

**Non-agricultural  
regional fertilizer  
application**

**Tampa Bay Region  
Model Ordinance**

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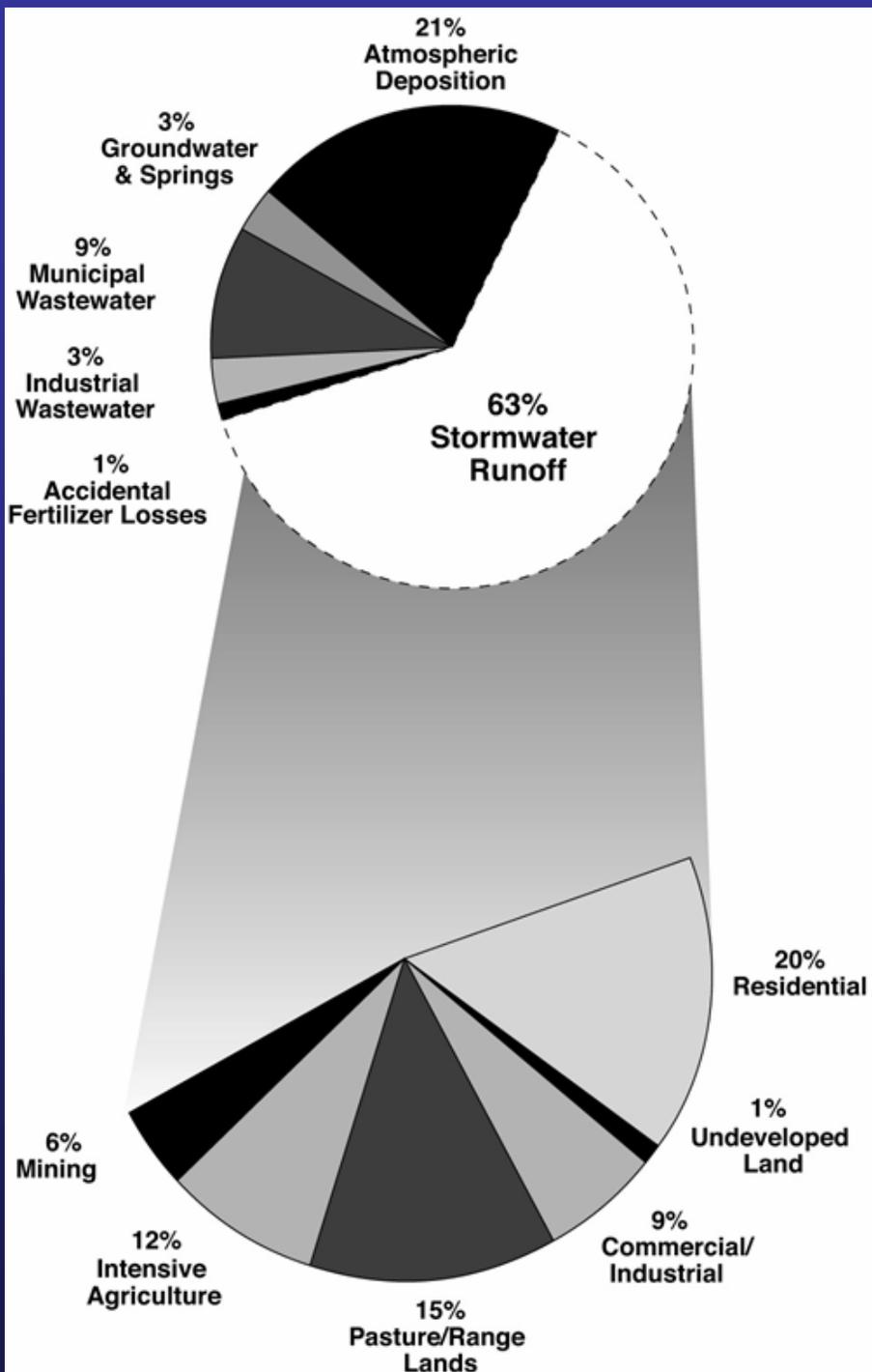
Tampa Bay Estuary  
Program

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# Nitrogen is a major pollutant of concern in Tampa Bay

-Excess nitrogen clouds the water and reduces sunlight so seagrasses can't grow.

