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# Non Technical Soil Description

## Soil Survey Area Park County Area, Wyoming, Eastern Part

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### Mapunit 19B Copeman loam, 3 to 6 percent slopes

Soil Component Name Copeman 85% of the mapunit

Slope range (%): 3 to 6 Permeability: Moderate  
Depth class: Very deep Available water capacity class: Moderate  
Drainage class: Well drained Total available water in top five feet (in.): 7.2  
Land capability: nonirrigated= 6e irrigated= 3e Flooding frequency: None  
Ecological Site: LOAMY (5-9BH) Depth to seasonal high water table (in): NA-  
Restrictive layers (in): - NA

#### Horizon Information

	<u>Depth (in)</u>	<u>Textures</u>	<u>pH range</u>	<u>Sodium</u>	<u>Salinity (mmhos/cm)</u>
H1	0 - 3	loam	7.9 - 8.4	NA -	NA -
H2	3 - 21	loam	7.9 - 8.4	NA -	NA -
H3	21 - 60	very gravelly loam	7.9 - 8.4	NA -	NA -

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pH classes: 3.5-4.4 extremely acid; 4.5-5.0 very strongly acid; 5.1-5.5 strongly acid; 5.6-6.0 moderately acid; 6.1-6.5 slightly acid; 6.6-7.3 neutral; 7.4-7.8 mildly alkaline; 7.9-8.4 moderately alkaline; 8.5-9.0 strongly alkaline; >9.0 very strongly alkaline.  
Salinity classes (if applicable): 0-2 non saline; 2-4 very slightly saline; 4-8 slightly saline; 8-16 moderately saline; >=16 saline.

**Mapunit 326BE Clapper-Clapper variant complex, 0 to 90 percent slopes**

**Soil Component Name** Clapper 60% of the mapunit

Slope range (%): 0 to 90  
 Depth class: Very deep  
 Drainage class: Well drained  
 Land capability: nonirrigated= 7s irrigated= Not rated  
 Ecological Site: GRAVELLY (5-9BH)  
 Restrictive layers (in): - NA

Permeability: Moderately rapid  
 Available water capacity class: Low  
 Total available water in top five feet (in.): 4.0  
 Flooding frequency: None  
 Depth to seasonal high water table (in): NA-

**Horizon Information**

	<u>Depth (in)</u>	<u>Textures</u>	<u>pH range</u>	<u>Sodium</u>	<u>Salinity (mmhos/cm)</u>
H1	0 - 4	gravelly fine sandy loam	7.9 - 8.4	NA -	NA -
H2	4 - 14	very gravelly sandy loam	7.9 - 9	NA -	NA -
H3	14 - 31	very gravelly loamy sand	7.9 - 9	NA -	NA -
H4	31 - 60	very gravelly sand	7.9 - 9	NA -	NA -

**Soil Component Name** Clapper variant 25% of the mapunit

Slope range (%): 0 to 30  
 Depth class: Moderately deep  
 Drainage class: Well drained  
 Land capability: nonirrigated= 6e irrigated= Not rated  
 Ecological Site: SANDY (5-9BH)  
 Restrictive layers (in): 20 - 40 Bedrock (paralithic)

Permeability: Moderately rapid  
 Available water capacity class: Very low  
 Total available water in top five feet (in.): 2.0  
 Flooding frequency: None  
 Depth to seasonal high water table (in): NA-

**Horizon Information**

	<u>Depth (in)</u>	<u>Textures</u>	<u>pH range</u>	<u>Sodium</u>	<u>Salinity (mmhos/cm)</u>
H1	0 - 12	gravelly fine sandy loam	7.9 - 8.4	NA -	NA -
H2	12 - 39	extremely gravelly loamy sand	7.9 - 9	NA -	2 - 8
H3	39 - 49	unweathered bedrock	-	NA -	NA -

pH classes: 3.5-4.4 extremely acid; 4.5-5.0 very strongly acid; 5.1-5.5 strongly acid; 5.6-6.0 moderately acid; 6.1-6.5 slightly acid; 6.6-7.3 neutral; 7.4-7.8 mildly alkaline; 7.9-8.4 moderately alkaline; 8.5-9.0 strongly alkaline; >9.0 very strongly alkaline.  
 Salinity classes (if applicable): 0-2 non saline; 2-4 very slightly saline; 4-8 slightly saline; 8-16 moderately saline; >=16 saline.

