Multi phase project to improve the area's flooding problem. Multiple improvements listed to improve the whole stormwater collection system, with the goal to minimize risks for 620 residents, 390 properties and protect critical assets.	\$ 16,067,860.00	0.5	\$8,033,930.00	\$8,033,930.00	3	2021 Stormwater Master Plan evaluated the infrastructure and identified system upgrades needed for next 30+Yrs. The project area is severely lacking in adequately sized drainage infrastructure. Per Stormwater Plan mitigation recommendations, these improvements will capture, retain and convey stormwater via increased storage capacity, new exfiltration systems, grassy surfaces, upsized inlets and pipes. The Shorecrest South Flood Improvements Project will minimize flooding frequency, severity, duration and impact. It will also protect critical assets and transportation corridors.

28.25	City of Lake Worth Beach	Palm Beach	Lake Worth Beach South Palm Park Sea Level Rise Mitigation	Lake Worth Beach, Palm Beach County	Flood control South Palm Park which affects residential neighborhoods and commercial districts to improve a stormwater pump and install a new outfall pipe and check valve.	\$ 600,000.00	0.5	\$300,000.00	\$300,000.00	3	Both the 2012 Stormwater Master Plan and the 2016 update recommend the installation of a stormwater pump station as the only viable solution for the chronic flooding along 18th Avenue South. It further recommends the installation of a new outfall with a tidal check valve. These proposed improvements will provide the infrastructure necessary to reduce sensitivities and enhance the adaptive capacities of resiliency in order to reduce the exposure of these properties to the increased incidence of flooding from heavy rainfall and surges of water from king tides and sea level rise by developing a more resilient coastline bordering the Lake Worth Lagoon.
27.25	Hillsborough County Board of County Commissioners	Hillsborough	Shimberg Park Parcel Flood Mitigation Conceptual Design	Town and Country area, Hillsborough County	Create conceptual design for a flood mitigation area, passive recreation area, educational signage, and reclamation of closed landfill site adjacent to park. Phase (1) of this project is this design (Phase 2 will be separate and will be construction). This project (phase 1) will lower water level elevations within the channel G drainage system and reduce potential flood levels during storms/high tides.	\$ 250,000.00	0.5	\$125,000.00	\$125,000.00	2	During periods of high tide and concurrent rainfall localized street flooding and occasional structure flooding occurs throughout the Town n Country area of northwest Hillsborough County. Portions of Hillsborough Avenue from east of Hanley Rd. to George Rd. west of Tampa International Airport. This project will help to reduce water elevations within the associated conveyance systems thereby reducing or alleviating flooding within the area. The pump stations are directly connected to the conveyance systems that this project will impact.
26.75	Escambia County BOCC	Escambia	Frinchez Heights (Sabra, Erwin, Whitmire, Earnstene Area)	Pensacola, Escambia County	Project design to improve drainage capacity in an area that would reduce or eliminate flood risk for up to 50 homes.	\$ 700,000.00	0.5	\$350,000.00	\$350,000.00	1	Over 30 properties within the project area have been documented to experience flooding multiple times, including the storm event in April 2014 and Hurricane Sally. The existing stormwater infrastructure is no longer adequate to convey stormwater during major rainfall events, which results in flooding. This project will help to mitigate flooding by making necessary upgrades to the existing stormwater system.
26.75	City of Doral	Miami Dade	Stormwater Improvement Project Sub Basin NW 33 Street W	City of Doral	Placement of an exfiltration trench to increase drainage and reduce flooding	\$ 301,644.00	0.5	\$150,822.00	\$150,822.00	1	The current drainage infrastructure is not sufficient to remove the water that pools from rain events. As the area experiences the effects of sea level rise and an increase in groundwater, flooding will increase unless additional stormwater infrastructure is put in place to increase the drainage. There are repetitive loss buildings in the project area that will have reduced risk of flooding due to the improved drainage on NW 33rd Street W. Exfiltration trenches are designed to exfiltrate excess stormwater runoff from rainfall events to meet the required roadway flood protection level of service.
