

Ecological site F126XY005OH

Wet Floodplain

Last updated: 9/27/2024
Accessed: 09/24/2026

General information

Provisional. A provisional ecological site description has undergone quality control and quality assurance review. It contains a working state and transition model and enough information to identify the ecological site.

MLRA notes

Major Land Resource Area (MLRA): 126X—Central Allegheny Plateau

This site contains poorly and very poorly drained on alluvial land deposited during the Quaternary period. ecosite is found in alluvial plain, and river valleys within hills, mountains, plateau, in MLRA 126

Classification relationships

USDA-NRCS (USDA 2006): Land Resource Region (LRR): N—East and Central Farming and Forest Region Major Land Resource Area (MLRA): 126—Central Allegheny Plateau USDA-FS (Cleland et al. 2007) Province: 221 - Eastern Broadleaf Province Section: 221E - Southern Unglaciaded Allegheny Plateau Subsection: 221Ea - Pittsburgh Low Plateau 221Eb - Teays Plateau 221Ec - Ohio Valley Lowland 221Ed - East Hocking Plateau This site crosswalks to Landfire biophysical setting (BpS) Central Interior and Appalachian Floodplain Systems. NatureServe (2007) describes this as an aggregated system including the following standard ecological systems (for MLRA 127): • Central Appalachian River Floodplain (CES202.608) Component Associations (all not applicable to MLRA 127) Association Unique ID Association Name CEGLO02014 Fraxinus pennsylvanica - Ulmus spp. - Celtis occidentalis Forest CEGLO02086 Betula nigra - Platanus occidentalis Forest CEGLO02191 Cephalanthus occidentalis / Carex spp. - Lemna spp. Southern Shrubland CEGLO02586 Acer saccharinum - Fraxinus pennsylvanica - Ulmus americana Forest CEGLO03896 Platanus occidentalis - Betula nigra - Salix (caroliniana, nigra) Woodland CEGLO04073 Platanus occidentalis - Acer negundo - Juglans nigra / Asimina triloba / Mertensia virginica Forest CEGLO04103 Carex torta Herbaceous Vegetation CEGLO04286 Justicia americana Herbaceous Vegetation CEGLO05014 Fagus grandifolia - Quercus spp. - Acer rubrum - Juglans nigra Forest CEGLO05033 Acer negundo Ruderal Floodplain Forest CEGLO05082 Alnus serrulata Swamp Shrubland CEGLO05449 Calamagrostis canadensis North-Central Wet Meadow CEGLO06001 Acer saccharinum - Ulmus americana / Onoclea sensibilis Forest CEGLO06036 Platanus occidentalis - Fraxinus pennsylvanica Forest CEGLO06042 Acer saccharinum - Ulmus americana / Physocarpus opulifolius Forest CEGLO06069 Cephalanthus occidentalis - Decodon verticillatus Shrubland CEGLO06114 Acer saccharum - Fraxinus spp. - Tilia americana / Matteuccia struthiopteris - Ageratina altissima Forest CEGLO06147 Acer saccharinum - (Populus deltoides) / Matteuccia struthiopteris - Laportea canadensis Forest CEGLO06176 Acer saccharinum / Onoclea sensibilis - Boehmeria cylindrica Forest CEGLO06184 Betula nigra - Platanus occidentalis / Impatiens capensis Forest CEGLO06185 Quercus palustris - Acer rubrum / Carex grayi - Geum canadense Forest CEGLO06217 Acer saccharinum - Acer negundo / Ageratina altissima - Laportea canadensis - (Elymus virginicus) Forest CEGLO06218 Quercus bicolor - Fraxinus pennsylvanica - (Platanus occidentalis) / Chasmanthium latifolium - Dichanthelium clandestinum - Zizia aurea Woodland CEGLO06244 Peltandra virginica - Polygonum amphibium var. emersum - Carex stricta - Impatiens capensis Herbaceous Vegetation CEGLO06251 Alnus serrulata - Physocarpus opulifolius Shrubland CEGLO06255 Liriodendron tulipifera - Platanus occidentalis - Betula lenta / Lindera benzoin / Circaea lutetiana ssp. canadensis Forest CEGLO06283 Andropogon gerardii - Panicum virgatum - Baptisia australis Herbaceous Vegetation CEGLO06305 Salix sericea Shrubland CEGLO06314 Liriodendron tulipifera - Fraxinus spp. / Lindera benzoin - Viburnum prunifolium / Podophyllum peltatum Forest CEGLO06386 Quercus bicolor - Acer rubrum / Carpinus caroliniana Forest CEGLO06405 Tilia americana - Acer saccharum - Acer nigrum / Laportea canadensis Forest CEGLO06445 Carya cordiformis - Prunus serotina / Ageratina altissima Forest CEGLO06447 Carex trichocarpa Herbaceous Vegetation CEGLO06459 Acer saccharum - Fraxinus americana / Carpinus caroliniana / Podophyllum peltatum Forest CEGLO06463 Salix nigra - Betula nigra / Schoenoplectus pungens Wooded Herbaceous Vegetation CEGLO06466 Platanus occidentalis / Aesculus flava Forest CEGLO06473 Acer saccharum - Liriodendron tulipifera / Galium concinnum - Carex laxiculmis Forest CEGLO06476 Platanus occidentalis - Acer saccharinum - Betula nigra - Fraxinus pennsylvanica / Boehmeria cylindrica - Carex emoryi Woodland CEGLO06478 Fraxinus americana / Andropogon gerardii - Sorghastrum nutans - Schizachyrium scoparium - Pycnanthemum tenuifolium Herbaceous Vegetation CEGLO06480 Verbena alternifolia - Elymus riparius - Solidago gigantea - (Teucrium canadense) Herbaceous Vegetation CEGLO06481 Eupatorium serotinum - Polygonum (lapathifolium, punctatum, pensylvanicum) Herbaceous Vegetation CEGLO06483 Eragrostis hypnoides - Ludwigia palustris - Lindernia dubia - Cyperus squarrosus Herbaceous Vegetation CEGLO06484 Carpinus caroliniana - Ilex decidua Shrubland CEGLO06491 (Hypericum prolificum, Leucothoe racemosa) / Schizachyrium scoparium - Solidago simplex var. racemosa - Ionactis linariifolius Sparse Vegetation CEGLO06495 Quercus rubra - Quercus shumardii / Cercis canadensis Temporarily Flooded Forest CEGLO06497 Quercus palustris -

