



Virginia Water Protection Permit Program

Overview of Program and VWP Inspections



Objectives

- To identify common permit conditions
- To understand a VWP inspection process
- To understand what role E&S and SWM professionals play





General Permit Conditions

1. The activities authorized by this VWP general permit shall be executed in a manner so as to minimize adverse impacts on instream beneficial uses as defined in §62.1-10 (b) of the Code of Virginia.



General Permit Conditions

2. No activity may substantially disrupt the movement of aquatic life indigenous to the water body, including those species which normally migrate through the area, unless the primary purpose of the activity is to impound water. Culverts placed in streams must be installed to maintain low flow conditions and shall be countersunk at both inlet and outlet ends of the pipe or culvert, unless specifically approved by the DEQ on a case-by-case basis, and as follows: The requirement to countersink does not apply to extensions or maintenance of existing pipes and culverts that are not countersunk, floodplain pipes and culverts being placed above ordinary high water, pipes and culverts being placed on bedrock, or pipes and culverts required to be placed on slopes 5.0% or greater. Bedrock encountered during construction must be identified and approved in advance of a design change where the countersunk condition cannot be met. Pipes and culverts 24 inches or less in diameter shall be countersunk at least three inches below the natural stream bed elevations, and pipes and culverts greater than 24 inches shall be countersunk at least six inches below the natural stream bed elevations. Hydraulic capacity shall be determined based on the reduced capacity due to the countersunk position. In all stream crossings appropriate measures shall be implemented to minimize any disruption of aquatic life movement.



VWP Inspections



Obstruction of flow



VWP Inspections



Culvert countersinking



VWP Inspections



Culvert countersinking



VWP Inspections



Culvert countersunk



General Permit Conditions

3. Wet or uncured concrete shall be prohibited from entry into flowing surface waters, unless the area is contained within a cofferdam and the work is performed in the dry or unless otherwise approved by the DEQ. Excess or waste concrete shall not be disposed of in flowing surface waters or washed into flowing surface waters.



VWP Inspections



Uncured or
wet concrete
poured into
waters/
wetlands



General Permit Conditions

5. Erosion and sedimentation controls shall be designed in accordance with the VESCH, 3rd Ed., 1992, or for mining activities covered by this general permit, the standards issued by the VDMME that are effective as those in the VESCH, 3rd Ed., 1992. These controls shall be placed prior to clearing and grading and maintained in good working order to minimize impacts to state waters. These controls shall remain in place until the area is stabilized and shall then be removed.



VWP Inspections



Turbidity
Curtains



General Permit Conditions

6. Exposed slopes and streambanks shall be stabilized immediately upon completion of work in each permitted impact area. All denuded areas shall be properly stabilized in accordance with the VESCH, 3rd Ed., 1992.



The logo for the Virginia Department of Environmental Quality (DEQ) is located in the bottom right corner of the slide. It features a stylized green and blue landscape with the letters 'DEQ' in a bold, green font, and the full name 'VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY' in a smaller font below it.

VWP Inspections



Stream bank stabilization



The photograph shows a construction site for stream bank stabilization. A yellow excavator is positioned on the left, with its bucket raised. In the center, a worker in a blue jacket and red cap is standing near a pile of rebar. Another worker in a red jacket is visible in the background. The ground is muddy and there is a small stream or pond in the foreground. The text 'Stream bank stabilization' is written in green to the right of the image.

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General Permit Conditions

7. All construction, construction access (e.g., cofferdams, sheetpiling, and causeways) and demolition activities associated with this project shall be accomplished in a manner that minimizes construction or waste materials from entering surface waters to the maximum extent practicable, unless authorized by this VWP general permit.



General Permit Conditions

8. No machinery may enter flowing waters, unless authorized by this VWP general permit or approved prior to entry by the DEQ.



General Permit Conditions

9. Heavy equipment in temporarily-impacted wetland areas shall be placed on mats, geo-textile fabric, or other suitable material to minimize soil disturbance to the maximum extent practicable. Equipment and materials shall be removed immediately upon completion of work.



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VWP Inspections



Logging Mats for access across wetlands



The photograph shows a dirt road leading to a body of water. The road is covered with wooden mats to prevent soil disturbance. A large pile of white rocks is visible on the left side of the road. The text 'Logging Mats for access across wetlands' is written in green to the right of the image.

