

The Wetland Type map shows wetland existence overlaid on an aerial imagery. The Flood Hazard Zones map shows FEMA flood hazard zones overlaid on an aerial imagery. Relevant FIRM panels and detailed zone information is provided below. For detailed Zone descriptions please click the link: https://floodadvocate.com/fema-zone-definitions

Available FIRM Panels in area:	21069C0125C(effective:2010-05-20) 21069C0150C(effective:2010-05-20) 21069C0025C(effective:2010-05-20) 21069C0050C(effective:2010-05-20) 21069C0115C(effective:2010-05-20) 21135C0190D(effective:2013-04-16) 21135C0305D(effective:2013-04-16) 21135C0315D(effective:2013-04-16) 21161C0190E(effective:2013-04-16) 21161C0195E(effective:2013-04-16) 21161C0280E(effective:2013-04-16)
Flood Zone A-01 Zone:	A

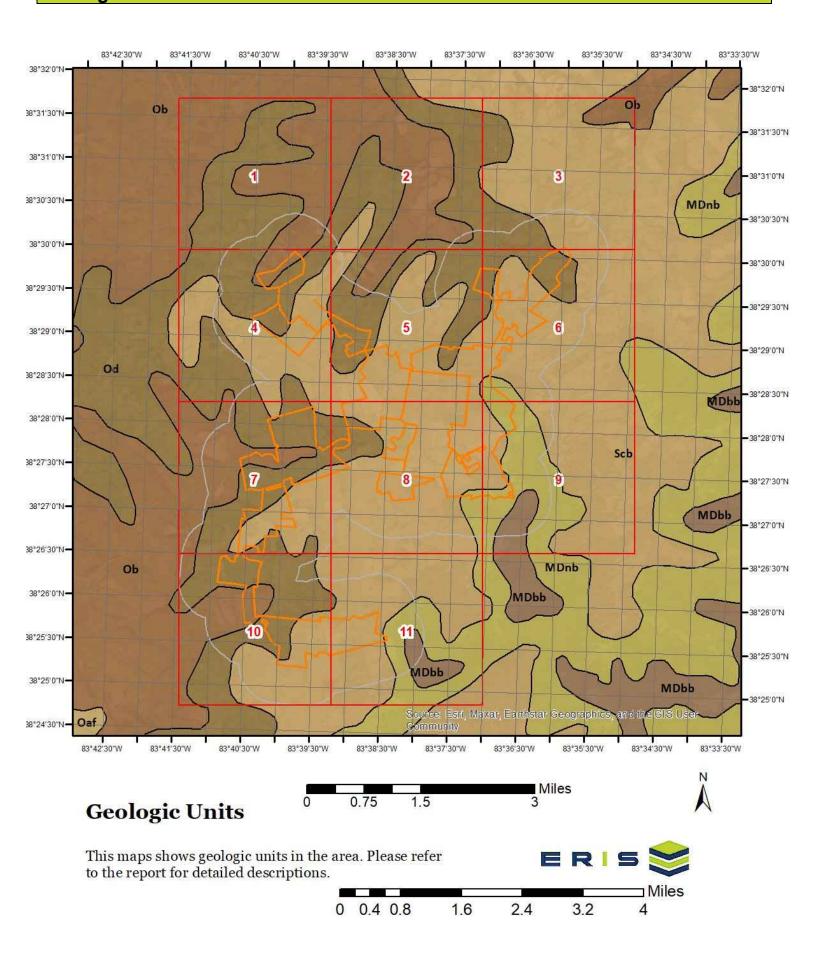
Flood Zone X-12

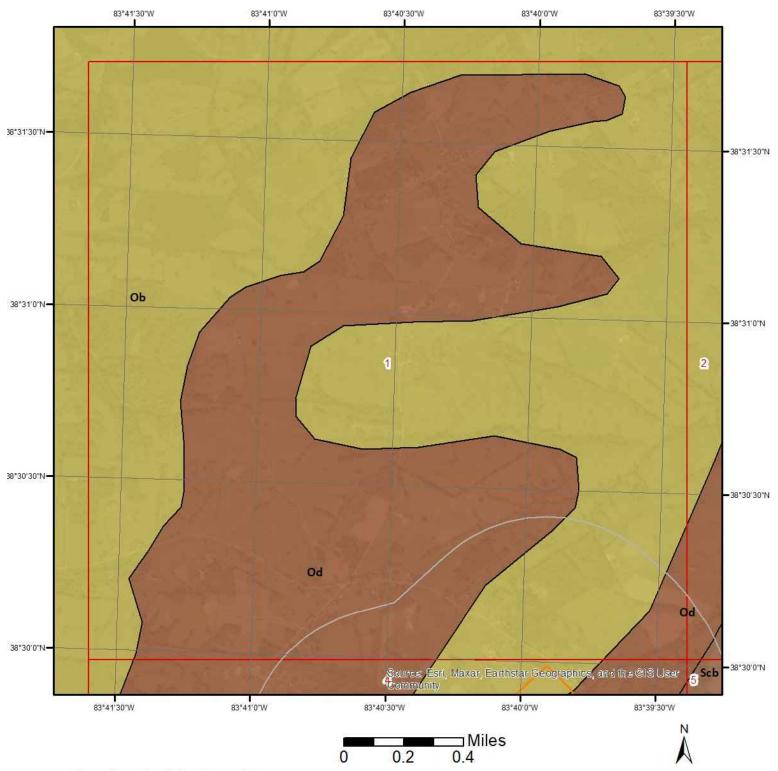
Zone subtype:

Zone: X

Zone subtype: AREA OF MINIMAL FLOOD HAZARD

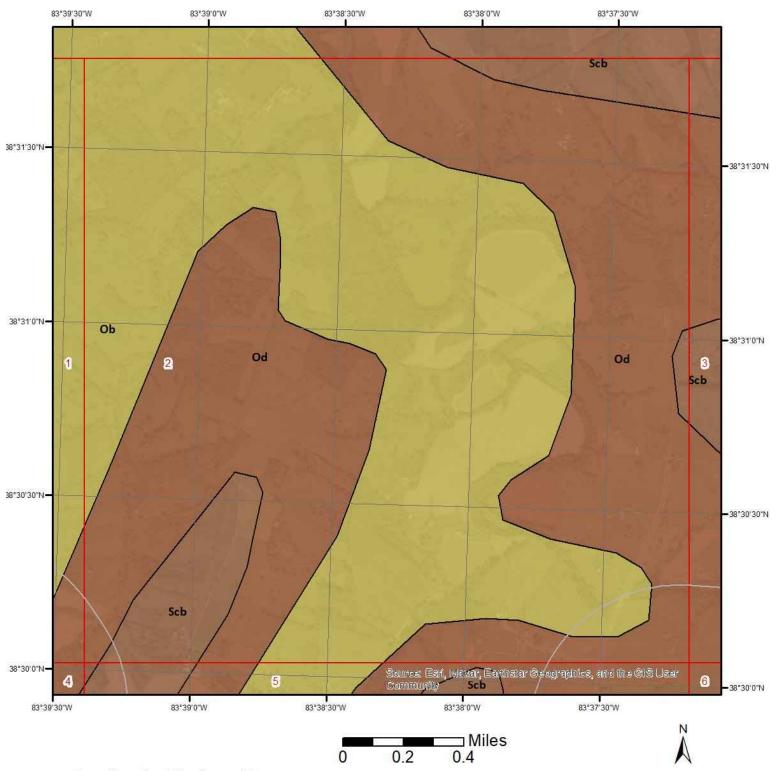
Order No: 23040300681p





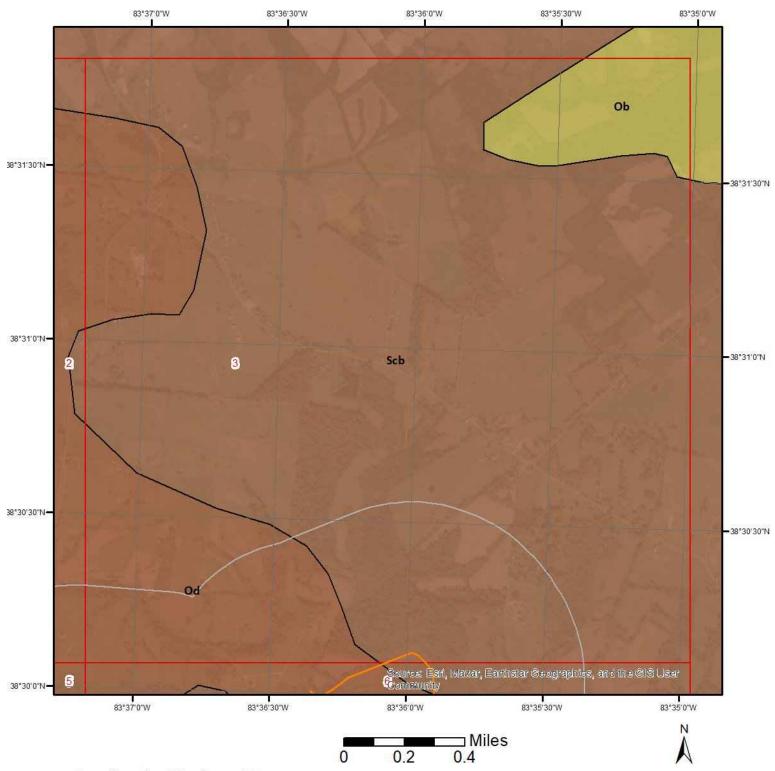
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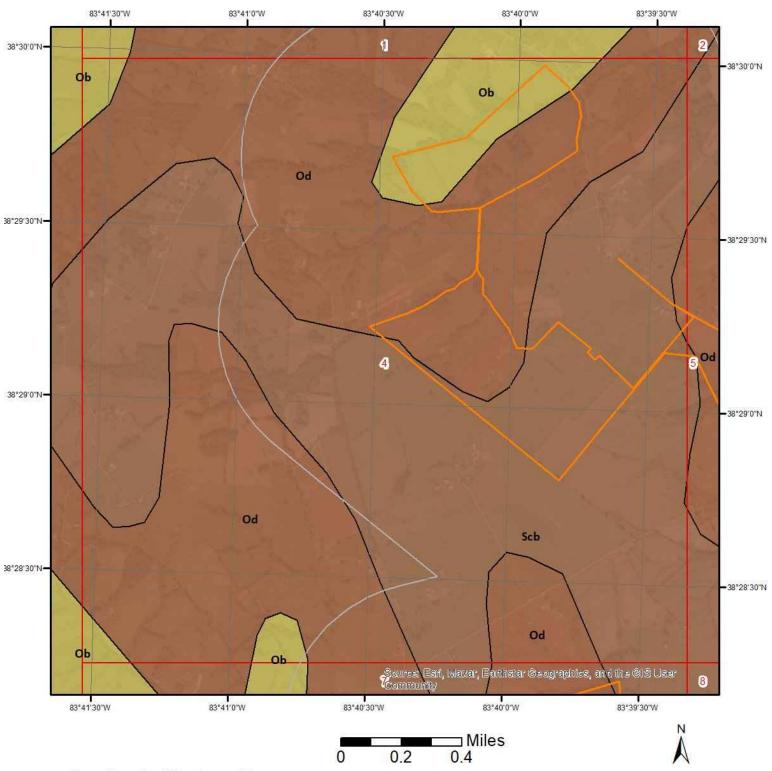
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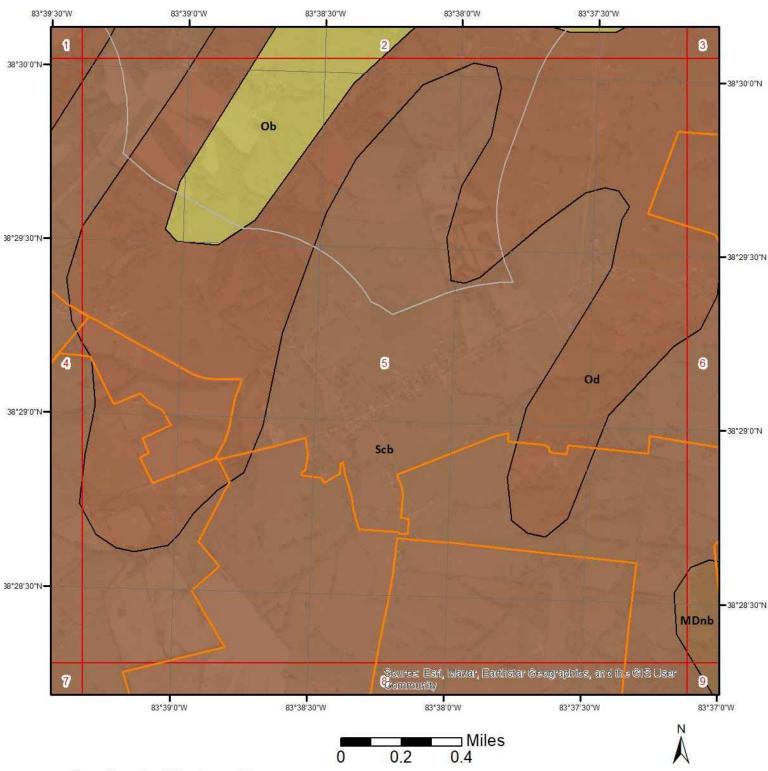
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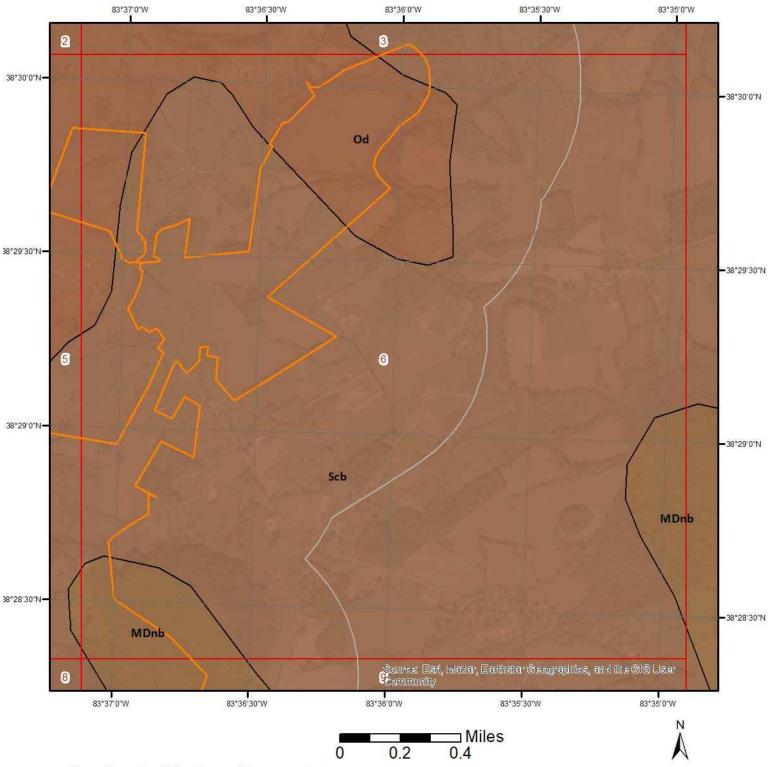
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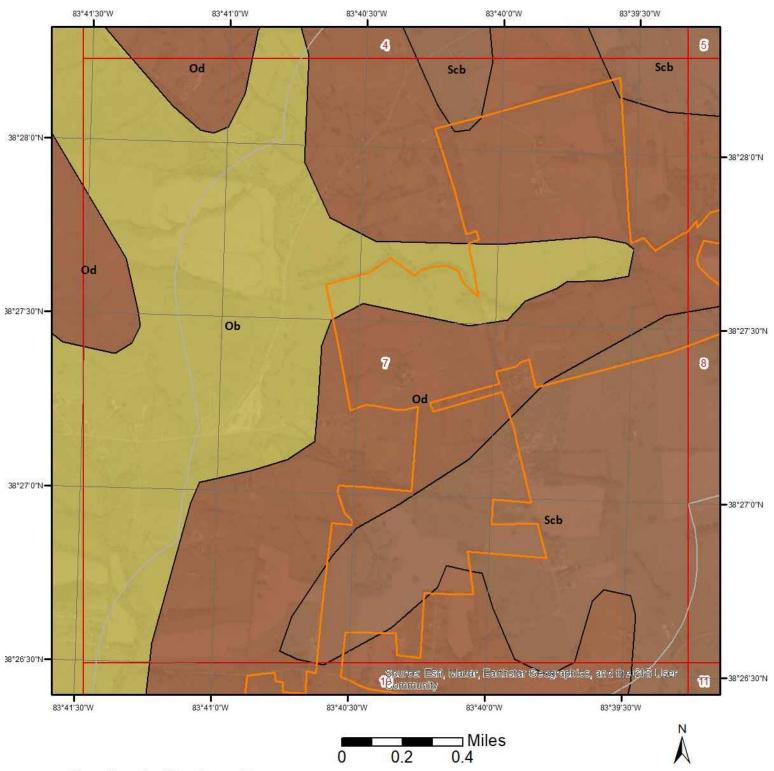
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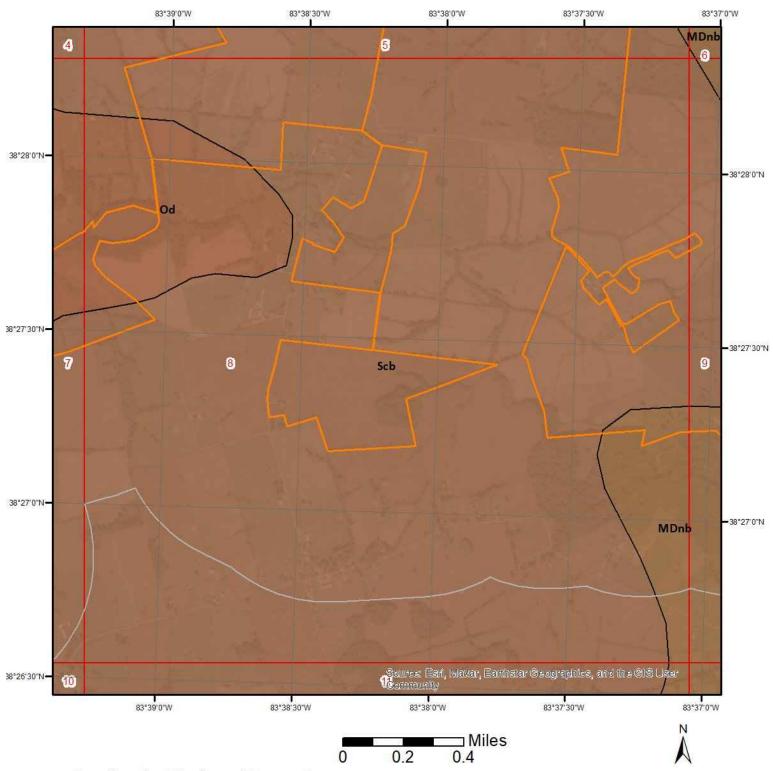
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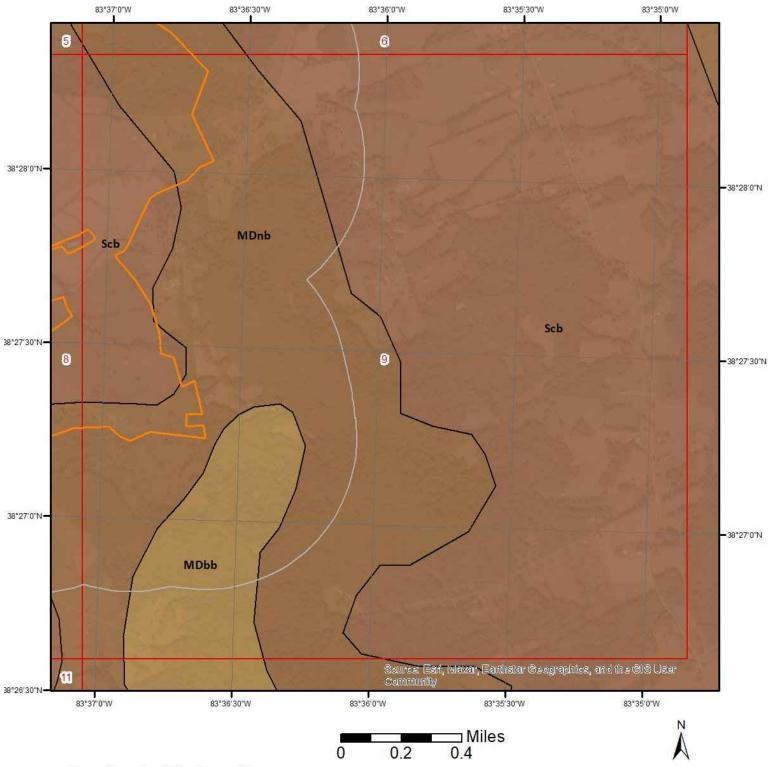
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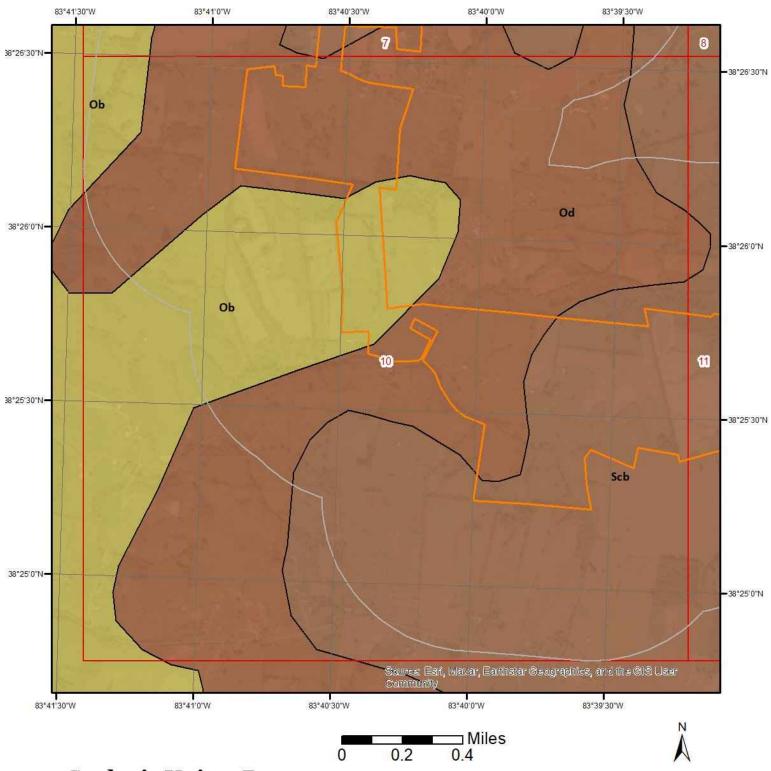
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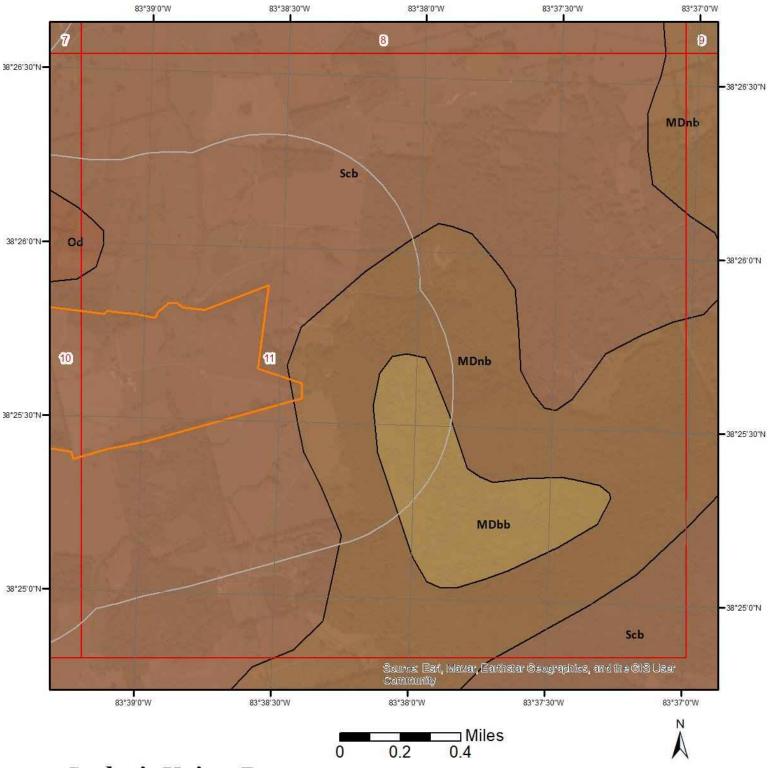
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The previous page shows USGS geology information. Detailed information about each unit is provided below.

