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# Module 2

## VSMP Process and Plan Review

# Module 2 Contents

- 2a. Overview (Plan Reviewer Role)
- 2b. Stormwater Management Plan Review Process
- 2c. SWM Plan Technical Review
- 2d. SWM Plan Technical Criteria
- 2e. Stormwater Pollution Prevention Plan (SWPPP)
- 2f. Construction General Permit
- 2g. Locality VSMP Authority Permit
- 2.h. Plan Review Documentation

# Module 2a.

## Overview

# Overview

- Role of the plan reviewer
  - Review SWM plan for approval by VSMP authority to ensure compliance with:
    - Virginia Stormwater Management Program (VSMP)
    - Virginia Erosion and Sediment Control Program (VESCP)
    - Construction General Permit (CGP)
    - Any applicable ordinances

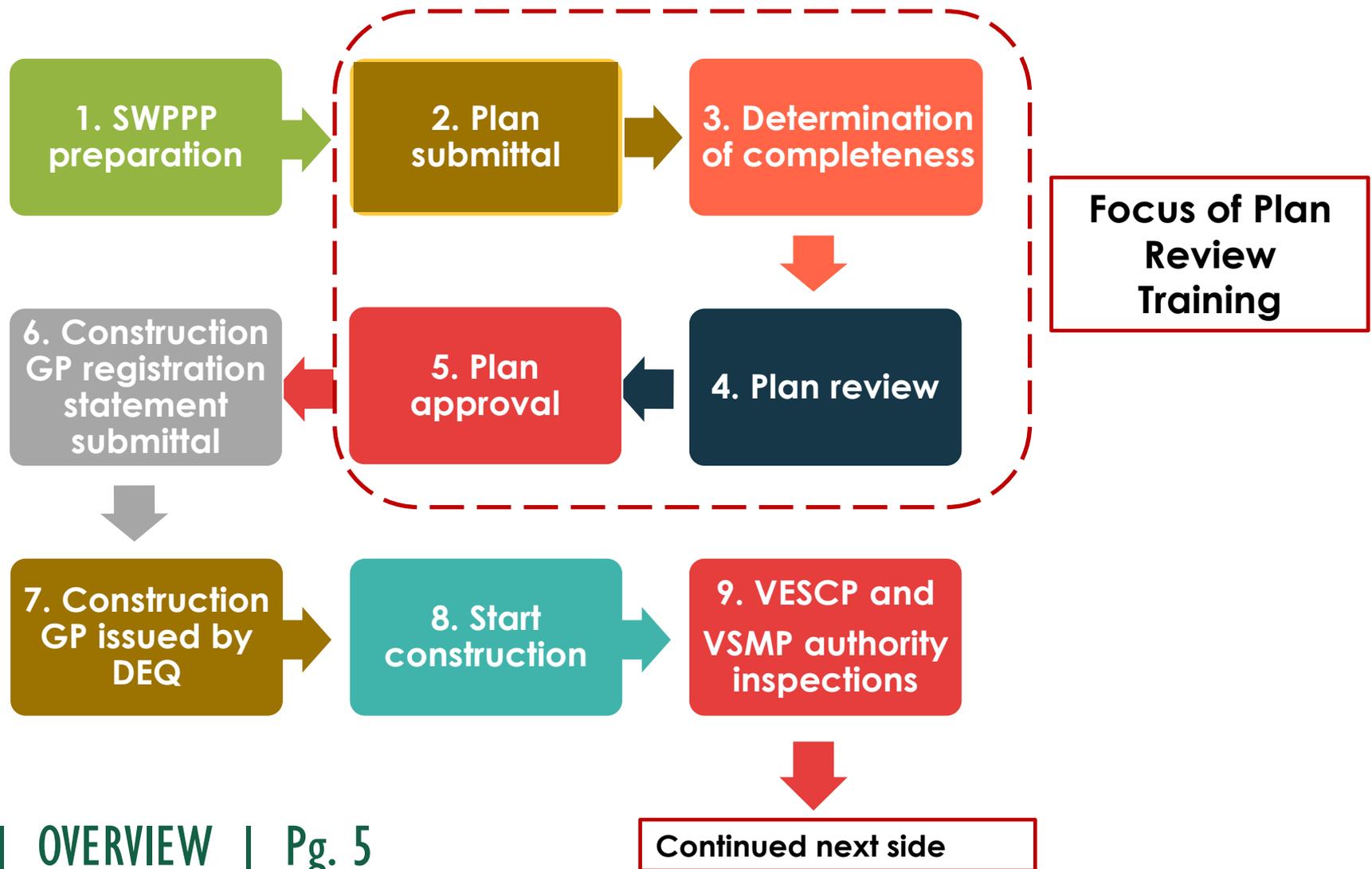
# Overview

- Role of the plan reviewer
  - TMDL control measures/P2 plan if submitted prior to permit issuance
  - Adhering to regulatory timeframe
  - SWM plan revisions after permit issuance and during construction if required

