

# Co-developing Nature-based Solutions in Refugio County, Texas

## Workshop Summary

Friday, April 14, 9 to noon



TEXAS A&M  
UNIVERSITY  
CORPUS  
CHRISTI

**HARTE**  
RESEARCH INSTITUTE  
FOR GULF OF MEXICO STUDIES



**SANTOS | MCBAIN**

## Workshop Participants

### Advisory Group

Libby Myers	WISD School Board; Texas Parks and Wildlife Department
Kiersten Stanzel	Coastal Bend Bays and Estuary Program
Amy Ancira	Austwell Town Council
Dan Opdyke	Anchor QEA
Geron Gowdy	Natural Resources Conservation Service
Mary Afuso	Regional Resilience Partnership of the South Texas Coastal Bend
Joan Garland	Mission-Aransas National Estuarine Research Reserve
April Conkey	Texas Children in Nature
Molly Rooke	Environmental and Community Advocate
Ann Fierova	Community Development Foundation

### Core Team Members

Robert Blaschke	County Judge <i>Ret.</i>
Arsum Pathak	National Wildlife Federation
Christine (Chris) Hale	Harte Research Institute
Diana Del Angel	Harte Research Institute
Hailey Satterwhite Morrow	Santos McBain

## **Agenda**

- 9:00 **Project overview** (National Wildlife Federation)
- 9:05 **Introductions** (full group)
- 9:15 **Project updates** (National Wildlife Federation)
- 9:30 **Black Point Bayside Living Shoreline Project** (Santos McBain)
- 9:50 **Community survey** (Harte Research Institute)
- 10:10 **Break**
- 10:20 **Group discussion to gather feedback/refine project design, identify engagement and outreach opportunities** (full group)
- 11:20 **Questions** (full group)
- 11:35 **Closing and next steps** (National Wildlife Federation)
- 11:45 **Refreshments**

## Workshop Summary

National Wildlife Federation, partnering with Harte Research Institute, Santos McBain, and Refugio County leadership, convened a 3-hour workshop on nature-based solutions at the Refugio Community Development Foundation. This summary provides an overview of the presentations and participant discussions that took place at the workshop. The format of the workshop included a mix of presentations and large group discussions.

The goal of the second workshop was to engage community experts to share the Bayside Living shoreline project identified during the first workshop, gather feedback on the project proposal and explore avenues for continued engagement and outreach. This workshop is funded through the *Engaging Communities to Design Nature-based Solutions to Mitigate Climate-related Hazards* grant provided by the National Academies of Sciences and Medicine (NASSEM) Gulf Research Program.

### Outcomes

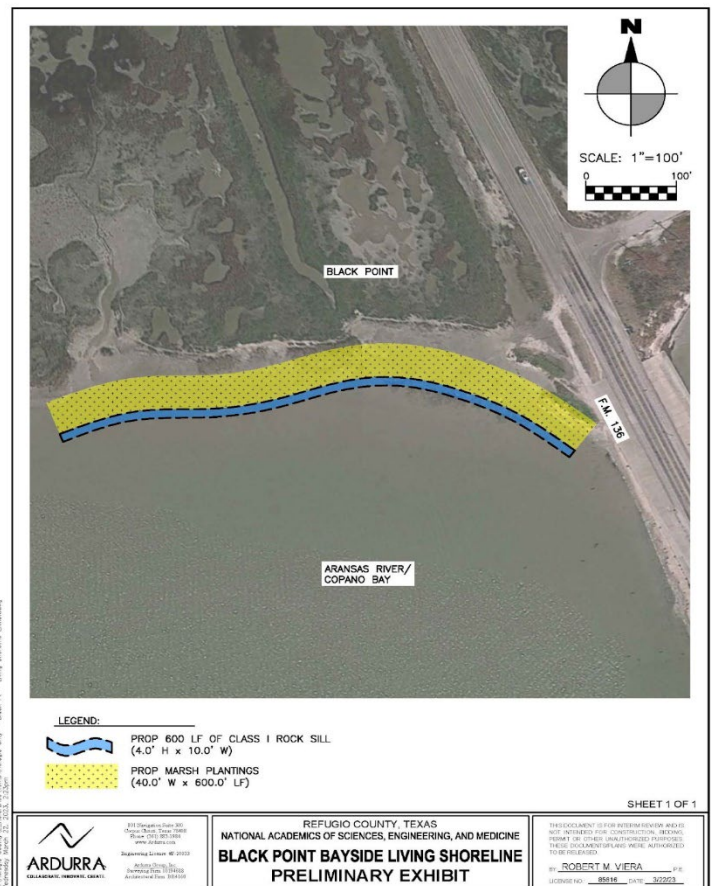
- A detailed understanding of the pros and cons related to the Black Point Bayside Living Shoreline project.
- An understanding of community needs, goals and priorities in the county.
- An understanding of the continued project sustainability and engagement by the advisory board.

