

# Ecological site R224XY200AK Gravelly Low Flood Plains Subalpine-riparian scrub gravelly diorite flood plains, Boreal-riparian scrub gravelly flood plains

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#### **General information**

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



Figure 1. Mapped extent

Areas shown in blue indicate the maximum mapped extent of this ecological site. Other ecological sites likely occur within the highlighted areas. It is also possible for this ecological site to occur outside of highlighted areas if detailed soil survey has not been completed or recently updated.

Table 1. Dominant plant species

Tree	Not specified
Shrub	Not specified
Herbaceous	Not specified

## Physiographic features

This site is on nearly level, somewhat poorly drained, very deep soils on channels on flood plains, occurring in MLRA 224 Cook Inlet Lowlands, located in South Central Alaska

Table 2. Representative physiographic features

Landforms	(1) Channel (2) Flood plain
Flooding duration	Long (7 to 30 days)
Flooding frequency	Rare to frequent
Ponding frequency	None

Elevation	91–882 m
Slope 0–2%	
Water table depth	51–119 cm
Aspect	Aspect is not a significant factor

#### Climatic features

## Influencing water features

### Soil features

Subalpine-Riparian Scrub Gravelly Diorite Flood Plains component is on channel on flood plains. The parent material consists of sandy and gravelly alluvium derived from diorite. The depth to restrictive layer is greater than 80 inches. It is somewhat poorly drained. The slowest permeability of the soil material is moderately rapid. Available water capacity is low and shrink swell potential is low. This soil is frequently flooded and is not ponded. The top of the seasonal high water table is at 20 inches. There are no saline horizons within 30 inches of the soil surface.

Boreal-Riparian Scrub Gravelly Flood Plains component makes up 25 percent of the map unit. This component is on channels on flood plains. The parent material consists of sandy and gravelly alluvium. The depth to restrictive layer is greater than 80 inches. It is somewhat poorly drained. The slowest permeability of the soil material is moderately rapid. Available water capacity is low and shrink swell potential is low. This soil is frequently flooded and is not ponded. The top of the seasonal high water table is at 20 inches. There are no saline horizons within 30 inches of the soil surface. This component is in the ecological site.

Table 3. Representative soil features

Surface texture	(1) Extremely cobbly coarse sand (2) Extremely gravelly loamy coarse sand	
Drainage class	Somewhat poorly drained	
Permeability class	Moderately rapid	
Soil depth	183 cm	
Surface fragment cover <=3"	35–60%	
Surface fragment cover >3"	0–35%	
Available water capacity (0-101.6cm)	5.08 cm	
Calcium carbonate equivalent (0-101.6cm)	0%	
Electrical conductivity (0-101.6cm)	0–2 mmhos/cm	
Soil reaction (1:1 water) (0-101.6cm)	5–6.8	
Subsurface fragment volume <=3" (Depth not specified)	35–60%	
Subsurface fragment volume >3" (Depth not specified)	0–35%	

## **Ecological dynamics**

State and transition model

**Contributors** 

# Rangeland health reference sheet

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

Au	thor(s)/participant(s)				
Со	ontact for lead author				
Da	ite				
Аp	proved by				
Аp	proval date				
Со	emposition (Indicators 10 and 12) based on	Annual Production			
	licators  Number and extent of rills:				
2.	2. Presence of water flow patterns:				
3.	3. Number and height of erosional pedestals or terracettes:				
4.	4. Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are not bare ground):				
5.	5. Number of gullies and erosion associated with gullies:				
6.	6. Extent of wind scoured, blowouts and/or depositional areas:				
7.	Amount of litter movement (describe size	ze and distance exp	pected to travel):		
8.	Soil surface (top few mm) resistance to values):	erosion (stability v	alues are averages - most sites will show a range of		

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

1.	Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction on this site):		
12.	Functional/Structural Groups (list in order of descending dominance by above-ground annual-production or live foliar cover using symbols: >>, >, = to indicate much greater than, greater than, and equal to):		
	Dominant:		
	Sub-dominant:		
	Other:		
	Additional:		
3.	Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence):		
4.	Average percent litter cover (%) and depth ( in):		
5.	Expected annual annual-production (this is TOTAL above-ground annual-production, not just forage annual-production):		
6.	Potential invasive (including noxious) species (native and non-native). List species which BOTH characterize degraded states and have the potential to become a dominant or co-dominant species on the ecological site if their future establishment and growth is not actively controlled by management interventions. Species that become dominant for only one to several years (e.g., short-term response to drought or wildfire) are not invasive plants. Note that unlike other indicators, we are describing what is NOT expected in the reference state for the ecological site:		