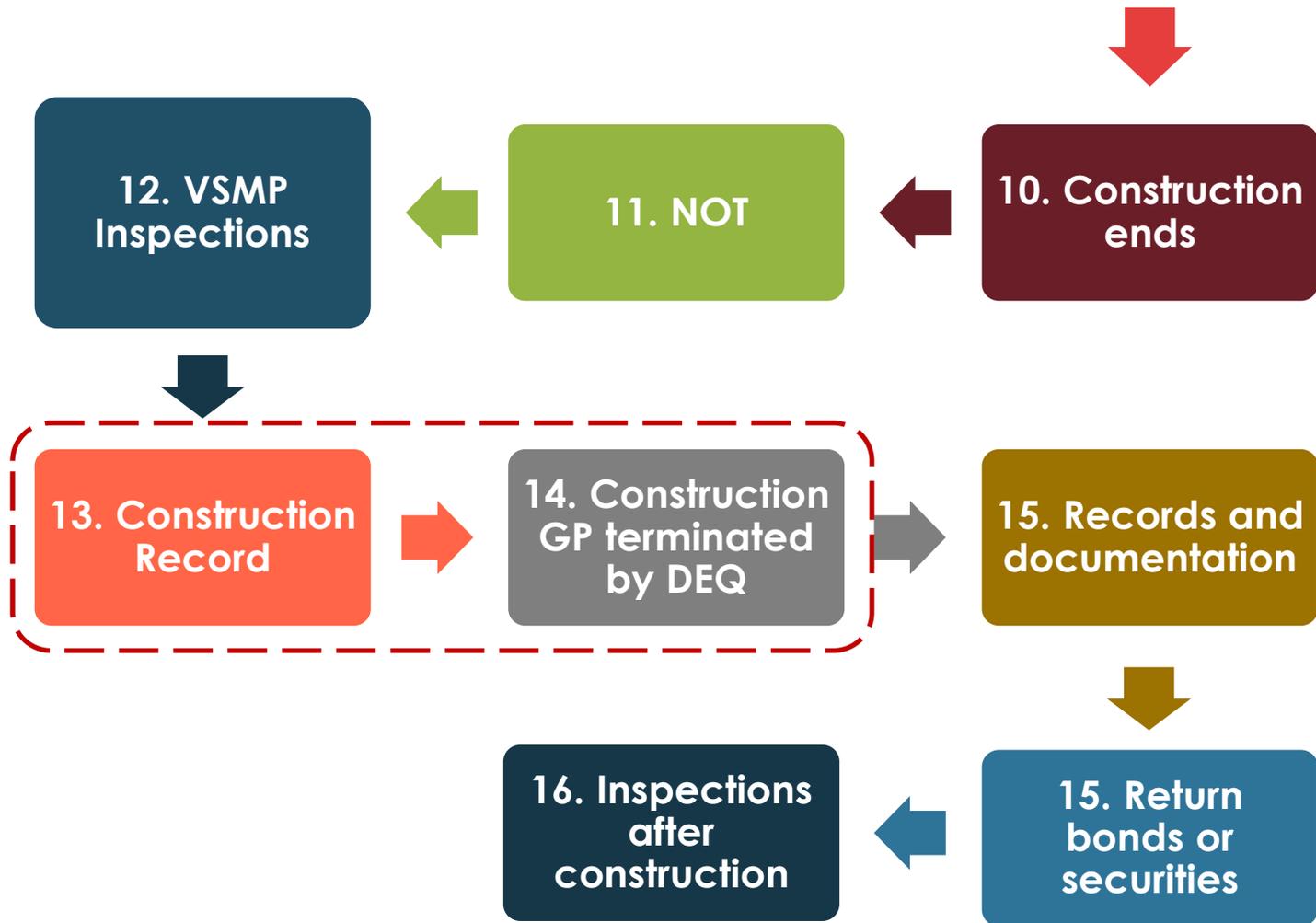
# Overview

- Role of the plan reviewer
  - Assistance:
    - Construction record drawings and notice of terminations (NOTs)
    - Document retention within required timeframe