Geologic Unit Ob

Unit Name: **Bull Fork Formation**

Unit Age: Ordovician Primary Rock Type: limestone Secondary Rock Type: shale

Unit Description: **Bull Fork Formation**

Geologic Unit Scb

Crab Orchard Formation and Brassfield Dolomite, undivided **Unit Name:**

Unit Age: Silurian Primary Rock Type: shale

Secondary Rock Type: dolostone (dolomite)

Unit Description: Crab Orchard Formation and Brassfield Dolomite, undivided; locally includes

Bisher Dolomite in Estill County

Geologic Unit MDnb

Unit Name: New Albany, Chattanooga, and Ohio Shales, Boyle Dolomite (Limestone), and

Sellersburg Limestone, undivided

Unit Age: Devonian to Mississippian

Primary Rock Type: black shale

Secondary Rock Type: dolostone (dolomite)

Unit Description: New Albany, Chattanooga, and Ohio Shales, Boyle Dolomite (Limestone), and

Sellersburg Limestone, undivided

Geologic Unit Od

Unit Name: **Drakes Formation**

Unit Age: Ordovician

Primary Rock Type: dolostone (dolomite)

Secondary Rock Type: shale

Drakes Formation Unit Description:

Geologic Unit MDbb

Unit Name: Wildie, Nada, Halls Gap, Holtsclaw Siltstone, Cowbell, Nancy, Kenwood

Siltstone, New Providence Shale, Sunbury Shale, Berea Sandstone, and Bedford Shale, undivided; Borden Formation locally includes Renfro Member

in eastern Kentucky

Unit Age: Devonian to Mississippian

shale Primary Rock Type: Secondary Rock Type: siltstone

Unit Description: Wildie, Nada, Halls Gap, Holtsclaw Siltstone, Cowbell, Nancy, Kenwood

Siltstone, New Providence Shale, Sunbury Shale, Berea Sandstone, and

Order No: 23040300681p

Bedford Shale, undivided; Borden Formation locally includes Renfro Member in eastern Kentucky

Geologic Unit MDbb

Unit Name: Wildie, Nada, Halls Gap, Holtsclaw Siltstone, Cowbell, Nancy, Kenwood

Siltstone, New Providence Shale, Sunbury Shale, Berea Sandstone, and Bedford Shale, undivided; Borden Formation locally includes Renfro Member

in eastern Kentucky

Unit Age: Devonian to Mississippian

Primary Rock Type: shale
Secondary Rock Type: siltstone

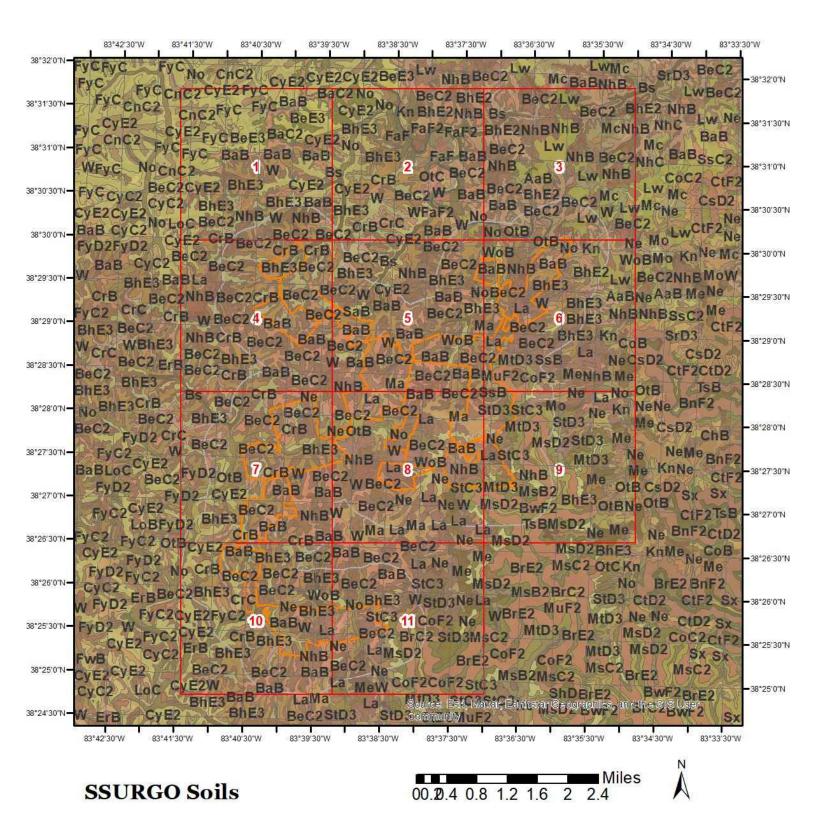
Unit Description: Wildie, Nada, Halls Gap, Holtsclaw Siltstone, Cowbell, Nancy, Kenwood

Siltstone, New Providence Shale, Sunbury Shale, Berea Sandstone, and Bedford Shale, undivided; Borden Formation locally includes Renfro Member

Order No: 23040300681p

in eastern Kentucky

Soil Information

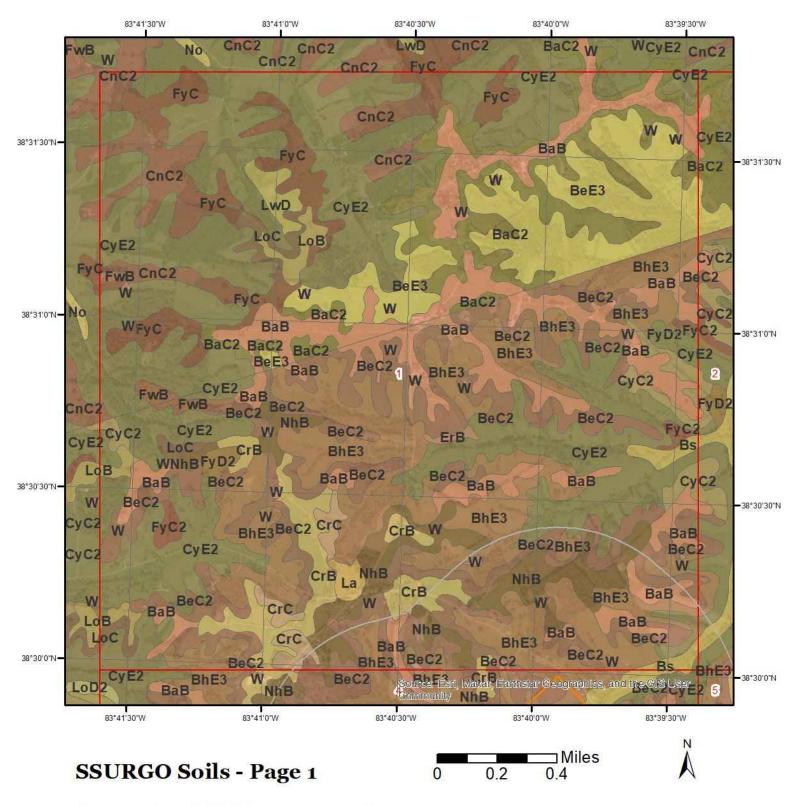


This maps shows SSURGO soil units around the target

property. Please refer to the report for detailed soil descriptions.



