



Department of the Environment

Regulatory Changes that will Impact Development and New Construction in Maryland

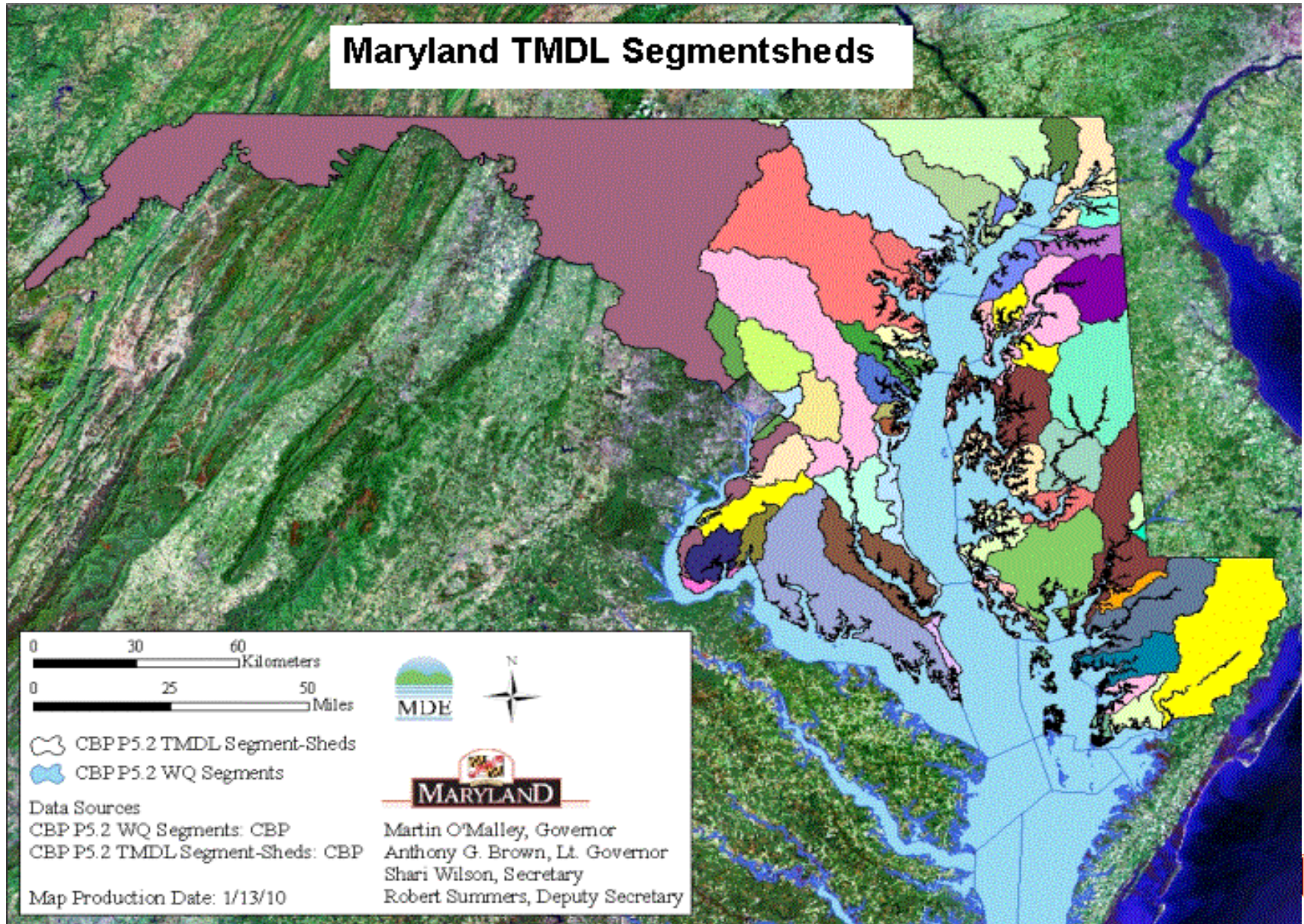
Presentation to the MD-DC Utilities
Association



