

# An Effective and Protective Fertilizer Ordinance for Collier County

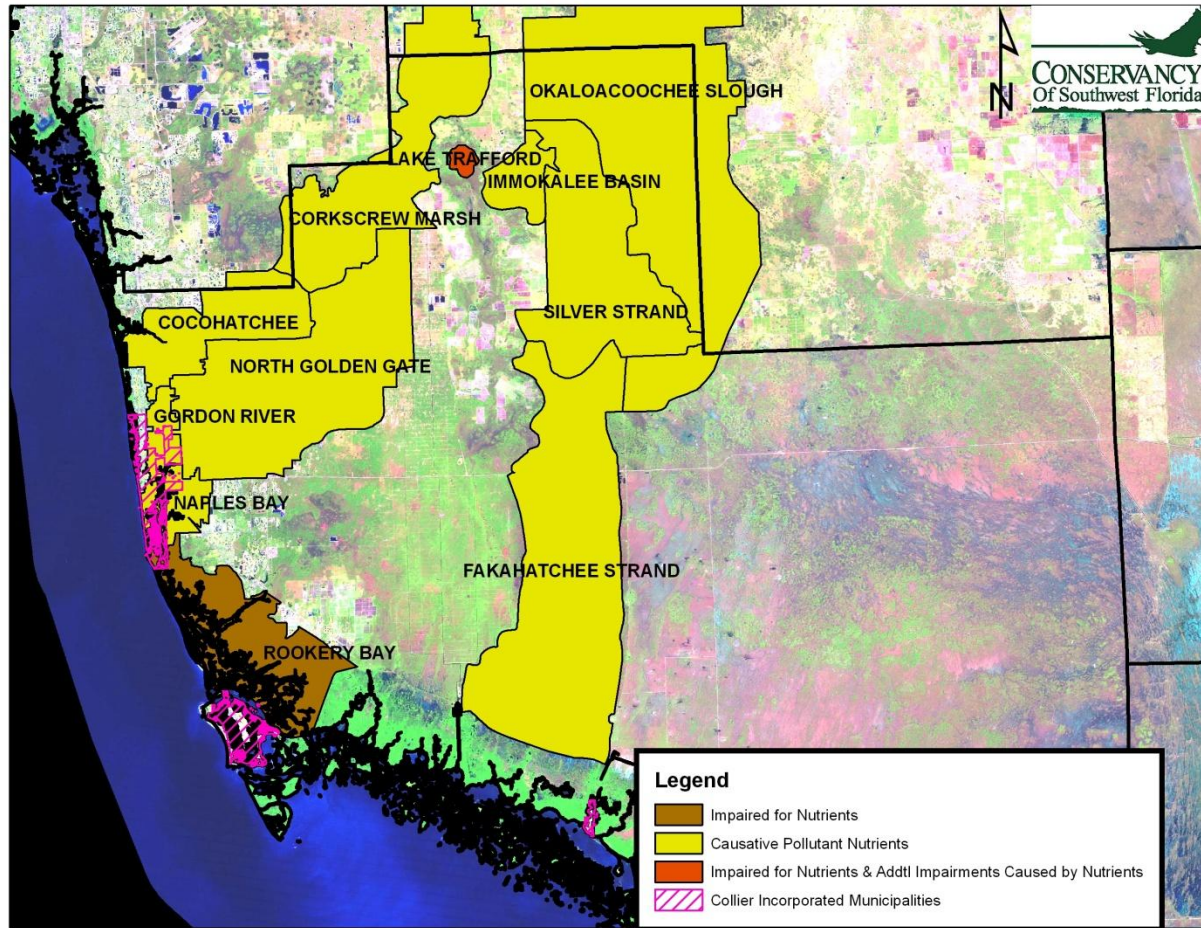
Conservancy of Southwest Florida

- Goal: clean water
- Can be achieved without sacrificing a green lawn



*Red Tide on SWFL Beaches*

## Collier County Impairments Related to Nutrients



32% of the County is threatened by nutrient pollution

# Zero or Low Phosphorous Content

- Florida soils generally carry enough P to maintain healthy plant life
- IFAS states: "excess P application can result in... the eutrophication of adjacent waterbodies."



