Our Vision is:

. . .to achieve excellence in programs and in services that preserve and protect agricultural resources and the environment, promote profitable agriculture and consumer confidence, and enhance the quality of life for all Marylanders.

Our Mission is:

. . .to provide leadership and support to agriculture and the citizens of Maryland by conducting regulatory, service, and educational activities that assure consumer confidence, protect the environment, and promote agriculture.
Agriculture in Maryland

- 12,256 farms on 2 million acres
- Average farm size: 166 acres
- Top Commodities:
  - Poultry
  - Grain (corn and soybeans)
  - Greenhouse and nursery
  - Dairy
- Maryland also has strong and expanding markets in local, value-added, fresh produce, and organic products that capitalize on regional demographics.
Wine and Grape Promotion Fund

Establish more efficient review and approval process for grant applications submitted to Maryland Wine and Grape Promotion Fund.

MALPF Easement Termination Process

Create more efficient, two-step process for determining if an easement is eligible for termination.

Seafood Marketing

Transfer the seafood marketing division of DNR to MDA. Also transfers Seafood Marketing Fund. Program would be housed under MDA’s current marketing division.
I. Marketing, Animal Industries & Consumer Services
   - Agricultural Marketing
   - Animal Health
   - Food Quality Assurance
   - Maryland Horse Industry Board
   - Maryland Agricultural Fair Board
   - State Board of Veterinary Medical Examiners
   - Weights & Measures

II. Plant Industries & Pest Management
   - Plant Protection & Weed Management
   - Turf & Seed
   - Pesticide Regulation
   - State Chemist
   - Mosquito Control
   - Forest Pest Management

III. Resource Conservation
   - Nutrient Management Program
   - Resource Conservation Operations
   - Maryland Agricultural Water Quality Cost-Share Program (MACS)
Office of Marketing, Animal Health & Consumer Services
Maryland’s Best

- State’s Agricultural Marketing Program
- Homegrown By Heroes
  - Launched Nov. 2, 2016
- Md.’s Best Restaurants
- Buyer Grower Meeting, Jan. 25
- Farmers Market Program
High Path Avian Influenza (HPAI)

• Three-fold increase in HPAI diagnosis this winter
  – Europe, Asia and Africa
  – Strains: H5/N8, H5/N6

• MDA renewed emergency orders for HPAI
  – Possible detection in York Co. (PA)

• Continuing to prepare
  – Outreach to farmers and stakeholders
  – Tabletop exercises
Food Safety Modernization Act (FSMA)

- Passed by Congress (2010)
- Produce Safety Rule first to regulate production practices:
  - Human pathogens in irrigation water
  - Use of biological soil amendments
  - Worker health and hygiene
  - Proximity of livestock, poultry, domestic, and wild animals
- FDA awarded $3.625 MM/5 yr for Maryland Produce Safety Rule
  - Outreach, education, and technical assistance
  - Inspection and Enforcement
Spay & Neuter Program

- Est. 2014—funded by fees on registered pet food
- Purpose: Reduce intake and euthanasia rates at county shelters
- 59 projects funded since 2014
  - 26,000 surgeries
  - Expansion of low cost shelter
  - Equipment for two new clinics
- New RFP this month
Office of Plant Industries and Pest Management
Zika Virus & Mosquito Control

• 161 Travel-Relate Cases
  – 91 during mosquito season
• Worked alongside DHMH and Local Health Depts.
• Response included:
  – Trapping and inspection of effected area
  – Residual pesticide application
  – Truck-mounted spray

• Prevention & Outreach

Aedes albopictus
Industrial Hemp

History
• HB443 became law in 2016
• MDA required to develop regulations

Timeline
• Reviewed other states’ regs
• Consulted with University
• Currently: reviewing draft regs
• Next: UMD, UMES and State Police review

Regs – Key Points
• Licensed by MDA
• Properties owned by IHEs
• IHEs required to:
  – Include site info
  – Contact policy agencies
  – Hold DEA permit
  – Test for THC content
  – Submit research proposal
  – Develop security plan
  – Maintain records
• MDA may inspect sites during season
Four Significant Enhancements

