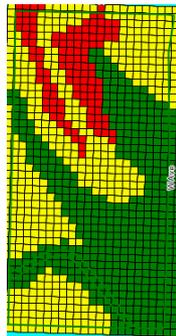




Management Zones

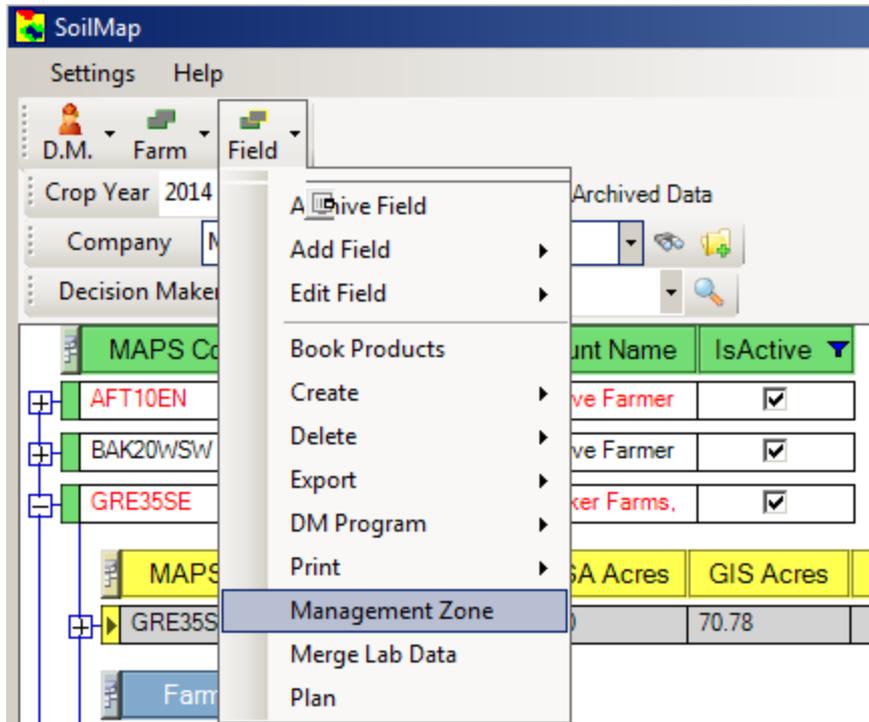


Version 7
Release notes

Changes Made

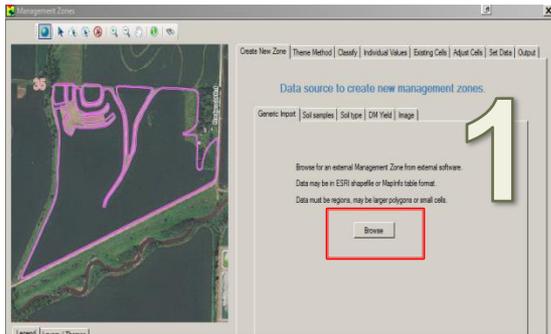
- ▶ Management Zones are now field specific
 - ▶ Functionality is found under the field level
 - ▶ Can import almost any type of data
 - ▶ Is used for Fert/Chem/Seed/Data Management Program
 - ▶ Can be based on Generic Import, Samples, Soil Type, Data Management Program, Imagery
- 

How to:



- Field Level
- Management Zone

Generic Import



| Attribute Name | Number of unique values | Data Type |
|----------------|-------------------------|-----------|
| Dataset | 1 | String |
| Field | 1 | String |
| Obj_Id | 18 | Number |
| Product | 1 | String |
| Yld_Vol_Dr | 18 | Number |

Number of shapes 18

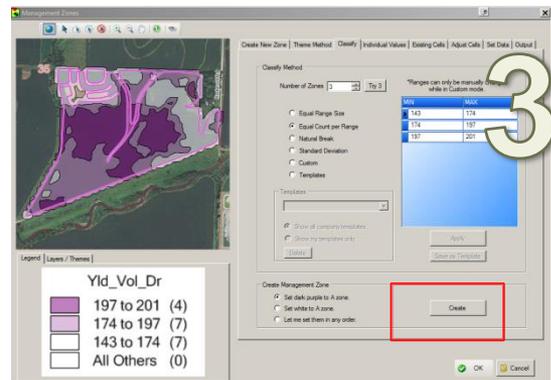
2

One example of a generic import is importing data from SMS

- Browse Button
- Navigate to data source

The columns available come from SMS in this example

- Select your Yield source
- Select Classify
- Set number of ranges (lots of options now exist, including templates)
- Press Create and give Name



Classify Options

Set # of Zones

Management Zones

Create New Zone | Theme Method | **Classify** | Individual Values | Existing Cells | Adjust Cells | Set Data | Output

Classify Method

Number of Zones: 3 (Try 3)

*Ranges can only be manually changed while in Custom mode.

| MIN | MAX |
|-----|-----|
| 0 | 175 |
| 175 | 200 |
| 200 | 300 |

Templates:

Show all company templates.
 Show my templates only.