26.25	Wakulla County Board of County Commissioners	Wakulla	Wakulla County - Coastal Lift Stations Retrofit and Flood Mitigation	Coastal Wakulla County	Replace, elevate and waterproof electric panels on three lift stations that are located in a Special Flood Hazard Area.	\$ 1,270,484.00	0	\$0.00	\$1,270,484.00	3	These lift stations have been identified in the County's Local Mitigation Strategy as risks for flooding from rainfall and eventually from sea level rise. Elevating and hardening the stations will reduce risk of flood damage and ensure continued function during of these critical assets during rain and flood events.
26	Brevard County	Brevard	West Crisafulli Road Drainage Improvements	Near Kennedy Space Center, Brevard County	Modeling, land acquisition, design and construction of pipes and swales to reduce flooding through the restoration of the drainage flow path to the historically intended outfall	\$ 1,176,000.00	0.5	\$588,000.00	\$588,000.00	4	This area has experienced increasingly more frequent flooding events over the past 20 years including from hurricane and storm events as well as more intense and more frequent rainfall events throughout the years. Roadways and residential properties are often inundated for extended periods of time days and occasionally for weeks and portions of home interiors have either been subjected to or threatened by flooding. Installing new conveyance pipes, inlets, and swales, and restoring the drainage ditch extending to the outfall located north of W. Crisafulli Road will provide a much needed outlet for the presently land-locked drainage area. The proposed work will address and assist to correct repetitive flooding problems resulting from more frequent and more intense rainfall events and increasing groundwater elevations.
25.75	Gulf County	Gulf	Roads and Stormwater	Countywide, Gulf County	Repair hurricane damage to roadway and replace all piping and stormwater infrastructure along Americus Ave in St. Joe Beach	\$ 9,433,311.54	0.005	\$47,167.00	\$9,386,144.98	3	At this time, the stormwater system can no longer handle normal rain events and standing water is often left throughout the community for extended period of time, resulting in further degradation of the system and community health concerns. This project has identified several areas in the County that are outlined in the Gulf County Local Mitigation Strategy 2020 as a top priority. Replacing the pipes will allow stormwater conveyance to function properly and prevent further flooding.
25.5	Town of Cutler Bay	Miami Dade	Cutler Bay Canal Bank Restoration Project	Cutler Bay, Miami-Dade County	Design, permit and construct erosion protection structures and bank stabilization measures along canals to mitigate flooding and construct a living shoreline to improve water quality in the Bay	\$ 1,500,000.00	0.5	\$750,000.00	\$750,000.00	3	During major flood events, the Town's canal system experiences flooding due to a combination of low elevations and flat terrain. Storm surges and the rapid water fluctuations during storm events cause the rotational failure of the embankments. The soil on the bank is sloughed off along the water's edge, impeding flow and decreasing capacity within the canal. The Canal Bank Restoration project is a priority mitigation strategy, approved by Miami-Dade County.
25.5	City of Miami	Miami Dade	Design, permitting and construction-East Flagami Flood Improvements Project(EFFI)-NW 38 Ct to NW 42 Ave, NW 1 St to NW 7 St	Miami	Design, permitting, and construction of a stormwater collection system to mitigate flooding in an area with repetitive issues, protecting residential properties and a major roadway and planning for future SLR	\$ 28,876,990.00	0.5	\$14,438,495.00	\$14,438,495.00	3	Stormwater overwhelms the current system. The East Flagami Flood Improvements Project will reduce flooding; pollution; property and infrastructure damage; social dislocation and stress; economic losses; emergency response and recovery costs. The project will improve drainage efficacy and system longevity for future climate change adaptivity & sea level rise. It will also protect critical assets such as major transportation corridors. The project will minimize flood risk for over 5975 residents in a primarily residential service area with a 61% LMI. It will also reduce the economic impact due to flooding to 951 Properties/849Residential valued at \$271 million.