1. Enact an immediate ban of additional phosphorus on soils highest in phosphorus based on a soil test.

2. Provide comprehensive information on soil phosphorus conditions statewide.

3. Ensure adequate time for farmers to fully understand and plan for new requirements.

4. Assure agricultural producers that critical elements are available for implementation.
## Phosphorus Management Tool (PMT)

**MD State Total Soil Phosphorus Data**  
*1/11/2017*

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Regulated Acres</td>
<td>1,277,931</td>
</tr>
<tr>
<td>Total Acres Submitted</td>
<td>1,083,352</td>
</tr>
<tr>
<td>Percentage Reported</td>
<td>84.8%</td>
</tr>
<tr>
<td>Number of Fields Submitted</td>
<td>73,647</td>
</tr>
<tr>
<td>P FIV &lt; 150</td>
<td>79.3%</td>
</tr>
<tr>
<td>P FIV 150-499</td>
<td>19.1%</td>
</tr>
<tr>
<td>P FIV &gt; 500</td>
<td>1.6%</td>
</tr>
</tbody>
</table>
## How It Works: Risk

<table>
<thead>
<tr>
<th>7 YEAR TRANSITION SUMMARY</th>
<th>CROP YEAR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier C - Avg. FIV P 450 and above</td>
<td>PSI/PMT</td>
</tr>
<tr>
<td>Tier B - Avg. FIV P 300-450</td>
<td>PSI/PMT</td>
</tr>
<tr>
<td>Tier A - Avg. FIV P 150 - 300</td>
<td>PSI/PMT</td>
</tr>
</tbody>
</table>

** = Phosphorus Site Index

TM1 = Transition Management Phase 1

TM2 = Transition Management Phase 2

PMT = Phosphorus Management Tool

** Could add time if services are not adequate.
PMT Statewide Tier Group Data

• 1,661 Operations have been reported
  • Represents one or more fields being 150 or greater
  • Represents 11,769 fields
    • Only these fields transition to PMT
  • Represents 187,870 acres

• PMT Tier Groups
  • Tier A = 150 – 300 Avg FIV (Transitions 2020)
    • 1,313 operations
    • 8,220 fields
    • 122,705 acres
  • Tier B = 300 – 450 Avg FIV (Transitions 2019)
    • 252 operations
    • 2,815 fields
    • 54,271 acres
  • Tier C = >450 Avg FIV (Transitions 2018)
    • 96 operations
    • 734 fields
    • 10,894 acres
Phosphorus Management Tool (PMT)

Economic Analysis Sample

- 8 farms in study
  - 4 Poultry Operations
  - 4 Dairy Operations
- Participating farms range from 59 to 104 acres
- Each participant compensated with incentives to reimburse commercial fertilizer costs
Case Study: Farm 2015-P-02

What was the change?

Price Per Acre: $91.40  $122.70

Change of 31.30 $/acre

What were the extra costs?

In comparison with PSI, under PMT the farmer had to purchase:

• An additional ~56 lbs/acre N
• 60 lbs/acre Potash
Manure Transport Program

FY2016 Accomplishments

• 213,000 tons transported (all manure)
• $1.4 million in payments
• Poultry litter tons: 57,700
• Other manure tons: 155,400
• Land applied poultry litter – 6,000 tons (17 contracts)
Manure Transport Program