Buttons: Apply, Save as Template, Delete, Create

Create Management Zone

Set dark purple to A zone.
 Set white to A zone.
 Let me set them in any order.

Legend: Yld_Vol_Dr

- 200 to 300 (1)
- 175 to 200 (9)
- 0 to 175 (8)
- All Others (0)

Buttons: OK, Cancel

Type in ranges you want to use

Use templates if your ranges are the same

At the classify screen you set your number of Zones. You can set any number of Zones you wish

You can save templates for the company or for you individually

When create is pressed the A,B,C zones are created and you will then name the file

Modifying/Viewing

Management Zones

Create New Zone | Theme Method | Classify | Individual Values | Existing Cells | Adjust Cells | Set Data | Output

| Name | Years | Notes | CreationDate |
|----------------------|-------|-------|-----------------------|
| MS_SEED_SPRING_14 | 2014 | | 4/2/2014 9:56:29 AM |
| MS_SEED | 2014 | | 3/19/2014 1:19:18 PM |
| MS_SPRING_14_VR_SEED | 2014 | | 3/14/2014 12:28:01 PM |
| MZ_FALL2013 | 2013 | | 11/25/2013 1:58:02 PM |

Legend | Layers / Themes

Management Zones

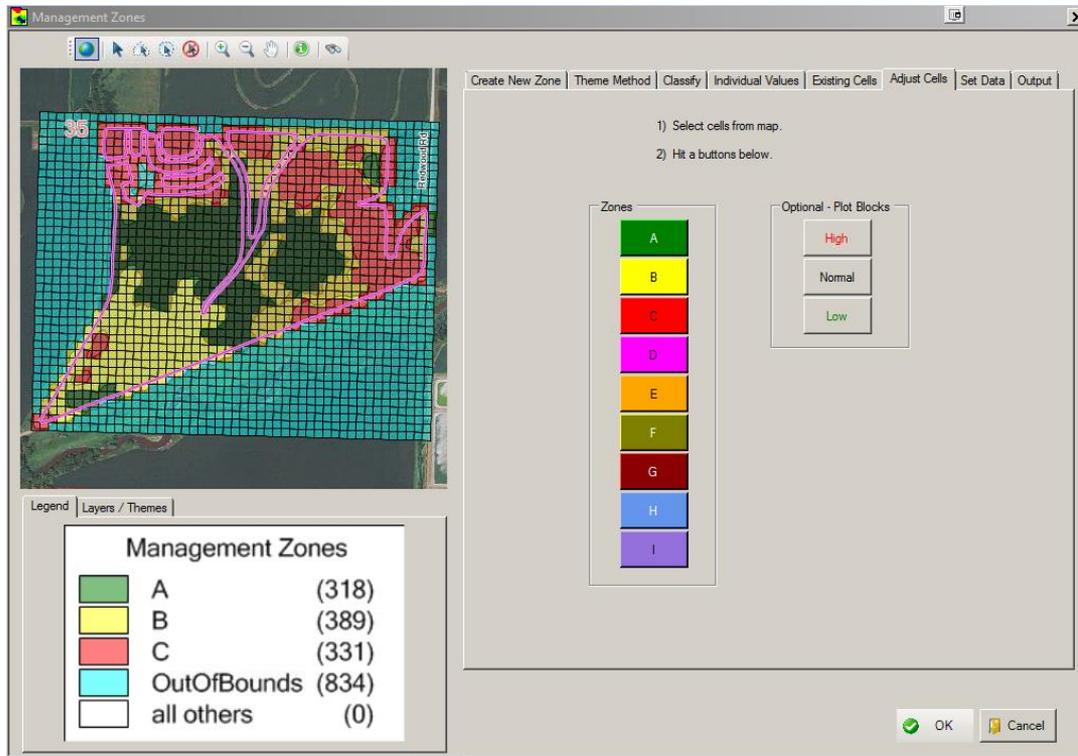
- A (318)
- B (389)
- C (331)
- OutOfBounds (834)
- all others (0)

