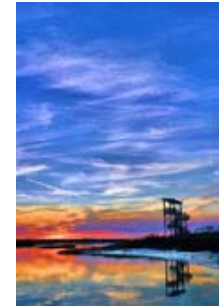


Air Quality Profile of Florida



National Association of Clean Air Agencies
2008 Spring Membership Meeting – Tampa, Florida

Presentation by Mara Nasca, Air Program
Administrator, Southwest District

Florida Department of Environmental Protection



Welcome to Florida!



- One million visitors are enjoying our state today. Thank you for being among them!
- DEP administers the Florida State Parks system, also known as “The Real Florida.” The thumbnails in this presentation are photos taken by visitors to our parks.



Florida Fun Facts



- 4th largest state in population—about 18.5 million residents.
- 22nd largest state in area—yet it's a 792 mile drive from Pensacola to Key West.
- Top travel destination in the world.
- 12 international airports and 14 deepwater ports.
- 1,350 miles of coastline.
- Nearly 1,300 golf courses—more than any other state.



Florida's Economy



- Tourism the #1 industry—over 80 million visitors per year—followed by agriculture.
- Florida grows 75% of the nation's oranges, 95% of which are processed into orange juice, the official "state beverage."



Florida's Air Quality



- No nonattainment areas currently, but new ozone standard will change that.
- Annual PM_{2.5} levels are highest in north Florida, ranging from about 12 ug/m³ in Tallahassee to less than 9 ug/m³ south of Tampa.

