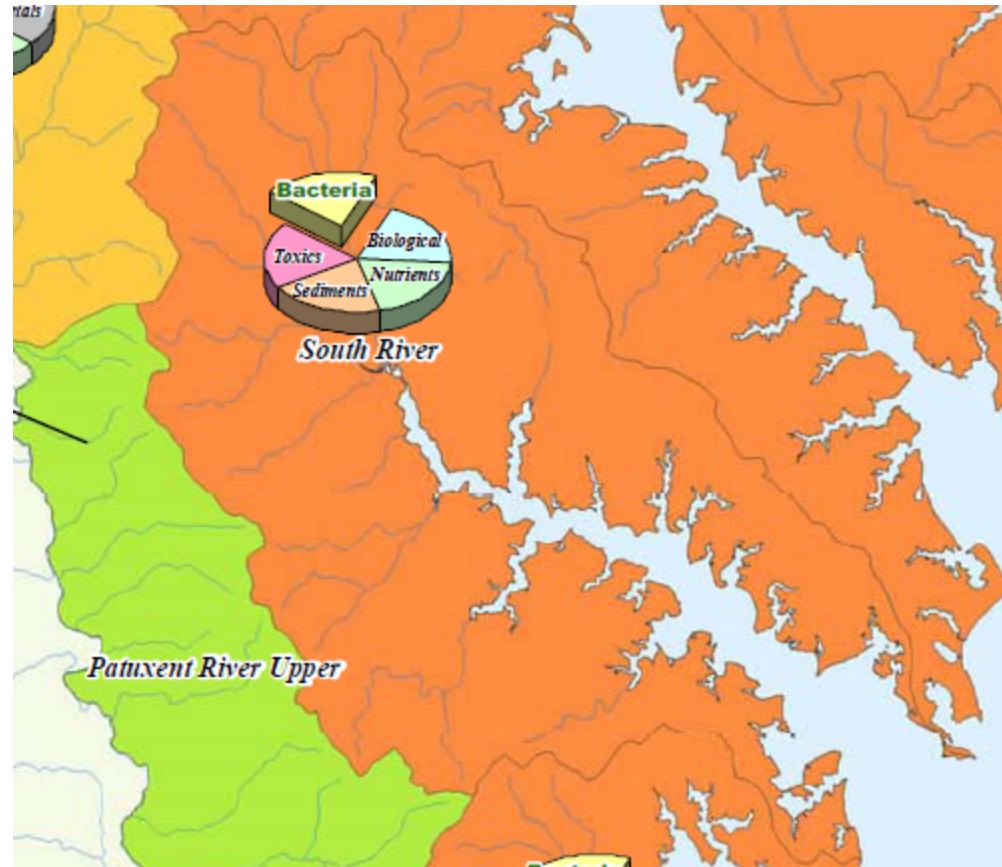


Bringing Back the South River





Pollution Impaired Waterways



Legend

Number of Impairments per Basin





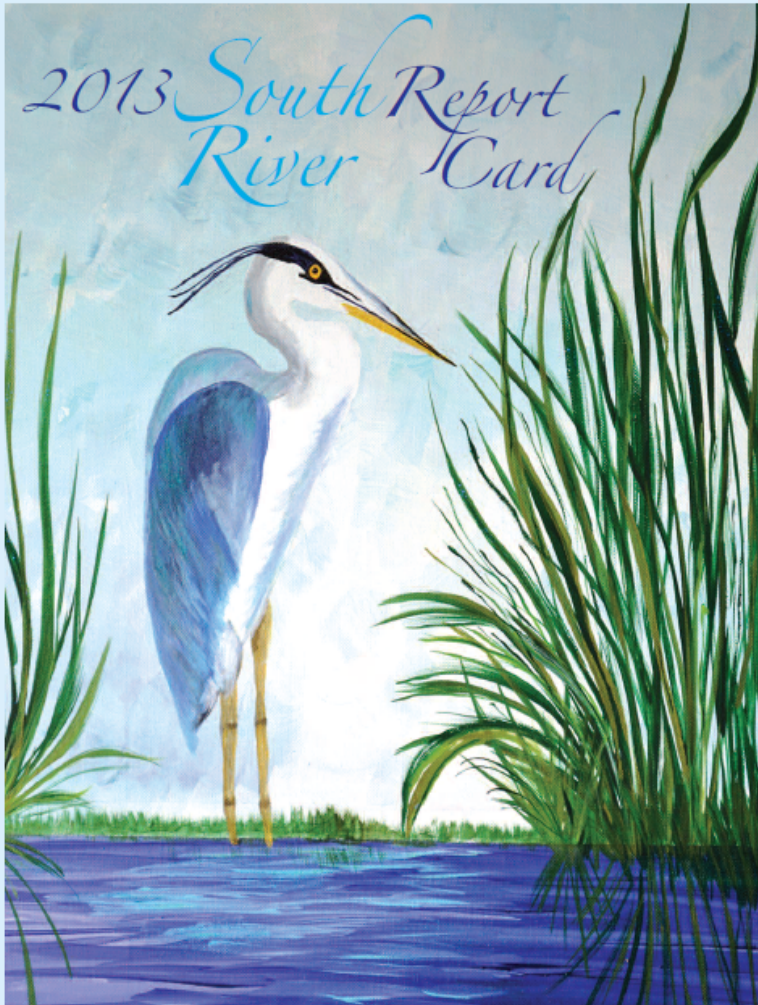
