

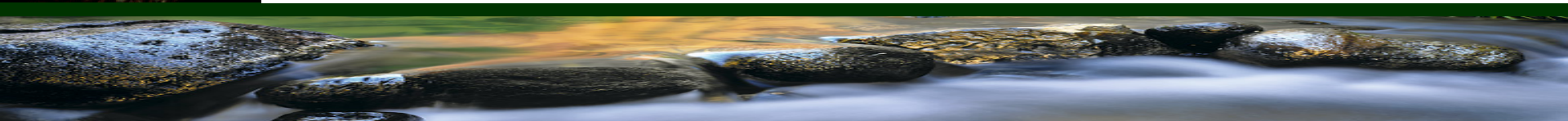


Numeric Nutrient Criteria

Presentation to the Agricultural and Natural Resources Policy Committee

February 3, 2010

David Richardson, PE
Assistant General Manager
Gainesville Regional Utilities

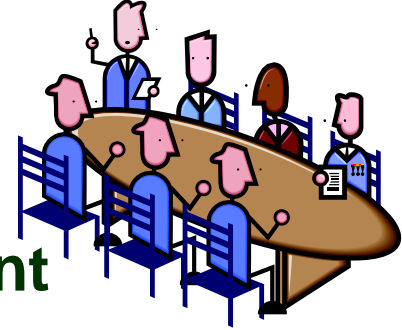




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- 62 Members**
 - 44 Utility**
 - 18 Subscribers**
- ~8 million Floridians served daily**



FWEA Utility Council Mission Statement



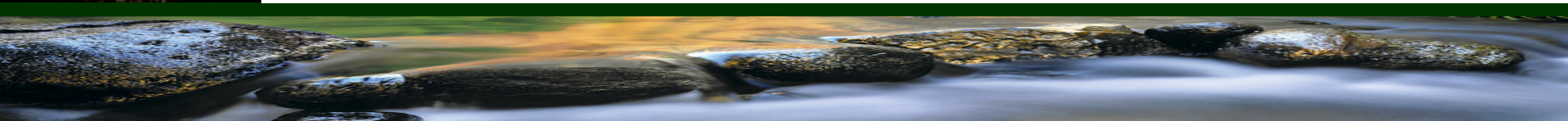
- **Strive for the reduction and elimination of water pollution in Florida;**
- **Assist its members to achieve sound public health and environmental goals in an efficient and cost effective manner; and**
- **Actively support the adoption and implementation of scientifically based wastewater legislation, regulation and policy at federal, state, regional and local levels.**





Since the FWEAUC last briefed this issue...

- FWEAUC representatives addressed this committee in November 2009
- Expressed concerns that EPA's proposed numeric nutrient criteria rule would **lack an adequate scientific basis & cause significant negative economic and policy consequences**
- EPA's proposed numeric nutrient criteria unfortunately confirmed that these predictions were well-founded

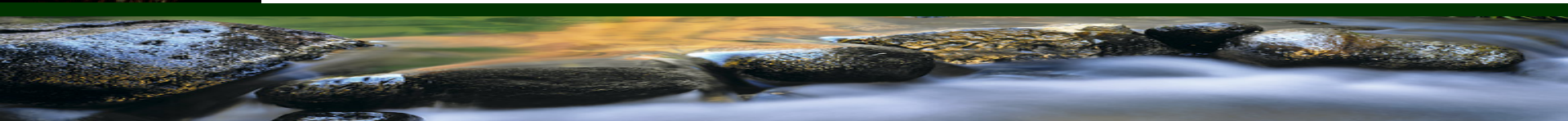




Numeric Nutrient Criteria

	TN (mg/L)	TP (mg/L)
Panhandle	0.824	0.043
Bone Valley	1.798	0.739
Peninsula	1.205	0.107
North Central	1.479	0.359

