

## Gravelly Low Flood Plains, Wet (M135A\_203)

### Ecoregion Classification

**Section:** Alaska Mountains (M135A)

**Subsection(s):** Lowland Flood Plains & Terraces & Fans (M135A.V1L)

### Physiographic Features

**Elevation (meters):** RV 637 Range 333 to 960

**Slope Gradient (percent):** 0 0 to 2

**Aspect (clockwise direction):** non-influencing

**Landform:** flood plains

	<i>Frequency</i>	<i>Duration</i>	<i>Beginning Month</i>	<i>Ending Month</i>
<b>Flooding:</b>	Frequent	Long	May	Sep

**Ponding:** None

### Climatic Features

**Annual Precipitation (millimeters):** RV 589 Range 344 to 923

**Annual Air Temperature (°C):** -3.1 -6.0 to -2.1

**Frost Free Days:** 70 60 to 80

### Soil Features

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

**Rooting Depth (cm):** RV: 23 Range: 9 to 38

#### 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. CEC = cation exchange capacity.

Thickness (cm)	Texture	Permeability	AWC (cm/cm)	pH	Effective CEC (me/100g)	CEC (me/100g)
2	slightly decomposed plant material	moderately rapid	.34	6.9		80
7	stratified sand to silt	moderate	.17	7.6		20
14	extremely gravelly coarse sand	rapid	.06	7.6		2

**Restrictive Features:** strongly contrasting textural stratification at 9 cm

**Water Table (May to September):** 0 to 70 cm

**Drainage Class:** very poorly drained

### Vegetation Features

#### Common Vegetation Types:

<i>Vegetation Type</i>	<i>Ecological Status</i>
Entire mountain avens/sedge wet dwarf scrub	Climax plant community

#### Ecological Status-Transition Description:

A single plant community with entire mountain avens/sedge wet dwarf scrub is identified on this site and flooding is considered a transitional pathway between this site and other geographically associated sites.

#### Vascular Plant Species Richness:

Vascular plant species richness is based on 1999-2002 field season data only. Data from 1997 and 1998 were not used in the calculations.

<i>Vegetation Type</i>		<i>Per Stand</i>			<i>Number of Stands</i>
	<i>Total</i>	<i>Min.</i>	<i>Avg.</i>	<i>Max.</i>	
Entire mountain avens/sedge wet dwarf scrub	95	27	38	52	5

### Notable Plants:

Notable plants include rare plants, range extensions, and plants little known from Denali National Park and Preserve.

#### Vegetation Type

Entire mountain avens/sedge wet dwarf scrub

#### Symbol

ARLO

ASSE13

CASTS

#### Scientific Name

*Arenaria longipedunculata*

*Astragalus sealei*

*Calamagrostis stricta* ssp. *stricta*

### Characteristics of Entire mountain avens/sedge wet dwarf scrub

**Ecological Status:** Climax plant community

### Plant Species Cover, Constancy, and Importance:

Cover, constancy, and importance are based on 1997-2002 field season data. Number of stands sampled = 6. Only those vascular, lichen, and bryophyte species with average cover >=5% and constancy >=15% are listed.

Stratum	Symbol	Scientific Name	Percent Canopy Cover			Percent Constancy	Importance Value
			Min.	Avg.	Max.		
SL	PEFL15	<i>Pentaphylloides floribunda</i>	2.0	7	20	67	22
SD-SL	VAUL	<i>Vaccinium uliginosum</i>	0.1	7	15	67	22
SL	SANI10	<i>Salix niphoclada</i>	10.0	10	10	17	13
SL	SHCA	<i>Shepherdia canadensis</i>	5.0	5	5	17	9
SD	DRIN4	<i>Dryas integrifolia</i>	0.1	23	45	100	48
SD	ANPO	<i>Andromeda polifolia</i>	0.1	15	30	67	32
SD	SARE2	<i>Salix reticulata</i>	0.1	7	20	100	26

  

