

Phosphorus Management Tool Informational Meeting



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Meeting Overview

- Welcome- Secretary Hance
- Purpose of the Meeting: To share what MDA is doing over the course of the next year to help farmers implement the new PMT tool pursuant to the compromise reached with stakeholders – Secretary Buddy Hance
- Phosphorus Management Tool (PMT) Overview- Royden Powell
- The Implementation Process- Royden Powell
- MDA Assistance- Royden Powell
 - Manure Transport, State Stockpiling, Manure Match
- Questions



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Implementing the Phosphorus Management Tool

Why Now?

- Using the latest science
 - Science continues to evolve and the PMT reflects the best, most up to date science
 - Farmers ask for science-based policy
- Meeting EPA TMDL- WIP obligation
 - Making good on our commitment
 - Doing what we said would happen in 2012.



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Implementing the Phosphorus Management Tool

PMT Overview

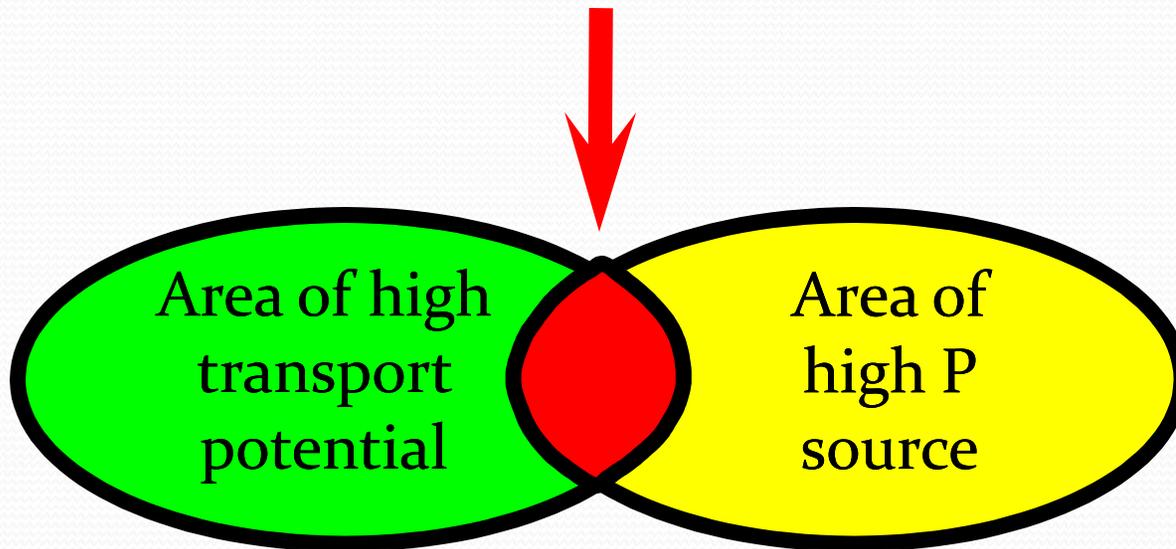
- Replaces the Phosphorus Site Index (PSI) which is outdated science
- Like the PSI, only applies where soil P is ≥ 150 FIV
- Result of years of Univ. of MD research
- In collaboration with regional and national scientists
 - Soils with high P do not show a yield response to additional applications of phosphorus.



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P-Site Index:

Critical source area
for P export from watershed



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PMT Overview

Original P Site Index

Part A
Site &
Transport
Characteristics

X

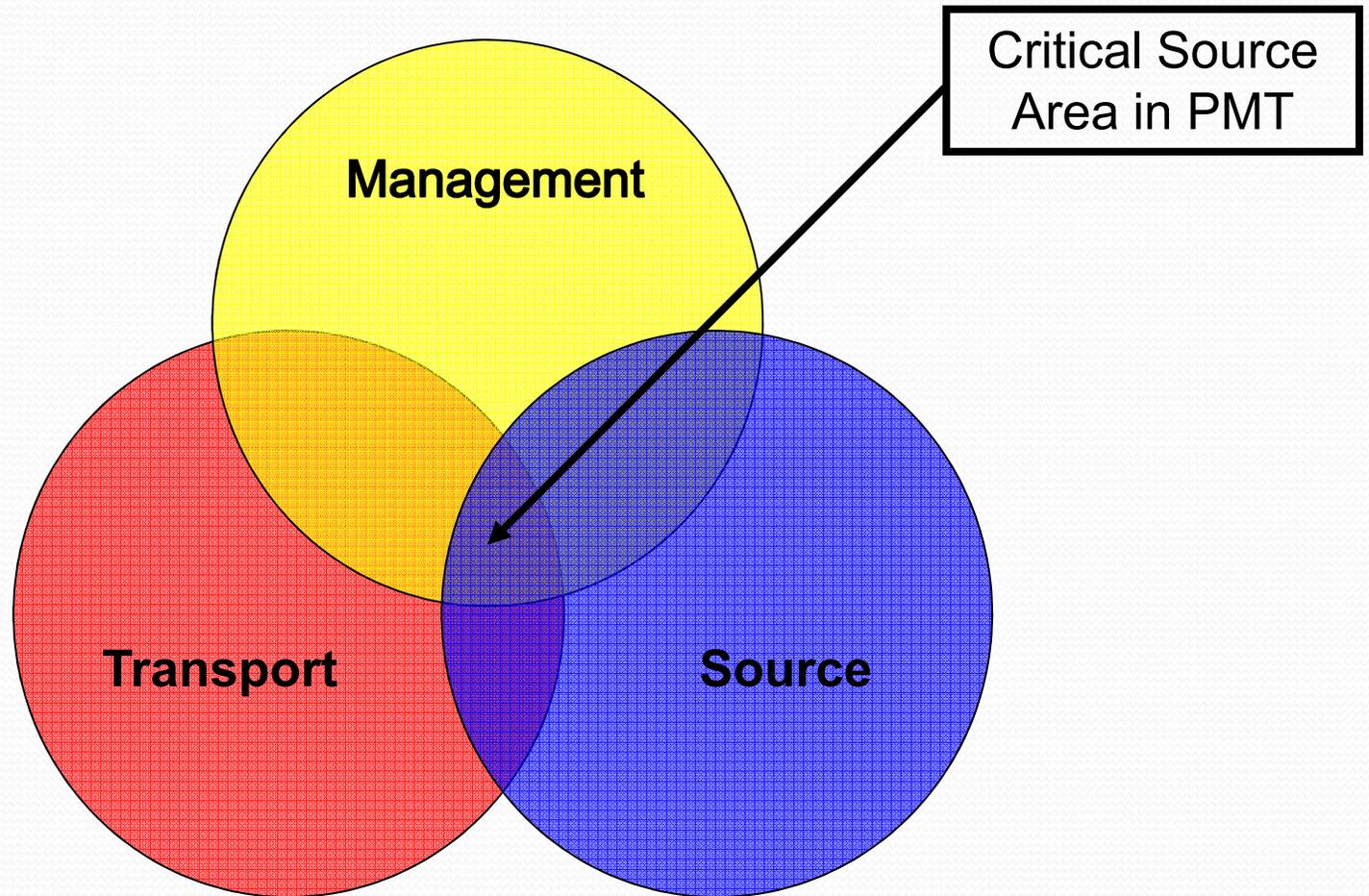
Part B
Management &
Source
Characteristics



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Critical Source Area

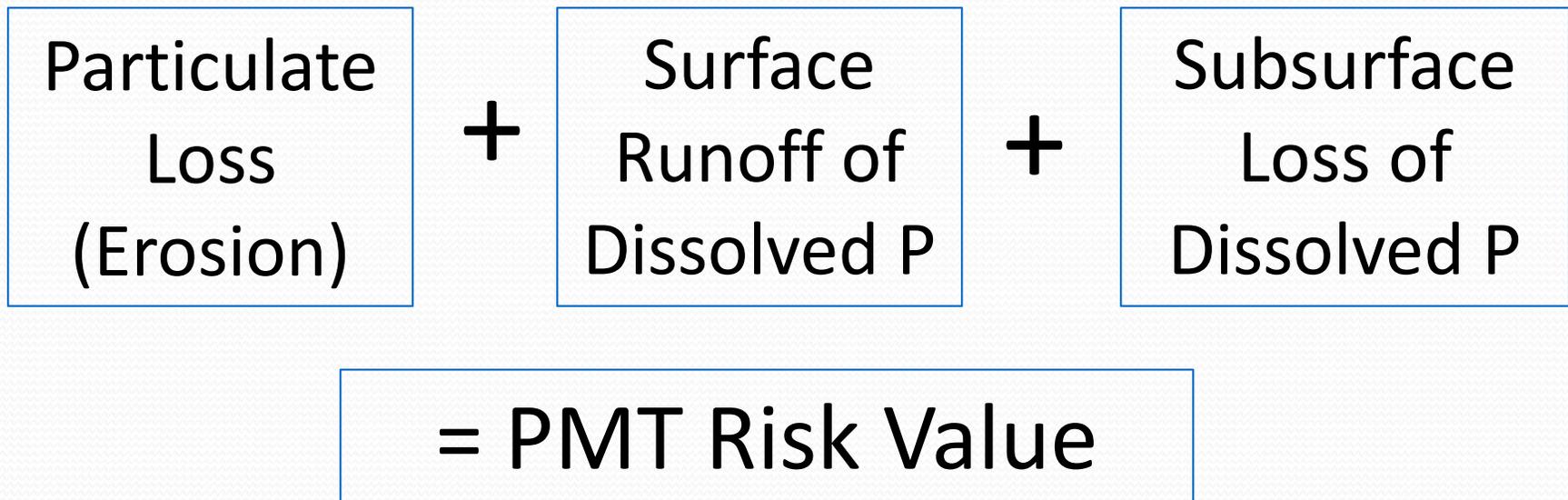
“Second Generation”



