

# **Resilient Infrastructure** and Adaptation Program

The Resilient Infrastructure and Adaptation Program, also known as Elevating Our Island Paradise, is the Village of Key Biscayne's vision for preserving our community's quality of life from environmental changes. The resilience program consists of a series of immediate-relief and long-term projects that will help mitigate flooding, underground our utilities, and protect our shorelines. This program takes proactive steps to address our vulnerabilities and reduce risks to our Island Paradise.

# Why Take on This Endeavor?

90%\* of our residents believe that flooding is a problem that should be addressed. This resilience program will protect our residents, their property, and the island's quality of life from impending increases in flooding, rising sea levels, and more severe rain events. Without a measured approach, our community is at risk of life and safety issues, significant damage to property, and decrease in mobility and access throughout the village. The overall goal of this innovative resilience program is to build a stronger, more resilient Key Biscayne.

### Zone 1 Integrated Infrastructure Project

The Zone 1 Integrated Infrastructure Project is the Village's first major resilience program undertaking because it is in the most vulnerable, low-lying area surrounding the K-8 Center and extremely prone to flooding. The project's purpose is to alleviate localized flooding and enhance safety throughout the heart of our village.

The project includes:



Upgrading the stormwater system to significantly reduce the street flooding currently experienced.



Burying the utility lines underground to increase service reliability and safety.



Constructing a new pump station at Harbor Park to collect the neighborhood stormwater, filter it, and discharge with improved water quality into Biscayne Bay.



Rebuilding the roadway within the neighborhood. The road will be slightly elevated and gently sloped into the new drainage inlets that will connect to the improved stormwater system.

\*Village of Key Biscayne Community Survey Findings Report, March 2024





The Zone 1 Integrated Infrastructure Project is in the design phase with construction expected to begin in late 2025. The current cost for the project is approximately \$75 million, and the team is diligently working to refine the design and cost estimates. By leveraging partnerships, grants, Village funding and secured obligations, the Village is consistently making sure costs are mitigated.

Our current funding framework includes the following:









Of the total expected **\$75 million** in cost, \$58 million will be paid for by residents. Of this \$58 million, **\$54 million** in loans and bonds will be repaid during the next 30 years.



The vast majority of residents may expect to pay between \$150 and \$1,200 more a year during the next 20 years in stormwater fees and taxes, depending on the value of their home.

## **Supporting and Shaping Efforts**

Several projects have already been completed as part of the resilience program, including the Immediate Flood Control and Mitigation Projects, the Beach Renourishment Project and the Vulnerability Assessment. The Village is also coordinating with the US Army Corps of Engineers to protect the beach and bay side shorelines.

Upcoming immediate-relief projects are being designed to add two generators to existing pump stations and to begin drainage improvements and undergrounding utilities in the Garden District and Holiday Colony. These projects are currently in the design phase. In addition to ongoing projects, the Public Works Department is performing annual cleaning of drains and regular maintenance of the stormwater system to help prevent severe flooding.

#### **Next Steps**

The Village has stressed the importance of program flexibility. Resident benefits will be evaluated after completing the Zone 1 Integrated Infrastructure Project. This assessment will guide the prioritization and selection of future projects based on their value, cost, and need, ensuring responsible financial and construction decisions.