25.5	City of St. Augustine	St. Johns	South Davis Shores Flood Mitigation and Drainage Improvements	City of St. Augustine, St. Johns County	The project will include the design, permitting and construction of flood walls, pump stations, drainage improvements, and smart tide check valves to address rainfall, coastal and compound flooding events.	\$ 2,797,000.00	0	\$0.00	\$2,797,000.00	4	South Davis Shores neighborhood experiences routine flooding from rainfall events and coastal surge, particularly when high tides are coupled with Nor'easters. The City has installed tide check valves throughout the stormwater network in the neighborhood, which has helped improve the nuisance flooding conditions. However, low lying elevations (primarily on private properties) provide a pathway for flooding as the Matanzas River can overtop existing ground in multiple locations, bypassing any tide check valves installed. The existing stormwater infrastructure is aged, undersized and inadequate, therefore, rainfall events can commonly create flooding conditions in the roadway.
25.25	City of Bradenton	Manatee	Eastside Drainage Improvements From 8th Ave E to 13th Ave E: remove 22 homes from flooding in low moderate income area.	Bradenton, Manatee County	Design, permitting, and construction to expand existing stormwater system to address recurring flooding due to inadequate capacity. Flooding effects roadways and residential properties	\$ 2,290,000.00	0.5	\$1,145,000.00	\$1,145,000.00	3	The Eastside Drainage Improvements project is designed to alleviate the 18+ inches that flood the street and the 22 residences. Bradenton experiences an average of 20 storms annually that cause some level of street flooding in this neighborhood; three to four of the storms cause house flooding. This project is intended to direct runoff away from the pond and 10th Ave E leaving capacity for other runoff that is unable to be redirected.
25.25	Islamorada, Village of Islands	Monroe	Founders Park Breakwater Restoration	Founder's Park/Plantation Yacht Harbor Marina, Village of Islamorada	Permitting and construction to stabilize and elevate a 60 year old breakwater by increasing its width and crest elevation in relation to SLR and peak tidal surge	\$ 1,903,754.00	0	\$0.00	\$1,903,754.00	2	The breakwater is no longer serving its intended purpose as a protective barrier to Village residents and infrastructure from forces of the sea. Repair and elevation of the breakwater addresses these threats by creating a resilient structure that protects against impending sea level rise and storm event and nuisance flooding. The Village is currently undertaking a phased approach to restoration of the breakwater to not only restore its original functionality, but to also accomplish the imperative goal of increasing the level of protection for the Founders Park marina and park infrastructure from impending sea level rise and tropical storm surge activity.
25.16	City of Dania Beach	Broward	SW 54th Court Stormwater Project	City of Dania Beach	This project calls for stormwater improvements for SW 54 Court. The road is low lying, and is located in the western portion of Dania Beach within a residential neighborhood. Limited infrastructure is causing flooding during storm events on this roadway. The project would also provide additional water quality improvements.	\$ 700,000.00	0.5	\$350,000.00	\$350,000.00	2	A stormwater model was conducted for the project area which concludes that the maximum flood elevation decreases after the stormwater infrastructure is installed, reducing the risk of flooding onto existing buildings and houses. The project addresses this risk by installing a stormwater pipe system that can transfer stormwater from SW 54th Court to a lake north of the project site.
25	City of Aventura	Miami Dade	Seawall Hardening	Neighborhood, City of Aventura	Rehabilitate 1,948 linear feet of seawall which is adjacent to high density, multi-family homes and faces flooding, storm surge and slr issues, decreasing community protection.	\$ 1,200,000.00	0.5	\$600,000.00	\$600,000.00	1	The project is located directly on the water that is part of Biscayne. Situated in a flood zone, the area has begun to experience flooding more frequently than in decades past. The project will protect hundreds of residences and thousands of people from the impacts of flooding caused by sea-level rise, storm surge, or heavy flooding. The enhancement of the existing structure will provide a hardened barrier between the uplands and the water. By improving the seawall to protect against long-term flooding levels and incorporating modern design techniques, the useful life of the structure will be at least 40 years.
