

Progress Report for Contract # 026
Saving the Integrity of Keller Bay and Sand Point Peninsula

End of Year 2, 4th quarter: July 1, 2024

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Project Summary: Our overarching goal is to protect the unique estuarine resources of Keller Bay by stopping the Sand Point Peninsula from breaching. Our strategy is to develop a living shoreline solution that incorporates public and private partners. Specific objectives include to:

- (1) Identify and model the best actions to stop the peninsula from breaching
- (2) Engage a working group, composed of stakeholders and agencies, to help design and identify a preferred action plan
- (3) Produce engineering/design plans and obtain permits for the Sand Engine

Task 1: Identify and model the best actions to stop the peninsula from breaching

Progress this Quarter: We have finished all sub-tasks.

Next Quarter: We expect to finish writing up the field and modeling results for the report. This report text will be used as a support package for the permit submission (see Task 3 below).

Deliverables:

- (1) High resolution topo-bathymetric map of study area – **completed and already submitted.**
- (2) Wave and flow velocity exceedance graphs for living shoreline design criteria – **completed and already submitted.**
- (3) Maps and videos of future morphologic evolution of study area, with and without various living shoreline alternatives, including a single or multiple Sand Engines – **completed, see download link for these large files in email message.**

Task 2: Engage a working group, composed of stakeholders and agencies, to help design and identify a preferred action plan

Progress this Quarter: Our team conducted several online meetings and informal phone calls between our personnel (4/3, 4/4, 5/3, 5/13, 5/17, 6/20). During these meetings, we discussed: continued hydrodynamic modeling work, work on engineering and design plans, and the beginning of the USACE permit submission process.

The team began to work with the Matagorda Bay Foundation to see the project continue into a future construction phase, beyond the time of MBMT funding. The TAMU portion of the team wrote text for the Matagorda Bay Foundation that was submitted to the Texas General Land Office to fund the first three phases of the construction. The West portion of the team

continued to reach out to agency stakeholders to win support for the design plans. The ASI portion of the team began working with the Matagorda Bay Foundation to submit a permit under their name for these design plans.

Next Quarter: The team plans to hold the second “stakeholder working group” meeting in early summer with the relevant agencies, to show them the final modeling results and to prepare for the USACE Joint Evaluation Meeting (JEM) portion of permitting. We will also deliver rough plans for potential sand engine design to the Texas General Land Office and USACE.

Deliverables:

- (4) Working group meeting recordings – **ongoing**
- (5) Report on working group’s regional strategy and funding plans – **ongoing**

Task 3: Produce engineering/design plans and obtain permits for the Sand Engine

Progress this Quarter: The team began the permitting portion of the project. After consultation with the Matagorda Bay Foundation, the team has almost finalized the engineering design plans.

Next Quarter: Expect to finish the E&D products for all alternatives, share them with stakeholders for their input over the next quarter, and schedule the USACE JEM meeting. We also hope to submit a draft version of a research support package for the permit.

Deliverables:

- (6) 30% E&D plans and alternatives for Sand Engine on state/federal-owned land – **ongoing**
- (7) Coastal Boundary survey – **not started**
- (8) Support package for permitting of Sand Engine – **ongoing**
- (9) Section 404 and other required permits for Sand Engine, 80% E&D – **ongoing**