Our Greatest Challenge (and not just for air): Growth

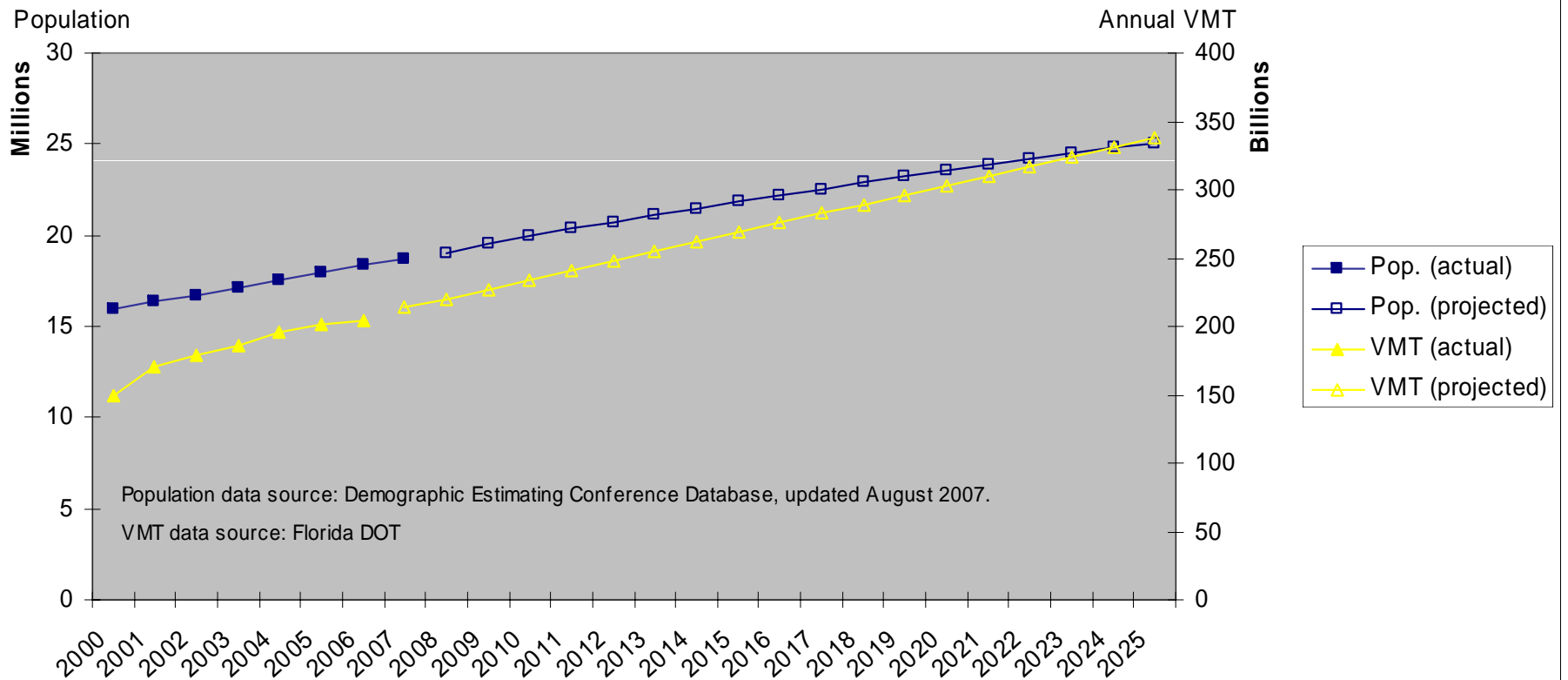


- “This is an economy that’s based on growth—growth for the sake of growth.”
Carl Hiaasen - 2006
- Florida currently welcomes nearly 1,000 new residents per day.
- Projected increases over next 20 years:
 - Population: 37%
 - Vehicle Miles Traveled: 66%(see next slide)





Florida Population and Annual Vehicle Miles Traveled (VMT) Growth



Our Greatest Advantage: Florida's Unique Geography & Meteorology



- Peninsular state—less affected by pollutant transport than most other states.
- Persistent subtropical flow off Atlantic Ocean, especially in South Florida, prevents build up of pollutants.