# Overview of VSMP



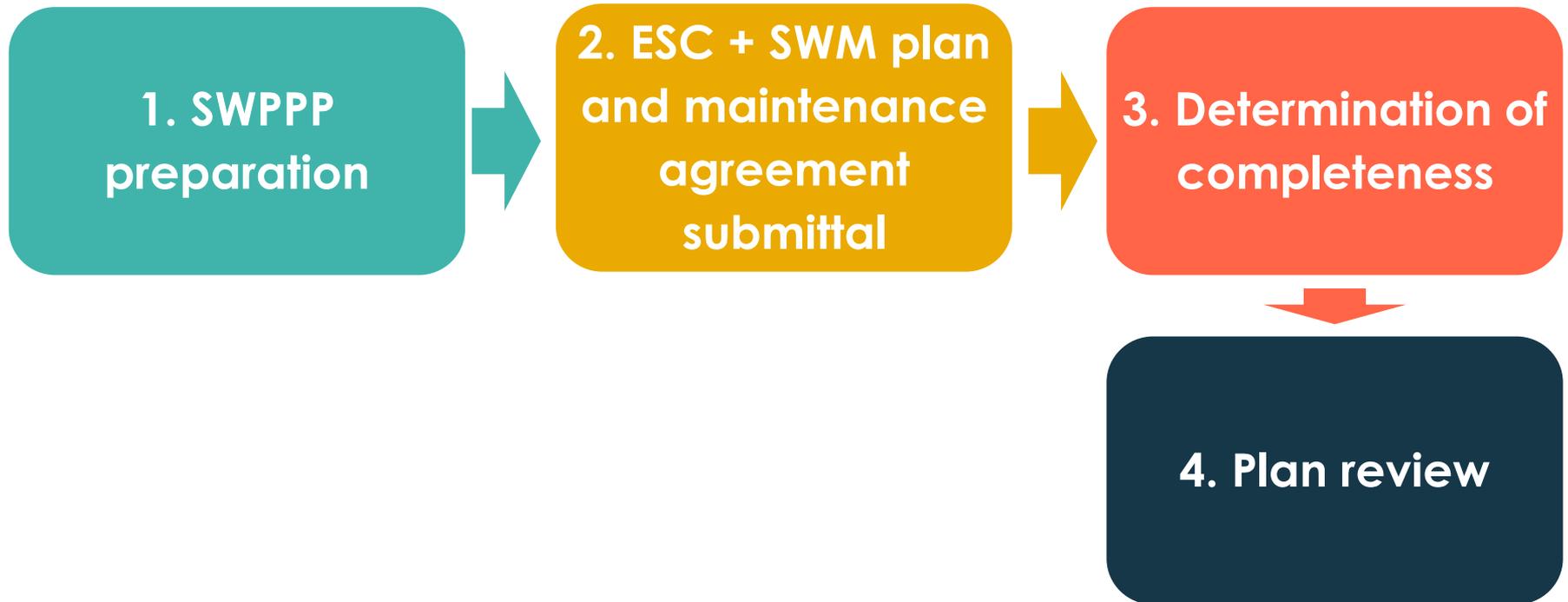
# Overview of VSMP



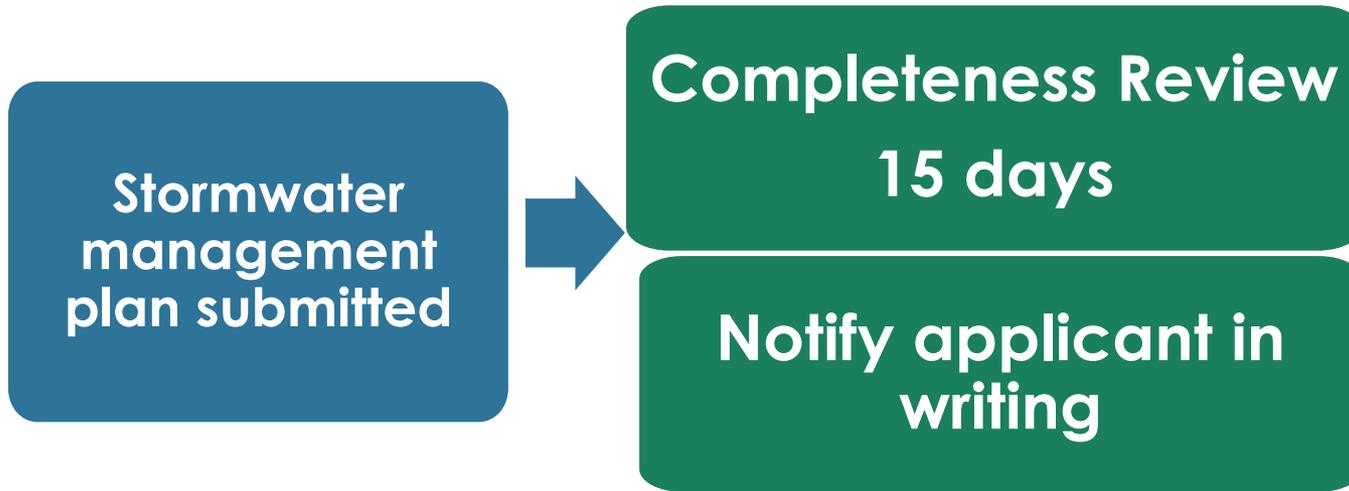
# Module 2b.

## SWM Plan Review Process

# SWM Plan Review Process



# SWM Plan Review Process



# Plan Review Schedule



# Applicant Notification

- **VSMP authority** required to notify applicant in writing of the results of both *completeness review* and *technical plan review*
- Must include reason for not approving

# SWM Plan Review Process

- Modifications

- VSMP authority has **60 days** to respond in writing to plans modified after approval
- Amendments can be required by VSMP authority after an inspection

# SMP Components

1  
Discharge  
information

2  
Contact  
information

3  
Narrative

4 General  
description of  
SWM facility  
O&M

5  
SWM facility  
information

6  
Hydrologic  
and hydraulic  
computations

Documentation  
for water  
quality &  
quantity  
compliance

8  
Maps

9  
Offsite options  
(if used)

10  
Fee and form  
(if required)

# SWPPP Preparation

- SWM plan
  - Must be approved **before** start of land disturbance
  - Outlines how post-construction stormwater will meet technical criteria

# Completeness Review

- SWM plan must include:
  1. Type and location of stormwater discharges
  2. Contact information
  3. Narrative
  4. General description of proposed SWM facilities/BMPs

# Completeness Review

- SWM plan must include:
  5. Information on proposed SWM facilities/ BMPs (type, location, acres treated, receiving waters, etc.)
  6. Hydrologic and hydraulic computations
  7. Documentation and calculations verifying compliance with water quality and quantity requirements

# Completeness Review

- SWM plan must include:

8. Maps that depict topography

- ✓ All contributing drainage areas
- ✓ Existing streams, ditches, wetlands, etc.
- ✓ Current land uses
- ✓ Info on adjoining parcels - assess SWM impacts
- ✓ Limits of clearing/grading/proposed drainage patterns
- ✓ Proposed buildings, roads, parking areas, utilities, BMPs
- ✓ Proposed land uses with percent surface areas

# Completeness Review

- SWM plan must include:
  9. Use of off-site compliance options (letter of availability from provider)
  10. Payment of fee(s)
- ✓ **Long-term maintenance agreement**

# Completeness Review

## Long-term maintenance agreement

- Submitted for review **before** approval of SWM plan;
- Stated to run with the land;
- Provide access for maintenance and regulatory inspections;
- Provide inspections + maintenance and submission of reports to VSMP authority; and
- Be enforceable by all appropriate governmental bodies

# Single-Family

- **Agreement in lieu of a SWM plan**
  - May be executed between VSMP authority and permittee of single family residence
    - Specifies how to comply with VSMP requirements

# Long-term maintenance agreements

- Individual residential lots
  - VSMP authority may decide not to require long-term maintenance agreements if future maintenance will be addressed through an enforceable mechanism

# Completeness Review

- See Appendix for sample Completeness Review Checklist

## Virginia Stormwater Management Program Plan Completeness Review Checklist

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### 1. Applicant Contact Information

SWM Plan Submission Date \_\_\_\_\_ Notification Due Date \_\_\_\_\_

Project Name \_\_\_\_\_

Plan/Permit Number \_\_\_\_\_

Site Address \_\_\_\_\_

Applicant \_\_\_\_\_ Phone Number \_\_\_\_\_

Fax: \_\_\_\_\_ E-mail \_\_\_\_\_

Applicant Legal Address \_\_\_\_\_

Parcel ID/GPIN \_\_\_\_\_

Tax Map Number \_\_\_\_\_

Property Owner \_\_\_\_\_ Phone Number \_\_\_\_\_

Principal Designer \_\_\_\_\_ Phone Number \_\_\_\_\_

General Contractor \_\_\_\_\_ Phone Number \_\_\_\_\_

### 2. Plan Completeness Status

\_\_\_\_\_ Complete

\_\_\_\_\_ Incomplete

**Legend:**

✓ - Complete

Inc. - Incomplete

N/A - Not Applicable

# Security for performance

- VSMP authority may require applicant to submit a reasonable performance bond
  - Must be refunded within **60 days** of completing permit requirements
  - Cannot be required for state or federal entities

# SWM Technical Review

- Determine correct technical criteria
  - Coverage under prior Construction GP?
  - Date of prior plan approval?
  - Date LDA commenced?

