Building Consensus, Building a Shoreline

A Stakeholder-driven Process to Address Erosion along Cedar Key's Daughtry Bayou

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Cedar Key, FL

- Old Florida working waterfront
- Exposed coastal “city”
- Population: 800-1,200
- 5 full-time employees
  - Fire Chief
  - Police Chief
  - City Clerk
  - City Attorney
  - Public Works Director
Coastal Erosion

- Rapid increase in rate of erosion since 1990s
- Previous project attempt in 2008
- Infrastructure & recreational uses threatened, degraded
Hurricane Hermine
Coastal Impacts Catalyzed Discussion
Addressing Coastal Erosion

- UF approached by City of Cedar Key
- Preliminary meeting → FCMP proposal → FCMP grant awarded → Hired Facilitators and Built Project Team

- Stakeholder Visioning Workshop
- Stakeholder Design Workshops
Stakeholder Process

Mix of stakeholders – mix of recreational uses, mix of property vs. non-property owners, City vs. County property/needs

Visioning Workshop Objectives
1. Discuss erosion history in the area and preferences for shoreline uses
2. Learn more about and compared various options for erosion control
3. Narrow down a range of acceptable project types that promise to preserve the shoreline at G Street and Airport Road locations according to preferred uses

Design Workshop Objective
4. Discuss and evaluate specific project designs and build consensus around one preferred option
1: Discuss Erosion History

- **Technique:** Icebreaker – Go-around & Sticky Arrows on Map

- **Technique:** Participatory Timeline with Aerial Imagery
  - **WHY?**
  - Give standing to long-time residents & property owners
  - Give context to newer residents
2: Understand Erosion Control Options

- **Technique:** Golf Cart Field Trip with Informational Handouts
  - **WHY?**
  - Make options tangible and relatable
  - Q&A with expert in informal setting
3: Narrow Down List of Project Types

- **Technique:** Field Trip Debrief – Plenary and in Pairs
  - WHY?
  - Collect narrative information about why certain projects preferred/disliked

- **Technique:** Sticky Dot Voting - 2 top and 2 bottom choices
  - WHY?
  - Failsafe method to gather quantitative information about preferences
**Design Workshops**

- **Technique:** Looking Back, Looking Forward
  - Remind participants what we did last time, get new ones up to speed
  - Give lay of the land for where we want to end up

- **Technique:** Present realistic project design ideas, discussion, scorecard/ranking
  - WHY?
  - Integrate narrative and quantitative feedback
  - Give “expert” information (hopefully) without biasing

### 1) Environmental Service (C- = negative, B = no change, A+ = most improved)

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<th>opt. 1</th>
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<tbody>
<tr>
<td>a) Carbon Sequestration</td>
<td>A-</td>
<td>A+</td>
<td>A-</td>
<td>B</td>
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<td>b) Wave dissipation</td>
<td>B+</td>
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<td>A+</td>
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<td>c) Water quality</td>
<td>A-</td>
<td>A+</td>
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<td>B</td>
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<td>d) Habitat/Biodiversity</td>
<td>A-</td>
<td>A+</td>
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<tr>
<td><strong>Category Average</strong></td>
<td>A-</td>
<td>A+</td>
<td>A-</td>
<td>B+</td>
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### 2) Cost (C- = high, A+ = low)

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<tr>
<td>a) Construction cost</td>
<td>A+</td>
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<td>C-</td>
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<td>b) Maintenance cost</td>
<td>A-</td>
<td>A-</td>
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<td><strong>Category Average</strong></td>
<td>A</td>
<td>A-</td>
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### 3) Project Longevity (C- = shortest time, A+ = longest time)

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<tr>
<td>B</td>
<td>A</td>
<td>A-</td>
<td>A+</td>
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### 4) Likelihood of obtaining external funding (A+ = high, C = low)

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<tr>
<td>A+</td>
<td>A</td>
<td>B</td>
<td>C+</td>
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beach fill

dune species
high marsh

low marsh
Enter: Mangroves!

- Northward creep of mangroves into Cedar Key
- Installation of a living shoreline would increase recruitment of mangroves
- Make or break moment in the workshop process
- Pragmatism vs. purism
Wrap-Up Workshop

**Technique: Workshop Pre-Work – Online Customization Survey**
- Give participants a chance to look ahead at what we will talk about
- Give people who could not attend a channel to provide input

**Technique: Looking Back**
- Summary of process and survey results

**Technique: Present design with highest votes from last workshop, group round-table discussions for customizing/tweaking design**

**Technique: Looking Forward**
- Define how we want to communicate going forward
- Set realistic expectations for timeline
A. G Street – Present Condition

B. G Street – Proposed Project
C. Airport Rd. – Present Condition

D. Airport Rd. – Proposed Project
If you have roughly $385,000 you want to use to fund TWO awesome local projects...

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