

# Localities and New Stormwater Management Programs

VACO Meeting 8/16/2013  
Mike Flagg (Hanover County)



# Stormwater...

## Related Regulatory Mandates

- **Erosion & Sediment Control – Statewide**
- **Chesapeake Bay Preservation – Tidewater Localities**
- **Virginia Stormwater Management Program (VSMP)**
- **Construction General Permit – Statewide VSMP Implementation**
- **Municipal Separate Storm Sewer System (MS4) General Permit (MCMs 4 & 5)– Urbanized Areas**

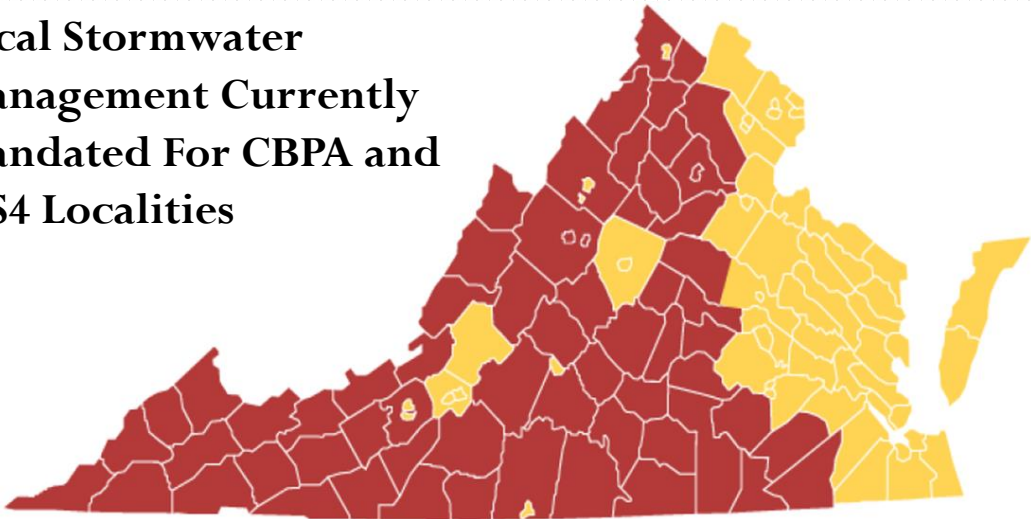



# Stormwater Management


## What's Changing...



**Local Stormwater Management Currently Mandated For CBPA and MS4 Localities**



 Chesapeake Bay Preservation Act localities and Municipal Separate Storm Sewer System (MS4) permitted localities

 Likely no stormwater program currently

### Required Statewide Local Stormwater Management

- New/Enhanced Local Program
- New Quality Criteria  
One standard statewide:  
0.41 lbs/acre/yr  
Runoff Reduction Method
- New Quantity Criteria  
Energy Balance Method



