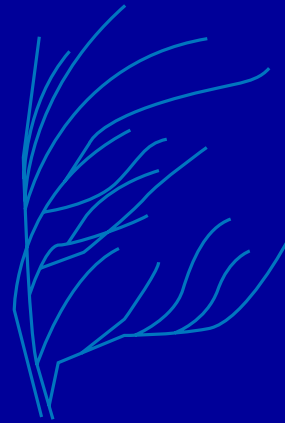


Southeast Florida Coral Reef Initiative

Land-Based Sources of Pollution



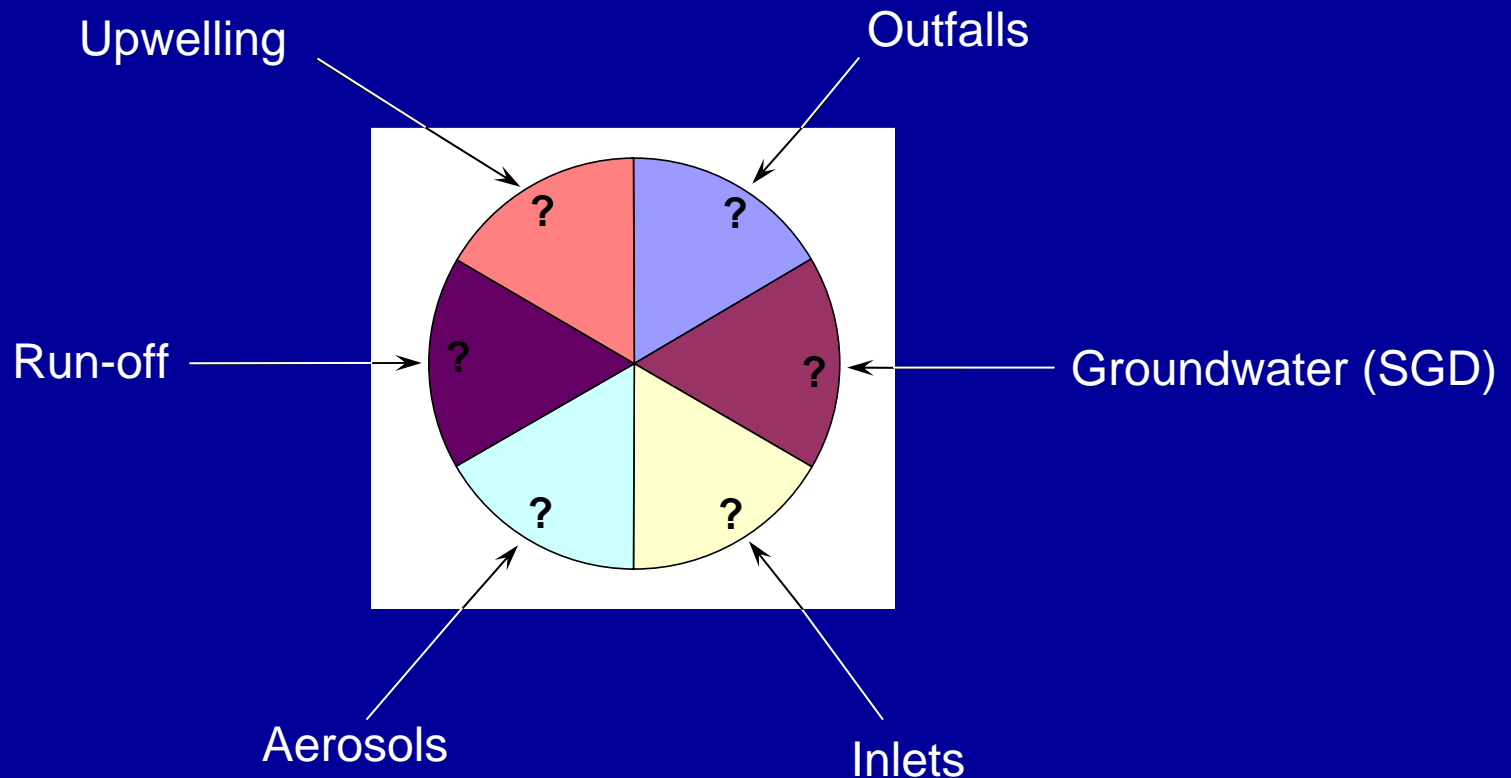
Southeast Florida Coral Reef Initiative

Acting above to protect what's below.

