

Captiva Bayside Adaptation Plan RFP

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July 6, 2023





We agreed:

- Competitive bid process
- Wanted to get an RFP out soon

Details about RFP draft sent

- Modeled on recent County RFP
- Drafted unique sections outside of boilerplate legal language
 - General Scope of Project (w goals)
 - Project Background
 - Proposed Deliverables
 - Proposed Timeframe
 - Responsibilities
 - Bid requirements/Scoring

General Scope

- Captiva Bayside Adaptation Plan should:
 - Address storm surge/sea level rise for depth of 3.5 ft NAVD
 - Tipping Point 2 in Aptim Vulnerability Assessment

Projected high tide water levels for 2040 (0.6 and 1.3 feet NAVD) are anticipated to cause minimal flooding.



Water Level Elevation

feet NAVD and above represent significant flooding and disruptive impacts.

Water level elevations of 3.5

The uppermost tipping point is represented by the 100-year flood scenario.

2.3 feet NAVD Tipping Point 1

Approximately 37% of building footprints on Captiva Island may have minor flooding at or near building footprints or below their elevated first floors (less than 1 foot of flood depth) at this tipping point.*

By 2040, this elevation may occur up to 130 times annually (based on NOAA Intermediate-High sea level rise projection).

3.5 feet NAVD Tipping Point 2

At this tipping point, flooding may occur along most of the bayfront parcels, within the mangrove areas and along most of the roads directly south of the library. Flooding along the evacuation route and the north end of Captiva Island where utility infrastructure is located may cause delays for the community and service response.

Whether a result of storm surge, sea level rise, or high tides in the future, water levels at this elevation cause disruptive flooding.

At this tipping point, 71% of building footprints on Captiva Island are vulnerable to minor flooding at or near building footprints or below their elevated first floors with their current conditions. Of these homes, nearly one third may have less than 1 foot of flooding adjacent to them and the majority would have between 1 to 2 feet of flooding. *

By 2040, this elevation may occur up to 26 times annually (based on NOAA Intermediate-High sea level rise projection).

8.8 feet NAVD

Tipping Point 3

At this tipping point, flooding across most oceanfront and bayfront parcels may occur. While this type of extreme event occurs rarely today, with predicted sea level rise by 2070, the anticipated frequency of storm surge of this magnitude is anticipated to occur once every 25 years rather than once every 100 years.

More than 95% of building footprints on Captiva Island would be affected on the island by this point and experience greater than 2 feet of flooding adjacent to or under buildings.*

* Approximately half of vulnerable footprints were built before the flood insurance standard (before 1983). While it is known that all residential homes seaward of the Coastal Construction Control Line (CCCL) built after 1978 were required to have the base floor level elevated, current day elevation certificates were unavailable, and thus, this analysis solely serves as a first order assessment.

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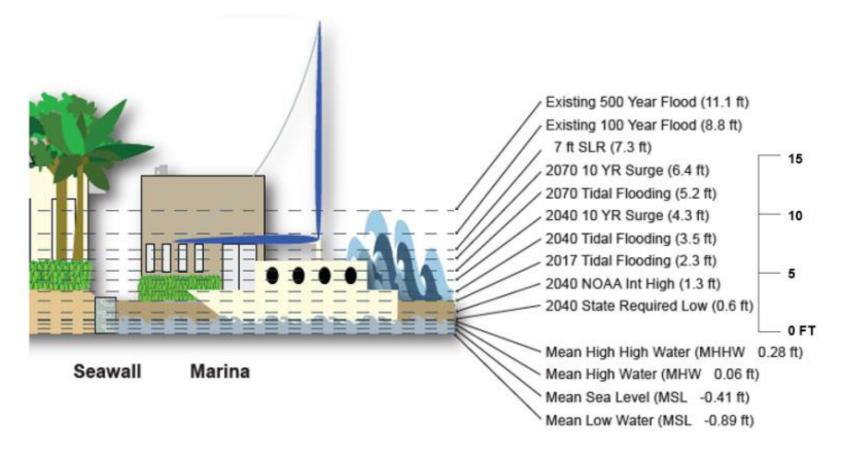


Figure 3. Comparison of Local Tidal Datum Elevations and Flood Elevations

General Scope

- Captiva Bayside Adaptation Plan should:
 - Explore strategies to:
 - Decrease inundation
 - Reduce erosion and subsequent damage from flooding
 - Quickly divert stormwater from the island

Goals

- List prioritized bayside adaptation areas (using VAs and other data) help identify order of implementation
- Assess feasibility of suite of structural and non-structural adaptation strategies