*Photo by Jesse Van Dyke*

**Eutrophication** - an algal bloom resulting from too much nutrient from sources such as phosphorus and nitrogen in fertilizers.

# Zero or Low Phosphorous Content (cont.)

- State Model allows x6 times more P to be applied than Conservancy proposal
- Conservancy ordinance allows application only when soil tests confirm it is needed
- Similar to City of Naples



# Slow Release Nitrogen

- Slow release N is in a form that adds nutrients into the soil slowly over time
- Quick release N has greater tendency to leech, run off, or 'burn' vegetation



# Slow Release Nitrogen (cont.)



- State Model Ordinance doesn't require the 50% slow release N like Conservancy's proposal
- SWFRPC recommended 70%+ slow release N
- Product readily available and saves money since less product is needed

# Maximum Nitrogen Application Rate

- Over application will result in nutrient loading and degrade water quality
- Conservancy proposal = not to exceed 4 lbs per 1,000 ft<sup>2</sup> per year, total
- Accepted as the amount needed for a green and healthy lawn, on average
- State Model allows almost double the amount of fertilizer per year (7 lbs)





# Blackout Periods

- Water Quality in SWFL waterbodies show a spike in Chlorophyll A during rainy season
- Rainy Season June 1 – September 30
  - 62% of rain falls between these dates
- A “No Application” period is common among fertilizer ordinances
- State Model only prohibits fertilizing during tropical storms, hurricanes, floods, or when rainfall is more than 2”
- Most rainfall in SWFL less than 2”, so blackout period necessary to help stop runoff during the most common rainfall events

# Blackout Periods (cont.)

- Calendar based blackout easier for homeowner to follow than ever-changing metrological reports
- Nutrients in grass clippings and rain provide sources of nitrogen during rainy season - several pounds N per year
- IFAS advises against N inputs during the summer  
'Encourages disease and insect problems'
- Sarasota just released "State of the Bay" indicating that their fertilizer ordinance, with the rainy season prohibition, has resulted in cleaner waters and improved fish and wildlife habitats, while seeing no adverse affects on lawns



# Buffer Zone

- Most fertilizer ordinances stipulate a boundary between fertilizer application and adjacent waterbodies
- The 25 foot buffer is specified by SFWMD, SWFRPC as well as the City of Sanibel
- Most SWFL ordinances have a 10 foot buffer, with deflector shield
- Buffer width for State Model Ordinance small at 3ft



# Education and Ordinance are Complimentary

- Professionals and homeowners
- Continue citizens educational programs about fertilizer and water quality protection
- Professional training and certification



# Conservancy Ordinance Contains Essential Elements for an Effective Ordinance

- Content:
  - 50% or greater slow release nitrogen
  - No phosphorous application unless soil tests determine it is needed
- Application:
  - Sets maximum amount of fertilizer that can be applied per application and per year
  - Buffer zone to stop runoff
  - Rainy season prohibition
- Educational outreach
  - Notification at retailers

# Compliance with State Statute Requirements

- Must do fertilizer ordinance if within impaired watershed
- Minimum is state model template but can do more stringent if desired to protect water resources
- State Model Ordinance allows for more stringent if:
  - \*verified impaired waters
  - \*possible TMDL requirements
  - \*harm to environment/human health
  - \*can improve water quality and prevent future impacts

# Compliance with State Statute Requirements (cont.)



- 1) existence of other programs and means to control non-point source pollution
  - Watershed Management Plans
  - Existing irrigation and landscaping regulations
  - Water quality monitoring
  - Filter marsh creation

# Compliance with State Statute Requirements (cont.)

- 2) utilize scientific/technical information to support
  - Conservancy December 2010 letter similar to what other municipalities have done
  - Much of the cited material is from IFAS and FDEP and academic literature on water quality and lawn science





# Consistency

- FDEP asks municipalities to consider “confusing jurisdictional differences”
- Conservancy proposed similar to SWFL coast ordinances, including incorporated cities within Collier County