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VWP Inspections



Or this may
happen



General Permit Conditions

10. All nonimpacted surface waters and compensatory mitigation areas within 50 feet of authorized activities and within the project or right-of-way limits shall be clearly flagged or marked for the life of the construction activity at that location to preclude unauthorized disturbances to these surface waters and compensatory mitigation areas during construction. The permittee shall notify contractors that no activities are to occur in these marked surface waters.



VWP Inspections



Non-Impact
area and
preservation
area
Flagging



General Permit Conditions

11. Temporary disturbances to surface waters during construction shall be avoided and minimized to the maximum extent practicable. All temporarily disturbed wetland areas shall be restored to preexisting conditions within 30 days of completing work at each respective temporary impact area, which shall include reestablishing preconstruction contours, with topsoil from the impact area where practicable and planting or seeding with appropriate wetland vegetation according to cover type (emergent, scrub/shrub, or forested). The permittee shall take all appropriate measures to promote and maintain revegetation of temporarily disturbed wetland areas with wetland vegetation through the second year post-disturbance. All temporarily impacted streams and streambanks shall be restored to their preconstruction elevations and contours with topsoil from the impact area where practicable within 30 days following the construction at that stream segment. Streambanks shall be seeded or planted with the same vegetation cover type originally present, including any necessary supplemental erosion control grasses. Invasive species identified on DCR's Virginia Invasive Plant Species List shall not be used to the maximum extent practicable or without prior approval from the DEQ.



VWP Inspections



Riprap in stream



General Permit Conditions

12. Materials (including fill, construction debris, and excavated and woody materials) temporarily stockpiled in wetlands shall be placed on mats or geotextile fabric, immediately stabilized to prevent entry into state waters, managed such that leachate does not enter state waters, and completely removed within 30 days following completion of that construction activity. Disturbed areas shall be returned to preconstruction elevations and contours with topsoil from the impact area where practicable; restored within 30 days following removal of the stockpile, and restored with the same vegetation cover type originally present, including any necessary supplemental erosion control grasses. Invasive species identified on DCR's Virginia Invasive Plant Species List shall not be used to the maximum extent practicable or without prior approval from the DEQ.





General Permit Conditions

13. Continuous flow of perennial springs shall be maintained by the installation of spring boxes, french drains, or other similar structures.



General Permit Conditions

15. The permittee shall conduct activities in accordance with the time-of-year restrictions recommended by the VDGIF, VMRC, or other interested and affected agencies as contained, when applicable, in DEQ- VWP general permit coverage, and shall ensure that all contractors are aware of the time-of-year restrictions imposed.



General Permit Conditions

17. If stream channelization or relocation is required, all work in surface waters shall be done in the dry, unless authorized by the DEQ, and all flows shall be diverted around the channelization or relocation area until the new channel is stabilized. This work shall be accomplished by leaving a plug at the inlet and outlet ends of the new channel during excavation. Once the new channel has been stabilized, flow shall be routed into the new channel by first removing the downstream plug and then the upstream plug. The rerouted stream flow must be fully established before construction activities in the old stream channel can begin.



VWP Inspections



Diversion
channel



VWP Inspections



Pump-around to work in the dry



VWP Inspections



Work in the dry



VWP Inspections



Diversion
channel



General Permit Conditions

D. Road crossings.

1. Access roads and associated bridges or culverts shall be constructed to minimize the adverse effects on surface waters to the maximum extent practicable. Access roads constructed above preconstruction elevations and contours in surface waters must be bridged, piped or culverted to maintain surface flows.
2. Installation of road crossings shall occur in the dry via the implementation of cofferdams, sheetpiling, stream diversions, or similar structures.