**II B vs. II C**

# Technical Criteria

- Implementation date
  - **July 1, 2014**, SWM plans must meet **Part II B** technical criteria

# Technical Criteria

- Prior coverage
  - **Existing projects** must meet **Part II C** technical criteria for **2** additional permit cycles
  - After, any unfinished LDA must meet new technical criteria

- Sample **Technical Plan Review Checklist** included in Appendix II
- Sample **BMP Review Checklists** included in Appendix III

# Grandfathering

- Local plan/ document approval **before July 1, 2012**
- No Construction GP or LDA **before July 1, 2014**



Document  
must provide  
layout  
compliant  
with Part II C

# Grandfathering

- **After June 30, 2019**, portions of project not under construction subject to new technical criteria

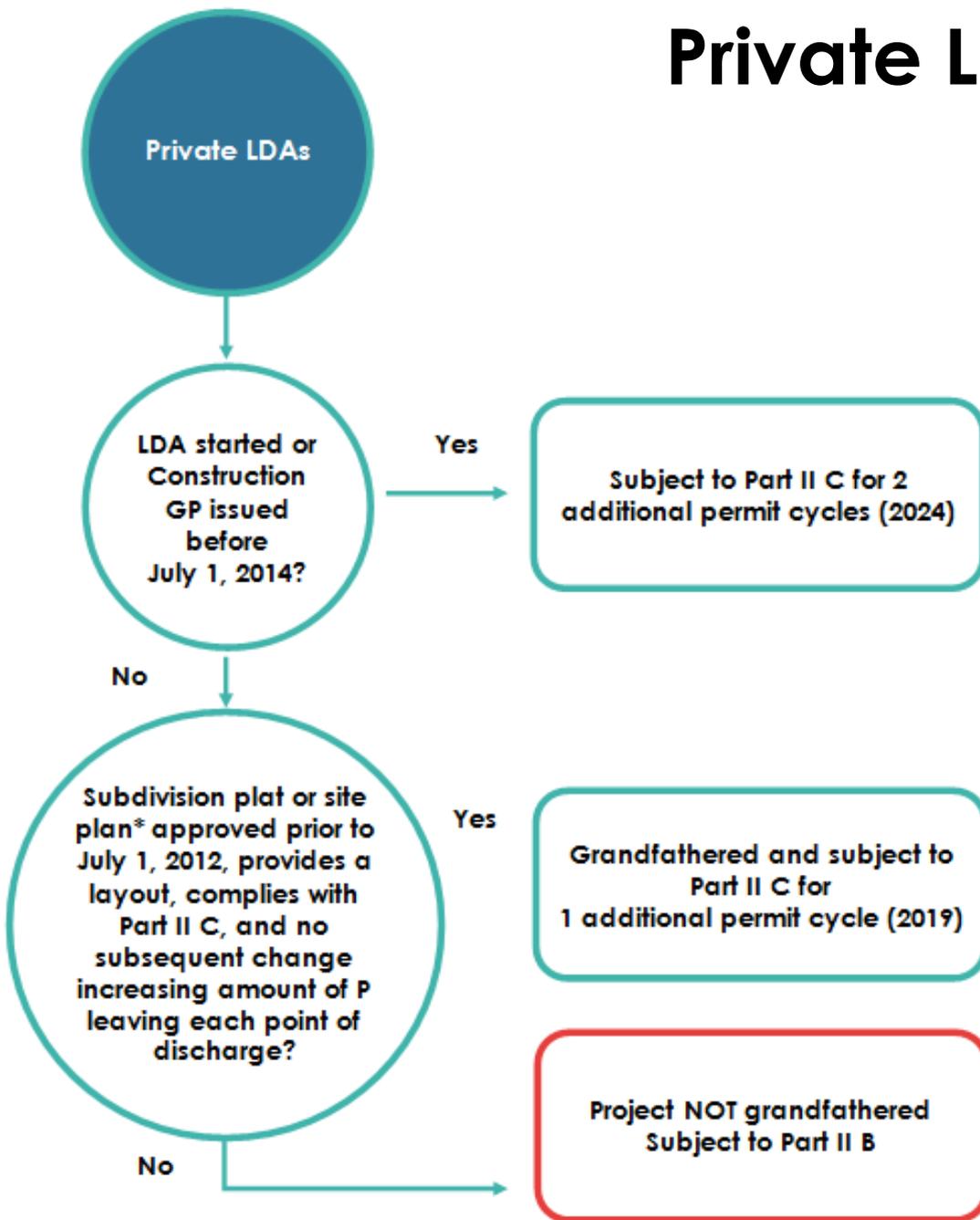
# Applicable Technical Criteria

- Grandfathering
  - **Exception for government projects** where bonding or public debt financing has been issued or where local/federal/state funds have been obligated prior to July 1, 2012

# Grandfathering

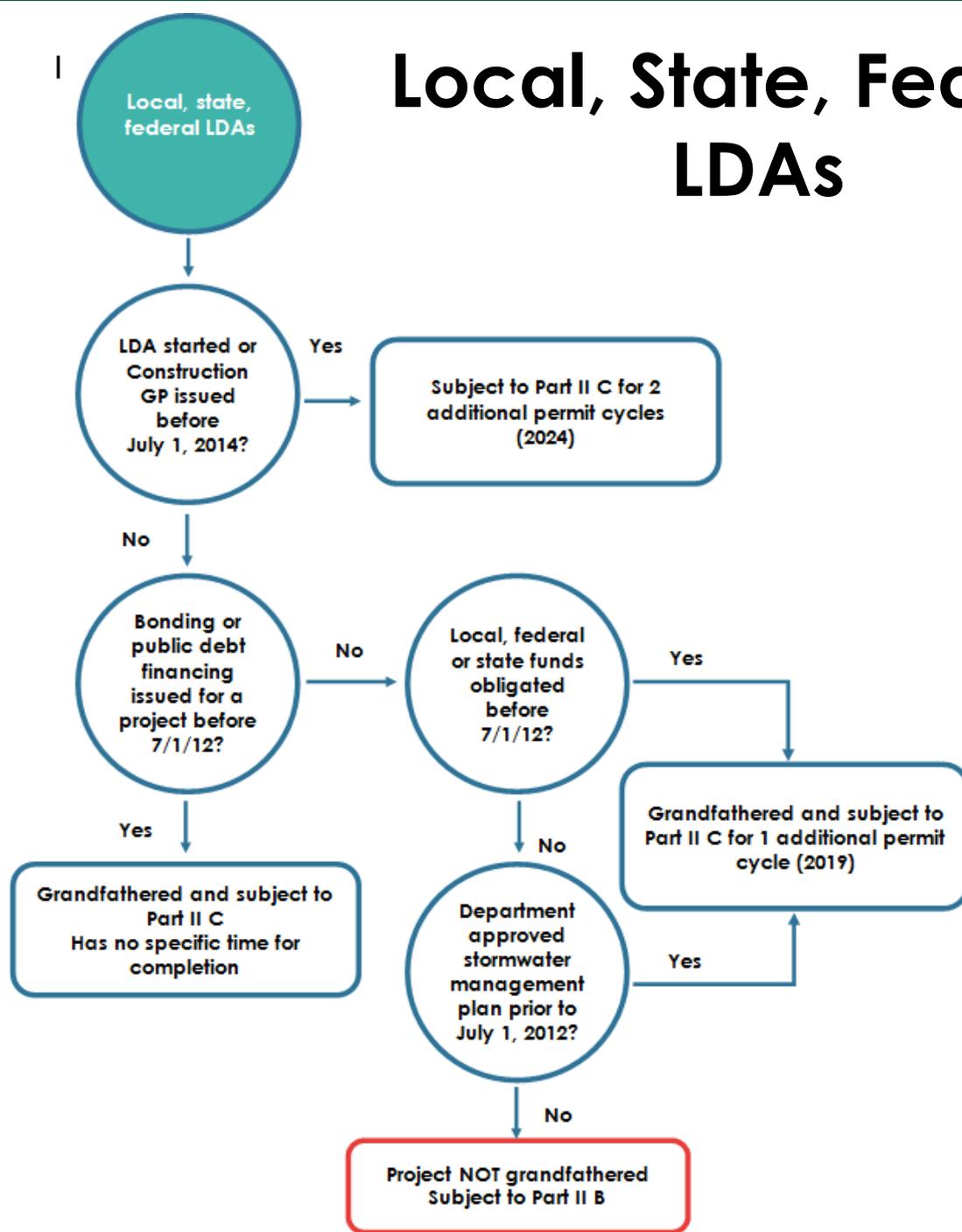
- Plan **modification** after approval **cannot**:
  - Increase amount of phosphorus (P) discharged
  - Increase volume or rate of runoff above that in the previously approved plan