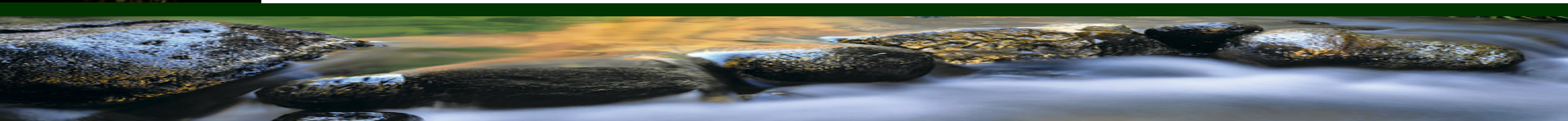
- EPA's regional numbers will in many instances be *reduced further* based on the perceived nutrient sensitivity of downstream waters.
 - Example: For a stream flowing into Pensacola Bay, the initial regional criterion for upstream waters is **0.824 mg/L-TN**, but EPA's downstream waters formula may reduce that stream criterion down to **0.43** to **0.48 mg/L-TN**.





FWEAUC Concerns

- Scientifically defensible?
 - EPA Proposed Rule, page 80: “...EPA analyzed stressor-response relationships in Florida streams based on available data, but...did not find sufficient scientific support for their use in the derivation of numeric nutrient criteria for Florida streams. More specifically, *EPA was not able to demonstrate a sufficiently strong correlation between the biological response indicators...and TN or TP concentrations.* ...”
 - Despite admitted shortcomings of the proposed criteria, EPA plans to overlay a downstream waters formula that will make the **already** roughly derived criteria even more restrictive.



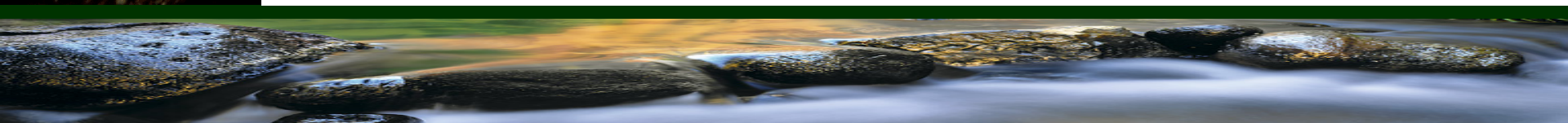


FWEAUC Concerns

- **Technologically achievable?**

Pollutant	Secondary Limits	AWT Limits	Proposed Regional Numeric Nutrient Limits*
cBOD5,mg/L	20-30	5	-
TSS, mg/L	20-30	5	-
TN, mg/L	No limit	3	0.82-1.80
TP, mg/L	No limit	1	0.043-0.739

*Downstream protective values for TN are as low as **0.27** mg/L. It is unknown what downstream protective values EPA will propose for TP.



