

Refresher for Inspectors

Department of Environmental Quality
Office of Training Services

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Ground Rules

- Silence your cell phones
- Ask questions, engage
- Speak and share your thoughts
- Be supportive of all participants



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Continuing Education Courses


<https://www.deq.virginia.gov/our-programs/training-certification/continuing-education>

EVENT	DATE/TIME
Refresher for Inspectors (Lynchburg)	03/18/2025 8:30 AM - 4:30 PM
Large Scale Construction Site Inspections (Fredericksburg)	04/07/2025 8:30 AM - 4:30 PM
Refresher for Inspectors (Fairfax)	05/28/2025 8:30 AM - 4:30 PM
Regulatory SWPPP Inspections (Fairfax)	05/29/2025 8:30 AM - 4:30 PM
Large Scale Construction Site Inspections (Wytheville)	06/18/2025 8:30 AM - 4:30 PM
Using the Virginia Stormwater Management Handbook (Hampton)	07/09/2025 8:30 AM - 4:30 PM
Using the Virginia Stormwater Management Handbook (Richmond)	08/13/2025 8:30 AM - 4:30 PM

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- Virginia Erosion Stormwater Management Act (VESMA) - Effective July 1, 2024
- NEW! Virginia Stormwater Management Handbook – Online – July 1, 2024
- CGP update – July 1, 2024

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- Turbidity Monitoring Guidance – VDOT Turbidity Monitoring -
<https://www.youtube.com/watch?v=qReho33ncfA>
- DEQ online recorded CE classes -
<https://www.deq.virginia.gov/our-programs/training-certification/continuing-education>

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Agenda

- 8:30 – 9:30 | Module 1 – Course Overview and Introduction/Is it Erosion? Exercise
- 9:30 – 10:00 | Module 2 – Virginia ESC Law and Regulations for Inspectors
- 10:00 – 10:15 | Break
- 10:15 – 11:15 | Module 2 – Continued
- 11:15 – 12:00 | P2 Exercise
- 12:00 – 1:00 | Lunch
- 1:00 – 2:30 | Module 3 – C-BMPs
- 2:30-2:45 | Break
- 2:45 – 3:30 | Module 4 – P-BMPs
- 3:30 – 4:00 | VESCH Exercise



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The purpose of this class

- Review laws and regs supporting VESCP and VESMP programs
- Review program basic concepts and purpose
- Review basic inspections procedures
- Review key C-BMPs and P-BMPs

Six contact hours are given for completing this course. Hours earned may be applied to ESC and SWM recertification. No partial credit is given

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The purpose of this class

PLEASE NOTE – This course is not one of the required prerequisite classes for taking any ESC or SWM certification exams.



This isn't the class you're looking for.

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Module 1

Course Overview and Introduction



Module 1



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A Little Refresher



“

It takes 20 years to build a reputation and five minutes to ruin it. If you think about that, you'll do things differently.”

Warren Buffett

BUSINESS INSIDER

Module 1



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Why Erosion and Sediment Control (ESC)?



VESCP Law and regulations require:

- “effective control of soil erosion, sediment deposition, and nonagricultural runoff
- to prevent the unreasonable degradation of property, stream channels, waters and other natural resources.”

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Why ESC?

Protect down-gradient properties from damage due to:

- Sediment deposition
- Damage due to increases in volume, velocity, and peak flow rate

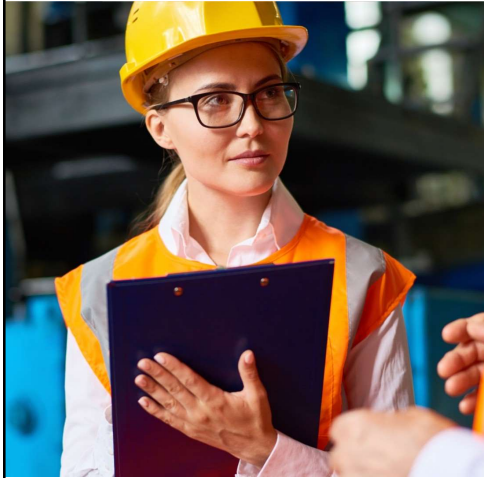


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Why is ESC Important?



- Beyond the regulations
- Resource loss
- Impacts to neighboring properties
- Impacts to wetlands and waterways
- Economic Impact
- National Security

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What is erosion?



The removal and transportation of soil:

- Water
- Wind
- Ice
- Gravity
- A combination of these forces

<http://SoilScience.info>

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What is erosion?