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PMT Overview

New Phosphorus Management Tool

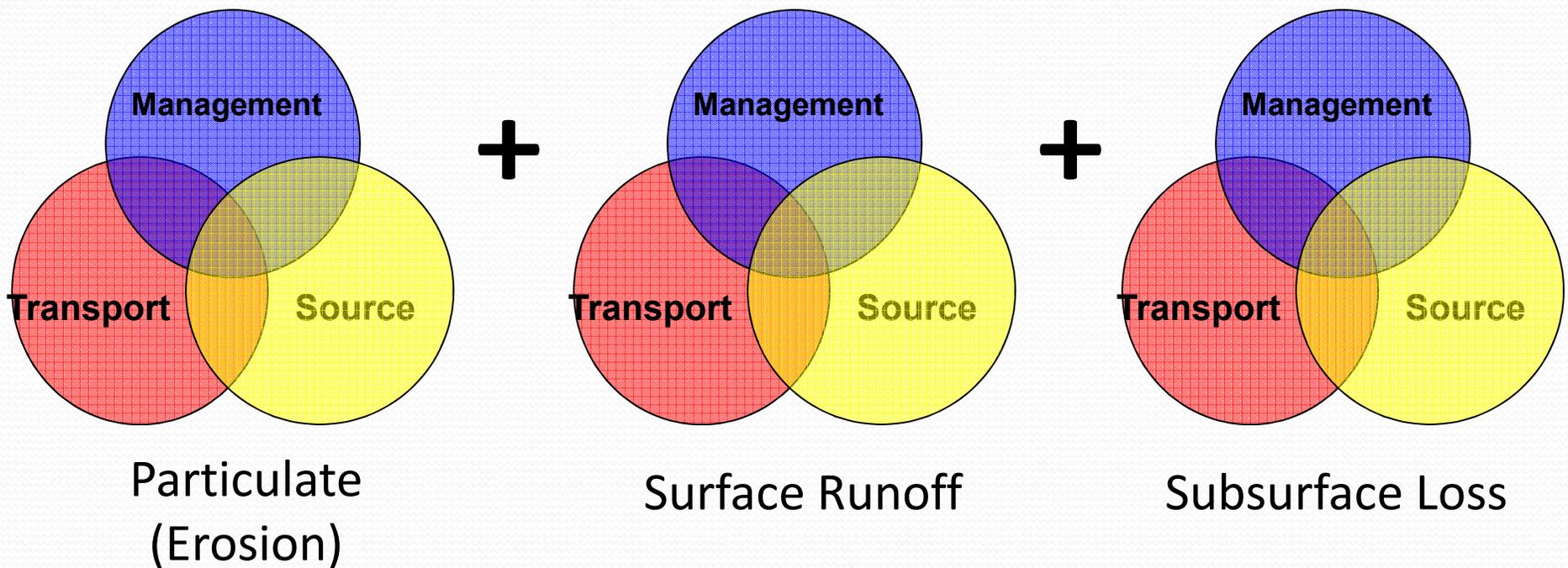


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PMT Overview

New PMT Paradigm



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Contributing Factors

Particulate Loss

- Distance to surface water
- Existing buffer
- Soil P level – (FIV)
- Sediment Transport Factor (RUSLE2)



