Underwater 'zombie grass' signals trouble for Florida fishermen

April 21 2016, by Kerry Sheridan

Wetland ecologist Steve Davis inspects the waters of Whipray Basin, where seagrass is dying at a rate unseen since the late 1980s

Decades ago, the sight of seagrass swaying beneath the waters off south Florida conjured romance for those who dangled their fishing lines in hopes of catching redfish, snook or mangrove snapper.

But now, seagrass is dying at a rate unseen since the late 1980s in the

Florida Bay, off the southern tip of Florida between the Atlantic Ocean and the Gulf of Mexico.

"It is like a desert," said fishing guide Xavier Figueredo, peering into the water, where only an occasional needle fish or ray could be seen scooting along a bottom clustered with matted, dead underwater grasses.

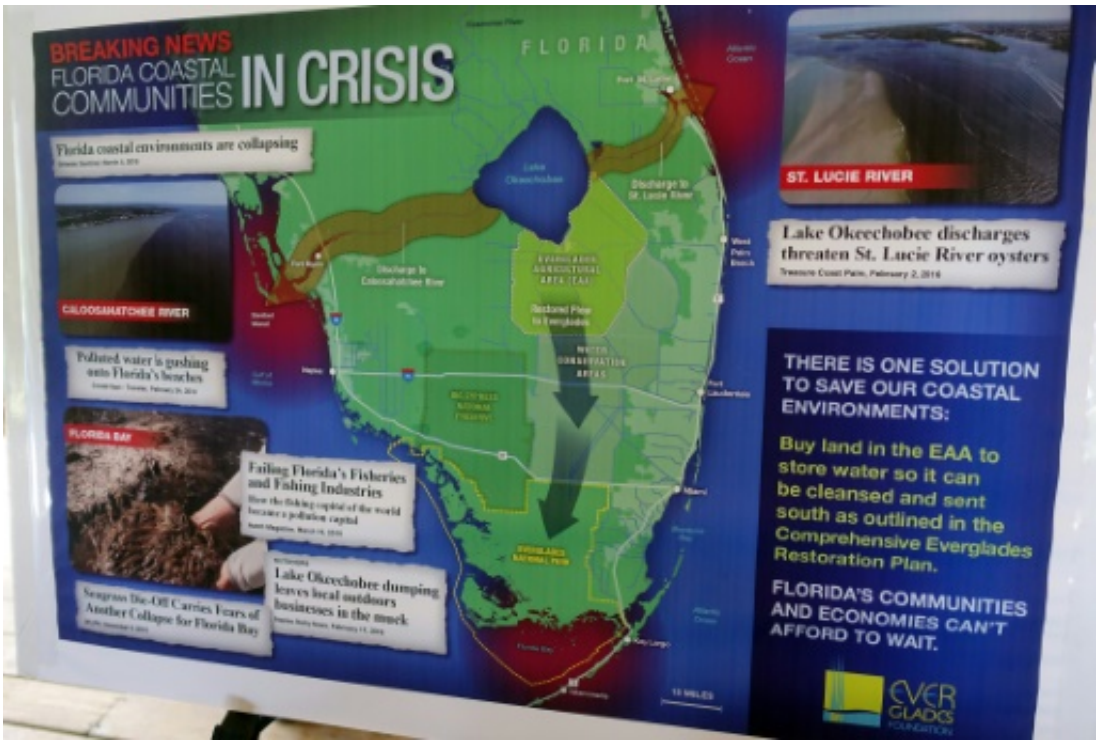
Seagrass provides shelter for small fish, which are eaten by bigger fish, and serves as the foundation for the marine food chain.

In Florida, where recreational saltwater fishing is a $7.6 billion industry, experts consider seagrass a key indicator of the ecosystem's health.

"This has historically been a wonderful spotted seatrout fishery. This year it was non-existent, literally," said Figueredo, one of a group of fishing guides who cater to tourists visiting the string of islands known as the Florida Keys.

A man-made problem

Ecologists say the problem is mainly due to the way humans have for decades diverted the natural flow of fresh water from central Florida southward to the Everglades wetlands, protecting sugar cane farms and other property.



A poster by the Everglades Foundation shows the stages of seagrass die-off in the Florida Keys

A massive die-off that began in 1987 and lasted for years helped spark ambitious plans to protect the area, but fishermen say progress has been too slow.

Now, they see the death cycle happening again, as increasingly warm and salty water smothers the underwater grass.

First the grass detaches from the bottom. It floats to the surface during the day and sinks again at night, earning it the nickname "zombie grass," said Steve Davis, a wetland ecologist with the Everglades Foundation, as he inspected a once-popular fishing area called Whipray Basin.

"It's dead, it just doesn't know it yet," he explained.

Eventually, the grass bleaches, and the blades amass into smelly islands.

The die-off makes an algae bloom quite likely, sucking oxygen out of the water and making it a hostile environment for marine life.

An area of healthy green seagrass is seen next to a patch that is yellow and dying in Florida Bay

"It is dramatic. It looks like a disaster area," said Davis.

Heavy rain led to record freshwater inflows coming into the bay in January and February, Davis said, but it is not enough. The die-off is gathering steam.

"We just have to now ride it out, and we know it is going to take years to recover," he said.

State wildlife officials say the affected area covers about 25,000 acres (110,000 hectares) of dead sea grass—about the size of Paris.

But Davis said fishermen who have seen it firsthand say it's twice that big—on the order of 50,000 acres.

"It is a massive area in Florida Bay where the entire habitat has been decimated," said Davis.