

Tyndall AFB Stakeholder Working Group/Coastal Resilience Advisory Group Meeting

Meeting Minutes

Date: July 26, 2023

Time: 1:00 p.m. – 2:30 p.m. CST

Location: TEAMS, FSU Panama City Campus, Tyndall AFB

Attendees:

Representatives from the following organizations: United States Air Force (USAF) Tyndall National Disaster Recovery (NDR) Office, The Nature Conservancy (TNC), US Fish and Wildlife Service (USFWS), Jacobs, University of Florida (UF), CDM Smith, Rutgers, Naval Research Lab (NRL), Air Force Civil Engineering Center (AFCEC), US Geological Survey (USGS), US Environmental Protection Agency (EPA) Region 4, Defense Advanced Research Projects Agency (DARPA), Naval Undersea Warfare Center (NUWC), Northwest Florida Water Management District (NFWFMD), Florida Department of Environmental Protection (FDEP), St. Andrews and St. Joseph Bays Estuary Program (SASJBEP), Southeast Regional Partnership for Planning and Sustainability (SERPPAS), Northwest Florida Sentinel Landscape, University of Georgia (UGA), Emerald Coast Regional Council (ECRC), National Fish and Wildlife Foundation (NFWF), Florida Fish and Wildlife Conservation Commission (FWC), National Oceanic and Atmospheric Administration (NOAA), Bay County, US Department of Agriculture (USDA), Defenders of Wildlife, The Water Institute, City of Panama City Beach.

In Person Participants: Jason Bird, Angela Bradley, Lilian Mulligan, Cathy Youngst, Sherry (No Last Name Available), Brian Stahl, Melanie Kaeser, Darryl Boudreau, Keith Bryant, Jon Skaggs, Alec Rodriguez, Maddie (No Last Name Available), Tanya Gallagher, Scott Jorgenson, Tiffany Bates, Eric Christianson, Daryal Danley, Jessica Graham, Ryann Rossi.

Online Participants: Brandon Rocker, Garey Payne, Alina Maruniak, Kelly Blake, Chief Peter Sartori, Matt Lambert, William Chavez, Katie Konchar, Maj Danny “Frosty” Gill OSS/DO, Mike (No Last Name Available), Jonathan Feldman, Carter DuVal, Tunch Orsoy, Jeff DeQuattro, David Bushek, Jocelyn Borcuk, Stephanie (No Last Name Available), Melody Ray-Culp, Rick Durbrow, Erica Felins, Jake Goodwin, Jonathan Brucker, Simeon Yurek, Don Kingery, Heidi Stiller, Addie Thornton, Becca Hatchell, Catrina Martin, Kent Wimmer, Jim Roncaglione, Rekesha Wilkerson, Lt Glenn, Krys Garay Rodriguez, Andrew Altieri, Christine Gralher, David Bell, Christine Shepard, Jim Muller, Robert Bendick, Gary Stuffle, Patricia Kelly, Michael Sharp, Raffaele Marino, Edwin Wallace

The objective of this meeting was to inform stakeholders of the resilience work being performed near Tyndall AFB.

Meeting Summary

- Dr. Jessica Graham (SASJBEP) started the stakeholder working group/coastal resilience advisory group (CRAG) meeting. Those present at the meeting introduced themselves.

CRAG Update

- Mr. Garey Payne (USAF) presented on the timeline of the creation of the coastal resilience program at Tyndall AFB.
 - October 2018 Hurricane Michael hit the base leading to the demolition of buildings due to damage. This led to the use of nature based solutions (NBS) around the base.
 - There are four pilot projects funded by the Readiness and Environmental Protection Integration (REPI) program. Design is in progress with construction anticipated to begin in FY24.
 - Tyndall has received \$10.45M in funding for the pilot projects in total.
- Pilot projects include living shoreline (funded by REPI), seagrass enhancement (RESTORE), oyster reef breakwater (REPI), DARPA Reefence, submerged shoreline stabilization (REPI), and coastal dune restoration (funded by AFCEC, led by USFWS)
- Phase 3 - Coastal Resilience Implementation Plan (CRIP) was discussed.
 - Part of the plan was to model sea level rise (SLR) at Tyndall. The models predict 7 ft SLR through 2100.
 - New facilities in certain locations must have finished floor elevations above flood levels, at approximately 14 ft to 19 ft elevation.
 - Visions and objectives were developed with the CRIP. These objectives aligned with 3 of the 5 Department of Defense Climate Adaptation Objectives. Those that did not align are not focuses of the CRIP.
 - NBSs are the first line of defense at the base. Tyndall would prefer to avoid “grey” infrastructure solutions where possible.
 - NBSs don’t prevent flooding but help reduce erosion and storm surge by reducing wave energy and stabilizing the substrate.
 - Tyndall aims to continue using NBSs through 2100 with the help of partnerships with organizations.

