

# PaOneStop : Online Conservation and Nutrient Planning System

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# PaOneStop ([www.PaOneStop.org](http://www.PaOneStop.org))

- Pa One Stop provides online tools to help farmers meet regulatory requirements for Conservation and Nutrient Management Planning
- Consists of two modules:
  - ▣ Nutrient Management Planning Mapping Module – allows farmers to develop maps that are required for Nutrient Management Planning and completion of Nutrient Balance Sheets
  - ▣ Conservation Planning Module – allows farmers to develop Conservation Plans to reduce soil loss and protect water quality
- Development of Pa One Stop is ongoing and will be released to the public incrementally. A pilot version of the Nutrient Management Planning Mapping Module has been released.



# Cooperators

- Pa State Conservation Commission
- Pa Department of Agriculture
- Pa Department of Environmental Protection
- Pa Office of USDA-NRCS
- Penn State Cooperative Extension
- National Consortium for Rural Geospatial Innovations – Chesapeake Penn State site – funded by USDA-NIFA



# Nutrient Management Mapping

- Pa regulations require completion of Nutrient Balance Sheets for manure transfers to protect water quality.
- Pa State Conservation Commission estimates that more than 50,000 nutrient balance sheets are completed annually
- Methods to develop Nutrient Balance Sheets are available to farmers but require maps as part of the process.
- Maps are expected to contain field boundaries, acreages, stream and water features, wells, sinkholes, application setbacks and buffers, soils, aerial images and more.
- Production of maps is difficult for most farmers



# Create User Login

The screenshot shows a web browser window displaying the 'Nutrient Balance Sheet Mapping' application. The page title is 'Nutrient Balance Sheet Mapping' and the user is logged in as 'rick'. The interface includes a navigation menu with 'Home / About / Help' and 'Account / Manage Listing'. The main content area is titled 'Manage Farm Listing' and 'My Farm', with instructions to update or post a farm listing. A list of four steps is shown, each with a green checkmark: 1. Edit Farm, 2. Draw / Edit Fields, 3. Draw / Edit Features, and 4. Maps. The central part of the screen is a map of Stormstown, PA, showing roads like Hallowood Valley Rd and 550, and a red location pin. The map is powered by Google and includes a 'Map' control with 'Map', 'Satellite', and 'Hybrid' options. The Windows taskbar at the bottom shows various open applications and the system clock at 11:56 AM.

Username

Password

Data secured and not shared

Data stored on server for future access and editing

Four easy steps !!



# Step 1: Locate Farm

The screenshot shows a web application interface for managing a farm listing. On the left, there is a sidebar with a 'Map Your Listing' section. This section contains a form with the following fields: Address (250 Houtz Lane), City (Port Matilda), State (Pa), and Zipcode (16870). Below the form is a button labeled 'Locate Farm Address on Map'. At the bottom of the sidebar are 'Save' and 'Listing Home' buttons. The main area of the application is a map showing a street network. A red pin is placed on the map, indicating the location of the farm. The map includes labels for various streets such as Houtz Ln, Stormstown, and Mahala St. The map is titled 'Farm Map' and has a navigation bar at the top with links for 'Home / About Search Your Account Help' and a login status 'You are currently logged in as: Rick Log out'. The map also has a 'Map' tab selected, with 'Satellite' and 'Hybrid' options available. The map data is attributed to 'Map data ©2009 Tele Atlas - Terms of Use'.

- Locate farm using address and Google maps
- Map as many farms as you like

# Step 2: Draw and Label Fields

**Nutrient Balance Sheet Mapping**

Home / About / Help      You are currently logged in as: Rick   Log out

Account   Manage Listing

**Edit Farm Fields**

Zoom to Farm

Click on the button below to trace a farm field on the map to the right. You will need to click this button each time you add a field to the map.

