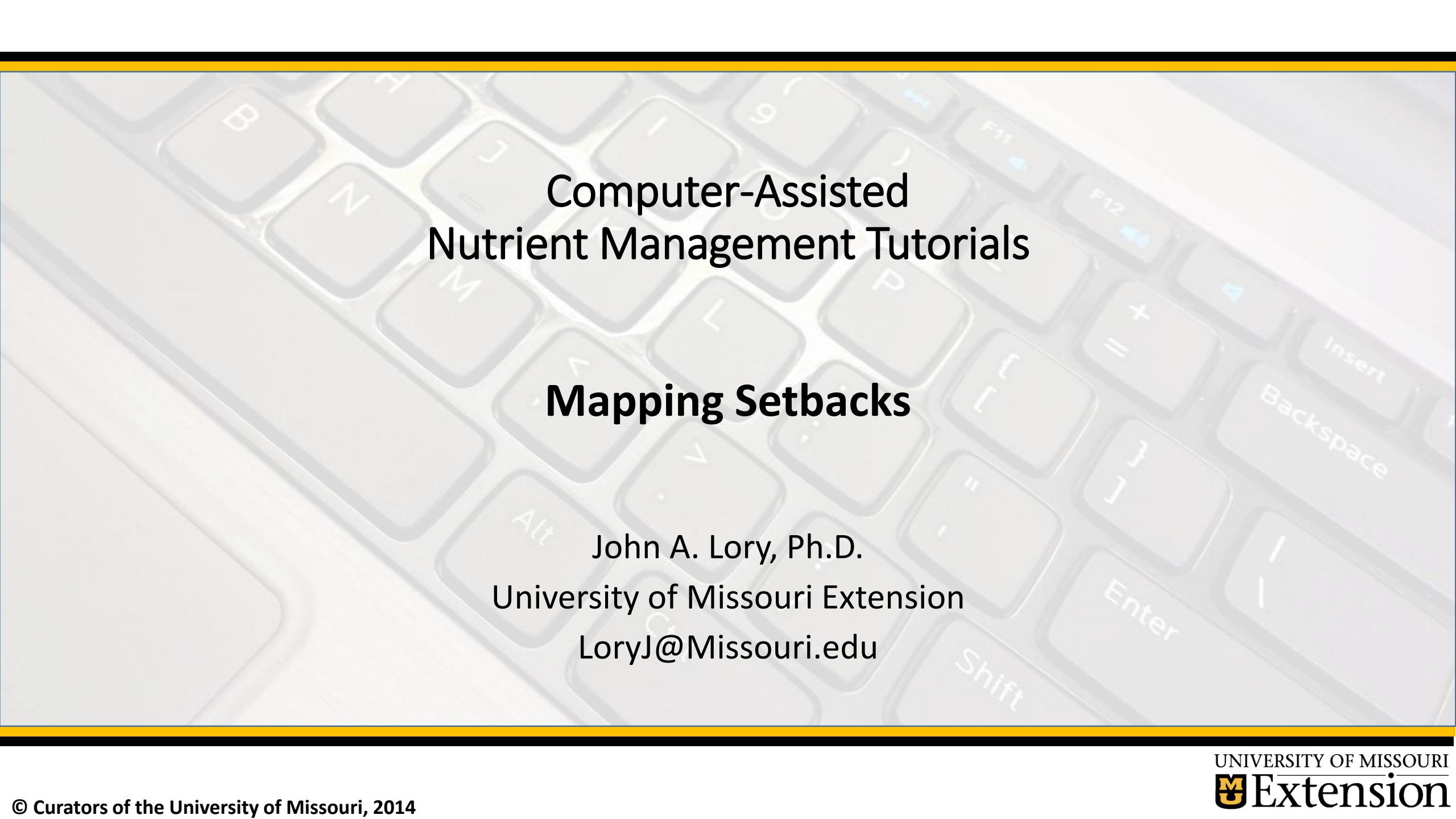


The background of the slide is a close-up, slightly angled photograph of a computer keyboard. The keys are light-colored with dark lettering. Visible keys include 'B', 'N', 'M', 'J', 'I', '9', 'F11', 'F12', 'P', 'L', 'V', 'Alt', 'Enter', 'Shift', 'Insert', and 'Backspace'. The text is overlaid on this image.