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# Stormwater Management

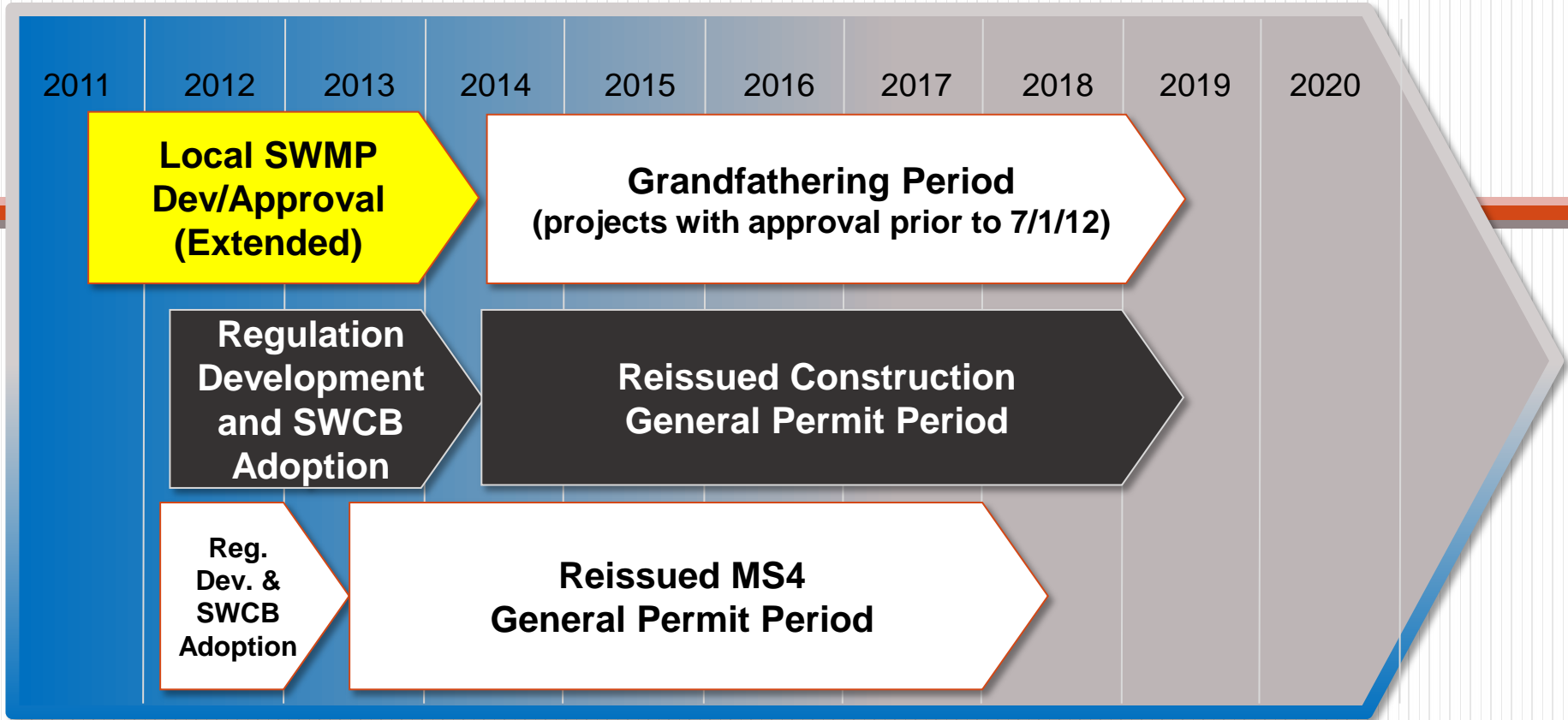
## What's Changing...

- Shift from State to Local Program Implementation of Construction Site Permitting
  - Presented as “One Stop Shopping”
  - Local Implementation → Better Compliance → Improved Water Quality
- New Regulations - More Stringent Stormwater Criteria on New Development & Redevelopment
  - Runoff Reduction Method & Energy Balance
- Changes at the state level will require the July 2014 sunset of Hanover's existing Regional Program (Private Sector Trading)



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# Timeline



# Program Application Required Elements

- Identify the Authority (DPW Director)
- **Stormwater Management Ordinance**
- Funding and Staffing Plan
- Process for Review & Approval of ESC and SWM Plans
- Policy/Procedure for Obtaining & Releasing Bonds
- Inspection Program & Certified Inspectors
- Procedures for Reporting & Recordkeeping
- BMP Design Criteria, Maintenance Requirements & Tracking
- Identify Applicable TMDLs
- Enforcement Program



