

South Florida Resilient Redesign

City of Delray Beach
Village by the Sea



Site Overview



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MARINA HISTORIC DISTRICT

Primarily developed between 1922 and 1943, the Marina Historic District displays a variety of architectural styles including Mediterranean and Mission Revival, Monterey, Minimal Traditional, Frame Vernacular and Art Moderne. The prominent neighborhood showcases some of the area's most accomplished architects. Built in 1939 and designed by Gustav Maas, the Boyd Building at 840 East Atlantic Avenue is a distinctive example of a large-scale commercial building in the Streamline Moderne style. A prime example of Mediterranean Revival architecture is the Marine Villas, designed by Sam Ogren, Sr. at 110 Marine Way. Consisting of four cottages, the Marine Villas have been immaculately maintained with the original detailing preserved. Located at 60 Marine Way is The Anchorage, also designed by Ogren and built in 1941 in the Monterey style. The cottage at 707 SE 1st Street, relocated from Boca Raton in the 1930's, was designed by renowned architect Addison Mizner (1872-1933). Palm Square is lined by its original cottages from the 1920's and 1930's and maintains its true historic environment. The City of Delray Beach designated the Marina Historic District in 1988.

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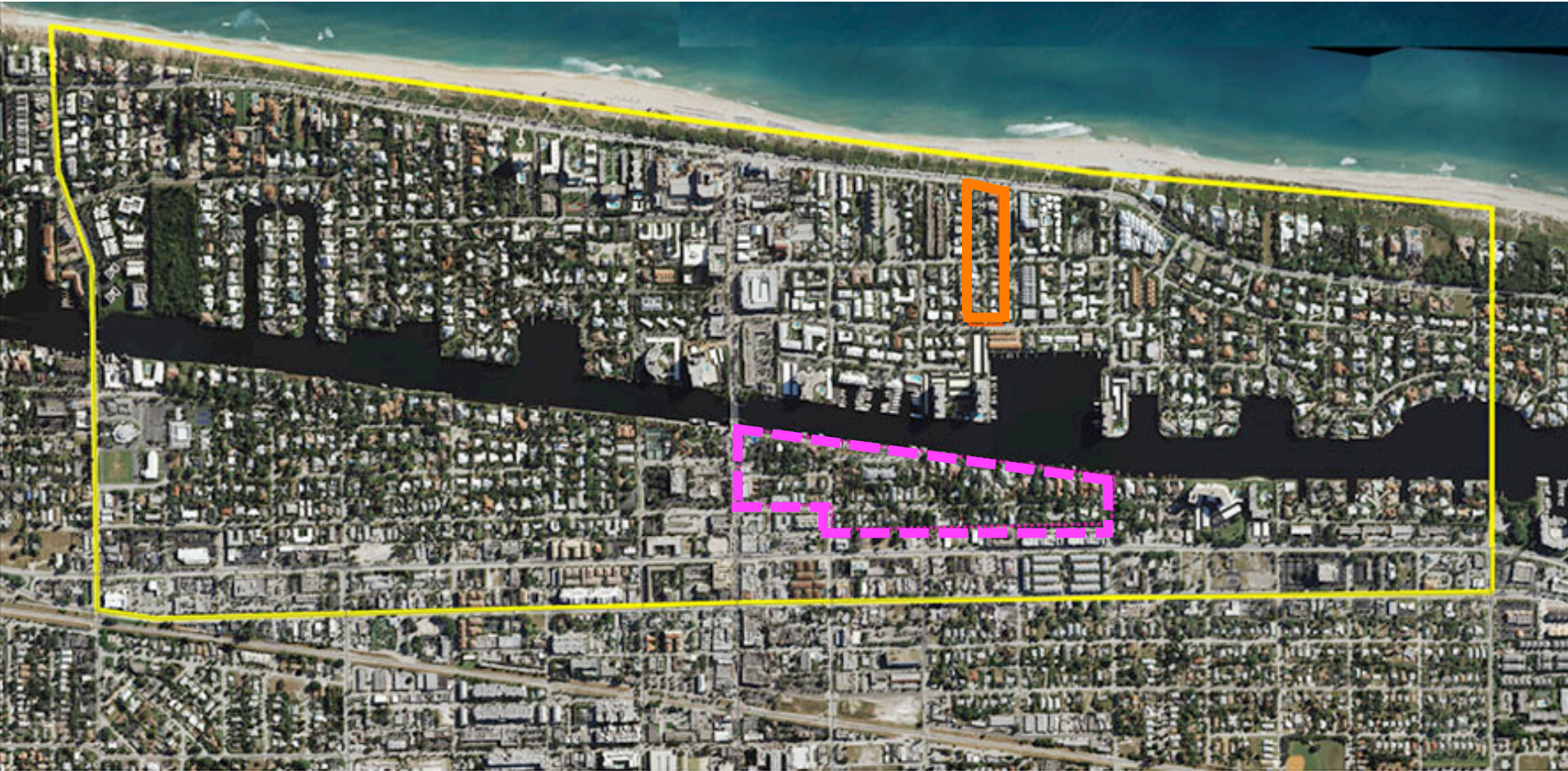