Computer-Assisted Nutrient Management Tutorials

Mapping Setbacks

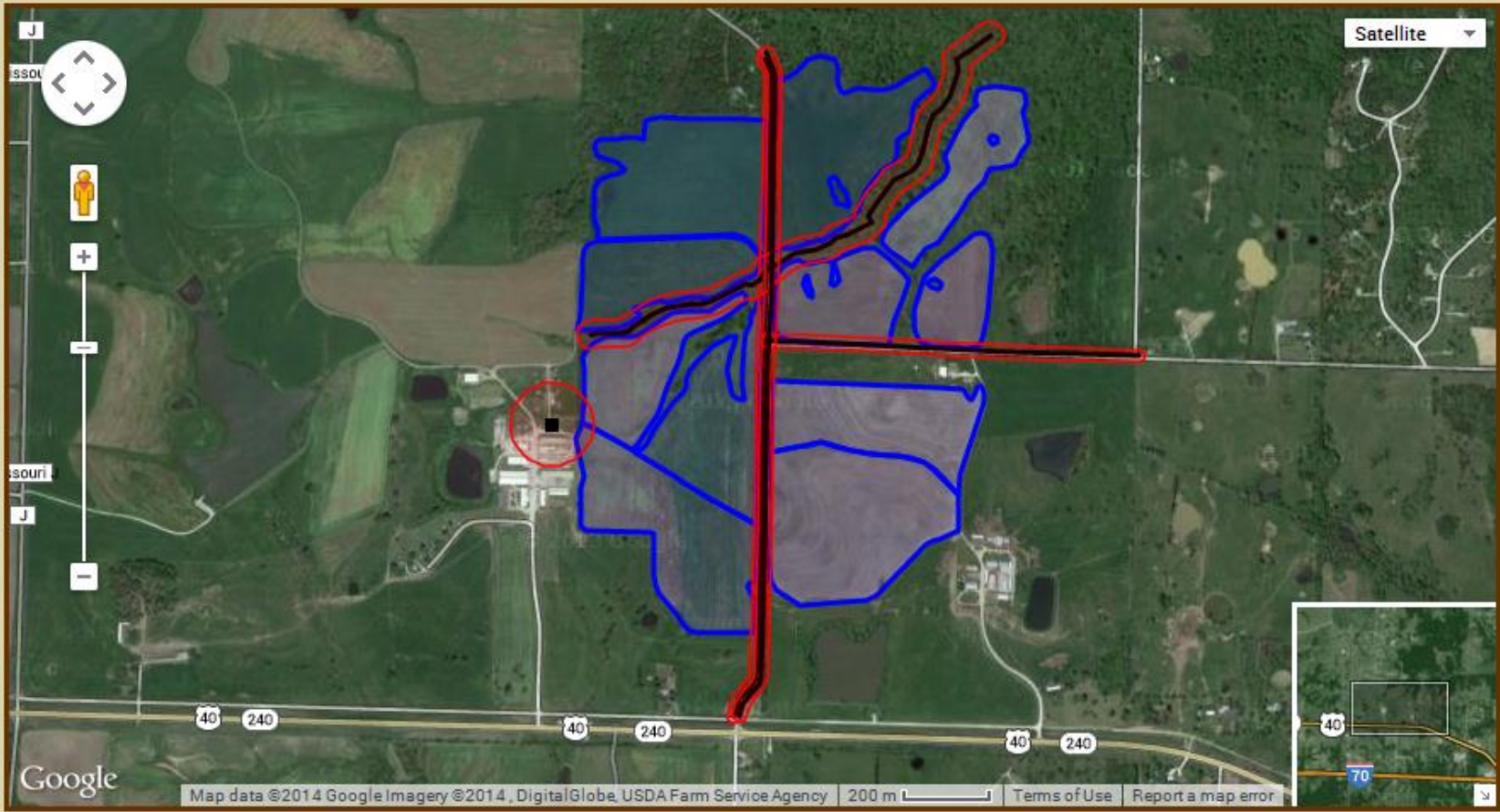
John A. Lory, Ph.D.
University of Missouri Extension
LoryJ@Missouri.edu