Quercus bicolor / *Carex tribuloides* - *Carex radiata* - (*Carex squarrosa*) Forest CEGLO06518 *Prunus pumila* / *Andropogon gerardii* - *Sorghastrum nutans* Herbaceous Vegetation CEGLO06536 *Carex torta* - *Apocynum cannabinum* - *Cyperus* spp. Herbaceous Vegetation CEGLO06546 *Alnus incana* - *Viburnum recognitum* / *Calamagrostis canadensis* Shrubland CEGLO06548 *Acer* (*rubrum*, *saccharinum*) - *Fraxinus pennsylvanica* - *Ulmus americana* / *Boehmeria cylindrica* Forest CEGLO06575 *Fraxinus pennsylvanica* - (*Juglans nigra*, *Platanus occidentalis*) Forest CEGLO06595 *Spiraea alba* Shrubland CEGLO07696 *Peltandra virginica* - *Saururus cernuus* - *Boehmeria cylindrica* / *Climacium americanum* Herbaceous Vegetation CEGLO07879 *Juglans nigra* / *Verbesina alternifolia* Ruderal Forest CEGLO08405 *Liriodendron tulipifera* - *Pinus strobus* - (*Tsuga canadensis*) / *Carpinus caroliniana* / *Amphicarpaea bracteata* Forest CEGLO08449 *Pinus virginiana* - *Juniperus virginiana* var. *virginiana* - *Quercus stellata* / *Amelanchier stolonifera* / *Danthonia spicata* / *Leucobryum glaucum* Woodland • North-Central Interior Floodplain (CES202.694) Component Associations (all not applicable to MLRA 127) Association Unique ID Association Name CEGLO02018 *Populus deltoides* - *Salix nigra* - *Acer saccharinum* Forest CEGLO02026 *Schoenoplectus tabernaemontani* - *Typha* spp. - (*Sparganium* spp., *Juncus* spp.) Herbaceous Vegetation CEGLO02086 *Betula nigra* - *Platanus occidentalis* Forest CEGLO02087 *Carya illinoensis* - *Celtis laevigata* Forest CEGLO02099 *Quercus michauxii* - *Quercus shumardii* - *Liquidambar styraciflua* / *Arundinaria gigantea* Forest CEGLO02101 *Quercus palustris* - (*Quercus stellata*) - *Quercus pagoda* / *Isoetes* spp. Forest CEGLO02102 *Quercus phellos* - (*Quercus lyrata*) / *Carex* spp. - *Leersia* spp. Forest CEGLO02103 *Salix nigra* Forest CEGLO02191 *Cephalanthus occidentalis* / *Carex* spp. - *Lemna* spp. Southern Shrubland CEGLO02314 River Mudflats Sparse Vegetation CEGLO02386 *Nuphar advena* - *Nymphaea odorata* Herbaceous Vegetation CEGLO02410 *Fraxinus pennsylvanica* - *Celtis* spp. - *Quercus* spp. - *Platanus occidentalis* Bottomland Forest CEGLO02417 *Quercus stellata* - *Quercus marilandica* - *Quercus falcata* / *Schizachyrium scoparium* Sand Woodland CEGLO02420 *Taxodium distichum* / *Lemna minor* Forest CEGLO02427 *Fraxinus pennsylvanica* - *Ulmus americana* - *Celtis laevigata* / *Ilex decidua* Forest CEGLO02430 *Polygonum* spp. - Mixed Forbs Herbaceous Vegetation CEGLO02431 *Acer saccharinum* - *Celtis laevigata* - *Carya illinoensis* Forest CEGLO02586 *Acer saccharinum* - *Fraxinus pennsylvanica* - *Ulmus americana* Forest CEGLO03725 *Platanus occidentalis* - *Betula nigra* / *Cornus amomum* / (*Andropogon gerardii*, *Chasmanthium latifolium*) Woodland CEGLO03836 *Arundinaria gigantea* ssp. *gigantea* Shrubland CEGLO03895 *Alnus serrulata* - *Xanthorhiza simplicissima* Shrubland CEGLO03910 (*Diospyros virginiana*, *Platanus