



BISCAYNE BAY FISH KILL AND ALGAE BLOOM POLICY RECOMMENDATIONS

- This fish kill is unprecedented for Biscayne Bay
- The fish kill was caused by low oxygen levels in the water, literally suffocating fish
- Low oxygen occurs in unhealthy bodies of water that have too much nutrient pollution
- Nutrients, like nitrogen and phosphorus, fertilize the water and cause blooms of algae
- Algae can use up all of the oxygen and suffocates the wildlife and seagrass
- Seagrass has already been lost (over 90% in some areas)
- Low oxygen conditions get worse in the summer with high water temperatures and low wind conditions, also freshwater pulses from canals and water control structures can reduce circulation even more
- Nutrients can come from various sources, including stormwater, septic tanks, sewage leaks, and fertilizer runoff

In order to improve conditions in Biscayne Bay and to avoid fish kills, we must:

- 1. Fix sewage infrastructure to stop leaks**
- 2. Remove septic tanks**
- 3. Treat and clean stormwater**
- 4. Enact strong fertilizer ordinances**

Here are our recommended policy action items to improve Biscayne Bay water quality and to increase resiliency in Miami:

STORMWATER

Stormwater brings dirty water and debris from the streets into canals and the Bay. Improve retention and treatment of stormwater by:

City & County

- Prioritize “green” stormwater retention areas, like parks, bioswales, medians where the stormwater can slow down and be cleaned
- Stop the use of stormwater pumps whenever possible; slow down and store water wherever possible
- Add stormwater grates to outfalls to stop debris
- Add “no dumping” signs at all storm drains
- Add filtration to stormwater system
- Enforce stormwater regulations and permits
- Increase stormwater outfall inspections
- Require stormwater grates and outfall filtration

State

- Increase NPDES permit enforcement
- Provide funding for stormwater retention and treatment projects (retention ponds, treatment parks, bioswales, medians, etc.)
- Stop releases from canals when temperatures are high and winds are low

Federal

- Strict enforcement of current stormwater regulations and retention requirements
- Increased funding for stormwater improvement projects



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SEWAGE

County

- Increase MDC water and sewer budget to improve and maintain our aging infrastructure – currently vulnerable to increased sewage leaks
- Fortify and upgrade sewage treatment plants
- conduct operation and maintenance on schedule and avoid deferred maintenance
- Increase detection and response to SSOs

State & Federal

- Assist in funding County sewage infrastructure improvements
- Increase enforcement of sewage leaks

SEPTIC TANKS

County

- Set a goal to eliminate conventional septic tanks in Miami-Dade County
 - As recommended in the 1970 Federal Water Quality Administration (DOI) report, “Pollution of the Waters of Dade County, Florida”, which led to the construction of our three waste treatment plants. This goal was set 50 years ago but has still not been fulfilled
- Prioritize elimination of septic tanks near waterways and in low-lying areas
- No new septic permits in urban areas
- Adoption of the Global Opportunity for Abutting Sewer Tie-In (GOFAST) program for expedited connections, coordination of public laterals with all departments, removal of burdens from property owners, reduced construction disruption, and cost savings
- Eliminate 12,000 septic tanks that abut sewer mains immediately, per County Ordinance
- Enact septic inspection and maintenance regulations
- Require mandatory disclosure/inspection of tanks in property sales and leases

State & Federal

- Enact legislation requiring regular inspection and maintenance
- Create grant and revolving loan fund for financial assistance

FERTILIZER

City & State

- Pass strong municipal fertilizer ordinances -- a County MS4 permit requirement
 - No fertilizer application in the rainy summer months of June - September
 - 0% phosphorus and at least 50% slow-release nitrogen in fertilizer mix
 - No fertilizer application within 15 ft from waterways and storm drains
- Incorporate pollutant load standards with Total Maximum Daily Load requirements
- Monitor seagrass recovery and set recovery targets
- Expand monitoring of Biscayne Bay pollution loads and set measurable targets
- Remove state preemption on glyphosate regulation
- Remove state preemption on regulation of fertilizer sales

Federal

- Fund increased monitoring programs for nutrients
- NOAA: continue funding for the Habitat Focus Area program for Biscayne Bay