Five stages of erosion:

- Rainfall
- Sheet flow
- Rill
- Gully
- Channel



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What is erosion?



Construction is a key cause of accelerated erosion.



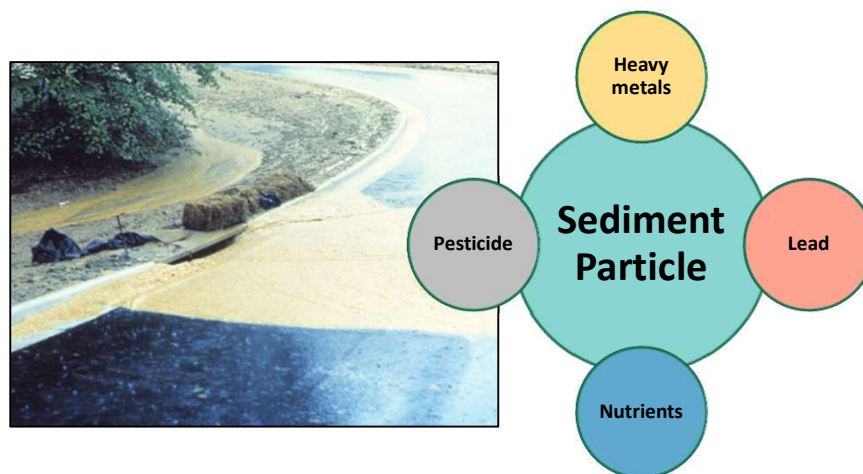
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What We're Trying to Avoid



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Chemicals Stick to Sediment

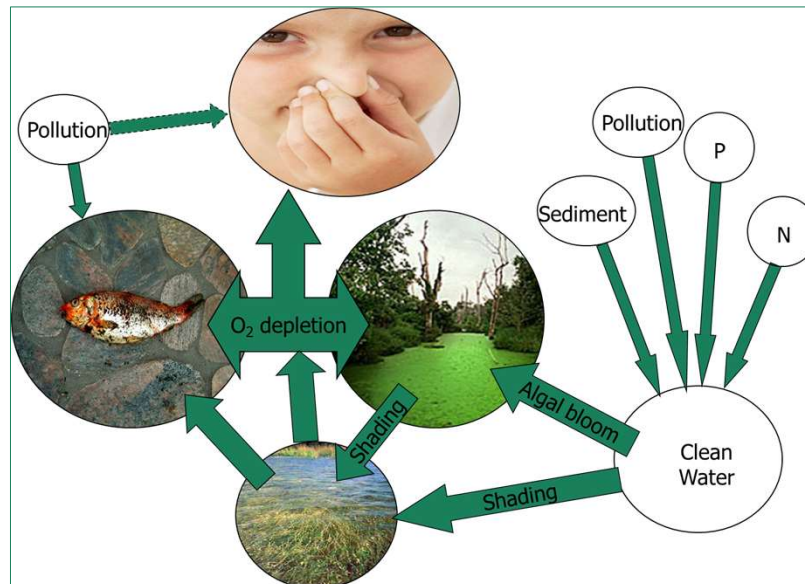


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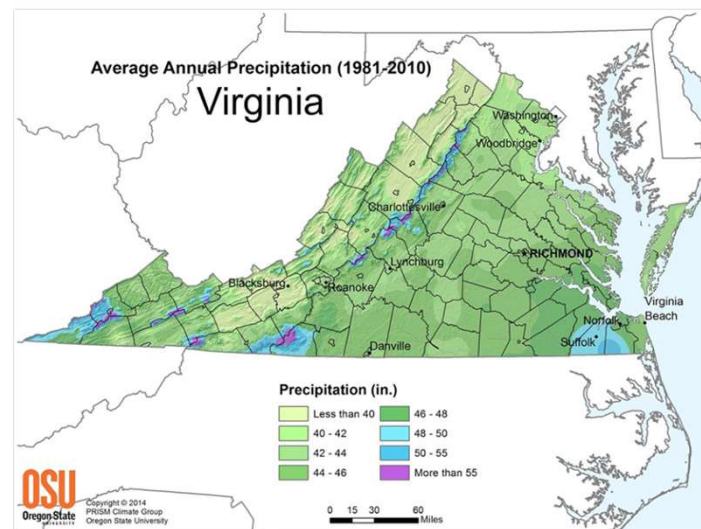
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Effects of Pollutants on Waters



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Virginia's Geography & Erosion