Draw Fields

ID	Field	Acres
0	1	11.9
1	2	23.43
2	3	9.9
3	4	6.1
4	5	10.1
5	8	8.1
6	44	11.53
7	66	23.26

Return to Farm Editing

**Field Information**

Field ID (max. of 10 characters)  
2

Description:  
Crop Rotation

Save   Delete Field

**Base Layer**

- Air Photos
- Aerial - Local
- Topo Map
- Infra-red Photos (NAIP)

**Overlays**

- Streams
- Lakes & Ponds
- Crop Management Units
- Manure Setbacks
- Vegetative Buffers
- Farm Features

**Outline field boundaries**

**Assign field identification number**

**Describe fields**

**Acreages automatically calculated**

**Fields can be added, edited, or deleted as needed.**

**Air photo background automatically provided**

# Edit Fields

The screenshot displays the 'Farm Map' web application. The main map area shows an aerial view with a yellow polygon outlining a field. A 'Field Information' dialog box is open, showing a 'Description' field with the text 'Woodlot' and buttons for 'Save' and 'Delete Field'. On the left, a sidebar contains a 'Manage Listing' section with 'Edit Farm Fields' and a 'Draw Fields' button. Below this is a 'Farm Fields' table with the following data:

ID	Field
0	field1
1	field2
2	field3

The interface also includes a navigation menu (Home / About / Search / Your Account / Help), a user login status ('You are currently logged in as: Rick Log out'), a legend for 'Base Layer' (Air Photos, Aerial - Farm, Topo Map - PASDA, PA, Infra-red Photos (NAIP)) and 'Overlays' (IRCS Soils WMS, Farm Fields, Farm Features), and a scale bar at the bottom left.

**Field boundaries can be edited and resaved**

**Errors can be deleted**

# Step 3: Draw Farm Features

**Edit Farm Features**

Select one of the tools below to begin to digitize your farm. If you wish to pan or move around the map, select the top button. If you wish to draw a new feature on the map, select one of the draw feature tools, type in the description for that feature in the feature description boxes below, then draw the feature on the map

1. Select a Tool Below

Draw Point | Draw Line | Draw Polygon

**Your Farm's Features**

ID	Shape	Type
0	line	Stream
1	area	Sinkhole
2	point	Well
3	line	Stream
4	line	Stream

**Feature Information**

Please describe the feature you have just selected.

Type: Stream

Description:

Save | Delete Feature

Has Vegetative Buffer

Setback distance (feet): 150

Description:

Create Setback | Delete Setback

**Base Layer**

- Air Photos
- Air Photos (State) - PASDA
- Topo Map
- Infra-red Photos (NAIP)

**Overlays**

- Streams
- Lakes & Ponds
- Crop Management Units
- Manure Setbacks
- Vegetative Buffers
- Farm Features

100 m | 200 ft

## Draw other farm features needed for map

- water wells
- sinkholes
- streams
- manure staging areas

## Generate manure setback areas

## Generate stream buffers

# Step 4 : Create Map

**Nutrient Balance Sheet Mapping**

Home / About / Help      You are currently logged in as: Rick Log out

Account      **Manage Listing**

Zoom to Farm

Click map to select fields or features:

Select Feature ▾

**Farm Fields**

ID	Field	Acres	On Map
0	1	11.9	visible
1	2	23.4	visible
2	3	9.9	visible
3	4	6.1	visible
4	5	10.1	visible
5	8	8.1	visible
6	44	11.53	hidden

**Farm Features**

ID	Shape	Type	On Map
0	point	Sinkhole	visible
1	line	Stream	visible
2	line	Stream	visible
3	line	Stream	visible
4	line	Stream	visible
5	area	Manure Stacking Area	visible
6	line	Stream	visible
7	point	Other	visible
8	point	Sinkhole	visible

Print      Return to Farm Editing

**Field Information**

Show on map

Field ID: 44

Description:

**Base Layer**

- Air Photos
- Aerial - Local
- Topo Map
- Infra-red Photos (NAIP)

