MOVING AHEAD WITH THE PHOSPHORUS MANAGEMENT TOOL

2014 Crop Management School
Princess Royale
Ocean City, MD
November 18, 2014
Last Friday, Governor directed MDA to introduce a proposed regulation to implement a phased-in Phosphorus Management Tool. Goal has been to adopt a regulation as part of his administration. Fulfills a MD commitment to EPA under the TMDL/WIP to update the current P risk assessment tool – PSI.
Moving Ahead with the PMT

- Addressing concerns related to:
  - Changes in required management
  - Impacts to the “bottom line”
  - Market value for manure as a commodity
  - Adequacy of infrastructure
    - Manure transportation and handling
  - Perceptions about P availability based on soil P FIV
    - Impacts to yields
  - Crops with high P diets
  - Adopting new technologies
Moving Ahead with the PMT

- A Phased Approach
  - Phased in time
  - Phased in “risk”
  - Phased in management requirements
Need to divide the farms with the greatest impact into separate groups (“tiers”) and phase in over a staggered time frame.

“Risk tiers” defined based on soil test P FIV

Determine an “average P FIV level” for each operation.

Based on all fields with soil P FIV >150

Calculation is done once and only used to determine which group the operation falls in.
HIGH risk tier =
- Average soil P FIV >450
- First to begin transition
- Provided the longest time frame
  - 5 years
MID risk tier =

- Average soil P FIV 300-450
- Second group to start
- Staggered to begin a year later
- 4 years to transition
LOW risk tier =
- Average soil P FIV 150-300
- Third group to transition
- Three year schedule
PMT changes management requirements for certain farms—some more than others.

Sub-surface drainage primary driver
- Eastern shore impacts
- Coincides with the poultry operations and high soil P levels

Distance to surface water
- Affects farms in other parts of the state.

Need to build in “incremental change”
- Especially for operations now scoring “HIGH” (>100) in the PMT calculation.
Moving Ahead with the PMT MANAGEMENT PHASING

- Need to provide a means to gradually change farm management current PSI to the PMT.
- Create interim or “transitional management” requirements based on PMT score.
  - LOW (0-50)/ MEDIUM(50-100)/HIGH (>100) all mean something different during transition.
- Create a three-step process for transition.
  - PSI → Transition Management Phase I (TM 1)
  - TM 1 → Transition Management Phase II (TM 2)
  - TM 2 → PMT
### Management Phasing in Transition

<table>
<thead>
<tr>
<th>PMT Risk Category</th>
<th>Transition Mgmt Phase 1</th>
<th>Transition Mgmt Phase 2</th>
<th>PMT</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOW</td>
<td>N-Based (not to exceed 3 Yr. C.R.)</td>
<td>3 Yr. Crop Removal</td>
<td>3 Yr Crop Removal</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>3 Yr Crop Removal P</td>
<td>2 Yr Crop Removal</td>
<td>1 Yr Crop removal</td>
</tr>
<tr>
<td>HIGH</td>
<td>1 Yr Crop Removal</td>
<td>50% of 1 Yr C.R.</td>
<td>No Addtl. P</td>
</tr>
</tbody>
</table>
Moving Ahead with the PMT
TIME PHASING

- 6 year phase in
- February 2015 – regulation effective
- Crop Year 2015 and 2016 –
  - Run both PSI and PMT when developing plans
  - Provide farmer management changes to be required under PMT.
  - Calculate ‘Average soil P FIV” value and report to MDA by 9/30/16.
- Crop Year 2017
  - HIGH risk tier begins a 5 year transition
  - Fully implementing PMT by 2021
Moving Ahead with the PMT TIME PHASING

- **Crop Year 2018**
  - MID risk tier begins a 4 year transition
  - Fully implementing PMT by 2021

- **Crop Year 2019**
  - LOW risk tier begins a 3 year transition
  - Fully implementing PMT by 2021

- **Crop Year 2021**
  - All operations are fully implementing PMT
# Moving Ahead with the PMT

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGH FIV Tier (&gt;450)</td>
<td>PSI</td>
<td>TM1</td>
<td>TM1</td>
<td>TM2</td>
<td>TM2</td>
<td>PMT</td>
</tr>
<tr>
<td>MID FIV Tier (300-450)</td>
<td>PSI</td>
<td>PSI</td>
<td>TM1</td>
<td>TM2</td>
<td>TM2</td>
<td>PMT</td>
</tr>
<tr>
<td>LOW FIV Tier (150-300)</td>
<td>PSI</td>
<td>PSI</td>
<td>PSI</td>
<td>TM1</td>
<td>TM2</td>
<td>PMT</td>
</tr>
</tbody>
</table>
Moving Ahead with the PMT PROCESS

- Submit to AELR Committee
  - Last Friday
- Publish in the Maryland Register
  - December 1
- 30 day comment period
- Adopt 45 days after publication
  - January 16, 2015
Copies of the proposed regulation and AELR package available on MDA’s website:

- www.mda.maryland.gov

- Under “Hot Topics”
Moving Ahead with the PMT
Moving Ahead with the PMT
Moving Ahead with the PMT
Moving Ahead with the PMT