24.75	City of Jacksonville	Duval	Wills Branch Dredge	Southwest Jacksonville	Will dredge sediments from the bottom of Wills Branch Creek banks (5,900 ft). This is the main drainage pathways along the St. John's River in Jacksonville. This project will be to maintain this drainage system and upkeep it so it may perform efficiently during flooding events.	\$ 2,738,234.00	0.5	\$1,369,117.00	\$1,369,117.00	2	The basin that Wills Branch serves is considered a restricted basin in Jacksonville. By keeping this discharge pathway open and clear, the degradation of the upstream conditions that would be caused by obstruction within the reach of this project is reduced. The properties on both sides of Wills Branch along the length of the project are considered repetitive loss properties by FEMA. Several of these properties have been purchased by FEMA and turned over to the City for maintenance as a result of the owners inability to obtain flood insurance.
24.75	City of Miami	Miami Dade	Replace Seawalls- Morningside/Shorecrest (MS)between NE 55th Terr/&NE 65thSt.&Biscayne Bay/NE 84th St./&AdemarCanal/NE Bayshore Dr./&Davis Canal	Shorecrest Neighborhood, Miami	Design, permitting, construction of 6 seawalls including outfall pipes, check valves, and natural shoreline restoration	\$ 3,021,792.84	0.5	\$1,510,896.42	\$1,510,896.42	2	The construction is intended to protect Morningside/Shorecrest for the mid- and long-term, considers future climate challenges for the next 30+years and enhances resilience. The Storm Water Master Plan simulated sea level rise to gauge impact on existing and proposed stormwater systems and showed that seawalls must be repaired and/or raised. The hazard mitigation provided by this project will meet the desired level of service for stormwater management, Sea-Level Rise and storm surge impacts and enhance the protection of Biscayne Bay.
24.75	City of St. Augustine	St. Johns	Flood Mitigation and Drainage Improvements for the Court Theophelia Neighborhood	City of St. Augustine, St. Johns County	Design, permitting, and construction and land acquisition to replace aged utilities, upgrade stormwater infrastructure, and repair flood-damaged roads in an area with recurring flooding	\$ 2,581,600.00	0	\$0.00	\$2,581,600.00	4	The neighborhood is already subject to both coastal and rainfall driven flooding. As a result, the streets are in poor condition due to the inundation of salt water on the roads. The proposed project would look at current and future conditions, incorporate into the design to determine best options for implementation.
24.5	City of Lake Worth Beach	Palm Beach	Lake Worth Beach Eden Place Sea Level Rise Mitigation	Lake Worth Beach	Flood control for the Eden Park neighborhood which currently experiences significant flooding from heavy rainfall and king tides. They aim to install a stormwater collection system of inlets and piping and an outfall with tidal check valve.	\$ 600,000.00	0.5	\$300,000.00	\$300,000.00	3	The City's Stormwater Master Plan includes this project recommending the installation of drainage inlets, a piping culvert and an outfall to the Lake Worth Lagoon along 16th Avenue North. It further recommends the installation of a tidal check valve at the outfall. The installation of the proposed improvements will serve to significantly reduce chronic flooding of the Eden Place neighborhood along 16th Avenue North that adversely impacts residential properties and nearby commercial properties with flood damage. This, along with the rip rap component of the living shoreline, will assist in the prevention of flood water resulting from high tides and ongoing sea level rise from penetrating the stormwater system.
24.41	City of Hollywood	Broward	Recapture the Swale Restoration Pilot Program	Hollywood, Broward County	Restores 5 swales as a model for an expanded program of swales	\$ 695,000.00	0.53	\$368,350.00	\$326,650.00	3	This project is being incorporated into the Citywide Comprehensive Stormwater Master Plan, which will examine flood risk through the City. Recapturing all of the swales is one nature-based approach the City is exploring. The initial pilot projects are being done in areas with both clear swales that can be effectively recaptured and areas with stormwater flooding concerns. This will be evaluated as part of the feasibility portion of the project alongside the Stormwater Master Plan.

