



Protecting Southwest Florida's unique natural environment and quality of life ... now and forever.

We need all hands on deck to help create a more sustainable storm resilience plan for Collier County.

The U.S. Army Corps of Engineers is now seeking public input for their "Collier County Coastal Storm Risk Management," (CSRМ) feasibility study. The purpose of the study is to recommend a plan to reduce the county's risk from storm surge and improve coastal resilience.

The Conservancy of Southwest Florida is urging all citizens to participate in this vitally important storm resilience planning process that will forever shape the future of Collier County's coast. The public has limited time and opportunities to urge Collier County and the Army Corps to ensure that our world-renowned coastal resources, tourism, and our local way of life are safeguarded.

The Conservancy is encouraging property owners and businesses, recreational and commercial anglers, ecotourism outfits, hoteliers, restaurant owners, natural resource managers, and local scientists and engineers, among others, to attend the meetings and provide input.

It is important to understand that once a draft plan has been created, the County's ability to significantly modify or change the plan is unlikely. Please TAKE ACTION by participating in the public meetings and by contacting your commissioners with the elements that are most important to you in a storm resilience plan. The future of Collier County depends on YOU!

HOW YOU CAN PARTICIPATE: (to be hyperlinked)

- **VIRTUAL MEETING - April 18 - 4:00 pm to 6:00 pm** via Zoom.
- Please register for the meeting at the following link:
https://us02web.zoom.us/webinar/register/WN_F50-0-gSskKdjtR57VWPEQ#registration
- **IN PERSON MEETING - April 26 - 5:30 pm to 7:00 pm** at South Regional Library, located at 8605 Lely Cultural Parkway. (Brief presentation, followed by an open-house-style forum)
- **SUBMIT WRITTEN COMMENTS** - here: <https://colliercsrм-usacnao.hub.arcgis.com/> or email here: Collier-csrм@usace.army.mil

Please participate in as many of these meetings as you can, and submit your written comments!



Conservancy of Southwest Florida has been awarded Charity Navigator's prestigious 4-Star top rating for good governance, sound fiscal management and commitment to accountability and transparency. Charity Navigator is America's largest and most respected independent evaluator of charities.

The following are ways in which you can TAKE ACTION:

Urge Collier County officials to request a locally supported option at the public meetings.

Without a locally supported alternative, the future character and landscape of our entire coastline will be decided by engineers based out of Norfolk, Virginia and Jacksonville, Florida.

Will their vision for our future align with what our community wants?

Encourage Collier County to insist that local experts are at the table at all stages of the plan development.

Local knowledge and preferences should drive all resilience and adaptation planning for Collier County.

Collier County is fortunate to have an abundance of experienced scientists and engineers from our own backyard who understand Collier County's unique coastal geology, hydrology, coastal habitats, and climate change risks.

Let Collier County and the Army Corps know that you strongly support nature-based solutions and natural and nature-based features.

Nature-based solutions for coastal protection are strategies that use **natural systems** to protect us from wind, waves, storm surge, flooding, and erosion.

Examples of nature-based solutions include: **Mangrove preservation, planting and restoration, oyster reef restoration, salt marsh restoration, and dune restoration.**

Artificial reefs are examples of hybrid approaches that combine natural solutions with engineered solutions.

Living shorelines, living breakwaters, and barrier islands are other examples that may use hybrid approaches for coastal protection.

Insist that the Multiple Line of Defense Strategy be a focus of the CSR.

A Multiple Line of Defense (MLODS) strategy is a multi-layered approach to coastal resilience, which includes a combination of several features to reduce coastal storm risk. MLDOS could often combine "gray" (hardened) and "green" (natural) infrastructure to improve resilience, while providing habitats and maintaining a healthy coastal ecosystem.