# Private LDA



**\* Or a proffered or conditional zoning plan, zoning with a plan of development, preliminary or final subdivision plat, preliminary or final site plan, or any document determined by the locality to be equivalent thereto**

# Local, State, Federal LDAs



# Offsite Compliance Options – Part II B

1.

Offsite controls as per comprehensive stormwater management plan

+ Water quantity

2.

Locality pollutant loading pro rata share program

+ Water quantity

3.

Nonpoint nutrient offset program

4.

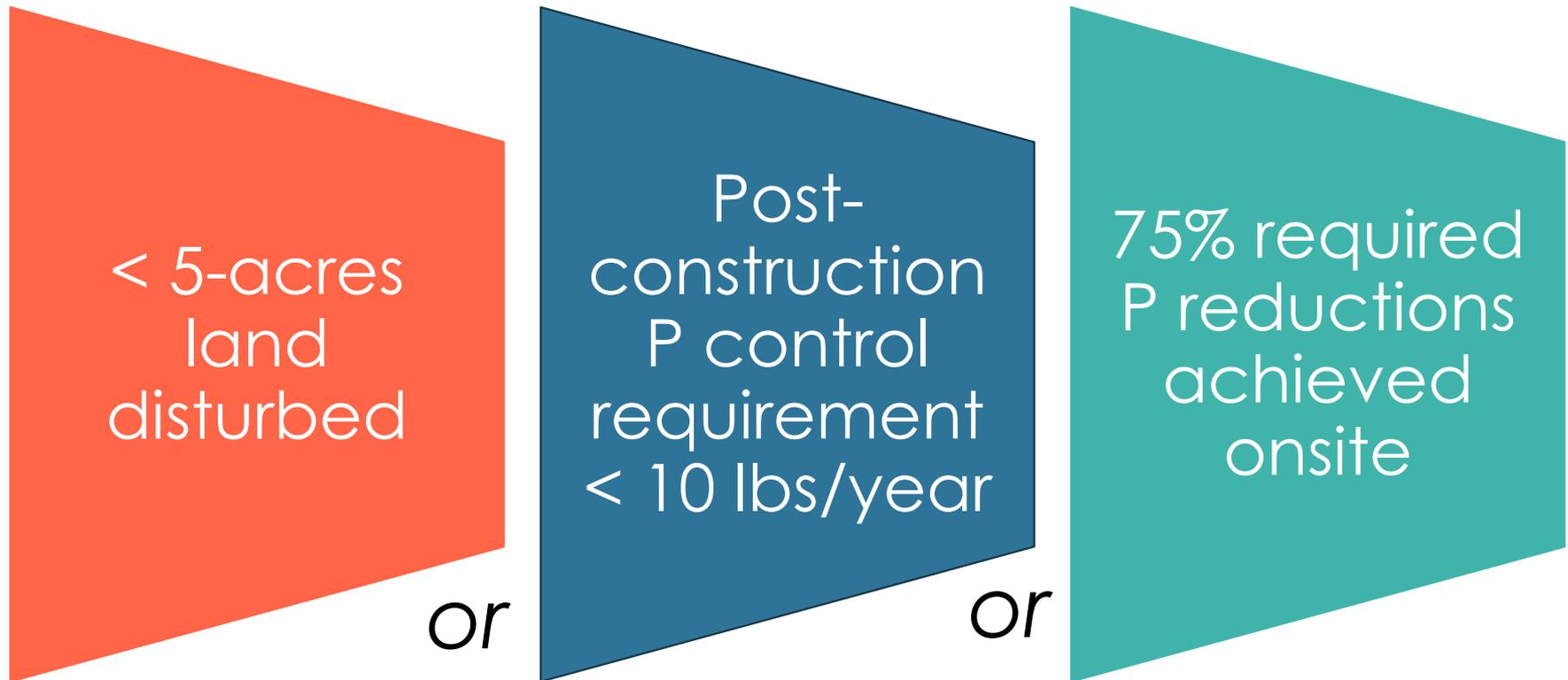
Other approved offsite options approved by applicable state agency or state board

5.

Operator's offsite properties within same HUC or **upstream** HUC or same watershed as determined by VSMP authority

# Offsite Compliance Options

Must be allowed (*for water quality*):



# Offsite Compliance Options

75% required P reduction **cannot** be met onsite

## Operator must demonstrate:

- i. Alternative site designs have been considered that may accommodate on-site BMPs,
- ii. On-site BMPs are considered in alternative site designs
- iii. Appropriate on-site BMPs will be implemented
- iv. Full compliance with postdevelopment P requirements cannot practicably be met on-site

# Offsite Compliance Options

- Nutrient reductions must be achieved **before:**
  - start of land disturbance
  - start of each phase for phased projects
- Offsite options **cannot** be used in violation of local water-quality based limitations at point of discharge

# Offsite Compliance Options

1.

## Comprehensive stormwater management plan

- For local watershed within which project located
- Locality VSMP authority may develop to meet Part II B water quality and/or water quantity criteria
- DEQ must approve plan
- State and federal agencies may develop and may participate in locality-developed plans

# Offsite Compliance Options

3.

