



*Florida Department of
Environmental Protection*

Clean Water Act

Water Quality Based Provisions and Challenges

Tampa Bay Regional Planning Council

October, 2010

Drew Bartlett, Deputy Director
Division of Environmental Assessment and Restoration



Basic Clean Water Act Water Quality Based Process

Set Water Quality Standards

Monitoring and Assess Waterbodies

List Impaired Waterbodies
303(d) List

Develop Total Maximum
Daily Loads

Implement Loads
NPDES Permitting &
Nonpoint Source Controls



Goal: “wherever attainable, provide for the protection and propagation of fish, shellfish, and wildlife and provide for recreation in and on the water”



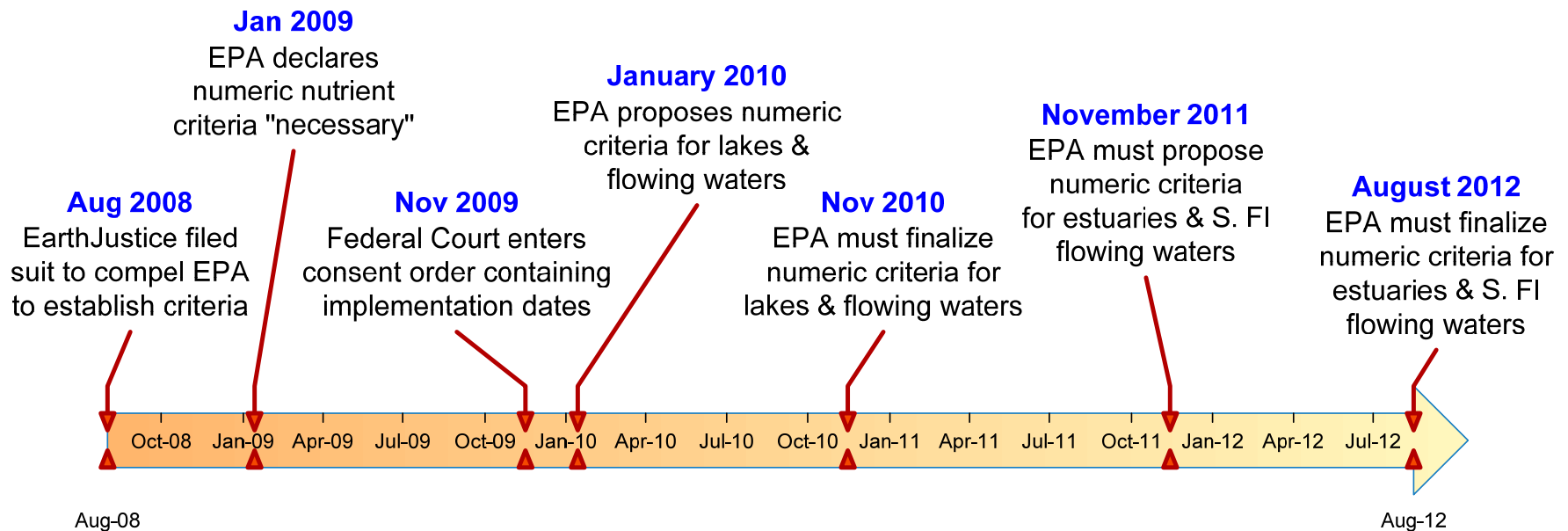
Requires EPA Involvement





Numeric Nutrient Criteria

- FDEP Started Developing Numeric Criteria in 2001

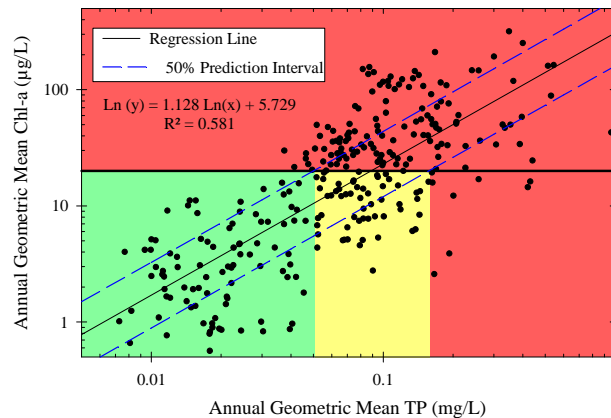




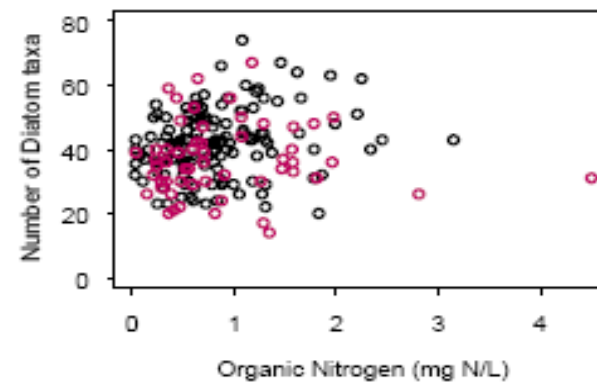
Deriving “Protective” Nutrient Standards

Plan A - Attempt to find the amount of nutrients that causes harm to waterways

Plan B - Identify the amount of nutrients in the healthy and undisturbed waterways



Lakes & Tampa Bay