occidentalis*) / *Eupatorium serotinum* - *Diodia virginiana* Ruderal Herbaceous Vegetation CEGLO04049 River Valley Impoundment Mudflat Sparse Vegetation CEGLO04103 *Carex torta* Herbaceous Vegetation CEGLO04286 *Justicia americana* Herbaceous Vegetation CEGLO04420 *Acer rubrum* var. *trilobum* - *Fraxinus pennsylvanica* / *Carex crinita* - *Peltandra virginica* Forest CEGLO04544 *Quercus macrocarpa* - *Quercus shumardii* - *Carya cordiformis* / *Chasmanthium latifolium* Forest CEGLO04618 *Fraxinus pennsylvanica* - *Ulmus crassifolia* - *Celtis laevigata* Forest CEGLO04691 *Platanus occidentalis* - *Liriodendron tulipifera* - *Betula* (*alleghaniensis*, *lenta*) / *Alnus serrulata* - *Leucothoe fontanesiana* Forest CEGLO04979 *Quercus nigra* - *Quercus* (*alba*, *phellos*) Forest CEGLO05014 *Fagus grandifolia* - *Quercus* spp. - *Acer rubrum* - *Juglans nigra* Forest CEGLO05033 *Acer negundo* Ruderal Floodplain Forest CEGLO05035 *Acer saccharum* - *Carya cordiformis* / *Asimina triloba* Floodplain Forest CEGLO05057 *Quercus stellata* / (*Danthonia spicata*, *Croton willdenowii*) Woodland CEGLO05451 *Lemna* spp. Eastern North American Aquatic Vegetation CEGLO06458 *Platanus occidentalis* - *Fraxinus pennsylvanica* / *Carpinus caroliniana* / *Verbesina alternifolia* Forest CEGLO06462 *Quercus* (*rubra*, *velutina*, *alba*) / *Carpinus caroliniana* - (*Halesia tetraptera*) / *Maianthemum racemosum* Forest CEGLO06466 *Platanus occidentalis* / *Aesculus flava* Forest CEGLO06480 *Verbesina alternifolia* - *Elymus riparius* - *Solidago gigantea* - (*Teucrium canadense*) Herbaceous Vegetation CEGLO06620 *Tsuga canadensis* - *Quercus rubra* - (*Platanus occidentalis*, *Betula nigra*) / *Rhododendron maximum* / *Anemone quinquefolia* Forest CEGLO07064 *Salix caroliniana* Temporarily Flooded Ozark Shrubland CEGLO07334 *Platanus occidentalis* - *Acer saccharinum* - *Juglans nigra* - *Ulmus rubra* Forest CEGLO07339 *Platanus occidentalis* - *Fraxinus pennsylvanica* - *Quercus imbricaria* Forest CEGLO07399 *Quercus palustris* - (*Fraxinus nigra*) / *Lindera benzoin* / *Carex bromoides* Forest CEGLO07410 *Salix nigra* Large River Floodplain Forest CEGLO07702 *Liquidambar styraciflua* - *Quercus michauxii* - *Carya laciniata* / *Fagus grandifolia* - (*Aesculus flava*) Forest CEGLO07810 *Acer saccharinum* - *Betula nigra* / *Cephalanthus occidentalis* Forest CEGLO07879 *Juglans nigra* / *Verbesina alternifolia* Ruderal Forest CEGLO07880 *Liquidambar styraciflua* - *Liriodendron tulipifera* - (*Platanus occidentalis*) / *Carpinus caroliniana* - *Halesia tetraptera* / *Amphicarpaea bracteata* Forest CEGLO07999 *Platanus occidentalis* - *Betula nigra* - *Celtis laevigata* - *Fraxinus pennsylvanica* / *Arundinaria gigantea* Temporarily Flooded Forest CEGLO08404 *Osmunda regalis* var. *spectabilis* Seepage Scour Herbaceous Vegetation CEGLO08495 *Hypericum densiflorum* - *Alnus serrulata* / *Tripsacum dactyloides* Shrubland CEGLO08562 *Salix interior* Temporarily Flooded Shrubland