Current Regulatory Landscape

- Chesapeake Bay TMDL – WIP
- Wetland Permitting/MDSPGP 4
- EPA's Stormwater Rule
- Effluent Limit Guidelines for Construction
- Maryland's Erosion & Sediment Control Specifications
- Tier II Protection

Chesapeake Bay TMDL



BAY TMDL PROCESS - WHAT'S NEW

- Federal "Accountability Framework"
 - Clean Water Act: Bay TMDLs and generally greater regulatory influence
 - Watershed Implementation Plans
 - 2-Year Implementation Milestones
 - Tracking & Evaluating Progress
 - Federal "Consequences"

Federal Consequences

- Possible Consequences:
 - Object to NPDES permits to require additional reductions from point sources;
 - Expand NPDES permit coverage to currently unregulated sources;
 - Increase and target federal enforcement and compliance assurance;
 - Condition or redirect EPA grants; and
 - Federal promulgation of local nutrient water quality standards.

Three-Phased Planning Process:

- Phase I Plans - 2010
 - Nutrient and sediment target loads by sector and impaired segment
 - Statewide strategies for reducing loads in each source sector
 - Starting Point for Phase II Plans
- Phase II Plans – 2011/12
 - Refined EPA Watershed Model Results
 - Divide loads by smaller geographic areas
 - More detailed strategy to meet 2017 Interim Target - 70% reduction
 - 2-Year Milestone actions for 2012-2013
- Phase III Plans – 2017
 - Modification of TMDL and allocations, if necessary
 - Identify changes needed to meet Final Target loads



MDE Wetland Permitting Changes

- *New Permit Streamlining Procedures Effective August 1, 2011*
- *The new process provides only one opportunity for an applicant to supplement an application with additional information.*
- *45-day letter” will include a deadline for the submission of requested information*
- *MDE will deny the permit application due to insufficient information*
- *Criteria for requiring additional time for review*
 - *scientific study requested by MDE*
 - *resolution of legal or local governmental matters*
 - *other factors beyond the control of the applicant*
- *Pre-application Meeting*





USACE MDSPGP - 4

- New General Permit in Effect October 1, 2011
- Grandfathering Provision:
 - 2. All activities that have received written project specific verification under the MDSPGP-3, based on applications made prior to the effective date of the MDSPGP-4, but that have not been completed, **have until December 31, 2013 to complete the work** under the terms and conditions of the MDSPGP-3. The project must receive written reauthorization under the MDSPGP-4 or alternate Corps permit review procedures if the authorized work cannot be completed by December 31, 2013. Requests for modifications of previously authorized work under the MDSPGP-3 and/or special conditions are not grandfathered, and must be submitted in writing for written reauthorization under the MDSPGP-4 or alternate Corps permit review procedures.





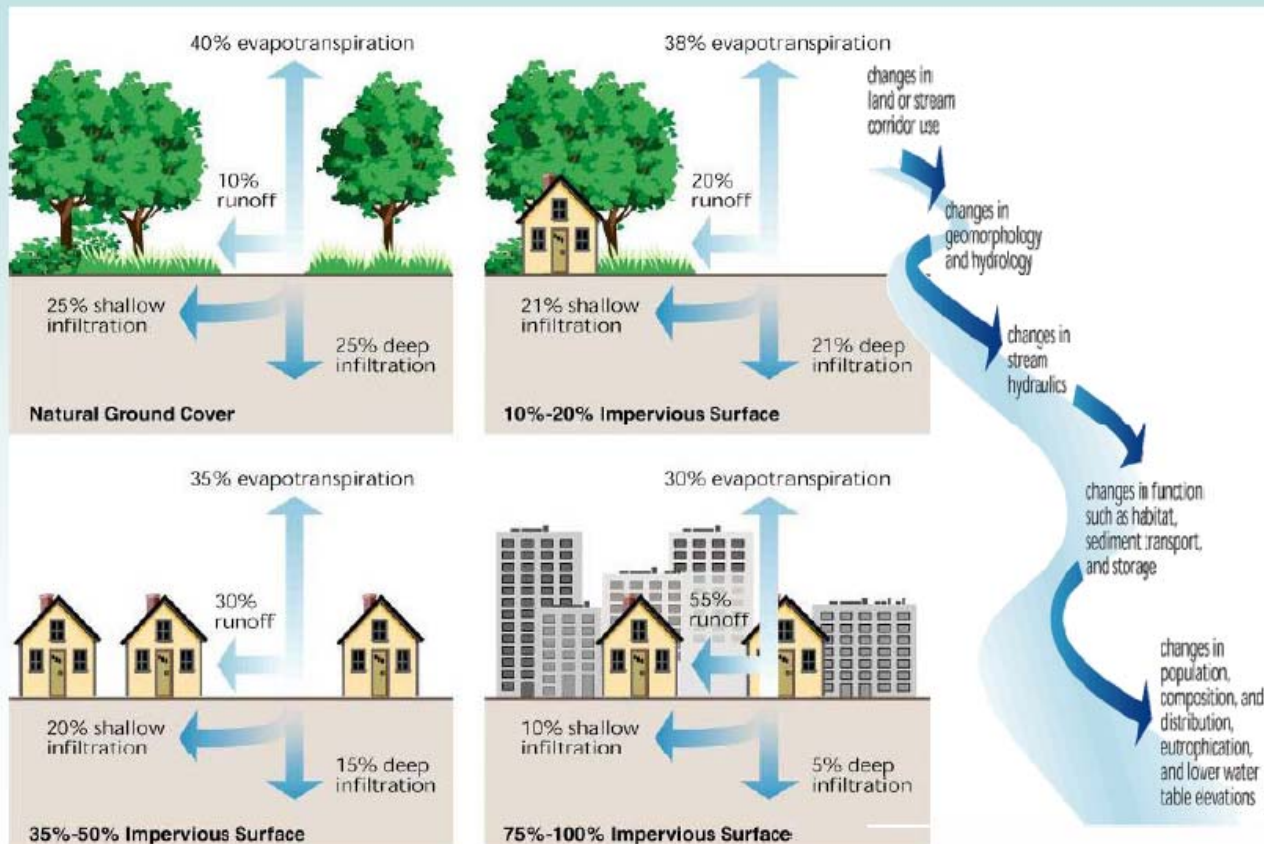
USACE MDSPGP - 4

- A new maximum total stream length impact threshold of 2,000 linear feet, in addition to the area impact threshold of one acre to all waters of the United States, to qualify for MDSPGP-4 authorization;
- Stream mitigation requirements when total stream length losses exceed 200 linear feet;
- Clarification of wetland mitigation requirements;
- Replacement of Category I and Category III with Category A (Corps review not required) and Category B (Corps review required);
- Elimination of Category II by including these current activities under the new Category B;
- Specific acreage limits designated for each activity under both Category A and Category B; and
- A reduction of impact limits for some Category A activities; and two new activities.



EPA'S Stormwater Rule

Impacts of urbanization on stormwater runoff



Stormwater Rule Schedule

- **Fall 2011: Report to Congress**
 - Areas outside the program
 - Types of pollutants
 - Programmatic recommendations
- **December 2011: Proposed Rule**
 - Expanding definition of MS4
 - Performance standard for discharge from **new** sites
 - Performance standard for discharge from **redeveloped** sites
 - Performance standard for **retrofits**
 - **Green** infrastructure



Current Issues in Discussion

- Post construction performance standard? (restore pre-development hydrology)
- How to expand MS4?
 - Jurisdictional boundary?
 - Exemptions?
 - Census? Watershed Boundaries?
 - Urban Clusters?

How To?

- Define redevelopment?
 - Addressing pre-existing uses (industrial, multi-family, government, commercial)
- Green infrastructure and LID
- Bay specific provisions
- Retrofit plans?
 - When?

How To?


Construction ELG

- December 1, 2009 - EPA published effluent limitations guidelines to control the discharge of pollutants from construction sites.
- February 1, 2010. – ELG In Effect. EPA expected state permitting authorities to bring these ELGs into their general permits on the next renewal.
- January 4, 2011, EPA stayed the numeric limitation of 280 NTU that was published in the December 1, 2009.
- mid-2011 - EPA decided to withdraw its revised numerical turbidity limit and instead seek more data on turbidity treatment system performance before coming out with a new numerical turbidity limit.