- Science & Education
- Restoration
- Enforcement
- Advocacy





South Riverkeeper – Diana Muller





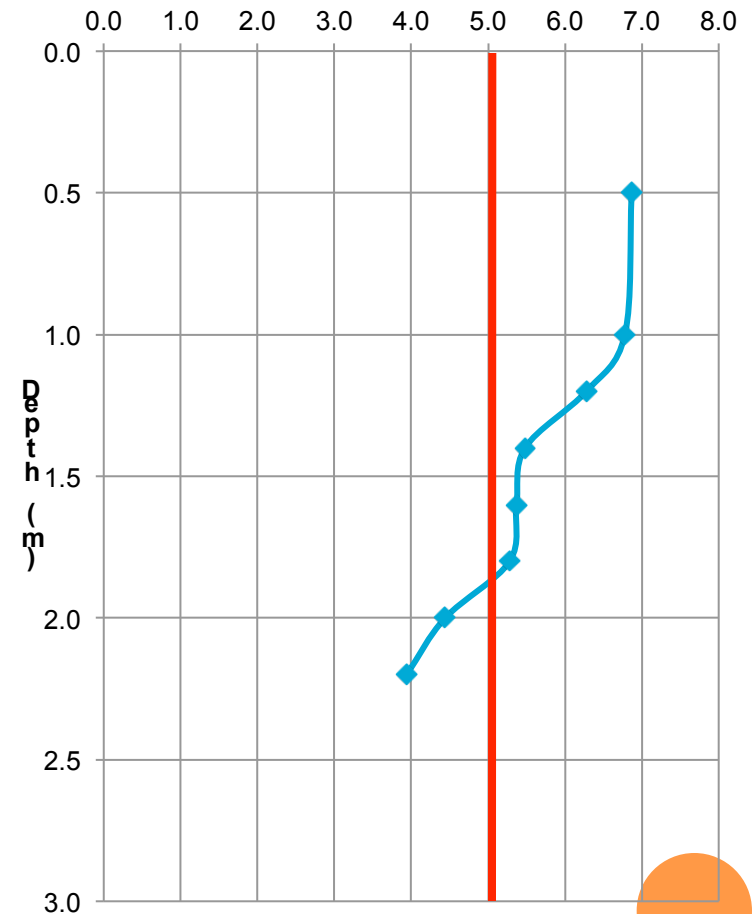
Protecting, Preserving, Restoring and Celebrating the South River