Effect on WIP Goals

• Maryland continues to exceed WIP goals for Manure Transport

• Cost-Share program allows MDA to track manure transport
# Program History

<table>
<thead>
<tr>
<th>Year</th>
<th>Tons Transported annually</th>
<th>Tons Poultry Litter Transported</th>
<th>Tons Non-Poultry Litter Transported</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY 99</td>
<td>1,925</td>
<td>1,925</td>
<td>0</td>
</tr>
<tr>
<td>FY 00</td>
<td>13,366</td>
<td>13,366</td>
<td>0</td>
</tr>
<tr>
<td>FY 01</td>
<td>20,477</td>
<td>20,477</td>
<td>0</td>
</tr>
<tr>
<td>FY 02</td>
<td>47,483</td>
<td>43,144</td>
<td>4,339</td>
</tr>
<tr>
<td>FY 03</td>
<td>28,463</td>
<td>27,707</td>
<td>756</td>
</tr>
<tr>
<td>FY 04</td>
<td>40,755</td>
<td>37,674</td>
<td>3,081</td>
</tr>
<tr>
<td>FY 05</td>
<td>38,333</td>
<td>24,080</td>
<td>14,253</td>
</tr>
<tr>
<td>FY 06</td>
<td>69,009</td>
<td>35,469</td>
<td>33,540</td>
</tr>
<tr>
<td>FY 07</td>
<td>99,298</td>
<td>47,844</td>
<td>51,454</td>
</tr>
<tr>
<td>FY 08</td>
<td>99,817</td>
<td>44,843</td>
<td>53,979</td>
</tr>
<tr>
<td>FY 09</td>
<td>119,892</td>
<td>62,505</td>
<td>57,387</td>
</tr>
<tr>
<td>FY 10</td>
<td>80,899</td>
<td>51,383</td>
<td>29,516</td>
</tr>
<tr>
<td>FY 11</td>
<td>61,150</td>
<td>37,807</td>
<td>23,343</td>
</tr>
<tr>
<td>FY 12</td>
<td>35,380</td>
<td>32,544</td>
<td>2,837</td>
</tr>
<tr>
<td>FY 13</td>
<td>52,481</td>
<td>38,238</td>
<td>14,243</td>
</tr>
<tr>
<td>FY 14</td>
<td>118,995</td>
<td>46,906</td>
<td>72,089</td>
</tr>
<tr>
<td>FY 15</td>
<td>167,237</td>
<td>54,380</td>
<td>112,857</td>
</tr>
<tr>
<td>FY 16</td>
<td>213,151</td>
<td>57,727</td>
<td>155,424</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,308,111</strong></td>
<td><strong>678,019</strong></td>
<td><strong>629,098</strong></td>
</tr>
</tbody>
</table>
## Animal Waste Technology Projects

<table>
<thead>
<tr>
<th>PROJECTS</th>
<th>ANIMAL TYPE/LOCATION</th>
<th>STATE FUNDING</th>
<th>TECHNOLOGY</th>
<th>STATUS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biomass Heating Solutions Inc. (BHSL) Annapolis, MD</td>
<td>Poultry Murphy Farms/Dorchester County</td>
<td>$970,000</td>
<td>Fluidized bed (Thermo-chemical)</td>
<td>Commissioned Dec 2016, operational January 2017</td>
</tr>
<tr>
<td>Green Mountain Technologies, Inc. (GMT) Bainbridge Island, WA</td>
<td>Horse Days End Farm / Howard County</td>
<td>$150,790</td>
<td>In vessel composter/turnkey</td>
<td>Operational October, 2015 - present successful</td>
</tr>
<tr>
<td>Green Mountain Technologies, Inc. (GMT) Bainbridge Island, WA</td>
<td>Dairy Cattle Iager Farm / Frederick County</td>
<td>$237,520</td>
<td>In vessel composter/turnkey</td>
<td>Operational December 2015 to present, 3 mos. add’t monitoring planned</td>
</tr>
<tr>
<td>Planet Found Energy Development (PFED) Berlin, MD</td>
<td>Poultry Millenium Farms/Worcester County</td>
<td>$676,144</td>
<td>Anaerobic digestion with nutrient separating system</td>
<td>Commissioning Dec 2016-January 2017; operational Feb 2017</td>
</tr>
</tbody>
</table>
## Animal Waste Technology Projects

Projects Approved October 2016

<table>
<thead>
<tr>
<th>2016 projects</th>
<th>ANIMAL TYPE/LOCATION</th>
<th>STATE FUNDING</th>
<th>TECHNOLOGY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veteran Compost</td>
<td>Livestock/Anne Arundel County</td>
<td>$350,302</td>
<td>Aerated Static Pile Composting</td>
</tr>
<tr>
<td>Chesapeake Bay Renewables</td>
<td>Poultry Litter/Somerset County</td>
<td>$1,400,000</td>
<td>Thermophilic AD w/Nutrient Recovery</td>
</tr>
</tbody>
</table>
Thank You