## Nonpoint nutrient offset program

### – Nutrient credits:

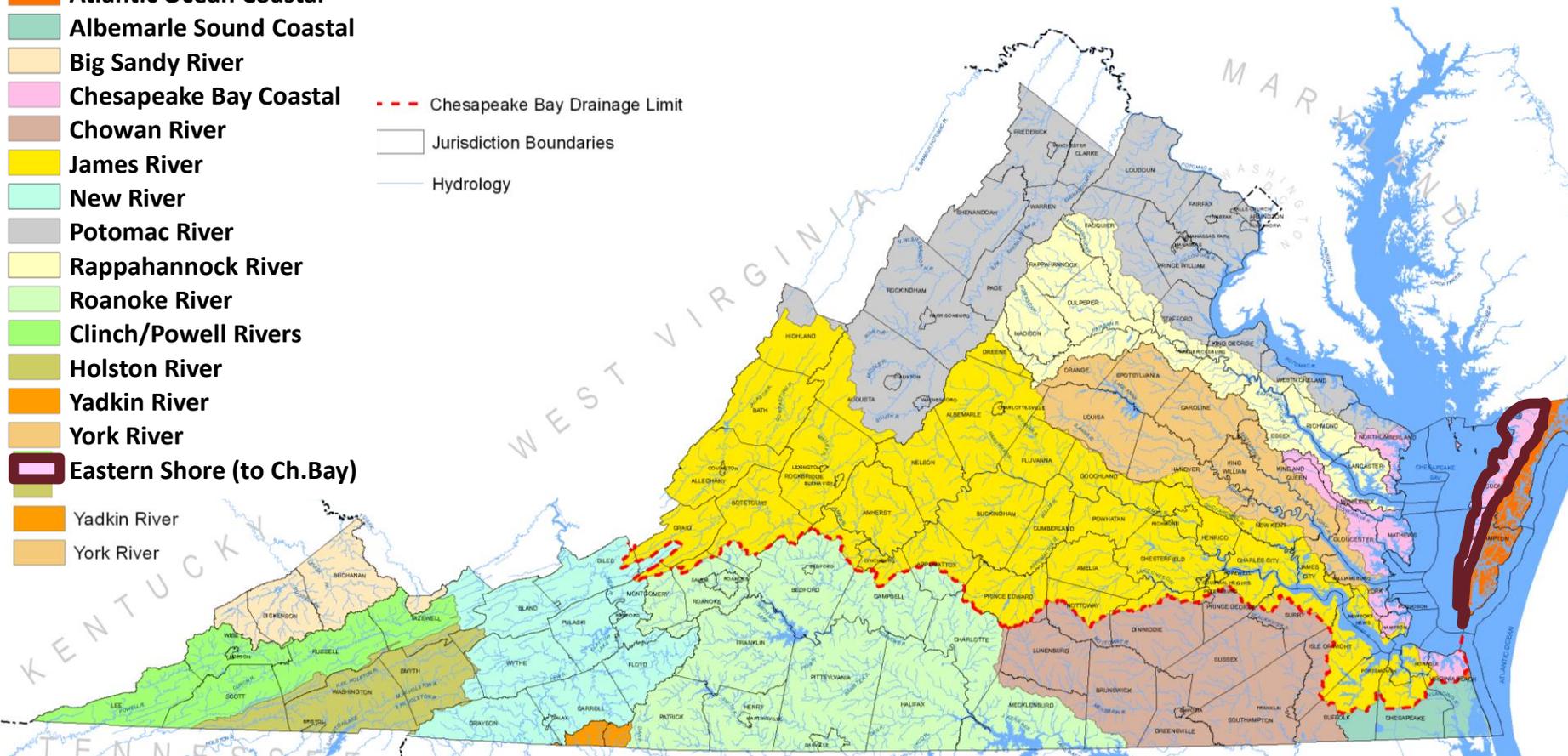
- Same tributary
- Same or adjacent 8 digit HUC
- Outside same or adjacent 8 digit HUC **only if**,  
*VSMP authority determines credits  
unavailable within same or adjacent 8 digit  
HUC (when accepting final site design)*

# Virginia Tributaries

(§62.1-44.15:35, §62.1-44.19:13)

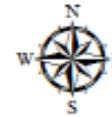
- Atlantic Ocean Coastal
- Albemarle Sound Coastal
- Big Sandy River
- Chesapeake Bay Coastal
- Chowan River
- James River
- New River
- Potomac River
- Rappahannock River
- Roanoke River
- Clinch/Powell Rivers
- Holston River
- Yadkin River
- York River
- Eastern Shore (to Ch.Bay)