**Overlays**

- Streams
- Lakes & Ponds
- Crop Management Units
- Manure Setbacks
- Vegetative Buffers
- Farm Features

**Select features to appear on map**

**Only impacted fields need to be mapped**

**Hide any field or feature not needed for map**

**Select background for map**

- air photo
- topography

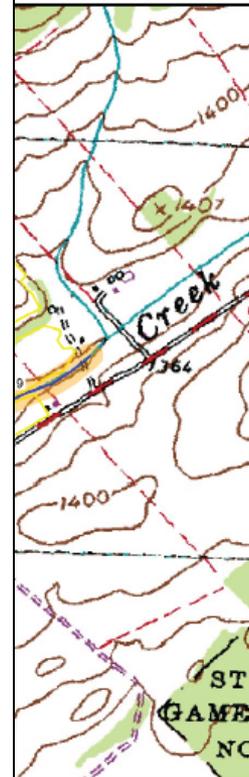
# Generate Digital or Hardcopy Maps

Nutrient Balance Sheet Map



Legend

- |                     |               |               |
|---------------------|---------------|---------------|
| field / CMU         | stream        | buffer area   |
| manure storage area | sinkhole      | water feature |
| well                | sinkhole area | other         |



FarmMap generates a map that is acceptable for PA Nutrient Balance Sheet submission

Farmers can save maps for reference

Farmers can save farm data for future mapping

Only need to draw fields and farm features once

# Generate Custom Maps

PENNSTATE Nutrient Balance Sheet Mapping

Home / About Help You are currently logged in as: rick Log out

Account Manage Listing

Zoom to Farm

Click map to: Select Feature

Farm Fields

ID	Field	Acres	On Map
0	1	10	HIDDEN
1	2	5.77	visible
2	3	24.74	visible
3	5	12.6	HIDDEN
4	444	2.78	HIDDEN
5	777	8.66	HIDDEN

Total Farm Acres: 64.55

Farm Features

ID	Shape	Type	On Map
0	line	Stream	visible
1	area	Sinkhole	visible
2	point	Well	HIDDEN
3	line	Stream	visible
4	line	Stream	HIDDEN

Map

Base Layer

- Air Photos
- Air Photos (State) - PASDA
- Topo Map
- Infra-red Photos (NAIP)

Overlays

- Streams
- Lakes & Ponds
- Crop Management Units
- Manure Setbacks
- Vegetative Buffers
- Farm Features

100 m  
200 ft

Done

Hide Features not needed for map

Features only need to be digitized once

Saves time

# Effective Acreages

Nutrient Balance Worksheet Mapping

PENNSTATE Nutrient Balance Sheet Mapping

Home / About Help You are currently logged in as: Rick Log out

Account Manage Listing

Edit Fields for My

Zoom to Farm

Click on the button below map to the right. You will each time you add a field

Draw Field

Farm Fields

ID	Field
0	2
1	5
2	45a
3	000
4	444
5	898

Total Farm Acres: 61.98

Return to Farm Editing

100 m  
200 ft

Field Information

Field ID (max. of 10 characters)  
5

Description:

Description	Acres
total area	11.91
non-farmed area (water, forest, etc.)	0.24
farmable area	11.67
area within setbacks and buffers	0.4
area suitable for manure application	11.27

Save Delete Field

Field successfully saved

Area of field not farmed or not suitable for manure application calculated

- homesites
- water features
- setbacks
- other non-farm areas

# Account: Edit / Delete Farms

The screenshot shows a web application titled "Farm Map". At the top, there is a navigation bar with "Home / About Search Your Account Help" and a login status "You are currently logged in as: Rick Log out". Below the navigation bar, there are two main sections: a list of listings on the left and a map on the right.