Ecological site concept

From NatureServe (2007): This system encompasses floodplains of medium to large rivers in Atlantic drainages from southern New England to Virginia. This system can include a complex of wetland and upland vegetation on deep alluvial deposits and scoured vegetation on depositional bars and on bedrock where rivers cut through resistant geology. This complex includes floodplain forests in which *Acer saccharinum*, *Populus deltoides*, and *Platanus occidentalis* are characteristic, as well as herbaceous sloughs, shrub wetlands, riverside prairies and woodlands. Microtopography and soil texture determine how long the various habitats are inundated. Depositional and erosional features may both be present depending on the particular floodplain. From Landfire <http://www.landfire.gov/index.php>: This systems group encompasses large-river floodplains over much of the eastern US (NatureServe 2007), but differs from the Coastal Plain model in several ways. First it is floristically different in that it lacks cypress and tupelo except in its lowest elevation where it transitions to the Coastal Plain. Permanent standing water is lacking except in the areas closest to sea level where oxbow lakes may exist. Hydroperiods are shorter and fluvial features such as river terraces, oxbows, alluvial flats, point bars, streamside levees and other fine-scale alluvial floodplain features are abundant. NatureServe (2007) notes some will include herbaceous sloughs and shrub wetlands, particularly in abandoned channels The substrate is primarily alluvium. The generally fertile soils are usually sandy to loamy but include local clayey and gravelly areas (NatureServe 2007). Synonyms for this BpS and its variations include eastern riverfront forest, bottomland hardwood forest, and alluvial forest. Fire and beaver activity create a mosaic whose elements include canebrake, beaver ponds, and grass-sedge meadows in abandoned beaver clearings, as well as the swamps and bottomland hardwood forests that make up more than 95% of the cover that exists today. Standard Ecological Systems noted by NatureServe (2007) that make up this aggregated system include: • Central Appalachian River Floodplain (CES202.608) • North-Central Interior Floodplain (CES202.694) • South-Central Interior

Large Floodplain (CES202.705) • Southern Piedmont Large Floodplain Forest (CES202.324) Issues or Problems: Federal reservoirs have had a serious and negative effect, along with agriculture that has converted much floodplain acreage to drained agricultural land. In the remaining less altered floodplains, flood duration varies according to the river's gradient (NatureServe 2007).

Associated sites

F126XY006OH	Well Drained Floodplain Well-drained floodplain
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Table 1. Dominant plant species

Tree	(1) <i>Platanus occidentalis</i>
Shrub	(1) <i>Acer negundo</i>
Herbaceous	(1) <i>Carex</i>

Physiographic features

The ecological site are flood plains found in alluvial plain, and river valleys within hills, mountains, plateau, in MLRA 126

Table 2. Representative physiographic features

Landforms	(1) Flood plain
Runoff class	Very low to medium
Flooding frequency	Rare to frequent
Ponding frequency	Rare to frequent
Elevation	30 – 420 m
Slope	0 %
Water table depth	0 – 50 cm

Climatic features

The regional climate of the unglaciated Central Allegheny Plateau is predominately a humid continental climate grading at the extreme southwestern corner a to humid temperate climate with hot summers and cool winters (Beck et al., 2018; Bailey, 2014). However, the local climate is highly influenced by the dissected terrain, where climatic variations may be greater at the local scale, e.g., cooler temperatures and shorter growing season at higher elevations and more northerly latitudes. High-intensity, convective thunderstorms are common in summer. Winter precipitation is mostly snow.