**Mapunit 396 Tassel-Turnercrest-Rock outcrop complex, 0 to 45 percent slopes**

**Soil Component Name** Tassel 35 % of the mapunit

Slope range (%): 3 to 45  
 Depth class: Shallow  
 Drainage class: Well drained  
 Land capability: nonirrigated= 7e irrigated= Not rated  
 Ecological Site: SHALLOW SANDY (5-9BH)  
 Restrictive layers (in): 10 - 20 Bedrock (paralithic)

Permeability: Moderately rapid  
 Available water capacity class: Very low  
 Total available water in top five feet (in.): 2.0  
 Flooding frequency: None  
 Depth to seasonal high water table (in): NA-

**Horizon Information**

	<u>Depth (in)</u>	<u>Textures</u>	<u>pH range</u>	<u>Sodium</u>	<u>Salinity (mmhos/cm)</u>
H1	0 - 3	sandy loam	7.4 - 8.4	NA -	NA -
H2	3 - 13	fine sandy loam	7.4 - 8.4	NA -	NA -
H3	13 - 23	unweathered bedrock	-	NA -	NA -

**Soil Component Name** Turnercrest 30 % of the mapunit

Slope range (%): 0 to 12  
 Depth class: Moderately deep  
 Drainage class: Well drained  
 Land capability: nonirrigated= 6e irrigated= Not rated  
 Ecological Site: SHALLOW SANDY (5-9BH)  
 Restrictive layers (in): 20 - 40 Bedrock (paralithic)

Permeability: Moderately rapid  
 Available water capacity class: Low  
 Total available water in top five feet (in.): 4.6  
 Flooding frequency: None  
 Depth to seasonal high water table (in): NA-

**Horizon Information**

	<u>Depth (in)</u>	<u>Textures</u>	<u>pH range</u>	<u>Sodium</u>	<u>Salinity (mmhos/cm)</u>
H1	0 - 9	sandy loam	7.4 - 8.4	NA -	NA -
H2	9 - 35	sandy loam	7.4 - 8.4	NA -	NA -
H3	35 - 45	unweathered bedrock	-	NA -	NA -

**Soil Component Name** Rock outcrop 25 % of the mapunit

Slope range (%): 0 to 45  
 Depth class: Shallow  
 Drainage class:  
 Land capability: nonirrigated= 8s irrigated= Not rated  
 Ecological Site:  
 Restrictive layers (in): - Bedrock (paralithic)

Permeability: Very rapid  
 Available water capacity class: High  
 Total available water in top five feet (in.):  
 Flooding frequency: None  
 Depth to seasonal high water table (in): NA-

**Horizon Information**

	<u>Depth (in)</u>	<u>Textures</u>	<u>pH range</u>	<u>Sodium</u>	<u>Salinity (mmhos/cm)</u>
H1	0 - 60	unweathered bedrock	-	NA -	NA -

pH classes: 3.5-4.4 extremely acid; 4.5-5.0 very strongly acid; 5.1-5.5 strongly acid; 5.6-6.0 moderately acid; 6.1-6.5 slightly acid; 6.6-7.3 neutral; 7.4-7.8 mildly alkaline; 7.9-8.4 moderately alkaline; 8.5-9.0 strongly alkaline; >9.0 very strongly alkaline.  
 Salinity classes (if applicable): 0-2 non saline; 2-4 very slightly saline; 4-8 slightly saline; 8-16 moderately saline; >=16 saline.

**Mapunit 415 Larim-Wapiti-Rock outcrop complex, 0 to 60 percent**

**Soil Component Name** Larim 35 % of the mapunit

Slope range (%): 0 to 15  
 Depth class: Very deep  
 Drainage class: Well drained  
 Land capability: nonirrigated= 7s irrigated= Not rated  
 Ecological Site: GRAVELLY (5-9BH)  
 Restrictive layers (in): - NA

Permeability: Moderate  
 Available water capacity class: Very low  
 Total available water in top five feet (in.): 2.5  
 Flooding frequency: None  
 Depth to seasonal high water table (in): NA-

**Horizon Information**

	<u>Depth (in)</u>	<u>Textures</u>	<u>pH range</u>	<u>Sodium</u>	<u>Salinity (mmhos/cm)</u>
H1	0 - 4	very gravelly loam	6.1 - 7.8	NA -	NA -
H2	4 - 9	gravelly clay loam	6.6 - 9	NA -	NA -
H3	9 - 60	extremely gravelly loamy sand	7.4 - 8.4	NA -	NA -

**Soil Component Name** Wapiti 25 % of the mapunit

Slope range (%): 0 to 60  
 Depth class: Very deep  
 Drainage class: Well drained  
 Land capability: nonirrigated= 7s irrigated= Not rated  
 Ecological Site: GRAVELLY (5-9BH)  
 Restrictive layers (in): - NA

Permeability: Moderately rapid  
 Available water capacity class: Very low  
 Total available water in top five feet (in.): 2.3  
 Flooding frequency: None  
 Depth to seasonal high water table (in): NA-

**Horizon Information**

	<u>Depth (in)</u>	<u>Textures</u>	<u>pH range</u>	<u>Sodium</u>	<u>Salinity (mmhos/cm)</u>
H1	0 - 4	gravelly sandy loam	7.9 - 8.4	NA -	NA -
H2	4 - 15	very gravelly loamy sand	7.9 - 8.4	NA -	NA -
H3	15 - 60	extremely gravelly loamy sand	7.9 - 9	NA -	NA -