VWP Inspections



Stream crossing and mats



VWP Inspections



Temporary stream crossing



VWP Inspections



Temporary stream crossing



VWP Inspections



Temporary stream crossing



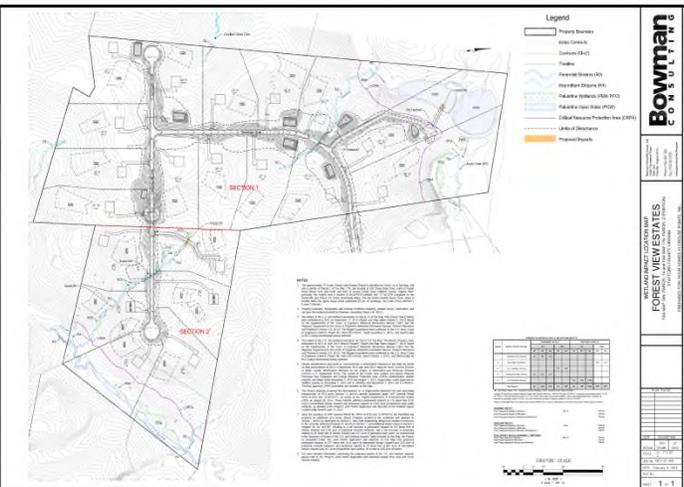
VWP Inspections



Temporary road crossing



VWP I



Stream crossings



General Permit Conditions

E. Utility lines.

1. All utility line work in surface waters shall be performed in a manner that minimizes disturbance, and the area must be returned to its preconstruction elevations and contours with topsoil from the impact area where practicable and restored within 30 days of completing work in the area, unless otherwise authorized by the DEQ. Restoration shall be the seeding or planting of the same vegetation cover type originally present, including any necessary supplemental erosion control grasses. Invasive species identified on DCR's Virginia Invasive Plant Species List shall not be used to the maximum extent practicable or without prior approval from the DEQ.



VWP Inspections



Utility
Crossing-
Stream bank
stabilization



VWP Inspections



Temporary
Impact
restoration



General Permit Conditions

2. Material resulting from trench excavation may be temporarily sidecast into wetlands not to exceed a total of 90 days, provided the material is not placed in a manner such that it is dispersed by currents or other forces.





General Permit Conditions

3. The trench for a utility line cannot be constructed in a manner that drains wetlands (e.g., backfilling with extensive gravel layers creating a french drain effect.). For example, utility lines may be backfilled with clay blocks to ensure that the trench does not drain surface waters through which the utility line is installed.



General Permit Conditions

F. Stream modification and stream bank protection.

1. Riprap bank stabilization shall be of an appropriate size and design in accordance with the VESCH, 3rd Ed., 1992.
2. Riprap apron for all outfalls shall be designed in accordance with the VESCH, 3rd Ed., 1992.



 VWP Inspections



Outlet
Protection



 VWP Inspections



Outlet
Protection





General Permit Conditions

3. For stream bank protection activities, the structure and backfill shall be placed as close to the stream bank as practicable. No material shall be placed in excess of the minimum necessary for erosion protection.



General Permit Conditions

4. All stream bank protection structures shall be located to eliminate or minimize impacts to vegetated wetlands to the maximum extent practicable.



 **General Permit Conditions**

5. Asphalt and materials containing asphalt or other toxic substances shall not be used in the construction of submerged sills or breakwaters.



 **General Permit Conditions**

6. Redistribution of existing stream substrate for the purpose of erosion control is prohibited.

7. No material removed from the stream bottom shall be disposed of in surface waters, unless authorized by this permit.



 **General Permit Conditions**

Dredging

3. If evidence of impaired water quality, such as a fish kill, is observed during the dredging, dredging operations shall cease and the DEQ shall be notified immediately.



 **General Permit Conditions**

7. A dredged material management plan for the designated upland disposal site shall be submitted and approved 30 days prior to initial dredging activity.





General Permit Conditions

8. Pipeline outfalls and spillways shall be located at opposite ends of the dewatering area to allow for maximum retention and settling time. Filter fabric shall be used to line the dewatering area and to cover the outfall pipe to further reduce sedimentation to state waters.



General Permit Conditions

9. The dredge material dewatering area shall be of adequate size to contain the dredge material and to allow for adequate dewatering and settling out of sediment prior to discharge back into state waters.



VWP Inspections



Dredge spoil containment and dewatering facility



VWP Inspections



Used for Hydraulic dredging





General Permit Conditions

10. The dredge material dewatering area shall utilize an earthen berm or straw bales covered with filter fabric along the edge of the area to contain the dredged material, filter bags, or other similar filtering practices, any of which shall be properly stabilized prior to placing the dredged material within the containment area.



General Permit Conditions

11. Overtopping of the dredge material containment berms with dredge materials shall be strictly prohibited



VWP Inspections

- What do VWP Inspectors use to conduct project assessments?
- What do they look for?
- What do you (SWM E&S professionals) do when there appears to be a problem that will or is affecting surface waters?



