



New Mexico Riparian Habitat Map Legend Version 2.0 Plus

The New Mexico Riparian Habitat Map Legend is presented below in Table 1. The legend has three hierarchical levels:

Level 1. General vegetation types characterized by major lifeforms and strata—forest and woodlands, shrublands, and herbaceous vegetation— plus a category of non-vegetated Miscellaneous Land Types.

Forests and woodlands: polygons dominated by stands of closed-canopied forest or open-canopied woodlands that are generally taller than 5m (some stands are dominated by short-statured species such as junipers that are < 5m). Shrub patches or herbaceous vegetation may be present under trees and in openings.

Shrublands: polygons dominated by dense to open stands (> 25% canopy cover) of woody shrubs or sapling trees between 0.5 and 5 m. Scattered mature trees or small open areas dominated by herbaceous vegetation may be present.

Herbaceous Vegetation: polygons dominated by stands of grass-like species (graminoids) and/or forbs. Trees and shrubs may be present as scattered patches or individuals. Some open areas may be predominantly bare ground.

Level 2. Mid-level units with broad categories of elevation zones (Montane > 6,500 ft and Lowland <6,500 ft), native versus non-native woody species, natural and semi-natural vegetation, riparian versus upland vegetation, and specific elements of Miscellaneous Land Types (e.g., roads, built-up areas, agriculture, etc.).

Level 3. Fine-scale units that reflect leaf retention (Deciduous versus Evergreen); specific species composition based on origin (Native, Russian Olive, or Tamarisk), or site characteristics (wet, dry, or alkaline). Each Level 3 unit is cross-referenced to U.S. National Vegetation Classification ([USNVC](#)) Alliances that reflect specific species composition, environments, and ecology. See the [New Mexico Riparian Habitat Map Annotated](#) Legend spreadsheet for more details on the NVC classes.

In addition to these levels, we sometimes added a modifier to a polygon. This is additional information about habitat context or treatments. These are explained in Table 2.



Table 1. New Mexico Riparian Habitat Map Legend structured

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Level Codes and Names			L3 MU ID
I	FOREST and WOODLAND		
IA	Montane Riparian Forest and Woodlands		
	IA1	Montane Native Evergreen Riparian Forest	12
	IA2	Montane Native Evergreen-Deciduous Riparian Forest	23
	IA3	Montane Native Deciduous Riparian Forest	11
IB	Lowland Riparian Forest and Woodlands		
	IB1	Western Lowland Native Deciduous Riparian Forest	6
	IB2	Great Plains Lowland Native Deciduous Riparian Forest	36
	IB3	Lowland Native-Introduced Russian Olive Deciduous Riparian Forest	24
	IB4	Lowland Native-Introduced Tamarisk Deciduous Riparian Forest	25
	IB5	Lowland Native-Introduced Russian Olive - Tamarisk Deciduous Riparian Forest	42
	IB6	Lowland Native Evergreen Dry Riparian Forest	7
	IB7	Lowland Native Evergreen-Deciduous Riparian Forest	41
	IB8	Southwest Warm Desert Native Deciduous Riparian Forest	45
	IB9	Southwest Desert Native Dry Deciduous Riparian Woodland	50
IC	Lowland Introduced Riparian Woodland and Scrub		
	IC1	Russian Olive Introduced Riparian Woodland and Scrub	16
	IC2	Tamarisk Introduced Riparian Woodland and Scrub	15
	IC3	Russian Olive - Tamarisk Introduced Riparian Woodland and Scrub	26
	IC4	Mixed Introduced Forest and Scrub	27
ID	Upland Forest and Woodland		
	ID1	Upland Forest and Woodland	20
IE	Semi-Natural Riparian Woodland and Scrub		
	IE1	Semi-Natural Riparian Forest and Scrub	34
II	SHRUBLAND		
IIA	Montane Riparian Shrubland		
	IIA1	Subalpine-Montane Riparian Shrubland	18
	IIA2	Montane Dry Riparian Shrubland	35
IIB	Lowland Riparian Shrubland		
	IIB1	Lowland Wet Riparian Shrubland	4
	IIB2	Lowland Dry Riparian Shrubland	3
	IIB3	Desert Alkaline-Saline Wet Shrubland	40
	IIB4	Lowland Mixed Native- Russian Olive Riparian Scrub	29
	IIB5	Lowland Mixed Native-Introduced Tamarisk Riparian Scrub	30
	IIB6	Lowland Mixed Native - Russian Olive - Tamarisk Riparian Woodland and Scrub	31
IIC	Upland Shrubland		
	IIC1	Upland Shrubland	28
III	HERBACEOUS VEGETATION		
IIIA	Montane Marshes and Wet Meadows		
	IIIA1	Subalpine and Montane Wetland	19
	IIIA2	Montane Wet Meadow	13
IIIB	Lowland Marshes and Wet Meadows		
	IIIB1	Western Lowland Marsh	5
	IIIB2	Great Plains Lowland Marsh	37
	IIIB3	Arid West Lowland Wet Meadow	9
	IIIB4	Great Plains Lowland Wet Meadow	38

