Riparian Conservation Opportunity Areas
Version 2.0

Spatial Layer Attributes and Descriptions for RCOAs, RCOA components, and associated Resource Layers

The following tables detail the attributes assigned to various components of the Riparian Conservation Opportunity Areas (RCOAs). Specifically, you will find: Attributes for RCOAs (Table 1), Riparian Strongholds (RSs) (Table 2), Other Native Riparian Areas (ORAs) (Table 3), Potential Restoration Areas (PRAs) (Table 4), and Small Primary Riparian Areas (SRAs) (Table 5)

Additionally, we have included tables for the supplementary connectivity elements/resource layers designed to complement the RCOAs: Inter-Connectivity Zones (IZs) (Table 6), Supplemental Habitat Zones (Table 7), and Potential Breaks in Connectivity (Table 8)

Table 1. Riparian Conservation Opportunity Areas (RCOAs) spatial layer attributes and descriptions.

NMRipMap = New Mexico Riparian Habitat Map; ONRA = Other Native Riparian Areas; PRA = Potential Restoration Areas; PNRV = **Primary Native Riparian Vegetation;** RS = Riparian Stronghold; and SPRA = Small Primary Riparian Areas.

Attribute Field Name	Description
General Attributes and RCOA rating attributes	
Subclass	*RCOA assigned hydrogeomorphic subclass: Confined, Unconfined, Headwater Complex
RCOA_RecID	Unique RCOA identification number, links to ONRAs, PRAs, and SPRAs
RCOA_NAME	Unique RCOA identification NAME, HUC12Name_Subclass_RCOA_RecID; links to ONRAs, PRAs, and SPRAs

Attribute Field Name	Description
HUC_12	The name of the Hydrological Unit Code (HUC) 12 that the majority of the RCOA intersects.
MoreThan_1HUC12	Identifies (Yes or No) whether the RCOA is in more than one HUC 12.
RCOA_Rating	RCOA rating based on the RCOA_Average_Score
RCOA_Average_Score	Average of RCOA ratings based on following fields: RCOA_Size_Score, RCOA_PRA_pct_Score, RCOA_ONRA_pct_Score, RCOA_VegTypeDiversity_Score
RCOA_Size_Score	RCOA rating based on the area of the RCOA in acres. Based on field: RCOA_Area_ac
RCOA_ORA pct_Score	RCOA rating based on percent ONRA. Based on field: RCOA_ONRA_pct.
RCOA_PRA_pct_score	RCOA rating based on percent PRA. Based on field: RCOA_PRA_pct
RCOA_VegTypeDiversity_Score	Rating based on the Vegetation Type Diversity Index (based on field RCOA_VegTypeDiversityIndex) of Primary Native Riparian Vegetation patches within an RCOA.
RCOA_Area_ac	Total RCOA Area in Acres

Additional RCOA Component Attributes

RCOA_RS_Area_ac	Sum of areas in acres of all RSs in an RCOA
RCOA_RS_pct	RS percent of RCOA area
RCOA_ORA_Area_ac	Total area in acres of all ONRAs in an RCOA
RCOA_ORA_pct	ONRA percent of total RCOA area
RCOA_PRA_Area_ac	Total area in acres of PRAs in an RCOA
RCOA_PRA_pct	PRA percent of total RCOA area

Attribute Field Name	Description
RCOA_SRA_Area_ac	Total area in acres of SPRAs in an RCOA
RCOA_SRA_pct	SPRA percent of total RCOA area

Diversity Attributes

RCOA_VegTypeDiversityIndex	Shannon Diversity Index of RCOA using PNRV community diversity as a measure of conservation value. PNRV vegetation types are those community types used for building the RS's
RCOA_SOC_value	Highest value (1-6, 1 being the highest) of the Species of Concern (SOC) hexagonal data that an RCOA intersects. The SOC data provide information, made available through the New Mexico Crucial Habitat Assessment Tool (NMCHAT), regarding the presence of one or more SOCs in square mile hexagonal areas.. The NMCHAT represents several datasets in this hexagonal grid across New Mexico. A NMCHAT Priority Value 1 reflects the presence of at least one state- or federally-endangered or threated species while Priority Value 6 indicates that there are no sensitive species known to be present (see NMCHAT metadata for details).