Stratum	Symbol	Scientific Name	Percent Canopy Cover			Percent Constancy	Importance Value
			Min.	Avg.	Max.		
GM	CAMI6	<i>Carex microglochis</i>	0.1	22	50	50	33
GM	CAREX	<i>Carex</i>	0.1	28	55	33	30
GM	KOSI2	<i>Kobresia simpliciuscula</i>	0.1	12	30	67	28
GM	CAGY2	<i>Carex gynocrates</i>	0.1	5	15	50	16
GM	CAAQ	<i>Carex aquatilis</i>	1.0	6	10	33	14
GM	CADI6	<i>Carex disperma</i>	5.0	5	5	17	9
FD-FM	EQVA	<i>Equisetum variegatum</i>	0.1	6	10	83	22
FD-FM	ASSE13	<i>Astragalus sealei</i>	0.1	5	10	33	13
FD	RUAR	<i>Rubus arcticus</i>	5.0	5	5	17	9
L	LICHEN	total lichens	0.0	1	5	100	10
M	MOSS	total bryophytes-mosses and liverworts	20.0	53	95	100	73
M1	ZZMOSS	unknown-mosses	35.0	48	60	50	49
M1	RACA11	<i>Racomitrium canescens</i>	5.0	5	5	17	9
B	LITTER	litter-herbaceous, mulch, and woody debris <2.5 cm	5.0	32	65	100	57
B	ROCK	mineral-surface rock fragments	0.0	8	30	100	28
B	SOIL	mineral-bare soil	0.0	4	10	100	20
B	WATER	water	0.0	2	6	100	14
B	LITTER2	litter-woody debris >2.5 cm	0.0	0	0	100	0

### Stratum Height:

Stratum height is based on 1997-2002 field season data. All plant species and ground layer records from all stands are included in the calculations.

Stratum Name	Included Strata	Height			Units	Number of Records
		Min.	Avg.	Max.		
Trees	TT, TM, TS	4.5	4.5	4.5	m	1
Tree regeneration	TR	2.0	2.0	2.0	m	1
Medium shrubs	SM	1.3	1.9	2.5	m	3
Low shrubs	SL	20.0	57.5	100.0	cm	4
Dwarf shrubs	SD	2.0	7.1	10.0	cm	7
Tall and medium grasses and grass-likes	GT, GM	10.0	20.0	30.0	cm	3
Tall and medium forbs	FT, FM	15.0	23.8	40.0	cm	4
Dwarf herbs, lichens, and bryophytes	GD, FD, L, M	1.0	6.9	10.0	cm	12

### Mapunit Components

### Common Name (Soils Name):

Boreal-riparian scrub gravelly flood plains, wet (Typic Cryaquents, sandy-skeletal)

### **Soil Map Units**

This landtype is a minor component in the map units listed. It does not occur as a major component in any map units.

**Symbol: Common Name (Soils Name):**

- 11FP Boreal Flood Plains, High Elevation  
(Typic Cryofluvents, coarse-loamy over sandy-skeletal-Oxyaquic Cryorthents, sandy-skeletal-Typic Cryorthents, sandy-skeletal Association, 0 to 3 percent slopes)
- 7FP1 Boreal Flood Plains and Terraces  
(Typic Cryofluvents, coarse-loamy over sandy-skeletal-Oxyaquic Cryorthents, sandy-skeletal Complex)

### **Geographically Associated Landtypes**

**M135A\_100—Loamy Flood Plains:**

This site occurs on slightly higher positions with well drained soils. The climax plant community is "Poplar-feltleaf willow scrub."

**M135A\_156—Loamy Wet High Flood Plains:**

This site occurs on slightly drier soils with thick loamy surface mantles. The climax plant community is "White spruce/Richardson willow/horsetail woodland."

**Riverwash—Alluvium, Nonvegetated:**

This site occurs on barren alluvium. The climax plant community is "Sparsely vegetated alluvium."

### **Similar Landtypes**

**M135A\_153—Loamy Wet Flood Plains:**

This site occurs on drier soils with thick loam surface mantles. The climax plant community is "Feltleaf willow/shrubby cinquefoil/scouring rush meadow/scrub."