Climate change is occurring, and the resiliency of any ecological site will depend upon the direct and indirect effects upon component species and shifting atmospheric and soil conditions.

Table 3 Representative climatic features

Frost-free period (characteristic range)	140-170 days
Freeze-free period (characteristic range)	170-200 days
Precipitation total (characteristic range)	1,020-1,090 mm
Frost-free period (actual range)	130-170 days
Freeze-free period (actual range)	160-200 days
Precipitation total (actual range)	990-1,140 mm
Frost-free period (average)	150 days
Freeze-free period (average)	180 days
Precipitation total (average)	1,070 mm

- (1) WHEELING [USC00469482], Wheeling, WV
- (2) SENECAVILLE LAKE [USC00337559], Senecaville, OH
- (3) CALDWELL 3 SE [USC00331175], Caldwell, OH
- (4) HANNIBAL L&D [USC00333500], New Martinsville, OH
- (5) WAYNESBURG 1 E [USC00369367], Waynesburg, PA
- (6) WEST UNION 2 [USC00469458], West Union, WV
- (7) PARKERSBURG [USW00013867], Parkersburg, WV
- (8) WINFIELD LOCKS [USC00469683], Red House, WV
- (9) PEA RIDGE PSD [USC00466912], Huntington, WV
- (10) HUNTINGTON SEWAGE PLT [USC00464397], Kenova, WV
- (11) LOYALHANNA LAKE [USC00365212], New Alexandria, PA
- (12) PITTSBURGH INTL AP [USW00094823], Coraopolis, PA

Influencing water features

Wet Floodplain and Drainageway ecological sites are wetlands located along river systems of varying size. River flooding and ponding are variable, ranging from rare to frequent. Flood events may be seasonal, most common in the spring and early summer.

Wetland description

In the National Wetland Classification System (Cowardin et al., 1979), the Wet Floodplain and Drainageway ecological site may be considered in the Palustrine system, with a vegetated class, such as emergent, scrub-shrub, or forested, and modified by a non-tidal water regime ranging from seasonally flooded to seasonally-flooded/saturated.

Soil features

The ecological site contains alluvial, poorly drained to very poorly drained soils.

Table 4. Representative soil features

Parent material	(1) Alluvium
Surface texture	(1) Silt loam
Permeability class	Very slow to slow
Depth to restrictive layer	80 – 180 cm
Surface fragment cover <=3"	Not specified
Surface fragment cover >3"	Not specified
Available water capacity (Depth not specified)	10.16 – 22.86 cm
Soil reaction (1:1 water) (Depth not specified)	4.5 – 7.8
Subsurface fragment volume <=3" (Depth not specified)	0 – 30 %
Subsurface fragment volume >3" (Depth not specified)	0 – 10 %

Ecological dynamics

Ecological Dynamics: Information contained in this section was adapted from several sources. The information presented is representative of very complex vegetation communities. Key indicator plants, animals and ecological processes are described to help inform land management decisions. Plant communities will differ across the MLRA because of the naturally occurring variability in weather, soils, and aspect. The reference plant community is not necessarily the management goal. The species lists are representative and are not botanical descriptions of all species occurring, or potentially occurring, on this site. They are not intended to cover every situation or the full range of conditions, species, and responses for the site.

State Correlation: This site will be correlated in: OH,PA,WV

From Landfire <http://www.landfire.gov/index.php>:

Most of the system is forest vegetation. The canopy is usually dominated by a mix of characteristic alluvial and bottomland species (depending on the region) such as sycamore (*Platanus occidentalis*), river birch (*Betula nigra*), box elder (*Acer negundo*), eastern cottonwood (*Populus deltoides*), sugarberry (*Celtis laevigata*), green ash (*Fraxinus pennsylvanica*), sweetgum (*Liquidambar styraciflua*), and red maple (*Acer rubrum*). NatureServe (2007) also notes characteristic trees include silver maple (*Acer saccharinum*), willows, especially black willow (*Salix nigra*) in the wettest areas, American elm (*Ulmus Americana*), swamp chestnut oak (*Quercus michauxii*), cherrybark oak (*Quercus pagoda*), and (at least in the Midwest) Bur oak (*Quercus macrocarpa*) in more well-drained areas. The particular mix of tree species will vary across the geographic range of this systems group, with some trees absent over parts of the range. Successional areas are often dominated by sweetgum (*Liquidambar styraciflua*), or tulip tree (*Liriodendron tulipifera*).