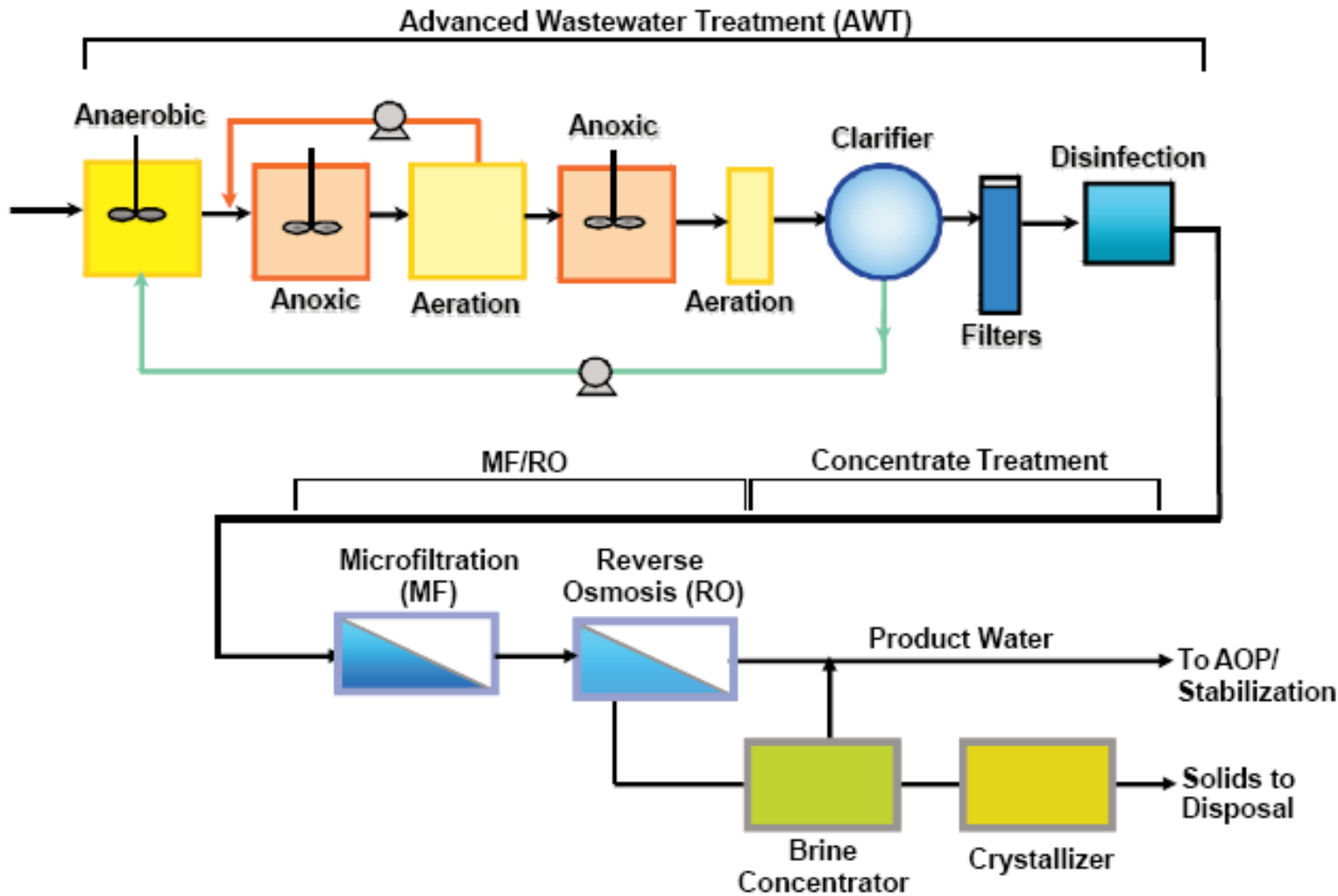


Figure 1. Schematic illustration of the type of processes likely required for Florida wastewater plants to comply with the proposed numeric nutrient criteria.

**Estimated Capital Costs and Increases in Sewer Rates for
Eight Florida Utilities and an Average Florida Case
to Construct Facilities to Meet Proposed Numeric Nutrient Limits**

	Capital Cost	Monthly (Annual) Sewer Rate Increase per Household
STATE OF FLORIDA²	\$24,400,000,000- \$50,700,000,000	\$ 62.² (\$740)
Bay County	\$42,000,000	\$ 57 (\$685)
Broward County	\$425,000,000	\$ 66 (\$793)
Destin Water	\$34,000,000	\$ 48 (\$581)
Escambia County	\$275,000,000	\$ 49 (\$591)
Hollywood	\$370,000,000	\$ 82 (\$996)
Jacksonville	\$2,000,000,000	\$ 67 (\$815)
Point Buena Vista ³	\$2,000,000	\$ 257 (\$3,094)
Cross City ³	\$5,800,000	\$ 28 (\$336)
South Walton ³	\$16,000,000	\$ 12 (\$147)

Notes:

1. The low end of the range provides the probable opinion of cost assuming only plants with surface water discharges will be required to meet numeric nutrient limits while the high end of the range assume that all plants will need to meet numeric nutrient limits.
2. Estimated average costs for the State of Florida include annual O&M expenses, and are shown for comparative purposes.
3. Assumes 2.5 persons per connection and 150 gpcd.

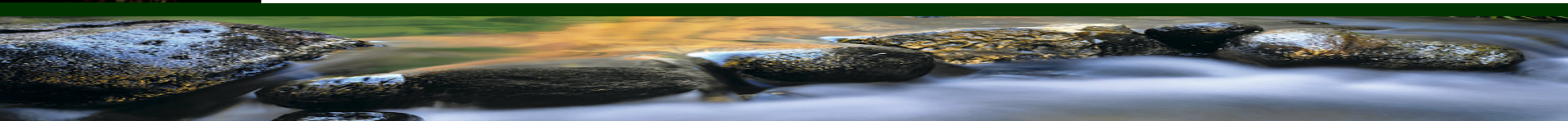
Justifiable cost?