# Stormwater Ordinance Summary

- Generally applies to land disturbances  $> 1$  acre
- Exemptions for agriculture, routine maintenance activities, and others
- No VSMP Permit required for CB Land Disturbing Activity (separately built) post June 2014
- Individual projects within a CPOD with a VSMP permit also required to have VSMP permit coverage
- Items required for a land disturbance permit include:
  - application with VSMP permit registration statement
  - approved Erosion & Sediment Control plan
  - approved Stormwater Management plan
  - payment of fee
  - performance bond
- SWPPP maintained, current and available on-site
- Technical Criteria: new required post June 2014 unless grandfathered or under VSMP permit
- Submission of construction record drawing for all permanent BMPs.
- Maintenance agreement for all permanent BMPs
- 15 day completeness, 60 day plan review periods
- Monitoring & Inspection Requirements (during & post construction), access provisions
- Hearings & Appeals Processes





# New Hanover Stormwater Ordinance

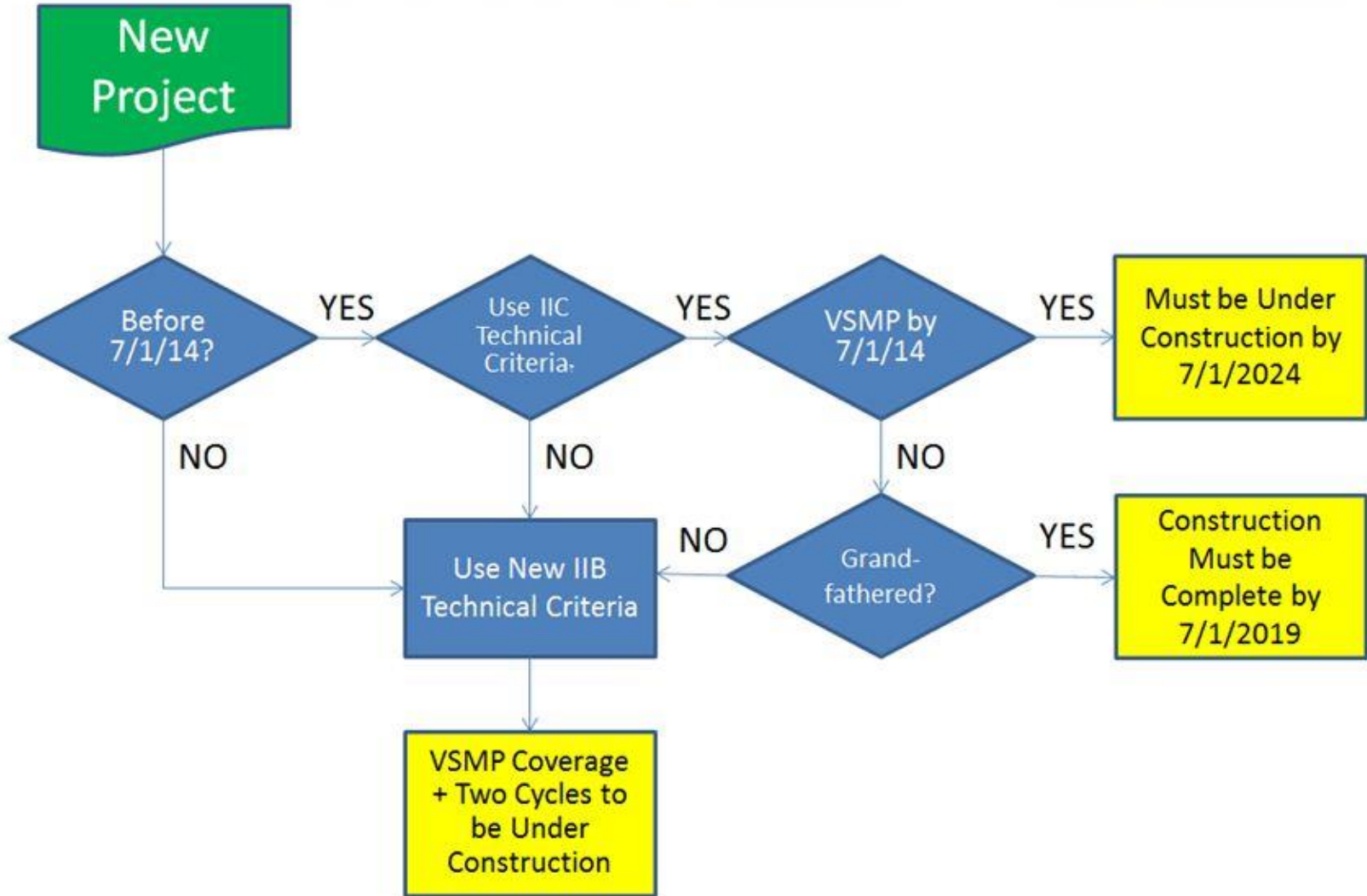
- **10-77 PURPOSE AND AUTHORITY**
- **10-78 DEFINITIONS**
- **10-79 STORMWATER PERMIT REQUIREMENT; EXEMPTIONS**
- **10-80 STORMWATER MANAGEMENT PROGRAM ESTABLISHED; SUBMISSION AND APPROVAL OF PLANS; PROHIBITIONS**
- **10-81 STORMWATER POLLUTION PREVENTION PLAN; CONTENTS OF PLANS**
- **10-82 STORMWATER MANAGEMENT PLAN; CONTENTS OF PLAN**
- **10-83 POLLUTION PREVENTION PLAN; CONTENTS OF PLANS**
- **10-84 REVIEW OF STORMWATER MANAGEMENT PLAN**
- **10-85 TECHNICAL CRITERIA FOR REGULATED LAND DISTURBING ACTIVITIES**
- **10-86 LONG-TERM MAINTENANCE OF PERMANENT STORMWATER FACILITIES**
- **10-87 MONITORING AND INSPECTIONS**
- **10-88 HEARINGS**
- **10-89 APPEALS**
- **10-90 ENFORCEMENT**
- **10-91 Fees**
- **10-92 Performance Bond**