- Chesapeake Bay Drainage Limit
- Jurisdiction Boundaries
- Hydrology



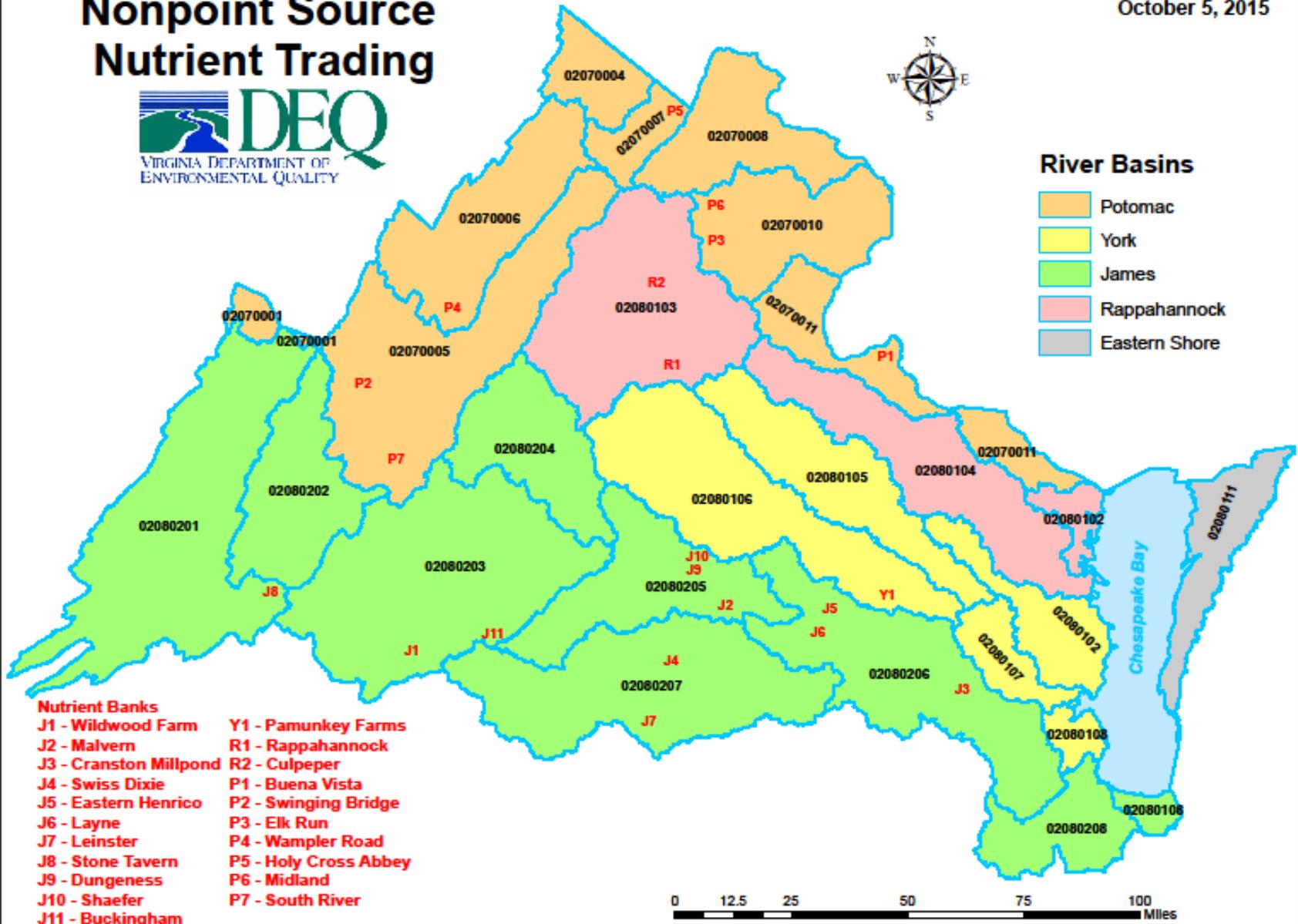
# Nonpoint Source Nutrient Trading

October 5, 2015



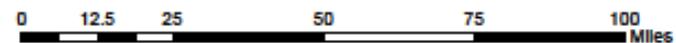
## River Basins

- Potomac
- York
- James
- Rappahannock
- Eastern Shore



### Nutrient Banks

- |                        |                       |
|------------------------|-----------------------|
| J1 - Wildwood Farm     | Y1 - Pamunkey Farms   |
| J2 - Malvern           | R1 - Rappahannock     |
| J3 - Cranston Millpond | R2 - Culpeper         |
| J4 - Swiss Dixie       | P1 - Buena Vista      |
| J5 - Eastern Henrico   | P2 - Swinging Bridge  |
| J6 - Layne             | P3 - Elk Run          |
| J7 - Leinster          | P4 - Wampler Road     |
| J8 - Stone Tavern      | P5 - Holy Cross Abbey |
| J9 - Dungeness         | P6 - Midland          |
| J10 - Shaefer          | P7 - South River      |
| J11 - Buckingham       |                       |



# Offsite Compliance Options

3.

## Nonpoint nutrient offset program

### – Nutrient credits **must**:

- Comply with 1:1 ratio of credits to required P reduction
- Achieve nutrient reductions **before** start of land disturbance
- Be documented for VSMP authority and DEQ

# Offsite Compliance Options

3.

Nonpoint nutrient offset program

— Nutrient credits **cannot** be used to:

- Address water quantity
- Violate local water quality-based limitations

# Requesting an Exception *(Part II B or C)*

- Submitted in writing to VSMP authority
- Exceptions **may** be granted if:
  - Exception minimum necessary for relief
  - Intent of Act/Regulations preserved
  - No special privileges given
  - Conditions not self-imposed/created

# Requesting an Exception

- Exceptions **must not** be granted for:
  - Economic hardship alone
  - Obtaining required state permits
  - BMPs not on BMP Clearinghouse, except where allowed under Part II C
- Exceptions for P reductions are not allowed unless offsite options have been considered and found not available

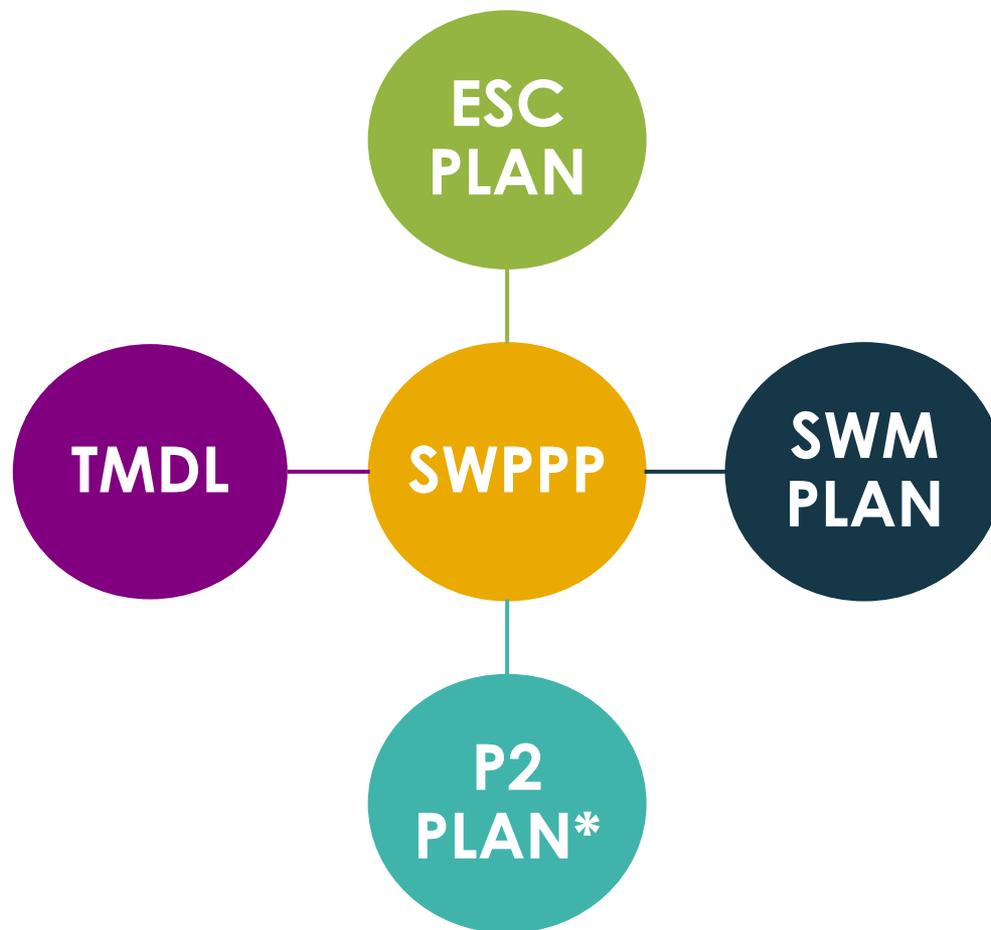
# Requesting an Exception (*Part II B or C*)

