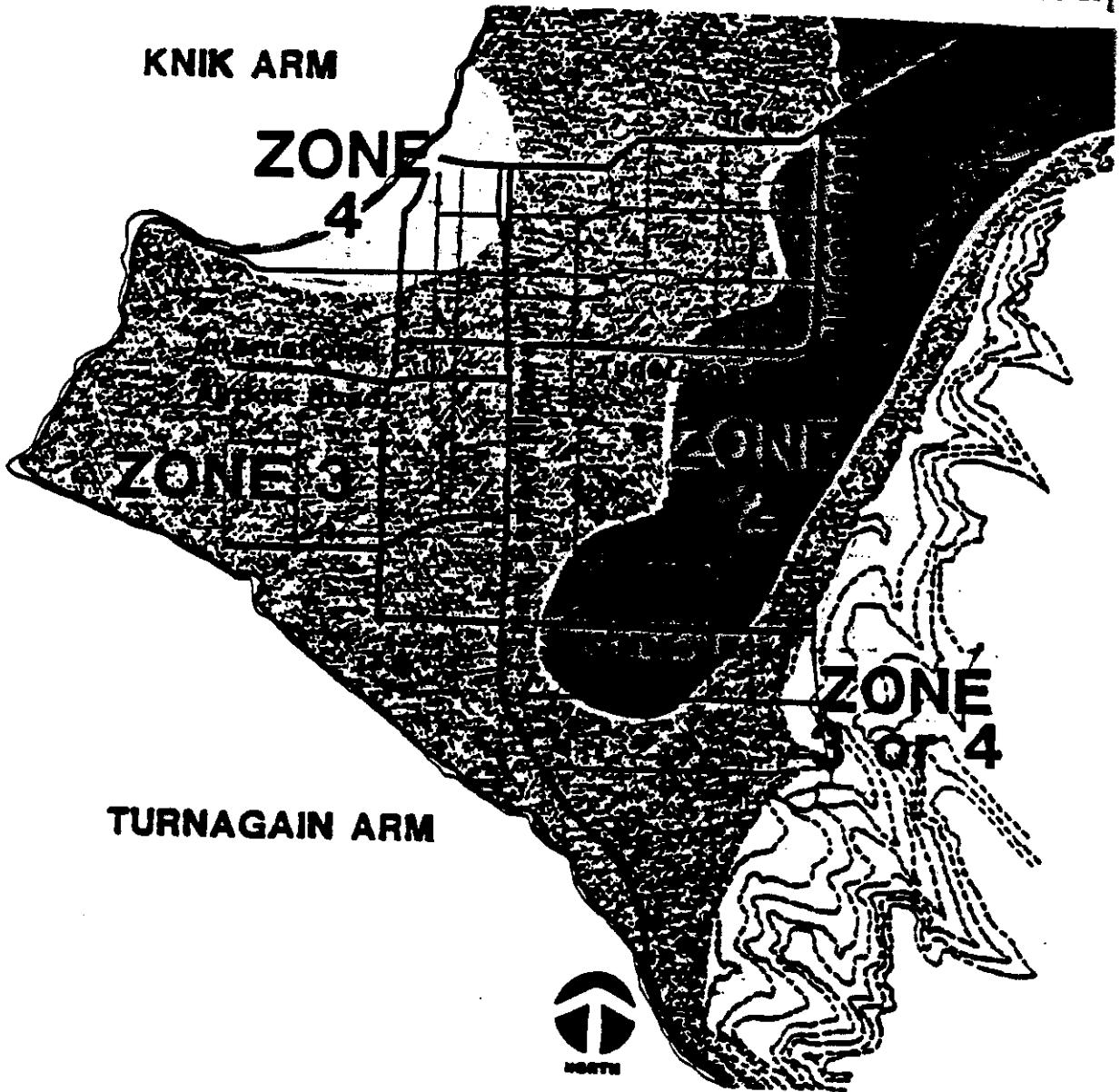


**APPENDIX A.**



## **ZONE 2 Cold-Air Basin**

A cold-air basin is formed at the base of the Chugach Mountains from the downhill flow of cold air, and intensified by channelled winter winds from the North.

Zone 2 is classified with -50 to -35 degrees minimum annual temperature.

## **ZONE 3 Predominant Climate**

Zone 3 is the predominant and average climate for the Anchorage Bowl. This area is classified with -35 to -20 degrees minimum annual temperature.