Water Quality Indicators	% Passing	
	Duvall	South River
<u>Water Clarity</u> Criteria: ≥ 1 meter	8%	5%
<u>Dissolved Oxygen</u> Criteria: ≥ 5 mg/l	55%	50%
<u>Nitrogen</u> Criteria: ≤ 0.65 mg/l	11%	11%
<u>Phosphorus</u> Criteria: ≤ 0.037 mg/l	10%	10%
<u>Chlorophyll a, Spring</u> Criteria: ≤ 6.3 μ g/l	0%	8%
<u>Chlorophyll a, Summer</u> Criteria: ≤ 7.7 μ g/l	0%	5%
<u>Underwater Grasses</u> Criteria: 455 acres total in South River	0%	3%

Human Health: Bacteria	% Passing
	Criteria: ≤ 104 cfu/ 100ml
Duvall Creek: Hillsmere Shores	87%
All South River Sites	78%

Dissolved Oxygen (mg/l)
October 10



What is a Watershed?















"Upstream from London Town, however, nearly every major tributary of South River had a mill. During the 1730's boom, no less than eleven mills or mill dams dotted the parish map. On Flat Creek alone there were four mills including two water mills, one fulling mill for cleaning wool, and one grist mill. Nearby, probably on Beard's Creek, Richard Moore erected both a water mill and bolting mill..." – *C. Earle (1975). Evolution of a Tidewater Settlement System: All Hallow's Parish, Maryland, 1650-1783*