- Approximately doubles the typical residential water/sewer bill for most utilities
- Cost of this will be born by our citizens and businesses for dubious environmental benefit
- Disproportionately impact low-income citizens
- Diverts public resources



FWEAUC Concerns

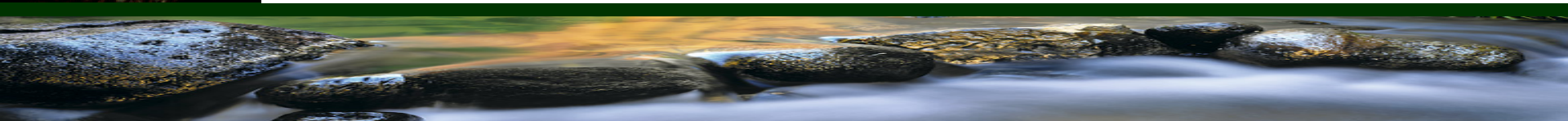
- **Significant Policy Consequences**
 - Render moot existing nutrient TMDLs & projects designed to achieve scientifically vetted nutrient targets
 - Undermine the reuse of reclaimed water
 - Two-Tier NPDES Permitting Program (federal & state standards)
- **Bottom line: EPA's overly aggressive deadline has resulted in scientifically indefensible proposed numeric nutrient criteria for Florida streams that will significantly impact Florida cities, the economy, and the general public.**





FWEAUC Position

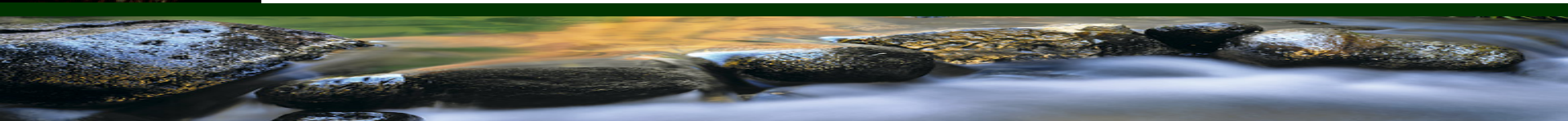
- **FWEA Utility Council supports science-based nutrient criteria that protect state water ecosystems and protect utility ratepayers from the economic burdens of unsound regulatory policy.**
- **FWEA Utility Council intends to work towards...**
 - Ensuring that nutrient criteria are scientifically defensible
 - Ensuring that needed nutrient reductions are tailored to individual water bodies, as currently happens under the existing narrative standard
 - Continuing to implement and improve Florida's progressive and sophisticated water quality standards programs





FWEAUC Intentions

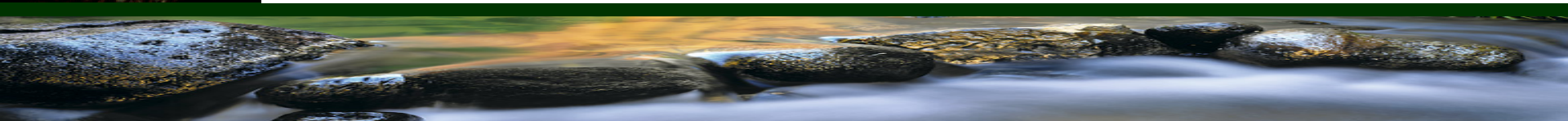
- **Challenge EPA's disruption of Florida's program**
- **Participate in rulemaking process with other interests to...**
 - Reduce unreasonableness in default standards
 - Improve provisions for implementation flexibility
 - Ensure that State developed SSACs/TMDLs have precedence over the default tabulated standard
- **Work constructively with DEP, Legislators, and other governmental entities**





Next Steps

- ***The State of Florida's response to EPA's imposition of federal numeric nutrient standards will greatly shape the future of water quality policy in Florida and throughout the nation.***





Next Steps

- We request that the Florida Legislature, FDEP, and all other governmental entities work with Stakeholders to request that EPA:
 - Recognize existing nutrient TMDLs and scientifically vetted nutrient targets
 - Ensure any new numeric nutrient standards are water body specific and account for the numerous parameters that drive biological response indicators, not just establish rudimentary TN and TP standards