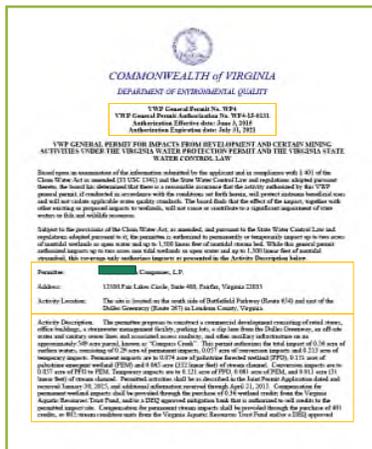
At the Outset

Find the documents that relate to the site

- The permit coverage and conditions
- The impacts map
- Related documents like dredge spoils dewatering plans, preservation areas, historic resources, or species of special concern



VWP Inspections



Does the project have coverage, and is it valid during the site visit?



VWP Inspections



Are there special limitations such as Time of Year work periods, special resources on site, site specific conditions, etc.



VWP Permit Cover Page

Activity Location: The project site is located between I-95 and Route 1 (Jefferson Davis Highway), south of Route 3 (Germanna Highway/Plank Road) in the City of Fredericksburg and Spotsylvania County, Virginia.

Activity Description: The permittee proposes to develop the site, known as the "Village of Idlewild," into 785 single-family homes with associated waterlines, sanitary sewer, storm drainage, and roadway improvements. The proposed activity results in the total permanent impact of 0.80 acres of surface waters, including 0.46 acres of palustrine forested (PFO) wetland, 0.10 acres of palustrine scrub-shrub (PSS) wetlands, 0.22 acres (420 linear feet) of perennial stream channel, and 0.02 acres (109 linear feet) of intermittent stream channel. Of the 0.46 acres of permanent PFO wetland impacts, 0.18 acres are to isolated wetlands. Permanent surface water impacts will be compensated through an in-lieu fee contribution of \$119,850 to the Virginia Aquatic Resources Trust Fund, as well as the on-site preservation of 12,200 linear feet of perennial stream buffer, and 4,400 linear feet of intermittent stream buffer. Buffer preservation will total 28.1 acres and includes 1.44 acres of PFO wetlands and 0.56 acres of PSS wetlands. Preserved areas are as represented on the Waters/Wetlands Preservation Areas map, dated July 2003.

Authorization Notes: There shall be a time-of-year restriction in perennial streams from February 15 to June 30 to protect anadromous fish during the spawning season.

The work authorized by this permit also satisfies the terms and conditions contained in the Norfolk District, U.S. Army Corps of Engineers' (USACE) State Program General Permit (12-SPGP-01) and no additional authorization from the USACE is required. The permittee is responsible for following all special conditions contained within the 12-SPGP-01 (attached) that are pertinent to the project.

The authorized activity shall be in accordance with this cover page, Part I - Special Conditions, Part II - Mitigation, Monitoring and Reporting, and Part III - Conditions Applicable to All VWP Permits, as set forth herein.



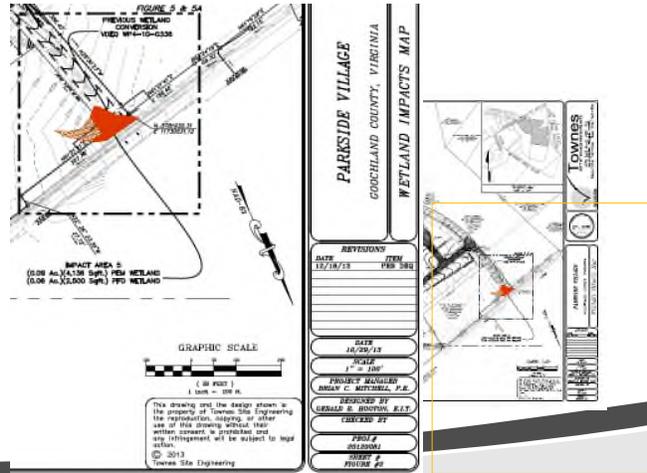
VWP Inspections

Impact map



VWP Inspections

Look for insets for better scale accuracy.
Check scale for relevance.



VWP Permit Cover Page



COMMONWEALTH of VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY
PIEDMONT REGIONAL OFFICE
4949-A Cox Road, Glen Allen, Virginia 23060
(804) 527-5020 Fax (804) 527-5106
www.deq.virginia.gov

Molly Joseph Wood
Secretary of Natural Resources

David E. Payne
Director
Michael P. Magley
Regional Director

November 17, 2016

██████████ Drive, Suite 100
Midlothian, Virginia 23113

Re: Virginia Water Protection (VWP) General Permit Tracking Number WP4-16-1399

Permittee: ██████████, LLC
Address: ██████████ Drive, Suite 100
Midlothian, Virginia 23113
Project Name: Project Woody
Project Location: The project site is located at 15950 Cosby Road in Chesterfield County, Virginia.
Project Description: The project consists of the construction of a mixed use development that blends multi-family residential and commercial uses to include a grocery store, retail buildings, and two (2) multi-family apartment buildings.