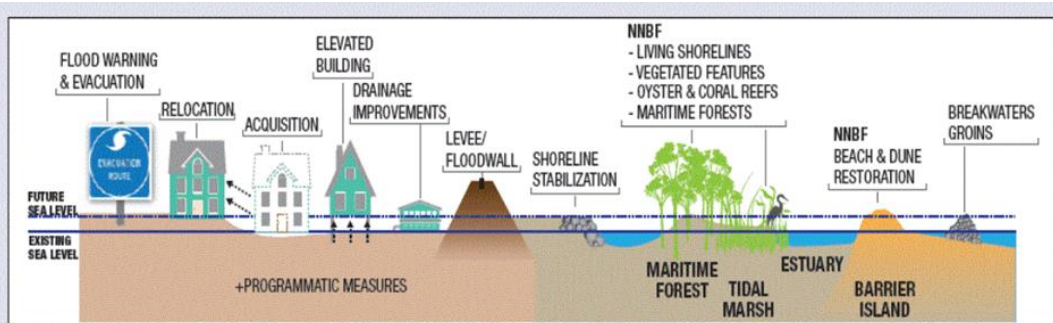


Figure II-1. Combinations of Adaptable Measures That May Be Used to Improve Redundancy, Robustness, and Resilience Associated with Coastal Flood Risk Management (not to scale)

Illustration of Multiple Lines of Defense Strategy provided by U.S. Army Corp of Engineers Headquarters.

Let the County Commission know that they must invite the Army Corps' Engineering with Nature (EWN) team *now* to participate in this CSRSM study process.

In addition to involving local experts, Collier County should insist on engaging the Army Corps' team of scientists, engineers, and practitioners who work for the "Engineering with Nature" (EWN) program.

Collier County residents should insist that any selected plan be holistic and consider other aspects of climate change. Make sure plans do not exacerbate inland or seaward flooding, cause water quality impacts, or negatively affect surface/groundwater connectivity.

The previous plan focused on storm surge while not addressing other hydrologic issues, such as:

- Inland flooding and rainwater/stormwater runoff impoundment due to the proposed walls and gates
- Seaward flooding, storm surge stacking and wave displacement seaward of the walls and gates (flow around the gates)
- Water quality impacts associated with stormwater impoundment and potential mass releases of polluted floodwater post-storm when gates are reopened
- Impacts to surface/groundwater connectivity and potential saltwater intrusion

Insist that natural ecosystems are recognized for their ability to mitigate storm surge and wind damage and, thus, be included in project alternatives.

The Corps requires that a plan must provide a net positive economic benefit. However, the 2020 plan did not value the economic benefits of ecosystem services, which was a huge weakness of the study. Natural infrastructure is inexpensive, or even free, compared to the millions of dollars engineered solutions cost, such as pumps, floodwalls, and storm surge barriers.

Insist that any storm risk plan for Collier County *enhance* essential fish habitats, not degrade them.

The 2020 plan anticipated unacceptable significant impacts to EFH and *EFH managed species, and their prey, including corals, red drum, shrimp, 31 reef fish, coastal migratory pelagic fish, and spiny lobster.*

These impacts are unacceptable.

Insist that any selected plan must avoid any impacts to sea turtle and shorebird nesting or impacts to critical habitat.

The 2020 plan proposes unacceptable impacts to the following *nine* federally endangered or threatened marine species and bird species including the **giant manta ray, Gulf sturgeon, small tooth sawfish, green sea turtle, hawksbill sea turtle, Kemp's ridley, leatherback sea turtle, and loggerhead sea turtle, the piping plover, red knot, and wood stork.**

Insist that any cost-benefit analyses for a storm risk plan include an economic impact study of the potential impacts to Collier County's tourism and marine economies and fisheries.

Tourism, fisheries, and the marine industry are major sectors that contribute to our blue economy. Potential economic impacts to these sectors must be analyzed and made public, as part of the process for choosing from alternative plans. Included in the analysis should be an assessment of economic impacts to kayak and boating tour businesses, sailboat excursions, sunset cruises, nature tours, boat rental companies, restaurants, hotels, and recreational and commercial fishing operations.

Support storm resilience plans that protect the aesthetics of our coast.

Collier County's beaches are simply beautiful, which is why we live here. It's one of the many reasons why so many tourists flock to our region and why part-time and yearlong residents are willing to spend millions of dollars for homes on or near the beaches and bays.

The massive concrete and metal storm surge structures and floodwalls proposed for Collier County's coasts and inlets are disruptive and unsightly. Nature-based solutions are a far better visual and aesthetic alternative, and yet another reason for the public and the County to request working in collaboration with nature.

Encourage land acquisition to protect and preserve as many acres of wetlands, forests, parks, dunes, urban preserves, and open space as possible to reduce vulnerability of current and future generations from storm impacts.

Preserving land is critically important for protecting our communities from the worst impacts of climate change. Wetlands act as a natural sponge, retaining water during heavy rains, while slowly filtering and releasing water. One acre of wetland can store between 1 and 1.5 million gallons of floodwater.