- But, land breeze/sea breeze recirculation events can lead to high ozone levels along Gulf coast.



Florida's Emissions



- 64% of NO_x from on-road and non-road sources; 27% from EGUs.
- 72% of SO₂ from EGUs.
- Both NO_x and SO₂ are projected to decline over next 10 years due to CAIR and EPA mobile source programs.



Regulated Point Sources



○ Title V sources	417
○ FESOP sources	272
○ Minor sources under state operating permit	738
○ Sources authorized to operate by rule; i.e., "general permits"	2,677

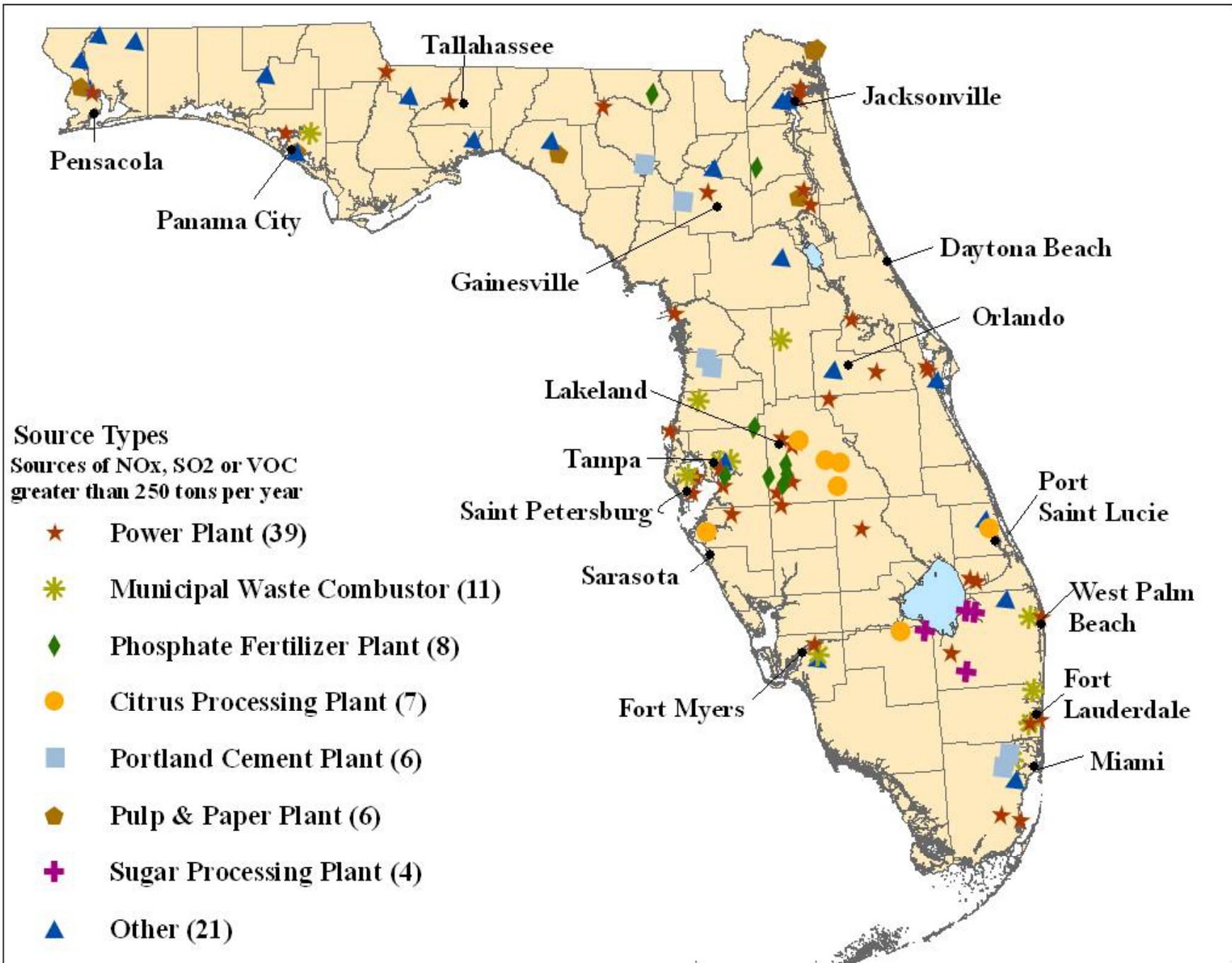
Note: 65% of sources are covered by general permits.