**Listings List:**

- asfasdf**  
Listing Type: Property for Sale  
Date Posted: 7/24/2009 11:12:00 AM  
Location: Centre County - any  
Acres: 0  
Status: Listed  
Views: 0  
Buttons: Edit Listing, Delete Listing
- test4**  
Listing Type: Property for Lease  
Date Posted: 7/24/2009 10:46:00 AM  
Location: any County - any  
Acres: asfasdf  
Status: Listed  
Views: 1  
Buttons: Edit Listing, Delete Listing
- Rick Day**  
Listing Type: Property for Lease  
Date Posted: 5/26/2009 10:33:00 AM  
Location: Centre County - any  
Acres: 0  
Status: Listed  
Views: 13  
Buttons: Edit Listing, Delete Listing
- asfasdf**  
Listing Type: Property for Sale  
Date Posted: 5/11/2009 10:10:00 AM  
Location: any County - any  
Acres: 0  
Status: Listed  
Views: 1  
Buttons: Edit Listing, Delete Listing
- Tim's Farm**  
Listing Type: Property for Lease  
Date Posted: 3/13/2009 11:19:00 AM  
Location: Centre County - Potter Township  
Acres: 200  
Status: Listed  
Views: 30  
Buttons: Edit Listing, Delete Listing
- Day Farm**  
Listing Type: Property for Sale  
Date Posted: 2/27/2009 11:55:00 AM  
Location: Centre County - Half Moon Township  
Acres: 55  
Status: Listed  
Views: 118  
Buttons: Edit Listing, Delete Listing

**Map Callout for Tim's Farm:**

- Type: Property for Lease
- Acres: 200
- Operation Type: Crop Operation
- County: Centre
- Buttons: Edit Listing

The map shows a geographical area with various roads (e.g., 144, 150, 220, 26, 64, 192, 45, 322) and locations (e.g., Bellefonte, Axemann, Centre Hill, Potters Mills, Boalsburg, State College). A large green area represents Rothrock State Forest. A red pin is placed on the map, and a callout box provides details for "Tim's Farm".

User can add, edit, delete, listings as needed

User can have one or many listings

# Benefits to Farmers

- Generate high-quality maps on aerial imagery
- No specialized software needed
- Farm information can be saved online for future usage
- Farm only needs to be drawn once
- Field acreages automatically calculated
- Helps meet regulatory requirements designed to protect PA water resources



# Status

- Presentations to two manure broker meetings
- Beta testing ongoing
- Available for testing by public
- Developing Help and educational materials
- Presentations to user groups – Manure Expo etc.
- Feedback providing valuable improvements
  - ▣ Holes in fields
  - ▣ All fields on/off
  - ▣ Multiple buffers displayed
  - ▣ Land within buffer and setbacks



# Conservation Planning Module

- Purpose: reduce soil loss and protect water quality
- Problem:
  - 59,000 Pa farms approximately
  - 40,000 without current Conservation Plans to meet DEP Chapter 102 compliance
  - Current rate of plan development much too slow
  - Farmers lack involvement
  - PaOneStop will increase the rate of plan development and bring farms into regulatory compliance



# How will it work?

- Digitize field boundaries
- Collect farm management information from farmer (tillage, crops etc)
- Extract soil, terrain, climatic conditions from online GIS servers
- Determine soil loss for each field (RUSLE/RUSLE2 model)
  - ▣  $A=R \times K \times LS \times C \times P$
- Compare soil loss to NRCS tolerable soil loss values (T)
- Modify crop management and/or implement conservation practices necessary to achieve tolerable soil loss for each field.
- Store farm information online for future modification or access
- Print reports and maps summarizing the Conservation Plan
- Submit Conservation Plan to regulatory agencies for review