24.25	City of Weston	Broward	Stormwater Enhancements	Weston, Broward County	Stormwater pump mitigation, including hardening the pumps, engines, buildings, backup power systems, controls, etc. in order to be prepared for more intense weather events.	\$ 3,100,000.00	0.5	\$1,550,000.00	\$1,550,000.00	2	This project is being proposed to address the growing threat of increased rain events caused by changes in the climate and sea-level rise. The improved pump station will allow the City to effectively manage stormwater and drain these areas much more efficiently. The timely removal of the water and conveyance away from the developed area will decrease the amount of damage flood waters can cause to every type of structure and infrastructure facility.
24.25	Escambia County Board of County Commissioners	Escambia	Oakfield Acres - Belle Meade Drainage Improvements	Pensacola, Escambia County	Drainage improvement design that would include adding two ponds, pipe culverts and a connected drainage structure between subdivisions. Aim to reduce or eliminate flood risk for up to 40 homes.	\$ 1,500,000.00	0.5	\$750,000.00	\$750,000.00	1	A Coastal Vulnerability Assessment Report was generated in 2016 showing expected higher flooding events due to increased rainfall due to climate change. This project will help to mitigate these expectations as this improvement is adjacent to Pensacola Bay. Multiple properties within the project area have been documented to experience flooding. Escambia County has received multiple resident complaints of flooding and property damage in this area.
24.25	Miami Dade County	Miami Dade	Deployable Flood Barriers for Multiple Miami-Dade County Flood-Prone Fire Stations	Miami-Dade County	This project would look to install deployable flood barriers at a number of Miami-Dade fire stations that were identified in an earlier vulnerability assessment and are located in flood prone areas. This would help to maintain continuity of operations at these facilities and improve response during emergency situations.	\$ 680,000.00	0.5	\$340,000.00	\$340,000.00	1	Fire Rescue Facilities were ranked as highly critical to the County's operations before, during, and after a storm or other emergency. The assessment revealed that 48 of MDR's 72 properties were exposed to storm surge, and the 8 stations identified in this project are exposed to sea level rise inundation. 7 stations are vulnerable to storm surge inundation and 4 of those stations are vulnerable to permanent inundation from sea level rise. Protecting critical assets that cannot be elevated or relocated with deployable flood barriers is one of the County's top priorities to increase resilience before, during, and after a storm or other flood event.
24.25	Village of Islamorada	Monroe	Islamorada Transmission Main Adaptation Project	Village of Islamorada	Will replace 4 miles of 30-inch ductile iron pipe with cathodically protected 36-inch steel pipe. This will protect against failures due to subterranean tidal flows which expose the pipe to corrosive conditions. The steel pipe will be less vulnerable to physical stress. Will mitigate the saltwater contamination of wellfield and reduce freshwater leaks.	\$ 35,000,000.00	0.5	\$17,500,000.00	\$17,500,000.00	3	This project mitigates both local and regional risks. Local risks are mitigated by hardening the system and replacing the corroding 30" transmission main in this tidally inundated subterranean area and reducing lost water due to breaks and leaks. Regionally, this helps maintain a freshwater head to protect the wellfield. Evidence of subterranean tidal flows and pipe corrosion have been observed during pipe excavations during main breaks.
24.16	City of Belle Isle	Orange	Sol Avenue Rebuild	Sol Avenue, City of Belle Isle	Reconstruction of roadway to include road base and geotextile to prevent water from coming up through road base so the street remains navigable by preventing flooding	\$ 492,155.00	0.6	\$295,293.00	\$196,862.00	1	This project effectively address the impacts of flooding the city faces and provides the necessary mitigation needed to prevent future flooding in this area due to the rise in the water table. The main contributing factor to the flooding of the roadway and the resulting failure of the pavement is the groundwater fluctuations throughout the year which causes the base and/or subbase failure. The project will replace the destroyed subgrade and base and with the installation of better drainage, the flooding due to the ground water infiltration will be eliminated. The project outcome will be to keep the ground water from coming up through the new road base and asphalt when the water table is high thereby preserving the road base and asphalt and making the street drivable.
