Organic High Flood Plains (135A_502)

Ecoregion Classification

Section: Cook Inlet Lowlands (135A)

Subsection(s): Lowland Flood Plains & Terraces & Fans (135A.V1)

Physiographic Features

	RV	Range
Elevation (meters):	179	61 to 380
Slope Gradient (percent):	0	0 to 0

Aspect (clockwise direction): non-influencing

Landform: cutoffs on flood plains; meander scrolls on flood plains

	Frequency	Duration	Beginning Month	Ending Month	Depth (cm)
Flooding:	Occasional	Long	May	Sep	
Ponding:	Frequent	Very long	May	Sep	0 to 10

Climatic Features

	RV	Range
Annual Precipitation (millimeters):	822	678 to 989
Annual Air Temperature (°C):	-0.1	-1.5 to 1.0
Frost Free Days:	80	70 to 100

Soil Features

Parent Materials: grassy organic material over sandy and silty alluvium

Rooting Depth (cm): *RV:* 72 *Range:* 21 to 116

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)
63	peat	moderately rapid	.34	5.7		80
9	silt loam	moderate	.18	5.8		16

Restrictive Features: strongly contrasting textural stratification at 63 cm

Water Table (May to September): 0 cm

Drainage Class: very poorly drained

Vegetation Features

Common Vegetation Types:

Vegetation Type	Ecological Status
Thinleaf alder/sweetgale/water horsetail scrub	Climax plant community

Ecological Status-Transition Description:

A single plant community with thinleaf alder/sweetgale/water horsetail 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.

		Per Stand			
Vegetation Type	Total	Min.	Avg.	Max.	Number of Stands
Thinleaf alder/sweetgale/water horsetail scrub	45	11	18	27	4

Notable Plants:

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

Vegetation Type	Symbol	Scientific Name
Thinleaf alder/sweetgale/water horsetail scrub	CIAL	Circaea alpina
	SOLE8	Solidago lepida

Characteristics of Thinleaf alder/sweetgale/water horsetail 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 = 4. 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.*		
TM	PIGL	Picea glauca	7.0	7	7	25	13
SM-ST	ALTE2	Alnus tenuifolia	25.0	42	60	100	65
SM	MYGA	Myrica gale	5.0	22	60	100	47
SM	SABA3	Salix barclayi	3.0	13	20	75	31
SM	SARI4	Salix richardsonii	1.0	7	15	75	23
SM	BEGL	Betula glandulosa	5.0	5	5	25	11
SL	VAUL	Vaccinium uliginosum	15.0	15	15	25	19
SL	SAFU	Salix fuscescens	5.0	5	5	25	11
GT	CACA4	Calamagrostis canadensis	30.0	45	60	75	58
FM-FT	EQFL	Equisetum fluviatile	10.0	32	60	100	57
FM-FT	COPA28	Comarum palustre	5.0	21	40	100	46
FD-FM	VACA3	Valeriana capitata	1.0	8	15	50	20
FM	GATR2	Galium trifidum	5.0	5	5	25	11
FM	GATR3	Galium triflorum	5.0	5	5	25	11
FM	METR3	Menyanthes trifoliata	5.0	5	5	25	11
L	LICHEN	total lichens	0.1	0	0	100	0
M	MOSS	total bryophytes-mosses and liverworts	7.0	48	95	100	69
M1	SPHAG2	Sphagnum	1.0	33	90	75	50
M1	ZZMOSS	unknown-mosses	5.0	16	45	100	40
M1	CALLI10	Calliergon	25.0	25	25	25	25
M1	PLAGI7	Plagiomnium	5.0	8	10	50	20
B	LITTER	litter-herbaceous, mulch, and woody debris <2.5 cm	20.0	44	95	100	66
B	WATER	water	0.1	18	40	100	42
B	LITTER2	litter-woody debris >2.5 cm	0.1	4	15	100	20
B	SOIL	mineral-bare soil	0.0	3	10	100	17
B	ROCK	mineral-surface rock fragments	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				Number of Records
		Min.	*Avg.*	*Max.*	*Units*	
Trees	TT, TM, TS	8.0	8.0	8.0	m	1
Tree regeneration	TR	0.2	2.6	5.0	m	2
Tall shrubs	ST	3.0	3.0	3.0	m	1
Medium shrubs	SM	1.2	1.9	3.0	m	9
Low shrubs	SL	40.0	70.0	100.0	cm	2
Tall and medium grasses and grass-likes	GT, GM	120.0	136.7	150.0	cm	3
Tall and medium forbs	FT, FM	25.0	61.2	120.0	cm	4
Dwarf herbs, lichens, and bryophytes	GD, FD, L, M	1.0	2.8	4.0	cm	4

Mapunit Components

Common Name (Soils Name):

Boreal-riparian scrub organic flood plains, wet (Terric Cryofibrists, euic)

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: Common Name (Soils Name):

13FWW Boreal Flood Plains, Very Wet
(Terric Cryofibrists, euic-Aquic Cryofluvents, coarse-loamy over sandy-skeletal Complex)

Geographically Associated Landtypes

135A_156 -- Loamy Wet High Flood Plains:

This site occurs on drier soils that lack thick organic mats. The climax plant community is "Mixed white spruce-poplar/thinleaf alder forest."

135A_200 -- Gravelly Low Flood Plains:

This site occurs on lower positions. The climax plant community is "Sitka alder-Barclay willow-Sitka willow scrub."

135A_501 -- Organic High Flood Plains, Very Wet:

This site occurs on slightly wetter and lower positions. The climax plant community is "Water horsetail-marsh five finger-buckbean wet meadow."