Our Goal: Drawing Setback Features and Determining Setback Distances.

[PROJECT MGMT] [**MAPPING**] [NUTRIENT MGMT] [NEWS] [ABOUT] Welcome **Training_Account** ! [Log Out](#)

Location of MU_Example_Farm: MO, Boone County

Map View:



MAP CONTROLS

<input checked="" type="button" value="On"/>	Off	Mouse wheel zoom
On	<input checked="" type="button" value="Off"/>	Labels
<input checked="" type="button" value="On"/>	Off	Setbacks
On	<input checked="" type="button" value="Off"/>	Administrative Boundaries ⓘ
On	<input checked="" type="button" value="Off"/>	Soils ⓘ

FIELD TOOLS

SETBACK TOOLS

Click a setback in the map to select it.

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To Get to Setback Tools: Expand the “Setback Tools”

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Location of MU_Example_Farm: MO, Boone County

Map View:

MAP CONTROLS

<input checked="" type="button" value="On"/>	Off	Mouse wheel zoom
On	<input checked="" type="button" value="Off"/>	Labels
<input checked="" type="button" value="On"/>	Off	Setbacks
On	<input checked="" type="button" value="Off"/>	Administrative Boundaries ?
On	<input checked="" type="button" value="Off"/>	Soils ?

[Zoom to all Features](#)

FIELD TOOLS

Click a field in the map to select it.

[Create New Field](#)

[Edit Field](#)

[Delete Field](#)

[Update Soils](#) [?](#)

[SETBACK TOOLS](#)

[MANURE STORAGE TOOLS](#)

[PRINT MAPS](#)

Tools work like the “Field Tools”.

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Location of MU_Example_Farm: MO, Boone County

Map View:

MAP CONTROLS

<input checked="" type="button" value="On"/>	Off	Mouse wheel zoom
<input checked="" type="button" value="On"/>	<input checked="" type="button" value="Off"/>	Labels
<input checked="" type="button" value="On"/>	Off	Setbacks
<input checked="" type="button" value="On"/>	<input checked="" type="button" value="Off"/>	Administrative Boundaries
<input checked="" type="button" value="On"/>	<input checked="" type="button" value="Off"/>	Soils

FIELD TOOLS

SETBACK TOOLS

Click a setback in the map to select it.

Create New Setback	
Edit Setback	
Delete Setback	

MANURE STORAGE TOOLS

PRINT MAPS

Google

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Step 1: Zoom in on the feature you want to draw.

We want to draw an intermittent stream.

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Location of MU_Example_Farm: MO, Boone County

Map View:

MAP CONTROLS

<input checked="" type="button" value="On"/> Off	Mouse wheel zoom
On <input checked="" type="button" value="Off"/>	Labels
<input checked="" type="button" value="On"/> Off	Setbacks
On <input checked="" type="button" value="Off"/>	Administrative Boundaries ?
On <input checked="" type="button" value="Off"/>	Soils ?

FIELD TOOLS

SETBACK TOOLS

Click a setback in the map to select it.

Step 2: Initiate “Create New Setback”.