Site Overview

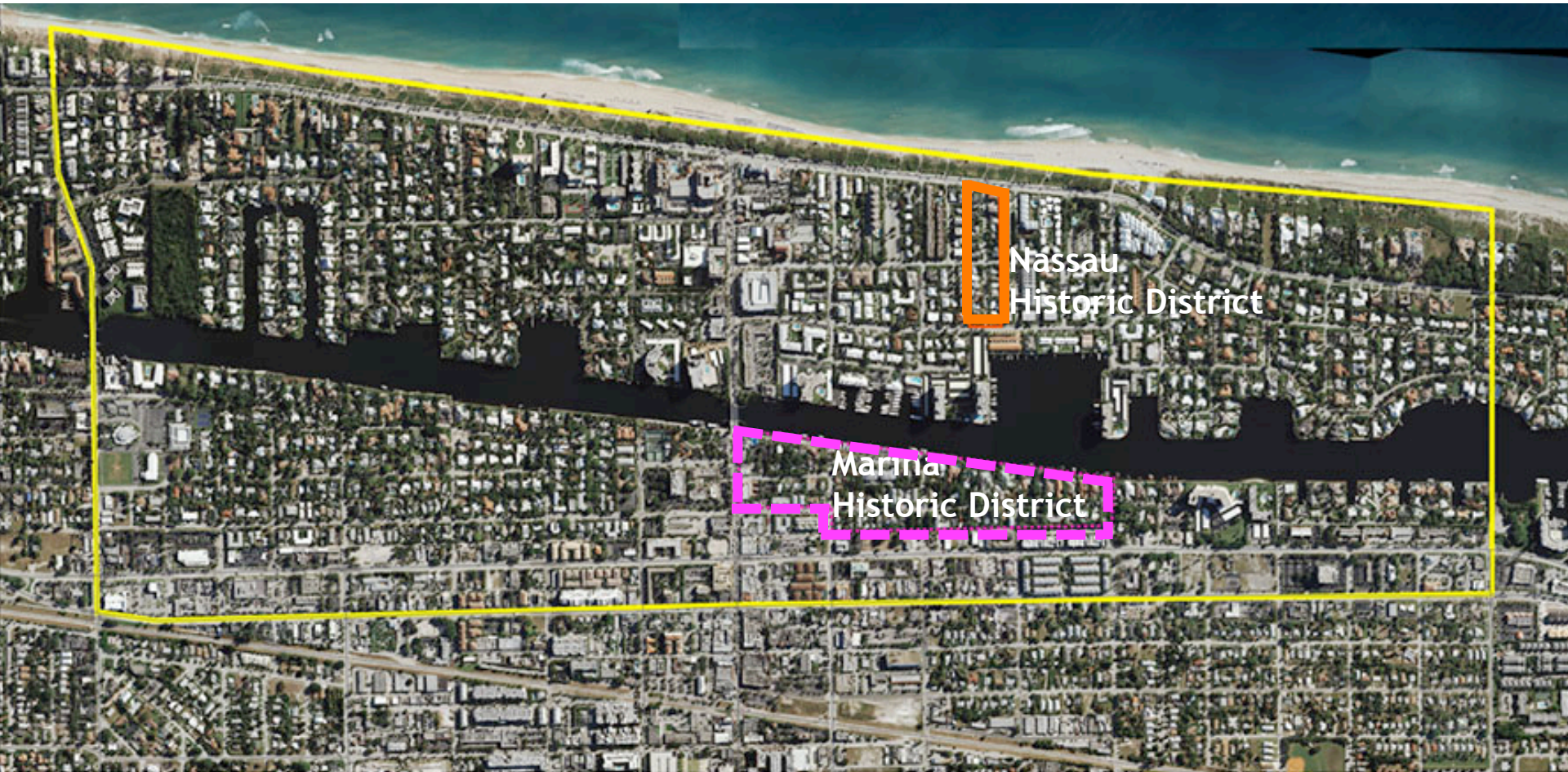
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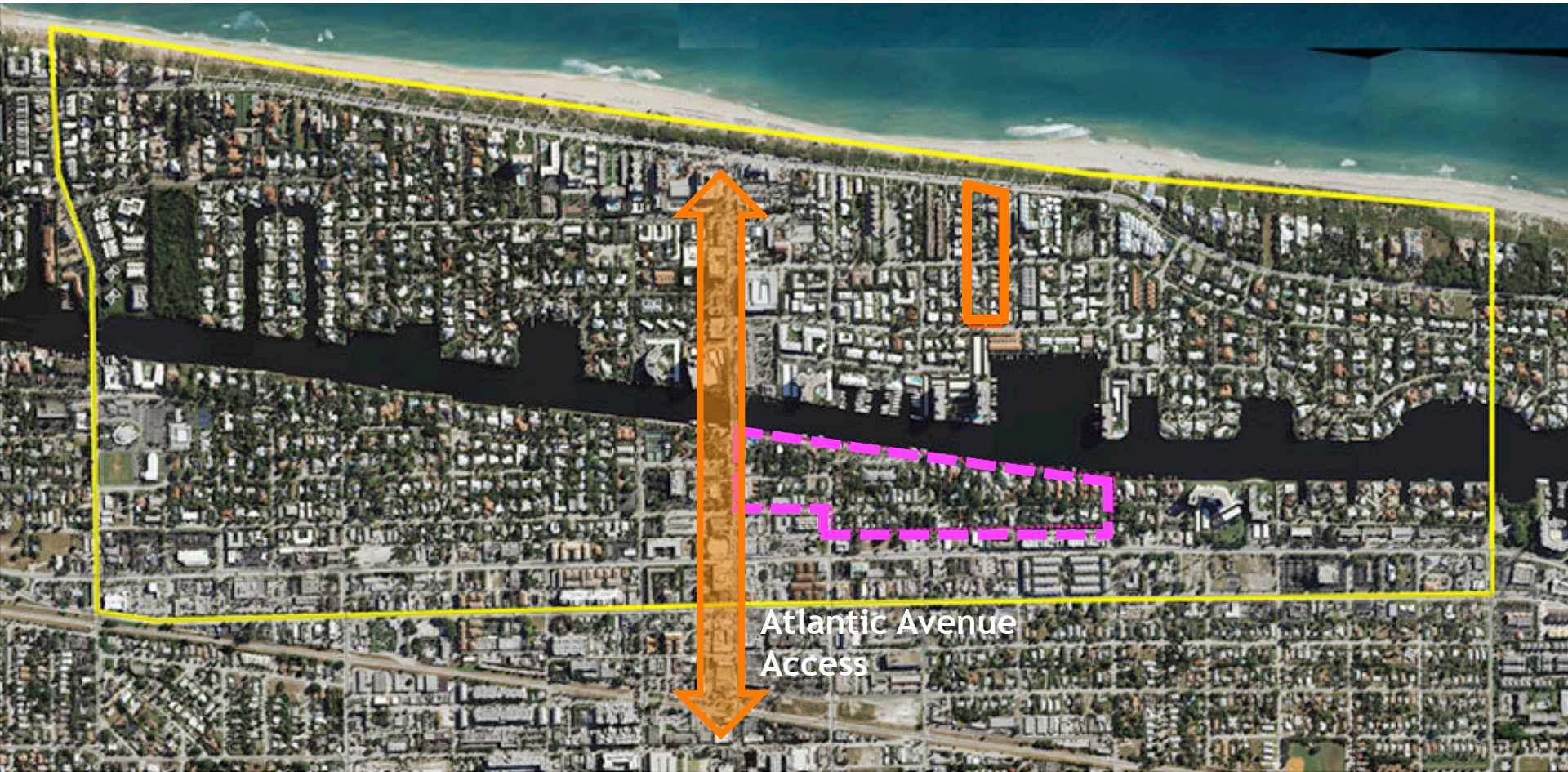
Site Analysis