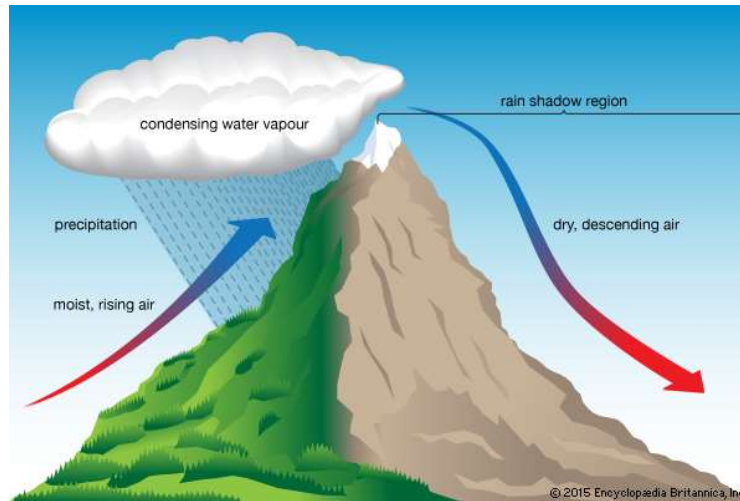


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VIRGINIA DEPARTMENT OF
ENVIRONMENTAL QUALITY

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The “Valley” (Rain shadow)



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Stream Impacts



High Stormwater Volume and Velocity

- More impervious surfaces lead to less ground infiltration, more higher energy runoff
- Increased stream volumes and flow rates, flooding, more erosion



Pollutants in Stormwater Runoff

- Pollutants transported untreated to our waterways (nutrients, sediments, toxics, litter, debris, bacteria and pathogens, higher water temps)

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Stream Impacts

Ecological Impacts



- Altered or lost habitats (aquatic, riparian)
- Reduced species richness and diversity
- Shift in ecological balance (aquatic food sources, opportunistic species)

Loss of Beneficial Uses



- Reduction in desirable fish species
- Shellfish contamination
- Contamination of drinking water sources
- Contamination of swimming beaches
- Loss of recreation and aesthetic value of state waters

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Principles of Erosion and Sediment Control

Ground Cover!

First line of defense - No erosion, no sediment.

- Minimizes damage from both erosion and sediment control
- The only practical approach in some instances (e.g., very fine sediments)



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Principles of Erosion and Sediment Control

Sediment Control

- Backup for erosion control measures; second line of defense.
- Coordination of erosion control, sediment control and SW management leaving the site required for a well-integrated program



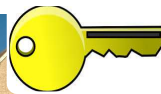
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Inspections

The key to an effective ESC Program!



ESC Law

VESMA

VSWMH

Local Ordinance

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Inspection Program



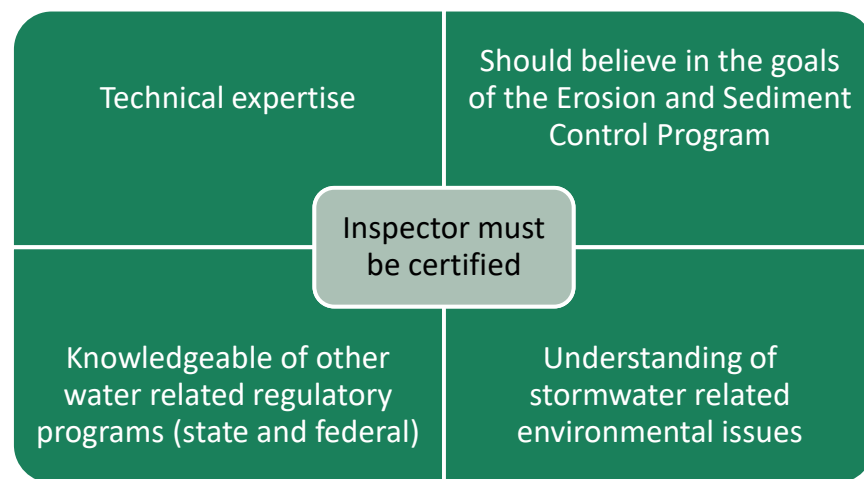
- Without an effective inspection program, the other elements become meaningless
- Soil conservation is accomplished through the effective ESC measures implemented on the project