### Presentation Highlights

#### Project Summary and Workshop 1 Outcomes

Arsum Pathak provided a short project overview. The purpose of this project was to engage the community, facilitate a conversation nature-based solutions for the county and organize community to support Refugio County's resilience efforts. In addition, a summary of Workshop 1 was presented. The outcome of Workshop 1 were three potential projects of interest, of which *Black Point Living Shoreline Project* had the most votes. The other two projects also considered were the *Mission River Living Shoreline Restoration* and the *East Refugio Nature-based Stormwater Management*.

#### Black Point Bayside Living Shoreline Project



Hailey Satterwhite Morrow, Santos McBain, presented a preliminary design of the Black Point Bayside Living shoreline project. The preliminary scope of work included a living shoreline design that includes a 600 linear feet of rock silt (4' by 10') along with marsh plantings (40' by 60') in the area east of F.M. 136 on Aransas River and Copano Bay in Bayside, Texas. A proposal for continuous planning and feasibility studies will be submitted to the National Academies of Sciences Gulf Research Program.



### **Community Survey**

Diana Del Angel, Harte Research Institute, shared findings from the community survey that captured Refugio County community's values, concerns, and preferences regarding use of natural and public areas. The survey collected anonymous feedback from participants and went live on March 20, 2023. The survey is available on the project's website, was distributed at the Refugio County Fair March 24<sup>th</sup>-25<sup>th</sup> and advertised in the local paper on March 30<sup>th</sup>. HRI received a total of 131 responses as of April 14, and will continue collecting responses through the end of the month.

Survey responses suggest that:

- Residents of Refugio County use natural and public areas in diverse ways and are important to the socio-cultural structure of the county and for health and well-being. Primary uses include social gathering and socializing, exercise, and fishing.
- Some of the most widely used public areas in the county are parks and sports fields. Survey responses also pointed to high interest in areas adjacent to water such as rivers and bays. This was further supported by residents' choices in features of importance, where rivers and streams, bays, and beaches were top of the list.
- There are several amenities and characteristics of a place that are considered and appreciated for example trees, shade, cleanliness, restrooms, and free access.
- Regarding environmental concerns drought is the main concern followed by severe storms, wildfires, and flooding.
- Open ended questions find comments that point to a lack of or degraded facilities, need for trails, concerns for closed parks, trash, water quality, and safety concerns.

### **Large Group Discussion Highlights**

Following the presentations, participants had an open-ended discussion on the project description and community surveys. Detailed notes for this discussion are available at the end of this document. Some common themes that emerged during the discussion include:

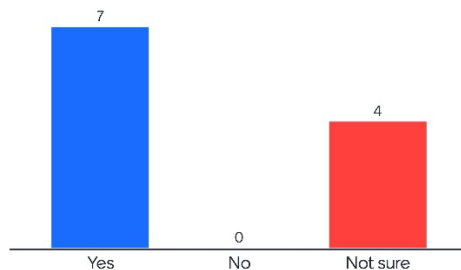
- A majority of participants (7) still prefer Black Point project as the potential NbS proposed for NASEM Phase 2 application.
- Participants expressed the need to align community values with the project design, particularly focusing on education, public access, recreational and community amenities such as parking at the location.
- All participants in the advisory board expressed interest for continued engagement with the majority being interested in stakeholder engagement and outreach (11), followed by monitoring and evaluation (3), and engineering

Each participant completed a mentimeter poll and answered the following questions:



# Based on the project description and community survey, do you still support Black Point Bayside Project for NASEM Phase 2?

Mentimeter



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## How should we align the survey findings with the preliminary project design?