Florida's Major Sources



- Just over 100 sources emit more than 250 tons/year of NO_x, SO₂, or VOC.
(see next slide)
- Note large concentration of various industries around Tampa Bay area.



Current Air Program Priorities



- Greenhouse Gas Reduction
- Control of Mercury Emissions
- New Ozone Standard



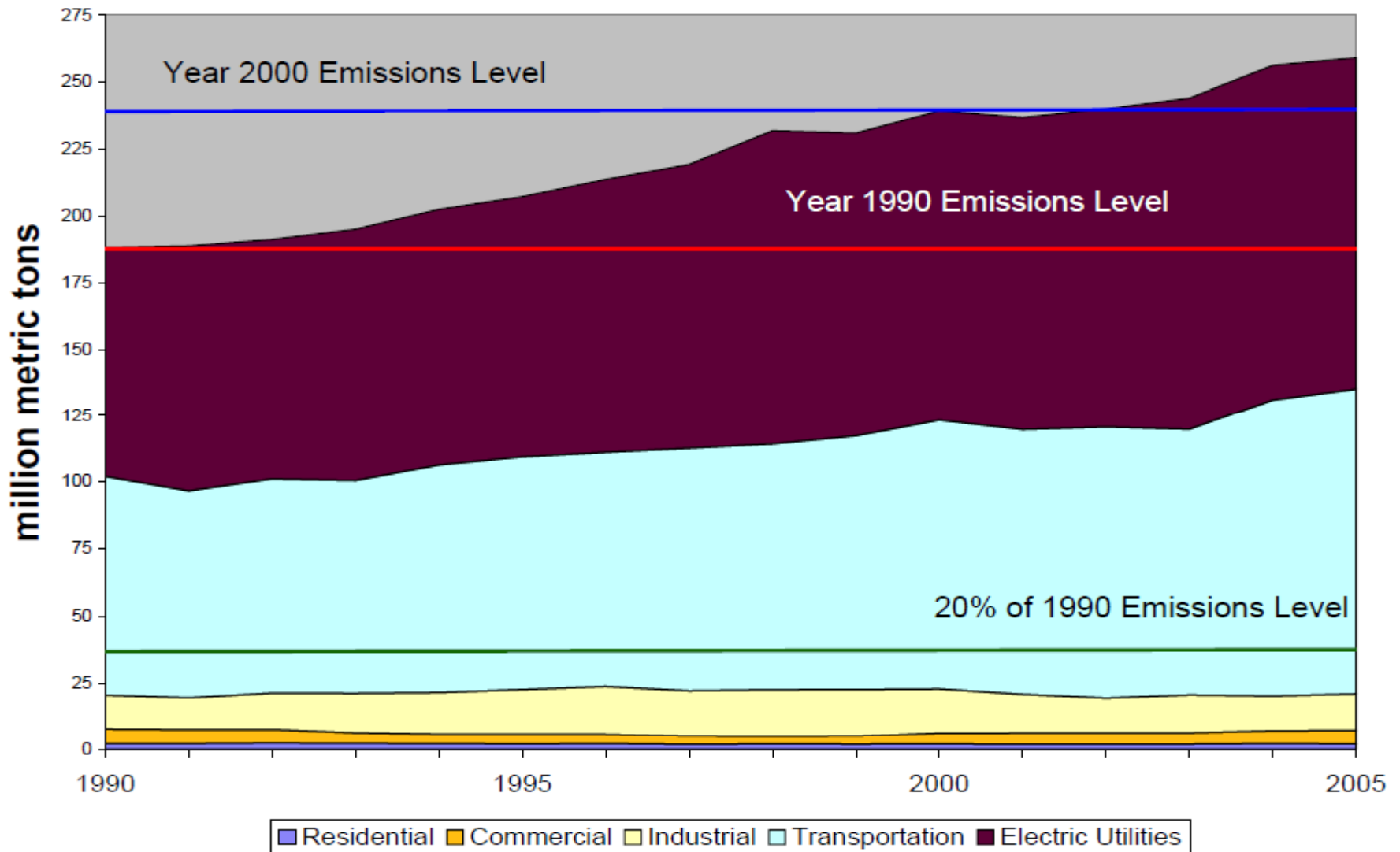
Greenhouse Gas Reduction



- “Global climate change is one of the most important issues we face this century, and we must take action.”
Charlie Crist, Governor of Florida, 2007
- Governor Crist has set goal of reducing Florida’s GHG emissions to 1990 levels by 2025 and to 20% of 1990 levels by 2050. (see next slide)



Florida's CO₂ Emissions



Our Role in Greenhouse Gas Reduction Initiative



- Air program charged with three rulemaking projects:
 - Adoption of diesel anti-idling standard.
 - Adoption of California motor vehicle emissions standards, including fleet-average GHG standards.
 - Adoption of electric utility GHG reduction program, consistent with Governor's goal.

Diesel Anti-idling Rule



- Scheduled for hearing late June.
- Applies to heavy-duty commercial and governmental vehicles (trucks & buses)
- Prohibits idling for longer than 5 min., with exemptions for traffic, emergency operations, bus passenger comfort, powering work equipment, etc.
- After September 2013, prohibits main engine idling while driver resting in sleeping berth.



Adoption of California Motor Vehicle Emission Standards



- Scheduled for hearing late August.
- Moving forward on assumption that EPA's denial of California waiver will be reversed; Florida DEP has joined lawsuit.
- California program brings about greater and sooner reductions than federal CAFE.

Electric Utility GHG Reductions



- Electric generating units account for about half of Florida's CO₂ emissions.
- Florida legislature expected to require DEP to develop cap-and-trade rule in consultation with new Florida Energy and Climate Commission. Rule to be adopted no sooner than 2010.
- Meanwhile, three new coal plants have been cancelled, and four new nuclear projects are being proposed.



Florida's Mercury Problem



- High levels of mercury in fish—in rivers, streams, and lakes over the entire state, but especially high in the Everglades.
- DEP required to develop Total Maximum Daily Loading (TMDL) standard sufficient to protect public health.

Control of Mercury Emissions



- Water program embarking on two-year intensive atmospheric deposition and water quality monitoring program in support of TMDL model development.
- Air program to initiate rulemaking this summer with primary focus on power plants (in absence of CAMR) and cement plants.

Power Plant/Cement Plant Connection



- Concern is that mercury removed as co-benefit of CAIR controls will end up in fly ash; then be re-emitted to the atmosphere by Portland cement plants that use fly ash as raw material.
- Mercury CEMS now required by permit at three proposed new cement plants; raw material sampling underway at three existing plants.
- Goal is to prevent re-emission of mercury at cement plants.

