

Appendix D. U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEETS
- Arid West Region for all transects and plots used to complete this delineation report.

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Shush Kin Fen City/County: Cibola Co. Sampling Date: 3/16/26
Applicant/Owner: USFS - Cibola National Forest State: NM Sampling Point: T-1A
Investigator(s): A. Chavez, P. Handley, J. Williams Section, Township, Range: T11N R13W Sec. 17 SE 1/4
Landform (hillside, terrace, etc.): Histogram Fen Local relief (concave, convex, none): concave Slope (%): 2%
Subregion (LRR): LRR D Lat: 35.1826503° N Long: 108.2312506° W Datum: WGS 84
Soil Map Unit Name: Not Available NWI classification: PEM1D

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no, explain in Remarks.)
Are Vegetation Y, Soil Y, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes ☐ No ☒
Are Vegetation Y, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks: Very low snowmelt year due to dry winter. Persistent drought in this region in the past decade. Invasive plants + upland spp present, indicating overall drying trend.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>No trees present</u>				Number of Dominant Species That Are OBL, FACW, or FAC: <u>1</u> (A)
2. _____				Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. _____				Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
4. _____				
5. _____				
<u>0</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Prevalence Index worksheet:
1. _____				Total % Cover of: _____ Multiply by: _____
2. _____				OBL species <u>14</u> x 1 = <u>14</u>
3. _____				FACW species <u>10</u> x 2 = <u>20</u>
4. _____				FAC species <u>15</u> x 3 = <u>45</u>
5. _____				FACU species _____ x 4 = _____
6. _____				UPL species <u>1</u> x 5 = <u>5</u>
7. _____				Column Totals: <u>40</u> (A) <u>84</u> (B)
8. _____				Prevalence Index = B/A = <u>2.1</u>
<u>0</u> = Total Cover				
Herb Stratum (Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Indicators: Dominance Test is >50% ☒ Prevalence Index is ≤3.0' Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>Juncus spp (rush)</u>	<u>10</u>	<u>N</u>	<u>FACW</u>	
2. <u>Carex spp (sedge)</u>	<u>14</u>	<u>N</u>	<u>OBL</u>	
3. <u>Poa tenuis</u>	<u>15</u>	<u>Y</u>	<u>FAC</u>	
4. <u>Achillea millefolium</u>	<u>1</u>	<u>N</u>	<u>UPL</u>	
5. <u>Other weedy spp</u>	<u>10</u>	<u>N</u>	<u>unk.</u>	
6. _____				
7. _____				
8. _____				
<u>50</u> = Total Cover				
Woody Vine Stratum (Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Hydrophytic Vegetation Present? Yes ☒ No ☐
1. <u>None present</u>				
2. _____				
<u>0</u> = Total Cover				
% Bare Ground in Herb Stratum <u>50%</u> % Cover of Biotic Crust <u>0</u>				

Remarks:

Sampling Point: T-1A

HYDROLOGY			
Wetland Hydrology Indicators:			
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>	
☐ Surface Water (A1)	☒ Salt Crust (B11)	☐ Water Marks (B1) (Riverine)	
☐ High Water Table (A2)	☐ Biotic Crust (B12)	☐ Sediment Deposits (B2) (Riverine)	
☐ Saturation (A3)	☐ Aquatic Invertebrates (B13)	☐ Drift Deposits (B3) (Riverine)	
☐ Water Marks (B1) (Nonriverine)	☐ Hydrogen Sulfide Odor (C1)	☒ Drainage Patterns (B10)	
☐ Sediment Deposits (B2) (Nonriverine)	☐ Oxidized Rhizospheres on Living Roots (C3)	☒ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3) (Nonriverine)	☐ Presence of Reduced Iron (C4)	☐ Crayfish Burrows (C8)	
☒ Surface Soil Cracks (B6)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Saturation Visible on Aerial Imagery (C9)	
☒ Inundation Visible on Aerial Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)	
☐ Water-Stained Leaves (B9)	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)	
Field Observations:			
Surface Water Present?	Yes ☒ No ☐	Depth (inches): <u>8"</u>	
Water Table Present?	Yes ☒ No ☐	Depth (inches): <u> </u>	
Saturation Present?	Yes ☒ No ☐	Depth (inches): <u> </u>	
(includes capillary fringe)		Wetland Hydrology Present? Yes ☒ No ☐	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Shushkin Fen City/County: Cibola Co. Sampling Date: 3/16/24
Applicant/Owner: USFS Cibola National Forest State: NM Sampling Point: T-1B
Investigator(s): A. Chivp, P. Hinkle, J. Williams Section, Township, Range: T11N R13W S017 SE 1/2
Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): CONVEX Slope (%): 4%
Subregion (LRR): LRR D Lat: 35.1824857°N Long: 108.2310006°W Datum: WGS84
Soil Map Unit Name: Not available NWI classification: Upland Site

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
		<u>0</u> = Total Cover		
Sapling/Shrub Stratum	(Plot size: <u>10'</u>)			
1.				
2.				
3.				
4.				
5.				
		<u>0</u> = Total Cover		
Herb Stratum	(Plot size: <u>10'</u>)			
1. <u>Poa catensis</u>		<u>70</u>	<u>Y</u>	<u>UPL</u>
2. <u>Trisetum missouriensis</u>		<u>2</u>	<u>N</u>	<u>FACW</u>
3. <u>Juncus sp. (rush)</u>		<u>10</u>	<u>N</u>	<u>FACW</u>
4. <u>other meadow herb</u>		<u>13</u>	<u>N</u>	<u>UPL</u>
5.				
6.				
7.				
8.				
		<u>95</u> = Total Cover		
Woody Vine Stratum	(Plot size: <u> </u>)			
1.				
2.				
		<u>0</u> = Total Cover		
% Bare Ground in Herb Stratum <u>5</u>		% Cover of Biotic Crust <u>0</u>		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u> </u>
FACW species <u>12</u>	x 2 = <u>24</u>
FAC species <u>0</u>	x 3 = <u> </u>
FACU species <u>0</u>	x 4 = <u> </u>
UPL species <u>13</u>	x 5 = <u>65</u>
Column Totals: <u>25</u> (A)	<u>89</u> (B)
Prevalence Index = B/A = <u>3.56</u>	
<u>89/25 =</u>	

Hydrophytic Vegetation Indicators:

☐ Dominance Test is >50%

☐ Prevalence Index is ≤3.0¹

☐ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks:

Sampling Point: T-113

HYDROLOGY			
Wetland Hydrology Indicators:			
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>	
☐ Surface Water (A1)	☐ Salt Crust (B11)	☐ Water Marks (B1) (Riverine)	
☐ High Water Table (A2)	☐ Biotic Crust (B12)	☐ Sediment Deposits (B2) (Riverine)	
☐ Saturation (A3)	☐ Aquatic Invertebrates (B13)	☐ Drift Deposits (B3) (Riverine)	
☐ Water Marks (B1) (Nonriverine)	☐ Hydrogen Sulfide Odor (C1)	☐ Drainage Patterns (B10)	
☐ Sediment Deposits (B2) (Nonriverine)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3) (Nonriverine)	☐ Presence of Reduced Iron (C4)	☐ Crayfish Burrows (C8)	
☒ Surface Soil Cracks (B6)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Inundation Visible on Aerial Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)	
☐ Water-Stained Leaves (B9)	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)	
Field Observations:			
Surface Water Present?	Yes ☐ No ☒	Depth (inches):	
Water Table Present?	Yes ☐ No ☒	Depth (inches):	
Saturation Present?	Yes ☐ No ☒	Depth (inches):	
(includes capillary fringe)		Wetland Hydrology Present? Yes ☐ No ☒	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Shush Kin Fen City/County: Cibola Co. Sampling Date: 3/16/26
Applicant/Owner: USFS Cibola National Forest State: NM Sampling Point: T-2A
Investigator(s): A. Chavez, P. Hinkle, J. Williams Section, Township, Range: T11N R13W Sec 17 SE 1/4
Landform (hillside, terrace, etc.): Histosol Fen Local relief (concave, convex, none): concave Slope (%): 0
Subregion (LRR): LRRD Lat: 35.1831631°N Long: 108.2307063°W Datum: WGS84
Soil Map Unit Name: Not available NWI classification: PEM1D
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no, explain in Remarks.)
Are Vegetation ☒ , Soil ☒ , or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes ☐ No ☒
Are Vegetation N , Soil N , or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	
Remarks: <u>low run-off / prolonged drought 1 year</u> <u>invasive weeds present</u>	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>none</u>				
2. <u>/</u>				
3. <u>/</u>				
4. <u>/</u>				
		<u>0</u> = Total Cover		

Sapling/Shrub Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>none</u>				
2. <u>/</u>				
3. <u>/</u>				
4. <u>/</u>				
5. <u>/</u>				
		<u>0</u> = Total Cover		

Herb Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Carex spp (sedge)</u>		<u>65</u>	<u>Y</u>	<u>OBL</u>
2. <u>Juncus spp (rush)</u>		<u>5</u>	<u>N</u>	<u>FACW</u>
3. <u>Poa pratensis</u>		<u>17</u>	<u>N</u>	<u>UPL</u>
4. <u>/</u>				
5. <u>/</u>				
6. <u>/</u>				
7. <u>/</u>				
8. <u>/</u>				
		<u>87</u> = Total Cover		

Woody Vine Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>none</u>				
2. <u>/</u>				
		<u>0</u> = Total Cover		

% Bare Ground in Herb Stratum <u>10</u>	% Cover of Biotic Crust <u>3</u>
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Remarks:	
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Dominance Test worksheet:	
Number of Dominant Species That Are OBL, FACW, or FAC:	<u>1</u> (A)
Total Number of Dominant Species Across All Strata:	<u>1</u> (B)
Percent of Dominant Species That Are OBL, FACW, or FAC:	<u>100</u> (A/B)
Prevalence Index worksheet:	
Total % Cover of:	Multiply by:
OBL species <u>65</u>	x 1 = <u>65</u>
FACW species <u>5</u>	x 2 = <u>10</u>
FAC species	x 3 =
FACU species	x 4 =
UPL species <u>17</u>	x 5 = <u>85</u>
Column Totals:	(A) <u>160</u> (B)
Prevalence Index = B/A = <u>1.8</u> <u>160/87 = 1.8</u>	
Hydrophytic Vegetation Indicators:	
☒ Dominance Test is >50%	
☒ Prevalence Index is ≤3.0 ¹	
Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)	
Problematic Hydrophytic Vegetation ¹ (Explain)	
¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	
Hydrophytic Vegetation Present?	Yes ☒ No ☐

SOIL

Sampling Point: T-2A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. ²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)		Indicators for Problematic Hydric Soils ³ :
☒ Histosol (A1)	☐ Sandy Gleyed Matrix (S4)	☐ 1 cm Muck (A9) (LRR C)
☐ Histic Epipedon (A2)	☐ Sandy Redox (S5)	☐ 2 cm Muck (A10) (LRR B)
☐ Black Histic (A3)	☐ Stripped Matrix (S6)	☐ Iron-Manganese Masses (F12) (LRR D)
☐ Hydrogen Sulfide (A4)	☐ Loamy Mucky Mineral (F1)	☐ Reduced Vertic (F18)
☐ Stratified Layers (A5) (LRR C)	☐ Loamy Gleyed Matrix (F2)	☐ Red Parent Material (F21)
☐ 1 cm Muck (A9) (LRR D)	☐ Depleted Matrix (F3)	☐ Very Shallow Dark Surface (F22)
☐ Depleted Below Dark Surface (A11)	☐ Redox Dark Surface (F6)	☐ Other (Explain in Remarks)
☐ Thick Dark Surface (A12)	☐ Depleted Dark Surface (F7)	
☐ Iron Monosulfide (A18)	☐ Redox Depressions (F8)	
☐ Sandy Mucky Mineral (S1)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed): Type: _____ Depth (inches): _____	Hydric Soil Present? Yes ☒ No ☐
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Remarks:
No soil pit