Streams





Water Quality for Tampa Bay (Plan A)

Reasonable Assurance/WQBEL

Implemented by Tampa Bay Nitrogen Management Consortium

Solid basis for all Clean Water Act Actions because it is known what protects the goal.

“protection and propagation of fish, shellfish, and wildlife”

Year	Old Tampa Bay	Hills. Bay	Mid. Tampa Bay	Lower Tampa Bay
1974	No	No	No	Yes
1975	No	No	No	Yes
1976	No	No	No	Yes
1977	No	No	No	No
1978	No	No	No	Yes
1979	No	No	No	No
1980	No	No	No	No
1981	No	No	No	No
1982	No	No	No	No
1983	No	No	No	No
1984	Yes	Yes	No	Yes
1985	No	No	No	Yes
1986	No	No	Yes	Yes
1987	No	Yes	No	Yes
1988	Yes	Yes	Yes	Yes
1989	No	Yes	Yes	Yes
1990	No	Yes	Yes	Yes
1991	Yes	Yes	Yes	Yes
1992	Yes	Yes	Yes	Yes
1993	Yes	Yes	Yes	Yes
1994	No	No	No	No
1995	No	No	No	Yes
1996	Yes	Yes	Yes	Yes
1997	Yes	Yes	Yes	Yes
1998	No	No	No	No
1999	Yes	Yes	Yes	Yes
2000	Yes	Yes	Yes	Yes
2001	Yes	Yes	Yes	Yes
2002	Yes	Yes	Yes	Yes
2003	No	Yes	Yes	Yes
2004	No	Yes	Yes	Yes
2005	Yes	Yes	Yes	No
2006	Yes	Yes	Yes	Yes
2007	Yes	Yes	Yes	Yes
2008	Yes	Yes	Yes	Yes
2009	No	Yes	Yes	Yes

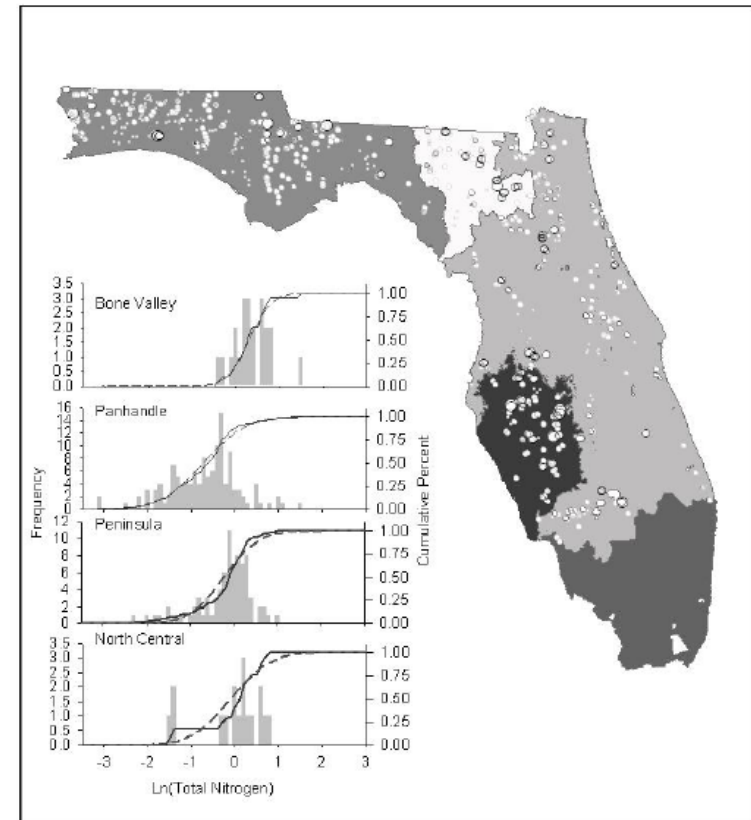




Stream Criteria (Plan B)

