

Soil Survey of the Delta River Area, Alaska

Ecological Site Description

Loamy Wet Flood Plains, High Elevation (R228XY152AK)

Ecological Site Characteristics

Site Type: Rangeland

Site Name: Loamy Wet Flood Plains, High Elevation

Site ID: R228XY152AK (Old: R173XY152AK)

Major Land Resource: 228 - Interior Alaska Mountains

Ecoregion Classification

Section: Alaska Mountains (M135A)

Subsection(s): Lowland Flood Plains, Terraces, and Fans (M135A.V1L)

Physiographic Features

Elevation (feet): 2,451 to 2,730

Slope Gradient (percent): 0 to 1

Aspect (clockwise direction): non-influencing

Landform: flood plains

	Frequency	Duration	Beginning Month	Ending Month
Flooding:	Frequent	Long	May	Sep

Ponding: None

Climatic Features

Annual Precipitation: 28 to 33

Annual Air Temperature (°F): 25 to 26

Frost Free Days: 60 to 80

Soil Features

Parent Materials: sandy and silty alluvium over sandy and gravelly alluvium

Rooting Depth (inches): RV: 14 Range: 1 to 26

Soil Layers and Properties within Representative Rooting Depth:

Layers are described from the surface downward. If more than one texture is listed, the predominant texture is listed first. AWC = available water capacity. pH = hydrogen ion activity in the soil using the 1:1 soil-water ratio method. CEC = cation exchange capacity.

Thickness (inches)	Texture	Permeability	AWC (inches/inch)	pH	Effective CEC (me/100g)	CEC (me/100g)
1	slightly decomposed plant material	moderately rapid	.34	6.0		80
4	fine sandy loam	moderate	.16	6.2		16
9	stratified sand to silt	moderate	.13	6.2		12

Restrictive Features: strongly contrasting textural stratification at 29 inches

Drainage Class: poorly drained

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Vegetation Features

Common Vegetation Types:

Vegetation Type

Diamondleaf willow/horsetail-fragile sedge scrub

Ecological Status

Climax plant community

Vascular Plant Species Richness:

Vegetation Type

Diamondleaf willow/horsetail-fragile sedge scrub

Total	Per Stand			Number of Stands
	Min.	Avg.	Max.	
21	4	9	12	5

Characteristics of Diamondleaf willow/horsetail-fragile sedge scrub

Ecological Status: Climax plant community

Plant Species Cover, Constancy, and Importance:

Number of stands sampled = 9. Only those vascular, lichen, and bryophyte species with average cover $\geq 5\%$ and constancy $\geq 15\%$ are listed. Importance value equals the square root of Percent Constancy times Average Cover.

Stratum	Symbol	Scientific Name	Percent Canopy Cover			Percent Constancy	Importance Value
			Min.	Avg.	Max.		
SM	ZZSHRUB	unknown-shrubs	40.0	55	70	22	35
SL-SM	SAPL2	Salix planifolia	3.0	27	60	44	34
SL-SM	SAAL	Salix alaxensis	10.0	11	15	44	22
GM	CACA4	Calamagrostis canadensis	20.0	23	25	22	22
GM	CAAQ	Carex aquatilis	20.0	20	20	22	21
FM	EQUIS	Equisetum	0.2	30	60	22	26
L	LICHEN	total lichens	0.0	3	10	56	13
M	MOSS	total bryophytes-mosses and liverworts	5.0	19	40	56	33
B	LITTER	litter-herbaceous, mulch, and woody debris <2.5 cm	25.0	35	55	56	44
B	SOIL	mineral-bare soil	0.0	22	60	56	35
B	LITTER2	litter-woody debris >2.5 cm	0.0	1	5	56	7
B	ROCK	mineral-surface rock fragments	0.0	0	0	56	0
B	WATER	water	0.0	0	0	56	0

Map Unit Components

Component Name (Classification):

Swedna

(Coarse-loamy over sandy or sandy-skeletal, mixed, superactive, nonacid Typic Cryaquents)

Soil Map Units

Only those map units in which the landtype is a major component are listed. The landtype also may occur as a minor component in other map units.

Symbol: Map Unit Name:

FPA Swedna-Riverwash-Dackey complex

FPD Dackey-Swedna-Tangoe complex

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M135A.V1L Alaska Mountains-Lowland Flood Plains, Terraces and Fans Subsection



Figure 4 (DR Soil Survey). Cross section of potential natural communities, soils, and ecological sites within map unit FPD.

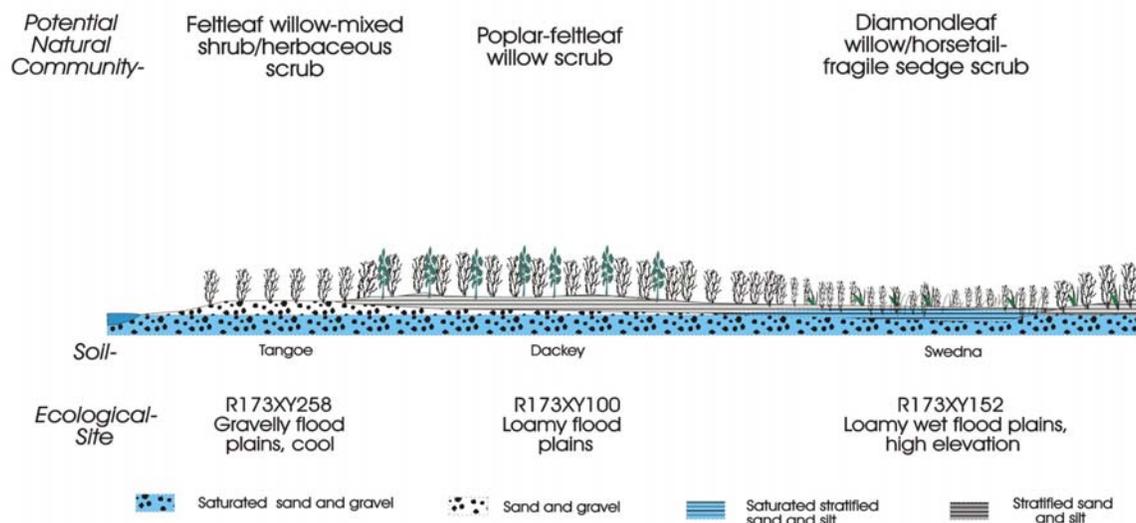


Plate 39 (DR Soil Survey). The poorly drained and flooded Swedna soil, is a major component of map unit FPD-Dackey-Swedna-Tangoe complex. The water table is at about 18 inches and underlies the entire valley bottom.