PNRV Composition Percentage by Stratum

RCOA_PNRV_Forest_pct	Total percent forested wetland area in RCOA - Lowland Native Deciduous Riparian Forest, Montane Native Deciduous Riparian Forest, Montane Native Mixed Evergreen-Deciduous Riparian Forest
RCOA_PNRV_Shrub_pct	Total percent riparian shrub wetland area in RCOA - Lowland Wet Riparian Shrubland, Subalpine Montane Riparian Shrubland
RCOA_PNRV_Herb_pct	Total percent herbaceous wetland area in RCOA- Western Lowland Marsh, Subalpine and Montane Marsh

Attribute Field Name	Description
NMRipMap Vegetation Composition Percentages	
RCOA_WesternLowlandMarsh_pct	Percent NMRipMap unit 5
RCOA_AridWestLowlandWetMeadow_pct	Percent NMRipMap unit 9
RCOA_WesternLowlandNativeDeciduousRiparianForest_pct	Percent NMRipMap unit 6
RCOA_LowlandNativeEvergreenDeciduousRiparianForest_pct	Percent NMRipMap unit 41
RCOA_LowlandDryRiparianShrubland_pct	Percent NMRipMap unit 3
RCOA_LowlandWetRiparianShrubland_pct	Percent NMRipMap unit 4
RCOA_MontaneNativeEvergreenDeciduousRiparianForest_pct	Percent NMRipMap unit 23
RCOA_SubalpineMontaneRiparianShrubland_pct	Percent NMRipMap unit 18
RCOA_MontaneDryRiparianShrubland_pct	Percent NMRipMap unit 35
RCOA_MontaneNativeEvergreenRiparianForest_pct	Percent NMRipMap unit 12
RCOA_MontaneNativeDeciduousRiparianForest_pct	Percent NMRipMap unit 11
RCOA_MontaneWetMeadow_pct	Percent NMRipMap unit 13
RCOA_SubalpineMontaneMarsh_pct	Percent NMRipMap unit 19
RCOA_SubalpineAndMontaneWetMeadow_pct	Percent NMRipMap unit 13
RCOA_MontaneDryRiparianMeadowandGrassland_pct	Percent NMRipMap unit 10
RCOA_MontaneDryRiparianShrubland_pct	Percent NMRipMap unit 35
RCOA_LowlandDryRiparianShrubland_pct	Percent NMRipMap unit 3
RCOA_LowlandNativeEvergreenRiparianForest_pct	Percent NMRipMap unit 7
RCOA_WesternLowlandSaltMeadowandDryGrassland_pct	Percent NMRipMap unit 8
RCOA_RuderalHerbaceousMeadow_pct	Percent NMRipMap unit 47
RCOA_BaregroundRocklandNonChannel_pct	Percent NMRipMap unit 2
RCOA_RussianOliveIntroducedRiparianWoodlandandScrub_pct	Percent NMRipMap unit 16
RCOA_LowlandMixedWillowRussianOliveRiparianScrub_pct	Percent NMRipMap unit 29
RCOA_LowlandNativeIntroducedRussianOliveDeciduous_pct	Percent NMRipMap unit 24
RCOA_LowlandNativeIntroducedTamariskDeciduousForest_pct	Percent NMRipMap unit 25
RCOA_RussianOliveTamariskIntroducedRiparianWoodlandandScrub_pct	Percent NMRipMap unit 26
RCOA_LowlandMixedWillowTamariskRiparianScrub_pct	Percent NMRipMap unit 30
RCOA_LowlandNativeIntroducedRussianOliveTamariskDeciduousForest_pct	Percent NMRipMap unit 42

Attribute Field Name	Description
RCOA_LowlandMixedWillowRussianOliveTamariskRiparianWoodlandandScrub_pct	Percent NMRipMap unit 31
RCOA_TamariskIntroducedRiparianWoodlandandScrub_pct	Percent NMRipMap unit 15
RCOA_MixedIntroducedForestandScrub_pct	Percent NMRipMap unit 27

Ownership Attributes:

Based on BLM Land Status Map

Public_pct	Public ownership percent of RCOA
Private_pct	Private ownership percent of RCOA
Tribal_pct	Tribal ownership percent of RCOA

Public Land Percentages

USFS_pct	U.S. Forest Service (USFS) ownership percent of RCOA
BLM_pct	U.S. Bureau of Land Management (BLM) ownership percent of RCOA
NPS_pct	National Park Service (NPS) ownership percent of RCOA
NMDGF_pct	New Mexico Department of Game and Fish (NMDGF) ownership percent of RCOA
StatePark_pct	State Park ownership percent of RCOA
StateLand_pct	State Land Office ownership percent of RCOA
StateofNM_pct	
DOD_pct	Department of Defense (DOD), U.S. Army Core of Engineers ownership percent of RCOA
CountyLand_pct	
StateForestry_pct	

RCOA Component Counts

RCOA_RS_Count	The count of RSs in a given RCOA
RCOA_ORA_Count	The count of ONRAs in a given RCOA
RCOA_PRA_Count	The count of PRAs in a given RCOA
RCOA_SRA_Count	The count of SRAs in a given RCOA

Attribute Field Name	Description
Canopy Height/Density Attributes Percent canopy cover based on the proportion of pixels of each vegetation stratum within an RCOA as derived from LiDAR canopy height model values. Unavailable for areas without LiDAR data available.	
Herbaceous_Cov	Proportion of canopy height model pixels within RCOA 0-0.5m tall.
Dwarf_Shrub_Cov	Proportion of canopy height model pixels within RCOA >=0.5m < 1m tall.
Shrub_Cov	Proportion of canopy height model pixels within RCOA >=1m < 5m tall.
Medium_Tree_Cov	Proportion of canopy height model pixels within RCOA >=5m < 12m tall.
Tall_Tree_Cov	Proportion of canopy height model pixels within RCOA >= 12m tall.

* Confined = Confined River Valleys and Wetlands; Unconfined = Unconfined River Valleys and Wetlands; Headwater Complex = Headwater Slope Wetlands.

Table 2. Riparian Strongholds (RSs) spatial layer attributes and descriptions.

NMRipMap = New Mexico Riparian Habitat Map; RCOA = Riparian Conservation Opportunity Area; VTDI = Vegetation Type Diversity Index.

Attribute Field Name	Description
Subclass	Subclass of RS: Confined, Unconfined, Headwater Complex
RS_RecID	Unique RS identification number
RS_Name	Unique name given to RS. Naming convention: Subclass_RS_RecID, i.e. "Confined_1", "Unconfined_1", etc.
Associated_RCOA_RecID	The RecID of the RCOA the RS is associated with
Associated_RCOA_Name	The name of the RCOA the RS is associated with
RS_Size_Rating	RS rating (A-D) based on area in acres of RS (Based on field: RS_Area_ac)

Rating	Acres
A	>= 80
B	>=40 and < 80
C	>20 and <= 40
D	<= 20

Attribute Field Name	Description
RS_Area_ac	Total area of RS in acres
RS_VegTypeDiversity_Rating	RS Vegetation Type Diversity Rating (1-4) based on Vegetation Type Diversity Index Values (Based on field: RS_VegTypeDiversityIndex)

Rating	VTDI
A	>=1.0
B	>0.63 and <1.0
C	>0.3 and <=0.63
D	<=0.3

Attribute Field Name	Description
RS_VegTypeDiversityIndex	Shannon Diversity Index of Primary Native Riparian Vegetation (PNRV) community diversity as a measure of conservation value. PNRV consists of the community types used to build the RSs

PNRV Vegetation Composition Percentage by Stratum

RS_Forest_pct	Total percent forested wetland area in RS - Lowland Native Deciduous Riparian Forest, Montane Native Deciduous Riparian Forest, Montane Native Mixed Evergreen-Deciduous Riparian Forest
RS_Shrub_pct	Total percent riparian shrub wetland area in RS - Lowland Wet Riparian Shrubland, Subalpine Montane Riparian Shrubland
RS_Herb_pct	Total percent herbaceous wetland area in RS- Western Lowland Marsh, Subalpine and Montane Wetland

Table 3. Other Native Riparian Areas (ORAs) spatial layer attributes and descriptions.

NMRipMap = New Mexico Riparian Habitat Map; RCOA = Riparian Conservation Opportunity Area; RS = Riparian Stronghold.

Attribute Field Name	Description
Subclass	Subclass of ORA: Confined, Unconfined, Headwater Complex
ORA_RecID	Unique ORA identification number
ORA_Name	Unique name given to ORA. Naming convention: Subclass_RecID, i.e. "Confined_1", "Unconfined_1", etc.
Associated_RCOA_RecID	The RecID of the RCOA the ORA is associated with
Associated_RCOA_Name	The name of the RCOA the ORA is associated with
ORA_Area_ac	Area of the ORA in acres
ORA_DominantType	Dominant vegetation type within the ORA: 1) Meadow/Herbaceous vegetation, 2) Dry Riparian Shrublands, 3) Lowland Evergreen Riparian Woodland, 4) Bare ground or Rockland
Dominant Vegetation Type Percentages	
ORA_ HerbaceousVegetation_pct	Total percent of ORA occupied by herbaceous grasses and forbs. This includes NMRipMap Units: Subalpine and Montane Wet Meadow, Montane Dry Riparian Meadow and Grassland, Western Lowland Salt Meadow and Dry Grassland, Ruderal Forb Meadow
ORA_DryRiparianShrubland_pct	Total percent of ORA occupied by dry riparian shrublands. This includes NMRipMap Units: Montane Dry Riparian Shrubland and Lowland Dry Riparian Shrubland
ORA_LowlandEvergreenWoodland_pct	Total percent of ORA occupied by NMRipMap Unit: Lowland Evergreen Riparian Woodland.
ORA_BaregroundRockland_pct	Total percent of ORA occupied by NMRipMap Unit: Riparian bare Ground/Rockland [no-channel] (this is rare).
Connectivity Attributes	
Connecting_RS_Count	Count of RSs the ORA touches or connects