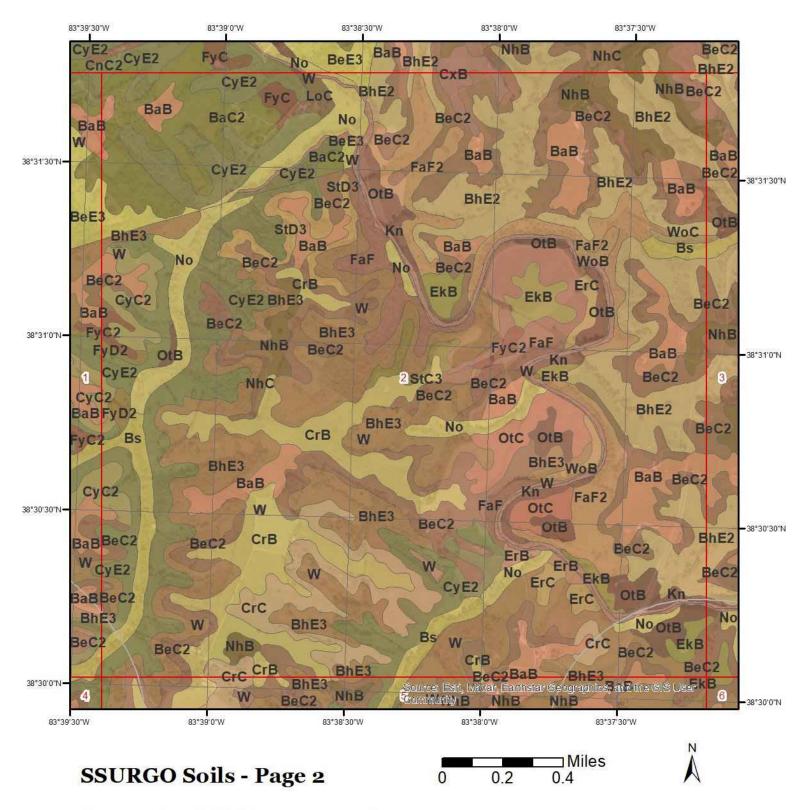
Soil Information



This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

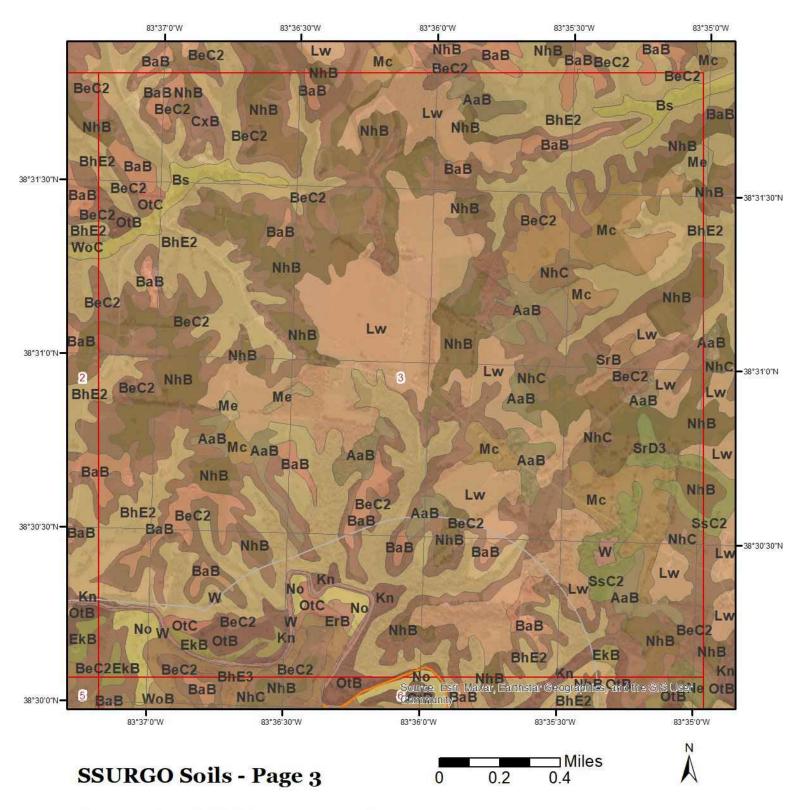


Soil Information

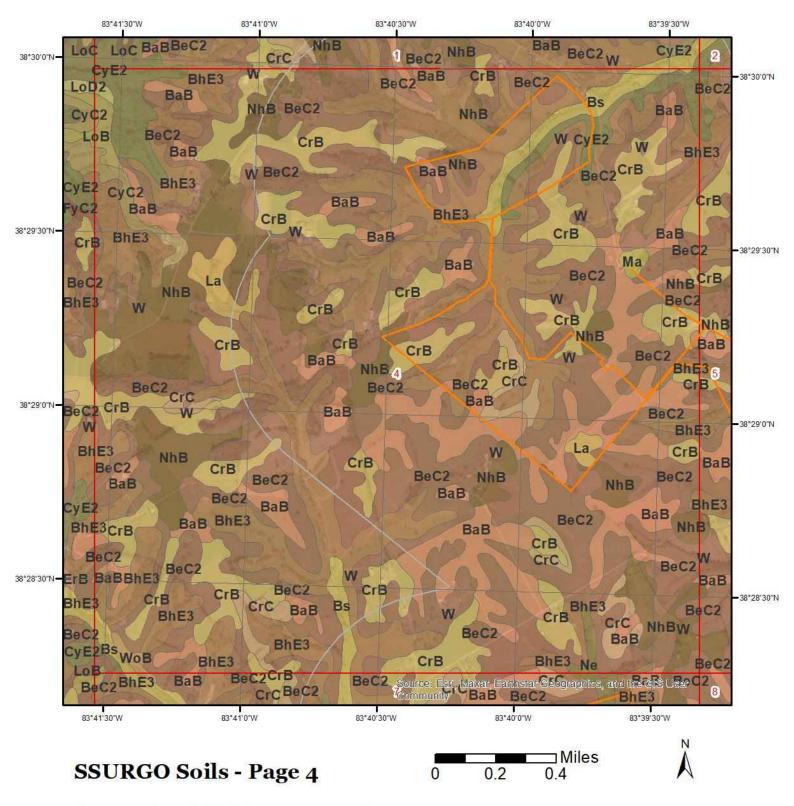


This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

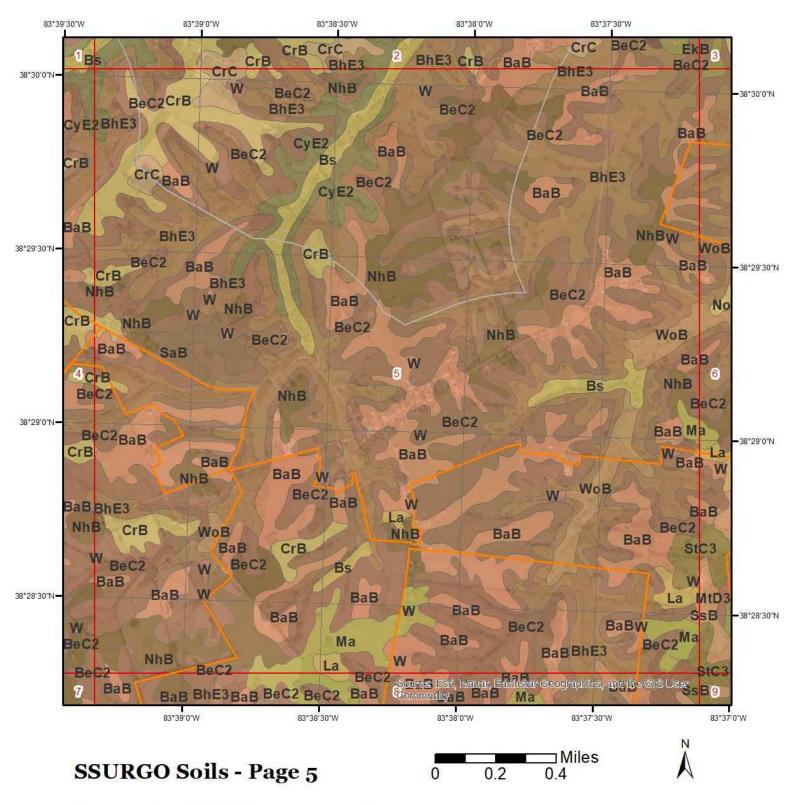




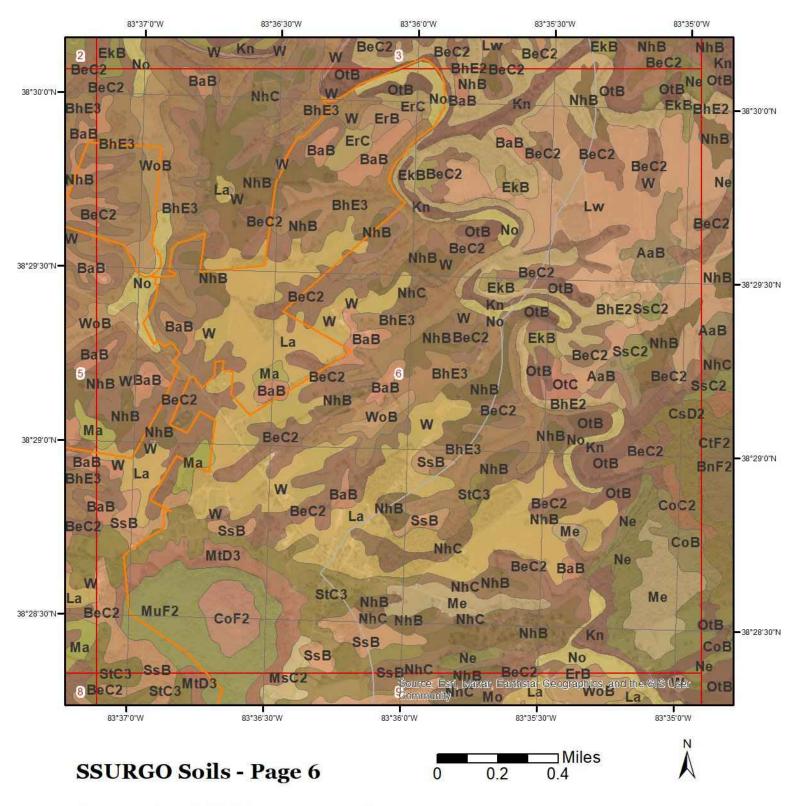




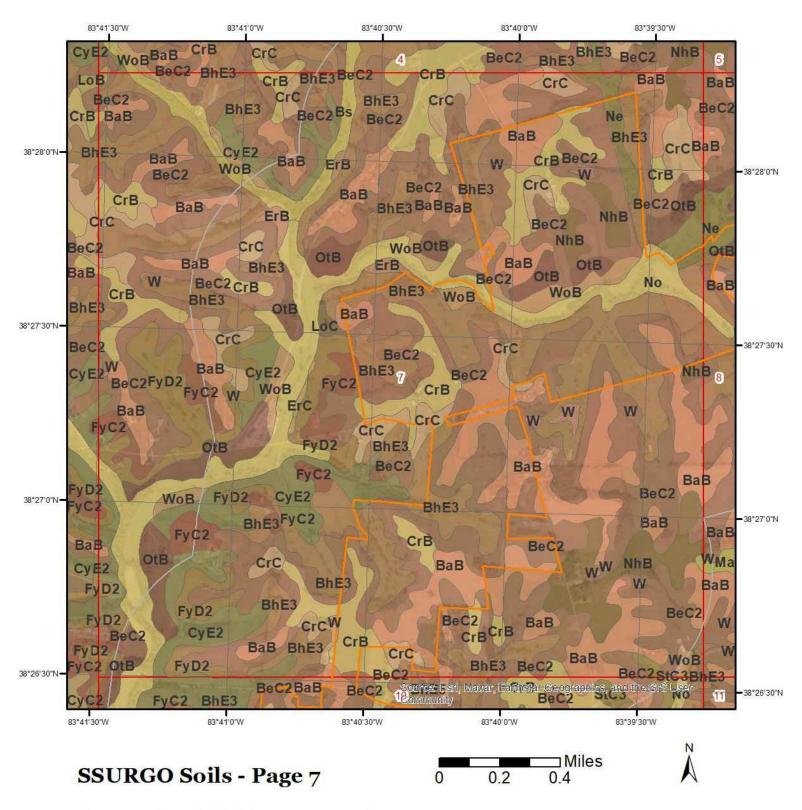




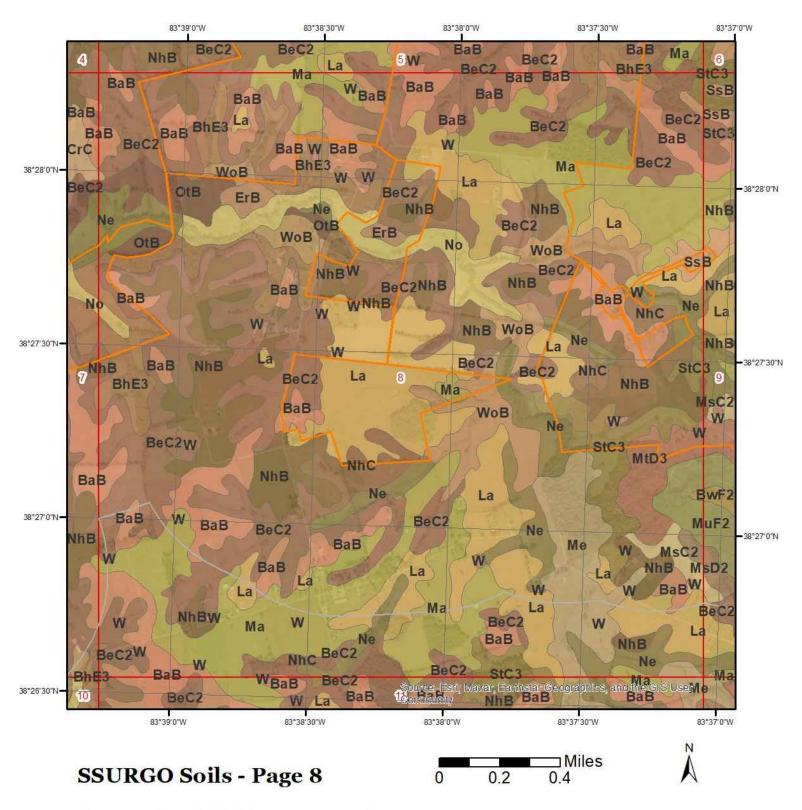




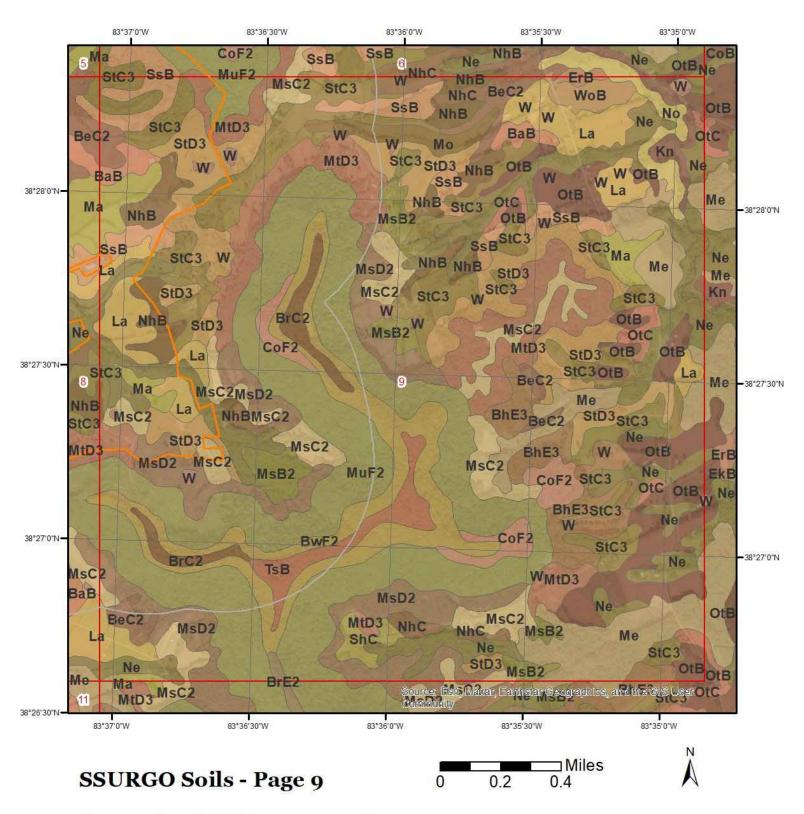




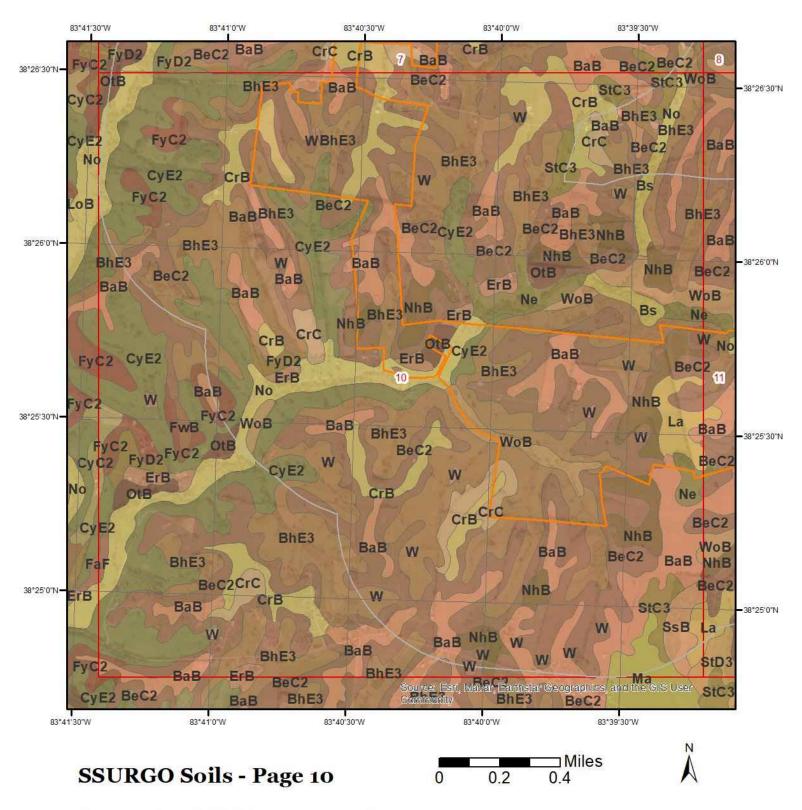




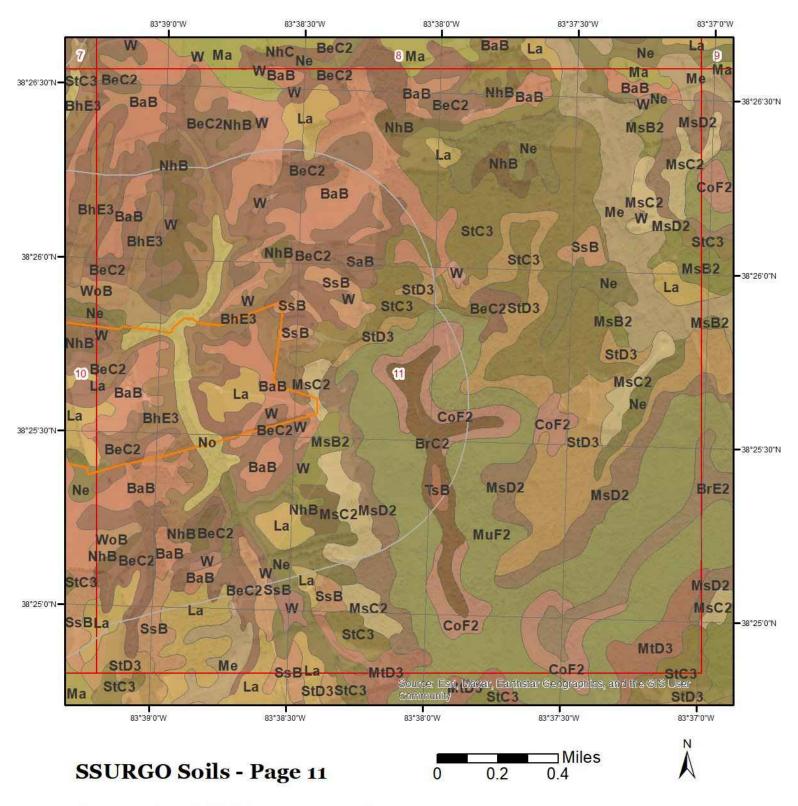














The previous page shows a soil map using SSURGO data from USDA Natural Resources Conservation Service. Detailed information about each unit is provided below.

Map Unit AaB (0.02%)

Map Unit Name: Aaron silt loam, 2 to 6 percent slopes

Bedrock Depth - Min: 135cm Watertable Depth - Annual Min: 71cm

Drainage Class - Dominant: Moderately well drained

Hydrologic Group - Dominant: D - Soils in this group have high runoff potential when thoroughly wet. Water

movement through the soil is restricted or very restricted.

Major components are printed below

Aaron(80%)

horizon H1(0cm to 20cm)

horizon H2(20cm to 114cm)

Clay

horizon H3(114cm to 135cm)

Clay

horizon R(135cm to 160cm)

Unweathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: AaB - Aaron silt loam, 2 to 6 percent slopes

Component: Aaron (80%)

The Aaron component makes up 80 percent of the map unit. Slopes are 2 to 6 percent. This component is on ridges on uplands. The parent material consists of clayey residuum weathered from calcareous shale. Depth to a root restrictive layer, bedrock, lithic, is 40 to 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 28 inches during January, February, March, November, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.

Component: Beasley (5%)

Generated brief soil descriptions are created for major components. The Beasley soil is a minor component.

Component: McGary (5%)

Generated brief soil descriptions are created for major components. The McGary soil is a minor component.

Component: Nicholson (5%)

Generated brief soil descriptions are created for major components. The Nicholson soil is a minor component.

Component: Lawrence (3%)

Generated brief soil descriptions are created for major components. The Lawrence soil is a minor component.

Component: Other soils (2%)

Generated brief soil descriptions are created for major components. The Other soils soil is a minor component.

Map Unit BaB (7.31%)

Map Unit Name: Beasley silt loam, 2 to 6 percent slopes

Bedrock Depth - Min: 107cm
Watertable Depth - Annual Min: null

Drainage Class - Dominant: Well drained

Hydrologic Group - Dominant: C - Soils in this group have moderately high runoff potential when thoroughly

wet. Water transmission through the soil is somewhat restricted.

Order No: 23040300681p

Major components are printed below

Beasley(85%)

horizon H1(0cm to 20cm)
Silt loam
horizon H2(20cm to 84cm)
Silty clay
horizon H3(84cm to 107cm)
Clay

horizon Cr(107cm to 135cm) Weathered bedrock horizon R(135cm to 160cm) Unweathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: BaB - Beasley silt loam, 2 to 6 percent slopes

Component: Beasley (85%)

The Beasley component makes up 85 percent of the map unit. Slopes are 2 to 6 percent. This component is on ridges on uplands. The parent material consists of clayey residuum weathered from calcareous shale. Depth to a root restrictive layer, bedrock, paralithic, is 40 to 54 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 12 percent.

Component: Nicholson (5%)

Generated brief soil descriptions are created for major soil components. The Nicholson soil is a minor component.

Component: Faywood (5%)

Generated brief soil descriptions are created for major soil components. The Faywood soil is a minor component.

Component: Shrouts (5%)

Generated brief soil descriptions are created for major soil components. The Shrouts soil is a minor component.

Map Unit BeC2 (18.45%)

Map Unit Name: Beasley silt loam, 6 to 12 percent slopes, rocky, eroded

Bedrock Depth - Min: 107cm Watertable Depth - Annual Min: null

Drainage Class - Dominant: Well drained

Hydrologic Group - Dominant: C - Soils in this group have moderately high runoff potential when thoroughly

wet. Water transmission through the soil is somewhat restricted.

Order No: 23040300681p

Major components are printed below

Beasley(85%)

horizon H1(0cm to 13cm)
Silt loam
horizon H2(13cm to 76cm)
Silty clay
horizon H3(76cm to 107cm)
Clay

horizon Cr(107cm to 135cm) Weathered bedrock horizon R(135cm to 160cm) Unweathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: BeC2 - Beasley silt loam, 6 to 12 percent slopes, rocky, eroded

Component: Beasley (85%)

The Beasley component makes up 85 percent of the map unit. Slopes are 6 to 12 percent. This component is on ridges on uplands. The parent material consists of clayey residuum weathered from calcareous shale and/or dolomite. Depth to a root restrictive layer, bedrock, paralithic, is 40 to 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the

surface horizon is about 2 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 12 percent.

Component: Shrouts (5%)

Generated brief soil descriptions are created for major components. The Shrouts soil is a minor component.

Component: Nicholson (4%)

Generated brief soil descriptions are created for major components. The Nicholson soil is a minor component.

Component: McGary (3%)

Generated brief soil descriptions are created for major components. The McGary soil is a minor component.

Component: Other soils (2%)

Generated brief soil descriptions are created for major components. The Other soils soil is a minor component.

Component: Rock outcrop (1%)

Generated brief soil descriptions are created for major components. The Rock outcrop soil is a minor component.

Map Unit BhE2 (1.58%)

Map Unit Name: Beasley-Shrouts complex, 12 to 30 percent slopes, very rocky, eroded

Bedrock Depth - Min: 76cm Watertable Depth - Annual Min: null

Drainage Class - Dominant: Well drained

Hydrologic Group - Dominant: C - Soils in this group have moderately high runoff potential when thoroughly

wet. Water transmission through the soil is somewhat restricted.

Order No: 23040300681p

Major components are printed below

Beasley(40%)

horizon H1(0cm to 13cm)
Silt loam
horizon H2(13cm to 76cm)
Silty clay
horizon H3(76cm to 107cm)
Clay

horizon Cr(107cm to 135cm) Weathered bedrock horizon R(135cm to 160cm) Unweathered bedrock

Shrouts(35%)

horizon H1(0cm to 8cm) Silty clay loam

horizon H2(8cm to 51cm) Clay horizon H3(51cm to 76cm) Clay

horizon Cr(76cm to 102cm) Weathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: BhE2 - Beasley-Shrouts complex, 12 to 30 percent slopes, very rocky, eroded

Component: Beasley (40%)

The Beasley component makes up 40 percent of the map unit. Slopes are 12 to 30 percent. This component is on hills on uplands. The parent material consists of clayey residuum weathered from calcareous shale and/or dolomite. Depth to a root restrictive layer, bedrock, paralithic, is 40 to 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 12 percent.

Component: Shrouts (35%)

The Shrouts component makes up 35 percent of the map unit. Slopes are 12 to 30 percent. This component is on hills on uplands. The parent material consists of clayey residuum weathered from calcareous shale and/or dolomite. Depth to a root restrictive layer, bedrock, paralithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2

percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 13 percent.

Component: Woolper (8%)

Generated brief soil descriptions are created for major components. The Woolper soil is a minor component.

Component: Rock outcrop (7%)

Generated brief soil descriptions are created for major components. The Rock outcrop soil is a minor component.

Component: Other soils (5%)

Generated brief soil descriptions are created for major components. The Other soils soil is a minor component.

Component: Boonesboro (4%)

Generated brief soil descriptions are created for major components. The Boonesboro soil is a minor component.

Component: Nolin (1%)

Generated brief soil descriptions are created for major components. The Nolin soil is a minor component.

Map Unit BhE3 (11.34%)

Map Unit Name: Beasley-Shrouts complex, rocky, 12 to 30 percent slopes, severely eroded

Bedrock Depth - Min: 89cm Watertable Depth - Annual Min: null

Drainage Class - Dominant: Well drained

Hydrologic Group - Dominant: C - Soils in this group have moderately high runoff potential when thoroughly

wet. Water transmission through the soil is somewhat restricted.

Order No: 23040300681p

Major components are printed below

Beasley(50%)

horizon H1(0cm to 10cm) Silty clay loam

horizon H2(10cm to 66cm) Clay horizon H3(66cm to 137cm) Clay

horizon Cr(137cm to 168cm) Weathered bedrock

Shrouts(40%)

horizon H1(0cm to 10cm) Silty clay horizon H2(10cm to 69cm) Clay

horizon H3(69cm to 89cm) Channery clay horizon Cr(89cm to 114cm) Weathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: BhE3 - Beasley-Shrouts complex, rocky, 12 to 30 percent slopes, severely eroded

Component: Beasley (50%)

The Beasley, severely eroded component makes up 50 percent of the map unit. Slopes are 12 to 30 percent. This component is on hills on uplands. The parent material consists of clayey residuum weathered from limestone and/or interbedded calcareous shale. Depth to a root restrictive layer, bedrock, paralithic, is 40 to 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 12 percent.

Component: Shrouts (40%)

The Shrouts, severely eroded component makes up 40 percent of the map unit. Slopes are 12 to 30 percent. This component is on hills on uplands. The parent material consists of clayey residuum weathered from calcareous shale. Depth to a root restrictive layer, bedrock, paralithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria. The calcium carbonate equivalent

within 40 inches, typically, does not exceed 13 percent.

Component: Other soils (10%)

Generated brief soil descriptions are created for major components. The Other soils soil is a minor component.

Map Unit BrC2 (0.26%)

Map Unit Name: Blairton silt loam, 6 to 12 percent slopes, eroded

Bedrock Depth - Min: 69cm Watertable Depth - Annual Min: 36cm

Drainage Class - Dominant: Moderately well drained

Hydrologic Group - Dominant: C/D - These soils have moderately high runoff potential when drained and high

runoff potential when undrained.

Major components are printed below

Blairton(85%)

horizon H1(0cm to 15cm)

horizon H2(15cm to 46cm)

horizon H3(46cm to 69cm)

horizon Cr(69cm to 94cm)

Silt loam

Channery silt loam

Weathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: BrC2 - Blairton silt loam, 6 to 12 percent slopes, eroded

Component: Blairton (85%)

The Blairton, eroded component makes up 85 percent of the map unit. Slopes are 6 to 12 percent. This component is on ridges on hills. The parent material consists of fine-loamy residuum weathered from shale. Depth to a root restrictive layer, bedrock, paralithic, is 20 to 40 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 16 inches during January, February, March, November, December. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria.

Component: Tilsit (5%)

Generated brief soil descriptions are created for major soil components. The Tilsit soil is a minor component.

Component: Wharton (5%)

Generated brief soil descriptions are created for major soil components. The Wharton soil is a minor component.

Component: Berks (5%)

Generated brief soil descriptions are created for major soil components. The Berks soil is a minor component.