RESTORATION

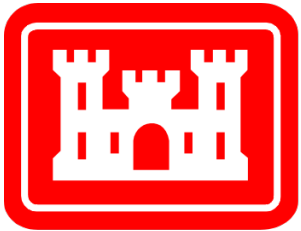












**US Army Corps
of Engineers®**

Permits



**Anne Arundel County Soil
Conservation District**







Living Shorelines





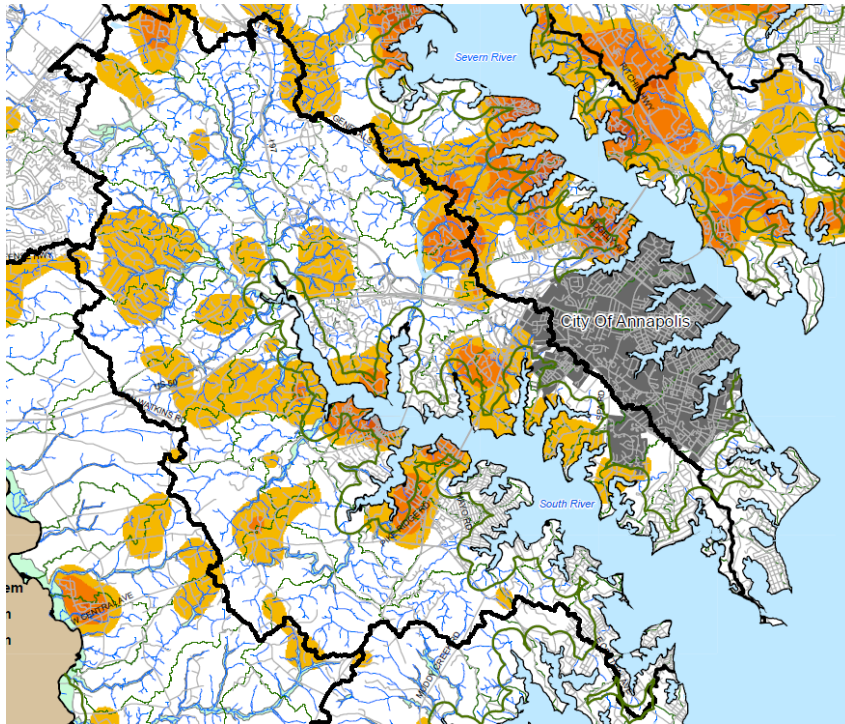
Oyster Recovery



Rain Gardens



Septic Systems and Our Waterways

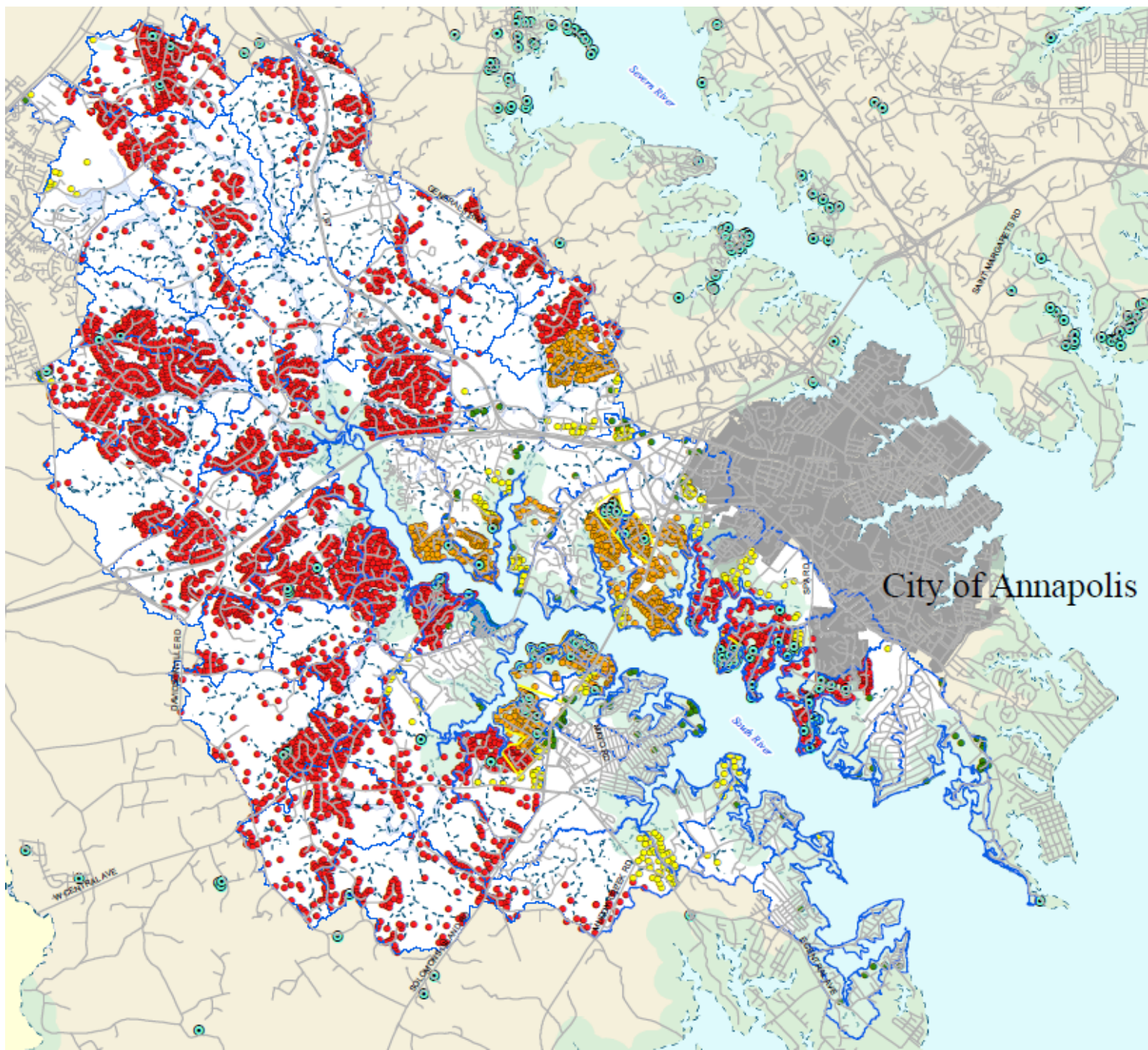


80% of nitrogen is not removed by septic systems within Critical Area; 50% is not removed within 1000 feet of non-tidal surface water