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Location of MU_Example_Farm: MO, Boone County

Map View:

MAP CONTROLS

<input checked="" type="button" value="On"/> Off	Mouse wheel zoom
On <input checked="" type="button" value="Off"/>	Labels
<input checked="" type="button" value="On"/> Off	Setbacks
On <input checked="" type="button" value="Off"/>	Administrative Boundaries ⓘ
On <input checked="" type="button" value="Off"/>	Soils ⓘ

FIELD TOOLS

SETBACK TOOLS

Click a setback in the map to select it.



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Step 3: Define the type of setback.

Use the drop-down menus to define the setback.

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Location of MU_Example_Farm: MO, Boone County

Map View:

ADD FEATURE

A selection must be made from each dropdown before drawing.

1. -- SELECT A FEATURE CATEGORY --
2. -- SELECT A FEATURE NAME --
3. -- SELECT AN OPERATION TYPE --
4. -- SELECT A SETBACK DEFINITION --
5. Notes (optional, 100 char. max)

Start Drawing

Satellite

MAP CONTROLS

Mouse wheel zoom

Labels

Setbacks

Administrative Boundaries

Soils

Zoom to all Features

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Step 3: Define the type of setback.

Steps 1 and 2 define the type of feature.

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Location of MU_Example_Farm: MO, Boone County

Map View:

ADD FEATURE

A selection must be made from each dropdown before drawing.

1. Lakes and Streams
2. Intermittent stream/arroyo
3. -- SELECT AN OPERATION TYPE --
4. -- SELECT A SETBACK DEFINITION --
5. Notes (optional, 100 char. max)

MAP CONTROLS

<input checked="" type="button" value="On"/>	Off	Mouse wheel zoom
On	<input checked="" type="button" value="Off"/>	Labels
<input checked="" type="button" value="On"/>	Off	Setbacks
On	<input checked="" type="button" value="Off"/>	Administrative Boundaries
On	<input checked="" type="button" value="Off"/>	Soils

Step 3: Define the type of setback.

Steps 3 defines the type of operation.

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Location of MU_Example_Farm: MO, Boone County

Map View:

ADD FEATURE

A selection must be made from each dropdown before drawing.

1. Lakes and Streams
2. Intermittent stream/arroyo
3. -- SELECT AN OPERATION TYPE --
4. -- SELECT AN OPERATION TYPE --
5. CAFO
NRCS Standard
User-defined

Satellite

MAP CONTROLS

<input checked="" type="button" value="On"/>	Off	Mouse wheel zoom
On	<input checked="" type="button" value="Off"/>	Labels
<input checked="" type="button" value="On"/>	Off	Setbacks
On	<input checked="" type="button" value="Off"/>	Administrative Boundaries ?
On	<input checked="" type="button" value="Off"/>	Soils ?

Step 3: Define the type of setback.

Steps 4 defines the options for setbacks for that feature.

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Location of MU_Example_Farm: MO, Boone County

Map View:

ADD FEATURE

A selection must be made from each dropdown before drawing.

1. Lakes and Streams
2. Intermittent stream/arroyo

no name: Perennial streams, intermittent streams, and canals ⓘ

3. NRCS Standard
4. -- SELECT A SETBACK DEFINITION --
5. -- SELECT A SETBACK DEFINITION --
0 ft -- Manure applied down-gradient
100 ft -- Manure applied upgradient

Satellite

MAP CONTROLS

<input checked="" type="button" value="On"/> Off	Mouse wheel zoom
On <input checked="" type="button" value="Off"/>	Labels
<input checked="" type="button" value="On"/> Off	Setbacks
On <input checked="" type="button" value="Off"/>	Administrative Boundaries ⓘ
On <input checked="" type="button" value="Off"/>	Soils ⓘ

Step 4: Select "Start Drawing".

[PROJECT MGMT] [**MAPPING**] [NUTRIENT MGMT] [NEWS] [ABOUT]

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Location of MU_Example_Farm: MO, Boone County

Map View: **On**

ADD FEATURE

A selection must be made from each dropdown before drawing.