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☒ Surface Water (A1)	☒ Salt Crust (B11)	☐ Water Marks (B1) (Riverine)	
☒ High Water Table (A2)	☒ Biotic Crust (B12)	☐ Sediment Deposits (B2) (Riverine)	
☒ Saturation (A3)	☐ Aquatic Invertebrates (B13)	☐ Drift Deposits (B3) (Riverine)	
☐ Water Marks (B1) (Nonriverine)	☐ Hydrogen Sulfide Odor (C1)	☒ Drainage Patterns (B10)	
☐ Sediment Deposits (B2) (Nonriverine)	☐ Oxidized Rhizospheres on Living Roots (C3)	☒ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3) (Nonriverine)	☐ Presence of Reduced Iron (C4)	☐ Crayfish Burrows (C8)	
☒ Surface Soil Cracks (B6)	☐ Recent Iron Reduction in Tilled Soils (C6)	☒ Saturation Visible on Aerial Imagery (C9)	
☒ Inundation Visible on Aerial Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)	
☐ Water-Stained Leaves (B9)	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)	

Field Observations: Surface Water Present? Yes ☒ No ☐ Depth (inches): _____ Water Table Present? Yes ☒ No ☐ Depth (inches): _____ Saturation Present? Yes ☒ No ☐ Depth (inches): _____ (includes capillary fringe)				Wetland Hydrology Present? Yes ☒ No ☐
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Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Shush Kin Fen City/County: Cibola Co. Sampling Date: 3/16/26
Applicant/Owner: USFS Cibola National Forest State: NM Sampling Point: T-2B
Investigator(s): A. Chavez, P. Hendley, J. Williams Section, Township, Range: T11N R13W S17 SE 1/4
Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): concave Slope (%): 4
Subregion (LRR): LRR D Lat: 35.1831426°N Long: 108.2305760°W Datum: WGS84
Soil Map Unit Name: Not available NWI classification: Upland Site

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	
Remarks:	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>none</u>				
2. _____				
3. _____				
4. _____				
		<u>0</u> = Total Cover		
Sapling/Shrub Stratum	(Plot size: <u>10'</u>)			
1. <u>none</u>				
2. _____				
3. _____				
4. _____				
5. _____				
		<u>0</u> = Total Cover		
Herb Stratum	(Plot size: <u>10'</u>)			
1. <u>Poa pratensis</u>		<u>30</u>		<u>UPL</u>
2. <u>Buteloua gracilis</u>		<u>40</u>		<u>UPL</u>
3. <u>Isis missouriensis</u>		<u>2</u>		<u>FACW</u>
4. <u>Juncus sp. (high)</u>		<u>4</u>		<u>FACW</u>
5. <u>Verhiscum tharassus</u>		<u>1</u>		<u>UPL</u>
6. <u>Other weedy herbs</u>		<u>15</u>		<u>UPL</u>
7. _____				
8. _____				
		<u>92</u> = Total Cover		
Woody Vine Stratum	(Plot size: <u>10'</u>)			
1. <u>none</u>				
2. _____				
		<u>0</u> = Total Cover		
% Bare Ground in Herb Stratum <u>8%</u>		% Cover of Biotic Crust _____		
Remarks:				

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: _____ (A)

Total Number of Dominant Species Across All Strata: _____ (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = _____
FACW species <u>6</u>	x 2 = <u>12</u>
FAC species <u>0</u>	x 3 = _____
FACU species <u>0</u>	x 4 = _____
UPL species <u>86</u>	x 5 = <u>430</u>
Column Totals: <u>92</u> (A)	<u>442</u> (B)
Prevalence Index = B/A = <u>4.8</u>	

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0¹

___ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

Sampling Point: T-2B

HYDROLOGY

Wetland Hydrology Indicators:

[illegible]

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
 See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
 Requirement Control Symbol EXEMPT:
 (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Shush Kin Fen City/County: Cibola Co. Sampling Date: 3/10/26
 Applicant/Owner: USFS Cibola National Forest State: NM Sampling Point: T-3A
 Investigator(s): A. Chavez, P. Hinds, J. Williams Section, Township, Range: T1N R13W Sec 17 SE 1/4
 Landform (hillside, terrace, etc.): high soil fen Local relief (concave, convex, none): concave Slope (%): 1%
 Subregion (LRR): LRRD Lat: 35.1837413°N Long: 108.2302058°W Datum: WGS 84
 Soil Map Unit Name: Not available NWI classification: PEM1D

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no, explain in Remarks.)
 Are Vegetation Y, Soil Y, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes ☐ No ☒
 Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No ☐ Hydric Soil Present? Yes ☒ No ☐ Wetland Hydrology Present? Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Remarks:	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>0</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)																																																																																																				
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Sapling/Shrub Stratum	(Plot size: <u>10'</u>)				Prevalence Index worksheet: <table style="width:100%;"> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> <tr> <td>OBL species _____</td> <td>x 1 = _____</td> </tr> <tr> <td>FACW species <u>10</u></td> <td>x 2 = <u>20</u></td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species <u>50</u></td> <td>x 5 = <u>250</u></td> </tr> <tr> <td>Column Totals: <u>100</u> (A)</td> <td><u>270</u> (B)</td> </tr> <tr> <td colspan="2"></td> <td align="right">Prevalence Index = B/A = <u>4.5</u></td> <td colspan="3"></td> </tr> <tr> <th>Herb Stratum</th> <th>(Plot size: <u>10'</u>)</th> <th></th> <th></th> <th></th> <td rowspan="10"> Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0¹ _____ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation¹ (Explain) ¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic. </td> </tr> <tr><td>1. <u>Juncus (rush)</u></td><td></td><td><u>10</u></td><td><u>N</u></td><td><u>FACW</u></td></tr> <tr><td>2. <u>Poa pratensis</u></td><td></td><td><u>40</u></td><td><u>Y</u></td><td><u>UPL</u></td></tr> <tr><td>3. <u>Misc. Forbs</u></td><td></td><td><u>10</u></td><td><u>N</u></td><td><u>UPL</u></td></tr> <tr><td>4. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>5. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>6. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>7. _____</td><td></td><td></td><td></td><td></td></tr> <tr><td>8. _____</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td align="right"><u>60</u> =Total Cover</td> <td colspan="3"></td> </tr> <tr> <th>Woody Vine Stratum</th> <th>(Plot size: <u>10'</u>)</th> <th></th> <th></th> <th></th> <td rowspan="3"> Hydrophytic Vegetation Present? Yes ☐ No ☒ </td> </tr> <tr><td>1. <u>none</u></td><td></td><td></td><td></td><td></td></tr> <tr><td>2. _____</td><td></td><td></td><td></td><td></td></tr> <tr> <td colspan="2"></td> <td align="right"><u>0</u> =Total Cover</td> <td colspan="3"></td> </tr> <tr> <td colspan="2">% Bare Ground in Herb Stratum <u>35</u></td> <td colspan="4">% Cover of Biotic Crust <u>5</u></td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species _____	x 1 = _____	FACW species <u>10</u>	x 2 = <u>20</u>	FAC species _____	x 3 = _____	FACU species _____	x 4 = _____	UPL species <u>50</u>	x 5 = <u>250</u>	Column Totals: <u>100</u> (A)	<u>270</u> (B)			Prevalence Index = B/A = <u>4.5</u>				Herb Stratum	(Plot size: <u>10'</u>)				Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.	1. <u>Juncus (rush)</u>		<u>10</u>	<u>N</u>	<u>FACW</u>	2. <u>Poa pratensis</u>		<u>40</u>	<u>Y</u>	<u>UPL</u>	3. <u>Misc. Forbs</u>		<u>10</u>	<u>N</u>	<u>UPL</u>	4. _____					5. _____					6. _____					7. _____					8. _____							<u>60</u> =Total Cover				Woody Vine Stratum	(Plot size: <u>10'</u>)				Hydrophytic Vegetation Present? Yes ☐ No ☒	1. <u>none</u>					2. _____							<u>0</u> =Total Cover				% Bare Ground in Herb Stratum <u>35</u>		% Cover of Biotic Crust <u>5</u>			
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Remarks:

Sampling Point: T-3A

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Shush Kin Fen City/County: Cibola Co. Sampling Date: 3/16/20
Applicant/Owner: USFS Cibola National Forest State: NM Sampling Point: T-3B
Investigator(s): A. Chappz, P. Hanley, J. Williams Section, Township, Range: T11N R13W Sec 17 SE 1/4
Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): none Slope (%): 2
Subregion (LRR): LRRD Lat: 35.1836874°N Long: 108.2300885°W Datum: WGS84
Soil Map Unit Name: Not available NWI classification: Upland Site

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation N, Soil Y, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	
Remarks:	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>none</u>				
2. _____				
3. _____				
4. _____				
		<u>0</u> = Total Cover		

Sapling/Shrub Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>none</u>				
2. _____				
3. _____				
4. _____				
5. _____				
		<u>0</u> = Total Cover		

Herb Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Poa pratensis</u>		<u>70</u>		<u>UPL</u>
2. <u>Verbascum thapsus</u>		<u>2</u>		<u>UPL</u>
3. <u>Buteloua gracilis</u>		<u>5</u>		<u>UPL</u>
4. <u>Juncus sp. (rough)</u>		<u>2</u>		<u>FACW</u>
5. <u>Misc. herbs/weeds</u>		<u>10</u>		<u>UPL</u>
6. _____				
7. _____				
8. _____				
		<u>85</u> = Total Cover		

Woody Vine Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>none</u>				
2. _____				
		<u>0</u> = Total Cover		

% Bare Ground in Herb Stratum 15 % Cover of Biotic Crust _____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 0 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:
Total % Cover of: Multiply by:
OBL species _____ x 1 = _____
FACW species 2 x 2 = 4
FAC species _____ x 3 = _____
FACU species _____ x 4 = _____
UPL species 83 x 5 = 415
Column Totals: 85 (A) 419 (B)
Prevalence Index = B/A = 4.9

Hydrophytic Vegetation Indicators:
____ Dominance Test is >50%
____ Prevalence Index is ≤3.0¹
____ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
____ Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks:

