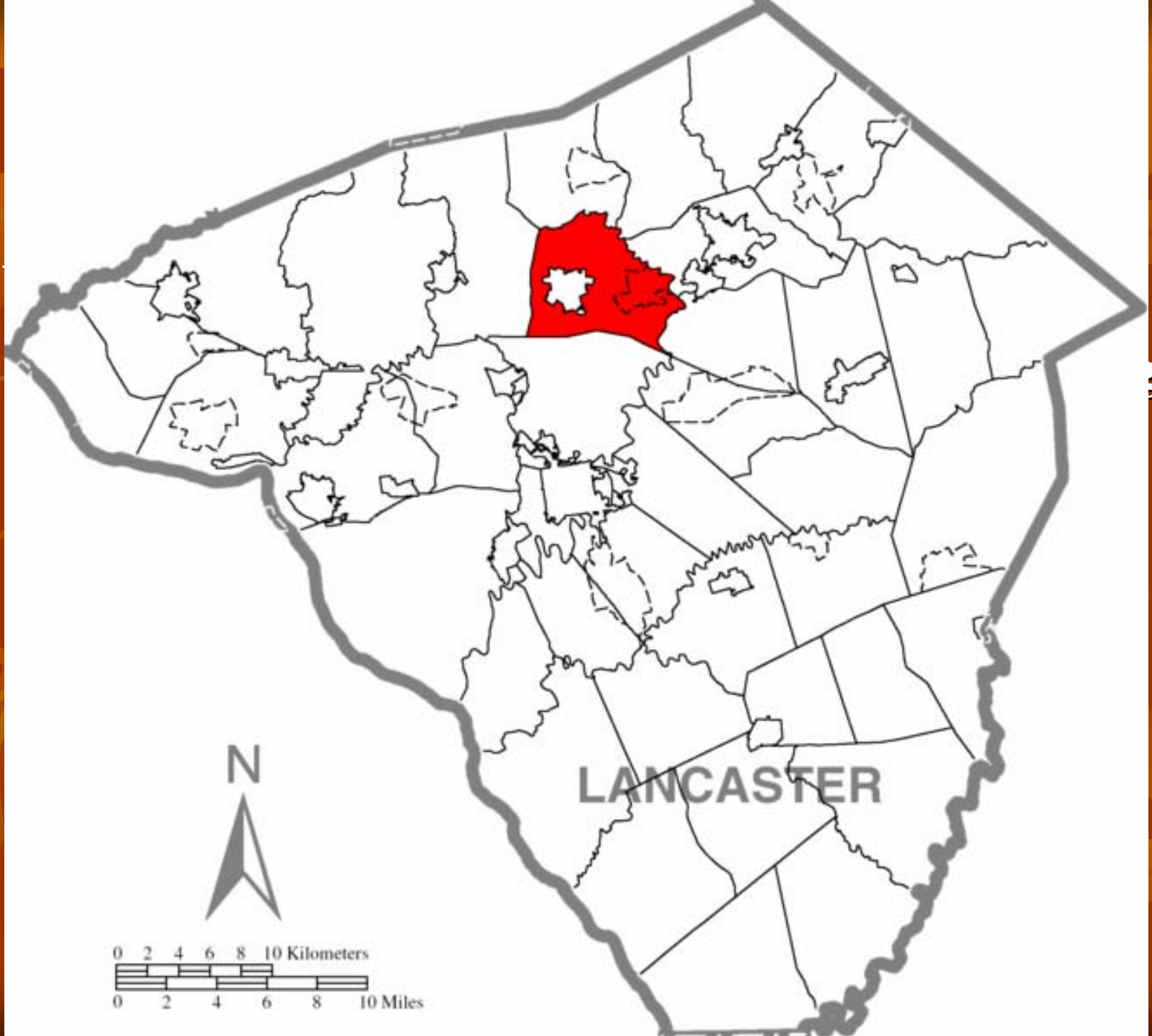


An aerial photograph of a rural landscape. In the foreground, there are large, curved fields of green and brown crops, likely corn. A dirt road or path runs through the fields. In the lower right corner, there is a farm complex with a large red barn, several smaller buildings, and two tall white silos. The background shows more fields and some distant buildings under a clear sky.