-Baywide, residential runoff accounts for 20% of the total nitrogen load to Tampa Bay



# **Nitrogen fertilizer and residential areas**

- **Homeowners use 6 times more fertilizer/acre than farmers (National Academy of Sciences study)**
- **79% of Nitrogen carried in groundwater to Lake Tarpon from fertilizers (Pinellas study)**

# **Costs to remove nitrogen from surface waters**

**Costs to remove excess nitrogen from waterways can be significant.**

**Stormwater retrofits can range from \$40,000-\$200,000 per ton (SWFWMD).**

**Wastewater treatment upgrades are greater than that amount.**

# Local Fertilizer Laws

- Sarasota County and City; Lee County; Collier County; St. Johns County; Sanibel; Marion County; Jacksonville
- Florida Legislature considered a statewide rule in 2007, but bill failed due to opposition from local gov't's (new bills coming forward this year)
- DACS passed new rule in 2007 concerning labeling of fertilizer bags and maximum N and P content

# Development of Regional Non-agricultural Fertilizer Application Model Ordinance

- TBEP facilitated four workshops between April-June
- Participation from 42 private and public sector organizations (lawn care, environmental groups, Agricultural Extension, local governments, scientists)
- Consensus-based approach

# Issues Addressed

- Timing (Blackout period)
- Buffer Zones
- Licensing of Lawn Care Professionals
- Regional Certification/Decal Program
- Reclaimed Water
- Education

# Key elements of Regional Model Ordinance endorsed by TBEP Policy Board November 2008

- **Non-agricultural fertilizer containing nitrogen should not be applied from June 1- September 30 rainy season.**
- **Non-agricultural fertilizer should not be applied within 10 feet of a waterway or wetland.**
- **A 6-foot low maintenance (“no mow”) zone adjacent to waterways using groundcovers should be encouraged.**

# **Key elements of Regional Model Ordinance endorsed by TBEP Policy Board November 2008**

- Train and license all site supervisors of lawn care companies.**
- Create baywide license/certificate for reciprocal recognition across the region.**
- Restrict point-of-sale N fertilizer during rainy season.**
  - Alternative “summer safe” lawn fertilizer is commercially available (potash, magnesium, micro-nutrients)**

# **Key elements of Regional Model Ordinance endorsed by TBEP Policy Board November 2008**

- **Provide Information about Nitrogen levels in reclaimed water to all customers using reclaimed for lawn irrigation**

**Region 1 – Bradenton, Clearwater, Largo, Oldsmar, and Palmetto**

**Region 2 – Hillsborough County, Tampa and north Pinellas Cty**

**Region 3 – Pasco County**

**Region 4 – Manatee County**

**Region 5 – Zephyrhills**

**Region 6 - St. Petersburg**

**The total recommended annual application from both reclaimed and fertilizer is 4 lb N/1000 ft<sup>2</sup>.**

Region	Recommended application of fertilizer nitrogen (lb/year/1,000 ft <sup>2</sup> )	
	Irrigate $\frac{3}{4}$ two times per week	Irrigate $\frac{3}{4}$ three times per week
1	3.1	2.6
2	2.9	2.4
3	1.4	0.0
4	0.6	0.0
5	0.0	0.0
6	0.0	0.0

# Estimated Nitrogen Reductions By Community with 50% Compliance

Hillsborough County (unincorporated)	30 Tons
Manatee County (unincorporated)	8 Tons
Pinellas County (unincorporated)	6 Tons
Clearwater	1.5 Tons
St. Petersburg	7 Tons
Tampa	8 Tons

# Estimated Cost Savings to Local Governments

- Baywide savings of \$2.4 Million to \$12.1 million (*based on 50% compliance and estimated nitrogen removal costs*)

## EXAMPLE:

St. Pete spending \$20 Million to remove 4 tons of N from Lake Maggiore (including \$100,000 per year O/M for alum treatment)

# Next Steps

- **Model ordinance endorsed by TBEP Policy Board Nov 2008.** *A local government may choose to implement, not required.*
- **Technical background and costs/benefits of ordinance provided.**
- **FDEP and EPA contacted regarding possible regulatory (TMDL) credit for adoption of ordinance.**
- **Distribution of model ordinance to governments in TB watershed occurred in early December.**

# Next Steps

- TBEP Policy Board allocated \$75,000 in unencumbered specialty license tag funds for development of a regional fertilizer education campaign – *TBEP now seeking matching grant funds to double money; steering committee established and convened in January*



# Ordinance Schedule

- Hillsborough County: January- EPC staff directed to hold stakeholder workshops
- Pinellas County: February-March
- Manatee County: February-March
- St. Pete: Underway
- Clearwater: Not scheduled
- Tampa: Not scheduled

**\*\* *TBRPC also to consider resolution in support***

# For more information

- Model Ordinance, Workshop Report and Technical Support Documents available at [www/tbeptech.org](http://www/tbeptech.org)
- Thank you for your consideration of support for the Tampa Bay Regional non-agricultural fertilizer ordinance.