Sampling Point: T-3B

HYDROLOGY			
Wetland Hydrology Indicators:			
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>	
☐ Surface Water (A1)	☐ Salt Crust (B11)	☐ Water Marks (B1) (Riverine)	
☐ High Water Table (A2)	☐ Biotic Crust (B12)	☐ Sediment Deposits (B2) (Riverine)	
☐ Saturation (A3)	☐ Aquatic Invertebrates (B13)	☐ Drift Deposits (B3) (Riverine)	
☐ Water Marks (B1) (Nonriverine)	☐ Hydrogen Sulfide Odor (C1)	☐ Drainage Patterns (B10)	
☐ Sediment Deposits (B2) (Nonriverine)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3) (Nonriverine)	☐ Presence of Reduced Iron (C4)	☐ Crayfish Burrows (C8)	
☒ Surface Soil Cracks (B6)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Inundation Visible on Aerial Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)	
☐ Water-Stained Leaves (B9)	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)	
Field Observations:			
Surface Water Present?	Yes ☐ No ☒	Depth (inches):	
Water Table Present?	Yes ☐ No ☒	Depth (inches):	
Saturation Present?	Yes ☐ No ☒	Depth (inches):	
(includes capillary fringe)		Wetland Hydrology Present? Yes ☐ No ☒	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Shush Kin Lower City/County: Cibola Co Sampling Date: 3/25/26
Applicant/Owner: USFS Cibola National Forest State: NM Sampling Point: T-4A
Investigator(s): Archiez, P. Hindey, H. Alvarez Section, Township, Range: T11N. R13W Sec 17 NE 1/4
Landform (hillside, terrace, etc.): Floodplain Local relief (concave, convex, none): CONVEX Slope (%): 0-5%
Subregion (LRR): LRR D Lat: 35.1859180°N Long: 108.2283563°W Datum: NAD83
Soil Map Unit Name: Not available NWI classification: unk
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation Y, Soil Y, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks: Low runoff year; persistent drought last 10 yrs.
Heavily grazed; hummocks in stream, headcut forming, down cut incision occurring
Upland veg. encroaching (Poa)

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Willow</u>		<u>2</u>	<u>N</u>	<u>OBL</u>
2. <u>Pseudotsuga</u>		<u>2</u>	<u>N</u>	<u>UPL</u>
3.				
4.				
		<u>4</u> = Total Cover		

Sapling/Shrub Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>none</u>				
2.				
3.				
4.				
5.				
		<u>0</u> = Total Cover		

Herb Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Poa pratensis</u> (VBS)		<u>70</u>	<u>Y</u>	<u>UPL</u>
2. <u>Juncus sp</u>		<u>5</u>	<u>N</u>	<u>FACW</u>
3. <u>Carex sp</u>		<u>5</u>	<u>N</u>	<u>OBL</u>
4. <u>Panicum dactyloides</u>				
5. <u>Misc herbs</u>		<u>6</u>	<u>N</u>	<u>FACW</u>
6. <u>Musk thistle</u>				
7. <u>Dandelion</u>				
8.				
		<u>86</u> = Total Cover		

Woody Vine Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
		<u>0</u> = Total Cover		

% Bare Ground in Herb Stratum 10 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>7</u>	x 1 = <u>7</u>
FACW species <u>11</u>	x 2 = <u>22</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>77</u>	x 5 = <u>385</u>
Column Totals: <u>95</u> (A)	<u>414</u> (B)
Prevalence Index = B/A = <u>4.35</u>	

Hydrophytic Vegetation Indicators:

Dominance Test is >50% ☐

Prevalence Index is ≤3.0¹ ☐

Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) ☐

Problematic Hydrophytic Vegetation¹ (Explain) ☐

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

Remarks:

SOIL

Sampling Point: T-4A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-11"	7.5YR 2.5/1	100	—	—	—	—	Sandy clay	
11-18"	10YR 3/2	100	—	—	—	—	Sandy clay w/a little more rock	
0-6	5YR 3/1	90	5YR 3/4	100	PC	PL	Silty clay	root lanes + roots
6-18"	7.5YR 2.5/1	80	2.5YR 2.5/4	15	C/CS	PL/M	Silty clay	matrix
0-18"	7.5YR 3/2	20	2.5YR 3/1	5	CS	PL	Silty clay	depleted matrix

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

☐ Histosol (A1)	☐ Sandy Gleyed Matrix (S4)	☐ 1 cm Muck (A9) (LRR C)
☐ Histic Epipedon (A2)	☒ Sandy Redox (S5)	☐ 2 cm Muck (A10) (LRR B)
☐ Black Histic (A3)	☒ Stripped Matrix (S6)	☐ Iron-Manganese Masses (F12) (LRR D)
☐ Hydrogen Sulfide (A4)	☐ Loamy Mucky Mineral (F1)	☐ Reduced Vertic (F18)
☐ Stratified Layers (A5) (LRR C)	☐ Loamy Gleyed Matrix (F2)	☐ Red Parent Material (F21)
☐ 1 cm Muck (A9) (LRR D)	☒ Depleted Matrix (F3)	☐ Very Shallow Dark Surface (F22)
☐ Depleted Below Dark Surface (A11)	☐ Redox Dark Surface (F6)	☐ Other (Explain in Remarks)
☐ Thick Dark Surface (A12)	☐ Depleted Dark Surface (F7)	
☐ Iron Monosulfide (A18)	☐ Redox Depressions (F8)	
☐ Sandy Mucky Mineral (S1)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present?

Yes ☒No ☐

Remarks:

Soil pit @ 35.1858917°N x 108.2283598°W (WGS84)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Secondary Indicators (minimum of two required)

☒ Surface Water (A1)	☐ Salt Crust (B11)	☐ Water Marks (B1) (Riverine)
☒ High Water Table (A2)	☐ Biotic Crust (B12)	☐ Sediment Deposits (B2) (Riverine)
☒ Saturation (A3)	☒ Aquatic Invertebrates (B13)	☐ Drift Deposits (B3) (Riverine)
☐ Water Marks (B1) (Nonriverine)	☐ Hydrogen Sulfide Odor (C1)	☒ Drainage Patterns (B10)
☐ Sediment Deposits (B2) (Nonriverine)	☐ Oxidized Rhizospheres on Living Roots (C3)	☒ Dry-Season Water Table (C2)
☐ Drift Deposits (B3) (Nonriverine)	☐ Presence of Reduced Iron (C4)	☐ Crayfish Burrows (C8)
☐ Surface Soil Cracks (B6)	☐ Recent Iron Reduction in Tilled Soils (C6)	☒ Saturation Visible on Aerial Imagery (C9)
☒ Inundation Visible on Aerial Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)
☐ Water-Stained Leaves (B9)	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?

Yes ☒No ☐

Depth (inches): _____

Water Table Present?

Yes ☒No ☐

Depth (inches): _____

Saturation Present?

Yes ☒No ☐

Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present?

Yes ☒No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Shush Kin Lower City/County: Cibola Co Sampling Date: 10/25/20
Applicant/Owner: USFS Cibola National Forest State: NM Sampling Point: T-4B
Investigator(s): A. Chavez, P. Henderson, H. Alvarez Section, Township, Range: T11N. R13W Sec 17 NE 1/4
Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): Concave Slope (%): 20
Subregion (LRR): LRRD Lat: 35.1858937°N Long: 108.2283172°W Datum: NAD83
Soil Map Unit Name: Not available NWI classification: Upland Site

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☐ No ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	
Remarks:	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>One seed Juniper</u>		<u>20</u>		<u>UPL</u>
2. <u>Rocky Mountain Juniper</u>				<u>UPL</u>
3. <u>Ponderosa pine</u>		<u>5</u>		<u>UPL</u>
4. <u></u>				
		<u>25</u> = Total Cover		
Sapling/Shrub Stratum	(Plot size: <u>10'</u>)			
1. <u>Mountain Mahogany</u>		<u>2</u>		
2. <u></u>				
3. <u></u>				
4. <u></u>				
5. <u></u>				
		<u>2</u> = Total Cover		
Herb Stratum	(Plot size: <u>10'</u>)			
1. <u>Blue grama</u>		<u>5</u>		<u>UPL</u>
2. <u>Indian ricegrass</u>		<u>20</u>		<u>UPL</u>
3. <u>Poa sp</u>		<u>5</u>		<u>UPL</u>
4. <u>Poa</u>		<u>5</u>		<u>UPL</u>
5. <u>Stipa sp</u>		<u>2</u>		<u>FACW</u>
6. <u>Mexican hairgrass</u>		<u>10</u>		<u>UPL</u>
7. <u></u>				
8. <u></u>				
		<u>53</u> = Total Cover		
Woody Vine Stratum	(Plot size: <u>10'</u>)			
1. <u>None</u>				
2. <u></u>				
		<u>0</u> = Total Cover		
% Bare Ground in Herb Stratum <u>20</u>		% Cover of Biotic Crust <u>0</u>		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>2</u>	x 2 = <u>4</u>
FAC species <u></u>	x 3 = <u></u>
FACU species <u></u>	x 4 = <u></u>
UPL species <u>98</u>	x 5 = <u>490</u>
Column Totals: <u>100</u> (A)	<u>494</u> (B)
Prevalence Index = B/A = <u>4.94</u>	

Hydrophytic Vegetation Indicators:

☐ Dominance Test is >50%

☐ Prevalence Index is ≤3.0¹

☐ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

☐ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

Remarks:

SOIL

Sampling Point: **T-4B**

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-11	7.5YR 2.5/1	100	—	—	—	—	Sandy Clay	1:1H ₂ O
11-18	10YR 3/2	100	—	—	—	—	Sandy Clay (w/ more rock)	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | | |
|--|---|--|
| ☐ Histosol (A1) | ☐ Sandy Gleyed Matrix (S4) | ☐ 1 cm Muck (A9) (LRR C) |
| ☐ Histic Epipedon (A2) | ☐ Sandy Redox (S5) | ☐ 2 cm Muck (A10) (LRR B) |
| ☐ Black Histic (A3) | ☐ Stripped Matrix (S6) | ☐ Iron-Manganese Masses (F12) (LRR D) |
| ☐ Hydrogen Sulfide (A4) | ☐ Loamy Mucky Mineral (F1) | ☐ Reduced Vertic (F18) |
| ☐ Stratified Layers (A5) (LRR C) | ☐ Loamy Gleyed Matrix (F2) | ☐ Red Parent Material (F21) |
| ☐ 1 cm Muck (A9) (LRR D) | ☐ Depleted Matrix (F3) | ☐ Very Shallow Dark Surface (F22) |
| ☐ Depleted Below Dark Surface (A11) | ☐ Redox Dark Surface (F6) | ☐ Other (Explain in Remarks) |
| ☐ Thick Dark Surface (A12) | ☐ Depleted Dark Surface (F7) | |
| ☐ Iron Monosulfide (A18) | ☐ Redox Depressions (F8) | |
| ☐ Sandy Mucky Mineral (S1) | | |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present?