Southeast Florida Coral Reef Initiative

Land-Based Sources of Pollution

Issue – coral reefs on a narrow continental shelf adjacent to a highly urbanized coast are likely to be impacted by pollution



Southeast Florida Coral Reef Initiative

Land-Based Sources of Pollution

Impacts - Indications of water quality degradation:

- Macroalgal blooms



- Turbidity



- Coral-boring sponges



Southeast Florida

Southeast Florida Coral Reef Initiative Land-Based Sources of Pollution

Approach - SEFCRI LBSP Goals



- Characterize the existing condition of the coral reef ecosystem
- Quantify and characterize land-based sources of pollution
- Identify how these sources of pollution impact the coral reef
- Develop strategies to reduce the impact of land-based sources of pollution
- Increase public awareness and understanding of the effects of land-based sources of pollution on water quality and coral reefs

Land-Based Sources of Pollution (LBSP) Project Update

Project 5: Conduct a biomarker study to identify and trace specific pollutants negatively impacting corals (Pilot Study)

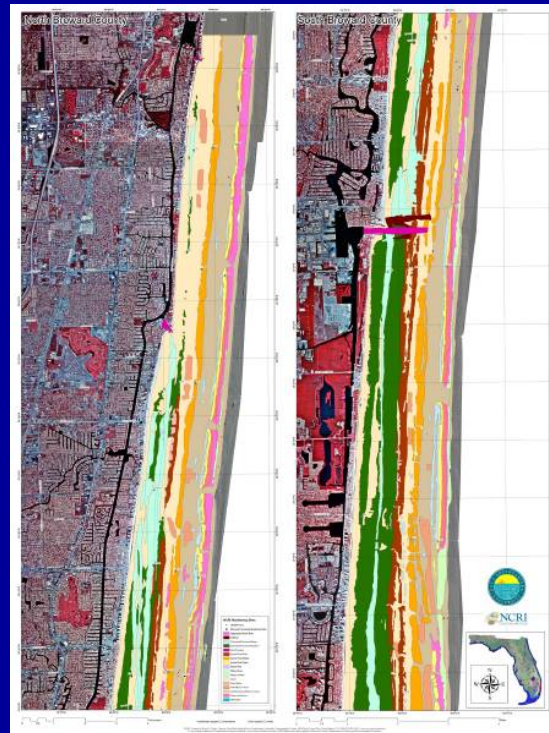
Goal - Impact of pollution of reef condition



Land-Based Sources of Pollution (LBSP) Project Update

Project 6: Develop benthic habitat maps for Broward County

Goal - Characterize existing reef condition



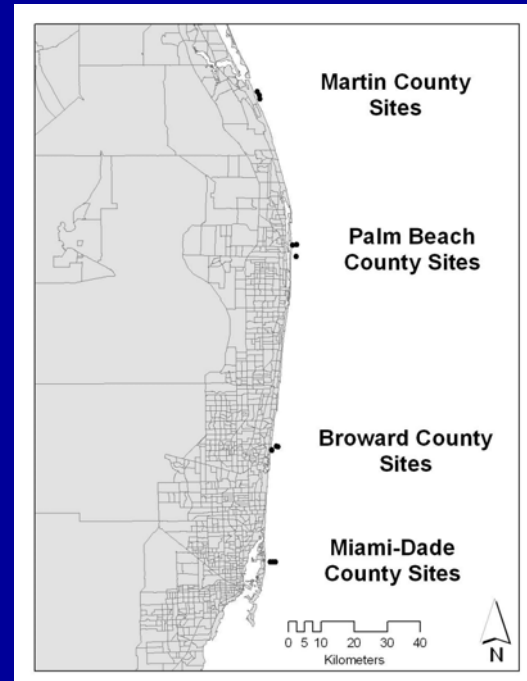
Land-Based Sources of Pollution (LBSP) Project Update

Project 12: Establish and maintain Southeast Florida Coral Reef Evaluation & Monitoring Project (SECREMP)

Goal - Characterize existing reef condition



Southeast Florida



Land-Based Sources of Pollution (LBSP) Project Implementation Challenges

- **Financial Capacity**

Research projects not funded through existing funding sources:

water quality monitoring

SECREMP expansion

completion of habitat mapping

pollutant loading project

- **Technical Capacity**

adequate through Technical Advisory Committee and local universities

Land-Based Sources of Pollution (LBSP) Project Needs

- Establish a long term water quality monitoring program in the SEFCRI geographic region - Sustainable funding for technical staff and equipment to design, implement and manage monitoring and resulting data.