1.
2.
mo name: Perennial streams, intermittent streams, and canals
3.
4.
5. Notes (optional, 100 char. max)

Start Drawing

MAP CONTROLS

On	Off	Mouse wheel zoom
On	Off	Labels
On	Off	Setbacks
On	Off	Administrative Boundaries
On	Off	Soils

Step 5: Use your mouse to trace the stream.

[PROJECT MGMT] [**MAPPING**] [NUTRIENT MGMT] [NEWS] [ABOUT]

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Location of MU_Example_Farm: MO, Boone County

Map View:

ADD FEATURE

Satellite

MAP CONTROLS

<input checked="" type="button" value="On"/>	Off	Mouse wheel zoom
On	<input checked="" type="button" value="Off"/>	Labels
<input checked="" type="button" value="On"/>	Off	Setbacks
On	<input checked="" type="button" value="Off"/>	Administrative Boundaries
On	<input checked="" type="button" value="Off"/>	Soils

Google

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Step 5: Use your mouse to trace the stream.

If you make a mistake you can drag point to the correct spot.

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Location of MU_Example_Farm: MO, Boone County

Map View:

ADD FEATURE

Satellite

MAP CONTROLS

<input checked="" type="button" value="On"/> Off	Mouse wheel zoom
On <input checked="" type="button" value="Off"/>	Labels
<input checked="" type="button" value="On"/> Off	Setbacks
On <input checked="" type="button" value="Off"/>	Administrative Boundaries
On <input checked="" type="button" value="Off"/>	Soils

Google

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Step 5: Use your mouse to trace the stream.

If you make a mistake you can drag point to the correct spot.

[PROJECT MGMT] [**MAPPING**] [NUTRIENT MGMT] [NEWS] [ABOUT] Welcome **Training_Account** ! [Log Out](#)

Location of MU_Example_Farm: MO, Boone County

Map View:

ADD FEATURE

Satellite

Map CONTROLS

<input checked="" type="button" value="On"/>	Off	Mouse wheel zoom
On	<input checked="" type="button" value="Off"/>	Labels
<input checked="" type="button" value="On"/>	Off	Setbacks
On	<input checked="" type="button" value="Off"/>	Administrative Boundaries
On	<input checked="" type="button" value="Off"/>	Soils

Google

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Step 6: Click “Submit” when you complete drawing the feature.

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Location of MU_Example_Farm: MO, Boone County

Map View:

ADD FEATURE

Map Controls:

- Mouse wheel zoom
- Labels
- Setbacks
- Administrative Boundaries
- Soils

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Mapping setback features: Switch to drawing an agricultural well.

You can start drawing another stream or change what your are drawing.

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Welcome **Training_Account** ! [Log Out](#)

Location of MU_Example_Farm: MO, Boone County

Map View: **On** Off

ADD FEATURE

A selection must be made from each dropdown before drawing.

1.
2.
- mo name: Perennial streams, intermittent streams, and canals ⓘ
3.
4.
5. Notes (optional, 100 char. max)

Start Drawing

satellite

MAP CONTROLS

On	Off	Mouse wheel zoom
On	Off	Labels
On	Off	Setbacks
On	Off	Administrative Boundaries ⓘ
On	Off	Soils ⓘ

Zoom to all Features

Google

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Mapping setback features: An agricultural well.

[PROJECT MGMT] [**MAPPING**] [NUTRIENT MGMT] [NEWS] [ABOUT]

Welcome **Training_Account** ! [Log Out](#)

Location of MU_Example_Farm: MO, Boone County

Map View:

ADD FEATURE

A selection must be made from each dropdown before drawing.

