

FDEP'S PROPOSED NPDES STORMWATER PERMIT MONITORING REQUIREMENTS

Dan Homblette & Julie Bortles
Orange County Environmental
Protection Division



EXISTING NPDES PERMIT REQUIREMENTS

- Flexible
- Goal Oriented
 - ID Problems
 - Evaluate trends
 - Determine Effectiveness of the program
 - Compatibility w/ State
- Submit to State for Approval
- Implement for Five Years

CURRENT PROGRAM

- Ambient Surface Water Program
- Sampling at 160 Lake and Stream Sites quarterly
- Supplemented by NPDES Inspection Sampling
- Biomonitoring at 20 Sites, partner with the City of Orlando on 5
- TSI Trends Reported to FDEP in Each AR
- TMDL/BMAP required monitoring

CURRENT PROGRAM

- Initial Monitoring Program Developed Thru Coordination with Eric Livingston (FDEP) and Brenita Richardson (EPA) - 1998
- Follow-up Program Approved by Michael Bateman (FDEP) 2003

ANNUAL COSTS - 2007

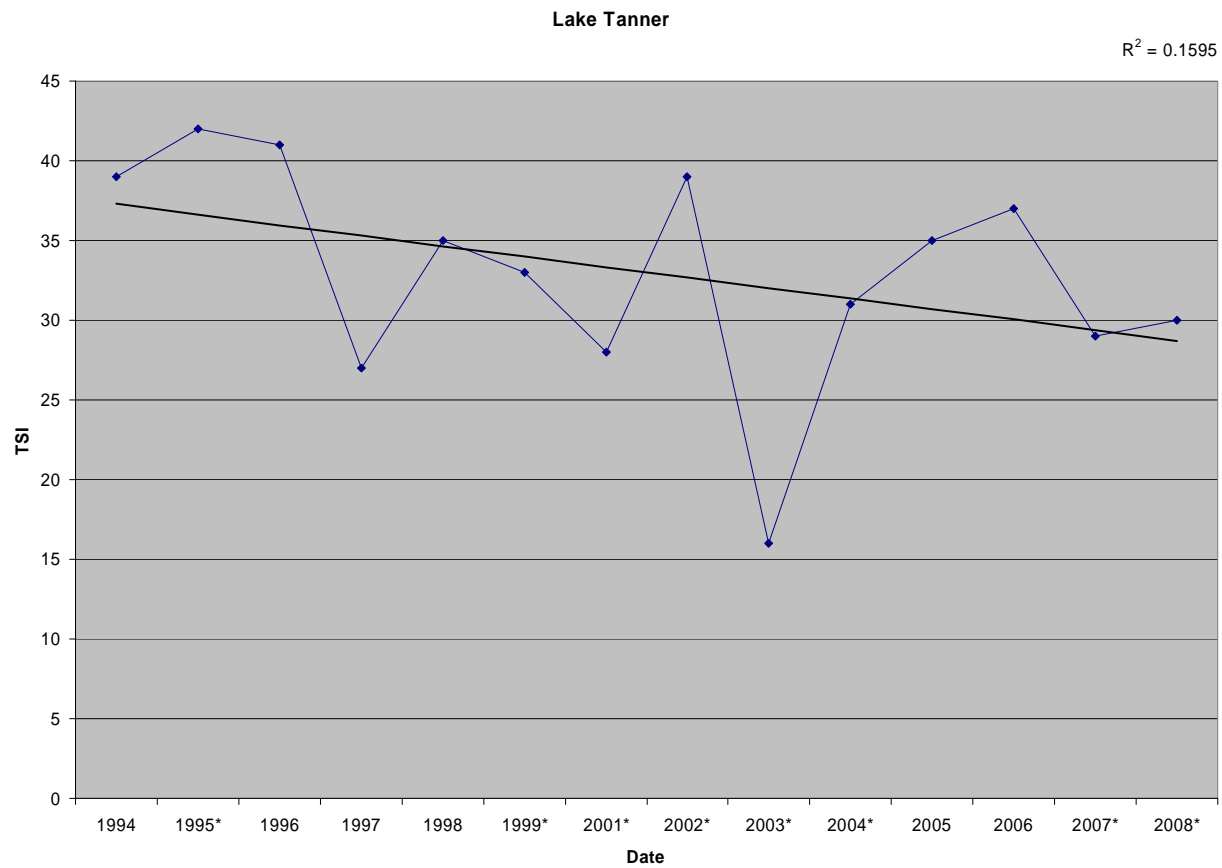
Sample Type	Sample Volume	Cost	Percentage
Ambient	2300	\$403,202	48
TMDL	410	\$71,875	8
NPDES	405	\$70,998	9
Bath. Bch.	545	\$95,541	11
Volunteer	434	\$76,082	10
BMP/ Research	656	\$115,000	14
Total		\$832,700	