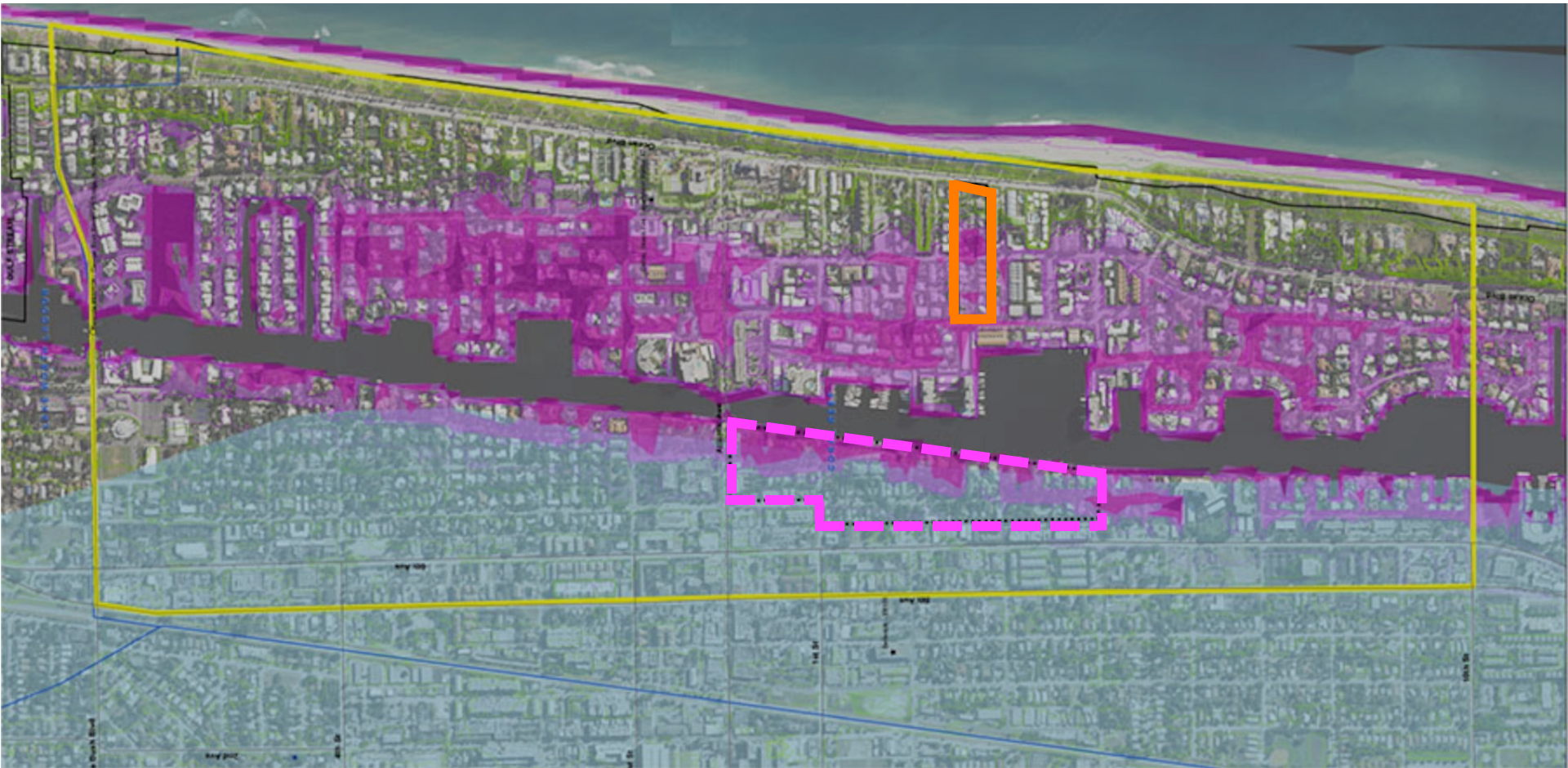
Site Analysis



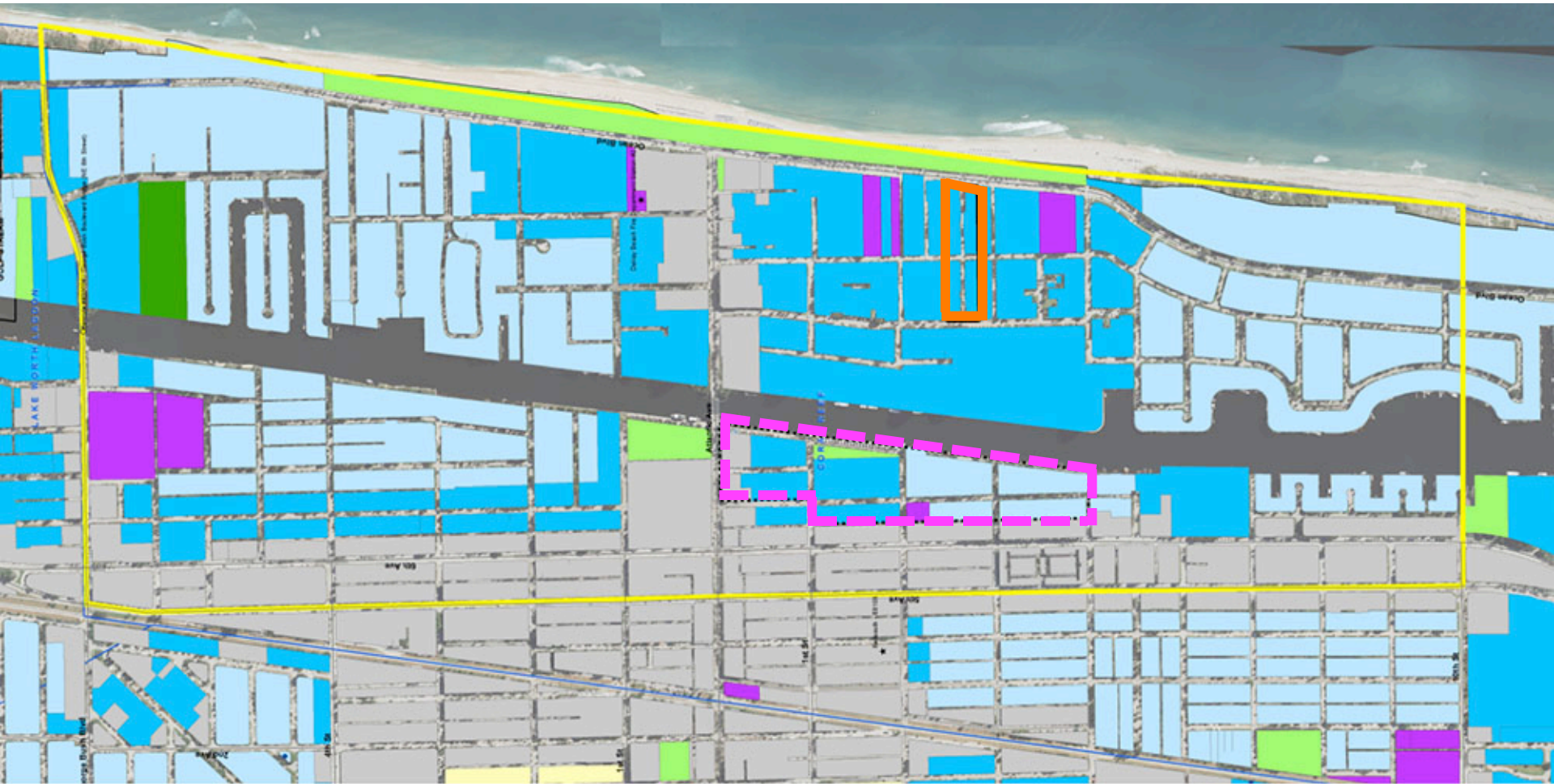
Site Analysis



3' Sea Level Rise (minimum) over MHHW



Future Land Use



Key Community Features

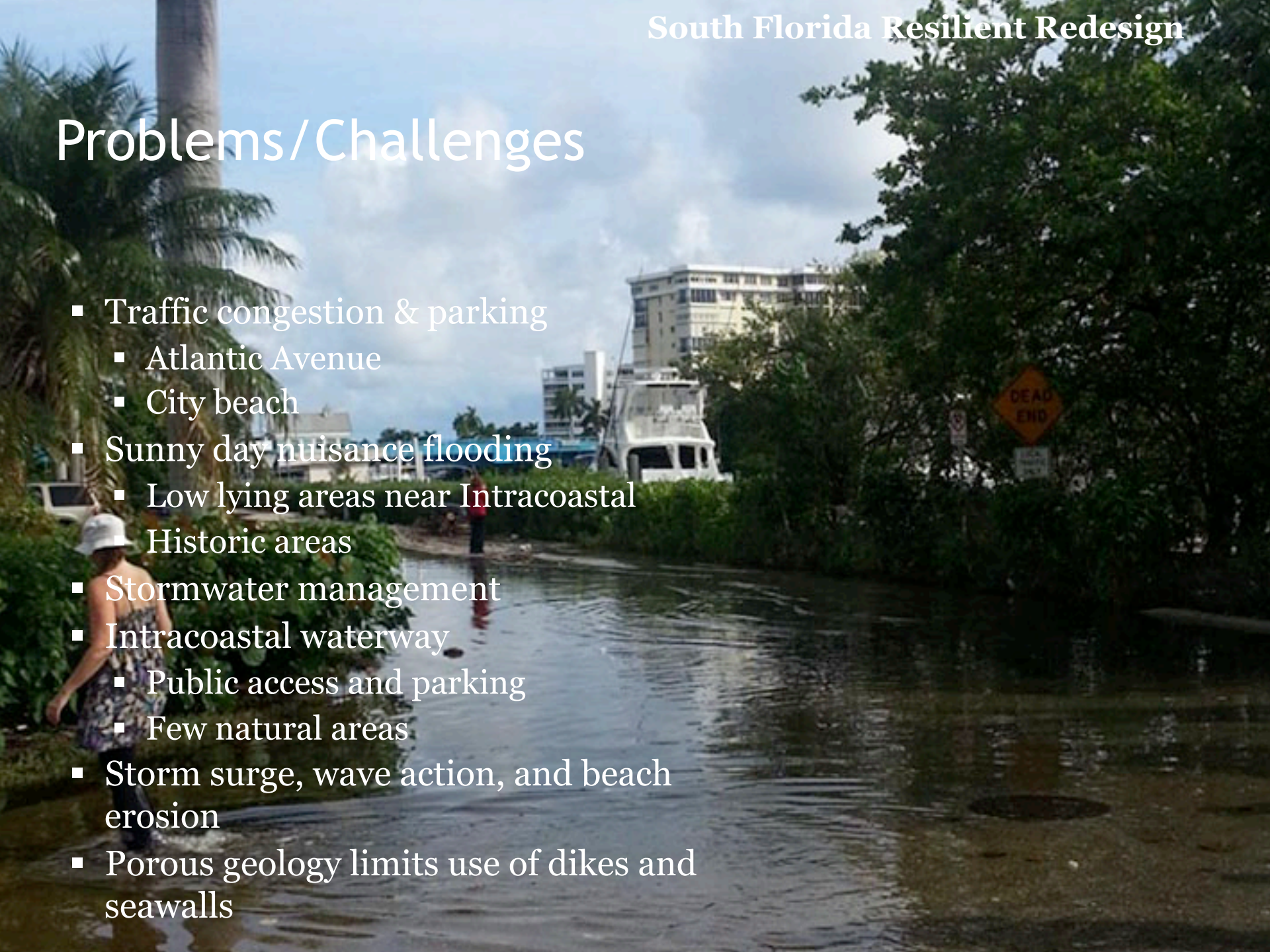
- Attractive seaside character
- Desirable place to live, work and play
- Public beach amenity
- Vibrant mixed use/commercial downtown
- Mix of housing types and opportunities
- Ongoing redevelopment
 - Public - complete streets
 - Private
 - Atlantic Crossing
 - Single and multi-family residential
- Tri-Rail Delray Beach Station / Future FEC passenger service
- Suited for multimodal transportation (Delray Roundabout & the Downtowner, public & private initiatives implemented)

Problems/Challenges



Problems/Challenges

- Traffic congestion & parking
 - Atlantic Avenue
 - City beach
- Sunny day nuisance flooding
 - Low lying areas near Intracoastal
 - Historic areas
- Stormwater management
- Intracoastal waterway
 - Public access and parking
 - Few natural areas
- Storm surge, wave action, and beach erosion
- Porous geology limits use of dikes and seawalls



