Sea Grant research informs new law for clam harvesting

“Mechanical harvesting will allow the Florida shellfish aquaculture industry to increase efficiency, diversify and expand, and become competitive with other shellfish-producing states.”
- Leslie Sturmer, Florida Sea Grant

Florida’s $20 million clam aquaculture industry supports about 350 growers and 600 jobs. Mechanical harvesting tools are expected to increase harvest efficiency, but the potential impacts from mechanical harvesters on water quality and habitat were previously unknown and prohibited for use. Florida Sea Grant developed a pump-driven harvester device that had only minor, short-lived effects on water quality and sediment disturbance when compared to the previously developed methods. This research informed a bill allowing the use of mechanical harvesting devices, which was signed into law by Governor Rick Scott in 2016. flseagrant.org/aquaculture
“Without Florida Sea Grant there would be no sponge fishery in Florida.”
- Jim Cantonis, President of Acme Sponge

Florida’s sponge fishery is sustained through Sea Grant research on improved harvesting techniques. Credit: Florida Sea Grant

Sea Grant technology helps local governments respond to boater needs and save taxpayer dollars

Florida is the nation’s top destination for boating-based marine recreation. This heavy boat traffic requires routine dredging to keep waterways navigable, however, the planning and permitting necessary to minimize environmental harm is expensive and accounts for up to half of project costs.

Florida Sea Grant applied advanced GIS technologies to map boating activities relative to sensitive coastal habitats. The resulting framework lets managers in Southwest Florida pinpoint where maintenance dredging is most needed, streamlining a permitting process that saves southwest Florida taxpayers an estimated $2 million annually.

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Sea Grant flood models support Florida’s coastal resiliency plans to mitigate $3 billion of potential property damage

Over 79% of Florida’s gross domestic product is associated with coastal property between one and eight feet above sea level, which puts these industries at high risk of coastal flooding due to storm surges, sea level rise, and rainfall. Many urban areas already experience flooding during high tide.

Florida Sea Grant developed a model at the request of the US Army Corps of Engineers to project future flood risks. The model showed that a 10% increase in rainfall during storms could result in $3 billion of property damage. The Southeast Florida Regional Climate Compact is using this model to redesign their climate adaptation plan that now includes wetland detention areas could improve coastal resiliency to severe storms and largely reduce damage costs. This implementation of this plan will help communities become more resilient to storm surge, sea level rise, and changing rainfall as well as prepare for and largely reduce damage costs.

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