Set to maintain concentrations found in similar healthy and/or undisturbed waterbodies.

	Concentrations from Biologically Healthy Sites (mg/L)		Concentrations from Minimally Disturbed Sites (mg/L)	
	Total Phosphorus	Total Nitrogen	Total Phosphorus	Total Nitrogen
Panhandle West	0.03	0.84	0.04	0.62
Panhandle East	0.10	0.77	0.11	0.97
North Central	0.36	1.48	0.35	1.90
Peninsula	0.10	1.20	0.11	1.67
West Central	0.73	1.80	0.35	1.30



Criticism: True level of protection unknown.



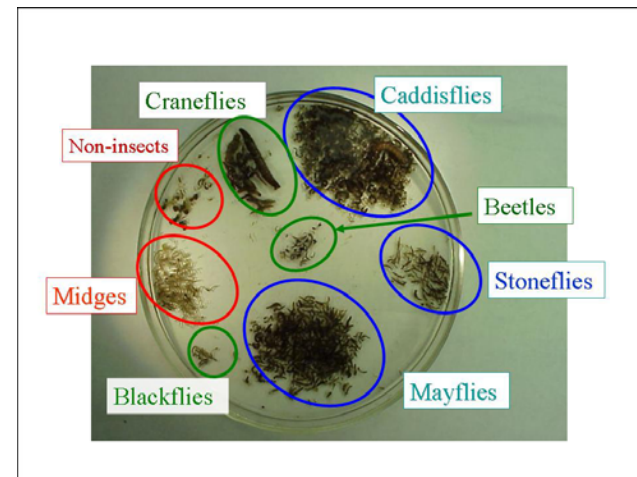


Accounting for Plan B Criteria

Understand the Waterbody



- Is it healthy?
- Can it be healthy?
- Are Nutrients a factor?



- If Healthy, then process site specific criteria to current conditions.
- If not Healthy, then set site specific criteria (through TMDL) or change goal of the waterbody (drainage ditch).



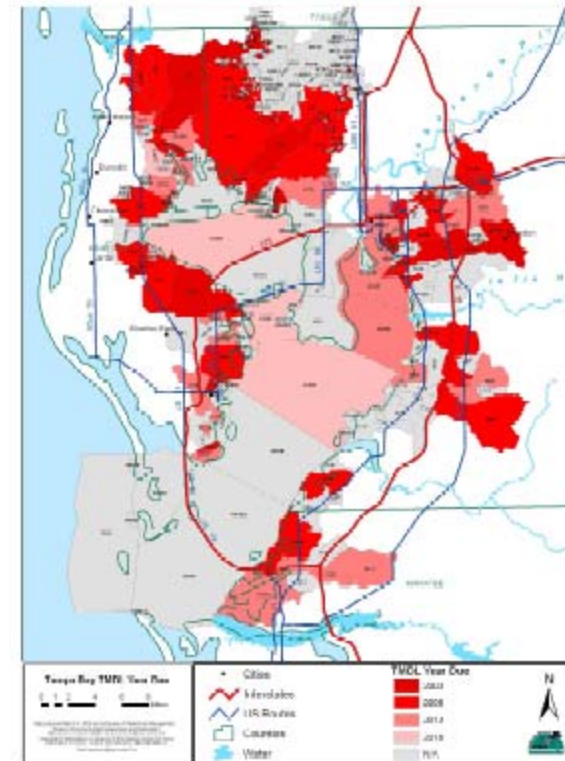


Why are TMDLs still being set?

Consent Decree Schedule

If EPA has not approved a State TMDL for a targeted impairment (1998 List) by Sept. 30th of each year, EPA shall propose a TMDL for that impairment.

Finalize 6 Months later unless more analysis is necessary.