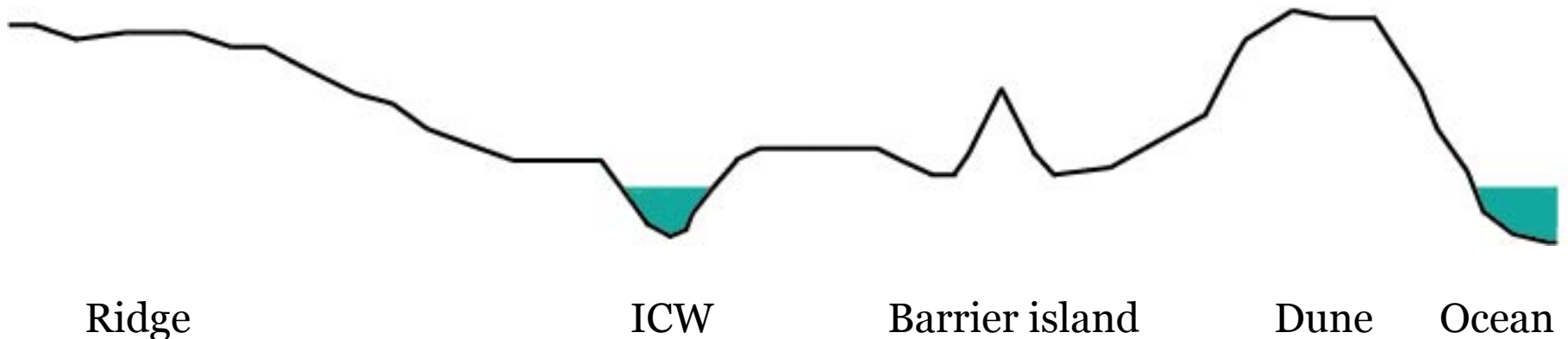
Vulnerability to Climate Change



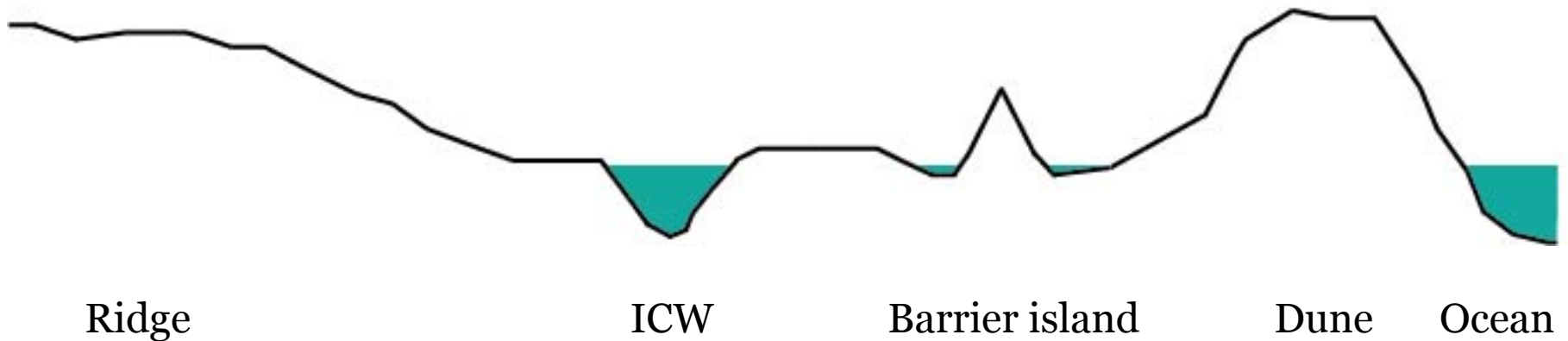
Scenario 1: Do Nothing



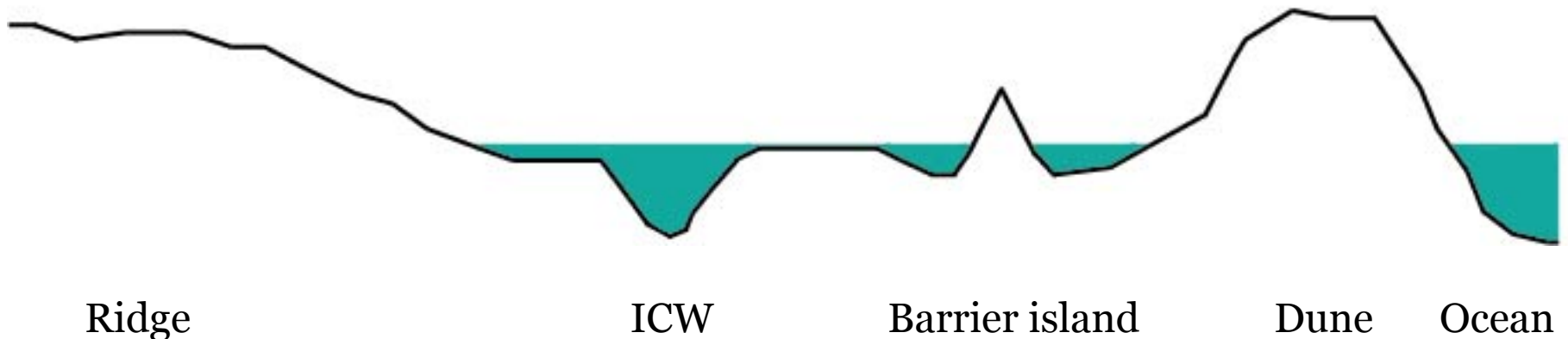
Scenario 2: Incremental Adaptation to 3' SLR



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Scenario 2: Living with the Water



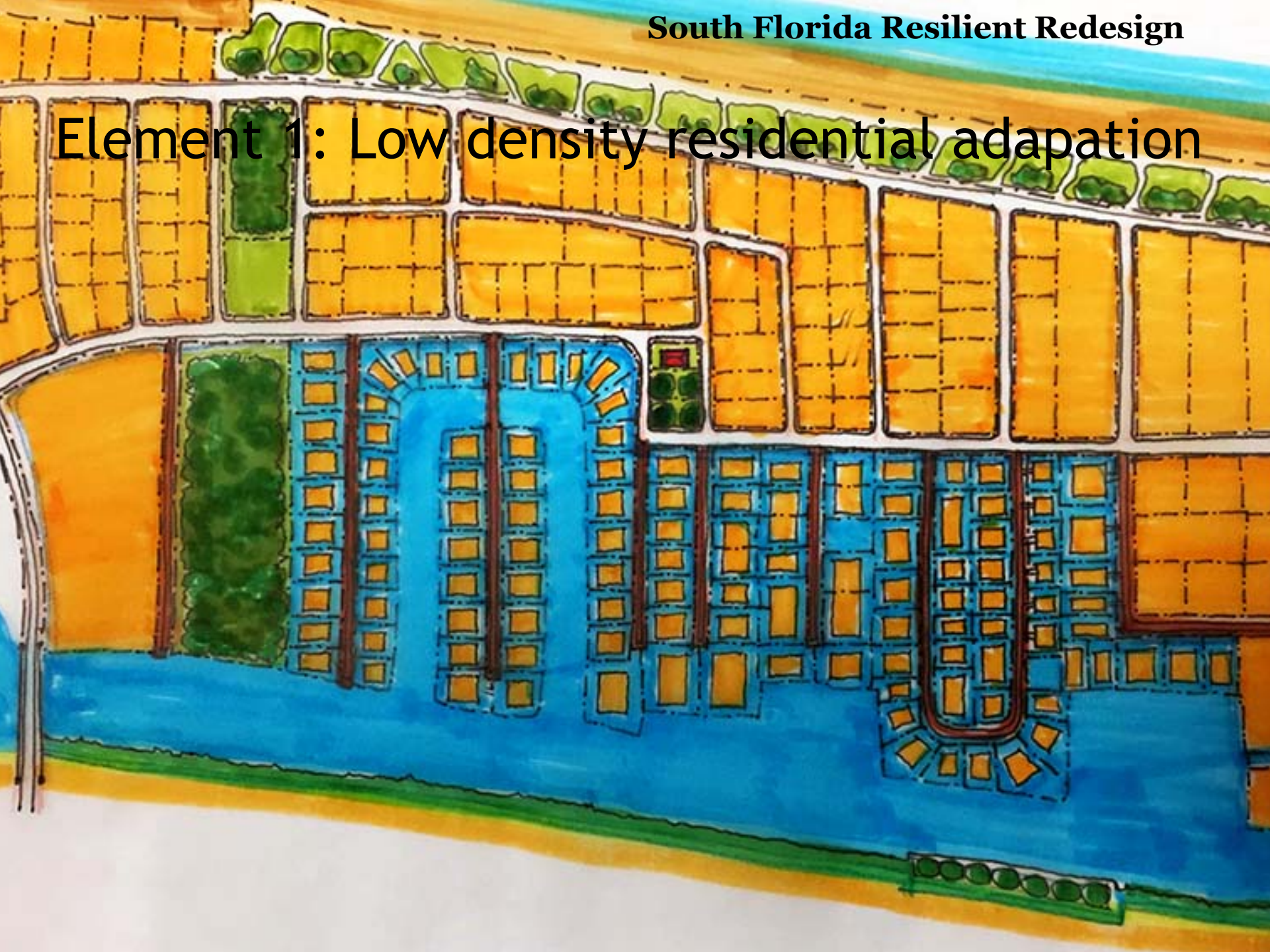
Scenario 2: Living with the Water



Scenario 2: Living with the Water



Element 1: Low density residential adaptation



Current tools

- Comprehensive Plan
 - Coastal element
 - Sea Level Rise element
 - Climate change element
 - Transportation element
- Adaptation Action Areas
 - Overlay districts
- Capital Improvement Plan
 - Infrastructure
- Land Development Regulations
 - Floodplain management
 - Development standards