Map Unit Bs (0.82%)

Map Unit Name: Boonesboro silt loam, frequently flooded

Bedrock Depth - Min: 84cm Watertable Depth - Annual Min: null

Drainage Class - Dominant: Well drained

Hydrologic Group - Dominant: C - Soils in this group have moderately high runoff potential when thoroughly

wet. Water transmission through the soil is somewhat restricted.

Order No: 23040300681p

Major components are printed below

Boonesboro(90%)

horizon H1(0cm to 51cm) Silt loam

horizon H2(51cm to 84cm)

horizon R(84cm to 109cm)

Very gravelly silt loam
Unweathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: Bs - Boonesboro silt loam, frequently flooded

Component: Boonesboro (90%)

The Boonesboro, frequently flooded component makes up 90 percent of the map unit. Slopes are 0 to 3 percent. This component is on flood plains on valleys. The parent material consists of mixed fine-loamy alluvium. Depth to a root restrictive layer, bedrock, lithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 4 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.

Component: Other soils (4%)

Generated brief soil descriptions are created for major components. The Other soils soil is a minor component.

Component: Nolin (2%)

Generated brief soil descriptions are created for major components. The Nolin soil is a minor component.

Component: Newark (2%)

Generated brief soil descriptions are created for major components. The Newark soil is a minor component.

Component: Woolper (2%)

Generated brief soil descriptions are created for major components. The Woolper soil is a minor component.

Map Unit BwF2 (0.52%)

Map Unit Name: Brownsville-Berks complex, very rocky, 20 to 55 percent slopes, eroded

Bedrock Depth - Min: 84cm Watertable Depth - Annual Min: null

Drainage Class - Dominant: Well drained

Hydrologic Group - Dominant: A - Soils in this group have low runoff potential when thoroughly wet. Water is

transmitted freely through the soil.

Major components are printed below

Brownsville(50%)

horizon H1(0cm to 10cm)

horizon H2(10cm to 48cm)

horizon H3(48cm to 137cm)

horizon R(137cm to 162cm)

Channery silt loam

Very channery silt loam

Extremely channery silt loam

Unweathered bedrock

Berks(40%)

horizon H1(0cm to 10cm) Very channery silt loam

horizon H2(10cm to 69cm) Channery loam horizon H3(69cm to 84cm) Silty clay

horizon R(84cm to 109cm)

Unweathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: BwF2 - Brownsville-Berks complex, very rocky, 20 to 55 percent slopes, eroded

Component: Brownsville (50%)

The Brownsville component makes up 50 percent of the map unit. Slopes are 20 to 55 percent. This component is on hills on uplands. The parent material consists of loamy colluvium derived from sandstone. Depth to a root restrictive layer, bedrock, lithic, is 40 to 72 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.

Order No: 23040300681p

Component: Berks (40%)

The Berks component makes up 40 percent of the map unit. Slopes are 20 to 55 percent. This component is on hills on uplands. The parent material consists of loamy residuum weathered from sandstone. Depth to a root restrictive layer, bedrock, lithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.

Component: Blairton (3%)

Generated brief soil descriptions are created for major components. The Blairton soil is a minor component.

Component: Shelocta (3%)

Generated brief soil descriptions are created for major components. The Shelocta soil is a minor component.

Component: Wharton (2%)

Generated brief soil descriptions are created for major components. The Wharton soil is a minor component.

Component: Other soils (2%)

Generated brief soil descriptions are created for major components. The Other soils soil is a minor component.

Map Unit CoF2 (0.26%)

Map Unit Name: Colyer-Trappist complex, 12 to 55 percent slopes, eroded

Bedrock Depth - Min: 43cm Watertable Depth - Annual Min: null

Drainage Class - Dominant: Well drained

Hydrologic Group - Dominant: D - Soils in this group have high runoff potential when thoroughly wet. Water

movement through the soil is restricted or very restricted.

Order No: 23040300681p

Major components are printed below

Colyer(40%)

horizon H1(0cm to 5cm)
Channery silty clay loam
horizon H2(5cm to 25cm)
Very channery clay
horizon H3(25cm to 43cm)
Extremely channery clay
horizon R(43cm to 68cm)
Unweathered bedrock

Trappist(40%)

horizon H1(0cm to 15cm) Silt loam horizon H2(15cm to 58cm) Clay

horizon H3(58cm to 89cm) Channery clay

horizon R(89cm to 114cm)

Unweathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: CoF2 - Colyer-Trappist complex, 12 to 55 percent slopes, eroded

Component: Colyer (41%)

The Colyer component makes up 41 percent of the map unit. Slopes are 12 to 55 percent. This component is on conical knobs on uplands. The parent material consists of clayey residuum weathered from acid shale. Depth to a root restrictive layer, bedrock, lithic, is 8 to 20 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.

Component: Trappist (39%)

The Trappist component makes up 39 percent of the map unit. Slopes are 12 to 55 percent. This component is on conical knobs on uplands. The parent material consists of clayey residuum weathered from acid shale. Depth to a root restrictive layer, bedrock, lithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent.

Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.

Component: Muse (4%)

Generated brief soil descriptions are created for major components. The Muse soil is a minor component.

Component: Blairton (4%)

Generated brief soil descriptions are created for major components. The Blairton soil is a minor component.

Component: Other soils (4%)

Generated brief soil descriptions are created for major components. The Other soils soil is a minor component.

Component: Brownsville (4%)

Generated brief soil descriptions are created for major components. The Brownsville soil is a minor component.

Component: Berks (4%)

Generated brief soil descriptions are created for major components. The Berks soil is a minor component.

Map Unit CrB (3.11%)

Map Unit Name: Crider silt loam, 2 to 6 percent slopes

Bedrock Depth - Min: null
Watertable Depth - Annual Min: null

Drainage Class - Dominant: Well drained

Hydrologic Group - Dominant: B - Soils in this group have moderately low runoff potential when thoroughly

wet. Water transmission through the soil is unimpeded.

Major components are printed below

Crider(90%)

horizon H1(0cm to 20cm)
Silt loam
horizon H2(20cm to 76cm)
Silty clay loam
horizon H3(76cm to 244cm)
Silty clay

Component Description:

Minor map unit components are excluded from this report.

Map Unit: CrB - Crider silt loam, 2 to 6 percent slopes

Component: Crider (85%)

The Crider component makes up 85 percent of the map unit. Slopes are 2 to 6 percent. This component is on ridges on karst uplands. The parent material consists of fine-silty noncalcareous loess over clayey residuum weathered from limestone. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.

Component: Nicholson (5%)

Generated brief soil descriptions are created for major soil components. The Nicholson soil is a minor component.

Component: Sandview (5%)

Generated brief soil descriptions are created for major soil components. The Sandview soil is a minor component.

Component: Nolin (3%)

Generated brief soil descriptions are created for major soil components. The Nolin soil is a minor component.

Component: Beasley (2%)

Generated brief soil descriptions are created for major soil components. The Beasley soil is a minor component.

Map Unit CrC (0.64%)

Map Unit Name: Crider silt loam, 6 to 12 percent slopes

Bedrock Depth - Min: null Watertable Depth - Annual Min: null

Drainage Class - Dominant: Well drained

Hydrologic Group - Dominant: B - Soils in this group have moderately low runoff potential when thoroughly

wet. Water transmission through the soil is unimpeded.

Major components are printed below

Crider(90%)

horizon H1(0cm to 20cm)

horizon H2(20cm to 76cm)

Silty clay loam

horizon H3(76cm to 244cm)

Silty clay

Component Description:

Minor map unit components are excluded from this report.

Map Unit: CrC - Crider silt loam, 6 to 12 percent slopes

Component: Crider (85%)

The Crider component makes up 85 percent of the map unit. Slopes are 6 to 12 percent. This component is on hills on karst uplands. The parent material consists of fine-silty noncalcareous loess over clayey residuum weathered from limestone. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria.

Component: Sandview (5%)

Generated brief soil descriptions are created for major soil components. The Sandview soil is a minor component.

Component: Nicholson (5%)

Generated brief soil descriptions are created for major soil components. The Nicholson soil is a minor component.

Component: Nolin (3%)

Generated brief soil descriptions are created for major soil components. The Nolin, ponded soil is a minor component.

Component: Beasley (2%)

Generated brief soil descriptions are created for major soil components. The Beasley soil is a minor component.

Map Unit CyE2 (3.84%)

Map Unit Name: Cynthiana-Faywood complex, very rocky, 12 to 35 percent slopes, eroded

Bedrock Depth - Min: 46cm Watertable Depth - Annual Min: null

Drainage Class - Dominant: Well drained

Hydrologic Group - Dominant: D - Soils in this group have high runoff potential when thoroughly wet. Water

movement through the soil is restricted or very restricted.

Order No: 23040300681p

Major components are printed below

Cynthiana(60%)

horizon H1(0cm to 5cm)
Silty clay loam
horizon H2(5cm to 46cm)
Horizon R(46cm to 71cm)
Flaggy silty clay
Unweathered bedrock

Faywood(30%)

horizon H1(0cm to 13cm) Silt loam horizon H2(13cm to 86cm) Clay

horizon R(86cm to 111cm)

Unweathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: CyE2 - Cynthiana-Faywood complex, very rocky, 12 to 35 percent slopes, eroded

Component: Cynthiana (60%)

The Cynthiana component makes up 60 percent of the map unit. Slopes are 12 to 35 percent. This component is on hills on karst uplands. The parent material consists of clayey residuum weathered from limestone. Depth to a root restrictive layer, bedrock, lithic, is 10 to 20 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 7s. This soil does not meet hydric criteria.

Component: Faywood (30%)

The Faywood component makes up 30 percent of the map unit. Slopes are 12 to 35 percent. This component is on hills on karst uplands. The parent material consists of clayey residuum weathered from limestone. Depth to a root restrictive layer, bedrock, lithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria.

Component: Beasley (2%)

Generated brief soil descriptions are created for major components. The Beasley soil is a minor component.

Component: Other soils (2%)

Generated brief soil descriptions are created for major components. The Other soils soil is a minor component.

Component: Woolper (2%)

Generated brief soil descriptions are created for major components. The Woolper soil is a minor component.

Component: Shrouts (2%)

Generated brief soil descriptions are created for major components. The Shrouts soil is a minor component.

Component: Fairmount (2%)

Generated brief soil descriptions are created for major components. The Fairmount soil is a minor component.

Map Unit EkB (0.13%)

Map Unit Name: Elk silt loam, 2 to 8 percent slopes

Bedrock Depth - Min: null
Watertable Depth - Annual Min: null

Drainage Class - Dominant: Well drained

Hydrologic Group - Dominant: B - Soils in this group have moderately low runoff potential when thoroughly

wet. Water transmission through the soil is unimpeded.

Order No: 23040300681p

Major components are printed below

Elk(80%)

horizon H1(0cm to 20cm)
Silt loam
horizon H2(20cm to 168cm)
Silt loam
horizon H3(168cm to 190cm)
Clay

Component Description:

Minor map unit components are excluded from this report.

Map Unit: EkB - Elk silt loam, 2 to 8 percent slopes

Component: Elk (80%)

The Elk component makes up 80 percent of the map unit. Slopes are 2 to 8 percent. This component is on stream terraces on river valleys. The parent material consists of fine-silty alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.

Component: Other soils (4%)

Generated brief soil descriptions are created for major components. The Other soils soil is a minor component.

Component: Haymond (4%)

Generated brief soil descriptions are created for major components. The Haymond soil is a minor component.

Component: Morehead (4%)

Generated brief soil descriptions are created for major components. The Morehead soil is a minor component.

Component: Otwell (4%)

Generated brief soil descriptions are created for major components. The Otwell soil is a minor component.

Component: Shelocta (4%)

Generated brief soil descriptions are created for major components. The Shelocta soil is a minor component.

Map Unit ErB (0.18%)

Map Unit Name: Elk silt loam, 2 to 6 percent slopes, rarely flooded

Bedrock Depth - Min: null Watertable Depth - Annual Min: null

Drainage Class - Dominant: Well drained

Hydrologic Group - Dominant: B - Soils in this group have moderately low runoff potential when thoroughly

wet. Water transmission through the soil is unimpeded.

Order No: 23040300681p

Major components are printed below

Elk(90%)

horizon Ap(0cm to 20cm)

horizon BA(20cm to 38cm)

horizon Bt(38cm to 117cm)

horizon 2C(117cm to 203cm)

Silt loam

Silty clay loam

Silty clay loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: ErB - Elk silt loam, 2 to 6 percent slopes, rarely flooded

Component: Elk (90%)

The Elk, rarely flooded component makes up 90 percent of the map unit. Slopes are 2 to 6 percent. This component is on stream terraces on river valleys. The parent material consists of mixed fine-silty alluvium over mixed loamy alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is rarely flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.

Component: Otwood (5%)

Generated brief soil descriptions are created for major soil components. The Otwood, rarely flooded soil is a minor component.

Component: Lawrence (3%)

Generated brief soil descriptions are created for major soil components. The Lawrence, rarely flooded soil is a minor component.

Component: Nolin (2%)

Generated brief soil descriptions are created for major soil components. The Nolin, occasionally flooded soil is a minor component.

Map Unit ErC (0.07%)

Map Unit Name: Elk silt loam, 6 to 12 percent slopes, rarely flooded

Bedrock Depth - Min: null
Watertable Depth - Annual Min: null

Drainage Class - Dominant: Well drained

Hydrologic Group - Dominant: B - Soils in this group have moderately low runoff potential when thoroughly

wet. Water transmission through the soil is unimpeded.

Major components are printed below

Elk(90%)

horizon Ap(0cm to 20cm)

horizon BA(20cm to 38cm)

horizon Bt(38cm to 117cm)

horizon 2C(117cm to 203cm)

Silt loam

Silty clay loam

Silty clay loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: ErC - Elk silt loam, 6 to 12 percent slopes, rarely flooded

Component: Elk (90%)

The Elk, rarely flooded component makes up 90 percent of the map unit. Slopes are 6 to 12 percent. This component is on stream terraces on river valleys. The parent material consists of mixed fine-silty alluvium over mixed loamy alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is rarely flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria.

Component: Otwood (5%)

Generated brief soil descriptions are created for major soil components. The Otwood, rarely flooded soil is a minor component.

Component: Allegheny (3%)

Generated brief soil descriptions are created for major soil components. The Allegheny soil is a minor component.

Component: Nolin (2%)

Generated brief soil descriptions are created for major soil components. The Nolin, occasionally flooded soil is a minor component.

Map Unit FyC2 (0.33%)

Map Unit Name: Faywood-Lowell silt loams, 6 to 12 percent slopes, eroded

Bedrock Depth - Min: 86cm Watertable Depth - Annual Min: null

Drainage Class - Dominant: Well drained

Hydrologic Group - Dominant: C - Soils in this group have moderately high runoff potential when thoroughly

wet. Water transmission through the soil is somewhat restricted.

Order No: 23040300681p

Major components are printed below

Faywood(55%)

horizon H1(0cm to 13cm) Silt loam horizon H2(13cm to 86cm) Clay

horizon R(86cm to 111cm)

Unweathered bedrock

Lowell(25%)

horizon H1(0cm to 13cm)
Silt loam
horizon H2(13cm to 58cm)
Silty clay loam

horizon H3(58cm to 152cm) Clay

Map Unit FyD2 (0.59%)

Map Unit Name: Faywood-Lowell silt loams, 12 to 20 percent slopes, eroded

Bedrock Depth - Min: 86cm Watertable Depth - Annual Min: null

Drainage Class - Dominant: Well drained

Hydrologic Group - Dominant: C - Soils in this group have moderately high runoff potential when thoroughly

wet. Water transmission through the soil is somewhat restricted.

Major components are printed below

Faywood(45%)

horizon H1(0cm to 13cm) Silt loam horizon H2(13cm to 86cm) Clay

horizon R(86cm to 111cm)

Unweathered bedrock

Lowell(40%)

horizon H1(0cm to 13cm)
Silt loam
horizon H2(13cm to 58cm)
Silty clay loam

horizon H3(58cm to 152cm) Clay

Map Unit Kn (0.24%)

Map Unit Name: Kinnick silt loam, occasionally flooded

Bedrock Depth - Min:

Watertable Depth - Annual Min:

Drainage Class - Dominant:

Mell drained

Hydrologic Group - Dominant:

B - Soils in this group have moderately low runoff potential when thoroughly

wet. Water transmission through the soil is unimpeded.

Order No: 23040300681p

Major components are printed below

Kinnick(85%)

horizon H1(0cm to 23cm)
Silt loam
horizon H2(23cm to 140cm)
Silt loam
horizon H3(140cm to 193cm)
Silt loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: Kn - Kinnick silt loam, occasionally flooded

Component: Kinnick (85%)

The Kinnick, occasionally flooded component makes up 85 percent of the map unit. Slopes are 0 to 3 percent. This component is on flood plains on valleys. The parent material consists of fine-silty alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very high. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 55 inches during February, March. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.

Component: Newark (4%)

Generated brief soil descriptions are created for major components. The Newark soil is a minor component.

Component: Boonesboro (4%)

Generated brief soil descriptions are created for major components. The Boonesboro soil is a minor component.

Component: Haymond (4%)

Generated brief soil descriptions are created for major components. The Haymond soil is a minor component.

Component: Other soils (3%)

Generated brief soil descriptions are created for major components. The Other soils soil is a minor component.

Map Unit La (3.61%)

Map Unit Name: Lawrence silt loam

Bedrock Depth - Min: null
Watertable Depth - Annual Min: 30cm

Drainage Class - Dominant: Somewhat poorly drained

Hydrologic Group - Dominant: C/D - These soils have moderately high runoff potential when drained and high

runoff potential when undrained.

Major components are printed below

Lawrence(85%)

horizon H1(0cm to 20cm)

horizon H2(20cm to 61cm)

horizon H3(61cm to 132cm)

horizon H4(132cm to 162cm)

Silt loam

Silty clay loam

Silty clay loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: La - Lawrence silt loam, 0 to 2 percent slopes

Component: Lawrence (90%)

The Lawrence component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on flats on uplands. The parent material consists of fine-silty alluvium over clayey residuum weathered from limestone and dolomite. Depth to a root restrictive layer, fragipan, is 18 to 32 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 15 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria.

Component: Robertsville (4%)

Generated brief soil descriptions are created for major soil components. The Robertsville soil is a minor component.

Component: Nicholson (4%)

Generated brief soil descriptions are created for major soil components. The Nicholson soil is a minor component.

Component: Newark (2%)

Generated brief soil descriptions are created for major soil components. The Newark, rarely flooded soil is a minor component.

Map Unit LoC (0.01%)

Map Unit Name: Lowell silt loam, 6 to 12 percent slopes

Bedrock Depth - Min: null
Watertable Depth - Annual Min: null

Drainage Class - Dominant: Well drained

Hydrologic Group - Dominant: C - Soils in this group have moderately high runoff potential when thoroughly

wet. Water transmission through the soil is somewhat restricted.

Order No: 23040300681p

Major components are printed below

Lowell(90%)

horizon H1(0cm to 18cm)
Silt loam
horizon H2(18cm to 64cm)
Silty clay loam

horizon H3(64cm to 152cm) Clay

Component Description:

Minor map unit components are excluded from this report.

Map Unit: uLfC - Lowell-Faywood silt loams, 6 to 12 percent slopes

Component: Lowell (70%)

The Lowell component makes up 70 percent of the map unit. Slopes are 6 to 12 percent. This component is on hills on karst uplands. The parent material consists of clayey residuum weathered from limestone and shale. Depth to a root restrictive layer, bedrock, lithic, is 40 to 57 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is high. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent.

Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria.

Component: Faywood (20%)

The Faywood component makes up 20 percent of the map unit. Slopes are 6 to 12 percent. This component is on hills on karst uplands. The parent material consists of clayey residuum weathered from limestone and shale. Depth to a root restrictive layer, bedrock, lithic, is 20 to 39 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria.

Component: Sandview (5%)

Generated brief soil descriptions are created for major soil components. The Sandview soil is a minor component.

Component: Cynthiana (5%)

Generated brief soil descriptions are created for major soil components. The Cynthiana soil is a minor component.

Map Unit Lw (1.24%)

Map Unit Name: Lawrence silt loam

Bedrock Depth - Min: 155cm Watertable Depth - Annual Min: 30cm

Drainage Class - Dominant: Somewhat poorly drained

Hydrologic Group - Dominant: D - Soils in this group have high runoff potential when thoroughly wet. Water

movement through the soil is restricted or very restricted.

Order No: 23040300681p

Major components are printed below

Lawrence(85%)

horizon H1(0cm to 23cm)

horizon H2(23cm to 48cm)

horizon H3(48cm to 112cm)

horizon H4(112cm to 155cm)

Silt loam

Silt loam

horizon Cr(155cm to 180cm) Weathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: Lw - Lawrence silt loam

Component: Lawrence (85%)

The Lawrence component makes up 85 percent of the map unit. Slopes are 0 to 4 percent. This component is on ridges on uplands. The parent material consists of thin fine-silty noncalcareous loess over clayey residuum weathered from calcareous shale. Depth to a root restrictive layer, fragipan, is 18 to 26 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria.

