Sustainable Living Shorelines

By Kyle Cronin

Photo from Fl Sea Grant

For decades, residents and property owners along the Florida shorelines continuously battle erosion from storms and hurricanes. The traditional solution is to build seawall structures which provide protection from the damaging elements. Now researchers at the Nature Coast Biological Station (NCBS) with the University of Florida (UF) are discovering a sustainable solution for shorelines.

Dr. Savanna Barry, Regional Specialized Extension Agent, is based in Cedar Key, Fl. at the Nature Coast Biological Station. According to Barry, living shorelines are getting attention from researchers and residents who live on Florida's coastline.

Living shorelines is a relatively new method used to stabilize shorelines that are made from natural materials such as plants, rock, or sand. She is seeing the long-term benefits of living shorelines to protect coastal areas compared to seawalls and they are cheaper to install over time.

"A living shoreline is the weakest it would ever be the day you build it but it will get stronger over time. The exact opposite is true for hardened structures like a seawalls. They actually going to be the strongest on the first day it's built and will continue to slowly degrade over time," said Barry.

NCBS provides a natural laboratory for residents to learn about different options for living shorelines. The University of Florida/Institute of Food and Agricultural Sciences (UF/IFAS) Sea Grant agents and affiliate researchers are creating a series of documents that describe how living shorelines function and installation considerations.

Many residents and property owners may be reluctant to build a living shoreline because they already have an existing traditional seawall.

But Dr. Barry cautions stakeholders that these structures won't last forever and proposes a compromise.

Barry said, "adding habitat in front of the seawall is a good way to go in terms of getting a lot of people to adapt living shorelines because initially people aren't going to bulldoze their seawalls and put up a marsh but they may put a marsh in front of their seawall."

Another benefit of using the living shorelines is that it provides habitat for fish and other living resources and increases stability and water quality over time.

"Once oysters come there's a huge suite of other organisms that come and colonize with oyster reefs, various shrimp, crabs, fish, depending on the tide cycle that kind of thing," said Barry.

Barry is passionate about her mission to educate the public about living shorelines options. To learn more about living shorelines go to Nature Coast Biological Station website at https://ncbs.ifas.ufl.edu/

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