1. Wells & other water intake structures
2. Agricultural well
- mo name: Public or private drinking water well or other wells including un-plugged abandoned wells
3. NRCS Standard
4. 300 ft -- All applications
5. Notes (optional, 100 char. max)

Start Drawing

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MAP CONTROLS

<input checked="" type="button" value="On"/>	Off	Mouse wheel zoom
<input checked="" type="button" value="On"/>	Off	Labels
<input checked="" type="button" value="On"/>	Off	Setbacks
<input checked="" type="button" value="On"/>	Off	Administrative Boundaries
<input checked="" type="button" value="On"/>	Off	Soils

[Zoom to all Features](#)

Mapping setback features: When you are done exit page.

[PROJECT MGMT] [**MAPPING**] [NUTRIENT MGMT] [NEWS] [ABOUT] Welcome **Training_Account** ! [Log Out](#)

Location of MU_Example_Farm: MO, Boone County

Map View:

ADD FEATURE

A selection must be made from each dropdown before drawing.

1. Wells & other water intake structures
2. Agricultural well
- mo name: Public or private drinking water well or other wells including un-plugged abandoned wells
3. NRCS Standard
4. 300 ft -- All applications
5. Notes (optional, 100 char. max)

Start Drawing

MAP CONTROLS

<input checked="" type="button" value="On"/>	Off	Mouse wheel zoom
<input checked="" type="button" value="On"/>	Off	Labels
<input checked="" type="button" value="On"/>	Off	Setbacks
<input checked="" type="button" value="On"/>	Off	Administrative Boundaries
<input checked="" type="button" value="On"/>	Off	Soils

Zoom to all Features

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MO, Bo

MO, Bo

Mapping setback features:

Note field information now reports Spreadable Acres.

[PROJECT MGMT] [**MAPPING**] [NUTRIENT MGMT] [NEWS] [ABOUT] Welcome **Training_Account** ! [Log Out](#)

Location of MU_Example_Farm: MO, Boone County

Map View:

MAP CONTROLS

<input checked="" type="button" value="On"/> Off	Mouse wheel zoom
On <input checked="" type="button" value="Off"/>	Labels
<input checked="" type="button" value="On"/> Off	Setbacks
On <input checked="" type="button" value="Off"/>	Administrative Boundaries ?
On <input checked="" type="button" value="Off"/>	Soils ?

FIELD TOOLS

SETBACK TOOLS

Click a setback in the map to select it.

Field

ID:	2
SubID:	A
Acres:	11.8
Spr. Acres:	10.1
Notes:	

Google

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Setback features: You can turn them on and off on the map.

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Location of MU_Example_Farm: MO, Boone County

Map View:

MAP CONTROLS

<input checked="" type="button" value="On"/> Off	Mouse wheel zoom
On <input checked="" type="button" value="Off"/>	Labels
On <input checked="" type="button" value="Off"/>	Setbacks
On <input checked="" type="button" value="Off"/>	Administrative Boundaries ⓘ
On <input checked="" type="button" value="Off"/>	Soils ⓘ

FIELD TOOLS

Click a field in the map to select it.

ⓘ

Mapping setback features

[PROJECT MGMT] [MAPPING] [NUTRIENT MGMT] [NEWS] [ABOUT]

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Location of MU_Example_Farm: MO, Boone County

Map View:

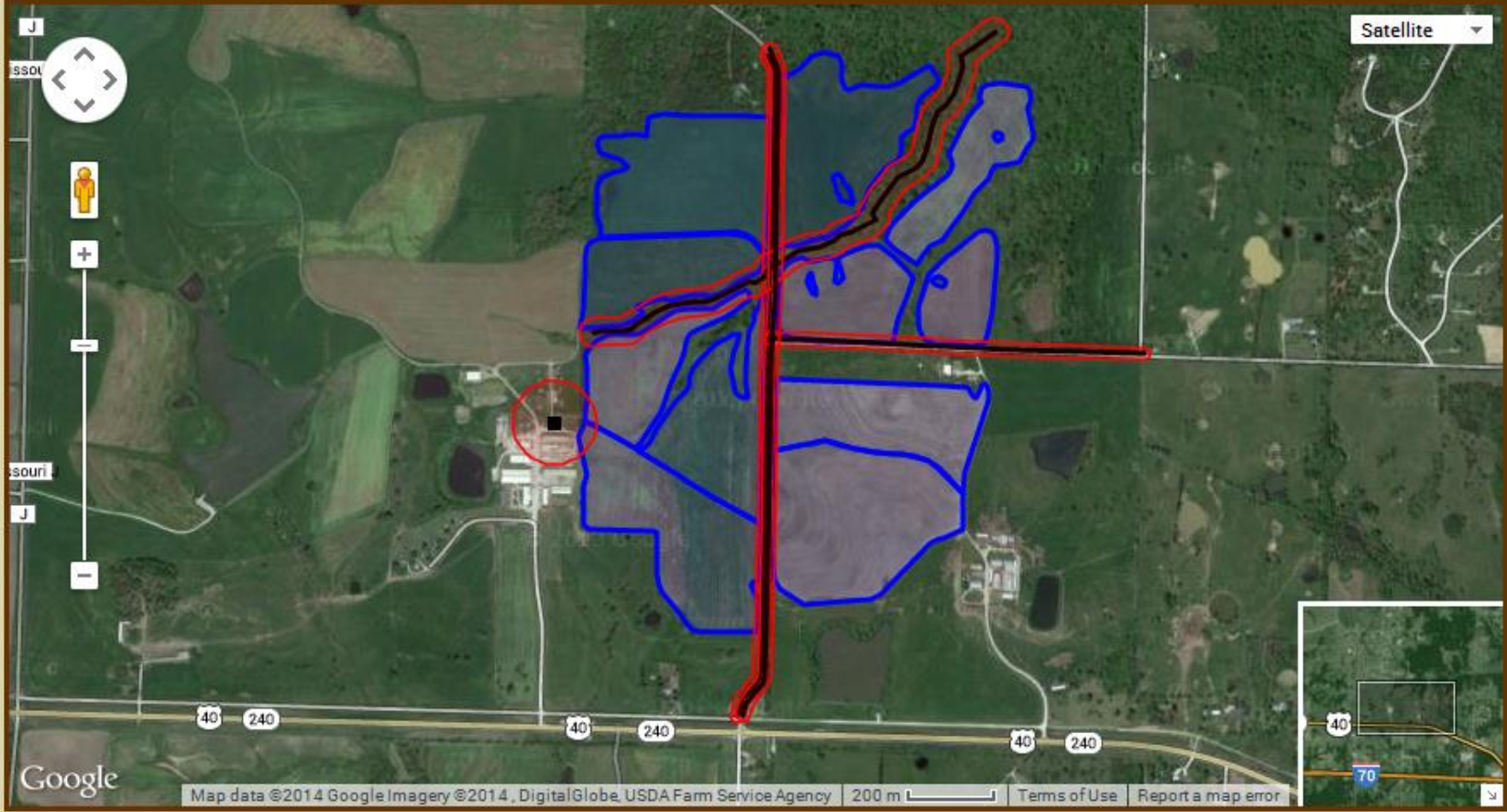
▼ MAP CONTROLS

<input checked="" type="button" value="On"/>	Off	Mouse wheel zoom
<input checked="" type="button" value="On"/>	Off	Labels
<input checked="" type="button" value="On"/>	Off	Setbacks
<input checked="" type="button" value="On"/>	Off	Administrative Boundaries ⓘ
<input checked="" type="button" value="On"/>	Off	Soils ⓘ

► FIELD TOOLS

▼ SETBACK TOOLS

Click a setback in the map to select it.



For more information on NMTracker.

- NMTracker website at nmtracker.missouri.edu.
- NMTracker tutorials at <http://nmplanner.missouri.edu/software/nmtracker.asp>.
- For information on program development contact [John Lory](#).
- For information on software implementation contact [Kevin Atherton](#)
- Other Nutrient Management resources at nmplanner.missouri.edu.