Yes _____

No ☒

Remarks:

Soil pit @ 35.1858846° N x 108.2283018° W (WGS84)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Secondary Indicators (minimum of two required)

- | | | |
|--|---|--|
| ☐ Surface Water (A1) | ☐ Salt Crust (B11) | ☐ Water Marks (B1) (Riverine) |
| ☐ High Water Table (A2) | ☐ Blotic Crust (B12) | ☐ Sediment Deposits (B2) (Riverine) |
| ☐ Saturation (A3) | ☐ Aquatic Invertebrates (B13) | ☐ Drift Deposits (B3) (Riverine) |
| ☐ Water Marks (B1) (Nonriverine) | ☐ Hydrogen Sulfide Odor (C1) | ☐ Drainage Patterns (B10) |
| ☐ Sediment Deposits (B2) (Nonriverine) | ☐ Oxidized Rhizospheres on Living Roots (C3) | ☐ Dry-Season Water Table (C2) |
| ☐ Drift Deposits (B3) (Nonriverine) | ☐ Presence of Reduced Iron (C4) | ☐ Crayfish Burrows (C8) |
| ☐ Surface Soil Cracks (B6) | ☐ Recent Iron Reduction in Tilled Soils (C6) | ☐ Saturation Visible on Aerial Imagery (C9) |
| ☐ Inundation Visible on Aerial Imagery (B7) | ☐ Thin Muck Surface (C7) | ☐ Shallow Aquitard (D3) |
| ☐ Water-Stained Leaves (B9) | ☐ Other (Explain in Remarks) | ☐ FAC-Neutral Test (D5) |

Field Observations:

Surface Water Present?	Yes _____	No ☒	Depth (inches): _____
Water Table Present?	Yes _____	No ☒	Depth (inches): _____
Saturation Present?	Yes _____	No ☒	Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Shush Kin Lower City/County: Cibola Co Sampling Date: 3/19/26
Applicant/Owner: USFS Cibola National Forest State: NM Sampling Point: T-5A
Investigator(s): A. Chavez, D. Hinkle, H. Alvarez Section, Township, Range: T11N, R13W Sec 17 NE 1/4
Landform (hillside, terrace, etc.): Floodplain Local relief (concave, convex, none): convex Slope (%): 2
Subregion (LRR): LRR D Lat: 35.1877754°N Long: 108.2266639°W Datum: WGS84
Soil Map Unit Name: Not available NWI classification: PEM1B

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no, explain in Remarks.)
Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes ☐ No ☒
Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks: low runoff year, persistent drought last ~10 yrs; overgrazed 1-2" stubble height

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>none</u>				
2. _____				
3. _____				
4. _____				
		<u>0</u> = Total Cover		

Sapling/Shrub Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Rubus Rabb. thornish</u>		<u>1</u>	<u>N</u>	<u>UPL</u>
2. _____				
3. _____				
4. _____				
5. _____				
		<u>1</u> = Total Cover		

Herb Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Poa pratensis</u>		<u>62</u>	<u>Y</u>	<u>UPL</u>
2. <u>Rumex</u>		<u>1</u>	<u>N</u>	<u>FACW</u>
3. <u>Thistle</u>		<u>1</u>	<u>N</u>	<u>FAC</u>
4. <u>Juncus sp.</u>		<u>15</u>	<u>N</u>	<u>FACW</u>
5. <u>Misc Herbaceous</u>		<u>7</u>	<u>N</u>	<u>UPL</u>
6. <u>in/anthem in H₂O</u>				
7. <u>Canex</u>		<u>3</u>	<u>N</u>	<u>OBL</u>
8. _____				
		<u>89</u> = Total Cover		

Woody Vine Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>none</u>				
2. _____				
		<u>0</u> = Total Cover		

% Bare Ground in Herb Stratum 10 % Cover of Biotic Crust _____

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>3</u>	x 1 = <u>3</u>
FACW species <u>16</u>	x 2 = <u>32</u>
FAC species <u>1</u>	x 3 = <u>3</u>
FACU species _____	x 4 = _____
UPL species <u>70</u>	x 5 = <u>350</u>
Column Totals: <u>90</u> (A)	<u>388</u> (B)
Prevalence Index = B/A = <u>4.3</u>	

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%
___ Prevalence Index is ≤3.0¹
___ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present?

Yes ☒ No ☐

Remarks:

SOIL

Sampling Point: T-5A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
8"	5YR 3/1	90	5YR 3/4	5	CS	PL	Clay Loam	
8-16"	5YR 2.5/1	80	2.5YR 3/6	15	C	PL	Clay Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5) (LRR C)
☐ 1 cm Muck (A9) (LRR D)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Iron Monosulfide (A18)
☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
☒ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Loamy Mucky Mineral (F1)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

- ☐ 1 cm Muck (A9) (LRR C)
☐ 2 cm Muck (A10) (LRR B)
☐ Iron-Manganese Masses (F12) (LRR D)
☐ Reduced Vertic (F18)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (F22)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present?

Yes ☒

No _____

Remarks:

Soil pit @ 35.18777000°N, 108.2266782°W (WGS84)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Secondary Indicators (minimum of two required)

- ☒ Surface Water (A1)
☒ High Water Table (A2)
☒ Saturation (A3)
☐ Water Marks (B1) (Nonriverine)
☐ Sediment Deposits (B2) (Nonriverine)
☒ Drift Deposits (B3) (Nonriverine)
☐ Surface Soil Cracks (B6)
☒ Inundation Visible on Aerial Imagery (B7)
☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
☐ Biotic Crust (B12)
☒ Aquatic Invertebrates (B13)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Thin Muck Surface (C7)
☐ Other (Explain in Remarks)

- ☐ Water Marks (B1) (Riverine)
☐ Sediment Deposits (B2) (Riverine)
☒ Drift Deposits (B3) (Riverine)
☒ Drainage Patterns (B10)
☒ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☒ Saturation Visible on Aerial Imagery (C9)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?

Yes ☒

No _____

Depth (inches): _____

Water Table Present?

Yes ☒

No _____

Depth (inches): _____

Saturation Present?

Yes ☒

No _____

Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present?

Yes ☒

No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Shush Kin Lower City/County: Cibola Co Sampling Date: 3/9/26
Applicant/Owner: USFS Cibola National Forest State: NM Sampling Point: T-5B
Investigator(s): A. Chavez, P. Handley, H. Alvarez Section, Township, Range: T11N, R13W Sec 17 NE 1/4
Landform (hillside, terrace, etc.): Terrace Local relief (concave, convex, none): none Slope (%): 1%
Subregion (LRR): LRR D Lat: 35.1877372°N Long: 108.2266136°W Datum: WGS84
Soil Map Unit Name: Not available NWI classification: Upland Site

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation Y, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes ☐ No ☒
Are Vegetation Y, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks: overgrazed, low runoff, persistent drought
upland shrubs encroaching into wetter area

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>None</u>				
2. _____				
3. _____				
4. _____				
		<u>0</u> = Total Cover		

Sapling/Shrub Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Rubber Rabbitbrush</u>		<u>10</u>	<u>N</u>	<u>UPL</u>
2. <u>Broom snakeweed</u>		<u>5</u>	<u>N</u>	<u>UPL</u>
3. _____				
4. _____				
5. _____				
		<u>15</u> = Total Cover		

Herb Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Blue grama</u>		<u>20</u>	<u>Y</u>	<u>UPL</u>
2. <u>Junco</u>		<u>5</u>	<u>N</u>	<u>FACW</u>
3. <u>Poa/Pascopyrum</u>		<u>15</u>	<u>N</u>	<u>UPL</u>
4. <u>Ceanothus</u>		<u>5</u>	<u>N</u>	<u>DBG</u>
5. <u>Misc. Herbs</u>		<u>10</u>	<u>N</u>	<u>UPL</u>
6. <u>Salsify</u>				
7. <u>Iris missouriensis</u>				
8. _____				
		<u>55</u> = Total Cover		

Woody Vine Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>None</u>				
2. _____				
		<u>0</u> = Total Cover		

% Bare Ground in Herb Stratum 30 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>5</u>	x 1 = <u>5</u>
FACW species <u>5</u>	x 2 = <u>10</u>
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species <u>60</u>	x 5 = <u>300</u>
Column Totals: <u>70</u> (A)	<u>315</u> (B)
Prevalence Index = B/A = <u>4.5</u>	

Hydrophytic Vegetation Indicators:

Dominance Test is >50%
Prevalence Index is ≤3.0¹
Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic

Vegetation Present? Yes ☒ No ☐

Remarks:

SOIL

Sampling Point: T-5B

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Salt Crust (B11)	☐ Water Marks (B1) (Riverine)	
☐ High Water Table (A2)	☐ Biotic Crust (B12)	☐ Sediment Deposits (B2) (Riverine)	
☐ Saturation (A3)	☐ Aquatic Invertebrates (B13)	☐ Drift Deposits (B3) (Riverine)	
☐ Water Marks (B1) (Nonriverine)	☐ Hydrogen Sulfide Odor (C1)	☐ Drainage Patterns (B10)	
☐ Sediment Deposits (B2) (Nonriverine)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3) (Nonriverine)	☐ Presence of Reduced Iron (C4)	☐ Crayfish Burrows (C8)	
☐ Surface Soil Cracks (B6)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Inundation Visible on Aerial Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)	
☐ Water-Stained Leaves (B9)	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)	
Field Observations:			
Surface Water Present?	Yes ☐ No ☒	Depth (inches):	
Water Table Present?	Yes ☐ No ☒	Depth (inches):	
Saturation Present?	Yes ☐ No ☒	Depth (inches):	
(includes capillary fringe)		Wetland Hydrology Present? Yes ☐ No ☒	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no, explain in Remarks.)

Are Vegetation Y, Soil Y, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes ☐ No ☒

Are Vegetation N, Soil N, or Hydrology Y naturally problematic? (If needed, explain any answers in Remarks.)

Hydrophytic Vegetation Present?	Yes ☒	No ☐	Is the Sampled Area within a Wetland?	Yes ☒	No ☐
Hydric Soil Present?	Yes ☒	No ☐			
Wetland Hydrology Present?	Yes ☒	No ☐			

Tree Stratum	Plot size: <u>10'</u>	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>none</u>				
2. _____				
3. _____				
4. _____				
		<u>0</u> = Total Cover		

Sapling/Shrub Stratum	Plot size: <u>10'</u>	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>none</u>				
2. _____				
3. _____				
4. _____				
5. _____				
		<u>0</u> = Total Cover		

Herb Stratum	Plot size: <u>10'</u>	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Poa pratensis</u>		<u>70</u>	<u>Y</u>	<u>UDL</u>
2. <u>Taraxacum spp.</u>		<u>8</u>	<u>N</u>	<u>FACW</u>
3. <u>Ranunculus spp.</u>			<u>N</u>	<u>OBL</u>
4. <u>Algae</u>			<u>N</u>	<u>-</u>
5. <u>Misc herbs</u>		<u>10</u>	<u>N</u>	<u>FAC</u>
6. <u>Carex spp.</u>		<u>2</u>	<u>N</u>	<u>OBL</u>
7. <u>Clover spp.</u>			<u>N</u>	<u>FACW</u>
8. <u>Carduus nutans</u>		<u>1</u>	<u>N</u>	<u>UPL</u>
		<u>90</u> = Total Cover		

Woody Vine Stratum	Plot size: <u>10'</u>	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>none</u>				
2. _____				
		<u>0</u> = Total Cover		

% Bare Ground in Herb Stratum 5

% Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>2</u>	x 1 = <u>2</u>
FACW species <u>8</u>	x 2 = <u>16</u>
FAC species <u>10</u>	x 3 = <u>30</u>
FACU species <u>-</u>	x 4 = <u>-</u>
UPL species <u>70</u>	x 5 = <u>350</u>
Column Totals: <u>90</u> (A)	<u>398</u> (B)
Prevalence Index = B/A = <u>4.4</u>	

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50% N

___ Prevalence Index is ≤3.0 N

___ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation

Present? Yes ☒ No ☐

Arid West – Version 2.0

SOIL

Sampling Point: J-6A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
5	7.5YR 3/1	80	2.5YR 3/6	10	RM	PL	Clay Loam	
12	5YR 2.5/1	60	5YR 4/6	10	RM	PL	Clay Loam	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- | | | |
|--|--|--|
| ☐ Histosol (A1) | ☐ Sandy Gleyed Matrix (S4) | ☐ 1 cm Muck (A9) (LRR C) |
| ☐ Histic Epipedon (A2) | ☐ Sandy Redox (S5) | ☐ 2 cm Muck (A10) (LRR B) |
| ☐ Black Histic (A3) | ☐ Stripped Matrix (S6) | ☐ Iron-Manganese Masses (F12) (LRR D) |
| ☐ Hydrogen Sulfide (A4) | ☐ Loamy Mucky Mineral (F1) | ☐ Reduced Vertic (F18) |
| ☐ Stratified Layers (A5) (LRR C) | ☐ Loamy Gleyed Matrix (F2) | ☐ Red Parent Material (F21) |
| ☐ 1 cm Muck (A9) (LRR D) | ☒ Depleted Matrix (F3) | ☐ Very Shallow Dark Surface (F22) |
| ☐ Depleted Below Dark Surface (A11) | ☐ Redox Dark Surface (F6) | ☐ Other (Explain in Remarks) |
| ☐ Thick Dark Surface (A12) | ☐ Depleted Dark Surface (F7) | |
| ☐ Iron Monosulfide (A18) | ☐ Redox Depressions (F8) | |
| ☐ Sandy Mucky Mineral (S1) | | |

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present?