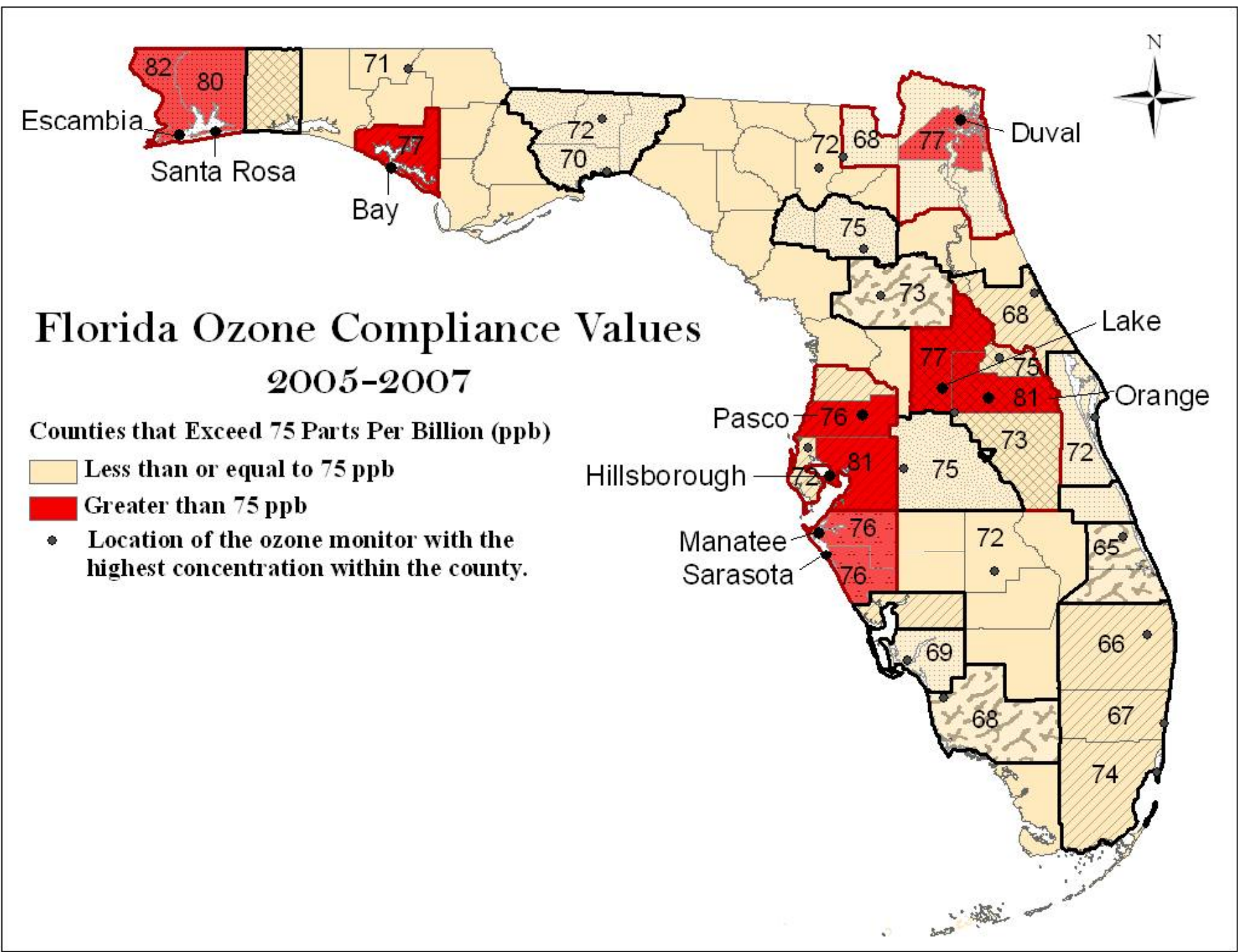


New Ozone Standard

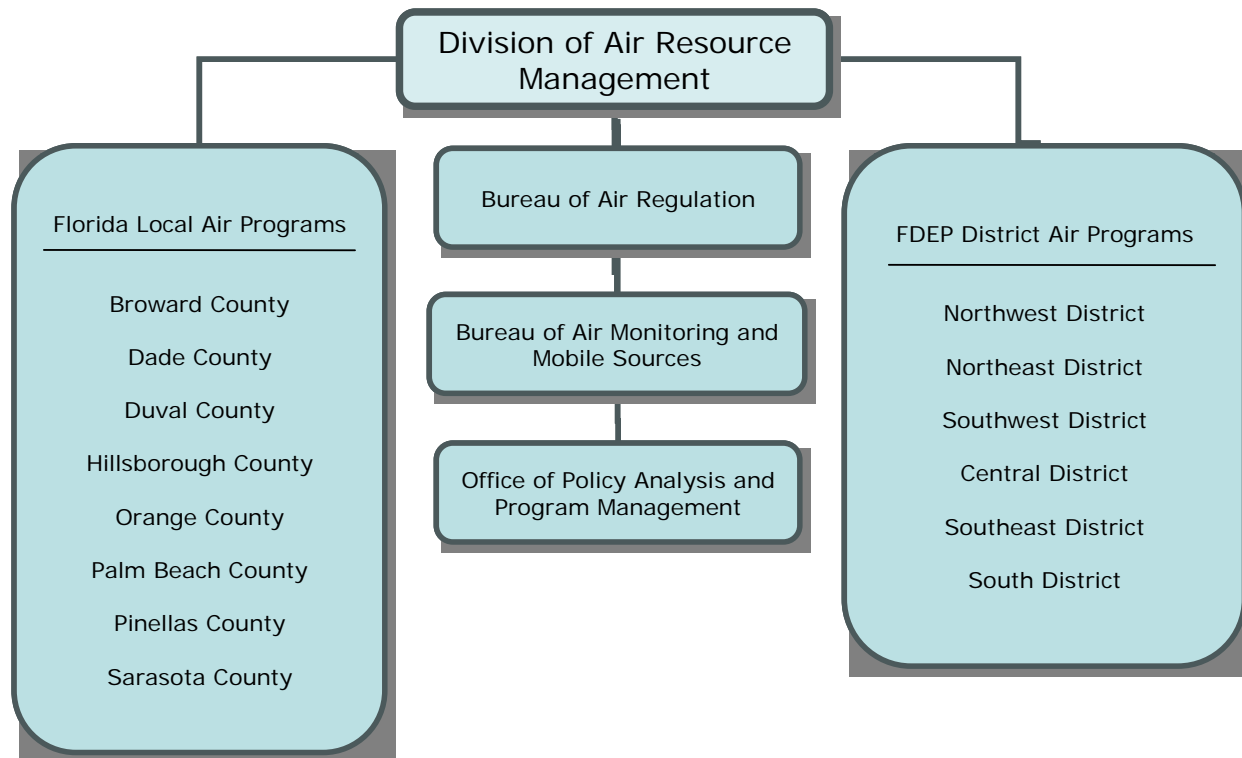


- 10 counties in violation for 2005-07.
(see next slide)
- Note geographical/meteorological effect: highest levels in Pensacola (pop. 295,000); lowest levels along southeast coast (pop. 5,464,000).
- Preliminary modeling predicts all of state to reach attainment in next few years based on programs already “on the way” or “on the books.”





Air Program Organization



State Air Program Revenues



○ Tag fees (\$1 fee on each vehicle registration sold)	\$20,100,000
○ Title V fees (\$25/ton, going to \$30/ton next year)	\$8,286,150
○ 105 grant*	\$1,367,850
○ 103 grant	\$515,000
○ Total	\$30,269,000

*Does not include portion of 105 grant dispersed directly to local programs.



State Air Program Budget



○ Division (85 FTE)	\$9,372,000
○ DEP Districts (97 FTE)	\$7,860,000
○ Tag-fee pass-through to local programs*	\$7,325,000
○ Title V & monitoring contracts w/locals	\$3,803,000
○ Non-operating budget	\$3,300,000
○ Total	\$31,660,000

*Approximately 200 FTE's in local programs.

