# 2. Introduction and Background: Why Islamorada Matters?



Over the past decade, Islamorada, Village of Islands ("Islamorada" or "Village") has undertaken several initiatives to implement policies and projects to become more sustainable, improve stormwater management, improve water quality, and address other threats to safety and property within the Village. This Islamorada Matters Plan ("Plan") furthers the Village's commitment to sustainability and sea level rise preparedness.<sup>3</sup>

This Plan evaluates the Village's current level of preparedness and investigates the potential impacts of sea level rise, exceptionally high tides, storm surge and other sea level rise issues. This effort officially launched in April 2014 and was conducted in tandem with a general planning effort being conducted by Monroe County ("County") on sustainability, sea level rise vulnerability and climate change. While concurrently undertaken with the County's planning process, the initiatives discussed in this Plan were developed with specific focus on the Village and its goals.

As vulnerability and sea level rise modeling data were developed for this project, candidate adaptation strategies were developed and publicly discussed, and a series of public meetings were held to help the community understand what Islamorada will face and what can be done to manage the challenges. These workshops were instrumental in understanding the concerns related to sea level rise and addressing community priorities related to adaptation. This Plan incorporates the results of the planning process, including a discussion of the sea level rise modeling done for Islamorada, results of Islamorada's preliminary sustainability assessment, goal priorities developed for the Village, and an implementation strategy with potential funding sources and policy recommendations to implement desired priorities.



#### A) Vulnerability: Geography



Alligator Reef Lighthouse, Islamorada, FL Photo Source: Project Team

The Florida Keys chain of islands is located in the tropics, bounded by Florida Bay to the north and west and by the Florida Keys National Marine Sanctuary ("FKNMS") to the east and west. The municipality of Islamorada is nestled in the center of this chain of islands within Monroe County. Islamorada separates the Atlantic Ocean and Florida Bay by no more than one (1) mile of land at its widest point with an average elevation of just five (5) feet above sea level. This makes the Village particularly vulnerable to more frequent flood events caused by rising sea levels, exacerbated high tides, extreme rain events, and stronger and more frequent hurricanes.

Islamorada consists of five (5) inhabited islands, Plantation Key, Windley Key, Upper Matecumbe Key, Lower Matecumbe Key, and Tea Table Key that are home to approximately 6,119 permanent residents.<sup>4</sup> The combined land area of the Village's chain of islands is approximately 6.43 square miles (4,115 acres) with boundaries extending approximately 18.3 linear miles (including the channels between the islands) from Mile Marker ("MM") 90.9 to MM 72.6 along U.S. Highway 1. The islands of the Village are home to many threatened and endangered plant and animal species.

In addition to the populated islands within Islamorada's waters, there are also several smaller, uninhabited islands adjacent to Islamorada that are rich in history and important natural habitats.

#### **B) Worth Protecting: History and Rare Natural Resources**

The Florida Keys are protected from the rough waters of the Atlantic Ocean by the third largest barrier reef in the world, the only living coral reef in the continental United States. The waters surrounding the Village consist of tidal wetlands, mangrove forests and seagrass habitat, all of which are unique ecosystems that provide food, shelter and nursery grounds to a multitude of fish, crustaceans, marine mammals, reptiles and bird species. A vast majority of the saltwater species found in North America are found in the waters surrounding the Florida Keys.



Florida East Coast Railway, Key West Extension Photo Source: https://psiresearcher.wordpress.com

The Florida Keys also have a unique and rich cultural history. Archeological evidence shows that Native Indian populations inhabited the islands as far back as two (2) to three (3) thousand years ago. The first historical records of the area date back to 1513 when Ponce de Leon passed through the Florida Keys to fill up on fresh water from the Matecumbes before sailing to Europe and Central America. Early settlers came from the Bahamas and New England, ultimately building ships and shipping pineapples, sponges and plundered shipwreck loot to northern markets. It is believed that Islamorada is named "purple island" for what the original settlers saw as they approached the island chain from the sea. Some people

believe the name came from the color of healthy seagrass, others say it was the thousands of native orchids or other native fauna in bloom at the time.

Larger population growth did not occur in the Florida Keys until the 1900s when Henry Flagler built a railroad from mainland Florida to Key West, which opened in 1912. The first road followed in 1928, originally existing in two (2) segments – one



from the mainland to Lower Matecumbe Key and the other from No Name Key to Key West – with an automobile ferry service connecting the forty-one (41) mile gap between Lower Matecumbe and No Name Keys. On Labor Day in 1935, the most devastating and deadly hurricane in Florida Keys history struck, wiping out the roadways, the train system and built environment, and killing almost 500 people. Survivors of the 1935 hurricane were dedicated people who remained and rebuilt the community.