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# IMPLEMENTATION FLOWCHART FOR NEW STORMWATER REGULATIONS



# Water Quality Criteria Changes

## Existing Rules

Impervious Surface (IC) only

0.5 inches of *Runoff* from the IC only

Average land condition/  
technology based  
(0.44 lb./ac/yr TP)

10% reduction TP

Simple Method

**Land Use(s)**

**Event**

**New Development  
Design Criteria**

**Redevelopment  
Criteria**

**Compliance  
Methodology**

## Modified Rules

IC + Forest/ Open Space +  
Managed Turf

1.0 inches of *Rainfall* from the  
whole site

0.41 lbs./ac/yr TP

<1 acre = 10% red. TP,  
>1 acre = 20% red. TP

Runoff Reduction Method  
(RRM = enhanced Simple  
Method)



# Water Quantity Criteria Changes

## Situational Channel Protection Criteria

### Manmade Stormwater Conveyance *Systems*

(2-yr, 24-hr storm)



### Restored Stormwater Conveyance *Systems*

(1-yr, 24-hr storm)



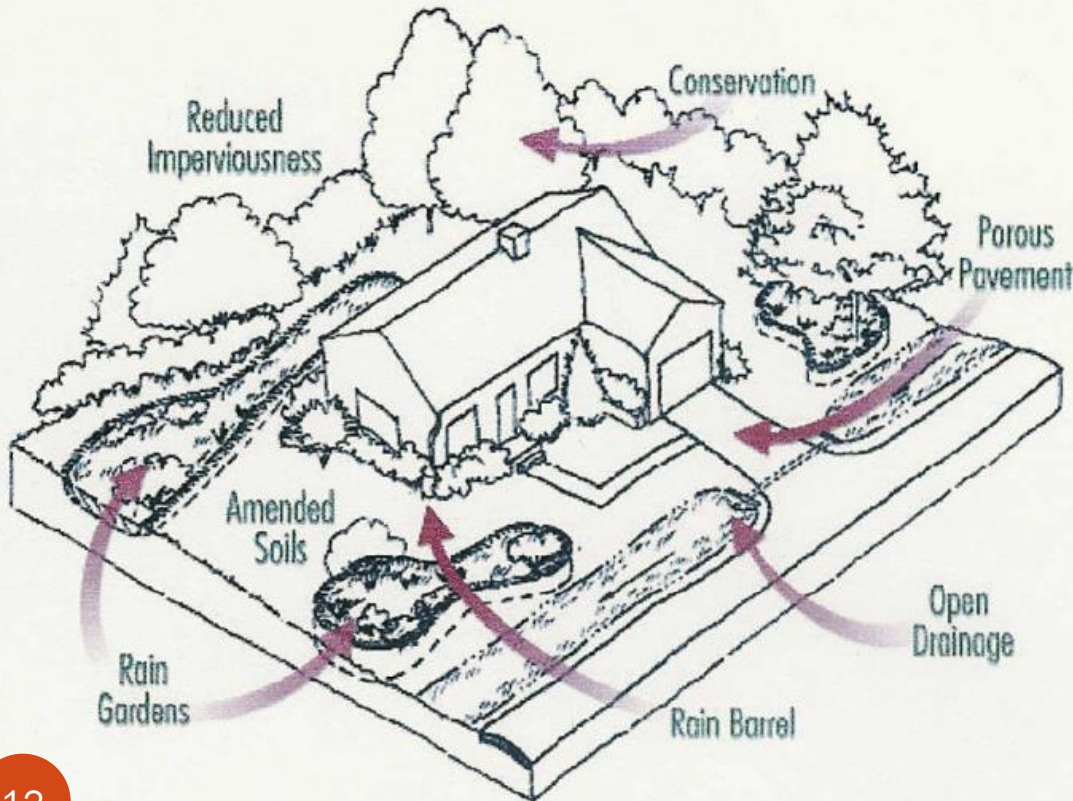
### Natural Stormwater Conveyance *Systems*

(1-yr, 24-hr storm)





# Design Considerations



## Environmental Site Design (ESD)



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# Summary of Challenges

- New Complex Technical Criteria and Program Start Up  
Many localities never implemented programs previously
- Heavy Degree of Overlap and Resulting Complexity  
e.g. Cbay, MS4, E&S, Construction Permit, TMDLs
- Different Permitting Thresholds for Construction  
VSMP: 1 acre, E&S 10,000 sq.ft., Cbay 2,500 sq.ft., Common Plan of Development
- Definitional Issues – Multiple Programs, inconsistent definitions
- Permitting Transition: DEQ to Localities for VSMP
- Training and Certification for E&S and SWM
- Inspections: E&S (2 weeks), SWM (quarterly), TMDL Conditions
- TMDL Special Conditions – Stricter Standards
- State Program Reviews and Compliance Audits
- Different Enforcement / Appeals / Penalties for various programs
- Reporting and Data Management (e-Permitting)
- BMP approval processes (VTAP)



# Potential Solutions

- Relationships – Build a Strong “Co-Regulator” Relationship (DEQ-Localities)
  - a) Localities need collaborative environment for building well-run programs
  - b) Localities need State reviews/ audits to be supportive (avoid inconsistency and conflict)
  - c) Localities need practical, efficient, consistent answers to program questions
- Phasing and Program Evolution (Big Picture First, Risk Based Approach)
  - a) Perhaps DEQ can issue staged expectations but localities recognize everything is important
  - b) Establish basic elements – Administration, Ordinances, Plan Reviews, Inspections
  - c) Evolution of enhanced / special conditions TMDLs
  - d) Strong State DEQ presence and intervention with EPA
  - e) Clean straight forward audits based on established expectations



# Priorities for Collaboration w/ DEQ

- Resolve regulation of “Common Plan of Development”  
e.g. VSMP Permitting of overall development, E&S permit on single family sites
- Program Development and Implementation
- Clean up hearings and appeals
- Streamline Certification and Training
- BMP Credit and approval processes (VTAP)





# Contact Information & Questions

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