# Conservation Planning Made Easy

Kevin Lutz & Jeff Hill



# Why Conservation Plans?

- State law
  - Chapter 102 (Clean Streams Law)
  - All plowing and tilling operations must have an E&S or approved equal (Conservation Plan) that can be produced upon request.
    - If not, can be found in non-compliance and a possible fine
- Continually strive to become *better* stewards of the land
  - (always farm work to be done, same with conservation... always something you can do to improve)

# Conservation Plans Cont.

- Most townships require a conservation plan for any building permit to be issued if on a farm
- Government programs also require conservation plans before the farmer enters into financial programs.  
Example: EQIP, crop payments, FSA loans, REAP
- Ag Preserve requirement
  - Can speed up entrance into Ag Preserve if one already exists
- Required for New Act 38 Plan Approvals (Nutrient Mgmt Act)

# Steps to a Conservation Plan

Initial Contact

Workbook

Rotation

What crops?

Soil Loss (RUSLE)

What is it?

Walk Fields

Options

Signed Conservation Plan



# What's found in a Conservation Plan?

- Maps (plan map, 5 ft contour map, soils map)
- Soils information
- Actual Conservation Plan (a schedule of decisions made by the farmer)
- Information sheets on conservation practices





## Conservation Plan Map

District: LANCASTER COUNTY CONSERVATION DISTRICT

Field Office: LANCASTER SERVICE CENTER

Agency:

Assisted By: Jeff Hill



### Legend

Consplan1

road\_tanw\_l\_pa071

300 0 300  
Feet



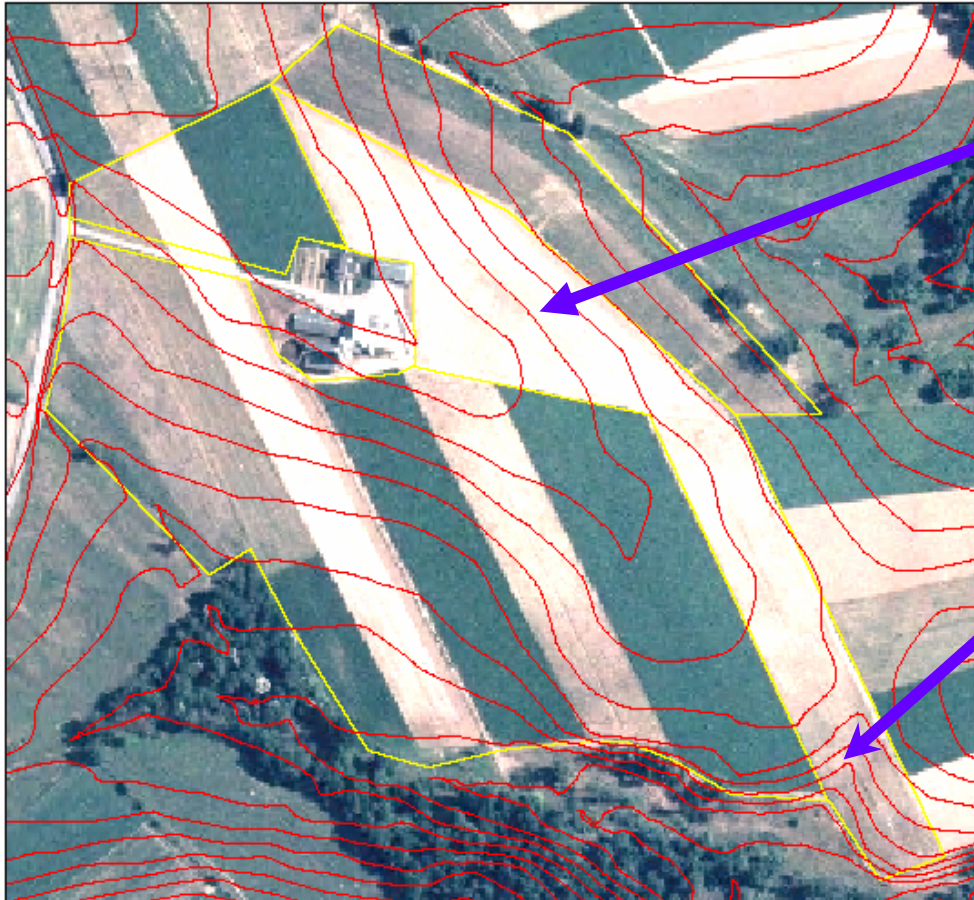
## 5ft. Contour Map

District: LANCASTER COUNTY CONSERVATION DISTRICT

Field Office: LANCASTER SERVICE CENTER

Agency:

Assisted By: Jeff Hill



### Legend

- contours\_south\_utm83
- Consplan1
- road\_tanw\_l\_pa071



300 0 300  
Feet



Contour  
Farming an  
option

Potential need  
for a grassed  
waterway



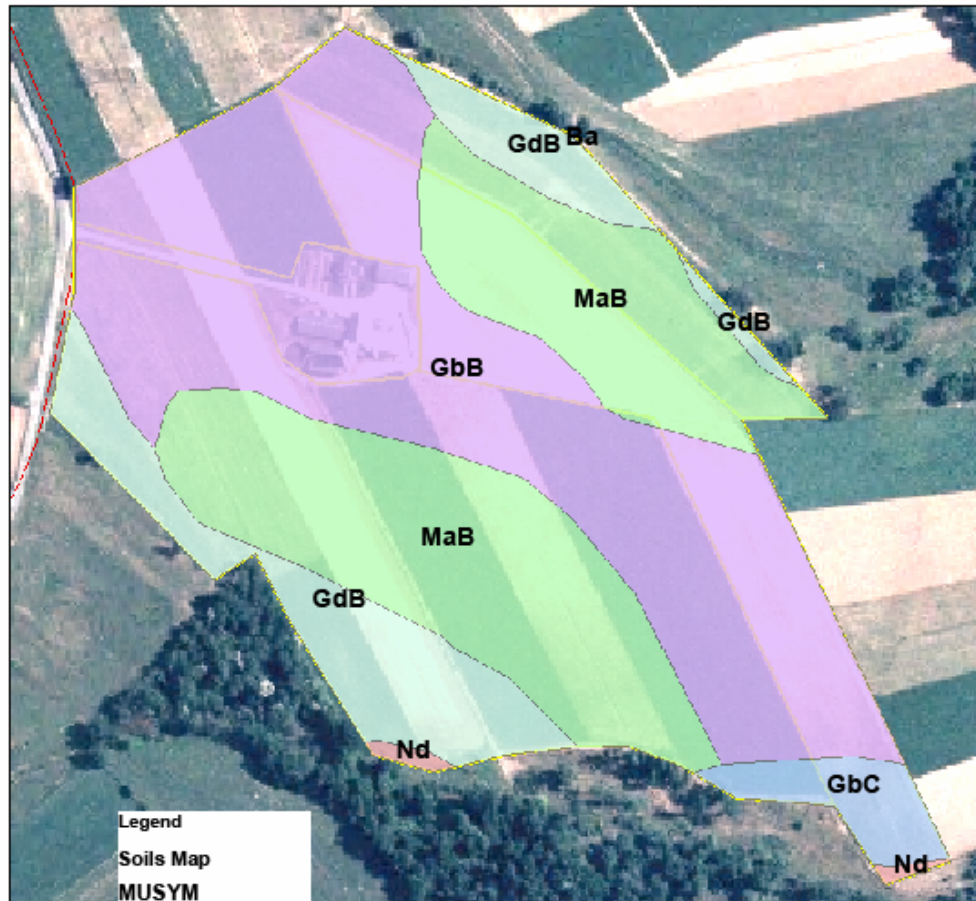
# Soils Map

District: LANCASTER COUNTY CONSERVATION DISTRICT

Field Office: LANCASTER SERVICE CENTER

Agency:

Assisted By: Jeff Hill



## Legend

### Soils Map

### MUSYM

Ba

GbB

GbC

GdB

MaB

Nd

Consplan1

road\_tanw\_l\_pa071



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## Non-Technical Descriptions