Archive

OK Cancel

From the **Existing Cells** tab you can view existing management zones or archive

Modifying/Viewing



From the Adjust Cells tab you can modify existing zones (Example switching a C zone to a B zone)

We can also add High Checks/Low Checks for population

Management Zone for Seed

Management Zones

Create New Zone | Theme Method | Classify | Individual Values | Existing Cells | Adjust Cells | Set Data | Output

| Column Name | A | B | C | OutOfBounds |
|----------------------|-------|-------|-------|-------------|
| Relative Yield All | -1 | -1 | -1 | -1 |
| Relative Yield Corn | -1 | -1 | -1 | -1 |
| Relative Yield Be... | -1 | -1 | -1 | -1 |
| Corn Yield | -1 | -1 | -1 | -1 |
| Soybean Yield | -1 | -1 | -1 | -1 |
| Corn Rate | 36000 | 32000 | 28000 | 32000 |
| Bean 1 Rate | -1 | -1 | -1 | -1 |
| Bean 2 Rate | -1 | -1 | -1 | -1 |

Apply

Hide Misc Columns

OK Cancel

Legend Layers / Themes

Layers

- Soil Samples
- Soil-Type Outline
- Field
- Fam
- Management Zone Cells

Theme

- None
- Zone
- Plot Block

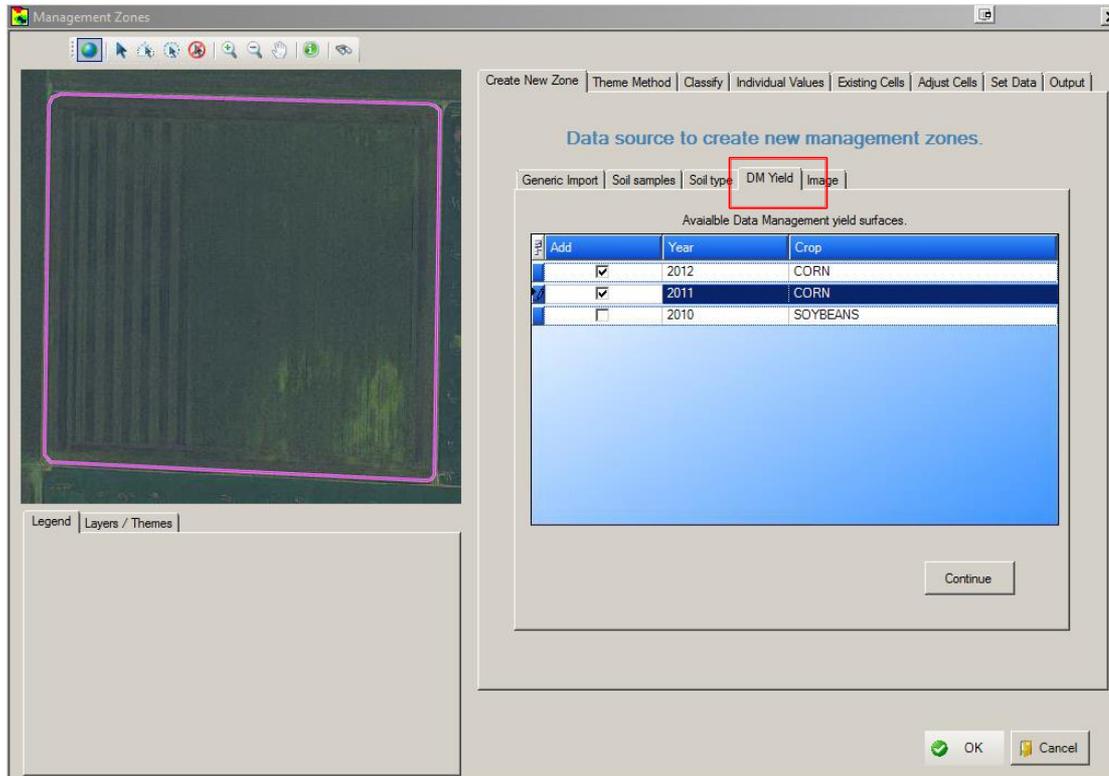
mzCornYld

Transparency

If you enter seeding rates in the Corn Rate columns for A,B,C you could then send this off as a prescription file for VR seeding (beans would also work)

In the next example I will show a fertilizer scenario where the grower is enrolled in Data Management

Data Management



For growers that are enrolled in the Data Management Program you can utilize the “DM Yield” button to create management zones based off of past crop history