Hurricane derails train, 1935 Photo Source: Original uploader E. Brown

A road spanning the entire distance of the Florida Keys was later constructed and opened in 1938 on the remnant Flagler railway bed. The determination to rebuild after such a catastrophic event led to the rebirth of Islamorada. The population of Islamorada exploded exponentially after World War II as northerners discovered the rich history of the islands, building homes and businesses throughout the Village. The Village has come a long way since 1870 when the U.S. Census showed a total of twenty-nine (29) residents in the Islamorada area (seventy-seven (77) including Indian Key) to its most recent U.S. Census (2010) population of 6,119.

## C) Functionality: Governance & Budgeting

In 1975, the State of Florida legislature recognized the unique environmental sensitivity and mounting development pressures of the region and designated the Florida Keys (Monroe County and its municipalities) and Key West as an Area of Critical State Concern ("ACSC"), one (1) of only four (4) areas in the state. The ACSC Principles of Guiding Development, found in Section 380.0552, Florida Statutes ("Fla. Stat."),<sup>5</sup> limit growth potential in the County and its municipalities by restricting new development, both residential and commercial, to ensure the protection of the natural environment and allow for orderly and balanced growth. This protects natural ecosystems while maintaining safe hurricane evacuation timelines for residents and visitors. As a result, the potential growth of the permanent population in the Florida Keys – including Islamorada – is minor.

Islamorada incorporated as a municipality on December 31, 1997. Under the Council-Manager form of government, the Islamorada Village Council has the independent power to enact local legislation, adopt budgets, determine policies and appoint officers and officials. All policies and decisions must be consistent with the ACSC Principles of Guiding Development.

## **D)** The Built and Natural Environment

The waters of the FKNMS, in Florida Bay, the Gulf of Mexico and the Atlantic Ocean, surrounding the entire length of the Florida Keys (including Islamorada), are designated as Outstanding Florida Waters ("OFW") by the Florida Department of Environmental Protection ("FDEP"). This designation means that these waters are specially protected because of their natural attributes, subjecting them to higher regulatory standards and a greater level of protection with regard to water quality. This special protection limits, and in some cases eliminates, discharges to these waters that would lower ambient (existing) water quality.

Islamorada, known by many as the sportfishing capital of the world, is home to perhaps the world's highest density of professional offshore charter boats, serving as the premiere location for backcountry sportfishing and saltwater fly fishing. This is due in part to the designations of both the coinciding FKNMS and OFW which together protect the unique marine ecosystem as a whole. Additionally, Islamorada has a large amount of parks and open space, including Windley Key Fossil Reef Geologic State Park, six (6) Village parks and four (4) Village beaches.

# Islamorada -By the Numbers

- » 18 miles long
- » ½ mile wide
- » 11,748 total acres (land and water)
- » 51 miles of public roadway
- » 34 miles of paved bike lanes
- » 105 acres of parks
- » 65.3 acres of protected habitat
- » 102.9 miles of water lines
- >> 91 miles of wastewater lines
- >> 5,038 total homes (3,662 single family, 150 multi-family)

Finally, Islamorada's geology and elevation are such that tidal influence is significant due to the porous cap rock of the land. This is a large factor for consideration in a sea level rise planning effort because "barrier" type solutions will provide little benefit to mitigate against tidal impacts.



Islamorada Chamber of Commerce Office/Visitors Center, Islamorada, FL Photo Source: Project Team

### E) Lead by the People: Public Involvement Culture

For Islamorada, public involvement and intergovernmental coordination efforts play a significant role in forming policy and long-range visioning. Coordination of public involvement opportunities is typically initiated by the Village Council and is often in response to input from the public, Village Departments, or other governmental agencies or community organizations. Islamorada's Planning Department acts as a liaison to numerous intergovernmental groups, including advisory boards, councils and committees. These groups are comprised of members of the general public whose volunteer efforts and actions help shape and influence Islamorada's policies, infrastructure and design decisions and social programs.

# Current Islamorada Advisory Boards, Councils and Committees

- Water Quality Improvement Citizens' Advisory Committee
- Parks and Recreation Citizen Advisory Committee
- Near Shore Water Regulation Citizens' Support Committee
- >>> Landscape Advisory Committee
- >>> Historic Preservation Commission

- Local Planning AgencyAchievable Housing
- Citizens Advisory Committee
- Community Development Block Grant ("CDBG") Citizens Advisory Task Force ("CATF")
- Development Review Committee
- >> Youth Council



Founders Park, Islamorada, FL Photo Source: Project Team