Table 4. Potential Restoration Areas (PRAs) spatial layer attributes and descriptions.

RCOA = Riparian Conservation Opportunity Area; RS = Riparian Stronghold.

Attribute Field Names	Descriptions
Subclass	Subclass of PRA: Confined, Unconfined, Headwater Complex
PRA_RecID	Unique PRA identification number
PRA_Name	Unique name given to PRA. Naming convention: Subclass_RecID, i.e. "Confined_1", "Unconfined_1", etc.
PRA_Area_ac	Area of PRA in acres
Associated_RCOA_RecID	The RecID of the RCOA the PRA is associated with
Associated_RCOA_Name	The name of the RCOA the PRA is associated with
PRA_DominantType	Dominant map unit type in PRA; vegetation type (Operational Subgroup type) with the highest percentage in PRA: I-1) Mixed Native-Exotic Shrubland, I-2) Mixed Native-Exotic Forest, I-3) Exotic Woodland
Dominant Vegetation Type Percentages	
PRA_MixedNativeExoticShrubland_per	Total percent of PRA occupied by mixed native exotic shrubland map unit types (Operational Subgroub, I-1). This includes the following Map Units: Lowland Native-Introduced Russian Olive Riparian Scrub, Lowland Native-Introduced Tamarisk Riparian Scrub, Lowland Native-Introduced Russian Olive-Tamarisk Riparian Woodland and Scrub
PRA_MixedNativeExoticForest_per	Total percent of PRA occupied by mixed native-exotic forest map unit types (Operational Subgroup, I-2). This includes the following Map Units: Lowland Native-Introduced Russian Olive Deciduous Riparian Forest, Lowland Native-Introduced Tamarisk Deciduous, Lowland Native-Introduced Russian Olive - Tamarisk Deciduous Riparian Forest
PRA_ExoticWoodland_per	Total percent of PRA occupied by exotic woodland map unit types (Operational Subgroup, I-3). This includes the following Map Units: Russian Olive Introduced Riparian Woodland and Scrub, Tamarisk Introduced Riparian Woodland and Scrub, Russian Olive-Tamarisk Introduced Riparian Woodland and Scrub, Mixed Introduced Forest and Scrub
Associated RS Attributes	
Connecting_RS_Count	Count of RSs the PRA touches or connects

Table 5. Small Primary Riparian Areas (SRA) spatial layer attributes and descriptions.

PNRV = Primary Native Riparian Vegetation; RCOA = Riparian Conservation Opportunity Area; RS = Riparian Stronghold.

Attribute Field Name	Description
Subclass	Subclass of SPRA: Confined, Unconfined, Headwater Complex
SRA_RecID	Unique SPRA identification number
SRA_Name	Unique name given to SPRA. Naming convention: Subclass_RecID, i.e. "Confined_1", "Unconfined_1", etc.
SRA_Area_ac	Area of SPRA in acres
Associated_RCOA_RecID	The RecID of the RCOA the SPRA is associated with
Associated_RCOA_Name	The name of the RCOA the SPRA is associated with
SRA_VegTypeDiversityIndex	Shannon Diversity Index of PNRV community diversity as a measure of conservation value. PNRV types consist of the community types used to build the RSs
PNRV Vegetation Composition Percentage by Stratum	
SRA_Forest_TotArea_pct	Total percent forested wetland in SPRA - Lowland Native Deciduous Riparian Forest, Montane Native Deciduous Riparian Forest, Montane Native Mixed Evergreen-Deciduous Riparian Forest
SRA_Shrub_TotArea_pct	Total percent riparian shrub wetland in SPRA - Lowland Wet Riparian Shrubland, Subalpine Montane Riparian Shrubland
SRA_Herb_TotArea_pct	Total percent herbaceous wetland area in SPRA - Western Lowland Marsh, Subalpine and Montane Wetland

Table 6. Inter-connectivity Zones (IZs) spatial layer attributes and descriptions.

Attribute Name	Description
IZ_RecID	Unique IZ identification number
IZ_Area_ac	Area of IZ in acres
Connecting_RCOA_count	Count of the RCOAs the IZ touches or connects
Associated_RCOA_RecIDs	The unique Rec IDs of the RCOAs the IZ touches or connects
Generalized Vegetation Composition Percentage	
IZ_PNRV_pct	Total percent Primary Native Riparian Vegetation in IZ
IZ_DMRV_pct	Total percent Dry-Mesic Riparian Vegetation in IZ
IZ_IRV_pct	Total percent Introduced Riparian Vegetation in IZ
NMRipMap Vegetation Composition Percentages	
IZ_WesternLowlandSaltMeadowandDryGrassland_pct	Percent NMRipMap unit 8
IZ_WesternLowlandMarsh_pct	Percent NMRipMap unit 5
IZ_AridWestLowlandWetMeadow_pct	Percent NMRipMap unit 9
IZ_WesternLowlandNativeDeciduousRiparianForest_pct	Percent NMRipMap unit 6
IZ_LowlandNativeEvergreenDeciduousRiparianForest_pct	Percent NMRipMap unit 41
IZ_LowlandWetRiparianShrubland_pct	Percent NMRipMap unit 4
IZ_MontaneNativeEvergreenDeciduousRiparianForest_pct	Percent NMRipMap unit 23
IZ_SubalpineMontaneRiparianShrubland_pct	Percent NMRipMap unit 18
IZ_MontaneNativeEvergreenRiparianForest_pct	Percent NMRipMap unit 12
IZ_MontaneNativeDeciduousRiparianForest_pct	Percent NMRipMap unit 11
IZ_SubalpineMontaneWetland_pct	Percent NMRipMap unit 19

IZ_SubalpineAndMontaneWetMeadow_pct	Percent NMRipMap unit 13
IZ_MontaneDryRiparianMeadowandGrassland_pct	Percent NMRipMap unit 10
IZ_MontaneDryRiparianShrubland_pct	Percent NMRipMap unit 35
IZ_LowlandDryRiparianShrubland_pct	Percent NMRipMap unit 3
IZ_LowlandNativeEvergreenRiparianForest_pct	Percent NMRipMap unit 7
IZ_RuderalHerbaceousMeadow_pct	Percent NMRipMap unit 47
IZ_BaregroundOrRocklandNonChannel	Percent NMRipMap unit 2
IZ_RussianOliveIntroducedRiparianWoodlandandScrub_pct	Percent NMRipMap unit 16
IZ_LowlandNativeIntroducedRussianOliveRiparianScrub_pct	Percent NMRipMap unit 29
IZ_LowlandNativeIntroducedRussianOliveDeciduous _pct	Percent NMRipMap unit 24
IZ_LowlandNativeIntroducedTamariskDeciduousForest_pct	Percent NMRipMap unit 25
IZ_RussianOliveTamariskIntroducedRiparianWoodlandandScrub_pct	Percent NMRipMap unit 26
IZ_LowlandNativeIntroducedTamariskRiparianScrub_pct	Percent NMRipMap unit 30
IZ_LowlandNativeIntroducedRussianOliveTamariskDeciduousForest_pct	Percent NMRipMap unit 42
IZ_LowlandNativeIntroducedRussianOliveTamariskRiparianWoodlandandScrub_pct	Percent NMRipMap unit 31
IZ_TamariskIntroducedRiparianWoodlandandScrub_pct	Percent NMRipMap unit 15
IZ_MixedIntroducedForestandScrub_pct	Percent NMRipMap unit 27

Table 7. Supplemental Habitat Zones spatial layer attributes and descriptions.

Attribute Field Name	Description
SuppHab RecID	Unique Supplemental Habitat Zone identification number
SuppHab_Area_ac	Area of Supplemental Habitat Zone in acres
SuppHabTier	Tier of Supplemental Habitat Zone • Tier 1 – Semi-Natural Riparian Habitat or Pasture with Wetlands • Tier 2 – Cultivated Agriculture or Hay/Pasture
L3_Name	NMRipMap Level 3 map unit that polygon is classified as

Table 8. Potential Breaks in Connectivity spatial layer attributes and descriptions.

Attribute Field Name	Description
PotBreak_RecID	Unique Potential Connectivity Break identification number
PotBreak_Area_ac	Area of Potential Connectivity Break in acres
L3_Name	NMRipMap Level 3 map unit that polygon is classified as