



Defining the Landscape: Opportunities for the Future

**Building a Better Bay Model:
A Workshop for Agricultural Partners
University of Maryland-College Park
May 22, 2013**



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EXTENSION

Solutions in your community



Chesapeake Bay Program

A Watershed Partnership

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Defining the Landscape

- Modeled Agricultural Land Uses- Phase 5:
 - Currently defined by 5 parameters:
 - Land management
 - Nutrient management
 - Tillage management
 - Nutrient Source
 - CAFO/ Non-CAFO
 - Currently divided into 20 major land uses

Defining the Landscape

- Alfalfa
- Animal Feeding Operations
- Concentrated Feeding Operations
- Degraded Riparian Pasture
- Hay w/ Nutrients
- Hay w/o Nutrients
- High-till w/ Manure
- High-till w/o Manure
- Low-till w/ Manure
- Nursery
- Nutrient Management Alfalfa
- Nutrient Management Hay
- Nutrient Management High-till w/ Manure
- Nutrient Management High-till w/o Manure
- Nutrient Management Low-till
- Nutrient Management Pasture
- Pasture
- Forest
- Harvested Forest
- Water

Defining the Landscape

- Modeled Land Use Limitations- Phase 5:
 - Difficult to Define
 - Difficult to Understand
 - Difficult to Apply
 - Limits Flexibility
 - Limits Management
 - Others?

Defining the Landscape

- Future Modeling Land Uses- Phase 6:
 - Agriculture Workgroup investigating potential new methods for defining agricultural land uses.
 - Parachute Test
 - BMP Test
 - Data Test
- Goal
 - Develop a division of agricultural land uses that addresses the current limitations.

Defining the Landscape

- Potential Future Options- Phase 6:
 - The Agriculture Workgroup has reviewed several potential land use development options.
 - Redevelop Current Model Land Uses
 - Develop Crop Rotational Sequencing
 - USDA-NRCS's Conservation Delivery Streamlining Initiative (CDSI)
 - The USDA-NRCS CDSI project may offer multiple advantages.

Defining the Landscape

Business Case and Strategy: Restructuring Land Use/Land Cover
Categories and Definitions

April 28, 2011

Critical to the Conservation Delivery Streamlining Initiative, land use delineation establishes the baseline data that is needed to derive systemic effects resulting from conservation execution from a legislative, policy, program, and resource conservation and effects modeling perspective. Currently there are 15 conservation planning land use designations defined in the National Planning Procedures Handbook. Several of the current land use designations are:

- unclearly defined or difficult to apply
- unable to represent the planning scenario accurately
- competing definitions for planning units when the land use has multiple purposes
- rarely used and unable to provide a clear purpose

Defining the Landscape

- Review Alternative Documents
 - Agriculture Work Alternative Proposals
 - USDA-NRCS CDSI
- USDA-CDSI Template
 - Currently under development for future use
 - Intended to replace existing NRCS data tracking systems
 - Designed to track all conservation practices- CS and Non-CS BMPs

Defining the Landscape

- USDA-NRCS CDSI Opportunities
 - Potentially enable improved data sharing between federal, state, and NGO sources
 - Potentially enable improved spacial data at the field level scale
 - Potentially reduce double-counting concerns with combining multiple sources of data
 - Potentially improve the verification and quality of data due to on-site data collection and reporting.
 - Potentially enable multiple-modeling comparisons.



**What do you
think?**