Yes ☒ No ☐

Remarks:

Soil pit @ 35.1895739°N, 108.2248488°W (WGS84)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Secondary Indicators (minimum of two required)

- | | | |
|---|---|---|
| ☒ Surface Water (A1) | ☒ Salt Crust (B11) | ☐ Water Marks (B1) (Riverine) |
| ☒ High Water Table (A2) | ☐ Biotic Crust (B12) | ☐ Sediment Deposits (B2) (Riverine) |
| ☒ Saturation (A3) | ☐ Aquatic Invertebrates (B13) | ☐ Drift Deposits (B3) (Riverine) |
| ☐ Water Marks (B1) (Nonriverine) | ☐ Hydrogen Sulfide Odor (C1) | ☒ Drainage Patterns (B10) |
| ☐ Sediment Deposits (B2) (Nonriverine) | ☐ Oxidized Rhizospheres on Living Roots (C3) | ☒ Dry-Season Water Table (C2) |
| ☒ Drift Deposits (B3) (Nonriverine) | ☐ Presence of Reduced Iron (C4) | ☐ Crayfish Burrows (C8) |
| ☐ Surface Soil Cracks (B6) | ☐ Recent Iron Reduction in Tilled Soils (C6) | ☒ Saturation Visible on Aerial Imagery (C9) |
| ☒ Inundation Visible on Aerial Imagery (B7) | ☐ Thin Muck Surface (C7) | ☐ Shallow Aquitard (D3) |
| ☐ Water-Stained Leaves (B9) | ☐ Other (Explain in Remarks) | ☐ FAC-Neutral Test (D5) |

Field Observations:

Surface Water Present?

Yes ☒No ☐

Depth (inches): _____

Water Table Present?

Yes ☒No ☐

Depth (inches): _____

Saturation Present?

Yes ☒No ☐

Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes ☒ No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Stream here is ~2' wide, flowing clear H₂O, evidence (remains) of crayfish

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Shush Kin Lower City/County: Cibola Co Sampling Date: 3/19/26
Applicant/Owner: USFS Cibola National Forest State: NM Sampling Point: T-6B
Investigator(s): A. Chavez, P. Hanley, H. Alvarez Section, Township, Range: T11N. R13W Sec17 NE1/4
Landform (hillside, terrace, etc.): terrace Local relief (concave, convex, none): concave Slope (%): 1%
Subregion (LRR): LRR D Lat: 35.1894122°N Long: 108.2247156°W Datum: WGS84
Soil Map Unit Name: Not available NWI classification: Upland transition
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☒ No ☐ (If no, explain in Remarks.)
Are Vegetation Y, Soil Y, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes ☐ No ☒
Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☐ No ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☐ No ☒	
Remarks: <u>overgrazing, prairie dog town present in plot</u>	

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>none</u>				
2. _____				
3. _____				
4. _____				
		<u>0</u> = Total Cover		

Sapling/Shrub Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Rubber Rabbit brush</u>		<u>5</u>	<u>N</u>	<u>UPL</u>
2. _____				
3. _____				
4. _____				
5. _____				
		<u>5</u> = Total Cover		

Herb Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Fringed artemisia (sage)</u>		<u>5</u>	<u>N</u>	<u>UPL</u>
2. <u>Great milkv</u>		<u>1</u>	<u>N</u>	<u>UPL</u>
3. <u>Blue Gram</u>		<u>40</u>	<u>Y</u>	<u>UPL</u>
4. <u>Carex</u>		<u>20</u>	<u>N</u>	<u>FACW</u>
5. <u>Misc Herbaceous</u>		<u>4</u>	<u>N</u>	<u>UPL</u>
6. _____				
7. _____				
8. _____				
		<u>75</u> = Total Cover		

Woody Vine Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>none</u>				
2. _____				
		<u>0</u> = Total Cover		

% Bare Ground in Herb Stratum 25 % Cover of Biotic Crust 0

Remarks: * look into upland carex spp-are there any? due to carex

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>20</u>	x 2 = <u>40</u>
FAC species <u>0</u>	x 3 = <u>0</u>
FACU species <u>0</u>	x 4 = <u>0</u>
UPL species <u>55</u>	x 5 = <u>275</u>
Column Totals: <u>75</u> (A)	<u>315</u> (B)
Prevalence Index = B/A = <u>4.2</u>	

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0¹

___ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation¹ (Explain)

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☒ No ☐

SOIL

Sampling Point: T-6B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
12	5YR 3/2	90	none				clay loam (transition zone)	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5) (LRR C)
☐ 1 cm Muck (A9) (LRR D)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Iron Monosulfide (A18)
☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
☐ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Loamy Mucky Mineral (F1)
☐ Loamy Gleyed Matrix (F2)
☐ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR C)
☐ 2 cm Muck (A10) (LRR B)
☐ Iron-Manganese Masses (F12) (LRR D)
☐ Reduced Vertic (F18)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (F22)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

 Type: _____
 Depth (inches): _____

Hydric Soil Present?

Yes _____ No ☒

Remarks:

Soil pit @ 35.1895192°N, 108.2247826°W (WGS 84)

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1)
☐ High Water Table (A2)
☐ Saturation (A3)
☐ Water Marks (B1) (Nonriverine)
☐ Sediment Deposits (B2) (Nonriverine)
☐ Drift Deposits (B3) (Nonriverine)
☒ Surface Soil Cracks (B6)
☐ Inundation Visible on Aerial Imagery (B7)
☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
☐ Biotic Crust (B12)
☐ Aquatic Invertebrates (B13)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Thin Muck Surface (C7)
☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Water Marks (B1) (Riverine)
☐ Sediment Deposits (B2) (Riverine)
☐ Drift Deposits (B3) (Riverine)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
 Water Table Present? Yes _____ No ☒ Depth (inches): _____
 Saturation Present? Yes _____ No ☒ Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Shush Kin Springs City/County: Cibola Co. Sampling Date: 3/25/26
Applicant/Owner: USFS Cibola National Forest State: NM Sampling Point: T-7A
Investigator(s): A. Chavez, Ph.D., H. Alvarez, J. Williams Section, Township, Range: T11N, R13W Sec 17 SE 1/4
Landform (hillside, terrace, etc.): Fluvial Local relief (concave, convex, none): concave Slope (%): 5
Subregion (LRR): LRR D Lat: 35.1827147°N Long: 108.2267670°W Datum: WGS84
Soil Map Unit Name: Not available NWI classification: R3UB1F

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no, explain in Remarks.)
Are Vegetation Y, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes ☐ No ☒
Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks: Low runoff year; persistent drought last ~ 10 yrs. No snow patches
Heavily grazed, Poa pratensis dominant.
present

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>none</u>				
2. _____				
3. _____				
4. _____				
		<u>0</u> = Total Cover		

Sapling/Shrub Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>none</u>				
2. _____				
3. _____				
4. _____				
5. _____				
		<u>0</u> = Total Cover		

Herb Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Poa pratensis</u>		<u>45</u>		<u>UPL</u>
2. <u>Sleepy grass</u>		<u>5</u>		<u>UPL</u>
3. <u>Indian ricegrass</u>		<u>5</u>		<u>UPL</u>
4. <u>Misc herbs/dandelion...</u>		<u>7</u>		<u>UPL</u>
5. _____				<u>OBL</u>
6. <u>Juncus 'sp</u>		<u>3</u>		<u>FACW</u>
7. _____				
8. _____				
		<u>0</u> = Total Cover		

Woody Vine Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>none</u>				
2. _____				
		<u>0</u> = Total Cover		

% Bare Ground in Herb Stratum 35 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u>0</u>	x 1 = <u>0</u>
FACW species <u>3</u>	x 2 = <u>6</u>
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species <u>62</u>	x 5 = <u>310</u>
Column Totals: <u>65</u> (A)	<u>316</u> (B)
Prevalence Index = B/A = <u>4.86</u>	

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%
___ Prevalence Index is ≤3.0¹
___ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation

Present? Yes ☐ No ☒

Remarks: * double check
is Juncus hydrophytic

SOIL

Sampling Point: F7A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
1-3	5YR 2.5/1	90	5YR 3/4	10	CS	PL	Clay	
3-11	5YR 4/3	100	2.5YR 4/6	40	CS	M	Sandy clay loam	
							→ pockets of depletion	
11-18	5YR 4/3	100	-	-	-	-	Loamy Sand (under H ₂ O)	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

- ☐ Histosol (A1)
☐ Histic Epipedon (A2)
☐ Black Histic (A3)
☐ Hydrogen Sulfide (A4)
☐ Stratified Layers (A5) (LRR C)
☐ 1 cm Muck (A9) (LRR D)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Iron Monosulfide (A18)
☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
☒ Sandy Redox (S5)
☐ Stripped Matrix (S6)
☐ Loamy Mucky Mineral (F1)
☐ Loamy Gleyed Matrix (F2)
☒ Depleted Matrix (F3)
☐ Redox Dark Surface (F6)
☐ Depleted Dark Surface (F7)
☐ Redox Depressions (F8)

- ☐ 1 cm Muck (A9) (LRR C)
☐ 2 cm Muck (A10) (LRR B)
☐ Iron-Manganese Masses (F12) (LRR D)
☐ Reduced Vertic (F18)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (F22)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present?

Yes ☒No ☐
 Remarks: Soil pit at veg plot center
 water table 9"

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☒ Surface Water (A1)
☐ High Water Table (A2)
☒ Saturation (A3)
☐ Water Marks (B1) (Nonriverine)
☐ Sediment Deposits (B2) (Nonriverine)
☒ Drift Deposits (B3) (Nonriverine)
☒ Surface Soil Cracks (B6)
☒ Inundation Visible on Aerial Imagery (B7)
☐ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
☐ Biotic Crust (B12)
☒ Aquatic Invertebrates (B13)
☐ Hydrogen Sulfide Odor (C1)
☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Presence of Reduced Iron (C4)
☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Thin Muck Surface (C7)
☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☒ Water Marks (B1) (Riverine)
☒ Sediment Deposits (B2) (Riverine)
☒ Drift Deposits (B3) (Riverine)
☒ Drainage Patterns (B10)
☒ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☒ Saturation Visible on Aerial Imagery (C9)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?

Yes ☒No ☐

Depth (inches): _____

Water Table Present?

Yes ☒No ☐

Depth (inches): _____

Saturation Present?

Yes ☒No ☐

Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present?

