On Farm Conservation Practices

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Presentation to:

Agriculture and Environmental Law Conference

John Swaine, III
Talbot Soil Conservation District
Maryland Association of Soil Conservation Districts
Pleasant Point Farm
Pleasant Point Farm

• Third generation farmer in Royal Oak Maryland
• Cash Grain Operation – Corn, Soybeans, Wheat, Barley, Sorghum, Hay, Timber
• 1,800 acres in production
  • 400 acres owned
  • 1,400 acres rented, 55 landlords
• NWS Cooperative Observer since 1948
John Swaine III

• Bachelor’s of Science, Agronomy, University of Maryland
• Certified Crop Advisor, Nutrient Management Consultant, Pest Control Consultant and Pesticide Applicator

• Provide advisory and service to:
  • Talbot Soil Conservation District – 27 years
    • 15 years as Chairman
  • State Soil Conservation Committee
  • Talbot Farm Bureau
  • Talbot Weed Control
  • Talbot Agronomy Program
  • Talbot Ag Preservation Advisory Board
  • Easton Ruritan Club – 28 years
Conservation and Farming
Nutrient and Sediment Loads by Sector

Relative Responsibility for Pollution Loads to the Bay (2008)

Nitrogen
- Urban/Suburban: 16%
- Agriculture: 42%
- Wastewater: 20%
- Atmospheric: 22%

Phosphorus
- Urban/Suburban: 32%
- Agriculture: 46%
- Wastewater: 22%

Sediment
- Urban/Suburban: 24%
- Agriculture: 76%

Wastewater loads based on measured discharges; the rest are based on an average-hydrology year. Does not include loads from direct deposition to tidal waters, tidal shoreline erosion or the ocean.
Nitrogen Reduction in Maryland

Maryland Nitrogen Loads
1985-2025 Target

- Agriculture
- Urban Runoff
- Wastewater+CSO
- Septic
- Forest
- Non-Tidal Water Deposition

Nitrogen Delivered (lbs/year)

Millions
Maryland’s Cover Crop Acreage
(Total cropland 1.1 m Acres)
<table>
<thead>
<tr>
<th>MILESTONE</th>
<th>Goal Implementation by June 30, 2015</th>
<th>Status As of June 30, 2014</th>
<th>Percent of Milestone Achieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cover Crops</td>
<td>Plant 386,007 acres annually</td>
<td>410,530* acres planted during 2013-2014 planting season</td>
<td>106%</td>
</tr>
<tr>
<td>Retirement of Highly Erodible Land</td>
<td>Retire 973 acres of highly erodible land by 2015</td>
<td>832 acres retired and planted with protective vegetation</td>
<td>86%</td>
</tr>
<tr>
<td>Soil Conservation and Water Quality Plans</td>
<td>Develop plans for 926,207 acres by 2015</td>
<td>933,965 acres planned</td>
<td>101%</td>
</tr>
<tr>
<td>Streamside Forest Buffers</td>
<td>Plant 353 acres of forest buffers next to streams by 2015</td>
<td>356 acres planted</td>
<td>100%</td>
</tr>
<tr>
<td>Streamside Grased Buffers</td>
<td>Plant 866 acres of grassed buffers next to streams by 2015</td>
<td>1,038 acres planted</td>
<td>119%</td>
</tr>
<tr>
<td>Waste Storage Structures/Livestock</td>
<td>Construct 55 livestock waste storage structures by 2015</td>
<td>47 structures installed</td>
<td>85%</td>
</tr>
<tr>
<td>Waste Storage Structures/Poultry</td>
<td>Construct 12 poultry waste storage structures by 2015</td>
<td>15 structures installed</td>
<td>125%</td>
</tr>
</tbody>
</table>

*Statewide, 423,212 acres of cover crops were planted on land both in and out of the Chesapeake Bay Watershed during the 2013-2014 planting season.*
Conservation Plan

John Swaine III
Pleasant Point Farm
Cover Crops
Cover Crops
Talbot Soil Conservation District – Cost Shared BMPs

BEFORE

After
Grass Waterway
Wetland Restoration
Ag Chemical Handling Facility
On Farm Fertilizer Storage
Increase in Voluntary Efforts

Two-Stage Ditch

high flow

low flow

floodplain

tile
Agricultural Concerns

- Loss of Poultry Industry and Loss of Poultry Litter as Fertilizer
- Accuracy and timeframe to improve Bay Model
- Cost-effectiveness of Ag BMPs
- Additional Mandatory Programs
- Loss of Competitiveness in Production
Take Home Suggestions

- Be Prepared
- Establish tracking and reporting of practices
- Get involved – everyone has a role.
- Establish partnerships to work collaboratively
- Get your land-grants on board to defend current practices and quantify water quality benefits