The driest and most fire sheltered sites support species such as pignut hickory (*Carya glabra*), shagbark hickory (*Carya ovata*), beech (*Fagus grandifolia*), and other fire sensitive species.

Subcanopy species included American holly (*Ilex opaca*), deciduous holly (*Ilex decidua* and *Ilex ambigua*), red mulberry (*Morus rubra*), ironwood (*Carpinus caroliniana*) and hop hornbeam (*Ostrya virginiana*). Shrubs such as spicebush (*Lindera benzoin*), beautyberry (*Callicarpa americana*), yellowroot (*Xanthorhiza simplicissima*), common buttonbush (*Cephalanthus occidentalis*), roughleaf dogwood (*Cornus drummondii*), and pawpaw (*Asimina triloba*); sedges (*Carex* spp.); and grasses including eastern bottlebrush grass (*Elymus hystrix*), Canada wildrye (*Elymus Canadensis*), and Indian woodoats (*Chasmanthium latifolium*), and false nettle (*Boehmeria cylindrica*) may be present.

Because of the particular mix and diversity of tree species will vary across the geographic range of this systems group, the list of BpS dominant and indicator species is only a rudimentary list.

State and transition model

Figure 7. State and Transition

Figure 8. Legend

Additional community tables

Table 5. Community 1.1 plant community composition

Group	Common Name	Symbol	Scientific Name	Annual Production ()	Foliar Cover (%)
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Table 6. Community 2.1 plant community composition

Group	Common Name	Symbol	Scientific Name	Annual Production ()	Foliar Cover (%)
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Table 7. Community 3.1 plant community composition

Group	Common Name	Symbol	Scientific Name	Annual Production ()	Foliar Cover (%)
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Inventory data references

Site Development and Testing Plan Future work is needed, as described in a future project plan, to validate the information presented in this provisional ecological site description. Future work includes field sampling, data collection and analysis by qualified vegetation ecologists and soil scientists. As warranted, annual reviews of the project plan can be conducted by the Ecological Site Technical Team. A final field review, peer review, quality control, and quality assurance reviews of the ESD are necessary to approve a final document.

Other references

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Contributors

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Approval

Greg Schmidt, 9/27/2024

Rangeland health reference sheet

Interpreting Indicators of Rangeland Health is a qualitative assessment protocol used to determine ecosystem condition based on benchmark characteristics described in the Reference Sheet. A suite of 17 (or more) indicators are typically considered in an assessment. The ecological site(s) representative of an assessment location must be known prior to applying the protocol and must be verified based on soils and climate. Current plant community cannot be used to identify the ecological site.

Author(s)/participant(s)	
Contact for lead author	
Date	09/24/2026
Approved by	

Approval date	
Composition (Indicators 10 and 12) based on	Annual Production

Indicators

1. Number and extent of rills:

2. Presence of water flow patterns:

3. Number and height of erosional pedestals or terracettes:

4. Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are not bare ground):

5. Number of gullies and erosion associated with gullies:

6. Extent of wind scoured, blowouts and/or depositional areas:

7. Amount of litter movement (describe size and distance expected to travel):

8. Soil surface (top few mm) resistance to erosion (stability values are averages - most sites will show a range of values):

9. Soil surface structure and SOM content (include type of structure and A-horizon color and thickness):

10. Effect of community phase composition (relative proportion of different functional groups) and spatial distribution on infiltration and runoff:

11. Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction on this site):

12. Functional/Structural Groups (list in order of descending dominance by above-ground annual-production or live foliar cover using symbols: >>, >, = to indicate much greater than, greater than, and equal to):

Dominant:

Sub-dominant:

Other:

Additional:

13. Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence):

14. Average percent litter cover (%) and depth (in):

15. Expected annual annual-production (this is TOTAL above-ground annual-production, not just forage annual-production):

16. Potential invasive (including noxious) species (native and non-native). List species which BOTH characterize degraded states and have the potential to become a dominant or co-dominant species on the ecological site if their future establishment and growth is not actively controlled by management interventions. Species that become dominant for only one to several years (e.g., short-term response to drought or wildfire) are not invasive plants. Note that unlike other indicators, we are describing what is NOT expected in the reference state for the ecological site:

17. Perennial plant reproductive capability:
