# Seawalls on Sanibel Island

Overview Presented to Land Development Committee

February 9, 2021

INCORPORATED

### Brief history of seawalls on Sanibel

- Prior to the City incorporation, seawalls were constructed on both natural bodies of water and human-made bodies of water
- Human-made canals for residential development present by 1958 on east end
- The development regulations following incorporation did not include seawalls as an allowed use
- Seawalls became an allowed use in 1988 limited to man-made canals within Shell Harbor, Sanibel Harbors, Sanibel Isles, Water Shadows and Sanibel Estates Unit IV
  - Lawfully existing seawalls outside of these areas are nonconforming uses
  - Lawfully existing seawalls within these areas became nonconforming structures
  - New seawalls where seawalls are allowed use require a Conditional Use Permit
- Seawalls are not required anywhere within the City of Sanibel
- Seawalls are not an allowed use on most human-made canals or human altered waterways on Sanibel

Figure 1: 1958 Aerial Human-made canal creation and dredging of the Sanibel River

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## Land Development Code

#### Seawalls

- Chapter 78 Definitions
- Section 126-101. Seawalls as accessory structures. Establishes Allowed Use. Conditional Use Permit. Construction Standards.
- Section 126-152. Nonconforming uses exceptions and prohibitions.
- Section 126-172. Nonconforming structures improvement, reconstruction or relocation prohibited; exceptions.
- Section 126-211. Standards for Building Back (reconstruction) of Structures Substantially Damaged by a Natural Disaster. Nonconforming Uses.
- Section 126-212. Standards for Building Back (reconstruction) of Structures Substantially Damaged by a Natural Disaster. Nonconforming Structures.
- Section 126-885. Accessory Marine Structures. Materials.
- Section 126-890. Accessory Marine Structures. Turbidity screening.
- Section 126-891. Accessory Marine Structures. Compliance with state and federal requirements.

#### Alternatives to Seawalls

- Revetments. Sections 126-911 and 126-912
- Erosion Control Structures. Section 126-99





#### Sanibel Isles Seawalls an Allowed Use Variety of Shorelines Existing











Seawalls an Allowed Use Variety of Shorelines Existing





#### Seawalls an Allowed Use vs. Seawalls Not Allowed / Existing Nonconforming Use





Anchors Aweigh Nonconforming Use Seawall



Beach Road / Seahawk / BMRH Nonconforming Use Seawall



#### Seawalls Not Allowed Use East End of Sanibel Island





Bay Beach Zone Seawalls Prohibited Existing Nonconforming Use Seawalls







Existing Erosion Control Structures and Nonconforming Use Seawalls West End of Sanibel Island

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Nonconforming Use Seawalls West End of Sanibel Island



Seawalls Not Allowed Use West End of Sanibel Island









### Current issues

- What materials are acceptable for seawall construction and repair to meet the *Sanibel Plan* and LDC standards?
- Is placing a replacement seawall waterward of an existing seawall consistent with the *Sanibel Plan* and current LDC standards?
- Many existing seawalls (primarily concrete) are deteriorating, reaching a point for the need to repair or replace (with new seawall or alternative shoreline stabilization)
- LDC standards needs to be revised to clarify and update seawall construction standards
- LDC standards need to be revised to include repair and replacement standards



### Examples of deteriorating seawalls



## Stressed and Failing Seawalls



## Seawall Repairs



Mariner Pointe Canal Entrance





Seawall Cap and Reinforcement Pilings Shell Harbor

Vinyl Seawall Shell Harbor

### Timeline

- Mayoral inquiry on the permitting of vinyl seawalls within the City of Sanibel and other jurisdictions within southwest Florida. Department of Community Services memorandum provided to Mayor Ruane dated January 9, 2020.
- City Council initiates the consideration to add provisions to LDC to allow use of vinyl seawalls waterward of mean high water as an alternative means of repairing/replacing existing seawalls. (May 6, 2020)
- Planning Commission discusses potential LDC amendments to allow for the installation of vinyl seawalls waterward of the mean high water line as an alternative means of repairing/replacing existing seawalls. Planning staff presents report on LDC regulations for vinyl seawalls in southwest Florida, and potential benefits and detriments of allowing a new seawall waterward of existing seawall to Planning Commission. Planning Commission passes a request to City Council to authorize Planning Commission to review all the rules and regulations related to repair and replacement of seawalls, not just waterward extensions related to vinyl seawalls, and forward to City Council any recommendations for amendments to the Code. (June 9, 2020)
- City Council directs Planning Commission to have Planning staff review the current LDC regulations pertaining to seawalls and evaluate whether any revisions to the seawall regulations is warranted at this time to ensure the code is current with technologies and alternatives while maintaining consistency with the Sanibel Plan. Natural material alternatives are to be considered in lieu of "grey structures" with guidance from Natural Resources staff. (July 14, 2020)
- LDC Subcommittee. Planning staff presents report on the Evaluation of the LDC pertaining to seawalls. (22 September 2020)
- LDC Subcommittee continued discussion on the Evaluation of the LDC pertaining to seawalls. (13 October 2020)
- LDC Subcommittee. Planning staff memorandum "Comparison of Seawall Materials" presented. LDC Subcommittee recommends allowing use of PVC, composite material, concrete, and metal for seawalls based upon staff memorandum. (10 November 2020)
- LDC Subcommittee. Planning staff presents overview of Seawalls on Sanibel and memorandum "Analysis of Placing Replacement Seawalls Waterward of Existing Concrete Seawalls." (February 9, 2020)
- LDC Subcommittee. Planning staff to present draft amendments to LDC. (March tbd)
- Planning Commission. Planning staff to present draft amendments to LDC with any revisions recommended by LDC Subcommittee. (April tbd)
- City Council. Planning staff to present draft amendments to LDC with any revisions recommended by Planning Commission. (May tbd)