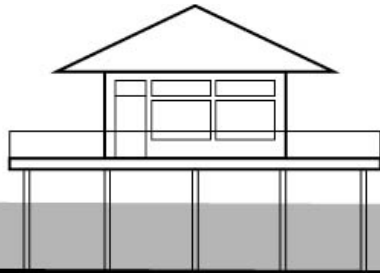


Concepts

- Transition
 - Infrastructure
 - Adaptation and resiliency
- Water storage
 - Collect and store stormwater
 - Below ground, cisterns
 - Onsite wetland
- Overlay districts
 - Historic residential barrier island
 - Historic residential ridge
 - Commercial mixed-use corridor
 - Recreational waterway and ocean edges

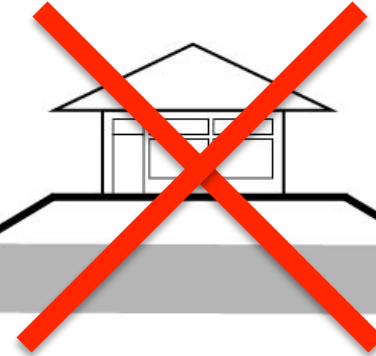
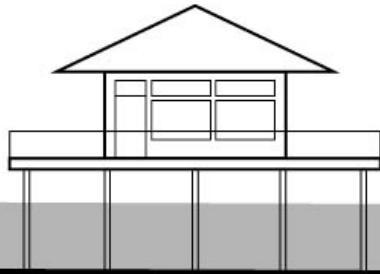


Concepts



- Adapt existing housing
- Provide non-vehicular access to properties in low lying areas
 - limited parking
 - boardwalks and raised access
 - emergency and service access
- Increase freeboard height
 - Convert ICW edge to living corridor/managed wetlands
- Provide incentives to adapt or relocate elsewhere
 - Density bonus or other incentives for private sector adaptation or TDR
 - Public buyout program

Concepts

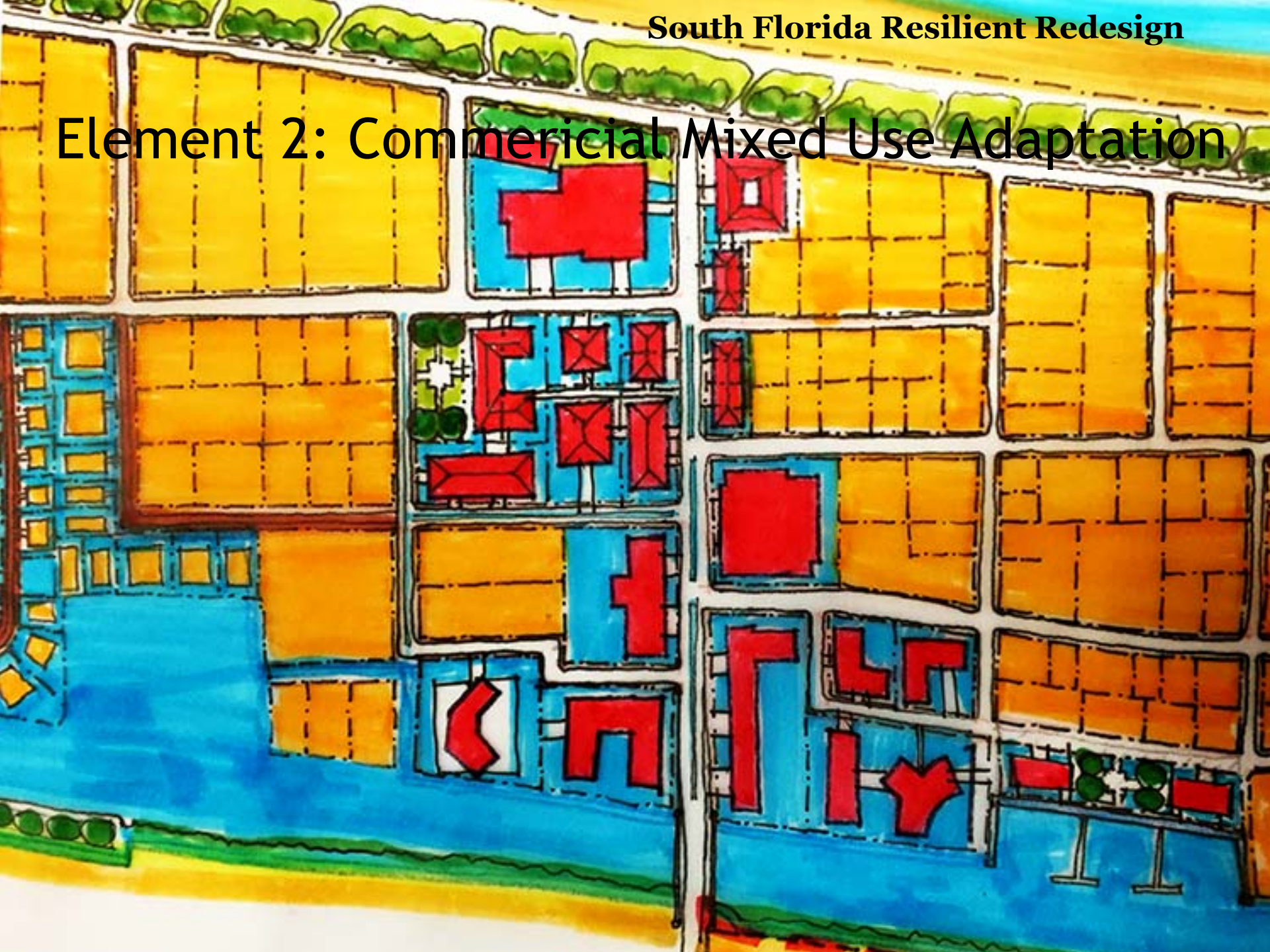


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Local character



Element 2: Commercial Mixed Use Adaptation



Concepts

- Water orientation
- Water as amenity
- Maximize water storage
- New structures on piers
- “Complete Streets”
- “Complete Waterways”
- Transportation improvements
 - Beach to mainland
 - FEC passenger opportunity
 - Monorail or trolley
 - Future personal transport
 - Multi-modal system