- Select years to use
- Press continue

Using Relative Yield or Yield

The screenshot shows the Management Zones software interface. On the left is a map of a field divided into a grid of management zones, with a pink rectangle highlighting a specific area. On the right is a dialog box with the 'Theme Method' tab selected. The dialog contains a table of attributes and their unique values, and a 'Creation Method' section with three radio button options.

| Attribute Name | Number of unique values | Data Type |
|----------------|-------------------------|-----------|
| mzBeanYld | 1 | Number |
| mzCornYld | 492 | Number |
| mzRYAll | 491 | Number |
| mzRYBn | 1 | Number |
| mzRYCn | 491 | Number |
| mzZone | 1 | String |
| mzZoneSC | 1 | String |

Number of shapes: 492

Creation Method

- CLASSIFY BY RANGE
 - May be used with numerical data types if there are less than 10 unique values.
 - Must be used with numeric values if there are 10 or more unique values.
 - Can not be used with string attributes.
- INDIVIDUAL VALUE
 - Must be used with string attributes.
 - Not recommended but may be used with numerical data if there are less than 10 unique values.
- DEFINITION COLUMN
 - Column contains only letters A-I to represent zones.

Legend Layers / Themes

mzCornYld

- 206 to 227 (126)
- 205 to 206 (17)
- 204 to 205 (14)
- 203 to 204 (14)
- 202 to 203 (16)
- 201 to 202 (22)
- 200 to 201 (15)
- 199 to 200 (13)
- 195 to 199 (66)
- 192 to 195 (28)
- 189 to 192 (25)
- 184 to 189 (31)
- 175 to 184 (38)
- 162 to 176 (32)
- 42 to 162 (35)
- All Others (0)

OK Cancel

At the **Theme Method** tab you now need to determine which yield method to use

Relative Yield is 0-100
Yield will be more field specific

➤ Switch to **Classify** after you make selection

Using Relative Yield or Yield

Management Zones

Create New Zone | Theme Method | **Classify** | Individual Values | Existing Cells | Adjust Cells | Set Data | Output

Classify Method

Number of Zones: 3 Try 3

*Ranges can only be manually changed while in Custom mode.

| MIN | MAX |
|-----|-----|
| 42 | 194 |
| 194 | 204 |
| 204 | 227 |

Templates

Show all company templates.
 Show my templates only.

Apply
Save as Template

Create Management Zone

Set dark purple to A zone.
 Set white to A zone.
 Let me set them in any order.

Create

OK Cancel

Legend Layers / Themes

mzCornYld

- 204 to 227 (157)
- 194 to 204 (155)
- 42 to 194 (180)
- All Others (0)

The steps are now the same as earlier in the tutorial

Refer to page 4 if you need help changing zones

Set Data Tab

The screenshot shows the 'Management Zones' software interface. On the left is a map of a field divided into management zones, color-coded by zone. A pink rectangle highlights a specific area on the map. Below the map is a legend titled 'Management Zones' with the following entries:

| Color | Zone Name | Count |
|--------|-------------|-------|
| Green | A | (157) |
| Yellow | B | (155) |
| Red | C | (180) |
| Cyan | OutOfBounds | (84) |
| White | all others | (0) |

On the right side of the interface is a 'Set Data' tab with a table of data. The table has columns for 'Column Name', 'A', 'B', 'C', and 'OutOfBounds'. The data is as follows:

| Column Name | A | B | C | OutOfBounds |
|----------------------|--------|--------|--------|-------------|
| Relative Yield All | 95.13 | 90.47 | 78.08 | -1 |
| Relative Yield Corn | 95.13 | 90.47 | 78.08 | -1 |
| Relative Yield Be... | 0 | 0 | 0 | -1 |
| Corn Yield | 210.05 | 199.33 | 171.99 | -1 |
| Soybean Yield | 0 | 0 | 0 | -1 |
| Corn Rate | -1 | -1 | -1 | -1 |
| Bean 1 Rate | -1 | -1 | -1 | -1 |
| Bean 2 Rate | -1 | -1 | -1 | -1 |

Below the table is an 'Apply' button and a checkbox labeled 'Hide Misc Columns' which is checked. At the bottom right are 'OK' and 'Cancel' buttons.

You will now see some data pre-filled out for you

This information can be edited and adjusted accordingly

Notice we have different yield goals for each zone

With this information filled out it could now be used in a fertilizer recommendation

Will go to the field rec screen now

Field Recommendation

The screenshot shows a software window titled "VRT Product Recs : EWB34WNE - ELGIN 80". The menu bar includes "Relationships", "Previous Crop Adjustments", "Future Crop Needs", "Adjustments", "Fertilizer Products", "Field Rec Map", "Output", and "Load Sheet". The main content area is divided into four columns for "Year 1", "Year 2", "Year 3", and "Year 4".