Dear Mr. ██████████

The Virginia Department of Environmental Quality (DEQ) has reviewed your application dated August 2016, received on August 25, 2016, and additional information materials received through October 12, 2016. Based on DEQ's review, the proposed "Project Woody" qualifies for coverage under the VWP General Permit Number WP4, in accordance with 9 VAC 25-690-10 et seq.

As required by Va. Code §62.1-44.15:20(A) and 9VAC25-690-30, the following requirements, limits, and other conditions shall apply to the project, in addition to those contained in VWP General Permit WP4:



VWP Permit Cover Page

WP4-12-1099
Page 2 of 2

1. This coverage authorizes the permanent impact of no more than 0.82 acre of forested wetland, 0.02 acre of emergent wetland, and 633 linear feet of stream bed. Impacts shall be as depicted on the drawing entitled "Figure 3: Preliminary Jurisdictional Waters of the U.S. Impact Map", dated July 23, 2016, received on October 12, 2016, and drawn by Timmons Group.
2. Compensation for permanent wetland impacts shall be provided through the purchase of 1.66 wetland credits and 729 USM stream credits from a DEQ approved mitigation bank that meets the requirements of Va. Code § 62.1-44.15:23(A) and 9 VAC25-690-70. Multiple banks may be used to fulfill compensation requirements.
3. The project satisfies the terms and conditions contained in the Norfolk District, Corps of Engineers' State Program General Permit (12-SPGP-01) and the special conditions, if any, attached to 12-SPGP-01. No additional authorization from the Corps is required. Your 12-SPGP-01 authorization is effective as of the date on this letter and remains effective until May 31, 2017.

The VWP General Permit WP4 expires on August 1, 2026. If the covered activity/activities has/have not been completed and you wish to complete the work, you must reapply for coverage under a VWP general permit in effect at that time or a VWP individual permit. Activities in surface waters requiring a permit shall not continue after August 1, 2026, until coverage under a new VWP general permit is granted or a VWP individual permit is issued by the board. If you have any questions, please contact Bryan Jones by phone at (804) 527-3074 or by email at bryan.jones@deq.virginia.gov.

Sincerely,


Allison C. Dunaway
Virginia Water Protection Permits Manager

Enclosure: VWP General Permit, Attachment 1 – VWP Permit Construction Status Update Form, Attachment 2 – Monthly VWP Permit Inspection Checklist, 12-SPGP-01

cc: Todd Peaninger, Timmons Group – VIA EMAIL
Julie Hamilton, U.S. Army Corps of Engineers, Richmond Field Office – VIA EMAIL



Onsite

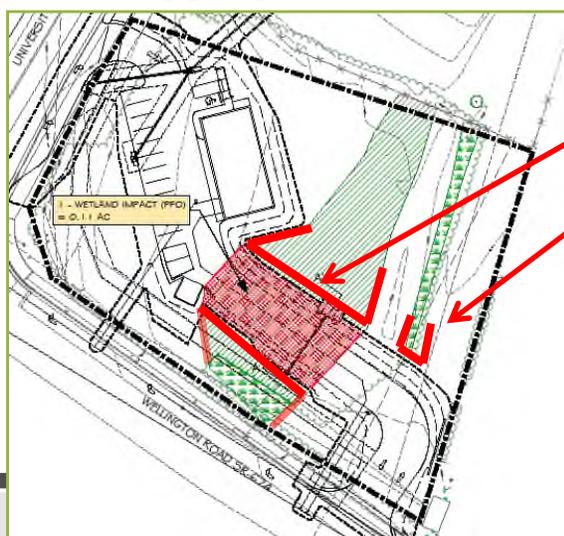
- Physical limits of authorization
- Construction conditions
- Special conditions



Authorized Impacts



4. Flagging Protected Areas



Required Flagging Area



VWP Inspections



Non-Impact
area and
preservation
area
Flagging



VWP Inspections



Flagging of
buffers



VWP Inspections



Flagging of buffers



VWP Inspections



Backflooding from a basin



VWP Inspections



Basin discharge locations



VWP Inspections



Discharge tie-in with channel



VWP Inspections



Discharge tie-in with channel



VWP Inspections



Special conditions-signage for special restrictions



Common Scenarios

- Utility stabilization
- “More is better”
- Sediment containment field decisions
- Failure to correlate permit documents and requirements to engineering or construction staff
- Failure to follow permit conditions
- Failure to obtain correct permit



VSMP/ E&S Inspectors/ Plan Reviewers Role

What can you do?