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**Soil Survey Area: Lancaster County, Pennsylvania**

**Survey Status: Published**

**Correlation Date: 11/01/1982**

**Distribution Date: 10/15/2002**

***Map Unit: Ba BAILE SILT LOAM***

***Description Category: AGR***

Baile soils make up 85 percent of the map unit. This soil is on a depression. The runoff class is very high. It is poorly drained. The slowest permeability within 60 inches is slow. Available water capacity is high and shrink swell potential is moderate. This soil is not flooded and is not ponded. The top of the seasonal high water table ranges from 0 to 6 inches. Major component is a hydric soil. Land capability class 5w.

***Map Unit: GbC GLENELG SILT LOAM, 8 TO 15 PERCENT SLOPES***

***Description Category: AGR***

Glenelg soils make up 85 percent of the map unit. This map unit is Farmland of Statewide Importance. The runoff class is medium. It is well drained. The slowest permeability within 60 inches is moderate. Available water capacity is high and shrink swell potential is low. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. Major component is not a hydric soil. Land capability class 3e.

***Map Unit: GdB GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES***

***Description Category: AGR***

Glenville soils make up 85 percent of the map unit. This map unit is Prime Farmland. The runoff class is high. The depth to a restrictive feature is 15 to 30 inches to a fragipan. It is moderately well drained. The slowest permeability within 60 inches is slow. Available water capacity is moderate and shrink swell potential is low. This soil is not flooded and is not ponded. The top of the seasonal high water table ranges from 6 to 36 inches. Major component is not a hydric soil. Land capability class 2e.

***Map Unit: MaB MANOR SILT LOAM, 3 TO 8 PERCENT SLOPES***

***Description Category: AGR***

Manor soils make up 90 percent of the map unit. This map unit is Prime Farmland. The runoff class is medium. It is well drained. The slowest permeability within 60 inches is moderate. Available water capacity is high and shrink swell potential is low. This soil is not flooded and is not ponded. The seasonal high water table is at a depth of more than 6 feet. Major component is not a hydric soil. Land capability class 2e.

***Map Unit: Nd NEWARK SILT LOAM, SCHIST SUBSTRATUM***

***Description Category: AGR***

Newark soils make up 85 percent of the map unit. This map unit is Farmland of Statewide Importance. The runoff class is very high. It is somewhat poorly drained. The slowest permeability within 60 inches is moderate. Available water capacity is high and shrink swell potential is low. This soil is subject to occasional flooding and is not ponded. The top of the seasonal high water table ranges from 6 to 18 inches. Major component is not a hydric soil. Land capability class 2w.



LANCASTER SERVICE CENTER  
1383 ARCADIA RD  
LANCASTER, PA 17601-3149  
7172991563 ext. 3

BRAD MICHAEL  
DISTRICT CONSERVATIONIST

## Conservation Plan

### OBJECTIVE(S)

To control soil erosion and maintain existing soil levels by the use of reduced tillage, and management techniques.

Crop \_\_\_\_\_ Tract: 6

### Conservation Crop Rotation

Grow crops in a planned rotation for biodiversity and to provide adequate amounts of organic material for erosion reduction, nutrient balance and sustained soil organic matter. Crop rotation includes 3 yrs corn silage followed by a rye/oat cover crop, with 1 yr tobacco, with covercrop, and then 4 yrs of spring seeded alfalfa. Tillage includes moldboard plow/disc, harrow. Manure is spread spring and fall, as liquid dairy or bedded pack.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	11.2 ac	7	2007		
2	3.7 ac	7	2007		
3	13.2 ac	7	2007		
4	11.8 ac	7	2007		
Total:	39.9 ac				

### Cover Crop

Establish cover crops to provide ground cover when crop residues have been removed and winter soil protection is needed. Plant cover crops to allow at least 4" of growth or 50% ground cover by winter. Refer to planting dates and seeding rates in the PSU Agronomy Guide or NRCS recommendations. Any planting after the recommended dates will be no-tilled. Rye and Oats maybe used.