# Field Characterization - Soils

The screenshot displays the Penn State Farm Map interface. The main map shows an aerial view of a farm with various fields outlined in yellow and labeled with soil codes such as MnB, MnC, MnD, MnE, MnF, MnG, MnH, MnI, MnJ, MnK, MnL, MnM, MnN, MnO, MnP, MnQ, MnR, MnS, MnT, MnU, MnV, MnW, MnX, MnY, MnZ, MnAA, MnAB, MnAC, MnAD, MnAE, MnAF, MnAG, MnAH, MnAI, MnAJ, MnAK, MnAL, MnAM, MnAN, MnAO, MnAP, MnAQ, MnAR, MnAS, MnAT, MnAU, MnAV, MnAW, MnAX, MnAY, MnAZ, MnBA, MnBB, MnBC, MnBD, MnBE, MnBF, MnBG, MnBH, MnBI, MnBJ, MnBK, MnBL, MnBM, MnBN, MnBO, MnBP, MnBQ, MnBR, MnBS, MnBT, MnBU, MnBV, MnBW, MnBX, MnBY, MnBZ, MnCA, MnCB, MnCC, MnCD, MnCE, MnCF, MnCG, MnCH, MnCI, MnCJ, MnCK, MnCL, MnCM, MnCN, MnCO, MnCP, MnCQ, MnCR, MnCS, MnCT, MnCU, MnCV, MnCW, MnCX, MnCY, MnCZ, MnDA, MnDB, MnDC, MnDD, MnDE, MnDF, MnDG, MnDH, MnDI, MnDJ, MnDK, MnDL, MnDM, MnDN, MnDO, MnDP, MnDQ, MnDR, MnDS, MnDT, MnDU, MnDV, MnDW, MnDX, MnDY, MnDZ, MnEA, MnEB, MnEC, MnED, MnEE, MnEF, MnEG, MnEH, MnEI, MnEJ, MnEK, MnEL, MnEM, MnEN, MnEO, MnEP, MnEQ, MnER, MnES, MnET, MnEU, MnEV, MnEW, MnEX, MnEY, MnEZ, MnFA, MnFB, MnFC, MnFD, MnFE, MnFF, MnFG, MnFH, MnFI, MnFJ, MnFK, MnFL, MnFM, MnFN, MnFO, MnFP, MnFQ, MnFR, MnFS, MnFT, MnFU, MnFV, MnFW, MnFX, MnFY, MnFZ, MnGA, MnGB, MnGC, MnGD, MnGE, MnGF, MnGG, MnGH, MnGI, MnGJ, MnGK, MnGL, MnGM, MnGN, MnGO, MnGP, MnGQ, MnGR, MnGS, MnGT, MnGU, MnGV, MnGW, MnGX, MnGY, MnGZ, MnHA, MnHB, MnHC, MnHD, MnHE, MnHF, MnHG, MnHH, MnHI, MnHJ, MnHK, MnHL, MnHM, MnHN, MnHO, MnHP, MnHQ, MnHR, MnHS, MnHT, MnHU, MnHV, MnHW, MnHX, MnHY, MnHZ, MnIA, MnIB, MnIC, MnID, MnIE, MnIF, MnIG, MnIH, MnII, MnIJ, MnIK, MnIL, MnIM, MnIN, MnIO, MnIP, MnIQ, MnIR, MnIS, MnIT, MnIU, MnIV, MnIW, MnIX, MnIY, MnIZ, MnJA, MnJB, MnJC, MnJD, MnJE, MnJF, MnJG, MnJH, MnJI, MnJJ, MnJK, MnJL, MnJM, MnJN, MnJO, MnJP, MnJQ, MnJR, MnJS, MnJT, MnJU, MnJV, MnJW, MnJX, MnJY, MnJZ, MnKA, MnKB, MnKC, MnKD, MnKE, MnKF, MnKG, MnKH, MnKI, MnKJ, MnKK, MnKL, MnKM, MnKN, MnKO, MnKP, MnKQ, MnKR, MnKS, MnKT, MnKU, MnKV, MnKW, MnKX, MnKY, MnKZ, MnLA, MnLB, MnLC, MnLD, MnLE, MnLF, MnLG, MnLH, MnLI, MnLJ, MnLK, MnLL, MnLM, MnLN, MnLO, MnLP, MnLQ, MnLR, MnLS, MnLT, MnLU, MnLV, MnLW, MnLX, MnLY, MnLZ, MnMA, MnMB, MnMC, MnMD, MnME, MnMF, MnMG, MnMH, MnMI, MnMJ, MnMK, MnML, MnMM, MnMN, MnMO, MnMP, MnMQ, MnMR, MnMS, MnMT, MnMU, MnMV, MnMW, MnMX, MnMY, MnMZ, MnNA, MnNB, MnNC, MnND, MnNE, MnNF, MnNG, MnNH, MnNI, MnNJ, MnNK, MnNL, MnNM, MnNN, MnNO, MnNP, MnNQ, MnNR, MnNS, MnNT, MnNU, MnNV, MnNW, MnNX, MnNY, MnNZ, MnOA, MnOB, MnOC, MnOD, MnOE, MnOF, MnOG, MnOH, MnOI, MnOJ, MnOK, MnOL, MnOM, MnON, MnOO, MnOP, MnOQ, MnOR, MnOS, MnOT, MnOU, MnOV, MnOW, MnOX, MnOY, MnOZ, MnPA, MnPB, MnPC, MnPD, MnPE, MnPF, MnPG, MnPH, MnPI, MnPJ, MnPK, MnPL, MnPM, MnPN, MnPO, MnPP, MnPQ, MnPR, MnPS, MnPT, MnPU, MnPV, MnPW, MnPX, MnPY, MnPZ, MnQA, MnQB, MnQC, MnQD, MnQE, MnQF, MnQG, MnQH, MnQI, MnQJ, MnQK, MnQL, MnQM, MnQN, MnQO, MnQP, MnQQ, MnQR, MnQS, MnQT, MnQU, MnQV, MnQW, MnQX, MnQY, MnQZ, MnRA, MnRB, MnRC, MnRD, MnRE, MnRF, MnRG, MnRH, MnRI, MnRJ, MnRK, MnRL, MnRM, MnRN, MnRO, MnRP, MnRQ, MnRR, MnRS, MnRT, MnRU, MnRV, MnRW, MnRX, MnRY, MnRZ, MnSA, MnSB, MnSC, MnSD, MnSE, MnSF, MnSG, MnSH, MnSI, MnSJ, MnSK, MnSL, MnSM, MnSN, MnSO, MnSP, MnSQ, MnSR, MnSS, MnST, MnSU, MnSV, MnSW, MnSX, MnSY, MnSZ, MnTA, MnTB, MnTC, MnTD, MnTE, MnTF, MnTG, MnTH, MnTI, MnTJ, MnTK, MnTL, MnTM, MnTN, MnTO, MnTP, MnTQ, MnTR, MnTS, MnTT, MnTU, MnTV, MnTW, MnTX, MnTY, MnTZ, MnUA, MnUB, MnUC, MnUD, MnUE, MnUF, MnUG, MnUH, MnUI, MnUJ, MnUK, MnUL, MnUM, MnUN, MnUO, MnUP, MnUQ, MnUR, MnUS, MnUT, MnUU, MnUV, MnUW, MnUX, MnUY, MnUZ, MnVA, MnVB, MnVC, MnVD, MnVE, MnVF, MnVG, MnVH, MnVI, MnVJ, MnVK, MnVL, MnVM, MnVN, MnVO, MnVP, MnVQ, MnVR, MnVS, MnVT, MnVU, MnVV, MnVW, MnVX, MnVY, MnVZ, MnWA, MnWB, MnWC, MnWD, MnWE, MnWF, MnWG, MnWH, MnWI, MnWJ, MnWK, MnWL, MnWM, MnWN, MnWO, MnWP, MnWQ, MnWR, MnWS, MnWT, MnWU, MnWV, MnWW, MnWX, MnWY, MnWZ, MnXA, MnXB, MnXC, MnXD, MnXE, MnXF, MnXG, MnXH, MnXI, MnXJ, MnXK, MnXL, MnXM, MnXN, MnXO, MnXP, MnXQ, MnXR, MnXS, MnXT, MnXU, MnXV, MnXW, MnXX, MnXY, MnXZ, MnYA, MnYB, MnYC, MnYD, MnYE, MnYF, MnYG, MnYH, MnYI, MnYJ, MnYK, MnYL, MnYM, MnYN, MnYO, MnYP, MnYQ, MnYR, MnYS, MnYT, MnYU, MnYV, MnYW, MnYX, MnYY, MnYZ, MnZA, MnZB, MnZC, MnZD, MnZE, MnZF, MnZG, MnZH, MnZI, MnZJ, MnZK, MnZL, MnZM, MnZN, MnZO, MnZP, MnZQ, MnZR, MnZS, MnZT, MnZU, MnZV, MnZW, MnZX, MnZY, MnZZ.