TNC and Jacobs Tyndall Nature Based Solutions

- Katie Konchar presented on the projects lead by TNC in partnership with Jacobs
- 4 NBSs in the project plan
 - Living shoreline, seagrass enhancement, oyster reef breakwater, submerged shoreline stabilization.

- Key objectives are to provide wave attenuation and mitigate shoreline erosion, and provide habitat.
- Grants and awards that are funding the projects include:
 - RESTORE (\$500k) – Executed
 - 2021 REPI Challenge (\$4.8M) – Executed
 - FY21 REPI Program (\$3M) – Executed
 - FY22 REPI Program (\$1.2) – Dedicated (committed)
- Each project was discussed in more detail:
 - Living Shoreline: 1,000 ft of structure planting, approximately 600-1000 feet from the shoreline in 8-12 feet of water depths, 25-year design life.
 - East Bay Living Shoreline and Seagrass Project (RESTORE): 5-acres of seagrass enhancement, 0.25 linear miles of shoreline, design life not specified.
 - Oyster Reef Breakwater: 1,500 ft structure length, 300-800 feet from the shoreline in 4-6 ft of water depth, 25-year design life.
 - Submerged Shoreline Stabilization (Buck Beach): 3,500 ft structure length, 200-1,000 feet from the shoreline in 4-12 feet of water, 50-year design life.
- Approximately 15 metrics will be monitored over time, including reef height, oyster density, water quality, marsh extent, and shoreline position, among others.

USFWS Coastal Dune Restoration

- Melanie Kaeser presented on the Coastal Dune Restoration project lead by USFWS.
- Funded by AFCEC.
 - One agreement with UF for research, design and implementation
 - One agreement with EarthBalance for seed collection, propagation, and planting
- Recreate the dunes that were destroyed by Hurricane Michael
 - Looking at various dune sizes, gaps between dunes, plant ratios and spacing
- EarthBalance collected and is propagating sea oats, bitter panic grass, and beach elder.
- Vegetation will be planted and sediment experiments will be conducted using artificial wrack and shell hash at Shell Island and Crooked Island West.
 - 17 plots for experimental monitoring and paired control plots

- Planting is set to occur between December 2023 and January 2024. Progress and survival will be checked at 30-, 60-, and 90-days.
 - Documenting growth and sand accumulation.

St. Andrews and St. Joseph Bays Estuary Program

- Dr. Jessica Graham presented on the SASJBEP..
- Working with local government and citizens to find a balance between the needs of the estuary and the needs of the community.
- 8 priority issues across the St Andrew Bay watershed.
 - Community engagement, recreational opportunities, stormwater (flooding), wastewater, habitat loss, sediment, nutrients & pathogens, changing environmental conditions.
- Close to completing a Comprehensive Conservation Management Plan (CCMP) to outline the who, what, why, how, funding, etc. of projects. The final release of the CCMP is anticipated by February 2024.
- Some of the research projects include seagrass awareness and protection, assessing restoration success and ecosystem services, living shoreline suitability analysis, microbial source tracking, nutrient source tracking.

NW Florida Sentinel Landscape

- Kent Wimmer presented on the Northwest Florida Sentinel Landscape
 - Encompasses all of the Florida Panhandle.
 - Goals are to protect base missions, working lands, and listed species habitats.
- Working with partners to develop project to accomplish one or more of the above goals in the Sentinel Landscape.
 - Work with partners for conservation in the Florida wildlife corridor
 - Focused on Northwest Florida where jets frequently fly.
- Reviewed FY22 accomplishments which include: partners provided \$21.7 million conserving 11,108 acres, partners enrolled 36,984 acres of private land, and other coastal resilience projects and proposals.
- Reviewed FY23 accomplishments to date which include: 15,346 conservation acres acquired for \$44.2 million, 32 Florida Forever projects targeting 528,000 acres, and \$14 million awarded for climate and coastal resilience projects, among other land conservations.

Stakeholder Announcements and Discussions

- Jonathan Brucker – DEP, Manages St Andrew and St Joseph Bay Aquatic Preserves

- Office is working with other organizations to plan a large-scale seagrass restoration project around St Andrews Aquatic preserve. This will be at no cost to the state.

Next Steps

- SASJBEP will be the future coordinator and facilitator of these meetings.
- Stakeholder working group/CRAG meeting frequency was discussed.
 - Mr. Payne discussed how the Coastal Resilience Advisory Board (CRAB) meeting occurs monthly. Since all projects are in the design phase, a semi-annual CRAG/stakeholder meeting may be sufficient. This can change frequency once the projects begin to pick up and enter construction.
 - Mr. Payne can invite any interested parties to be a part of the monthly CRAB update which is often an email update while in the design phase.
- The next stakeholder working group meeting is tentatively scheduled for the mid-late January.
 - Dr. Jessica Graham will coordinate this meeting.