

# MDNR Nutrient Stakeholders Meeting

## Sept 21, 2011

*Overview of EPA Decision and the Importance of Reducing  
N & P Pollution*

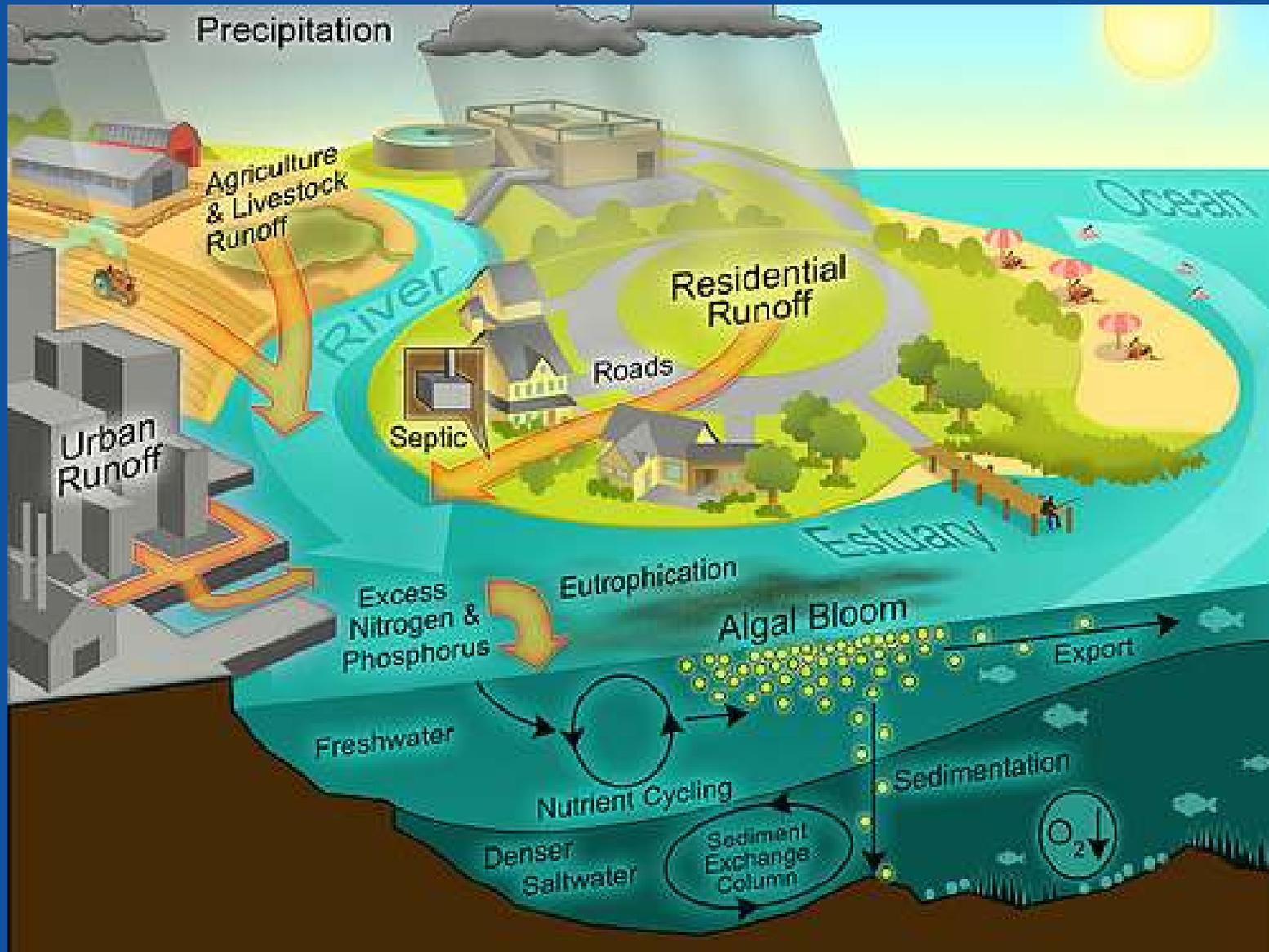


# What is Nitrogen (N) and Phosphorus (P) Pollution?

- ◆ “Nutrient pollution,” is the result of excess nitrogen (N) and phosphorus (P) entering waters
- ◆ It causes harmful algae blooms—the thick, green muck that fouls clear water—that produce toxins harmful to both humans and animals, and deplete oxygen needed for fish and shellfish survival, and smother vegetation and discolor water.
- ◆ N and P pollution threatens waters used for drinking, fishing, swimming, and other recreational purposes



# Sources of Nitrogen and Phosphorus Pollution



# States and Local Communities are Best Positioned to Restore and Protect their Waters

- ◆ EPA believes that States are best suited to address N/P pollution
- ◆ EPA works closely with our State and local partners on a technical basis to aid their efforts.
- ◆ EPA has worked with 25 states across the country to develop and approve numeric nutrient criteria for their waters.
- ◆ Numeric nutrient criteria work to keep everyone accountable in the effort to keep their waters clean because they provide specific measurable guidelines to help restore lakes, springs, rivers and streams to a healthy condition.



# Agency's Decision on 10 CSR 20-7.031 (3)(N) (Nutrients and Chlorophyll)

- ◆ Approved 10 CSR 20-7.031 (4) Specific Criteria (N) Nutrients (3),  
Table M
- ◆ Disapproved the remaining portions of 10 CSR 20-7.031 (3)(N)



# In making the Agency's Decision, we relied upon:

- ◆ Rule
- ◆ Rationale
- ◆ MDNR Response to Comments Document
- ◆ Dataset provided to the EPA



# Two Overarching Issues

- ◆ Sound Scientific Rationale/Transparency: Inability to reproduce the numeric criteria based on the data.
- ◆ Criteria not demonstrated to adequately protect the use



# Moving Forward – Concerns to Keep in Mind

- ◆ When using a reference approach must ensure that waters have minimal anthropogenic impacts
- ◆ Modeling approaches must result in establishment of criteria that protects use
- ◆ Further statistical relationships (specifically TN and Chla) can be evaluated along with other lines of evidence to provide more robust scientific rationale



# Moving Forward – Next Steps

- ◆ EPA believes that States are best suited to address N/P pollution
- ◆ Criteria is one of eight recommended elements in a State Framework for Managing Nitrogen and Phosphorous Pollution
- ◆ EPA looks forward to working closely with MDNR to aid their efforts to refine lake and stream criteria.



For more information, visit:  
[www.epa.gov/nutrientpollution](http://www.epa.gov/nutrientpollution)



# Moving Forward – Post 2008

New Studies?  
New Data?  
New Models?