**Listing Details**

create report | image gallery

Action to take when map is clicked:  
Get Soil Information | Zoom to Farm

**Day Farm**

250 Houtz Lane  
Port Matilda, Pa 16870  
Latitude: 40.78860001 Longitude: -78.00687790  
Farm Location: Centre, Half Moon Township  
General Directions: 0.7 miles se of Stormstown on Houtz lane  
Listing Type: Property for Sale  
Acres: 55  
Operation Type: Mixed Operation  
Posted: 2/27/2009  
Description: great spot near the gamelands lots of deer and turkeys  
Water Supply: Upper Halfmoon Water company and rainfall  
Terms: cash on the barrel  
Reservations: No hog farms

**Contact: Rick Day**

116 ASI Building  
University Park, Pa 16802  
Phone Numbers: or  
Email: [rdav@psu.edu](mailto:rdav@psu.edu)

**Farm Fields**

ID	Field	Acres
0	field1	93.49
1	field2	27.5
2	field3	19.5

**Soil at Location**

Hagerstown silt loam, 3 to 8 percent slopes

MapUnit: HaB  
Acres: 44.88  
Capability Class: 2  
Drainage Class: Well drained  
Minimum Depth to Bedrock (cm): 200  
Minimum Depth to Watertable:

Base Layer  
 Air Photos  
 Topo Map - PASDA  
 PA

Overlays  
 NRCs Soils WMS  
 Farm Soils  
 Farm Fields  
 Farm Features

Penn State Geospatial Technology Program, Land Analysis Lab \* Problems? Contact Webmaster

USDA-NRCS

- SSURGO soils
- K-factor
- T-factor

Soils extracted from NRCS MapServer GIS service – all soils that intersect field

Soils clipped locally to field boundary

Acreages within fields calculated

SSURGO data tables accessed



# Field Characterization - Topography

PENNSTATE Nutrient Balance Sheet Mapping

Home / About Help You are currently logged in as: Rick Log out

Account Manage Listing

### Edit Farm Fields

Zoom to Farm Manage Air Photos

Click on the button below to trace a farm field on the map to the right. You will need to click this button each time you add a field to the map.

Draw Field

ID	Field	Acres
0	1	7.5
1	2	6.9
2	3	16.39
3	4	10.7
4	7	17.6
5	12	11.62
6	555	7.94
7	999	7.62

Total Farm Acres: 86.27

Map

Done

## Terrain Models

- LiDAR data
- 10m/NED
- Slope
- Slope Length

# Benefits

- Actively engage farmers in conservation planning
- Efficient production of Conservation Plans
- Meet Chapter 102 compliance standards
- Simplify plan updates
- Evaluate various management scenarios
- Reduce soil loss
- Improve water quality
- Provide valuable database of agricultural management and conservation practices statewide



# Status

- Startup funding available – more needed
- Advisory Committee established
- Technical development stage currently
- Final prototype within 1 – 1.5 years
- Long-term enhancements needed along with education and training programs



□ Thank You

□ Questions ?

□ [www.PaOneStop.org](http://www.PaOneStop.org)

□ Rick Day

□ rday@psu.edu

