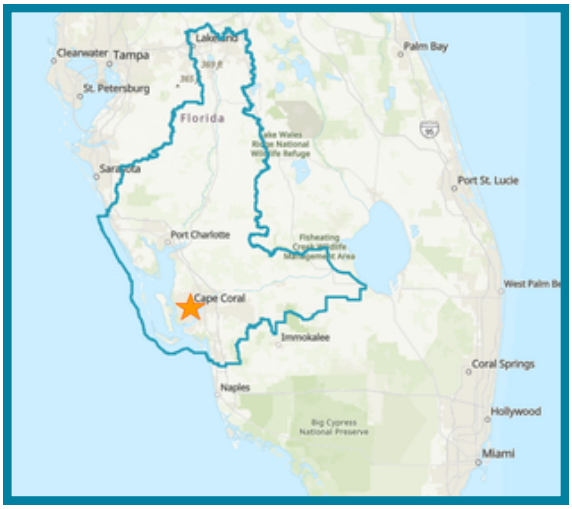
Lee County SEASCAPES Project

WATER QUALITY IMPROVEMENT


City of Cape Coral



Summary

This project is to support the construction of multi-habitat artificial islands in saltwater lakes within the tidal Cape Coral canal system as a nature-based strategy to mitigate impacts on water quality and habitat. The islands will improve the water quality, storm resilience, habitat health, and recreation within the tidal canal system that drains into the lower Caloosahatchee estuary.

Seascapes Islands will include dynamic habitat for fish and invertebrates, seeded oyster reefs, halophytic grasses, and red mangroves. These features will provide habitat enhancement for fish and other organisms, as well as improve water quality via natural water filtration and reduced excess nutrients. The area will also benefit from increased resilience to storms and flooding as the city's location and canal system makes it prone to heavy damage from storm events.

Phase I will including the engineering design, permitting, and construction plans for at least eight lake sites, funded by CHNEP. The City of Cape Coral will be contributing public education about the benefits of nature-based solutions and develop opportunities for community engagement, such as citizen-science water-quality sampling near the islands.

Location: Lee County

Partners: City of Cape Coral

Implemented: 2026

Status: Ongoing

CHNEP Cost: $100,000

Funding Source: EPA 320

2025 CHNEP Plan Activity:

Water Quality Improvement 3: Reduce urban stormwater and agricultural runoff pollution

Fish, Wildlife, & Habitat Protection 1: Protect, monitor, and restore estuarine habitats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Anticipated Results and Benefits

Increased Water Quality

The Cape Coral canal system is part of the larger Caloosahatchee River system and basin, which has significant water quality issues. Implementing solutions that improves water quality in one area will have positive impacts on the larger system it influences. These islands will be a dynamic composition of red mangroves and oyster reefs, along with other salt tolerant grasses, that have the ability to filter pollutants and slow water flow to let suspended sediments not only settle, but to prevent future erosion and suspension of particles as well.

Increased Fish and Wildlife Habitat

Not only will the existing aquatic ecosystem benefit from the establishment of these islands, but it creates even more usable terrestrial habitat to increase biodiversity in the area. This extensive habitat enhancement will support diverse communities of fish, invertebrates, wading birds, and halophytic (salt tolerant) plants that will add recreational fishing and aesthetic value on top of the ecological value these islands will provide.

Enhanced Community Resiliency

This project is being based on conceptual designs inspired by similar projects located in Southwest Florida. By implementing nature-based solutions that have been successful in other projects, it strengthens the resiliency of not just one community but serves as an example to others on ways they can increase their resiliency in the face of rising coastal water levels and stronger more abundant storms.

CONTACT INFORMATION

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City of Cape Coral

Uniting Central and Southwest Florida to protect water and wildlife