Component: Aaron (4%)

Generated brief soil descriptions are created for major components. The Aaron soil is a minor component.

Component: Nicholson (4%)

Generated brief soil descriptions are created for major components. The Nicholson soil is a minor component.

Component: McGary (4%)

Generated brief soil descriptions are created for major components. The McGary soil is a minor component.

Component: Other soils (2%)

Generated brief soil descriptions are created for major components. The Other soils soil is a minor component.

Component: Other hydric soils (1%)

Generated brief soil descriptions are created for major components. The Other hydric soils soil is a minor component.

Map Unit Ma (1.91%)

Map Unit Name: McGary silt loam

Bedrock Depth - Min: null
Watertable Depth - Annual Min: 30cm

Drainage Class - Dominant: Somewhat poorly drained

Hydrologic Group - Dominant: C/D - These soils have moderately high runoff potential when drained and high

runoff potential when undrained.

Major components are printed below

McGary(90%)

horizon H1(0cm to 20cm)

horizon H2(20cm to 99cm)

Silt loam

Silty clay

horizon H3(99cm to 122cm)

Clay

Component Description:

Minor map unit components are excluded from this report.

Map Unit: Ma - McGary silt loam

Component: McGary (90%)

The McGary component makes up 90 percent of the map unit. Slopes are 0 to 2 percent. This component is on broad flats on uplands. The parent material consists of mixed clayey alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is high. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3w. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 25 percent.

Component: Nicholson (3%)

Generated brief soil descriptions are created for major components. The Nicholson soil is a minor component.

Component: Lawrence (3%)

Generated brief soil descriptions are created for major components. The Lawrence soil is a minor component.

Component: Beasley (2%)

Generated brief soil descriptions are created for major components. The Beasley soil is a minor component.

Component: Hydric soils (2%)

Generated brief soil descriptions are created for major soil components. The Hydric soils soil is a minor component.

Map Unit Me (0.7%)

Map Unit Name: Melvin silt loam, frequently flooded

Bedrock Depth - Min: null
Watertable Depth - Annual Min: 15cm

Drainage Class - Dominant: Poorly drained

Hydrologic Group - Dominant: B/D - These soils have moderately low runoff potential when drained and high

runoff potential when undrained.

Major components are printed below

Melvin(90%)

horizon H1(0cm to 15cm)
Silt loam
horizon H2(15cm to 51cm)
Silt loam
horizon H3(51cm to 157cm)
Silt loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: Me - Melvin silt loam, 0 to 2 percent slopes, frequently flooded

Component: Melvin (85%)

The Melvin, frequently flooded component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on flood plains on river valleys. The parent material consists of fine-silty alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very high. Shrink-swell potential is low. This soil is frequently flooded. It is not ponded. A seasonal zone of water saturation is at 0 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3w. This soil meets hydric criteria.

Component: Haymond (5%)

Generated brief soil descriptions are created for major soil components. The Haymond, frequently flooded soil is a minor component.

Component: Newark (5%)

Generated brief soil descriptions are created for major soil components. The Newark, frequently flooded soil is a minor component.

Component: Otwell (5%)

Generated brief soil descriptions are created for major soil components. The Otwell soil is a minor component.

Map Unit Mo (0.09%)

Map Unit Name: Morehead silt loam, rarely flooded

Bedrock Depth - Min: null
Watertable Depth - Annual Min: 30cm

Drainage Class - Dominant: Moderately well drained

Hydrologic Group - Dominant: B/D - These soils have moderately low runoff potential when drained and high

runoff potential when undrained.

Major components are printed below

Morehead(85%)

horizon H1(0cm to 25cm)
Silt loam
horizon H2(25cm to 147cm)
Silty clay loam
horizon H3(147cm to 241cm)
Silt loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: Mo - Morehead silt loam, rarely flooded

Component: Morehead (85%)

The Morehead, rarely flooded component makes up 85 percent of the map unit. Slopes are 0 to 2 percent. This component is on stream terraces on valleys. The parent material consists of mixed fine-silty alluvium. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very high. Shrink-swell potential is low. This soil is rarely flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.

Component: Other soils (3%)

Generated brief soil descriptions are created for major components. The Other soils soil is a minor component.

Component: Nolin (3%)

Generated brief soil descriptions are created for major components. The Nolin soil is a minor component.

Component: Newark (3%)

Generated brief soil descriptions are created for major components. The Newark soil is a minor component.

Component: Skidmore (3%)

Generated brief soil descriptions are created for major components. The Skidmore soil is a minor component.

Component: Melvin (3%)

Generated brief soil descriptions are created for major soil components. The Melvin, frequently flooded soil is a minor component.

Map Unit MsB2 (0.18%)

Map Unit Name: Muse channery silt loam, 2 to 6 percent slopes, eroded

Bedrock Depth - Min: 150cm

Watertable Depth - Annual Min: 136cm

Drainage Class - Dominant: Well drained

Hydrologic Group - Dominant: C - Soils in this group have moderately high runoff potential when thoroughly

wet. Water transmission through the soil is somewhat restricted.

Major components are printed below

Muse(90%)

horizon H1(0cm to 8cm) Channery silt loam

horizon H2(8cm to 117cm) Clay

horizon H3(117cm to 150cm) Channery silty clay horizon R(150cm to 175cm) Unweathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: MsB2 - Muse channery silt loam, 2 to 6 percent slopes, eroded

Component: Muse (90%)

The Muse component makes up 90 percent of the map unit. Slopes are 2 to 6 percent. This component is on knobs on uplands. The parent material consists of clayey residuum weathered from acid shale. Depth to a root restrictive layer, bedrock, lithic, is 40 to 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 54 inches during January, February, March, April. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.

Component: Shelocta (4%)

Generated brief soil descriptions are created for major components. The Shelocta soil is a minor component.

Component: Other soils (3%)

Generated brief soil descriptions are created for major components. The Other soils soil is a minor component.

Component: Shrouts (3%)

Generated brief soil descriptions are created for major components. The Shrouts soil is a minor component.

Map Unit MsC2 (0.39%)

Map Unit Name: Muse channery silt loam, 6 to 12 percent slopes, eroded

Bedrock Depth - Min: 150cm

Watertable Depth - Annual Min: 136cm

Drainage Class - Dominant: Well drained

Hydrologic Group - Dominant: C - Soils in this group have moderately high runoff potential when thoroughly

wet. Water transmission through the soil is somewhat restricted.

Order No: 23040300681p

Major components are printed below

Muse(75%)

horizon H1(0cm to 8cm) Channery silt loam

horizon H2(8cm to 117cm) Clay

horizon H3(117cm to 150cm) Channery silty clay horizon R(150cm to 175cm) Unweathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: MsC2 - Muse channery silt loam, 6 to 12 percent slopes, eroded

Component: Muse (75%)

The Muse component makes up 75 percent of the map unit. Slopes are 6 to 12 percent. This component is on knobs on uplands. The parent material consists of clayey residuum weathered from acid shale. Depth to a root restrictive layer, bedrock, lithic, is 40 to 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 54 inches during January, February, March, April. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria.

Component: Other soils (9%)

Generated brief soil descriptions are created for major components. The Other soils soil is a minor component.

Component: Shelocta (8%)

Generated brief soil descriptions are created for major components. The Shelocta soil is a minor component.

Component: Skidmore (8%)

Generated brief soil descriptions are created for major components. The Skidmore soil is a minor component.

Map Unit MsD2 (0.67%)

Map Unit Name: Muse channery silt loam, 12 to 20 percent slopes, eroded

Bedrock Depth - Min: 150cm

Watertable Depth - Annual Min: 136cm

Drainage Class - Dominant: Well drained

Hydrologic Group - Dominant: C - Soils in this group have moderately high runoff potential when thoroughly

wet. Water transmission through the soil is somewhat restricted.

Order No: 23040300681p

Major components are printed below

Muse(75%)

horizon H1(0cm to 8cm) Channery silt loam

horizon H2(8cm to 117cm) Clay

horizon H3(117cm to 150cm)

Channery silty clay
horizon R(150cm to 175cm)

Unweathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: MsD2 - Muse channery silt loam, 12 to 20 percent slopes, eroded

Component: Muse (75%)

The Muse component makes up 75 percent of the map unit. Slopes are 12 to 20 percent. This component is on knobs on uplands. The parent material consists of clayey residuum weathered from acid shale. Depth to a root restrictive layer, bedrock, lithic, is 40 to 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 54 inches during January, February, March, April. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria.

Component: Shrouts (4%)

Generated brief soil descriptions are created for major components. The Shrouts soil is a minor component.

Component: Brownsville (4%)

Generated brief soil descriptions are created for major components. The Brownsville soil is a minor component.

Component: Colyer (4%)

Generated brief soil descriptions are created for major components. The Colyer soil is a minor component.

Component: Shelocta (4%)

Generated brief soil descriptions are created for major components. The Shelocta soil is a minor component.

Component: Other soils (3%)

Generated brief soil descriptions are created for major components. The Other soils soil is a minor component.

Component: Skidmore (3%)

Generated brief soil descriptions are created for major components. The Skidmore soil is a minor component.

Component: Trappist (3%)

Generated brief soil descriptions are created for major components. The Trappist soil is a minor component.

Map Unit MtD3 (0.63%)

Map Unit Name: Muse-Shrouts complex, 6 to 20 percent slopes, severely eroded

Bedrock Depth - Min: 89cm Watertable Depth - Annual Min: null

Drainage Class - Dominant: Well drained

Hydrologic Group - Dominant: C - Soils in this group have moderately high runoff potential when thoroughly

wet. Water transmission through the soil is somewhat restricted.

Order No: 23040300681p

Major components are printed below

Muse(50%)

horizon H1(0cm to 5cm) Channery silt loam

horizon H2(5cm to 114cm) Clay

horizon H3(114cm to 147cm) Channery silty clay
horizon R(147cm to 172cm) Unweathered bedrock

Shrouts(40%)

horizon H1(0cm to 10cm) Silty clay horizon H2(10cm to 69cm) Clay

horizon H3(69cm to 89cm) Channery clay horizon Cr(89cm to 114cm) Weathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: MtD3 - Muse-Shrouts complex, 6 to 20 percent slopes, severely eroded

Component: Muse (50%)

The Muse, severely eroded component makes up 50 percent of the map unit. Slopes are 6 to 20 percent. This component is on knobs on uplands. The parent material consists of clayey residuum weathered from acid shale. Depth to a root restrictive layer, bedrock, lithic, is 40 to 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria.

Component: Shrouts (40%)

The Shrouts, severely eroded component makes up 40 percent of the map unit. Slopes are 6 to 20 percent. This component is on hills on uplands. The parent material consists of clayey residuum weathered from calcareous shale. Depth to a root restrictive layer, bedrock, paralithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 13 percent.

Component: Other soils (4%)

Generated brief soil descriptions are created for major components. The Other soils soil is a minor component.

Component: Colyer (3%)

Generated brief soil descriptions are created for major components. The Colyer soil is a minor component.

Component: Shelocta (3%)

Generated brief soil descriptions are created for major components. The Shelocta soil is a minor component.

Map Unit MuF2 (26.3%)

Map Unit Name: Muse-Trappist complex, 20 to 55 percent slopes, eroded

Bedrock Depth - Min:

Watertable Depth - Annual Min:

Drainage Class - Dominant:

Well drained

Hydrologic Group - Dominant: C - Soils in this group have moderately high runoff potential when thoroughly

wet. Water transmission through the soil is somewhat restricted.

Order No: 23040300681p

Major components are printed below

Muse(60%)

horizon H1(0cm to 8cm) Channery silt loam

horizon H2(8cm to 117cm) Clay

horizon H3(117cm to 150cm) Channery silty clay horizon R(150cm to 175cm) Unweathered bedrock

Trappist(20%)

horizon H1(0cm to 15cm) Silt loam horizon H2(15cm to 58cm) Clay

horizon H3(58cm to 89cm) Channery clay

horizon R(89cm to 114cm)

Unweathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: MuF2 - Muse-Trappist complex, 20 to 55 percent slopes, eroded

Component: Muse (60%)

The Muse component makes up 60 percent of the map unit. Slopes are 20 to 55 percent. This component is on knobs on uplands. The parent material consists of clayey residuum weathered from acid shale. Depth to a root restrictive layer, bedrock, lithic, is 40 to 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 54 inches during January, February, March, April. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.

Component: Trappist (20%)

The Trappist component makes up 20 percent of the map unit. Slopes are 20 to 55 percent. This component is on knobs on uplands. The parent material consists of clayey residuum weathered from acid shale. Depth to a root restrictive layer, bedrock, lithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.

Component: Brownsville (4%)

Generated brief soil descriptions are created for major components. The Brownsville soil is a minor component.

Component: Berks (4%)

Generated brief soil descriptions are created for major components. The Berks soil is a minor component.

Component: Other soils (3%)

Generated brief soil descriptions are created for major components. The Other soils soil is a minor component.

Component: Shelocta (3%)

Generated brief soil descriptions are created for major components. The Shelocta soil is a minor component.

Component: Blairton (3%)

Generated brief soil descriptions are created for major components. The Blairton soil is a minor component.

Component: Colver (3%)

Generated brief soil descriptions are created for major components. The Colyer soil is a minor component.

Map Unit Ne (1.13%)

Map Unit Name: Newark silt loam, occasionally flooded

Bedrock Depth - Min: null
Watertable Depth - Annual Min: 31cm

Drainage Class - Dominant: Somewhat poorly drained

Hydrologic Group - Dominant: B/D - These soils have moderately low runoff potential when drained and high

runoff potential when undrained.

Major components are printed below

Newark(85%)

horizon H1(0cm to 20cm)
Silt loam
horizon H2(20cm to 56cm)
Silt loam
horizon H3(56cm to 157cm)
Silt loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: Ne - Newark silt loam, 0 to 3 percent slopes, occasionally flooded

Component: Newark (85%)

The Newark, occasionally flooded component makes up 85 percent of the map unit. Slopes are 0 to 3 percent. This component is on flood plains on valleys. The parent material consists of fine-silty alluvium derived from sedimentary rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat poorly drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. A seasonal zone of water saturation is at 12 inches during January, February, March, April. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.

Component: Lobdell (5%)

Generated brief soil descriptions are created for major soil components. The Lobdell, occasionally flooded soil is a minor component.

Component: Melvin (5%)

Generated brief soil descriptions are created for major soil components. The Melvin, occasionally flooded soil is a minor component.

Component: Skidmore (5%)

Generated brief soil descriptions are created for major soil components. The Skidmore, occasionally flooded soil is a minor

component.

Map Unit NhB (4.78%)

Map Unit Name: Nicholson silt loam, 2 to 6 percent slopes

Bedrock Depth - Min: null
Watertable Depth - Annual Min: 64cm

Drainage Class - Dominant: Moderately well drained

Hydrologic Group - Dominant: C - Soils in this group have moderately high runoff potential when thoroughly

wet. Water transmission through the soil is somewhat restricted.

Order No: 23040300681p

Major components are printed below

Nicholson(90%)

horizon Ap(0cm to 20cm)

horizon Bt(20cm to 71cm)

Silt loam

horizon Btx(71cm to 96cm)

Silty clay loam

horizon 2Bt(96cm to 127cm) Clay horizon 2C(127cm to 203cm) Clay

Component Description:

Minor map unit components are excluded from this report.

Map Unit: NhB - Nicholson silt loam, 2 to 6 percent slopes

Component: Nicholson (90%)

The Nicholson component makes up 90 percent of the map unit. Slopes are 2 to 6 percent. This component is on ridges on uplands. The parent material consists of fine-silty noncalcareous loess over clayey residuum weathered from limestone. Depth to a root restrictive layer, fragipan, is 16 to 30 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 25 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.

Component: Lowell (5%)

Generated brief soil descriptions are created for major soil components. The Lowell soil is a minor component.

Component: Lawrence (5%)

Generated brief soil descriptions are created for major soil components. The Lawrence soil is a minor component.

Map Unit NhC (0.29%)

Map Unit Name: Nicholson silt loam, 6 to 12 percent slopes

Bedrock Depth - Min: null Watertable Depth - Annual Min: 69cm

Drainage Class - Dominant: Moderately well drained

Hydrologic Group - Dominant: C - Soils in this group have moderately high runoff potential when thoroughly

wet. Water transmission through the soil is somewhat restricted.

Order No: 23040300681p

Major components are printed below

Nicholson(85%)

horizon H1(0cm to 23cm) Silt loam horizon H2(23cm to 71cm) Silty clay loam horizon H3(71cm to 104cm) Silty clay loam Clay

horizon H4(104cm to 188cm)

Component Description:

Minor map unit components are excluded from this report.

Map Unit: NhC - Nicholson silt loam, 6 to 12 percent slopes

Component: Nicholson (90%)

The Nicholson component makes up 90 percent of the map unit. Slopes are 6 to 12 percent. This component is on ridges on uplands. The parent material consists of fine-silty noncalcareous loess over clayey residuum weathered from limestone. Depth to a root restrictive layer, fragipan, is 16 to 30 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 25 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria.

Component: Faywood (5%)

Generated brief soil descriptions are created for major soil components. The Faywood soil is a minor component.

Component: Lowell (5%)

Generated brief soil descriptions are created for major soil components. The Lowell soil is a minor component.

Map Unit No (3.23%)

Map Unit Name: Nolin silt loam, 0 to 3 percent slopes, occasionally flooded

Bedrock Depth - Min: null
Watertable Depth - Annual Min: null

Drainage Class - Dominant: Well drained

Hydrologic Group - Dominant: B - Soils in this group have moderately low runoff potential when thoroughly

wet. Water transmission through the soil is unimpeded.

Major components are printed below

Nolin(85%)

horizon Ap(0cm to 30cm)

horizon Bw(30cm to 188cm)

Silt loam

horizon C(188cm to 203cm)

Silt loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: No - Nolin silt loam, 0 to 3 percent slopes, occasionally flooded

Component: Nolin (85%)

The Nolin, occasionally flooded component makes up 85 percent of the map unit. Slopes are 0 to 3 percent. This component is on flood plains on river valleys. The parent material consists of fine-silty alluvium derived from sedimentary rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is very high. Shrink-swell potential is low. This soil is occasionally flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 2w. This soil does not meet hydric criteria.

Component: Melvin (5%)

Generated brief soil descriptions are created for major soil components. The Melvin, occasionally flooded soil is a minor component.

Component: Grigsby (5%)

Generated brief soil descriptions are created for major soil components. The Grigsby, frequently flooded soil is a minor component.

Component: Newark (5%)

Generated brief soil descriptions are created for major soil components. The Newark, frequently flooded soil is a minor component.

Map Unit OtB (0.79%)

Map Unit Name: Otwell silt loam, 2 to 6 percent slopes

Bedrock Depth - Min: null
Watertable Depth - Annual Min: 58cm

Drainage Class - Dominant: Moderately well drained

Hydrologic Group - Dominant: C/D - These soils have moderately high runoff potential when drained and high

runoff potential when undrained.

Major components are printed below

Otwell(80%)

horizon H1(0cm to 23cm)
Silt loam
horizon H2(23cm to 74cm)
Silt loam
horizon H3(74cm to 165cm)
Silt loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: OtB - Otwood silt loam, 2 to 6 percent slopes

Component: Otwood (80%)

The Otwood component makes up 80 percent of the map unit. Slopes are 2 to 6 percent. This component is on stream terraces on valleys. The parent material consists of mixed fine-silty alluvium. Depth to a root restrictive layer, fragipan, is 23 to 35 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water

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saturation is at 27 inches during January, February, March, April, May, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.

Component: Elk (6%)

Generated brief soil descriptions are created for major soil components. The Elk soil is a minor component.

Component: Lawrence (5%)

Generated brief soil descriptions are created for major soil components. The Lawrence soil is a minor component.

Component: Nolin (5%)

Generated brief soil descriptions are created for major soil components. The Nolin, occasional soil is a minor component.

Component: Newark (4%)

Generated brief soil descriptions are created for major soil components. The Newark, occasional soil is a minor component.

Map Unit OtC (0.03%)

Map Unit Name: Otwell silt loam, 6 to 12 percent slopes

Bedrock Depth - Min: null
Watertable Depth - Annual Min: 58cm

Drainage Class - Dominant: Moderately well drained

Hydrologic Group - Dominant: C/D - These soils have moderately high runoff potential when drained and high

runoff potential when undrained.

Major components are printed below

Otwell(80%)

horizon H1(0cm to 23cm)
Silt loam
horizon H2(23cm to 74cm)
Silt loam
horizon H3(74cm to 165cm)
Silt loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: OtC - Otwood silt loam, 6 to 12 percent slopes

Component: Otwood (85%)

The Otwood component makes up 85 percent of the map unit. Slopes are 6 to 12 percent. This component is on stream terraces on river valleys. The parent material consists of mixed fine-silty alluvium derived from limestone and siltstone. Depth to a root restrictive layer, fragipan, is 21 to 33 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 24 inches during January, February, March, April, May, November, December. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Elk (5%)

Generated brief soil descriptions are created for major soil components. The Elk soil is a minor component.