General Permit for Construction

- MDE is unsure on EPA's schedule for the new limit, but collection and analysis of new data will likely take time.
- The non-numerical portions of EPA's 2009 ELGs remain in effect, and MDE intends to implement them in its next general permit, which is scheduled to take effect in 2014.
- The non-numerical ELG provisions include a number of requirements, such as installing appropriate concrete washout controls.
- The public participation process for the next MDE general permit will likely begin in late 2012 or early 2013.




Erosion & Sediment Control Update



**2010 Maryland
Standards and Specifications
for Soil Erosion and Sediment
Control**

*DRAFT
OCTOBER 2009*

*Maryland Department of the Environment
Water Management Administration
in association with
Natural Resources Conservation Service
and
Maryland Association of Soil Conservation Districts*



Martin O'Malley, Governor
Anthony G. Brown, Lt. Governor
Shari T. Wilson, Secretary
Robert M. Summers, Deputy Secretary

1800 Washington Blvd.
Baltimore, MD 21230
410-537-3000
www.mde.state.md.us

- Public Informational Meeting – Thursday, October 29th at MDE
- Initiate Formal Regulatory Process – January 2009
- Complete Promulgation – May 2010

What's New?

- ESD to the MEP!
- Planning and Design Section
- Stabilization Requirements
- Grading Unit
- TMDLs and Tier II, Etc.
- Revised Standard Practices
- New Standard Practices



Table of ESC Practices

Table A.4: Erosion and Sediment Control Practices Matrix

Practice	Primary Purpose	Design Criteria	Associated Practices	Remarks
Stabilized Construction Entrance	Stabilize soil	Access points	Mountable Berms, Silt Fence, Super Silt Fence	All Ingress/Egress Points
Stabilized Construction Entrance with Wash Rack	Stabilize soil; prevent tracking of mud	Access points	Sediment Traps, Mountable Berms, Silt Fence, Super Silt Fence	All Ingress/Egress Points
Serrated Slopes	Stabilize extreme grade changes	Site specific	Temporary and Permanent Stabilization	Divert overland flow from top of slope
Benching	Minimize erosion	20 ft cut/fill- 2:1 slopes 30 ft cut/fill- 3:1 slopes 40 ft cut/fill- 4:1 slopes	Temporary and Permanent Stabilization, Pipe Slope Drain	Can apply to stockpiles
Temporary Stabilization	Stabilize soil	Site specific	Soil Stabilization Matting	Maximum six month duration, Soil Testing
Permanent Stabilization	Stabilize soil	Site specific	Soil Stabilization Matting	Soil Testing
Heavy Use Area Protection	Stabilize Soil	Construction routes, staging and material storage areas	Dust Control, Temporary Swales, Temporary or Permanent Seeding	SCE, Soil Stabilization
Earth Dike	Convey runoff	Drainage area ≤ 10 ac; slope $\leq 10\%$	Sediment Trap, TSOS, TGOS, Outlet Protection	Engineering Design if > 10 ac or slope $> 10\%$.
Temporary Swale	Convey runoff	Drainage area ≤ 10 ac; slope $\leq 10\%$	Sediment Trap, TSOS, TGOS; Outlet Protection	Engineering Design if > 10 ac or slope $> 10\%$.
Perimeter Dike/ Swale	Convey runoff	Drainage area ≤ 2 ac; slope $\leq 10\%$	Sediment Trap, Temporary Stabilization	Smaller footprint than ED and TS
Storm Drain System Temporary Diversion	Convey runoff	Site specific	Sediment Trap or Basin, Outlet Protection,	
Temporary Asphalt Berm	Convey runoff on paved areas	Site specific	Earth Dikes, TSOS, TGOS, Outlet Protection	
Clear Water Diversion Pipe	Convey channel flow around construction area	Design storm = Q_2 ; 1 ft freeboard at inlet	Dewatering Practices, Outlet Protection	Possible review by Wetlands and Waterways Program
Temporary Barrier Diversion	Convey stream flow around construction	Design storm = Q_2 ; 1 ft freeboard at inlet	Dewatering Practices; Outlet Protection	



Standard Stabilization Note

STANDARD STABILIZATION NOTE

Following initial soil disturbance or redisturbance, permanent or temporary stabilization is required within [seven (7)] **three (3)** calendar days as to the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes, and all slopes greater than 3 horizontal to 1 vertical (3:1); and [fourteen (14)] **seven (7) days** as to all other disturbed areas on the project site.