Concepts

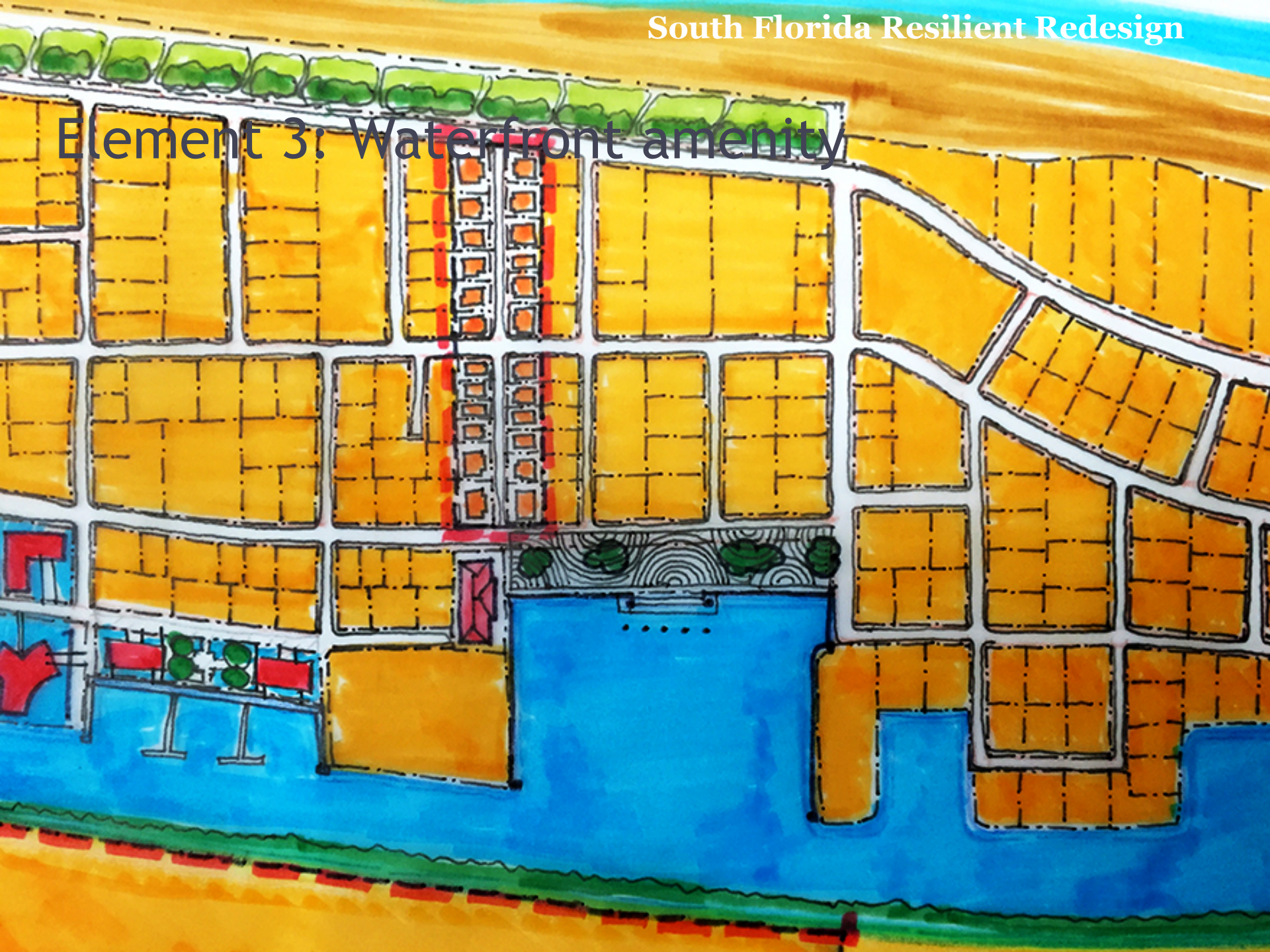
- Maximize water storage
- New structures on piers
- Complete Streets redesign
- Complete Waterways redesign
- Transportation improvements
 - Water taxi / Water bus
 - Bicycles / NEVs
 - Walking/Wheelchair/Segway