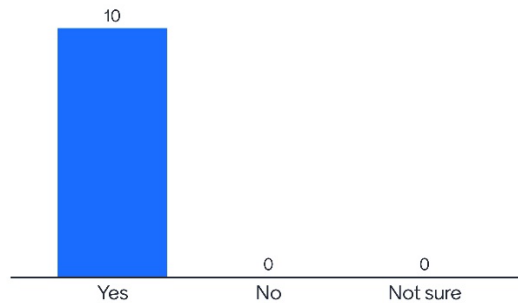
9 Answers


Mentimeter

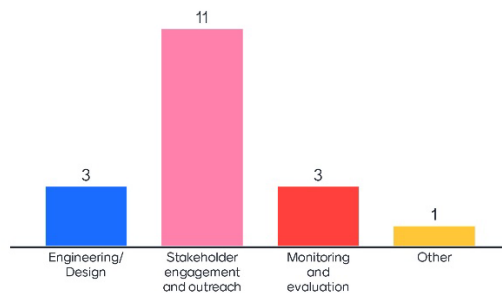
- Focus on storm surge, flooding, mitigation and recreational opportunities
- Incorporate public access and educational signage
- Community values the nature around them. Showing the importance of proactively mitigating the loss of shoreline, waterways, etc.
- Boardwalk for bird watching, Parking/trash issues, Be mindful of kayak access point, Recreational fishing access
- Enhance educational experiences for the broader region and access to these unique coastal areas.
- Continue public access for kayaking, fishing, waterfowl hunting. Include educational signage on living shorelines.
- Expand into school/education opportunities as part of a broader county-wide project. Potentially include utilizing Eagle Creek sewer leakage in Woodsboro.
- Survey findings can help shape preliminary project design to expressed interests & concerns, while keeping in mind that we need to focus on effective nature based climate adaptation & mitigation.
- Add some supporting components like upstream storm water projects, potential long term plans for parking, traffic congestion in the location

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Would you like to continue participating in these workshops for NASEM Phase 2? 



How will you/your organization like to participate in the NASEM Phase 2 project opportunity? 



## Next Steps

The core team decided to continue moving forward with the Black Point project with continued feedback on multiple partners and stakeholders identified during the workshop. Some next steps include:

- Conduct community outreach through another survey to gather feedback on the Black Point project.



- Reach out to key players (landowners, TX DOT, and Texas GLO), and identify additional stakeholders and partners required for project design and implementation.
- Draft and finalize proposal for NASEM Phase 2 application.

## Detailed Discussion Notes

- The survey responses may be a mismatch for the project- there will be a second and specific survey about the project.
- Could the wastewater project be used to support the need for parks in the areas?
- In support: from a regional perspective, this project would be visible to the whole community [as opposed to a local park]
- Further issues related to the implementation of the project (private property) will be issues that all projects face including the wastewater and mission river projects.
- A project survey would be needed. Participant suggested there are many outdoorsmen that use the area. The second survey can be circulated with groups such as CCA, ACA, DU- also a sign at the project sit with a survey link may be helpful for targeting people who use this area.
- Note that these projects [coastal restoration] can take 5-6 years from conception, planning, to implementation.
- An idea would be to have a stormwater demonstration project- maybe next to a school for visibility- Look at Clean Coast Texas. It's a struggle to find places for educational purposes.
  - Example flour Bluff ocean program
- An example of successfully completed project: Bayside wastewater treatment facility
- Eagle Creek runs through school in Woodsboro- there is water quality concerns and a opportunity for a project
- Other flooding issues in North Woodsboro communities
- Participant supports the Bayside project- The project on the right side of the road took years to get traction, work is needed Work with TxDOT to turn this into a destination- add features like a breakwater walk maybe to connect both projects. It will be important to engage the private company A&E to get their support/buy in- to overall stop erosion of the shoreline and would increase the size of the property – may contribute to the success of the ongoing bayside restoration projects
- This can be a site for school field trips- design an educational activity that can be used for regional county schools
- Monitoring is important (perception, education, fishing, economy)
- Important to craft language carefully around climate and SLR- this triggers people to think that others are trying to get into their pockets- Blackpoint is a unique educational

opportunity- we can signal “this is where the shoreline used to be” and can point to the restored/vs erosion sections of wetlands.

- What is missing is input from the youth in the area would this project be of benefit to them?
- Will need to go into the school; create a discussion guide; project lead has contacted school superintendent
- What about scouts? Student council? You have to target groups that operate outside the regular day- would have to be after school
- Matagorda Bay Foundation has a 2 week summer camp with youth- educational components can be added to the phase 2 proposal
- Its work to move forward several ideas- since the implementation process takes so long as you’re pushing one project forward the next has to be on the way.