Component: Newark (5%)

Generated brief soil descriptions are created for major soil components. The Newark, occasionally flooded soil is a minor component.

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Component: Otwood (5%)

Generated brief soil descriptions are created for major soil components. The Otwood, rarely flooded soil is a minor component.

Map Unit SaB (0.11%)

Map Unit Name: Sandview silt loam, 2 to 6 percent slopes

Bedrock Depth - Min: null Watertable Depth - Annual Min: null

Drainage Class - Dominant: Well drained

Hydrologic Group - Dominant: B - Soils in this group have moderately low runoff potential when thoroughly

wet. Water transmission through the soil is unimpeded.

Major components are printed below

Sandview(85%)

horizon H1(0cm to 36cm) Silt loam horizon H2(36cm to 107cm) Silty clay loam

horizon H3(107cm to 249cm) Clay

Component Description:

Minor map unit components are excluded from this report.

Map Unit: SaB - Sandview silt loam, 2 to 6 percent slopes

Component: Sandview (85%)

The Sandview component makes up 85 percent of the map unit. Slopes are 2 to 6 percent. This component is on ridges on uplands. The parent material consists of thin fine-silty noncalcareous loess over clayey residuum weathered from limestone. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.

Component: Lowell (4%)

Generated brief soil descriptions are created for major components. The Lowell soil is a minor component.

Component: Crider (4%)

Generated brief soil descriptions are created for major components. The Crider soil is a minor component.

Component: Nicholson (4%)

Generated brief soil descriptions are created for major components. The Nicholson soil is a minor component.

Component: Other soils (3%)

Generated brief soil descriptions are created for major components. The Other soils soil is a minor component.

Map Unit SsB (0.66%)

Map Unit Name: Shrouts silty clay loam, 2 to 6 percent slopes

Bedrock Depth - Min: 94cm
Watertable Depth - Annual Min: null

Drainage Class - Dominant: Well drained

Hydrologic Group - Dominant: D - Soils in this group have high runoff potential when thoroughly wet. Water

movement through the soil is restricted or very restricted.

Order No: 23040300681p

Major components are printed below

Shrouts(90%)

horizon H1(0cm to 15cm) Silty clay loam

horizon H2(15cm to 74cm) Clay

horizon H3(74cm to 94cm) Channery clay horizon Cr(94cm to 119cm) Weathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: SsB - Shrouts silty clay loam, 2 to 6 percent slopes

Component: Shrouts (90%)

The Shrouts component makes up 90 percent of the map unit. Slopes are 2 to 6 percent. This component is on ridges on uplands. The parent material consists of clayey residuum weathered from calcareous shale. Depth to a root restrictive layer, bedrock, paralithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is

no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 13 percent.

Component: Other soils (5%)

Generated brief soil descriptions are created for major components. The Other soils soil is a minor component.

Component: Beasley (5%)

Generated brief soil descriptions are created for major components. The Beasley soil is a minor component.

Map Unit StC3 (1.27%)

Map Unit Name: Shrouts silty clay, 6 to 12 percent slopes, severely eroded

Bedrock Depth - Min: 89cm Watertable Depth - Annual Min: null

Drainage Class - Dominant: Well drained

Hydrologic Group - Dominant: D - Soils in this group have high runoff potential when thoroughly wet. Water

movement through the soil is restricted or very restricted.

Major components are printed below

Shrouts(85%)

horizon H1(0cm to 10cm) Silty clay horizon H2(10cm to 69cm) Clay

horizon H3(69cm to 89cm) Channery clay horizon Cr(89cm to 114cm) Weathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: StC3 - Shrouts silty clay, 6 to 12 percent slopes, severely eroded

Component: Shrouts (85%)

The Shrouts, severely eroded component makes up 85 percent of the map unit. Slopes are 6 to 12 percent. This component is on ridges on uplands. The parent material consists of clayey residuum weathered from calcareous shale. Depth to a root restrictive layer, bedrock, paralithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 13 percent.

Component: Other soils (8%)

Generated brief soil descriptions are created for major components. The Other soils soil is a minor component.

Component: Beasley (7%)

Generated brief soil descriptions are created for major components. The Beasley soil is a minor component.

Map Unit StD3 (0.6%)

Map Unit Name: Shrouts silty clay, 12 to 20 percent slopes, severely eroded

Bedrock Depth - Min: 89cm Watertable Depth - Annual Min: null

Drainage Class - Dominant: Well drained

Hydrologic Group - Dominant: D - Soils in this group have high runoff potential when thoroughly wet. Water

movement through the soil is restricted or very restricted.

Order No: 23040300681p

Major components are printed below

Shrouts(85%)

horizon H1(0cm to 10cm) Silty clay horizon H2(10cm to 69cm) Clay

Soil Information

horizon H3(69cm to 89cm) horizon Cr(89cm to 114cm) Channery clay Weathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: StD3 - Shrouts silty clay, 12 to 20 percent slopes, severely eroded

Component: Shrouts (85%)

The Shrouts, severely eroded component makes up 85 percent of the map unit. Slopes are 12 to 20 percent. This component is on hills on uplands. The parent material consists of clayey residuum weathered from calcareous shale. Depth to a root restrictive layer, bedrock, paralithic, is 20 to 40 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 13 percent.

Component: Muse (5%)

Generated brief soil descriptions are created for major components. The Muse soil is a minor component.

Component: Beasley (5%)

Generated brief soil descriptions are created for major components. The Beasley soil is a minor component.

Component: Other soils (5%)

Generated brief soil descriptions are created for major components. The Other soils soil is a minor component.

Map Unit TsB (0.15%)

Map Unit Name: Tilsit silt loam, 2 to 6 percent slopes

Bedrock Depth - Min: null
Watertable Depth - Annual Min: 51cm

Drainage Class - Dominant: Moderately well drained

Hydrologic Group - Dominant: C/D - These soils have moderately high runoff potential when drained and high

runoff potential when undrained.

Major components are printed below

Tilsit(90%)

horizon H1(0cm to 20cm)
Silt loam
horizon H2(20cm to 64cm)
Silt loam
horizon H3(64cm to 152cm)
Silty clay loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: TsB - Tilsit silt loam, 2 to 6 percent slopes - residual landforms

Component: Tilsit (90%)

The Tilsit component makes up 90 percent of the map unit. Slopes are 2 to 6 percent. This component is on ridges on hills. The parent material consists of fine-silty residuum weathered from shale and siltstone. Depth to a root restrictive layer, fragipan, is 14 to 34 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 18 inches during January, February, March, April, December. Organic matter content in the surface horizon is about 2 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.

Component: Blairton (10%)

Generated brief soil descriptions are created for major soil components. The Blairton soil is a minor component.

Map Unit W (0.44%)

Soil Information

Map Unit Name: Water

No more attributes available for this map unit

Component Description:

Minor map unit components are excluded from this report.

Map Unit: W - Water

Component: Water (100%)

Generated brief soil descriptions are created for major soil components. The Water is a miscellaneous area.

Map Unit WoB (1.11%)

Map Unit Name: Woolper silt loam, 2 to 6 percent slopes, rarely flooded

Bedrock Depth - Min: null
Watertable Depth - Annual Min: null

Drainage Class - Dominant: Well drained

Hydrologic Group - Dominant: C - Soils in this group have moderately high runoff potential when thoroughly

wet. Water transmission through the soil is somewhat restricted.

Order No: 23040300681p

Major components are printed below

Woolper(90%)

horizon H1(0cm to 58cm)

horizon H2(58cm to 86cm)

Silty clay

horizon H3(86cm to 152cm)

Clay

Component Description:

Minor map unit components are excluded from this report.

Map Unit: WoB - Woolper silt loam, 2 to 6 percent slopes, rarely flooded

Component: Woolper (90%)

The Woolper, rarely flooded component makes up 90 percent of the map unit. Slopes are 2 to 6 percent. This component is on ridges on uplands. The parent material consists of clayey colluvium derived from limestone and/or clayey alluvium derived from limestone. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is rarely flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 5 percent. Nonirrigated land capability classification is 2e. This soil does not meet hydric criteria.

Component: Other soils (4%)

Generated brief soil descriptions are created for major components. The Other soils soil is a minor component.

Component: Boonesboro (2%)

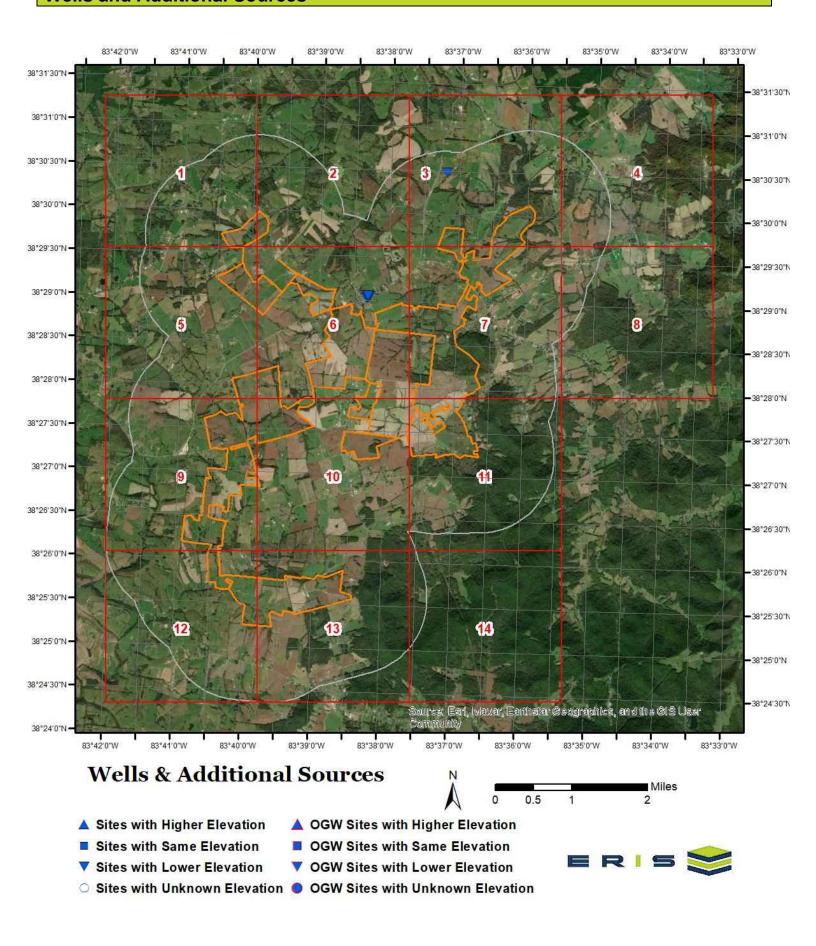
Generated brief soil descriptions are created for major components. The Boonesboro soil is a minor component.

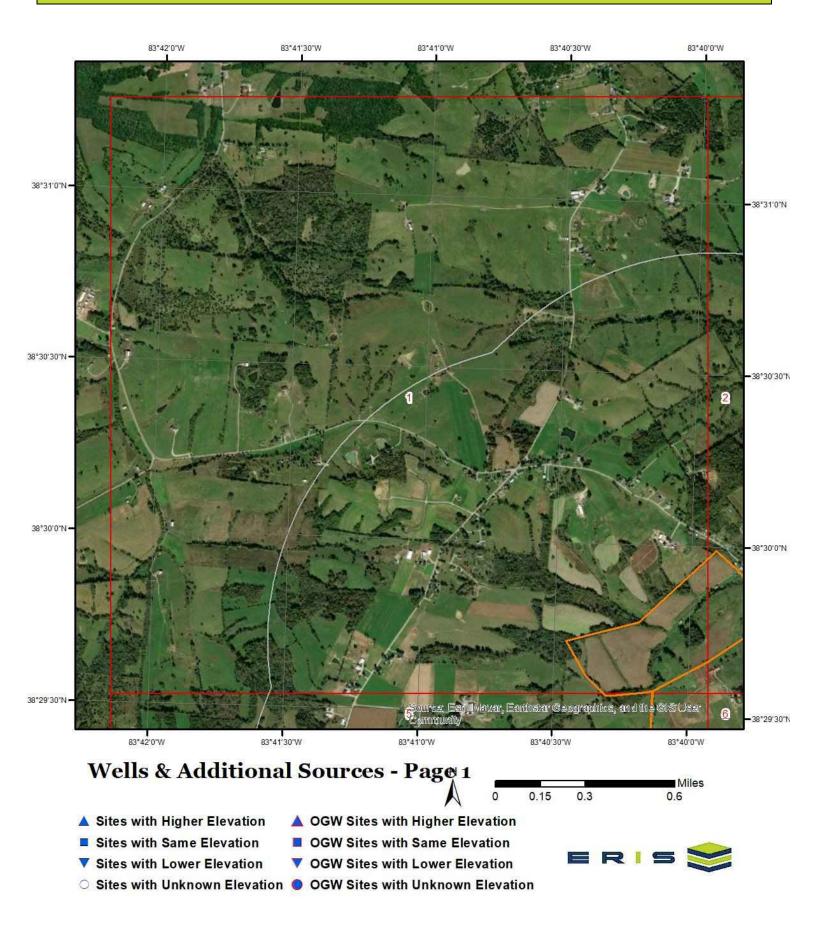
Component: Nolin (2%)

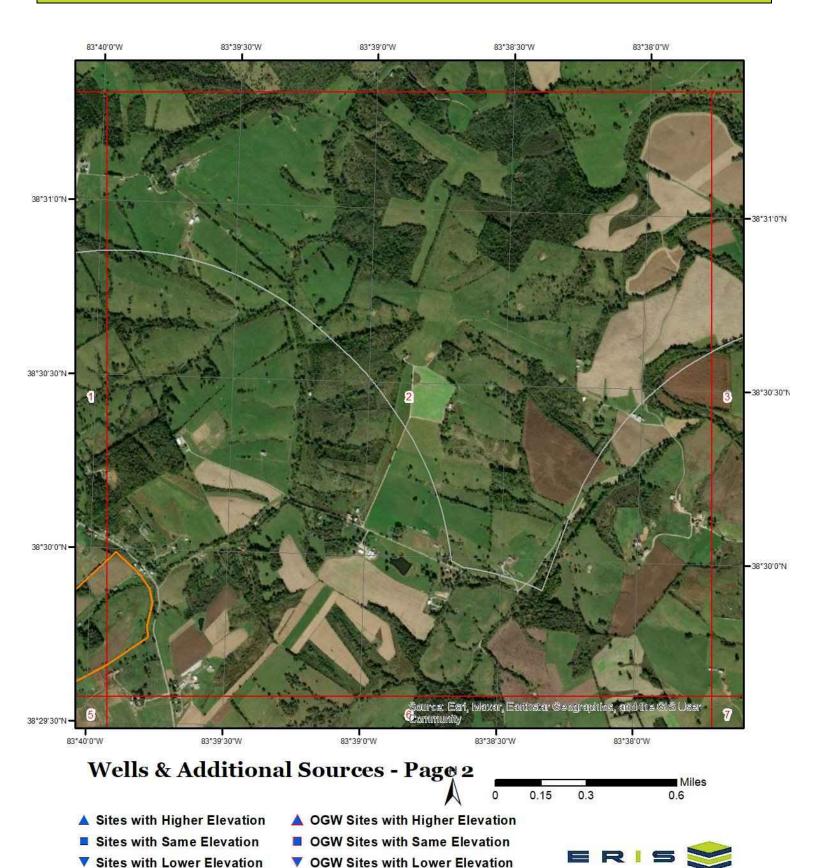
Generated brief soil descriptions are created for major components. The Nolin soil is a minor component.

Component: Elk (2%)

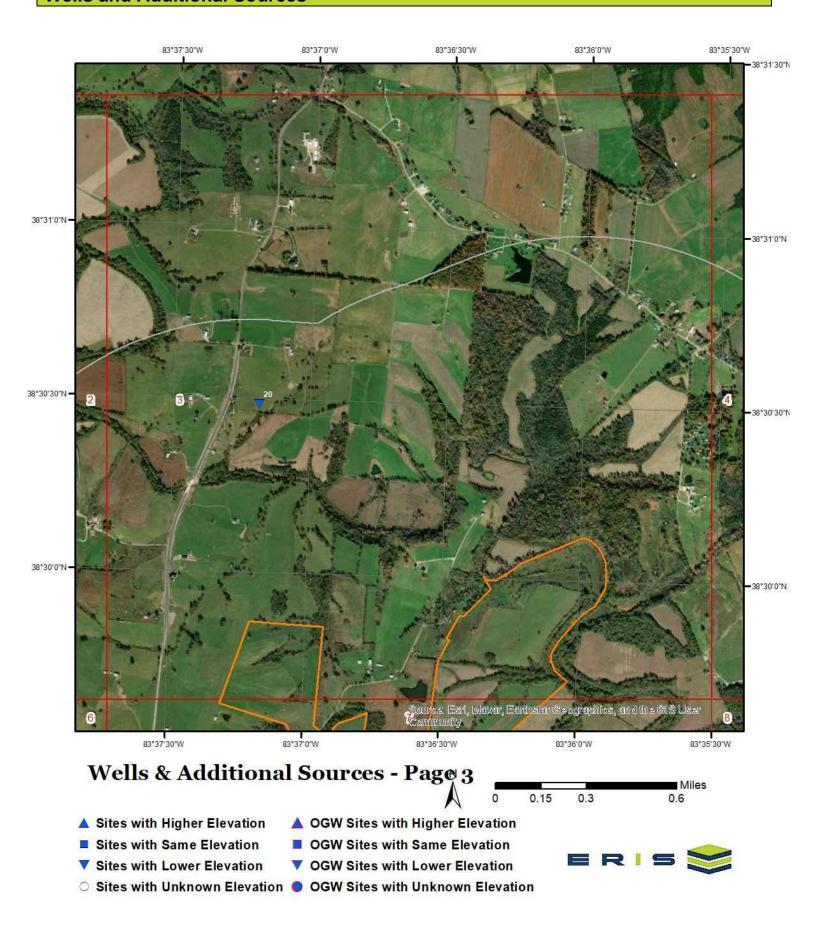
Generated brief soil descriptions are created for major components. The Elk soil is a minor component.