23.75	City of Titusville	Brevard	Bayview Sewage Lift Station #31 Elimination Project	Titusville, Brevard County	Design, permitting, and construction to eliminate vulnerable lift station by installing additional piping and reconstructing a nearby lift station	\$ 2,000,000.00	0	\$0.00	\$2,000,000.00	3	The Bayview Lift Station was identified to be exposed to 3 of 4 natural hazards including storm surge, flooding, and sea level rise. This is the most vulnerable sanitary sewer asset in the City. The Bayview and Seminole Sewage Lift Stations were originally constructed in the 1950's and are housed in buildings built at the edge of the Indian River Lagoon. Their location and design results in a high risk of sanitary sewer overflows entering the Indian River Lagoon. Completion of the Bayview Sewage Lift Station #31 Elimination Project will not only protect the City's sewer assets from sea level rise, but virtually eliminate the risk of future sanitary sewer spills to the Indian River Lagoon from this location.
23.6	Miami-Dade County	Miami Dade	Schenley Park Septic to Sewer Conversion	Schenley Park Neighborhood, Miami-Dade County	This project will extend the sanitary sewer system to serve approximately 1,800 residential parcels currently on septic systems in the Schenley Park neighborhood of Miami-Dade County. Outcomes include one wastewater pump station, approximately 45,000 linear feet of 6-inch service lateral pipe, 86,000 linear feet of 8-inch gravity pipe, 1,350 linear feet of 12-inch gravity pipe and 250 linear feet of 16-inch gravity pipe. Expansion of the sanitary sewer system to up to 1,700 parcels and removal of up to 1,700 septic systems. Enhanced resident awareness of the benefits of converting to the sanitary sewer system. Reduction of future risks to increased groundwater levels from sea level rise.	\$ 55,000,000.00	0.5	\$27,500,000.00	\$27,500,000.00	4	Miami-Dade County is working with residents, municipal partners, and the business community to convert septic systems to sanitary sewer service in Schenley Park .
23.25	City of Miami	Miami Dade	Brickell and Coconut Grove Seawalls Project (S-BCG) (between SE 25th Rd. to Matheson Ave. and Biscayne Bay)	Coconut Grove, Miami	Design, permitting, and construction of 4 seawalls up to a 3.5' cap elevation with capacity to raise cap to 6' NAVD88 to replace dilapidated seawalls to address flooding within a priority area	\$ 1,658,529.00	0.5	\$829,264.50	\$829,264.50	3	The construction is intended to protect Brickell and Coconut Grove for the mid- and long-term, considers future climate challenges for the next 30+ years and enhances resilience. S-BCG will armor the shoreline by constructing 3.5' seawalls with structural capacity for an extra 3' cap; raise seawalls to a cap elevation < 3.5' NAVD; determine if able to support an added cap of 3 ft.; rehabilitate corroded seawalls and/or replace seawalls in poor condition.
23.16	City of Gainesville	Alachua	Wastewater Lift Station/Force Main Resiliency SSO Reduction	Central Gainesville	Increase capacity, redundancy and reliability of wastewater lift station to prevent/reduce the number of sanitary sewer overflows (SSO) during storm/flood events.	\$ 11,865,000.00	0.6	\$7,119,000.00	\$4,746,000.00	3	The project includes improvements to the lift station/force main system to increase capacity and provide redundancy in order to reduce the risk of SSOs resulting from storm events thus helping to protect public health and the environment.

22.75	Palm Beach County Water Utilities	Palm Beach	Western Region Wastewater Treatment Facility (WRWWTF) Operations Building Replacement	Palm Beach County	Construction to replace existing wastewater treatment facility that is vulnerable to flooding.	\$ 7,945,590.00	0.03	\$238,367.70	\$7,707,222.30	3	This is an infrastructure hardening project that will include physical changes to make it less susceptible to operational disruption and damage from flooding and sea level rise. The cost of other recommended improvements were determined to be significant and it was decided that constructing a new Operations Building was economically more feasible and would limit the disruption to operations at the facility. The new Operations Building would be less susceptible to flooding as it will be raised above the flood elevation as the critical building components will be located on the second floor and allow the operation of the wastewater treatment plant to continue during future flooding events.