ANNUAL COSTS - 2007 Cont'

- Realtime Monitoring Program
 - Four sites
 - Collaboration with USGS and SFWMD
 - \$120,000
- Expansion in 2009 with Addition of 2-4 Sites

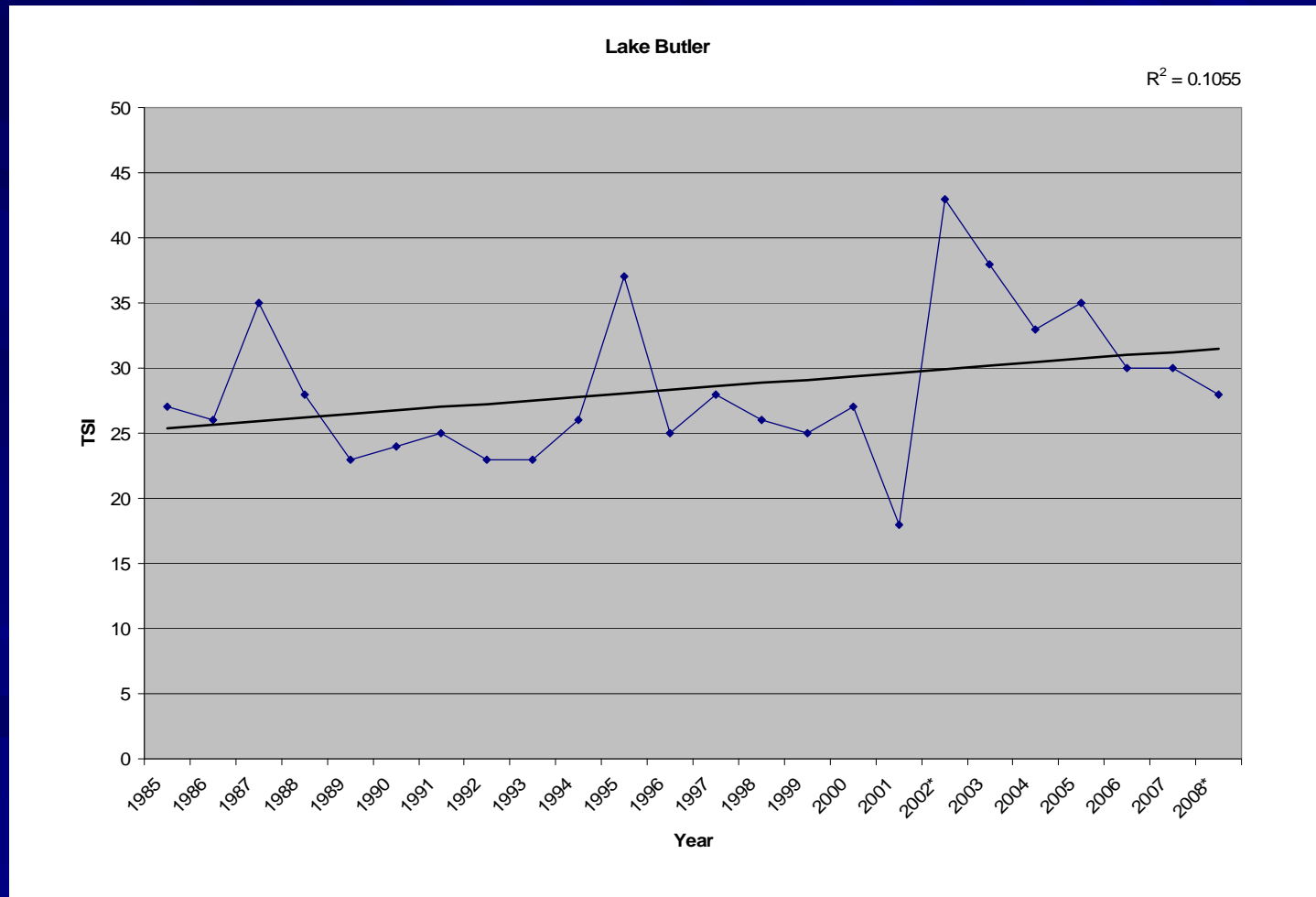
TREND EXAMPLES

Lake Tanner TSI 1994 - 2008



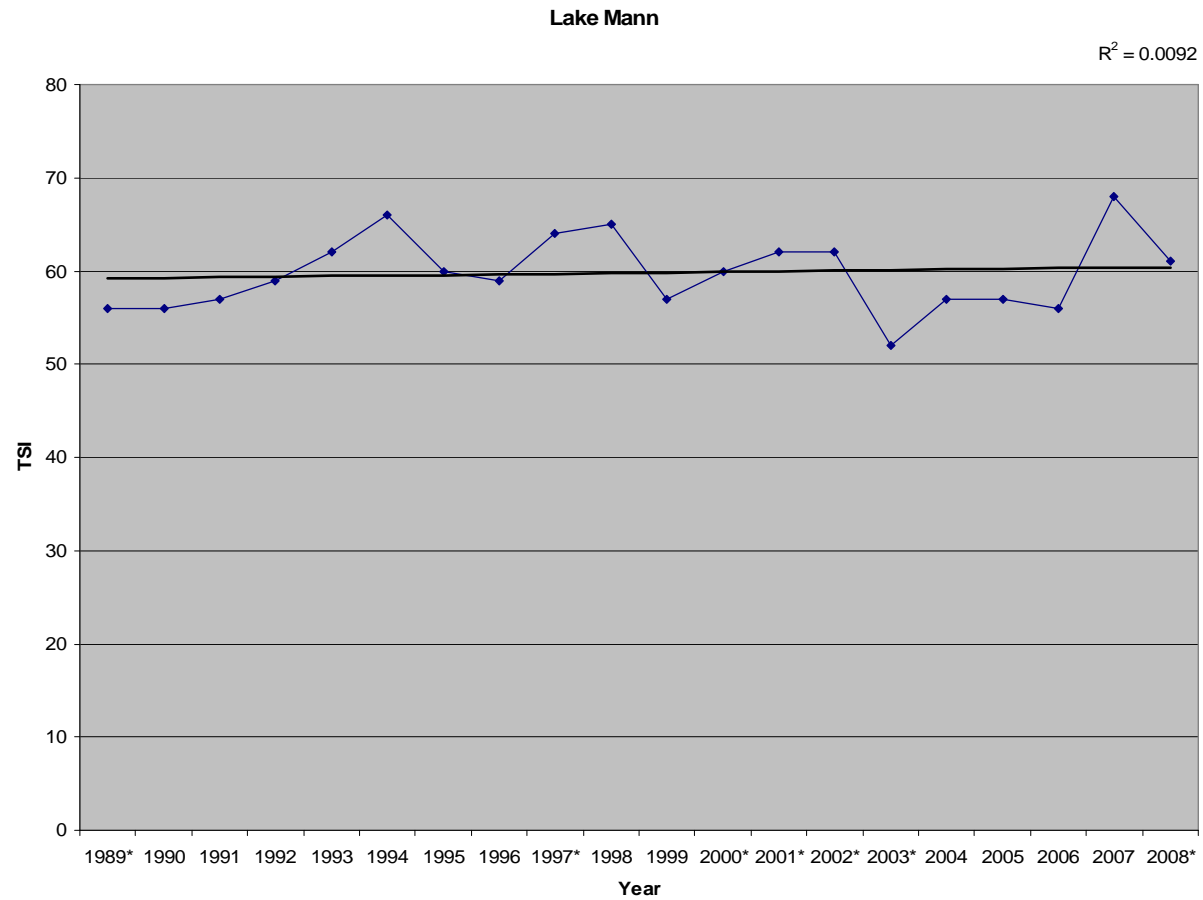
TREND EXAMPLE

Lake Butler TSI 1985 - 2008



TREND EXAMPLE

Lake Mann TSI 1989 - 2008



FDEP CONCERNS ABOUT MONITORING

- 27 Phase I Entities, Variable Approaches
- 88% Not Monitoring Discharges
- Desire to Standardize Monitoring
- Follow National Trend

PROPOSED NPDES PERMIT REQUIREMENTS

- Same Goals, BUT Stormwater Focused:
 - Major outfalls from residential, commercial or industrial land uses
 - Major outfalls discharging to impaired waters
 - Alternatives: major outfalls at pre-BMP implementation; pre-dev.; post-BMP implementation
- Ambient is Optional

CRITIQUE OF REQUIREMENTS

- Hard to Establish Trends with Limited Sample Events
- High Staff Utilization Per Sample Relative to Ambient (And Low Success Rates)
- Doesn't Fully Recognize Need for Ambient Relative to TMDLs

PROJECTED COSTS

- Assume Coverage of 12 Major Basins in Orange County
- Two Monitoring Stations Per Basin
- 8 Events Required Over 5 – Year Permit
- Autosamplers Supplemented by Initial Grabs
- If All Events Occur as Planned with No Repeats - \$239,000
- Other sampling programs reduced or cut

WHERE TO GO FROM HERE

- FDEP Provide Short and Long-Term Goals Related to Change
- FDEP Meet with Phase I Permittees
- Develop Collaborative, Scientifically Based Monitoring Plan Framework That Integrates Value of Ambient Data, TMDL needs, BMP Performance, NPDES Permit Compliance