

Major Land Resource Area 147X Northern Appalachian Ridges and Valleys

Accessed: 05/15/2026

Ecological site keys

147PES KEY dichotomous

1a. Non [not] Human Transported Materials or Mine Spoil

2a. Mesic Soil Temperature Regime

3a. Not floodwater (Alluvium) or wind-deposited (Eolian) materials, materials otherwise (Residuum, Colluvium)

4a. Upland summits, shoulders, backslopes -- Residuum

5a. Acid shales, sandstones, and siltstones (mixed sedimentary) and sandstone dominated

6a. Acid shales, sandstones, and siltstones (mixed sedimentary)

7a. Bedrock <40" (100cm) -- Shallow to MD Acid Mixed Sedimentary Upland ... F147XY008PA –
Shallow Mixed Sedimentary Upland

7b. Bedrock >40" (100 cm) - Deep Acid Mixed Sedimentary Upland ... F147XY002PA – Mixed
Sedimentary Upland

6b. Sandstone dominated

8A. Bedrock <40" (100cm) - (combined with below)

8B. Bedrock >40" (100 cm) -- Sandstone Upland ... F147XY004PA – Sandstone Upland

5b. Limestone and calcareous SS and shales (mixed limestone)

9a. Bedrock <40" (100cm) – (combined with 10b - below) ... F147XY003PA – Mixed Limestone
Upland

9b. Bedrock >40" (100cm) -- Mixed Limestone Upland ... F147XY003PA – Mixed Limestone
Upland

4b. Footslopes, benches, or toeslopes – colluvium

10a. Acidic Shales, SS, and Siltstone (Mixed Sedimentary and Sandstone)

11a. Well Drained and MWD --combined with Deep Acid Mixed Sedimentary Upland (above) ... F147XY002PA
– Mixed Sedimentary Upland

11b. Poorly Drained and SPD -- PD Acidic Mixed Sedimentary Toeslopes ... F147XY005PA – Poorly
Drained Mixed Sedimentary Toeslope

10b. Limestone and Calcareous SS and Shales (Mixed Limestone)

12a. Well Drained and MWD -- Mixed Limestone Lower slope ... F147XY006PA – Mixed Limestone
Lower Slope

12b. Poorly Drained and SPD -- combined with PD floodplains below) ... F147XY011PA – Poorly Drained Fine Mixed Floodplain

3b. Water deposited (Alluvium) or wind-deposited (Eolian) materials

13a. Water deposited – Alluvium

14a. Not-actively flooded to rarely-flooded deposits -Terraces

15a. Well Drained and MWD -- Loamy to Coarse Terrace ... F147XY007PA – Loamy To Coarse Terrace

15b. Poorly Drained and SPD -- Fine Poorly Drained Alluvial Terrace ... F147XY001PA – Poorly Drained Fine Alluvial Terrace

14b. Floodplains and Drainageways

16a. Shales, Sandstone, Limestones, and Siltstone

17a. Moderately Well Drained to EWD

18a. Loamy -- Loamy Mixed Floodplain ... F147XY009PA – Loamy Mixed Floodplain

18b. Coarse textured -- Coarse Mixed Floodplain ... F147XY010PA – Coarse Mixed Floodplain

17b. Poorly Drained to VPD -- Poorly Drained Fine Mixed Floodplain ... F147XY011PA – Poorly Drained Fine Mixed Floodplain

16b. Marl, pure limestone, strongly carbonaceous

19a. Well Drained to MWD -- Calcareous Loamy Bottomland ... F147XY012PA – Calcareous Loamy Bottomland

19b. Poorly Drained and SPD - Poorly Drained Calcareous Bottomland ... F147XY013PA – Poorly Drained Calcareous Bottomland

13b. Wind deposited - Eolian Deposits -- Combined with Loamy to Coarse Terrace (above) ... F147XY007PA – Loamy To Coarse Terrace

2b. Frigid uplands -- Frigid Mixed Sedimentary Uplands ... F147XY015PA – Frigid Mixed Sedimentary Upland

1b. Human Transported Materials or Mine Spoil

20a. Mine Spoil (Reserved)

20b. Urban lands (Reserved)

MLRA 147

I. Uplands – summits, shoulders, or backslopes - residuum

A. Acidic Shales, SS, and Siltstone (Mixed Sedimentary)

1 Bedrock <40” (100cm) ... F147XY008PA – Shallow Mixed Sedimentary Upland

2 Bedrock >40” (100 cm) ... F147XY002PA – Mixed Sedimentary Upland

B. Limestone and Calcareous SS and Shales (Mixed Limestone) –includes Pre-Wisconsinan tills ... F147XY003PA – Mixed Limestone Upland

C. Sandstone dominated ... F147XY004PA – Sandstone Upland

II. Foothills, benches, or Toeslopes - colluvium

A. Acidic Shales, SS, and Siltstone (Mixed Sedimentary and Sandstone)

1 Well Drained and MWD - combined with Deep Acid Mixed Sedimentary Upland

2 Poorly Drained and SPD ... F147XY005PA – Poorly Drained Mixed Sedimentary Toeslope

B. Limestone and Calcareous SS and Shales (Mixed Limestone)

1 Well Drained and MWD ... F147XY006PA – Mixed Limestone Lower Slope

2 Poorly Drained and SPD - combined with PD floodplains

III. Terraces – rarely flooded or not flooded

A. Well Drained and MWD ... F147XY007PA – Loamy To Coarse Terrace

B. Poorly Drained and SPD ... F147XY001PA – Poorly Drained Fine Alluvial Terrace

IV. Eolian Deposits - Combined with Loamy to Coarse Terrace

V. Floodplains and Drainageways

A. Shales, Sandstone, Limestones, and Siltstone Uplands

1 Well Drained to MWD ... F147XY009PA – Loamy Mixed Floodplain

2 Well Drained to EWD ... F147XY010PA – Coarse Mixed Floodplain

3 Poorly Drained to VPD ... F147XY011PA – Poorly Drained Fine Mixed Floodplain

B. Marl, pure limestone, strongly carbonaceous

1 Well Drained to MWD ... F147XY012PA – Calcareous Loamy Bottomland

2 Poorly Drained and SPD ... F147XY013PA – Poorly Drained Calcareous Bottomland

VI. Mine Spoil ... F147XY014PA – Mine Spoil Land

VII. Frigid uplands ... F147XY015PA – Frigid Mixed Sedimentary Upland

VIII. Urban uplands ... F147XY016PA – Urban Uplands