Yes ☒No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Granite Canyon Creek City/County: Cibola Co. Sampling Date: 3/25/26
Applicant/Owner: USFS Cibola National Forest State: NM Sampling Point: T-7B
Investigator(s): A. Chavez, D. Hamilton, H. Alvarez, J. Williams Section, Township, Range: T11N, R13W S&17 SE&4
Landform (hillside, terrace, etc.): hillside Local relief (concave, convex, none): convex Slope (%): →
Subregion (LRR): LPRD Lat: 35.18217108° N Long: 108.2268271° W Datum: NAD83
Soil Map Unit Name: Not available NWI classification: Upland site

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no, explain in Remarks.)
Are Vegetation Y, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes ☐ No ☒
Are Vegetation Y, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐ No ☒	Is the Sampled Area within a Wetland?	Yes ☐ No ☒
Hydric Soil Present?	Yes ☐ No ☒		
Wetland Hydrology Present?	Yes ☐ No ☒		

Remarks: Low runoff year; would normally expect snow patches
High bare ground w/out needle cast; recently RXB'd upland.
High canopy cover in mado-dominated-dense stand maybe VSS3

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:
1. <u>Pseudotsuga</u>		<u>10</u>	<u>N</u>	<u>UPL</u>	Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)
2. <u>Pando</u>		<u>55</u>	<u>Y</u>	<u>UPL</u>	Total Number of Dominant Species Across All Strata: <u>1</u> (B)
3. <u>Pando</u>		<u>10</u>	<u>N</u>	<u>UPL</u>	Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
4. <u>Rocky mtn juniper</u>		<u>85</u> = Total Cover			
Sapling/Shrub Stratum (Plot size: <u>10'</u>)					Prevalence Index worksheet:
1.					Total % Cover of: Multiply by:
2.					OBL species <u>2</u> x 1 = <u>2</u>
3.					FACW species <u>2</u> x 2 = <u>4</u>
4.					FAC species <u>2</u> x 3 = <u>6</u>
5.					FACU species <u>2</u> x 4 = <u>8</u>
		<u>0</u> = Total Cover			UPL species <u>88</u> x 5 = <u>440</u>
Herb Stratum (Plot size: <u>10'</u>)					Column Totals: <u>90</u> (A) <u>444</u> (B)
1. <u>Phacelia</u>		<u>5</u>	<u>N</u>	<u>UPL</u>	Prevalence Index = B/A = <u>4.9</u>
2. <u>Blue</u>		<u>4</u>	<u>N</u>	<u>UPL</u>	
3. <u>Misc. herbs</u>		<u>4</u>	<u>N</u>	<u>UPL</u>	
4. <u>Yucca</u>		<u>2</u>	<u>N</u>	<u>FACW</u>	
5.					
6.					
7.					
8.					
		<u>15</u> = Total Cover			
Woody Vine Stratum (Plot size: <u>10'</u>)					Hydrophytic Vegetation Indicators:
1. <u>none</u>					Dominance Test is >50%
2.					Prevalence Index is ≤3.0 ¹
		<u>0</u> = Total Cover			Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet)
% Bare Ground in Herb Stratum <u>10</u> % Cover of Biotic Crust <u>0</u>					Problematic Hydrophytic Vegetation ¹ (Explain)

Remarks: lichens on rocks

SOIL

Sampling Point: T-7B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	7.5YR 3/2	100	—	—	—	—	clay loam	
3-7	7.5YR 3/2	100	—	—	—	—	Sandy clay loam	
3-7	7.5YR 3/4	40	—	—	—	—	Sandy clay loam	
7-18	7.5YR 3/2	100	—	—	—	—	Sandy clay	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

☐ Histosol (A1)	☐ Sandy Gleyed Matrix (S4)	☐ 1 cm Muck (A9) (LRR C)
☐ Histic Epipedon (A2)	☐ Sandy Redox (S5)	☐ 2 cm Muck (A10) (LRR B)
☐ Black Histic (A3)	☐ Stripped Matrix (S6)	☐ Iron-Manganese Masses (F12) (LRR D)
☐ Hydrogen Sulfide (A4)	☐ Loamy Mucky Mineral (F1)	☐ Reduced Vertic (F18)
☐ Stratified Layers (A5) (LRR C)	☐ Loamy Gleyed Matrix (F2)	☐ Red Parent Material (F21)
☐ 1 cm Muck (A9) (LRR D)	☐ Depleted Matrix (F3) <i>pockets</i>	☐ Very Shallow Dark Surface (F22)
☐ Depleted Below Dark Surface (A11)	☐ Redox Dark Surface (F6)	☐ Other (Explain in Remarks)
☐ Thick Dark Surface (A12)	☐ Depleted Dark Surface (F7)	
☐ Iron Monosulfide (A18)	☐ Redox Depressions (F8)	
☐ Sandy Mucky Mineral (S1)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: Rock
Depth (inches): 9-18

Hydric Soil Present?

Yes ☐ No ☒

Remarks:

Soil pit @ veg plot center

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

☐ Surface Water (A1)	☐ Salt Crust (B11)
☐ High Water Table (A2)	☒ Biotic Crust (B12)
☐ Saturation (A3)	☐ Aquatic Invertebrates (B13)
☐ Water Marks (B1) (Nonriverine)	☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) (Nonriverine)	☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Drift Deposits (B3) (Nonriverine)	☐ Presence of Reduced Iron (C4)
☐ Surface Soil Cracks (B6)	☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Thin Muck Surface (C7)
☐ Water-Stained Leaves (B9)	☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

☐ Water Marks (B1) (Riverine)
☐ Sediment Deposits (B2) (Riverine)
☐ Drift Deposits (B3) (Riverine)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ☐	No ☒	Depth (inches):
Water Table Present?	Yes ☐	No ☒	Depth (inches):
Saturation Present?	Yes ☐	No ☒	Depth (inches):

(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
 See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
 Requirement Control Symbol EXEMPT:
 (Authority: AR 335-15, paragraph 5-2a)

Project/Site: Shush Kin Springs City/County: Cibola Co Sampling Date: 3/25/26
 Applicant/Owner: USFS Cibola National Forest State: NM Sampling Point: T-8A
 Investigator(s): Achavez, P. Handley, H. Alvarez, J. Williams Section, Township, Range: T11N. R13W Sec 17 SE 1/4
 Landform (hillside, terrace, etc.): Floodplain Local relief (concave, convex, none): Variable Slope (%): 0
 Subregion (LRR): LRR D Lat: 35.1791988° N Long: 108.2257379° W Datum: WGS84
 Soil Map Unit Name: Not available NWI classification: R3UB1F

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no, explain in Remarks.)

Are Vegetation Y, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes ☐ No ☒

Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No ☐	Is the Sampled Area within a Wetland? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐	
Wetland Hydrology Present? Yes ☒ No ☐	

Remarks: Low runoff year; persistent drought
Heavy grazing apparent
Veg has high pod (tight carpet)

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet: Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A) Total Number of Dominant Species Across All Strata: <u>1</u> (B) Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)																
1. <u>none</u>																					
2. _____																					
3. _____																					
4. _____																					
<u>0</u> = Total Cover					Prevalence Index worksheet: <table border="1"> <thead> <tr> <th>Total % Cover of:</th> <th>Multiply by:</th> </tr> </thead> <tbody> <tr> <td>OBL species <u>5</u></td> <td>x 1 = <u>5</u></td> </tr> <tr> <td>FACW species <u>5</u></td> <td>x 2 = <u>10</u></td> </tr> <tr> <td>FAC species _____</td> <td>x 3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species <u>100</u></td> <td>x 5 = <u>300</u></td> </tr> <tr> <td>Column Totals: <u>70</u> (A)</td> <td><u>315</u> (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = <u>4.5</u></td> </tr> </tbody> </table>	Total % Cover of:	Multiply by:	OBL species <u>5</u>	x 1 = <u>5</u>	FACW species <u>5</u>	x 2 = <u>10</u>	FAC species _____	x 3 = _____	FACU species _____	x 4 = _____	UPL species <u>100</u>	x 5 = <u>300</u>	Column Totals: <u>70</u> (A)	<u>315</u> (B)	Prevalence Index = B/A = <u>4.5</u>	
Total % Cover of:	Multiply by:																				
OBL species <u>5</u>	x 1 = <u>5</u>																				
FACW species <u>5</u>	x 2 = <u>10</u>																				
FAC species _____	x 3 = _____																				
FACU species _____	x 4 = _____																				
UPL species <u>100</u>	x 5 = <u>300</u>																				
Column Totals: <u>70</u> (A)	<u>315</u> (B)																				
Prevalence Index = B/A = <u>4.5</u>																					
Sapling/Shrub Stratum (Plot size: <u>10'</u>)																					
1. <u>Desert (buckbrush)</u>		<u>5</u>	<u>N</u>	<u>UPL</u>																	
2. _____																					
3. _____																					
4. _____																					
5. _____																					
<u>5</u> = Total Cover																					
Herb Stratum (Plot size: <u>10'</u>)																					
1. <u>Poa pratensis</u>		<u>40</u>	<u>Y</u>	<u>UPL</u>																	
2. <u>Gibber Grass</u>		<u>10</u>	<u>N</u>	<u>UPL</u>																	
3. <u>Blue Grama</u>		<u>5</u>	<u>N</u>	<u>UPL</u>																	
4. <u>Junco's spp</u>		<u>2</u>	<u>N</u>	<u>FACW</u>																	
5. <u>Ricegrass</u>			<u>N</u>																		
6. <u>Misc herbs</u>		<u>3</u>	<u>N</u>	<u>FACW</u>																	
7. <u>Carex spp</u>		<u>5</u>	<u>N</u>	<u>OBL</u>																	
8. _____																					
<u>105</u> = Total Cover																					
Woody Vine Stratum (Plot size: <u>10'</u>)																					
1. <u>none</u>																					
2. _____																					
<u>0</u> = Total Cover																					
% Bare Ground in Herb Stratum <u>30</u> % Cover of Biotic Crust _____																					

Remarks: moss present

SOIL

Sampling Point: T-8A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-3	5YR 3/1	100	—	—	—	—	Sandy clay	
3-10	7.5YR 3/3	100	5YR 3/4	100	CS	M	Sandy loam	
10-12	7.5YR 2.5/3	100	—	—	—	—	Loamy sand	

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

☐ Histosol (A1)	☐ Sandy Gleyed Matrix (S4)	☐ 1 cm Muck (A9) (LRR C)
☐ Histic Epipedon (A2)	☒ Sandy Redox (S5) <i>wetland soil pit</i>	☐ 2 cm Muck (A10) (LRR B)
☐ Black Histic (A3)	☐ Stripped Matrix (S6)	☐ Iron-Manganese Masses (F12) (LRR D)
☐ Hydrogen Sulfide (A4)	☐ Loamy Mucky Mineral (F1)	☐ Reduced Vertic (F18)
☐ Stratified Layers (A5) (LRR C)	☐ Loamy Gleyed Matrix (F2)	☐ Red Parent Material (F21)
☐ 1 cm Muck (A9) (LRR D)	☐ Depleted Matrix (F3)	☐ Very Shallow Dark Surface (F22)
☐ Depleted Below Dark Surface (A11)	☐ Redox Dark Surface (F6)	☐ Other (Explain in Remarks)
☐ Thick Dark Surface (A12)	☐ Depleted Dark Surface (F7)	
☐ Iron Monosulfide (A18)	☐ Redox Depressions (F8)	
☐ Sandy Mucky Mineral (S1)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present?

Yes ☒No ☐

Remarks:

Soil pit @ veg plot center.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Secondary Indicators (minimum of two required)

☒ Surface Water (A1)	☐ Salt Crust (B11)	☐ Water Marks (B1) (Riverine)
☒ High Water Table (A2)	☐ Biotic Crust (B12)	☐ Sediment Deposits (B2) (Riverine)
☒ Saturation (A3)	☒ Aquatic Invertebrates (B13)	☐ Drift Deposits (B3) (Riverine)
☐ Water Marks (B1) (Nonriverine)	☐ Hydrogen Sulfide Odor (C1)	☒ Drainage Patterns (B10)
☐ Sediment Deposits (B2) (Nonriverine)	☐ Oxidized Rhizospheres on Living Roots (C3)	☒ Dry-Season Water Table (C2)
☐ Drift Deposits (B3) (Nonriverine)	☐ Presence of Reduced Iron (C4)	☐ Crayfish Burrows (C8)
☐ Surface Soil Cracks (B6)	☐ Recent Iron Reduction in Tilled Soils (C6)	☒ Saturation Visible on Aerial Imagery (C9)
☒ Inundation Visible on Aerial Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)
☐ Water-Stained Leaves (B9)	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?

Yes ☒No ☐

Depth (inches): _____

Water Table Present?

Yes ☒No ☐

Depth (inches): _____

Saturation Present?

Yes ☒No ☐

Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present?

Yes ☒No ☐

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Shush Kin Sonnas City/County: Cibola Co. Sampling Date: 3/25/26
Applicant/Owner: USFS Cibola National Forest State: NM Sampling Point: T-8B
Investigator(s): Arviz, Phyllis, Alvarez, William Section, Township, Range: T11N, R13W Sec 17 SE 1/4
Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): convex Slope (%): 45
Subregion (LRR): LRR D Lat: 35.1791103°N Long: 108.2257754°W Datum: WGS84
Soil Map Unit Name: Not available NWI classification: Upland Site
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no, explain in Remarks.)
Are Vegetation N, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ☐	No ☒	Is the Sampled Area within a Wetland?	Yes ☐	No ☒
Hydric Soil Present?	Yes ☐	No ☒			
Wetland Hydrology Present?	Yes ☐	No ☒			

Remarks: Site should normally have snow patches this time of year.

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>none</u>				
2. _____				
3. _____				
4. _____				
		<u>0</u> = Total Cover		

Sapling/Shrub Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>none</u>				
2. _____				
3. _____				
4. _____				
5. _____				
		<u>0</u> = Total Cover		

Herb Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Indian ricegrass</u>		<u>35</u>		<u>UPL</u>
2. <u>squirrel tail</u>		<u>25</u>		<u>UPL</u>
3. <u>Misc herb</u>		<u>5</u>		<u>UPL</u>
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
		<u>0</u> = Total Cover		

Woody Vine Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>none</u>				
2. _____				
		<u>0</u> = Total Cover		

% Bare Ground in Herb Stratum 25 % Cover of Biotic Crust 10

Dominance Test worksheet:

Number of Dominant Species That
Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species
Across All Strata: 1 (B)
Percent of Dominant Species That
Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species <u>65</u>	x 5 = <u>325</u>
Column Totals: _____ (A)	_____ (B)
Prevalence Index = B/A = <u>5</u>	

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%
___ Prevalence Index is ≤3.0¹
___ Morphological Adaptations¹ (Provide supporting
data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must
be present, unless disturbed or problematic.

Hydrophytic
Vegetation
Present? Yes ☐ No ☒

Remarks:

SOIL

Sampling Point: T-8B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		
0-6	7.5YR 4/3	100	—	—	—	—	Sandy Clay Loam	
10-10	7.5YR 3/3	100	—	—	—	—	Sandy Clay	
10-18	Rock layer		—	—	—	—	—	Rock

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

Indicators for Problematic Hydric Soils³:

☐ Histosol (A1)	☐ Sandy Gleyed Matrix (S4)	☐ 1 cm Muck (A9) (LRR C)
☐ Histic Epipedon (A2)	☐ Sandy Redox (S5)	☐ 2 cm Muck (A10) (LRR B)
☐ Black Histic (A3)	☐ Stripped Matrix (S6)	☐ Iron-Manganese Masses (F12) (LRR D)
☐ Hydrogen Sulfide (A4)	☐ Loamy Mucky Mineral (F1)	☐ Reduced Vertic (F18)
☐ Stratified Layers (A5) (LRR C)	☐ Loamy Gleyed Matrix (F2)	☐ Red Parent Material (F21)
☐ 1 cm Muck (A9) (LRR D)	☐ Depleted Matrix (F3)	☐ Very Shallow Dark Surface (F22)
☐ Depleted Below Dark Surface (A11)	☐ Redox Dark Surface (F6)	☐ Other (Explain in Remarks)
☐ Thick Dark Surface (A12)	☐ Depleted Dark Surface (F7)	
☐ Iron Monosulfide (A18)	☐ Redox Depressions (F8)	
☐ Sandy Mucky Mineral (S1)		

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: rock (permeable, not ponding H₂O)
Depth (inches): 10"

Hydric Soil Present?

Yes ☐ No ☒

Remarks:

Soil pit @ Veg plot center

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

Secondary Indicators (minimum of two required)

☐ Surface Water (A1)	☐ Salt Crust (B11)	☐ Water Marks (B1) (Riverine)
☐ High Water Table (A2)	☐ Biotic Crust (B12)	☐ Sediment Deposits (B2) (Riverine)
☐ Saturation (A3)	☐ Aquatic Invertebrates (B13)	☐ Drift Deposits (B3) (Riverine)
☐ Water Marks (B1) (Nonriverine)	☐ Hydrogen Sulfide Odor (C1)	☐ Drainage Patterns (B10)
☐ Sediment Deposits (B2) (Nonriverine)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Dry-Season Water Table (C2)
☐ Drift Deposits (B3) (Nonriverine)	☐ Presence of Reduced Iron (C4)	☐ Crayfish Burrows (C8)
☐ Surface Soil Cracks (B6)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Saturation Visible on Aerial Imagery (C9)
☐ Inundation Visible on Aerial Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquilard (D3)
☐ Water-Stained Leaves (B9)	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes ☒	No ☐	Depth (inches):
Water Table Present?	Yes ☒	No ☐	Depth (inches):
Saturation Present?	Yes ☒	No ☐	Depth (inches):

(includes capillary fringe)

Wetland Hydrology Present? Yes ☐ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Granite Canyon Creek City/County: Cibola Co. Sampling Date: 4/1/26
Applicant/Owner: USFS Cibola National Forest State: NM Sampling Point: 9A
Investigator(s): Archives, Pittendley Section, Township, Range: T11N, R13W, S17 SE 1/4
Landform (hillside, terrace, etc.): Floodplain Local relief (concave, convex, none): Concave Slope (%): 5
Subregion (LRR): LRR D Lat: 35.175125(N) Long: -108.223120(W) Datum: WGS84
Soil Map Unit Name: None available NWI classification: R3UB1F

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no, explain in Remarks.)
Are Vegetation Y, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes ☐ No ☒
Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☒ No ☐
Hydric Soil Present? Yes ☒ No ☐
Wetland Hydrology Present? Yes ☒ No ☐

Is the Sampled Area
within a Wetland? Yes ☒ No ☐

Remarks: Heavily grazed, dominated by *Ba prattensis*. Low runoff year. Persistent drought. Invasives present. Ephemeral or intermittent ponding.

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
		<u>0</u> = Total Cover		

Sapling/Shrub Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
		<u>0</u> = Total Cover		

Herb Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u><i>Ba prattensis</i></u>		<u>50</u>	<u>Y</u>	<u>UPL</u>
2. <u><i>Juncus</i></u>		<u>20</u>		<u>FACW</u>
3. <u><i>Misc. herbs</i></u>		<u>20</u>		<u>FACW</u>
4.				
5.				
6.				
7.				
8.				
		<u>90</u> = Total Cover		

Woody Vine Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
		<u>0</u> = Total Cover		

% Bare Ground in Herb Stratum 10 % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That
Are OBL, FACW, or FAC: (A)
Total Number of Dominant Species
Across All Strata: (B)
Percent of Dominant Species That
Are OBL, FACW, or FAC: (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species <u> </u>	x 1 = <u> </u>
FACW species <u>40</u>	x 2 = <u>80</u>
FAC species <u> </u>	x 3 = <u> </u>
FACU species <u> </u>	x 4 = <u> </u>
UPL species <u>50</u>	x 5 = <u>250</u>
Column Totals: <u>90</u> (A)	<u>340</u> (B)
Prevalence Index = B/A = <u>3.77</u>	

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%
___ Prevalence Index is ≤3.0¹
___ Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation¹ (Explain)
¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic
Vegetation
Present? Yes ☒ No ☐

Remarks:

Sampling Point: T-9A

[illegible]

Wetland Hydrology Indicators:			
Primary Indicators (minimum of one is required; check all that apply)		Secondary Indicators (minimum of two required)	
☐ Surface Water (A1)	☐ Salt Crust (B11)	☐ Water Marks (B1) (Riverine)	
☐ High Water Table (A2)	☐ Biotic Crust (B12)	☐ Sediment Deposits (B2) (Riverine)	
☒ Saturation (A3)	☐ Aquatic Invertebrates (B13)	☐ Drift Deposits (B3) (Riverine)	
☐ Water Marks (B1) (Nonriverine)	☐ Hydrogen Sulfide Odor (C1)	☒ Drainage Patterns (B10)	
☐ Sediment Deposits (B2) (Nonriverine)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3) (Nonriverine)	☐ Presence of Reduced Iron (C4)	☐ Crayfish Burrows (C8)	
☐ Surface Soil Cracks (B6)	☐ Recent Iron Reduction in Tilled Soils (C6)	☒ Saturation Visible on Aerial Imagery (C9)	
☒ Inundation Visible on Aerial Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)	
☐ Water-Stained Leaves (B9)	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)	
Field Observations:			
Surface Water Present?	Yes ☐ No ☒	Depth (inches):	
Water Table Present?	Yes ☐ No ☐	Depth (inches):	
Saturation Present?	Yes ☒ No ☐	Depth (inches):	
(Includes capillary fringe)		Wetland Hydrology Present? Yes ☒ No ☐	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			

U.S. Army Corps of Engineers
WETLAND DETERMINATION DATA SHEET – Arid West Region
See ERDC/EL TR-08-28; the proponent agency is CECW-COR

OMB Control #: 0710-0024, Exp: 09/30/2027
Requirement Control Symbol EXEMPT:
(Authority: AR 335-15, paragraph 5-2a)

Project/Site: Granite Mountain Creek City/County: Nihoa Co. Sampling Date: 4/1/26
Applicant/Owner: USFS Nihoa National Forest State: NM Sampling Point: 9-B
Investigator(s): Archer, D. H. D. H. Section, Township, Range: T1N, R13W, S17, SE4
Landform (hillside, terrace, etc.): Hillside Local relief (concave, convex, none): concave Slope (%): 30
Subregion (LRR): LLRD Lat: 35.175071 N Long: -108.223091 W Datum: WGS84
Soil Map Unit Name: None available NWI classification: Upland site
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ☐ No ☒ (If no, explain in Remarks.)
Are Vegetation Y, Soil N, or Hydrology N significantly disturbed? Are "Normal Circumstances" present? Yes ☒ No ☐
Are Vegetation N, Soil N, or Hydrology N naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes ☐ No ☒	Is the Sampled Area within a Wetland? Yes ☐ No ☒
Hydric Soil Present? Yes ☐ No ☒	
Wetland Hydrology Present? Yes ☐ No ☒	

Remarks: Dry winter, no snowpack or patches; low runoff, persistent drought here. Heavily grazed ~1" stubble.

VEGETATION – Use scientific names of plants.

