Organic High Flood Plains, Very Wet (135A_501)

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	5 to 25

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:* 100 *Range:* 59 to 150

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
37	stratified fine sand to silt	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
Water horsetail-marsh five finger-buckbean wet meadow	Climax plant community

Ecological Status-Transition Description:

A single plant community of water horsetail-marsh five finger-buckbean wet meadow is identified on this site. 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			Number of
Vegetation Type	Total	*Min.*	*Avg.*	*Max.*	Stands
Water horsetail-marsh five finger-buckbean wet meadow	52	17	22	24	5

Notable Plants:

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

Vegetation Type	Symbol	Scientific Name
Water horsetail-marsh five finger-buckbean wet meadow	ASJU	Aster junciformis
	CACH5	Carex chordorrhiza
	CADI4	Carex diandra
	CAIN11	Carex interior
	CIBU	Cicuta bulbifera
	PEMA	Pedicularis macrodonta

Characteristics of Water horsetail-marsh five finger-buckbean wet meadow

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 = 5. 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-SM	MYGA	Myrica gale	3.0	12	20	80	31
SL	SAFU	Salix fuscescens	15.0	15	15	20	17
GM-GT	CAAQ	Carex aquatilis	0.1	7	20	80	24
GM-GT	CADI4	Carex diandra	2.0	11	20	40	21
GT	CACA4	Calamagrostis canadensis	0.1	5	15	60	17
GT	CAUT	Carex utriculata	10.0	10	10	20	14
GM	CACH5	Carex chordorrhiza	0.1	16	45	60	31
GM	CALI7	Carex limosa	5.0	10	15	40	20
GM	ERANS2	Eriophorum angustifolium ssp. subarcticum	5.0	10	15	40	20
FM-FT	EQFL	Equisetum fluviatile	30.0	44	65	100	66
FM-FT	COPA28	Comarum palustre	4.0	19	50	100	44
FT	PESA5	Petasites sagittatus	5.0	5	5	20	10
FM	METR3	Menyanthes trifoliata	3.0	14	30	100	37
L	LICHEN	total lichens	0.0	0	0	100	0
M	MOSS	total bryophytes-mosses and liverworts	35.0	66	90	100	81
M1	ZZMOSS	unknown-mosses	1.0	36	80	100	60
M1	SPHAG2	Sphagnum	0.1	32	90	60	44
M1	CALLI10	Calliergon	30.0	30	30	20	24
M1	TONI70	Tomentypnum nitens	15.0	15	15	20	17
B	WATER	water	6.0	24	70	100	49
B	LITTER	litter-herbaceous, mulch, and woody debris <2.5 cm	10.0	21	40	100	46
B	SOIL	mineral-bare soil	0.0	2	10	100	14
B	LITTER2	litter-woody debris >2.5 cm	0.0	0	0	100	0
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*	
Medium shrubs	SM	1.7	1.8	2.0	m	3
Low shrubs	SL	20.0	42.5	70.0	cm	4
Tall and medium grasses and grass-likes	GT, GM	20.0	40.0	60.0	cm	4
Tall and medium forbs	FT, FM	20.0	60.0	130.0	cm	10
Dwarf herbs, lichens, and bryophytes	GD, FD, L, M	0.1	1.7	3.0	cm	5

Mapunit Components

Common Name (Soils Name):

Boreal-riparian wet meadow organic flood plains, Cook Inlet (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_502 -- Organic High Flood Plains:

This site occurs on slightly drier and higher positions. The climax plant community is "Thinleaf alder/sweetgale/water horsetail scrub."

Similar Landtypes

135A_500 -- Loamy Wet Flood Plains:

This site has drier soils with a thick loamy surface mantle. The climax plant community is "Thinleaf alder-mixed willow scrub."

135A_534 -- Organic Depressions, Very Wet:

This site occurs in uplands and is not flooded. The climax plant community is "Tufted bulrush-few-flowered sedge wet meadow."