*Potential Partners: NOAA USEPA
DEP universities
counties*

Limitations: funding

Land-Based Sources of Pollution (LBSP) Project Needs

- Add SECREMP monitoring sites to improve spatial resolution of status and trends data

*Potential Partners: NOAA
NRCS*

*NSF USEPA
universities*

Limitations: funding

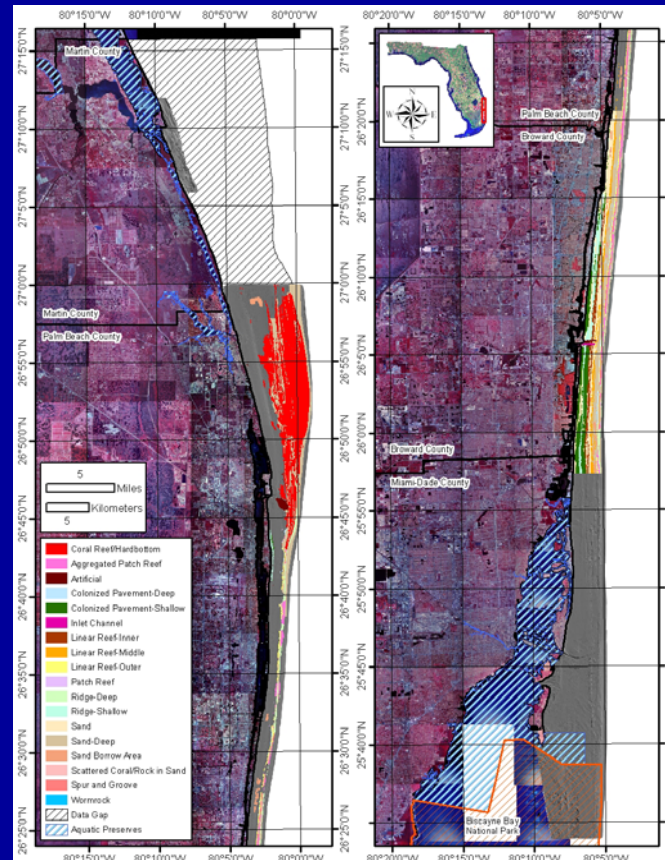
Land-Based Sources of Pollution (LBSP) Project Needs

- Martin County bathymetric mapping and Martin and Miami-Dade Counties benthic habitat mapping – Funding needed to fill these gaps in mapping for the reefs of southeast Florida.

Potential Partners:

*NOAA USGS NCRI
DEP FWC*

Limitations: funding



Land-Based Sources of Pollution (LBSP) Project Needs

- Quantify mass loading of pollutants to the coastal waters - determine relative contribution of different pollutant sources

Potential Partners: NOAA

NSF

USACE

USGS

USDA

USEPA

NRCS

universities

Limitations: funding

Land-Based Sources of Pollution (LBSP) Project Update

FUTURE PLANS:

- At this time no new LBSP projects are planned for addition to the current LAS until existing priorities can be met.
- Upon completion of the 140 SEFCRI LAS projects, it is anticipated that a comprehensive management plan will be developed for the reefs of southeast Florida. The management plan may include additional LBSP LAS projects.

Southeast Florida Coral Reef Initiative (SEFCRI)

The FDEP Coral Reef Conservation Program recognizes and thanks the growing group of stakeholders and partners who have contributed their time, expertise support and in-kind resources to the development and implementation of the Southeast Florida Coral Reef Initiative.

Biscayne National Park
Broward County
Broward Audubon Society
Coastal Eco Group
Coastal Planning & Engineering
Coastal Systems International
College of Charleston
Cry of the Water
Dive Equipment Manufacturers Association
Environmental Defense
Florida Fish and Wildlife Conservation Commission
Florida Department of Environmental Protection
Florida International University
Florida Outdoor Writers Association
Florida Sea Grant
Florida Sportsman Magazine
Florida Keys National Marine Sanctuary
Greater Fort Lauderdale Diving Association
Harbor Branch Oceanographic Institute
International Game Fish Association
Lighthouse Point Saltwater Sportsman Association
Lithophyte Research
Marine Industries Association of Florida
Martin County
McMaster University
Miami-Dade County
National Coral Reef Institute/Nova Southeastern University

National Oceanic & Atmospheric Administration
Ocean Engineering
Ocean Watch Foundation
PADI Project Aware
Palm Beach County
Port Everglades
Port of Miami
Port of Palm Beach
Reef Environmental Education Foundation
Smithsonian Institute Marine Station
South Florida Diving Headquarters
South Florida Water Management District
Surfrider Foundation
Tetra Tech
The Nature Conservancy
The Ocean Conservancy
Tropical Audubon Society
University of Florida
University of Georgia
University of Miami
University of North Carolina, Wilmington
University of South Florida
U.S. Army Corps of Engineers
U.S. Coast Guard
U.S. Department of Agriculture
U.S. Environmental Protection Agency
U.S. Geological Survey
Vone Research