- Exceptions **must not** be granted for:
  - Economic hardship alone
  - Obtaining required state permits
  - BMPs not on BMP Clearinghouse, except where allowed under Part II C
- Exceptions for P reductions not allowed unless offsite options
  - Considered *and*
  - Not available

# Module 2e.

## Stormwater Pollution Prevention Plan (SWPPP)

# SWPPP



# SWPPP

Erosion and  
sediment  
control plan



Must be reviewed  
and approved by  
**VESCP authority**

Stormwater  
management  
plan



Must be reviewed  
and approved by  
**VSMP authority**

# SWPPP

- May reference other plans to fulfill requirements
  - E.g., Spill prevention control and countermeasure plan with pollution prevention plan

VSMP	VESCP
<p><b>15 days</b> to determine completeness and notify</p>	<p><b>45 days</b> to review and notify for inadequate plans</p>
<p><b>60 days</b> from notification to review and notify</p>	<p><b>60 days</b> to review and approve plans</p>
<p>No action within timeframe, plan meeting all requirements deemed approved</p>	<p>No action within timeframe, plan deemed approved</p>
<p><b>45 days</b> to review and respond to previously disapproved plans</p>	<p><b>45 days</b> to review and respond to previously disapproved plan</p>
<p><b>60 days</b> to review and respond to modifications of approved plan</p>	

# SWPPP

- P2 plan
  - **Not** grandfathered

# TMDLs, Impaired, Exceptional Waters

- Must be included in the SWPPP
- Rapid stabilization (7 days)
- Appropriate use of fertilizers and NMPs\*
- Enhanced inspection schedules

\* NMP: Nutrient Management Plan

# More Stringent Ordinances



# Erosion and Sediment Control Plan

## *9 performance requirements*

Stormwater  
volume and  
velocity

Stormwater  
discharges

Soil exposure

Steep slopes

Sediment  
discharges

Natural buffers  
and vegetated  
areas

Soil  
compaction  
and topsoil

Stabilization

Outlet  
structures

# 9 Performance Requirements

**Implement:  
ESC MS 1-19  
(9VAC25-840-40)**

**Approved  
ESC plan**

**ESC Stds  
& Specs  
(VESC HB)**

**Environmental  
Site Design  
principles**

# Cross-Ref: Stds, Specs, Design Principles

Table 2-2

<b>Requirement</b>	<b>Existing Stds, Specs, Design Principles</b>
1. Control stormwater volume and velocity within site	<ul style="list-style-type: none"><li>●MS 10 &amp; 19</li><li>●ESD Principles 6 &amp; 7</li></ul>
2. Control stormwater discharges at outlets	<ul style="list-style-type: none"><li>●MS 10 &amp; 19</li><li>●ESD Principles 6</li></ul>

# Pollution prevention (P2) plan

- **Not** required to be approved by VSMP authority
- VSMP authority **may** require submittal for review
- Reviewed by the VSMP inspector
- Must be updated throughout the duration of the land-disturbing activity

# SWPPP Preparation

- Pollution prevention (P2) plan

## Minimize



# SWPPP Preparation

- Pollution prevention (P2) plan

## Prohibit



# Review Law, Regulations, and Participant Guide!!

## SWPPP

- Contents
- Amendments, modifications, updates
- Public Notification
- Availability
- Inspection Requirements

# Review Construction General Permit Regulations and Participant Guide!

## VPDES Construction General Permit

- Permit term: July 1, 2014 to June 30, 2019
- Construction GP contained with Construction GP Regulation (9VAC25-880 *et al.*)

# Authorized Discharges under the CGP

- **Stormwater associated with construction activities**
- **Stormwater discharges from specific support activities on-site or off-site**
  - Concrete or asphalt batch plants
  - Equipment staging yards
  - Material storage areas
  - Excavated material disposal areas
  - Borrow areas

★ • **Must be identified on registration statement**

# Limitations on Discharges

## Discharges not Authorized by GP:

- **Post-construction discharges**
- Discharges mixed with **nonstormwater**
- Discharges covered by **another state permit**
- **Impaired waters and TMDL limitation:**
  - Discharges to surface waters identified as impaired or for which TMDL wasteload allocation (WLA) exists
  - Unless SWPPP consistent with approved TMDL WLA

# Application package

- ☑ Stormwater pollution prevention plan (SWPPP)
- ☑ Initial terms of long-term maintenance agreement\*
- ☑ Security for performance\*
- ☑ Fees\*
- ☑ Registration statement\*

\* If required



# Locality VSMP authority permit

- Issue consolidated SWM and ESC permit
  - Copy or reference to Construction GP
- Issue after DEQ has issued Construction GP (if required)

# Documentation During Plan Review

- Denial
  - Reason(s) in writing
  - Based upon plan's **compliance with VSMP authority requirements and VSMP regulations**
  - Reference applicable sections of the regulations, law, or local ordinance

# Documentation at Project Completion

- Reports and record keeping:
  - Project records must be kept **3 years** after permit termination or project completion
  - Construction record drawings must be kept **in perpetuity** or until the stormwater management **facility is removed**

# Review

- Stormwater Pollution Prevention Plan (SWPPP)
- Construction General Permit
- Pollution Prevention (P2) Plan



**Review Participant Guide!!**

# Duty of the Operator to Provide

## **DUTY OF THE OPERATOR TO PROVIDE INFORMATION**

(§ 62.1-44.15:40)

The Board, DEQ, or the VSMP authority may require every permit applicant, every permittee, or any person subject to state permit requirements to furnish when requested such application materials, plans, specifications, and other pertinent information as may be necessary to determine the effect of their discharge on the quality of state waters, or such other information as may be necessary to accomplish the purposes of the Act.

# Questions?