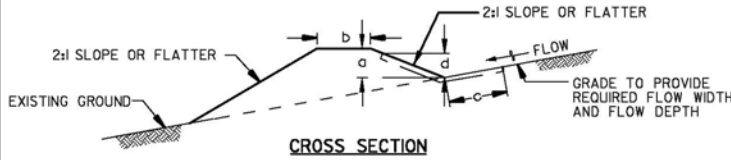
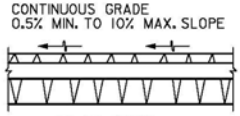


Grading Unit

“Grading Unit” means the maximum contiguous area allowed to be graded at given time. For the purpose of proposed regulation change, a grading unit is 20 acres or less.



Revised Standard Practices

DETAIL C-1 EARTH DIKE		STANDARD SYMBOL A-1															
		<small>PLACE DESIGNATION (A-1, B-2, etc.) ON FLOW CHANNEL SIDE OF DIKE.</small>															
 <p style="text-align: center;">PLAN VIEW</p>	<p style="text-align: center;">DIKE TYPE</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">A</th> <th style="text-align: center;">B</th> </tr> </thead> <tbody> <tr> <td>a - DIKE HEIGHT</td> <td style="text-align: center;">18 IN MIN.</td> <td style="text-align: center;">30 IN MIN.</td> </tr> <tr> <td>b - DIKE WIDTH</td> <td style="text-align: center;">24 IN MIN.</td> <td style="text-align: center;">36 IN MIN.</td> </tr> <tr> <td>c - FLOW WIDTH</td> <td style="text-align: center;">4 FT MIN.</td> <td style="text-align: center;">6 FT MIN.</td> </tr> <tr> <td>d - FLOW DEPTH</td> <td style="text-align: center;">12 IN MIN.</td> <td style="text-align: center;">24 IN MIN.</td> </tr> </tbody> </table>			A	B	a - DIKE HEIGHT	18 IN MIN.	30 IN MIN.	b - DIKE WIDTH	24 IN MIN.	36 IN MIN.	c - FLOW WIDTH	4 FT MIN.	6 FT MIN.	d - FLOW DEPTH	12 IN MIN.	24 IN MIN.
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<p>FLOW CHANNEL STABILIZATION</p> <p>A-1 SEED WITH STRAW MULCH AND TACK.</p> <p>A-2/B-2 SEED WITH SOIL STABILIZATION MATTING OR LINE WITH SOD.</p> <p>A-3/B-3 4 TO 7 INCH STONE OR EQUIVALENT RECYCLED CONCRETE PRESSED INTO SOIL FLUSH WITH GROUND 7 INCHES MINIMUM.</p>																	
<p>CONSTRUCTION SPECIFICATIONS</p> <ol style="list-style-type: none"> 1. CONSTRUCT FLOW CHANNEL ON AN UNINTERRUPTED, CONTINUOUS GRADE, ADJUSTING THE LOCATION DUE TO FIELD CONDITIONS AS NECESSARY TO MAINTAIN POSITIVE DRAINAGE. 2. PROVIDE OUTLET PROTECTION AS REQUIRED ON PLAN. 3. REMOVE AND DISPOSE OF ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SO AS NOT TO INTERFERE WITH PROPER FUNCTION OF EARTH DIKE. 4. EXCAVATE OR SHAPE EARTH DIKE TO LINE, GRADE, AND CROSS SECTION AS SPECIFIED. BANK PROJECTIONS OR OTHER IRREGULARITIES THAT IMPEDE FLOW ARE NOT ALLOWED. 5. COMPACT FILL. 6. STABILIZE EARTH DIKE WITHIN THREE DAYS OF INSTALLATION. STABILIZE FLOW CHANNEL FOR CLEAR WATER DIKE WITHIN 24 HOURS OF INSTALLATION. 7. INSPECT AND PROVIDE NECESSARY MAINTENANCE PERIODICALLY AND AFTER EACH RAIN EVENT. 8. UPON REMOVAL OF EARTH DIKE, GRADE AREA FLUSH WITH EXISTING GROUND AND STABILIZE DISTURBED AREA WITH TOPSOIL, SEED, AND MULCH, OR AS SPECIFIED WITHIN 24 HOURS OF REMOVAL. 																	
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL																	
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE		MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION															

