SOUTHEAST FLORIDA CORAL REEF MANAGEMENT PLAN

With guidance from the United States Coral Reef Task Force, the Florida Department of Environmental Protection and the Florida Fish and Wildlife Conservation Commission have coordinated formation of an interagency Southeast Florida Action Strategy Team (SEFAST) for coral reef conservation and management. This team is developing a *Local* Action Plan to improve coordination of technical and financial support for conservation and management of the coral reefs from the southern Miami-Dade County line to Hobe Sound (Martin County). The Southeast Florida Coral Reef Initiative (SEFCRI) is targeting this region because the coral habitats are close to shore and co-exist with intensely urbanized areas that lack a coordinated management plan (like that of the Florida Keys National Marine Sanctuary).

SEFAST is made up of four workgroups: Awareness and Appreciation: Fishing, Diving, and Other Uses: Land-Based Sources of Pollution and Water Quality: and Maritime Industry and Coastal **Construction Impacts.** The workgroups will outline issues and threats, present them at stakeholder workshops, combine information from public input and technical advisory committees. then further define threats to these coral habitats. and propose projects to minimize harmful effects. The outcome will be a coordinated plan to address causes of coral degradation and provide a roadmap for successful conservation and management. See *http://www.coralreef.gov/* for more information on the national initiative.

All coral is protected or regulated by law. You may NOT collect, harvest, or sell stony coral that comes from state or federal waters.

Florida's coral reefs

- Florida has different types of coral communities.
- Coral reefs off the Florida Keys are protected within the Florida Keys National Marine Sanctuary.
- Only about 50% of Florida's coral reefs have been mapped.
- The existence of corals off southeast Florida is less well known.
- Southeast Florida can save its valuable coral reefs.



Did you know?

- Coral reefs have existed for millions of years.
- Corals are alive. Coral reefs are made by colonies of thousands of tiny, living, tube-like animals called polyps. New colonies constantly grow on top of the skeletons of older ones.
- + Thousands of coral colonies of many types form coral reefs.
- + Coral reefs are home to many different kinds of plants and animals.
- Most of Florida's sport fish species and many other marine animals spend significant parts of their lives around coral reefs.
- People all over the world are working to save their coral reefs.
- Southeast Florida's coral reefs are threatened by many natural events and human activities.
- + It is not too late to save southeast Florida's coral reefs, but your help is needed!

Coral is at risk!

ropical coral reefs develop only in areas with

specific characteristics: a solid structure for the base, transparent water with the right amount of saltiness, warm and stable temperature, and moderate wave action to transport waste from the reef and bring oxygen and microscopic organisms to the reef. There are many pressing threats to the delicate balance that allows coral to thrive.



A crushed head of brain coral.

Why are living corals valuable?

Coral reefs are beautiful, and they provide a marvelous resource for **recreation**, **education**, **scientific research**, and **public inspiration**. Millions of tourists and local residents enjoy **scuba diving**, **snorkeling**, and **fishing**, thanks to Florida's coral reefs. These activities are a



Branching octocoral, seafan, and head coral in a staghorn thicket.

tremendous **source of income** for Florida and its coastal communities. A study of natural and artificial reef usage in southeastern Florida showed that from June 2000 to May 2001, expenditures in Broward, Palm Beach, and Miami-Dade counties contributed **1.9 billion dollars** income; employment related to natural reefs provided **over 36,000 jobs** in the region.

Coral reefs are valuable natural resources. They protect our coasts by **reducing wave energy** from storms and hurricanes. As a **source of food and shelter**, coral reefs provide critical habitat for numerous species. Coral reefs **support important fisheries**. Corals and other reef plants and animals provide **sources for health and beauty aids**, including ingredients for **new medicines**.

How do we harm coral?

Pollution—There are many sources of pollution that can harm coral. Sewage from boats and land can damage coral, as can water runoff containing chemicals, fertilizers, silt, and debris. Runoff from residential, industrial, and agricultural areas contains contaminants that are carried through storm drains to Florida's waterways. **Sources of pollution from people who live miles from the nearest reef and never visit the water can damage or destroy coral.** The *Land-Based Sources of Pollution and Water Quality* workgroup has a Technical Advisory Committee (TAC) to assist in targeting information for these effects.

Coastal Construction Impacts—Construction activities (like dredge and fill) can damage coral habitat and make the water murky. Because they depend on light, **coral reefs need clear water for growth.** Corals can be severely damaged by sediment or other factors that reduce water clarity or quality. The *Maritime Industry and Coastal Construction* workgroup will focus on these types of effects.



Unintentional Effects—Most of the millions of divers, snorkelers, and boaters visiting the coral reefs are careful. However, others may not know that one thoughtless toss of an anchor can destroy years of coral growth in a few minutes. Physical contact with fins, hands, or equipment of boaters, divers, and snorkelers can damage delicate coral polyps. **Always be aware.** Many fishing activities inadvertently result in reef damage. Both the *Awareness and Appreciation* and *Fishing, Diving, and Other Uses* workgroups will focus on these areas.

How can you help protect coral reefs?

Use navigational charts to locate coral reefs.

While reefs are not always well marked on navigation charts, refer to the charts to see if you are boating in a known reef area. Every year, inattentive boaters run aground, destroying coral colonies that are hundreds of years old. From the water's surface, reefs appear golden-brown. If you see brown, you may hit a reef. Remember: *Brown, brown, run aground; blue, sail on through.*

Anchor to mooring buoys or anchor in sand.

Be cautious when anchoring your boat. Do not deploy the anchor directly in coral. Reefs are usually composed of coral and sandy areas; be sure to anchor in the sand. Many popular reefs have special anchor buoys for mooring. In these areas, tie up to the buoys rather than anchoring.

Stash your trash.

Do not dispose of trash, bilge washings, or other debris on or near the reefs! Be sure to pump out and dispose of trash only in marinas and designated areas.

Don't touch coral. Coral is made of a hard skeleton, but the coral polyps are fragile.

When diving or snorkeling, look, but do not touch! Don't collect souvenirs or grasp, stand, or sit on living coral. You may damage the fragile coral polyps and cut or bruise



yourself in the process. If you see environmental disturbances or damage at your dive sites, report them. Remember, your interactions with coral reefs and their inhabitants can have lasting results. Use caution and have a great experience!

Avoid trolling for fish above a reef.

Anglers should avoid shallow coral reefs when trolling. Hooks can injure and scar the coral, leaving it vulnerable to infection by microscopic organisms that can kill the coral.

Use caution when catching lobster near coral reefs. When harvesting lobster, avoid touching coral reefs. Never use chemicals near a reef. If you use traps, avoid placing the traps on reefs. Heavy traps break corals and damage the surrounding habitat when the traps are pulled.

Be a smart consumer.

Remember, shells and corals you buy were once alive on a reef. If you purchase aquarium fish or corals, make sure they are aquaculture-raised and harvested. Look for the Marine Aquarium Council (MAC) stamp of approval. Learn and observe Florida and federal fishing regulations. Learn more about coral reefs.

How can you learn more?

This publication is a product of the Florida Department of Environmental Protection (FDEP) and the Florida Fish and Wildlife Conservation Commission (FWC) in cooperation with federal, regional, state, and local agencies. To learn more about coral, please contact the FWC, FDEP, or any of the numerous agencies that work together to protect Florida's coral reefs.



Cover photo and two inside photos courtesy of Nova Southeastern University National Coral Reef Institute



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How you can be a responsible visitor and neighbor helping to ensure the continued vitality of Florida's coral reefs