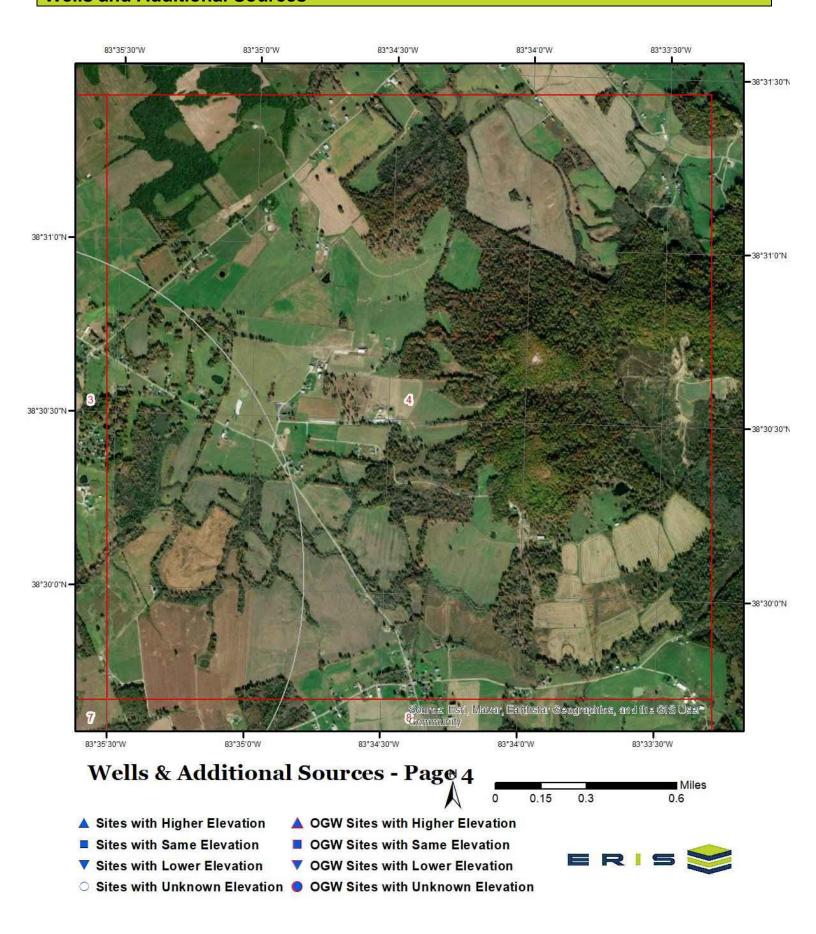


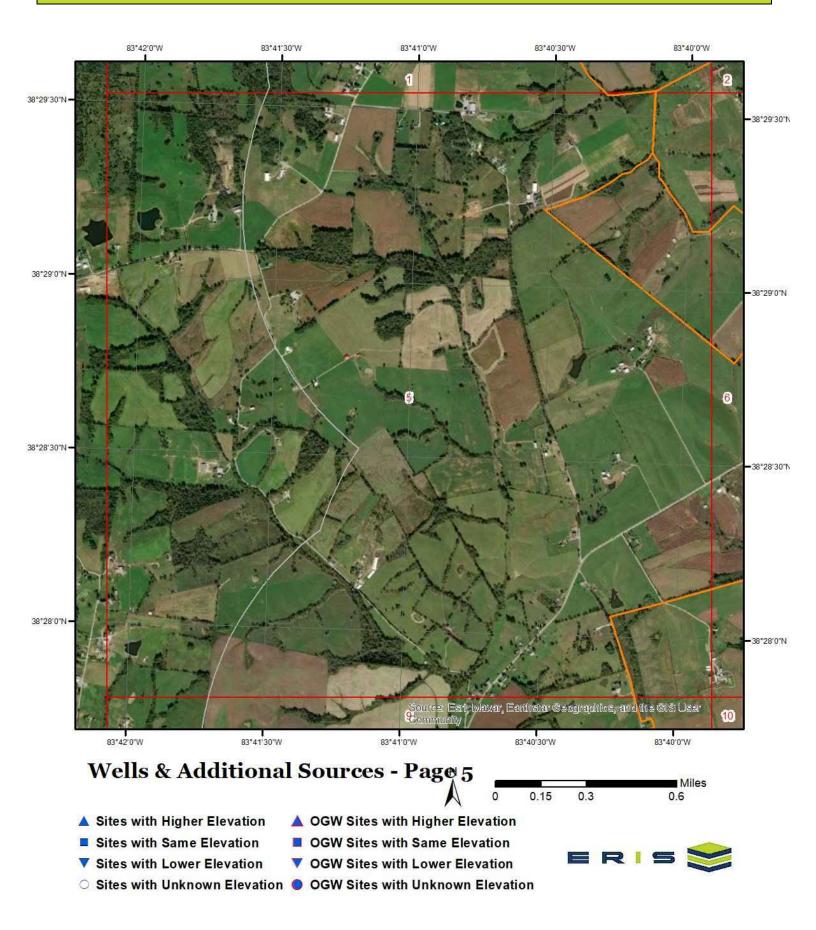


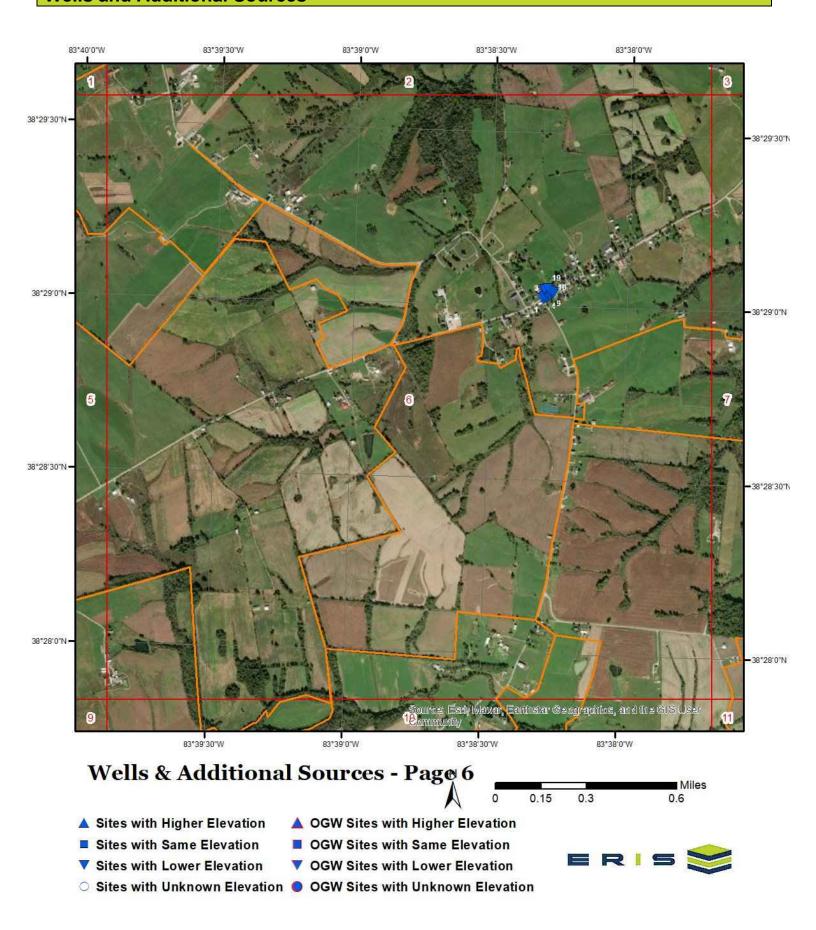


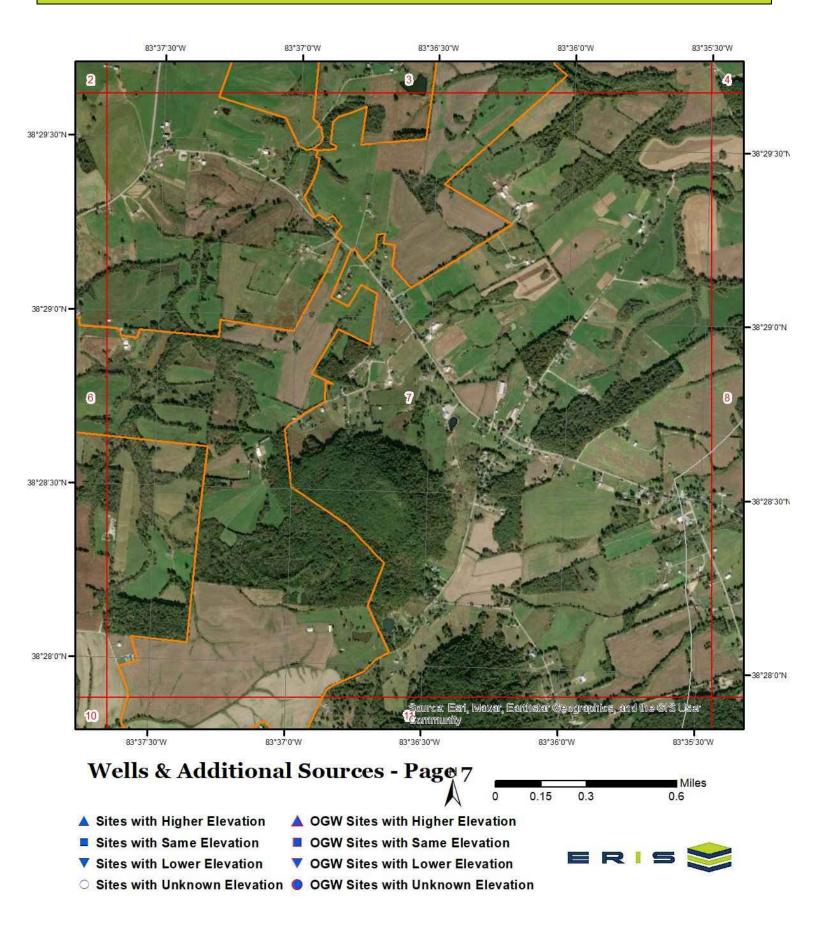
O Sites with Unknown Elevation OGW Sites with Unknown Elevation