IIC	Montane Dry Meadow and Grassland		
	IIC1	Montane Dry Riparian Meadow and Grassland	10
IID	Lowland Dry Meadow and Grassland		
	IID1	Western Lowland Salt Meadow and Dry Grassland	8
	IID2	Great Plains Lowland Salt Meadow and Dry Grassland	39
III	Semi-natural Herbaceous Vegetation		
	III1	Ruderal Herbaceous Meadow	47
	III2	Pasture Wetlands	48
IIIF	Upland Grassland		
	IIIF1	Upland Grassland	32
IV	MISCELLANEOUS LAND TYPES		
IVA	Bare Unvegetated		
	IVA1	Riparian Bare Ground/Rockland [non-channel]	2
IVB	Water/Channel		
	IVB1	Open Channel Riverwash/Water/Non-vegetated Bars	22
IVC	Agriculture		
	IVC1	Agriculture – Cultivated crops	1
	IVC2	Agriculture – Hay/Pasture	49
IVD	Urban/Built-Up Areas		
	IVD1	Development/Disturbed Ground	21
IVE	Roads		
	IVE1	Roads	14
IVF	Upland Non-Veg		
	IVF1	Upland Bare Ground/Rockland	33

Table 2. Map unit modifiers assigned as needed to polygons of the New Mexico Riparian Habitat Map. MU_ID_mod refers to the attribute name in the geodatabase for the map.

Modifier	MU_ID_mod	Rules
Agriculture	1	This can include herbaceous vegetation, shrublands, and woodlands that occur in an agricultural setting, outside of the current floodplain.
Treatment/Disturbed	2	Assigned where there is high confidence that mapped polygons have evidence of either vegetation treatment (mechanically or by herbicide) or other disturbances such as a fires or floods that have recently altered the site. Based on NAIP imagery used in a given mapping domain.
Russian olive	3	Assigned when considered a major inclusion in stands but usually <25% of the polygon area (may be more in Semi-Natural woodland and scrub or Agriculture)
Tamarisk	4	Assigned when considered a major inclusion in stands but usually <25% of the polygon area (may be more in Semi-natural woodland and scrub or Agriculture)

Modifier	MU_ID_mod	Rules
Russian Olive-Tamarisk	5	Assigned when considered a major inclusion in stands but usually <25% of the polygon area (may be more in Semi-natural woodland and scrub or Agriculture)
Ditch Bank	6	This modifier was used to indicate Semi-Natural Riparian Woodland and Scrub growing along a ditch bank outside the current active floodplain or when stands of natural vegetation were growing along a ditch bank (levies) inside the floodplain.
Native Vegetation	7	Assigned to indicate >25% cover within stands classified as Semi-natural woodland and scrub or Agriculture, or as major inclusion in non-native-dominated polygons (i.e., Russian olive and/or tamarisk).
Mixed native-exotic	8	Used as a modifier to indicate >25% cover within stands classified as Semi-natural woodland and scrub or Agriculture, or as major inclusion in native polygons (e.g., willow or cottonwood).
Marsh/Wetland	9	Assigned when considered a major inclusion in stands but usually <25% of the polygon area (may be more in Semi-natural woodland and scrub or Agriculture)
Treatment/Disturbed field verified	10	Used to indicate stands that had been significantly modified by treatment, insects, or fire after the image date of the mapping domain based on field data.
Dead Overstory	11	Used to indicate herbaceous stands with a dead overstory, which include cottonwoods, willows, or other shrubs and trees with the exception of tamarisk.
Alkali Flat	13	Modifier for Alkali flats that are bare or grassland but without obvious shrub cover and thus not assigned to "Desert Alkaline-Saline Wet Shrubland" (MU_ID: 40).
Burned 2022	22	Burned in 2022, Hermits Peak/Calf Canyon Fires. Added opportunistically.
Fen	66	Wetland that might be a Fen. Added opportunistically.
Dead Tamarisk Overstory	99	Used to indicate stands that have >90% dead tamarisk in them. Many tamarisk dominated stands have died by chemical treatment and have changed in community type but still have the structure of the dead trees/shrubs in them.

Modifier	MU_ID_mod	Rules
Managed for Natural Habitat	34	Used on areas like Bosque Del Apache and Sevilletta NWR or other public lands (BOR, MRGCD, etc.) that are on the opposite side of levees from the river or otherwise hydrologically disconnected from the river but being managed for wildlife habitat or natural vegetation. The MU_ID (Level 3 Vegetation Type) is assigned based on composition and this modifier is added to indicate it is hydrologically separated from the current floodplain. These areas were identified based on public lands where management is known, or on large swaths of naturally established vegetation directly adjacent to levees that have not been converted to ag/urban. This applies only to riparian vegetation that is inside a managed land-use area. It does NOT apply to any riparian vegetation that is clearly within a developed area, or vegetation along ditch banks or within agricultural areas and old fields; those areas are mapped as "Semi-Natural Riparian Woodland and Scrub" (MU_ID: 34).
Sporobolus wrightii	30	Used only in the Animas Creek in the bootheel of New Mexico to distinguish large stands dominated by <i>Sporobolus wrightii</i> .