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Contributing Factors

Surface Loss

- Amount/source of applied P
- Application method/timing- (incorporate/inject)
- Degree of P saturation
- Distance to surface water
- Existing buffer
- Soil permeability
- Slope



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Contributing Factors

Subsurface Loss

- Presence of artificial drainage
- Amount/source of applied P
- Application method/timing- (incorp./inject)
- Degree of P saturation
- Soil Drainage Class
- Hydrologic Soil Group



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PMT Overview

- Three “Risk” categories:
 - Low - Three year crop removal applied over a three year period.
 - Medium – One year crop removal
 - High – No additional P



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PMT Overview

● Old PSI

- 4 Risk categories
- N based planning at the lowest risk category
- Delete:
- Priority watersheds



● New PMT

- 3 Risk categories
- All levels include some degree of Phosphorus management
- Add:
- Degree of P Saturation



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Implementing the Phosphorus Management Tool *Process*

- Changing COMAR (Code of MD Regulations)
- Update the *Maryland Nutrient Management Manual*
 - “*incorporated by reference*”
 - Add the Univ. MD Extension Bulletin – UMD Phosphorus Management Tool – Technical Users Guide (EB405)



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Background

- Submitted original proposal to AELR – December 2012
 - Included a “draft” Extension Bulletin
- Received Final Extension Bulletin – June 28, 2013
 - Final version included an edit that did not significantly affect the risk score but, legally, was considered “substantive”.
- Resubmitted to AELR – July 2013 as Emergency Regs
- Proposal pulled based on concerns from farmers and environmental groups
 - Unknown impacts and unclear implementation



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Process Time Line – Round 3

- Meet with small group of stakeholders to find consensus
 - Agricultural interests –
 - MD Farm Bureau
 - MD Grain Producers Association
 - DelMarVa Poultry Industry
 - Environmental interests –
 - Chesapeake Bay Foundation
 - MD Clean Agriculture Coalition
- Revised proposal from the second meeting based on compromise reached with all groups



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Revised Proposal

- Phased – in Implementation Schedule
 - Between Now and September 30, 2014:
 - NMPs to be developed using both the existing PSI and the new PMT.
 - Farms will be managed according the PSI
 - Information from the PMT will assist in planning for future implementation
 - MDA will gather information on effects of implementation based on PMT calculations
 - On and after October 1, 2014
 - NMPs to be developed using the PMT
 - After January 1, 2015, plan implementation will follow the PMT, regardless of when plan was written.



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Enhancing the Manure Transport Program

- Previous funding level - \$712,000
 - \$357,000 – State match for poultry litter
 - \$357,000 – Poultry company match
- Additional Funding Now - \$500,000
 - Supports transporting poultry litter and livestock manure
 - Additional support now from poultry companies
 - Perdue, Tyson have expanded commitments
 - Amick tentatively committed to participate-agreement in process
 - Mountaire and Harim proposals pending
- New agreements being negotiated for FY15
- Considering changes to match req.



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Revised Proposal

- MDA to develop a public outreach campaign
 - Targeting the public:
 - Helping the public understand the benefits of stockpiling and proper timing of application.
 - Making clear that these activities occur under established regulations
 - Targeting farmers:
 - Promoting organic manures as crop nutrients
 - Using animal manures have multiple values beyond N, P & K
 - Micro nutrients
 - Organic matter
 - Improved soil health



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Implementing the Phosphorus Management Tool *Revised Proposal*

- Revitalize *Manure Matching Service*
 - Connecting “senders” and “receivers”
 - 1-855-6MANURE
- MDA exploring a state-operated facility to receive poultry litter.
 - To be used as a “last resort”, if no other markets exist.
 - Litter to be redistributed to other farms, or uses.



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Revised Proposal

- MDA to evaluate projected impacts of implementation.
 - Collect information from plans developed
 - Explore additional resources necessary
 - Manure Transport Program
- Convene a Troubleshooter Team
 - Comprised of key sectors of ag and interests
 - Meet regularly to identify potential challenges to effective implementation
 - Proposes solutions



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Next Steps

- Publish in MD Register
 - October 18, 2013
- 30 Day Comment Period
 - November 18, 2013



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Questions?



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Comments

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For more information, visit MDA's website:

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