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The Inspector

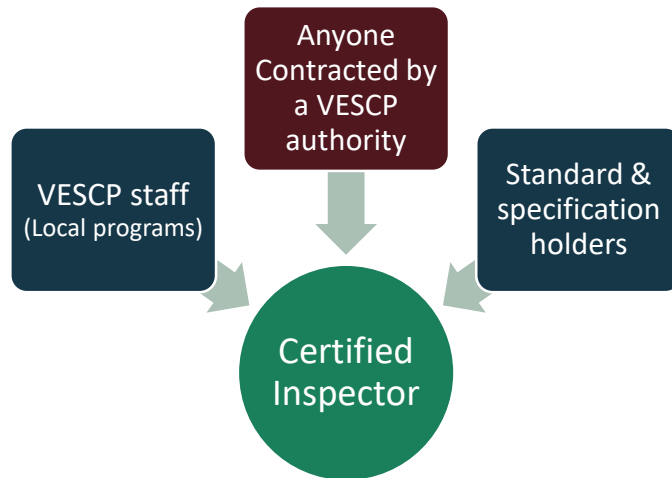


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Which Programs Require Certified Inspectors?



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Which Programs Require Certified Inspectors?



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Inspectors conducting project self-inspections (onsite) under SWPPP

**Must be qualified.
What does that mean?**

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Prior to July 1, 2025 - Who/What is a qualified individual? (1)

"Qualified personnel" means a person **knowledgeable** in the principles and practices of erosion and sediment and stormwater management controls who possesses the skills to **assess conditions** at the construction site for the operator that could impact stormwater quality and quantity and to **assess the effectiveness** of any sediment and erosion control measures or stormwater management facilities selected to control the quality and quantity of stormwater discharges from the construction activity. [9VAC25-870-10](#)

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Effective July 1, 2025 - Who/What is a qualified individual?

On or after July 1, 2025, "qualified personnel" shall hold:

An unexpired Dual Inspector certification issued by DEQ

- An unexpired Inspector for Erosion and Sediment Control certification and an unexpired Inspector for Stormwater Management certification, both issued by DEQ
- A Construction General Permit Qualified Personnel Certificate issued by the department or the Virginia Department of Transportation
- Or an equivalent certification provided by EPA (currently titled Construction Inspection Training Course) [9VAC25-880-10](#)

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Inspectors conducting inspections for a local authority or Standard and Specification Holder

**Must be qualified.
What does that mean?**

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Prior to July 1, 2025 - Who/What is a qualified individual? (2)

"Qualified personnel" For **VSMP authorities** this **requires** the use of a person who holds a **certificate of competency** from the board in the area of project inspection for ESC and project inspection for SWM or **combined administrator** for ESC and combined administrator for SWM as defined in [9VAC25-850-10](#) or a **combination** of ESC and SWM qualifications from these two areas. [9VAC25-870-10](#)

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Effective July 1, 2025 - Who/What is a qualified authority inspector?

Inspector for ESC. This classification applies to individuals who perform inspections of land-disturbing activities in the area of ESC pursuant to this chapter. This certification is a requirement for any individual employed as an inspector for ESC by a VESCP or VESMP authority, or an agent of a VESCP or VESMP authority. This certification also serves as the ESC component required for the dual inspector certification. [9VAC25-875-400](#)

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Effective July 1, 2025 - Who/What is a qualified authority inspector?

Inspector for SWM. This classification applies to individuals who conduct inspections in the area of SWM pursuant to this chapter. This certification is a requirement for any individual employed to perform the duties of an inspector for SWM by a VSMP or VESMP authority, or an agent of a VSMP or VESMP authority. This certification also serves as the SWM component required for the dual inspector certification [9VAC25-875-400](#)