Legend

-  < 0.5 acres per Septic System
-  0.5 to 1 acres per Septic System
-  1 to 2 acres per Septic System
-  2 to 5 acres per Septic System





City of Annapolis

Enforcement







“Pasadena company guilty of South River tree clearing” – The Capital, 3/30/12



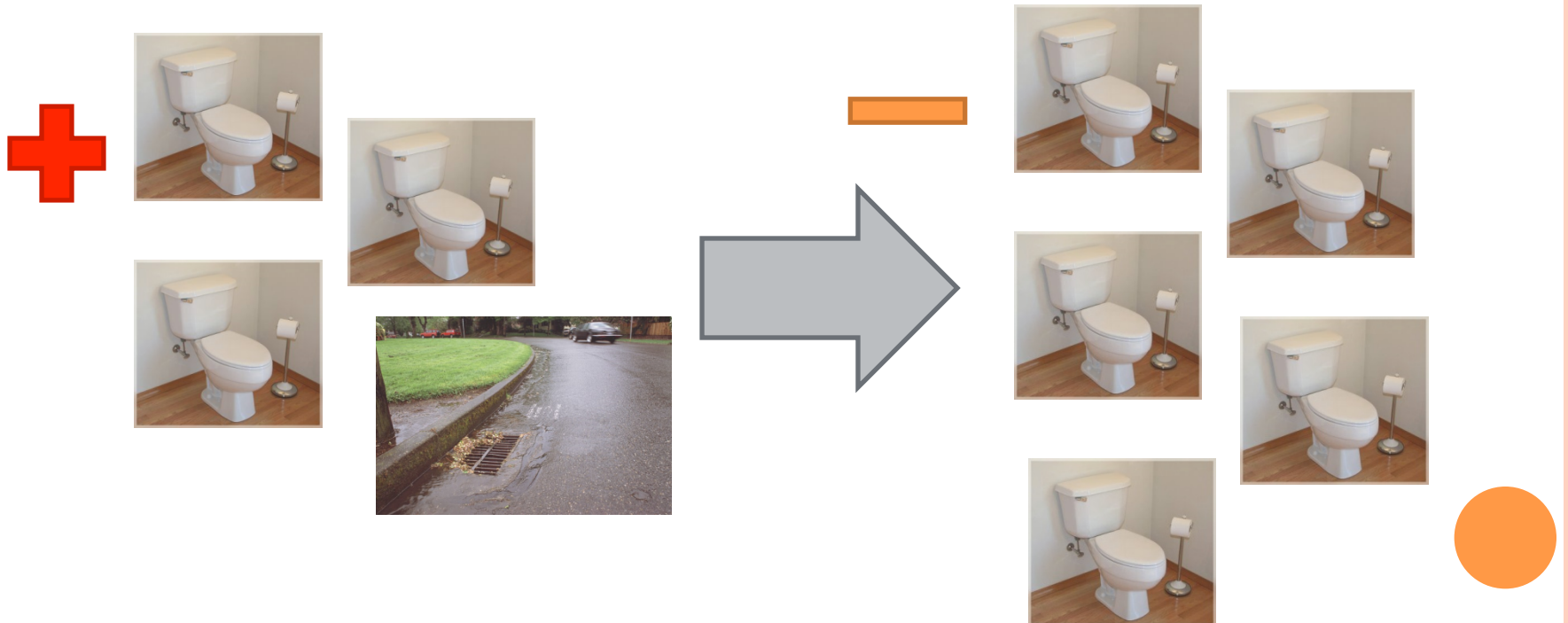
Advocacy

WORKING IN THE LEGISLATURES TO FIND
THE RESOURCES FOR RESTORATION.



WORKING WITH STAKEHOLDERS ON AN “OFFSET” PROGRAM

- As new pollution loads come on-line, they will have to be cancelled out by pollution improvements elsewhere in the watershed, with no net increase in overall pollution (and a goal of reducing overall pollution).







Thank You

Erik Michelsen

Executive Director

South River Federation

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