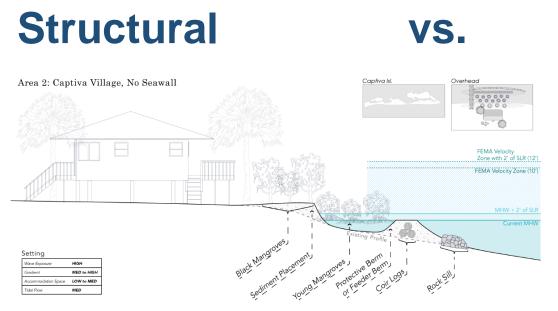


Figure 7. Conceptual adaptation design for Priority Area 2, an area within Captiva Village (see Figure 3)



Non-structural

- Best-management practices
- Proposed ordinances
- Proposed landuse/development changes

Structural vs. Non-structural, example plans

- <u>Punta Gorda</u>, water source vulnerability, Florida friendly landscaping
- Southeast Regional Compact <u>Regional Climate Action Plan</u>
 <u>3.0</u>
- City of Sarasota <u>Climate Adaptation Plan</u>

Goals

- Assess feasibility of suite of adaptation strategies (cont.)
 - Based on guiding principles, include nature-based and hybrid among assessed strategies, prioritize whenever possible
 - Feasibility = permitability, function, cost-effectiveness, fundability, environmental impact, scalability
 - Issue of private versus public implementation will need to be examined closely. Range of solutions to consider/scale
 = private property to sovereign submerged lands

Goals

- Incorporate District, partner, and public input when narrowing to list of final strategies
- Two follow-up products:
 - Structural = design drawings to be implemented in next stage
 - Non-structural = recommendations for implementation
- Final compilation into Plan

Background

- Two parts:
 - General context vulnerability, unique character of Captiva
 - Brief notes on funding source

- Deliverable 1: Kick-off meeting
- Deliverable 2: Assessment priority bayside adaptation areas
 - Task 1 Use VAs to assess vulnerability
 - Task 2 Recommendations of grouping/ranking
 - Task 3 Gather and incorporate feedback
 - Task 4 Final memo with list, written summary of process, maps

- Deliverable 3: Feasibility assessment of adaptation strategies
 - Task 1 Identify suite of potential structural, nonstructural adaptation strategies
 - Minimum 3 per area
 - Consider private versus public

- Deliverable 3: Feasibility assessment of adaptation strategies (cont.)
 - Task 2 Identify grouping of strategies, provide written description, maps

- Deliverable 3: Feasibility assessment of adaptation strategies (cont.)
 - Task 3 Assess feasibility:
 - Permitability
 - Function
 - Cost-effectiveness
 - Fundability
 - Environmental impact
 - Scaleability

- Deliverable 3: Feasibility assessment of adaptation strategies (cont.)
 - Task 4 Visuals for communications
- Deliverable 4: Public Workshops work with partners to facilitate these

- Deliverable 5: Revised final strategy list w/ written explanation of how District, partner, public feedback incorporated
- Deliverable 6: Pilot project design drawings (structural), recommendations for implementation (non-structural)
- Deliverable 7: Assembly previous deliverables into final Captiva Bayside Adaptation Plan

Timeframe

RFP Process	Expected Dates & Times
Advertise Request for Proposal	July X, 2023
Pre-proposal Meeting	End of July/beginning of August
Proposal Question Deadline	8 calendar days prior to deadline; 5:00 PM
Submission Deadline	August 15, 2023; 5:00 PM
First Review Committee Short List Discussion	August 24, 2023; 1:00 PM
Notify Short List Consultants Via Email	TBD; likely within 1-2 days of prior step
Final Review Committee Selection/Scoring Meeting	August 31 or September 7, 2023; 1:00 PM
District September Board Meeting	September 11, 2023; 1 PM

Timeframe

Project Deliverable	Proposed Completion
Kick-off Meeting	First two weeks of October 2023
Assessment of Priority Bayside Adaptation Areas	Mid to end of November 2023
Feasibility Assessment Adaptation Strategies	End of February 2023
Public Workshops	March - April 2024
Revised/Finalized Strategy List for Bayside Adaptation Areas	May 2024
Adaptation Strategy Implementation Recommendations, Pilot Project Design Drawings	June-August 2024
Final Submission of Captiva Bayside Shoreline Adaptation Plan	End of October 2024

Responsibilities

- Outlined some both for consultant and District/grantor
 - Likely need to vet w/ Ralf, explore overlap with other legal language

Bid Process

- Bid Package 5 sections:
 - Qualifications of company, relevant experience, & reference
 - Plan of approach
 - Personnel
 - Price Scoring
 - Required forms (I-9)

Scoring

Criteria	Criteria Description	Max Points Available
1	Qualifications of Company (Tab 1)	35
2	Plan of Approach (Tab 2)	35
3	Personnel (Tab 3)	15
4	Price Scoring (Tab 4)	15
Total Score		100

Anything Else?

- Any questions?
- Any additions?
- Anything specific to how something is captured in the actual document text?