- Know where wetlands and other surface waters are located, and where construction activities are authorized.
- Plan reviewers should have the approved wetland delineation maps and approved impacts maps.
- Inspectors should, in addition to having plans that identify surface waters and approved impacts, find resource flagging when they look for limits of clearing flagging/ tree protection at the pre-con meeting: ensure everyone onsite knows the meaning of various flagging.



VWP Inspections



Engineering change from Detention Basin to Retention Basin



VSMP/ E&S Inspectors/ Plan Reviewers Role

- Understand the limitations of the VWP permit.
- Ensure that the boundaries are honored.
- Ensure that E&S and SWM criteria are strictly followed.



VSMP/ E&S Plan Reviewers Role

What do you do?

- When plan reviewers find the plans appear in conflict with the approved VWP permit, identify the concern to the Engineer and Permittee.
- Evidence of having obtained authorization for surface water impacts and for plan revisions that result in impact changes.



VWP Inspections



Engineering change to utilize stream corridor as sediment basin location



VSMP/ E&S Inspectors/ Plan Reviewers Role

- When sediment or other spills reach surface waters or wetlands- *Notify DEQ-VWP.*
- *Sediment discharges to State waters may warrant an immediate Stop Work Order under the E&S Regulations.*
- *Amplify efforts to stem the discharge.*



VWP Inspections



Sediment discharges



VWP Inspections



Sediment discharges



VSMP/ E&S Inspectors/ Plan Reviewers Role

➤ When plan (field) changes will result in effects in or over wetlands or other waters-
Notify DEQ-VWP and the US Army Corps of Engineers for direction. This often involves the plan designer as well.



VWP Inspections



Sediment discharges



Other common situations



Street Washing



Other common situations



Spills



Post Construction BMP Maintenance

- Remember to ensure that BMP elevation as-built surveys, maintenance elevations, and maintenance agreements are established and recorded.
- This may relieve the landowner of VWP permitting due to routine maintenance of the facilities. *See Guidance Memorandum 04-2018*



VWP Compliance Resolution

Guidance Memorandum No. 10-2002
 Virginia Water Protection Permit Program
 Noncompliance Determination and
 Enforcement Referral Guidance

Table 1. Non-Administrative (Onsite) Violations

| Infraction | Points | | | Notes |
|------------------------------------|----------------------------|----------------------------|-----------------------|---|
| | 1 st Occurrence | 2 nd Occurrence | Additional Occurrence | |
| Exceeding Permitted Impacts | | | | Minor Exceedance: below minor modification/notice of planned change thresholds |
| Major Exceedance | 1-4 | 1-4 | 4 | Major Exceedance: above minor modification/notice of planned change thresholds |
| Minor Exceedance | 1-2 | 1-2 | 4 | |
| | | | | Impact areas in multiple locations over a given time period are summed to determine if the impact is considered major or minor; individual impacts are not assigned Points separately |
| | | | | Impact thresholds serve only as a guide for assessing alleged noncompliance; the facts of the case must be considered carefully regardless of the size of impacts; smaller impacts to more significant aquatic resource functions may also be considered major, whereas larger impacts in context with a larger permitted impacts may be considered minor |

VWP Non-Compliance Resolution

| Informal Compliance | Warning Letter | Notice of Violation |
|---|---|--|
| Permittee corrects and further action is not required | Permittee responds to DEQ, corrects and further action is not required OR Elevated to NOV | The concern is referred to DEQ's Enforcement Division for resolution |
| Corrective Action on Site | | |



Selected References

- *VWP Regulations*: Legislative Information System
<http://law.lis.virginia.gov/admincode/title9/agency25/chapter690/section100/>
- DEQ website <http://www.deq.virginia.gov/>
- *US Army Corps of Engineers* Norfolk District Website
<http://www.nao.usace.army.mil/>
- Mark.remsberg@deq.virginia.gov
Justin.brown@deq.virginia.gov
- See *Guidance Memorandum 04-2018* for more detail of the BMP Guidance document, & *10-2002* for Enforcement Referrals



QUESTIONS?