Year 1: A list box contains three items: "Com N MZ" (unchecked), "Com P MZ" (checked), and "Com K MZ" (checked). Below the list is a "Crop" dropdown menu with "Com" selected.

Year 2, Year 3, Year 4: Each column contains an empty rectangular box and a "Crop" dropdown menu.

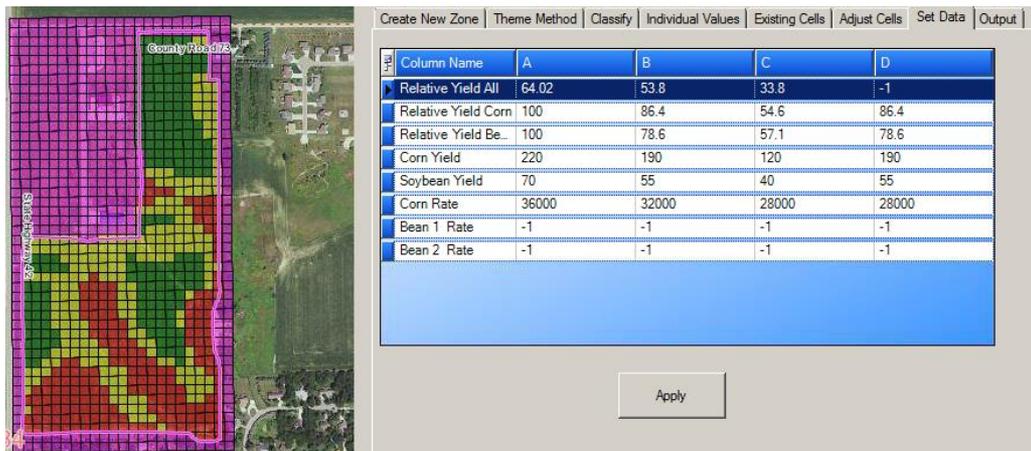
Multiple Year: A section at the bottom contains an empty rectangular box and a checkbox labeled "Fall N Application".

At the future crop needs screen you will now see your company specific options

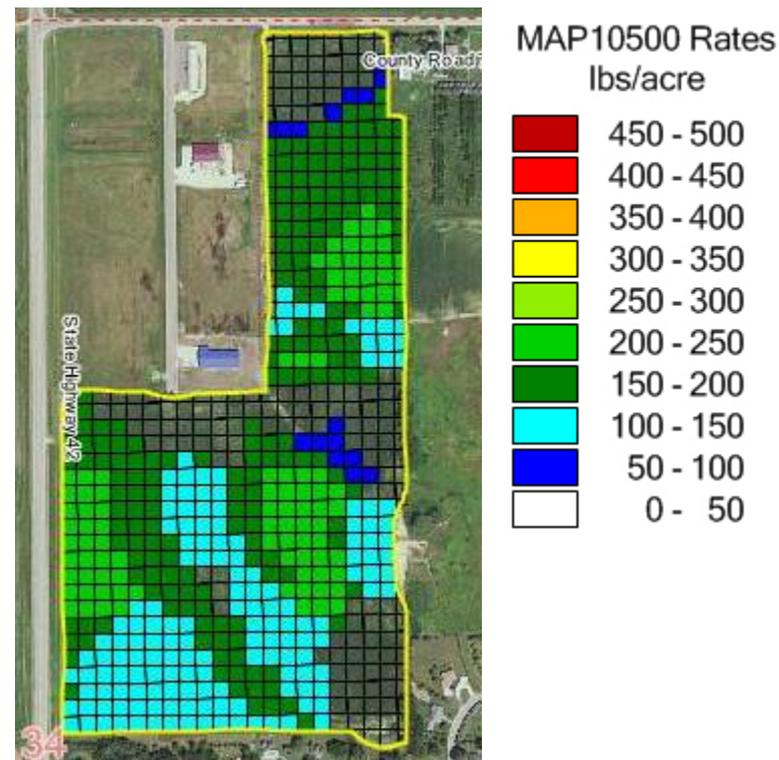
This previously would have shown Gold, Silver, Bronze N P K

Now you may be applying a Gold equation to the A zones, a Silver to your B zones, and a Bronze to your C zones

Fertilizer Products Comparison



Management Zone Setup



VRT Field Rec