Field	Planned Amount	Month	Year	Applied Amount	Date
1	11.2 ac	7	2007		
2	3.7 ac	7	2007		
3	13.2 ac	7	2007		
4	11.8 ac	7	2007		
Total:	39.9 ac				

This plan when implemented will represent a progressive conservation plan.

## CERTIFICATION OF PARTICIPANTS

DATE

## CERTIFICATION OF:

DISTRICT CONSERVATIONIST

DATE

CONSERVATION DISTRICT

LANCASTER COUNTY CONSERVA DATE

## PUBLIC BURDEN STATEMENT

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0578-0013. The time required to complete this information collection is estimated to average 45/0.75 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection information.

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## RUSLE2 Worksheet Erosion Calculation Record

Info: Corn silage 2yrs, alfalfa 2 yrs. No-till with liquid manure on corn ground

<i>Owner name</i>	<i>Tract #</i>	<i>Field name</i>
<b>**Owner name**</b>	<b>**Tract number**</b>	<b>**Field number**</b>

<i>Location</i>	<i>Soil</i>	<i>T value, t/ac/yr</i>	<i>Slope length (horiz), ft</i>	<i>Avg. slope steepness, %</i>
Pennsylvania\Lancaster County	DbB DUFFIELD SILT LOAM, 3 TO 8 PERCENT SLOPES\DUFFIELD silt loam 90%	5.0	200	4.5

### Alternatives:

<i>Description</i>	<i>Management</i>	<i>Contouring</i>	<i>Strips / barriers</i>	<i>Diversion/terrace, sediment basin</i>
	c.Other Local Mgt Record	a. rows up-and-down hill	(none)	(none)

### Alternatives Results:

<i>Description</i>	<i>Management</i>	<i>Cons. plan. soil loss</i>	<i>Soil conditioning index (SCI)</i>
	c.Other Local Mgt Records	2.1	0.36

The **SCI** is the **Soil Conditioning Index** rating. If the calculated index is a negative value, soil organic matter levels are predicted to decline under that production system. If the index is a positive value, soil organic matter levels are predicted to increase under that system.


# Conservation Plans: Fact or Fiction

**Conservation Plan**

For: \_\_\_\_\_

Conservation District: \_\_\_\_\_

Prepared By: \_\_\_\_\_ Date: \_\_\_\_\_

 **NRCS**  
Natural Resources  
Conservation Service



# Myth # 1

**Implementing a Conservation Plan will  
always cost me money!!!**

**False!**

**Agonomic practices can be utilized...  
(no-till, reduced tillage, cover crop, rotation)**



An aerial photograph of a rural landscape. A winding stream flows through the center of the image, surrounded by green fields. A road runs horizontally across the upper portion of the image. In the background, there are some buildings and more fields.

## Myth # 2

**Getting a conservation plan means  
I WILL NEED to contour my farm!!!!**

**False!**

**Contouring is just one option that may be  
available...**

# **Myth # 3**

**Working with the Lancaster Conservation District is the highlight of my already busy day**

**Fact!!**

**Technicians strive to build trusting and lasting relationships for years to come**

# Myth # 4

**A conservation plan won't work on my farm!**

**False!**



**All farms are different, and we will work with you on developing a plan specifically for your operation!**

# **Myth # 5**

**Conservation Plans are written by the  
Conservation District, for the Conservation  
District**

**False!**

**Plans are written for the farmer, by working  
together with the District**



# Nutrient Management



- Another tool to help manage farm resources
- Would be a good idea to have a nutrient management plan for any farm that deals with manure
- Everyone is “regulated”, it's just a matter of what is required for your operation  
(Manure Mgmt plan, CAO, CAFO)

# **Why do you really want one?**

- **Crop needs vs. Nutrient application**
  - **Shorting yourself vs. over applying**
  - **Application of nutrients only where necessary**
  - **Fertilizer cost?**
- **Contact private consultant to have plan written**
  - **Contact District for list of planners**

# Final Thoughts...

- The best time for conservation planning is late fall through winter, to early spring (crops are off, less busy w/ farm work)
- Cost share usually available for BMP's
- District & NRCS not the only conservation planners, check with private consultants to see if they are certified planners.



# THE END