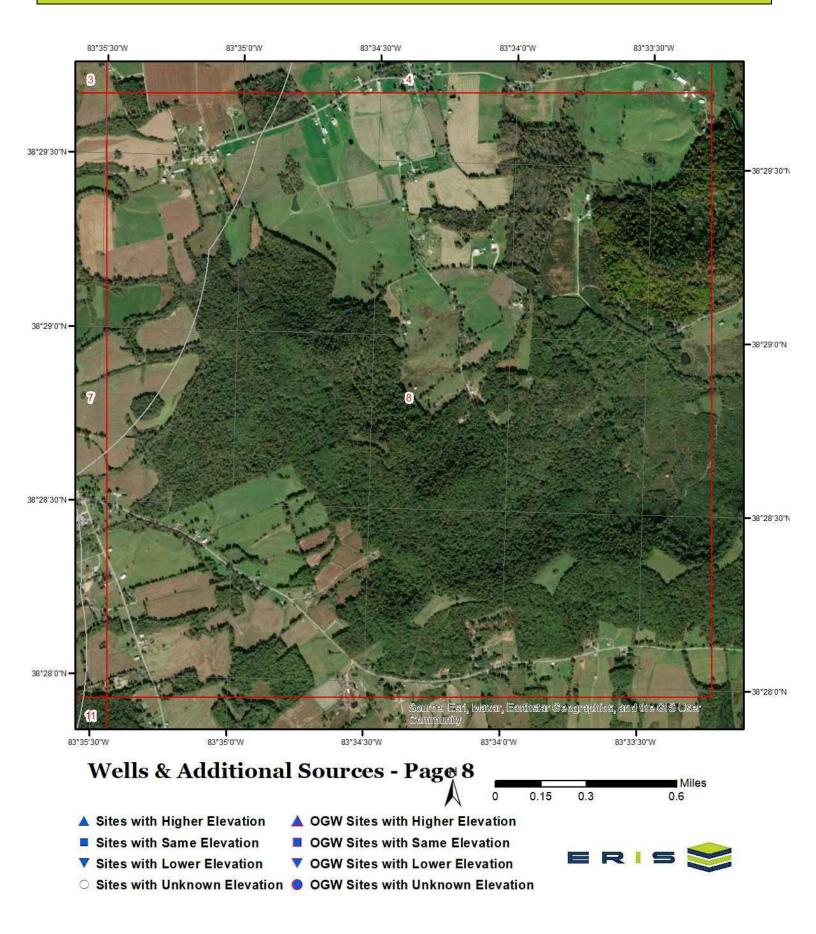


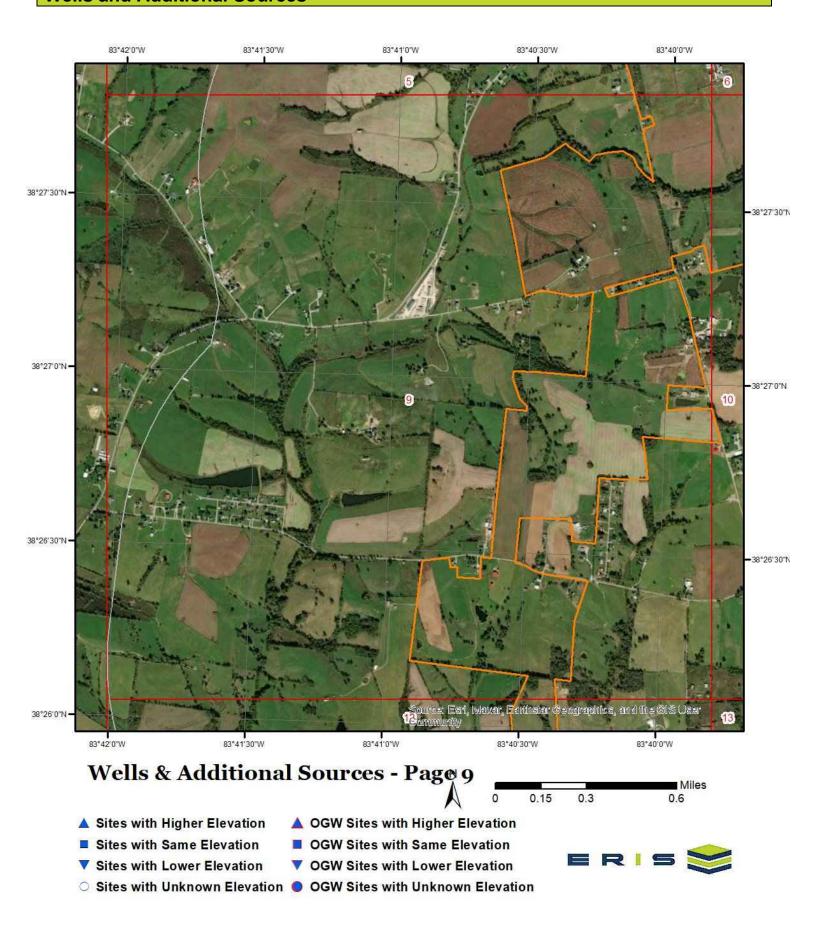




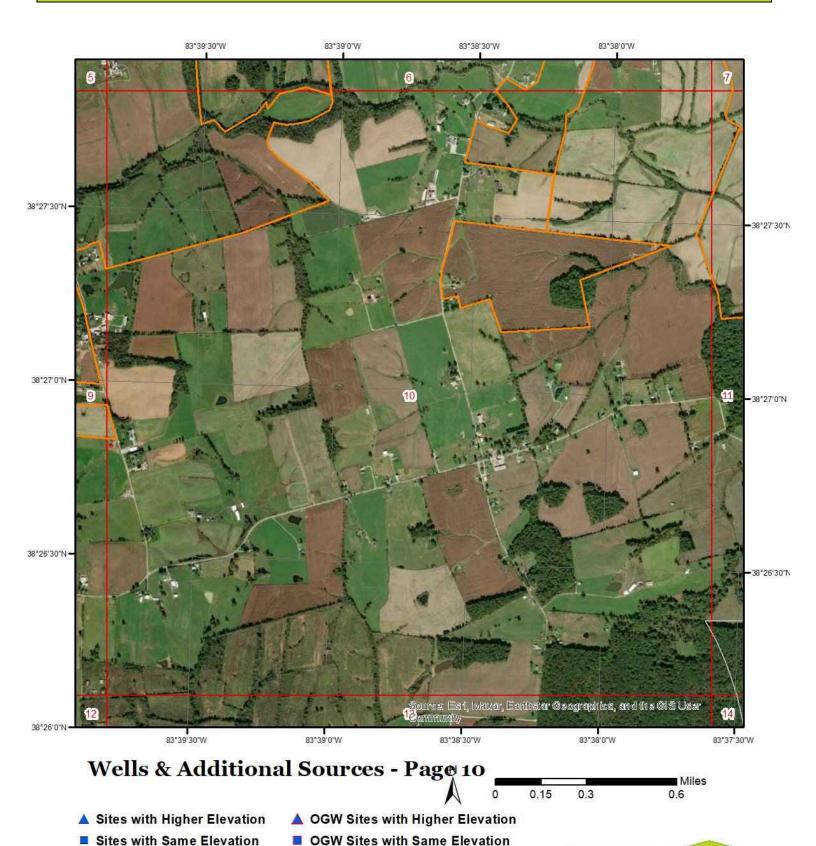






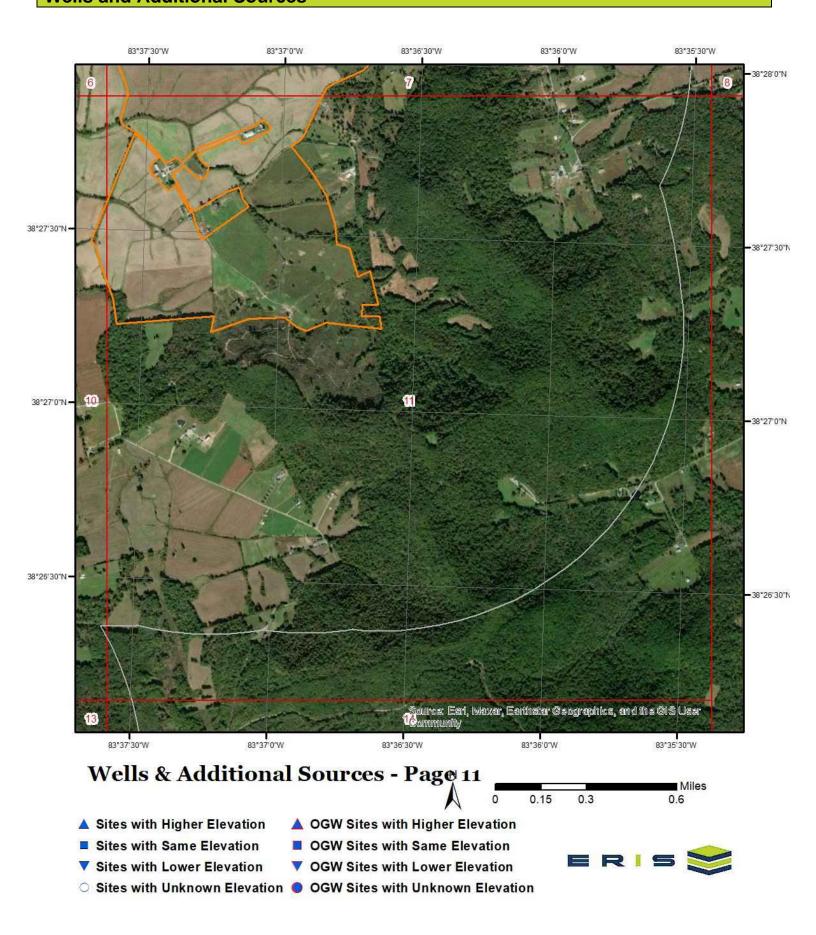


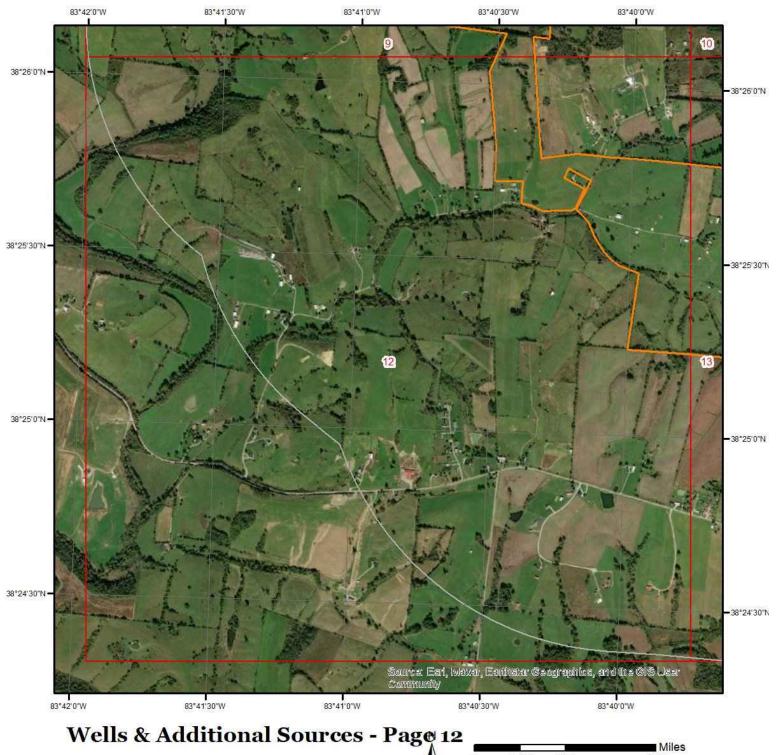
▼ Sites with Lower Elevation

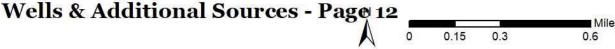


OGW Sites with Lower Elevation

O Sites with Unknown Elevation OGW Sites with Unknown Elevation



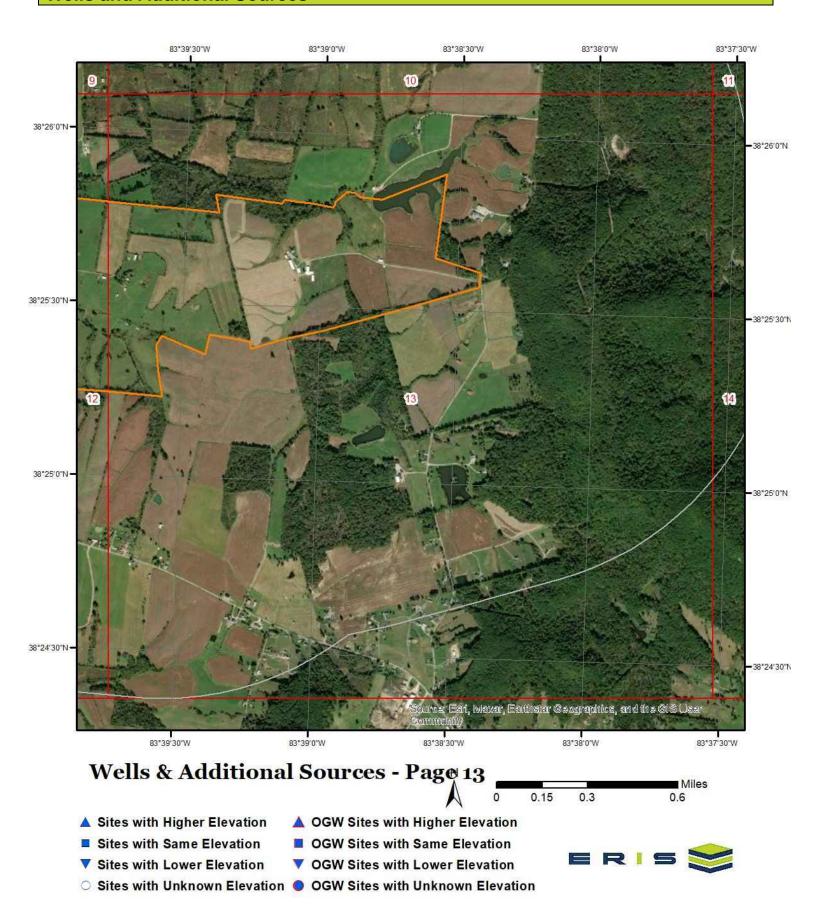


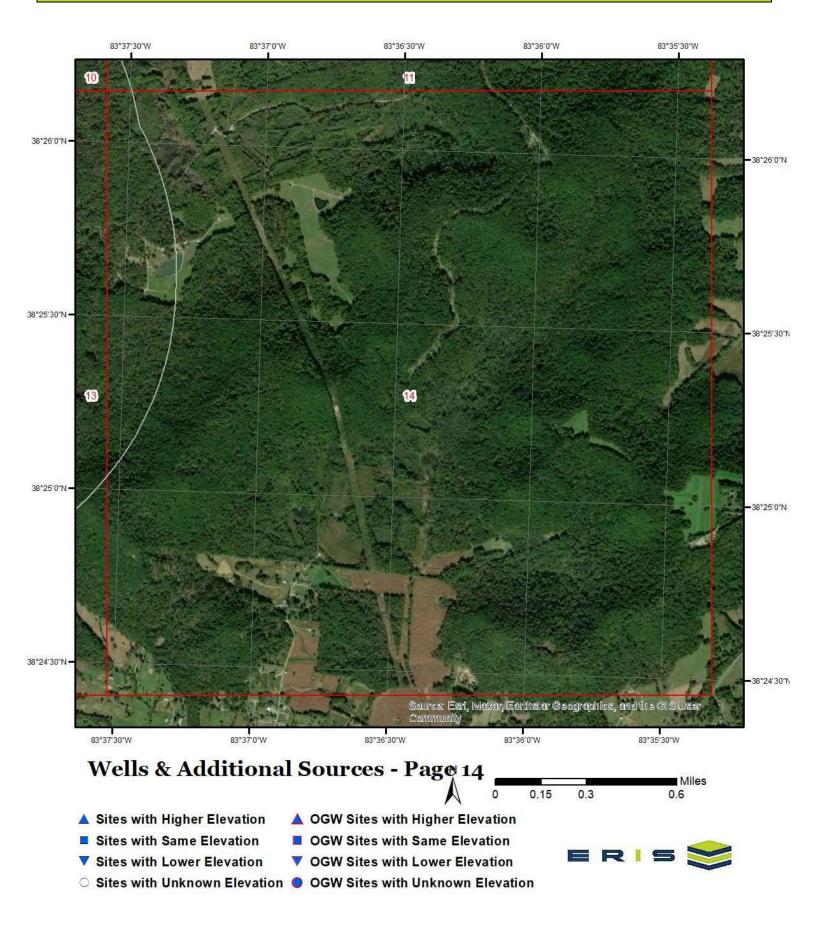


- ▲ Sites with Higher Elevation
- Sites with Same Elevation
- ▼ Sites with Lower Elevation

- ▲ OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- O Sites with Unknown Elevation OGW Sites with Unknown Elevation







Wells and Additional Sources Summary

Federal Sources

Public Water Systems Violations and Enforcement Data

Map Key ID Distance (ft) Direction

No records found

Safe Drinking Water Information System (SDWIS)

Map Key ID Distance (ft) Direction

No records found

USGS National Water Information System

Map Key ID Distance (ft) Direction

No records found

Wells from NWIS

Map Key ID Distance (ft) Direction

No records found

State Sources

Kentucky Groundwater Data Repository

Map Key	AKGWA No	Distance (ft)	Direction
1	80078520	933.18	N
2	80076657	968.38	N
3	80078521	947.61	N
4	80076656	994.23	N
5	80076658	990.51	N
6	80076655	1033.31	N
7	80050341	1040.35	N
8	80054217	1038.05	N
9	80076654	1093.47	N
10	80078519	1105.49	N
11	80054218	1054.72	N
12	80050342	1073.40	N
13	80054219	1063.90	N
14	80078518	1124.22	N
15	80076653	1125.45	N
16	80059367	1116.74	N
17	80050343	1107.16	N
18	80059368	1101.64	N
19	80059369	1141.99	N
20	60002869	3795.18	NNE
	333233	0.00.10	

Oil and Gas Wells

Wells and Additional Sources Summary

Map Key ID Distance (ft) Direction

No records found

Public Water Supply Wells

Map Key ID Distance (ft) Direction

No records found

Kentucky	Groundwater	Data Re	pository
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DB	Elevation (ft)	Distance (ft)	Distance (mi)	Direction	Мар Кеу
WATER WELLS	885.22	933.18	0.18	N	1
	Flemingsburg	Quad Name:	3520	80078	AKGWA No:
	Fleming	County:	8	MW-1	ALT ID:
	38.483651	Latitude:		М	Type:
	-83.638379	Longitude:	rass	n: Blueg	Physiograph Regio
				889	Surface Elevation:
		-	oring Well - Ambient Mo		Usage:
		raph (DOQ)	Generated - Aerial Photog	GIS	Lat Long Method:
DB	Elevation (ft)	Distance (ft)	Distance (mi)	Direction	Мар Кеу
WATER WELLS	885.36	968.38	0.18	N	2
	Flemingsburg	Quad Name:	6657	80076	AKGWA No:
	Fleming	County:	4	MW-1	ALT ID:
	38.48371	Latitude:		M	Type:
	-83.638255	Longitude:		-	Physiograph Regio
			99975585938		Surface Elevation:
		-	oring Well - Ambient Mo		Usage:
		raph (DOQ)	Generated - Aerial Photog	GIS G	Lat Long Method:
DB	Elevation (ft)	Distance (ft)	Distance (mi)	Direction	Мар Кеу
WATER WELLS	886.21	947.61	0.18	N	3
	Flemingsburg	Quad Name:	3521	80078	AKGWA No:
	Fleming	County:	9	MW-1	ALT ID:
	38.483732	Latitude:		М	Type:
	-83.638481	Longitude:	rass	n: Blueg	Physiograph Regio
			99975585938	890.0	Surface Elevation:
		-	oring Well - Ambient Mo		Usage:
		raph (DOQ)	Generated - Aerial Photog	GIS G	Lat Long Method:
DB	Elevation (ft)	Distance (ft)	Distance (mi)	Direction	Мар Кеу
WATER WELLS	885.35	994.23	0.19	N	4
	Flemingsburg	Quad Name:	6656	80076	AKGWA No:
	Fleming	County:	3	MW-1	ALT ID:
	38.48376	Latitude:		М	Type:
	30.40070				· ·
	-83.638182	Longitude:	rass		Physiograph Regio Surface Elevation:

Usage: Monitoring Well - Ambient Monitoring
Lat Long Method: GIS Generated - Aerial Photograph (DOQ)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
5	N	0.19	990.51	887.00	WATER WELLS
AKGWA No:	8007	6658	Quad Name:	Flemingsburg	
ALT ID:	MW-		County:	Fleming	
Type:	М		Latitude:	38.483812	
Physiograph Reg	gion: Blue	grass	Longitude:	-83.638343	
Surface Elevation	n: 885.2	299987792969			
Usage: Monitoring Well - Ambient Me		onitoring			
Lat Long Method	l: GIS	Generated - Aerial Photo	graph (DOQ)		

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
6	N	0.20	1,033.31	886.08	WATER WELLS
AKGWA No:	8007	6655	Quad Name:	Flemingsburg	
ALT ID:	MW-	12	County:	Fleming	
Type:	M		Latitude:	38.483822	
Physiograph Reg	jion: Blueç	grass	Longitude:	-83.638042	
Surface Elevation	n: 886.9	000024414063			
Usage:	Monit	toring Well - Ambient Mo	nitoring		
Lat Long Method:	: GIS (Generated - Aerial Photog	graph (DOQ)		

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
7	N	0.20	1,040.35	887.00	WATER WELLS
AKGWA No:	8005	0341	Quad Name:	Flemingsburg	
ALT ID:	MW-0	01	County:	Fleming	
Type:	M		Latitude:	38.483893	
Physiograph Regi	on: Blueç	grass	Longitude:	-83.638158	
Surface Elevation	: 880				
Usage:	Moni	Monitoring Well - Ambient Monitoring			
Lat Long Method:	GIS (Generated - Aerial Photo	graph (DOQ)		

Мар Кеу	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
8	N	0.20	1,038.05	887.00	WATER WELLS
AKGWA No:	80054	1 217	Quad Name:	Flemingsburg	
ALT ID:	MW-0)4	County:	Fleming	
Type:	М		Latitude:	38.483927	
Physiograph Regio	n: Blueg	rass	Longitude:	-83.638264	
Surface Elevation:	880				

Usage: Monitoring Well - Ambient Monitoring
Lat Long Method: GIS Generated - Aerial Photograph (DOQ)

Мар Кеу	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
9	N	0.21	1,093.47	886.09	WATER WELLS
AKGWA No:	8007	6654	Quad Name:	Flemingsburg	
ALT ID:	MW-	11	County:	Fleming	
Type:	M		Latitude:	38.483942	
Physiograph Reg	ion: Blue	grass	Longitude:	-83.637886	
Surface Elevation	: 883				
Usage:	Moni	toring Well - Ambient Mo	nitoring		
Lat Long Method:	GIS	Generated - Aerial Photo	graph (DOQ)		

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
10	N	0.21	1,105.49	885.16	WATER WELLS
AKGWA No:	8007	8519	Quad Name:	Flemingsburg	
ALT ID:	MW-	17	County:	Fleming	
Type:	M		Latitude:	38.48394	
Physiograph Reg	gion: Blueç	grass	Longitude:	-83.6378	
Surface Elevation	n: 892.5	5			
Usage:	Moni	toring Well - Ambient Mo	nitoring		

GIS Generated - Aerial Photograph (DOQ)

Мар Кеу	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
11	N	0.20	1,054.72	887.00	WATER WELLS
AKGWA No:	800	54218	Quad Name:	Flemingsburg	
ALT ID:	MW	-05	County:	Fleming	
Type:	M		Latitude:	38.483954	
Physiograph Regio	n: Blue	grass	Longitude:	-83.638201	
Surface Elevation:	880				
Usage:	Mor	itoring Well - Ambient Moi	nitoring		
Lat Long Method:	GIS	Generated - Aerial Photog	graph (DOQ)		

Мар Кеу	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
12	N	0.20	1,073.40	887.00	WATER WELLS
AKGWA No:	80050	0342	Quad Name:	Flemingsburg	
ALT ID:	MW-0)2	County:	Fleming	
Type:	М		Latitude:	38.483963	
Physiograph Regi	on: Blueg	rass	Longitude:	-83.638079	
Surface Elevation	: 880				

Order No: 23040300681p

Lat Long Method:

Usage: Monitoring Well - Ambient Monitoring
Lat Long Method: GIS Generated - Aerial Photograph (DOQ)

Мар Кеу	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
13	N	0.20	1,063.90	887.00	WATER WELLS
AKGWA No:	8005	4240	Quad Name:	Flowingshurg	
	-		Quad Name:	Flemingsburg	
ALT ID:	MW-0	06	County:	Fleming	
Type:	M		Latitude:	38.484035	
Physiograph Reg	ion: Blueç	grass	Longitude:	-83.638349	
Surface Elevation	n: 880				
Usage:	Moni	Monitoring Well - Ambient Monitoring			
Lat Long Method:	GIS	Generated - Aerial Photo	graph (DOQ)		

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
14	N	0.21	1,124.22	886.00	WATER WELLS
AKGWA No:	80078	3518	Quad Name:	Flemingsburg	
ALT ID:	MW-1	6	County:	Fleming	
Type:	M		Latitude:	38.484025	
Physiograph Region	on: Blueg	rass	Longitude:	-83.637854	

Surface Elevation: 892

Usage: Monitoring Well - Ambient Monitoring
Lat Long Method: GIS Generated - Aerial Photograph (DOQ)

Мар Кеу	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB	
15	N	0.21	1,125.45	886.02	WATER WELLS	
A1401A4A A1			0 111	-		
AKGWA No:	8007	6653	Quad Name:	Flemingsburg		
ALT ID:	MW-	10	County:	Fleming		
Type:	М		Latitude:	38.484076		
Physiograph Region: Blu		grass	Longitude:	-83.637962		
Surface Elevation: 88		886.799987792969				
Usage: Monitoring Well - Ambient Mon		onitoring				
Lat Long Method:	GIS	Generated - Aerial Photo	graph (DOQ)			

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
16	N	0.21	1,116.74	887.01	WATER WELLS
AKGWA No:	8005		Quad Name:	Flemingsburg	
ALT ID: Type:	MW-0 M)7	County: Latitude:	Fleming 38.484102	
Physiograph Region	on: Blueç	grass	Longitude:	-83.638093	
Surface Elevation:	880				

Usage: Monitoring Well - Ambient Monitoring
Lat Long Method: GIS Generated - Aerial Photograph (DOQ)

Мар Кеу	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
17	N	0.21	1,107.16	886.86	WATER WELLS
AKGWA No:	8005	0343	Quad Name:	Flemingsburg	
ALT ID:	MW-0)3	County:	Fleming	
Type:	M		Latitude:	38.484144	
Physiograph Region: Bluegrass		yrass	Longitude:	-83.638289	
Surface Elevation: 880					
Usage: Monitoring Well - Ambient I		oring Well - Ambient Mo	nitoring		
Lat Long Method: GIS Generated - Aerial P		Generated - Aerial Photo	graph (DOQ)		

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
18	N	0.21	1,101.64	886.87	WATER WELLS
ALCOVAVA NI	2005	2000	0 111	E	
AKGWA No:	8005	9368	Quad Name:	Flemingsburg	
ALT ID:	MW-0	08	County:	Fleming	
Type:	M		Latitude:	38.484149	
Physiograph Region: Bluegrass		grass	Longitude:	-83.638354	
Surface Elevation: 880					
Usage: Monitoring Well - Ambient Mor		nitoring			
Lat Long Method: GIS Generated - Aerial Phot		graph (DOQ)			

Мар Кеу	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB		
19	N	0.22	1,141.99	886.00	WATER WELLS		
AKGWA No:	8005	9369	Quad Name:	Flemingsburg			
ALT ID:	MW-	09	County:	Fleming			
Type:	M		Latitude:	38.484209			
Physiograph Region: Blueg		grass	Longitude:	-83.638175			
Surface Elevation: 880		880					
Usage: Monitoring Well - Ambient M		onitoring					
Lat Long Method:	GIS	Generated - Aerial Photo	graph (DOQ)				

Мар Кеу	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
20	NNE	0.72	3,795.18	794.53	WATER WELLS
AKGWA No: ALT ID: Type: Physiograph Regio		2869	Quad Name: County: Latitude: Longitude:	Tollesboro Lewis 38.508056 -83.619722	

Usage: Agriculture - Livestock Watering

Lat Long Method:

Radon Information

This section lists any relevant radon information found for the target property.

Federal EPA Radon Zone for FLEMING County: 2 Federal EPA Radon Zone for LEWIS County: 2

- Zone 1: Counties with predicted average indoor radon screening levels greater than 4 pCi/L
- Zone 2: Counties with predicted average indoor radon screening levels from 2 to 4 pCi/L
- Zone 3: Counties with predicted average indoor radon screening levels less than 2 pCi/L

Federal Area Radon Information for FLEMING County

No Measures/Homes: 2 Geometric Mean: 3.6 Arithmetic Mean: 4.8 Median: 4.8 Standard Deviation: 4.3 Maximum: 7.8 % >4 pCi/L: 50 % >20 pCi/L: 0

Notes on Data Table: TABLE 1. Screening indoor

radon data from the EPA/State Residential Radon Survey of Kentucky conducted during 1986-87. Data represent 2-7 day charcoal canister

measurements from the lowest level of each home tested.

Federal Area Radon Information for LEWIS County

No Measures/Homes: Geometric Mean: 0.5 Arithmetic Mean: 0.6 Median: 0.6 Standard Deviation: 0.1 Maximum: 0.6 % >4 pCi/L: 0 % >20 pCi/L:

Notes on Data Table: TABLE 1. Screening indoor

> radon data from the EPA/State Residential Radon Survey of Kentucky conducted during 1986-87. Data represent 2-7

day charcoal canister

measurements from the lowest level of each home tested.

Federal Sources

FEMA National Flood Hazard Layer

FEMA FLOOD

The National Flood Hazard Layer (NFHL) data incorporates Flood Insurance Rate Map (FIRM) databases published by the Federal Emergency Management Agency (FEMA), and any Letters Of Map Revision (LOMRs) that have been issued against those databases since their publication date. The FIRM Database is the digital, geospatial version of the flood hazard information shown on the published paper FIRMs. The FIRM Database depicts flood risk information and supporting data used to develop the risk data. The FIRM Database is derived from Flood Insurance Studies (FISs), previously published FIRMs, flood hazard analyses performed in support of the FISs and FIRMs, and new mapping data, where available.

Indoor Radon Data INDOOR RADON

Indoor radon measurements tracked by the Environmental Protection Agency(EPA) and the State Residential Radon Survey.

Public Water Systems Violations and Enforcement Data

PWSV

List of drinking water violations and enforcement actions from the Safe Drinking Water Information System (SDWIS) made available by the Drinking Water Protection Division of the US EPA's Office of Groundwater and Drinking Water. Enforcement sensitive actions are not included in the data released by the EPA. Address information provided in SWDIS may correspond either with the physical location of the water system, or with a contact address.

RADON ZONE

Areas showing the level of Radon Zones (level 1, 2 or 3) by county. This data is maintained by the Environmental Protection Agency (EPA).

Safe Drinking Water Information System (SDWIS)

SDWIS

The Safe Drinking Water Information System (SDWIS) contains information about public water systems as reported to US Environmental Protection Agency (EPA) by the states. Addresses may correspond with the location of the water system, or with a contact address.

Soil Survey Geographic database

SSURGO

The Soil Survey Geographic database (SSURGO) contains information about soil as collected by the National Cooperative Soil Survey at the Natural Resources Conservation Service (NRCS). Soil maps outline areas called map units. The map units are linked to soil properties in a database. Each map unit may contain one to three major components and some minor components.

U.S. Fish & Wildlife Service Wetland Data

US WETLAND

The U.S. Fish & Wildlife Service Wetland layer represents the approximate location and type of wetlands and deepwater habitats in the United States.

USGS Current Topo US TOPO

US Topo topographic maps are produced by the National Geospatial Program of the U.S. Geological Survey (USGS). The project was launched in late 2009, and the term "US Topo" refers specifically to quadrangle topographic maps published in 2009 and later.

<u>USGS Geology</u> US GEOLOGY

Seamless maps depicting geological information provided by the United States Geological Survey (USGS).

USGS National Water Information System

FED USGS

The U.S. Geological Survey (USGS)'s National Water Information System (NWIS) is the nation's principal repository of water resources data. This database includes comprehensive information of well-construction details, time-series data for gage height, streamflow, groundwater level, and precipitation and water use data.

Wells from NWIS FED USGS

The U.S. Geological Survey's National Water Information System (NWIS) is the nation's principal repository of water resources data. The NWIS includes comprehensive information of well-construction details, time-series data for gage height, streamflow, groundwater level, and precipitation and water use data. This NWIW dataset contains select Site Types from the overall NWIS Sites data, limited to the following Group Site Types only: Groundwater Group Site Types: Well, Collector or Ranney type well, Hyporheic-zone well,

Appendix

Interconnected Wells, Multiple wells; Spring Group Site Type: Spring; and Other Group Site Types: Aggregate groundwater use, Cistern.

State Sources

Kentucky Groundwater Data Repository

WATER WELLS

Order No: 23040300681p

List of records in the Kentucky Geological Survey's Water Well & Spring Records database. The Kentucky Groundwater Data Repository was initiated in 1990 by the Kentucky Geological Survey under mandate from the Kentucky legislature (KRS 151:035). The repository was established to archive and disseminate groundwater data collected by State agencies, other organizations, and independent researchers.

Oil and Gas Wells OGW

Oil and Gas Wells Data made available by the Kentucky Geological Survey.

Public Water Supply Wells PWSW

The Public Water Supply Wells (PWSW) data consist of community water supply wells in Kentucky. This data was made available by Kentucky Department for Environmental Protection, Division of Water.

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Appendix F Aerial Photographs



Project Number: 237800383

