

# FISH KILL AND DISEASE



## About Fish Kills

A fish kill is typically caused by unusually low levels of dissolved oxygen in the water, resulting in a large amount of dead fish suddenly appearing onshore. Other contributing factors can include weather patterns associated with rainfall and wind speeds, erosional runoff and higher water temperatures. Runoff from septic tanks, pavement, and agricultural or lawn fertilizer carries excess nutrients into waterbodies that can cause aquatic plants and algae to flourish. The excessive growth of plant material in the water reduces the amount of available dissolved oxygen that fish need to breathe. As the plant material decomposes, it further reduces the amount of available oxygen in the water, which drops to levels insufficient for fish survival. As a result, fish may suffocate and float to the surface of the water, eventually drifting to shore in mass quantities.

Fish kills also can be caused by oil spills, discharges of toxic substances, poor water circulation or too many organisms in an isolated body of water.



A fish kill in the Indian River Lagoon in April 2016. Photo: Florida Fish and Wildlife Conservation Commission

## FAST FACTS

Tips for preventing fish kills:

- » Reduce the amount of nutrient-filled runoff reaching waterbodies by avoiding the use of fertilizer during rainy summer months.
- » Avoid septic tank overflows.
- » Reduce the amount of impermeable surfaces in a watershed area to prevent stormwater runoff and excess nutrients from reaching the ocean. Use mulch, bricks, gravel or other porous materials for walkways, patios and driveways.

## About Fish Disease

Low levels of dissolved oxygen also can stress fish and cause them to be more susceptible to disease and infections.

Types of fish diseases that have been observed in Florida and reported to the FWC Fish Kill Hotline include lesions and ulcers.



Red sore disease. Photo: [www.AL.com](http://www.AL.com)

**Report observed fish kills or fish disease to Southeast Florida Action Network (SEAFAN) [online](#) or call 866-770-7335.**



SEAFAN is a reporting and response system designed to improve the protection and management of Southeast Florida's coral reefs by enhancing marine debris clean-up efforts, increasing response to vessel groundings and anchor damage, and providing early detection of potentially harmful biological disturbances.