22.66	Town of Hypoluxo	Palm Beach	Septic to Sewer Conversion in Town of Hypoluxo	Town of Hypoluxo, Palm Beach County	Removal of 2 commercial septic systems adjacent to Lake Worth Lagoon and installation of new connection to sewer system to reduce the potential risk to public health and disruption in wastewater services as a result of flood impacts	\$ 1,437,500.00	0.51	\$733,125.00	\$704,375.00	2	The increased risk of flooding from both more frequent storms and rising water levels now places the remaining septic systems in more danger. The locations of systems are in flood-prone areas, with water only having the Lagoon and the neighboring Hypoluxo Scrub to empty into. The removal of the septic systems will reduce one potential threat that could occur during flooding.
22.25	Alachua County Public Works	Alachua	Pine Hills drainage improvements	Gainesville, Alachua County	Purchase and demolish 2 residential homes to construct a stormwater retention pond to reduce repetitive flooding	\$ 1,345,630.64	0.5	\$672,815.32	\$672,815.32	2	This project area has been identified in the County's 2010 Master Plan as a high risk flooded site. The project will eliminate the 2 repetitive loss residential structures from future rainfall events. The flood elevation has exceeded the finished floor elevation of the two residential structures in Hills of Santa Fe. The floodplain is a static water level that is dependent on rainfall totals in an area with low permeability. During storm events the erosion from the upstream houses is carried to the two structures which are located at the bottom elevation of the hill.
22.25	Palm Beach County	Palm Beach	M-2 Bypass	Eastern Palm Beach County near Boca Raton	Expanding an existing impoundment for flood protection by installing a bypass through the existing levee into the pump station	\$ 389,324.00	0.5	\$194,662.00	\$194,662.00	2	The project will impact a 2,707-acre drainage basin that includes the 120-acre M-2 Impoundment. The area benefiting from the project includes single-family homes, public infrastructure such as roads, District facilities, and critical facilities. The prevention of disruption of traffic by flooded and damaged roads is the main benefit to the area. The duration of flooding extends approximately four days after a major event if there is no additional rainfall, and longer with more rainfall.
22.1	Escambia Board of County Commissioners	Escambia	Surrey-Wishsong Pond, Outfall, and Rehabilitation	Pensacola, Escambia County	Design project to upgrade a pond and improve the outfall to meet current stormwater needs; aim to reduce or eliminate flood risk for up to 10 homes.	\$ 375,000.00	0.9	\$337,500.00	\$37,500.00	1	A County-wide Stormwater Recommendation Report was generated by the Stormwater Advisory Team (SWAT). The report determined that this project should be ranked number 24. A total of 10 properties within the project area have been documented to experience flooding. Escambia County has received multiple resident complaints of flooding a property damage in this area.
22	Alachua County	Alachua	Hills of Santa Fe Drainage Improvements	Hills of Santa Fe Neighborhood, Alachua County	Purchase of 2 homes and up to 4 acres to demolish the homes and construct a stormwater retention pond and pump station to reduce flooding	\$ 1,015,230.13	0.5	\$507,615.07	\$507,615.07	2	This project area has been identified in the County's 2010 Master Plan as a high risk flooded site. The project will eliminate the 2 repetitive loss residential structures from future rainfall events. The flood elevation has exceeded the finished floor elevation of the two residential structures in Hills of Santa Fe. The floodplain is a static water level that is dependent on rainfall totals in an area with low permeability. During storm events the erosion from the upstream houses is carried to the two structures which are located at the bottom elevation of the hill.
22	Town of Montverde	Lake	Infrastructure Flooding Mitigation Program	Town of Montverde, Lake County	Town of Montverde desires to construct storm water retention, detention, collection, and control measures to mitigate potential flooding and reduce the phosphorus nutrient load entering the area lakes. Projects will include curbing and piping to collect storm water run off. The water will be diverted to retention/detention ponds to control flooding. The ponds will be designed to improve water quality before entering the lakes.	\$ 2,000,000.00	0.1	\$200,000.00	\$1,800,000.00	2	The town has visually observed runoff and sediment degradation following severe storm events. These events can cause localized flooding, erosion, and nutrient entry into Lake Apopka and Florence Lake. In addition, algae blooms have become more significant and wide spread. Montverde has witnessed high rain events that cause significant flows of fast moving water, leading to erosion and surface deterioration.