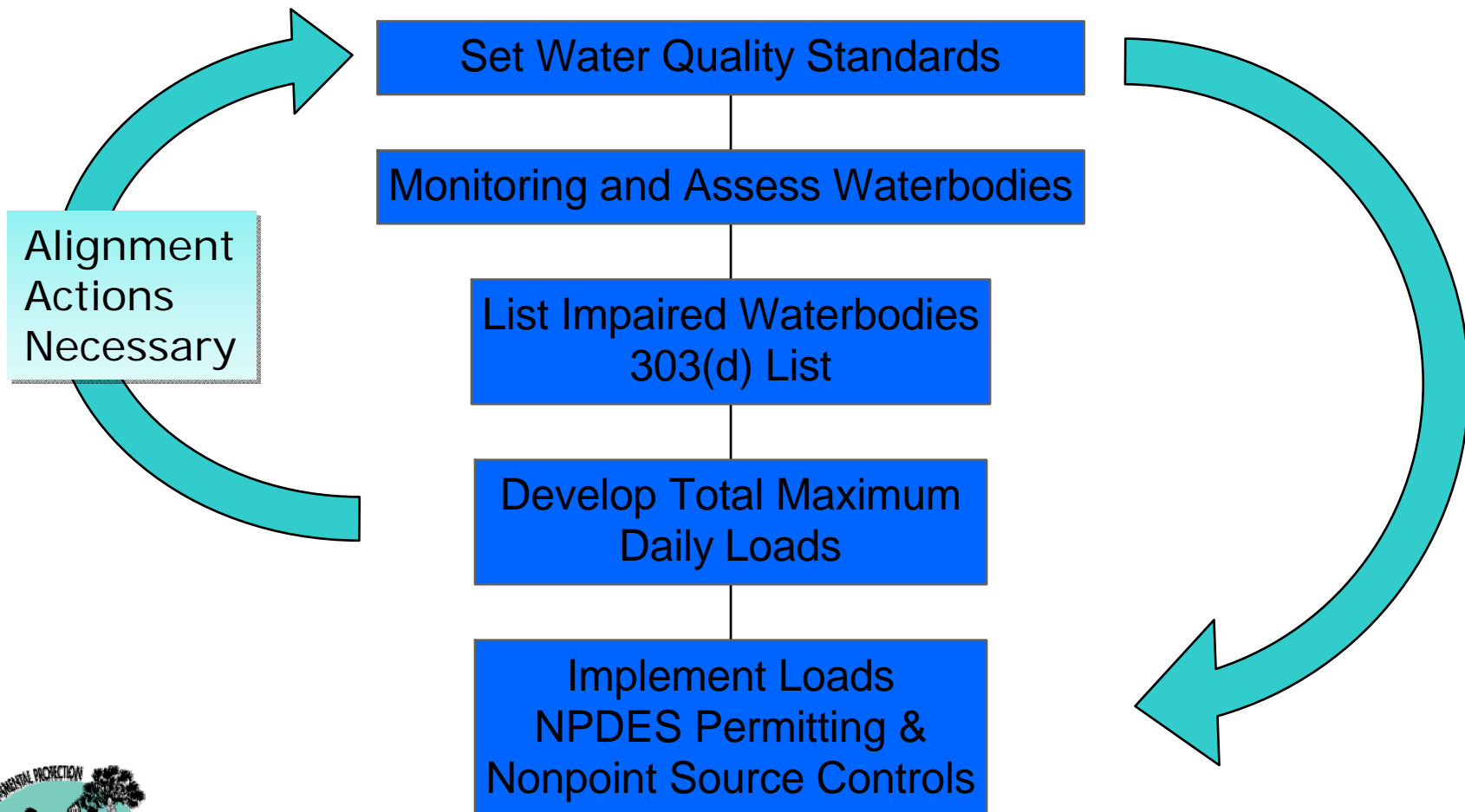


Revisiting nutrient TMDLs will be necessary.





Interaction with Criteria, TMDLs, and Other Water Quality Goals (Tampa Bay TMDL/RA)





Questions?

Drew Bartlett

Deputy Director

Division of Environmental Assessment and Restoration

(850) 245-8446

drew.bartlett@dep.state.fl.us

<http://www.dep.state.fl.us/water/wqssp/nutrients/index.htm>