**Soil Component Name** Rock outcrop 10% of the mapunit

Slope range (%): 0 to 60  
 Depth class: Shallow  
 Drainage class:  
 Land capability: nonirrigated= 8s irrigated= Not rated  
 Ecological Site:  
 Restrictive layers (in): - Bedrock (paralithic)

Permeability: Very rapid  
 Available water capacity class: High  
 Total available water in top five feet (in.):  
 Flooding frequency: None  
 Depth to seasonal high water table (in): NA-

**Horizon Information**

	<u>Depth (in)</u>	<u>Textures</u>	<u>pH range</u>	<u>Sodium</u>	<u>Salinity (mmhos/cm)</u>
H1	0 - 60	unweathered bedrock	-	NA -	NA -

pH classes: 3.5-4.4 extremely acid; 4.5-5.0 very strongly acid; 5.1-5.5 strongly acid; 5.6-6.0 moderately acid; 6.1-6.5 slightly acid; 6.6-7.3 neutral; 7.4-7.8 mildly alkaline; 7.9-8.4 moderately alkaline; 8.5-9.0 strongly alkaline; >9.0 very strongly alkaline.  
 Salinity classes (if applicable): 0-2 non saline; 2-4 very slightly saline; 4-8 slightly saline; 8-16 moderately saline; >=16 saline.

**Mapunit 53A Bessler-Asherton fine sandy loams, 0 to 3 percent slopes**

**Soil Component Name** Bessler 60% of the mapunit

Slope range (%): 0 to 3  
Depth class: Very deep  
Drainage class: Well drained  
Land capability: nonirrigated= 6s irrigated= 3s  
Ecological Site: SANDY (5-9BH)  
Restrictive layers (in): - NA

Permeability: Moderately rapid  
Available water capacity class: Low  
Total available water in top five feet (in.): 5.8  
Flooding frequency: None  
Depth to seasonal high water table (in): NA-

**Horizon Information**

	<u>Depth (in)</u>	<u>Textures</u>	<u>pH range</u>	<u>Sodium</u>	<u>Salinity (mmhos/cm)</u>
H1	0 - 3	fine sandy loam	6.6 - 7.8	NA -	NA -
H2	3 - 21	sandy loam	6.6 - 7.8	NA -	NA -
H3	21 - 60	loamy sand	7.4 - 9	NA -	NA -

**Soil Component Name** Asherton 30% of the mapunit

Slope range (%): 0 to 3  
Depth class: Very deep  
Drainage class: Well drained  
Land capability: nonirrigated= 6s irrigated= 3s  
Ecological Site: SANDY (5-9BH)  
Restrictive layers (in): - NA

Permeability: Moderately rapid  
Available water capacity class: Low  
Total available water in top five feet (in.): 4.8  
Flooding frequency: None  
Depth to seasonal high water table (in): NA-

**Horizon Information**

	<u>Depth (in)</u>	<u>Textures</u>	<u>pH range</u>	<u>Sodium</u>	<u>Salinity (mmhos/cm)</u>
H1	0 - 9	fine sandy loam	7.4 - 8.4	NA -	NA -
H2	9 - 20	fine sandy loam	7.9 - 8.4	NA -	NA -
H3	20 - 60	very gravelly sandy loam	8.5 - 9	NA -	NA -

**Mapunit 67B Zigweid loam, 3 to 6 percent slopes**

**Soil Component Name** Zigweid 85% of the mapunit

Slope range (%): 3 to 6  
Depth class: Very deep  
Drainage class: Well drained  
Land capability: nonirrigated= 6e irrigated= 3e  
Ecological Site: LOAMY (5-9BH)  
Restrictive layers (in): - NA

Permeability: Moderate  
Available water capacity class: High  
Total available water in top five feet (in.): 11.2  
Flooding frequency: None  
Depth to seasonal high water table (in): NA-

**Horizon Information**

	<u>Depth (in)</u>	<u>Textures</u>	<u>pH range</u>	<u>Sodium</u>	<u>Salinity (mmhos/cm)</u>
H1	0 - 7	loam	7.4 - 8.4	NA -	NA -
H2	7 - 60	loam	7.9 - 9	NA -	NA -

pH classes: 3.5-4.4 extremely acid; 4.5-5.0 very strongly acid; 5.1-5.5 strongly acid; 5.6-6.0 moderately acid; 6.1-6.5 slightly acid; 6.6-7.3 neutral; 7.4-7.8 mildly alkaline; 7.9-8.4 moderately alkaline; 8.5-9.0 strongly alkaline; >9.0 very strongly alkaline.  
Salinity classes (if applicable): 0-2 non saline; 2-4 very slightly saline; 4-8 slightly saline; 8-16 moderately saline; >=16 saline.