22	Town of Surfside	Miami Dade	Surfside's Collins Avenue Water Main Replacement Design Phase	Eastern Surfside	Town determined that a 70-year-old Cast Iron Pipe water main along Collins Avenue needs replacement due to its deterioration, caused by saltwater intrusion and sea level rise. The Town is seeking grant funding for the design phase of this project to adapt the water main to, and to mitigate against the effects of flooding and sea level rise.	\$340,205.00	36%	\$122,474.00	\$217,731.00	1	This specific water main replacement project is one of several general infrastructure projects that are critical to the Town. The corroded cast iron pipe can lead to a capacity reduction by decreasing in internal diameter and ultimately the collapse of the water main, presenting a significant risk of flooding and interruption of water services to thousands of people. It was determined that due to the age and pipe material, critical infrastructure is at higher risk due to the corrosive environment affected by the coastal proximity and saltwater intrusion.
21	Dixie County Board of County Commissioners	Dixie	Dixie County Airport and Prison Flood Abatement	Dixie County	2 separate projects in 1- design and construction of flood management infrastructure for the airport and prison (\$50k only). A County-wide VA and AP in several phases (1.2 million)	\$600,000.00	17%	\$102,000.00	\$498,000.00	1	This project is specifically targeting flooding of high value regional assets (airport and prison) based on four years of data collection in the area, specific flooding models provided as part of the application.
20.75	City of West Palm Beach	Palm Beach	Flagler Drive Area Underground Utilities Hardening	West Palm Beach	Hardening of the wastewater collection system to mitigate the flow of inflow and infiltration into the system. This project specifically focuses on underground utilities that are exposed to elevated groundwater and flooding conditions.	\$1,500,000.00	50%	\$750,000.00	\$750,000.00	1	Currently the Flagler Drive region of the City of West Palm Beach routinely floods in King Tide season and even when heavier precipitation falls flooding streets, yards, garages and even structures. This primary transportation route runs along the City's waterfront and provides access for a significant amount of business owners, employees and residents. The area is also home to Good Samaritan hospital and its ancillary medical professional community.
20.25	City of Miramar	Broward	Swale regrading	Historic section, City of Miramar	The requested funds will be used toward the installation of drainage swales in the Historic section of City of Miramar. Improved drainage with increased swale capacity. Limitation of regular flooding. Proposed project length is 1 year.	\$75,000.00	0%	\$0.00	\$75,000.00	1	This project improves storage capacity thereby reducing flooding. After a rain, even the road is inundated with water making it difficult to residents to gain access to necessary items.
19.25	Palm Beach County Water Utilities	Palm Beach	Wastewater Lift Station LS 0637 Hardening Improvements	Palm Beach County	Elevating critical components of the wastewater lift station to protect them from flooding, including flood risk identified in a VA at the NOAA 2070 int-high.	\$ 500,000.00	50%	\$250,000.00	\$250,000.00	3	This is an infrastructure hardening project that will include physical changes to make it less susceptible to operational disruption and damage from flooding and sea level rise. The project includes elevating of the critical components, such as access hatches, power supply, and the instrumentation to provide reliability of operation.

19.25	City of Sunrise	Broward	Sunset Strip Drainage Improvement	Sunrise	Design, permitting and construction for drainage improvements identified in the City's SWMP to increase drainage capacity.	\$ 3,000,000.00	50%	\$1,500,000.00	\$1,500,000.00	4	The results of the Citywide stormwater model were used to evaluate the City's drainage level of service and the capacity of the stormwater system relative to permitted discharges. This evaluation showed roadway flooding identified for the 3-year/24-hour storm and the 10-year/72-hour storms. Based on this evaluation, the City meets its drainage level of service for buildings; however, the City does not meet its drainage level of service for all roadways.
					Funded ARPA Projects Total	\$ 730,677,283		\$326,641,132	\$404,036,151		