New Tables

TABLE B.1: Temporary Seeding for Site Stabilization

Plant Species	Seeding Rate ^{1/}		Seeding Depth (inches) ^{2/}	Recommended Seeding Dates by Plant Hardiness Zone ^{3/}		
	lbs./ac.	lbs./ 1,000 sq.ft.		5b and 6a	6b	7a and 7b
Cool-Season Grasses						
Annual Ryegrass Lolium perenne ssp. multiflorum	40	1.0	0.5	Mar 15 to May 31 Aug 1 to Sep 30	Mar 1 to May 15 Aug 1 to Oct 15	Feb 15 to Apr 30 Aug 15 to Nov 30
Barley Hordeum vulgare	96	2.2	1.0	Mar 15 to May 31 Aug 1 to Sep 30	Mar 1 to May 15 Aug 1 to Oct 15	Feb 15 to Apr 30 Aug 15 to Nov 30
Oats Avena sativa	72	1.7	1.0	Mar 15 to May 31 Aug 1 to Sep 30	Mar 1 to May 15 Aug 1 to Oct 15	Feb 15 to Apr 30 Aug 15 to Nov 30
Wheat Triticum aestivum	120	2.8	1.0	Mar 15 to May 31 Aug 1 to Sep 30	Mar 1 to May 15 Aug 1 to Oct 15	Feb 15 to Apr 30 Aug 15 to Nov 30
Cereal Rye Secale cereale	112	2.8	1.0	Mar 15 to May 31 Aug 1 to Oct 31	Mar 1 to May 15 Aug 1 to Nov 15	Feb 15 to Apr 30 Aug 15 to Dec 15
Warm-Season Grasses						
Foxtail Millet Setaria italica	30	0.7	0.5	Jun 1 to Jul 31	May 16 to Jul 31	May 1 to Aug 14
Pearl Millet Pennisetum glaucum	20	0.5	0.5	Jun 1 to Jul 31	May 16 to Jul 31	May 1 to Aug 14

NOTES:

1. Seeding rates for the warm-season grasses are in pounds of Pure Live Seed (PLS). Actual planting rates shall be adjusted to reflect percent seed germination and purity, as tested. Adjustments are usually not needed for the cool-season grasses.

Seeding rates listed above are for temporary seedings, when planted alone. When planted as a nurse crop with permanent seed mixes, use 1/3 of the seeding rate listed above for barley, oats, and wheat. For smaller-seeded grasses (annual ryegrass, pearl millet, foxtail millet), do not exceed more than 5% (by weight) of the overall permanent seeding mix. Cereal rye generally should not be used as a nurse crop, unless planting will occur in very late fall beyond the seeding dates for other temporary seedings. Cereal rye has allelopathic properties that inhibit the germination and growth of other plants. If it must be used as a nurse crop, seed at 1/3 of the rate listed above.

Oats are the recommended nurse crop for warm-season grasses.

2. For sandy soils, plant seeds at twice the depth listed above.
3. The planting dates listed are averages for each Zone, and may require adjustment to reflect local conditions, especially near the boundaries of the zone.

Anti-Degradation

- New requirements for projects impacting Tier II (high quality waters)
- No new discharges
- Analytical approach – monitoring and assessment
- Technical guidance under development.
- Protective standards not established at the project/site scale.
- Enhanced SW Management
- Should be captured at the planning level (WRE)

Other Considerations

- FastTrack Process: Maryland Made Easy
- Forest Conservation.
- Environmental Justice impacts.
- Sustainability
- Green Energy
- Plan Maryland

THANKS - Questions?