Tree Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
		<u>0</u> = Total Cover		

Sapling/Shrub Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
3.				
4.				
5.				
		<u>0</u> = Total Cover		

Herb Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1. <u>Ba. matensis</u>		<u>20</u>		
2. <u>(upland grass)</u>				
3. <u>Blue grama</u>		<u>10</u>		
4.				
5.				
6.				
7.				
8. <u>Litter (Pine needles/sticks)</u>		<u>40</u>		
		<u>70</u> = Total Cover		

Woody Vine Stratum	(Plot size: <u>10'</u>)	Absolute % Cover	Dominant Species?	Indicator Status
1.				
2.				
		<u>0</u> = Total Cover		

% Bare Ground in Herb Stratum 30 % Cover of Biotic Crust 0

Remarks:

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species	x 1 =
FACW species	x 2 =
FAC species	x 3 =
FACU species	x 4 =
UPL species <u>30</u>	x 5 = <u>150</u>
Column Totals: <u>0</u> (A)	<u>150</u> (B)
Prevalence Index = B/A = <u>5</u>	

Hydrophytic Vegetation Indicators:

Dominance Test is >50% ☐

Prevalence Index is ≤3.0¹ ☐

Morphological Adaptations¹ (Provide supporting data in Remarks or on a separate sheet) ☐

Problematic Hydrophytic Vegetation¹ (Explain) ☐

¹Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ☐ No ☒

SOIL

Sampling Point: T-9B

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)								
Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type ¹	Loc ²		

¹Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.²Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1) ☐ Sandy Gleyed Matrix (S4)
☐ Histic Epipedon (A2) ☐ Sandy Redox (S5)
☐ Black Histic (A3) ☐ Stripped Matrix (S6)
☐ Hydrogen Sulfide (A4) ☐ Loamy Mucky Mineral (F1)
☐ Stratified Layers (A5) (LRR C) ☐ Loamy Gleyed Matrix (F2)
☐ 1 cm Muck (A9) (LRR D) ☐ Depleted Matrix (F3)
☐ Depleted Below Dark Surface (A11) ☐ Redox Dark Surface (F6)
☐ Thick Dark Surface (A12) ☐ Depleted Dark Surface (F7)
☐ Iron Monosulfide (A18) ☐ Redox Depressions (F8)
☐ Sandy Mucky Mineral (S1)

Indicators for Problematic Hydric Soils³:

- ☐ 1 cm Muck (A9) (LRR C)
☐ 2 cm Muck (A10) (LRR B)
☐ Iron-Manganese Masses (F12) (LRR D)
☐ Reduced Vertic (F18)
☐ Red Parent Material (F21)
☐ Very Shallow Dark Surface (F22)
☐ Other (Explain in Remarks)

³Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present?

Yes _____ No ☒

Remarks:

Upland evident by upland vegetation, plot in ponderosa pine stand
No soil pit for this plot.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ☐ Surface Water (A1) ☐ Salt Crust (B11)
☐ High Water Table (A2) ☐ Biotic Crust (B12)
☐ Saturation (A3) ☐ Aquatic Invertebrates (B13)
☐ Water Marks (B1) (Nonriverine) ☐ Hydrogen Sulfide Odor (C1)
☐ Sediment Deposits (B2) (Nonriverine) ☐ Oxidized Rhizospheres on Living Roots (C3)
☐ Drift Deposits (B3) (Nonriverine) ☐ Presence of Reduced Iron (C4)
☐ Surface Soil Cracks (B6) ☐ Recent Iron Reduction in Tilled Soils (C6)
☐ Inundation Visible on Aerial Imagery (B7) ☐ Thin Muck Surface (C7)
☐ Water-Stained Leaves (B9) ☐ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ☐ Water Marks (B1) (Riverine)
☐ Sediment Deposits (B2) (Riverine)
☐ Drift Deposits (B3) (Riverine)
☐ Drainage Patterns (B10)
☐ Dry-Season Water Table (C2)
☐ Crayfish Burrows (C8)
☐ Saturation Visible on Aerial Imagery (C9)
☐ Shallow Aquitard (D3)
☐ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No ☒ Depth (inches): _____
 Water Table Present? Yes _____ No _____ Depth (inches): _____
 Saturation Present? Yes _____ No ☒ Depth (inches): _____

(includes capillary fringe)

Wetland Hydrology Present? Yes _____ No ☒

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

U.S. Army Corps of Engineers WETLAND DETERMINATION DATA SHEET – Arid West Region See ERDC/EL TR-08-28; the proponent agency is CECW-COR	OMB Control #: 0710-0024, Exp: 09/30/2027 Requirement Control Symbol EXEMPT: (Authority: AR 335-15, paragraph 5-2a)
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Project/Site: <u>Shush'Kin Fen</u>	City/County: <u>Cibola County</u>	Sampling Date: <u>8/25/25</u>
Applicant/Owner: _____	State: _____	Sampling Point: _____
Investigator(s): <u>Rich Schrader & Carlos Herrera</u>	Section, Township, Range: <u>Sect. 17, T11N, R13W</u>	
Landform (hillside, terrace, etc.): <u>slope</u>	Local relief (concave, convex, none): <u>concave</u>	Slope (%): <u>3%</u>
Subregion (LRR): _____	Lat: <u>35°10'58.6"N</u>	Long: <u>108°13'51.5"W</u>
Soil Map Unit Name: _____	Datum: _____	
Soil NWI classification: <u>PEM1D and PEM1B-palustrine</u>		
Are climatic / hydrologic conditions on the site typical for this time of year? Yes _____ No _____ (If no, explain in Remarks.)		
Are Vegetation <u>x</u> , Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes <u>x</u> No _____		
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)		

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <u>x</u> No _____ Hydric Soil Present? Yes <u>x</u> No _____ Wetland Hydrology Present? Yes <u>x</u> No _____	Is the Sampled Area within a Wetland? Yes <u>X</u> No _____
Remarks: The fen inside the upstream pipe fence location has been degraded from livestock overgrazing, has surface water that is hydrologically disconnected from downstream water bodies and is desiccating due to soil loss that has eroded 12-18 inches below it's previous elevation (see map of site with three transects).	

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	Dominance Test worksheet:																
1. <u>No trees or shrubs in the Fen</u>	_____	_____	_____	Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A) Total Number of Dominant Species Across All Strata: _____ (B) Percent of Dominant Species That Are OBL, FACW, or FAC: _____ (A/B)																
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
_____ =Total Cover																				
Sapling/Shrub Stratum (Plot size: _____)				Prevalence Index worksheet: <table style="width:100%; border-collapse: collapse;"> <tr> <th style="width:50%;">Total % Cover of:</th> <th style="width:50%;">Multiply by:</th> </tr> <tr> <td>OBL species <u>25</u></td> <td>x 1 = _____</td> </tr> <tr> <td>FACW species <u>4</u></td> <td>x 2 = _____</td> </tr> <tr> <td>FAC species <u>65</u></td> <td>x 3 = _____</td> </tr> <tr> <td>FACU species _____</td> <td>x 4 = _____</td> </tr> <tr> <td>UPL species _____</td> <td>x 5 = _____</td> </tr> <tr> <td>Column Totals: _____ (A)</td> <td>_____ (B)</td> </tr> <tr> <td colspan="2">Prevalence Index = B/A = _____</td> </tr> </table>	Total % Cover of:	Multiply by:	OBL species <u>25</u>	x 1 = _____	FACW species <u>4</u>	x 2 = _____	FAC species <u>65</u>	x 3 = _____	FACU species _____	x 4 = _____	UPL species _____	x 5 = _____	Column Totals: _____ (A)	_____ (B)	Prevalence Index = B/A = _____	
Total % Cover of:	Multiply by:																			
OBL species <u>25</u>	x 1 = _____																			
FACW species <u>4</u>	x 2 = _____																			
FAC species <u>65</u>	x 3 = _____																			
FACU species _____	x 4 = _____																			
UPL species _____	x 5 = _____																			
Column Totals: _____ (A)	_____ (B)																			
Prevalence Index = B/A = _____																				
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
3. _____	_____	_____	_____																	
4. _____	_____	_____	_____																	
5. _____	_____	_____	_____																	
_____ =Total Cover																				
Herb Stratum (Plot size: _____)				Hydrophytic Vegetation Indicators: _____ Dominance Test is >50% _____ Prevalence Index is ≤3.0 ¹ _____ Morphological Adaptations ¹ (Provide supporting data in Remarks or on a separate sheet) _____ Problematic Hydrophytic Vegetation ¹ (Explain) ¹ Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.																
1. <u>Carex nebrascensis</u>	<u>6</u>	_____	<u>OBL</u>																	
2. <u>Carex praegracilis</u>	<u>7</u>	_____	<u>OBL</u>																	
3. <u>Agrostis stolonifera</u>	<u>61</u>	<u>DOM</u>	<u>FAC</u>																	
4. <u>Poa pratensis</u>	<u>4</u>	_____	<u>FAC</u>																	
5. <u>Parnassia palustris</u>	<u>11</u>	<u>DOM</u>	<u>OBL</u>																	
6. <u>Juncus balticus</u>	<u>4</u>	_____	<u>FACW</u>																	
7. _____	_____	_____	_____																	
8. _____	_____	_____	_____																	
<u>84</u> =Total Cover																				
Woody Vine Stratum (Plot size: _____)				Hydrophytic Vegetation Present? Yes _____ No _____																
1. _____	_____	_____	_____																	
2. _____	_____	_____	_____																	
_____ =Total Cover																				
% Bare Ground in Herb Stratum <u>16</u> % Cover of Biotic Crust _____																				

Remarks: Taxa list and percentages based on observations by River Source team and report by Springs Stewardship Institute (INVENTORY AND ASSESSMENT OF SPRINGS ON CIBOLA NATIONAL FOREST TO SUPPORT FOREST PLANNING 2021 FINAL PROJECT REPORT)
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SOIL

Sampling Point:

[illegible]

HYDROLOGY

Wetland Hydrology Indicators:			
<u>Primary Indicators (minimum of one is required; check all that apply)</u>		<u>Secondary Indicators (minimum of two required)</u>	
☒ Surface Water (A1)	☐ Salt Crust (B11)	☐ Water Marks (B1) (Riverine)	
☐ High Water Table (A2)	☐ Biotic Crust (B12)	☐ Sediment Deposits (B2) (Riverine)	
☒ Saturation (A3)	☐ Aquatic Invertebrates (B13)	☐ Drift Deposits (B3) (Riverine)	
☐ Water Marks (B1) (Nonriverine)	☐ Hydrogen Sulfide Odor (C1)	☐ Drainage Patterns (B10)	
☐ Sediment Deposits (B2) (Nonriverine)	☐ Oxidized Rhizospheres on Living Roots (C3)	☐ Dry-Season Water Table (C2)	
☐ Drift Deposits (B3) (Nonriverine)	☐ Presence of Reduced Iron (C4)	☐ Crayfish Burrows (C8)	
☐ Surface Soil Cracks (B6)	☐ Recent Iron Reduction in Tilled Soils (C6)	☐ Saturation Visible on Aerial Imagery (C9)	
☐ Inundation Visible on Aerial Imagery (B7)	☐ Thin Muck Surface (C7)	☐ Shallow Aquitard (D3)	
☐ Water-Stained Leaves (B9)	☐ Other (Explain in Remarks)	☐ FAC-Neutral Test (D5)	
Field Observations:			
Surface Water Present?	Yes ☒ No ☐	Depth (inches):	¹
Water Table Present?	Yes ☒ No ☐	Depth (inches):	
Saturation Present?	Yes ☐ No ☐	Depth (inches):	
(includes capillary fringe)		Wetland Hydrology Present? Yes ☒ No ☐	
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:			
Remarks:			
Surface water flow is dispersed in the fen and concentrates in a shallow channel downstream. The surface water diminishes to zero surface flow from evaporation and infiltration into the soils on the downstream part of the fen.			