Living on the water

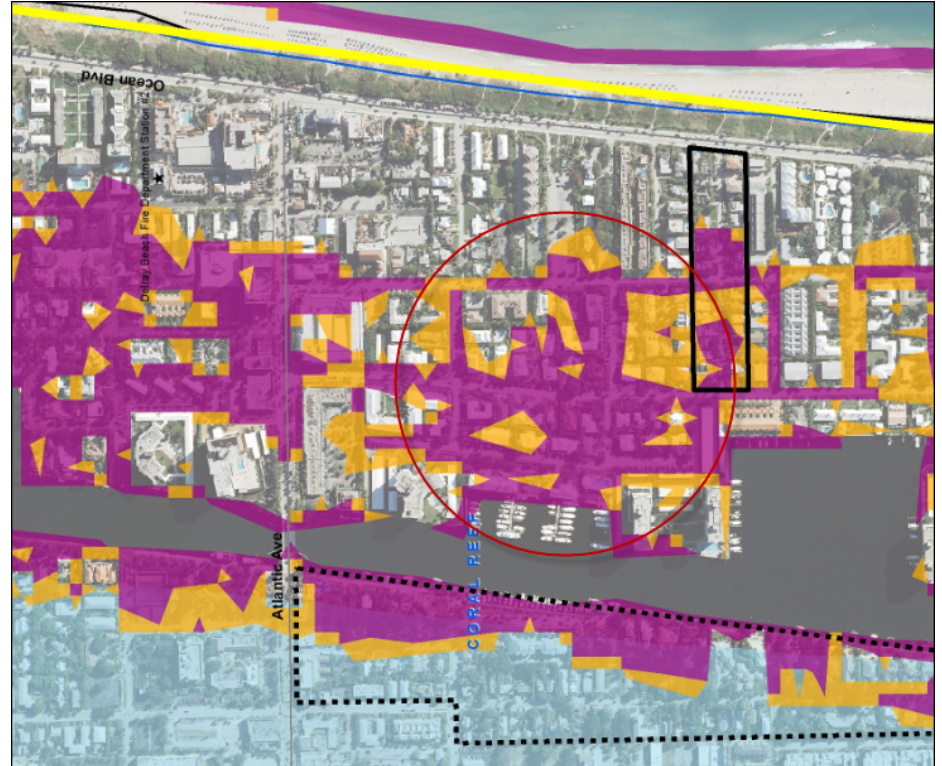


Element 3: Waterfront amenity

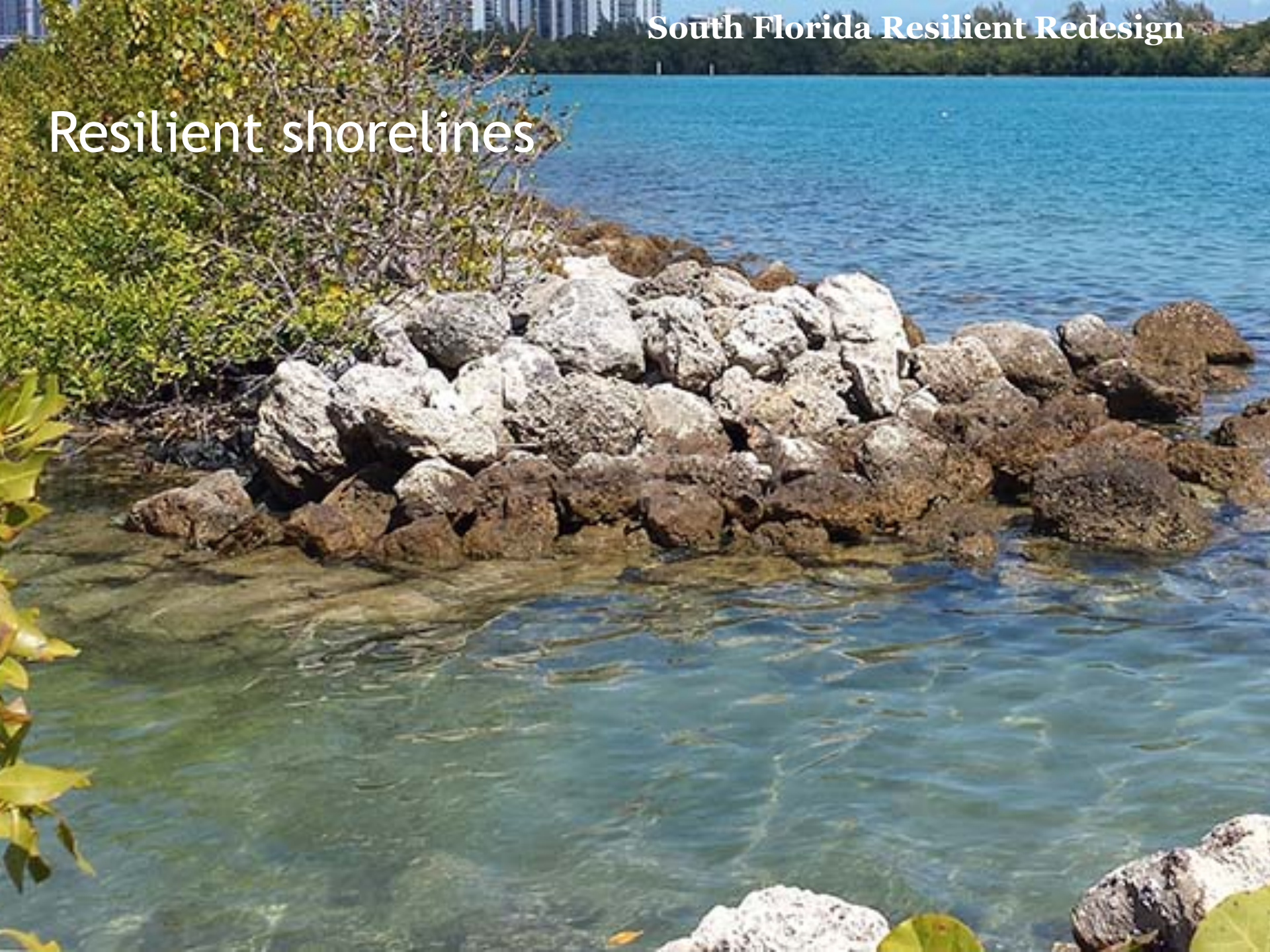


Concepts

- Nassau district
 - Impact on western 2/3
 - Emphasis on historic context
 - Raise structures in place
- Marina district
 - Poor drainage
 - Persistent flooding and street washout at ICW
 - Convert Marine Way to a bio-swale
 - Raise structures in place
 - Relocate at-risk structures to suitable context for a new historic district

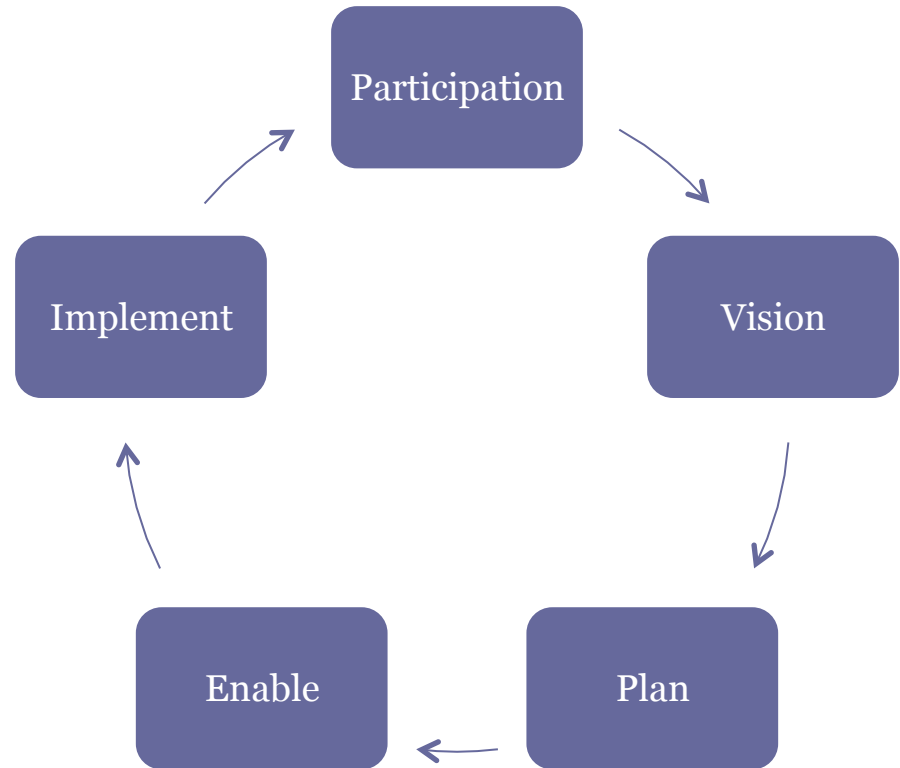


Resilient shorelines



Implementation Plan

- Adaptive strategies
 - Participation
 - Community and stakeholders
 - Process
 - Vision
 - Create Framework
 - Plan
 - Vulnerability Assessment
 - Urban Water Management Plan
 - Post Disaster Recovery Plan
 - Enable
 - Adopt policies
 - Develop tools
 - Implement over time
 - Public infrastructure
 - Business/development sectors
 - Homeowners



SFRR II Delray Beach Team

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