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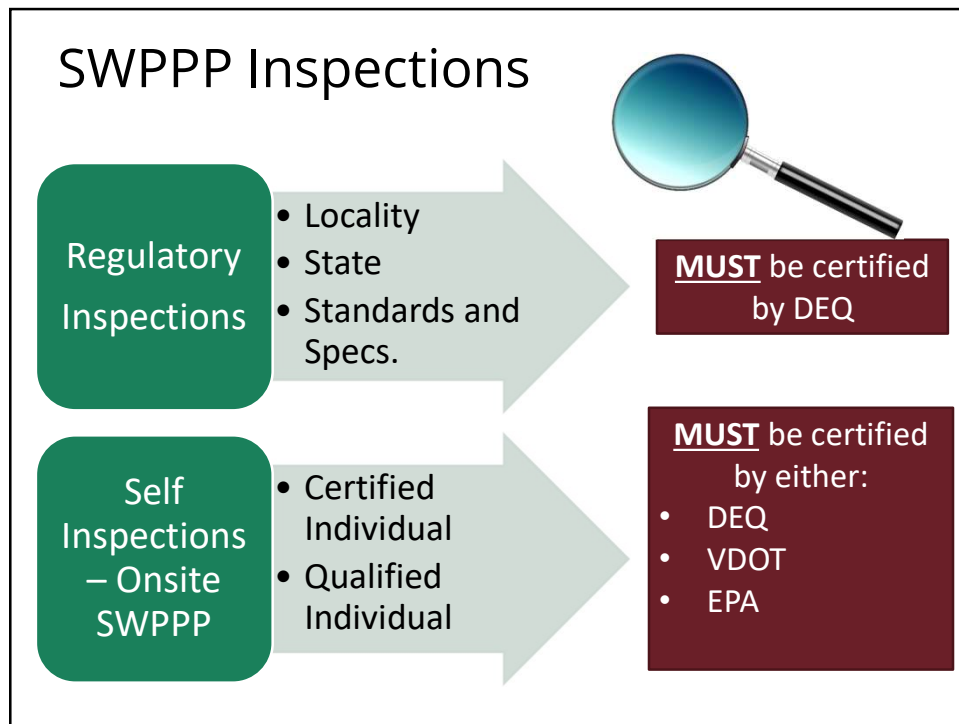
Effective July 1, 2025 - Who/What is a qualified authority inspector?

Dual inspector. This classification applies to individuals who conduct inspections in the areas of ESC and SWM pursuant to this chapter. This certification satisfies the requirement for any individual employed as a dual inspector for ESC and SWM by a VESMP authority, an agent of a VESMP authority, or for personnel implementing department-approved standards and specifications pursuant to § [62.1-44.15:31](#) of the Code of Virginia and attendant regulations. [9VAC25-875-400](#)

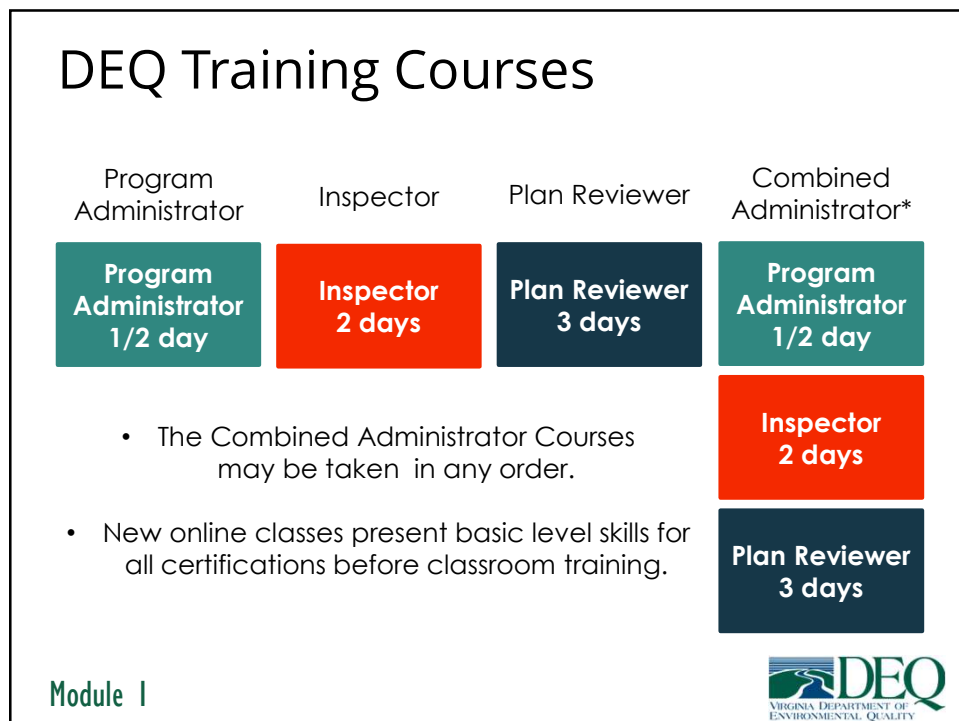
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Dual Certifications

Erosion and Sediment Control		Stormwater Management		Dual Certification
ESC Program Administrator	+	SWM Program Administrator	=	Dual Program Administrator
ESC Inspector	+	SWM Inspector	=	Dual Inspector
ESC Plan Reviewer	+	SWM Plan Reviewer	=	Dual Plan Reviewer
ESC Combined Administrator	+	SWM Combined Administrator	=	Dual Combined Administrator

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Questions?



Additional information is at:

<https://www.deq.virginia.gov/our-programs/training-certification>

Or contact us at:

certification@deq.virginia.gov

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