## **ZONE 4 Milder Pockets**

Two micro-climates exhibit Zone 4 temperatures: a coastal pocket near the Knik Arm with milder winters, cooler summers, and a longer growing season; and a hillside thermal belt above the cold-air basin with mild winters, but a significantly shorter growing season.

Zone 4 is classified with -20 to -10 degrees minimum annual temperature.

\* Based on the hardiness zones for North America developed by the Arnold Arboretum in Boston.

**APPENDIX B.**

CELL TEMPERATURE • C

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30																										
300.0	344.6	332.0	322.3	312.2	302.1	292.0	282.0	272.0	262.0	252.0	242.0	232.0	222.0	212.0	202.0	192.0	182.0	172.0	162.0	152.0	142.0	132.0	122.0	112.0	102.0	92.0	82.0	72.0	62.0																											
225.0	222.2	200.1	180.1	160.1	140.1	120.0	100.0	80.0	60.0	40.0	20.0	0.0	200.0	190.0	180.0	170.0	160.0	150.0	140.0	130.0	120.0	110.0	100.0	90.0	80.0	70.0	60.0	50.0	40.0	30.0																										
260.0	401.0	380.5	360.5	340.2	320.2	302.0	282.0	262.0	242.0	222.0	202.0	182.0	162.0	142.0	122.0	102.0	82.0	62.0	42.0	22.0	0.0	200.0	190.0	180.0	170.0	160.0	150.0	140.0	130.0	120.0	110.0																									
275.0	420.6	416.2	412.8	409.2	405.7	402.2	398.7	395.2	391.7	388.2	384.7	381.2	377.7	374.2	370.7	367.2	363.7	360.2	356.7	353.2	349.7	346.2	342.7	339.2	335.7	332.2	328.7	325.2	321.7	318.2	314.7																									
400.0	444.0	439.7	436.3	432.6	429.2	416.2	412.6	409.2	405.7	402.2	398.7	395.2	391.7	388.2	384.7	381.2	377.7	374.2	370.7	367.2	363.7	360.2	356.7	353.2	349.7	346.2	342.7	339.2	335.7	332.2	328.7	325.2	321.7																							
425.0	448.0	441.7	438.0	434.3	430.7	426.0	422.3	418.6	414.9	411.2	407.5	403.8	400.1	396.4	392.7	389.0	385.3	381.6	377.9	374.2	370.5	366.8	363.1	359.4	355.7	352.0	348.3	344.6	340.9	337.2	333.5	330.0																								
440.0	468.0	460.6	457.4	454.1	450.9	447.7	444.4	441.1	437.9	434.6	431.3	428.0	424.7	421.4	418.1	414.8	411.5	408.2	404.9	401.6	398.3	395.0	391.7	388.4	385.1	381.8	378.5	375.2	371.9	368.6	365.3	362.0																								
455.0	494.4	487.1	483.7	480.4	477.1	473.8	470.5	467.2	463.9	460.6	457.3	454.0	450.7	447.4	444.1	440.8	437.5	434.2	430.9	427.6	424.3	421.0	417.7	414.4	411.1	407.8	404.5	401.2	397.9	394.6	391.3	388.0																								
460.0	500.0	494.6	488.4	482.2	476.0	470.8	464.6	458.4	452.2	446.0	439.8	433.6	427.3	421.1	414.9	408.7	402.5	396.3	389.1	382.9	376.7	370.5	364.3	358.1	351.9	345.7	339.5	333.3	327.1	320.9	314.7	308.5																								
525.0	522.6	500.0	478.4	456.4	434.4	412.4	390.4	368.4	346.4	324.4	302.4	280.4	258.4	236.4	214.4	192.4	170.4	148.4	126.4	104.4	82.4	60.4	38.4	16.4	0.4	200.0	190.0	180.0	170.0	160.0																										
526.0	522.7	500.1	478.5	456.5	434.5	412.5	390.5	368.5	346.5	324.5	302.5	280.5	258.5	236.5	214.5	192.5	170.5	148.5	126.5	104.5	82.5	60.5	38.5	16.5	0.5	200.5	190.5	180.5	170.5	160.5																										
540.0	544.0	521.7	499.7	477.7	455.7	433.7	411.7	389.7	367.7	345.7	323.7	301.7	279.7	257.7	235.7	213.7	191.7	169.7	147.7	125.7	103.7	81.7	59.7	37.7	15.7	3.7	1.7	0.7	0.0	0.0																										
545.0	548.0	522.2	500.2	478.2	456.2	434.2	412.2	390.2	368.2	346.2	324.2	302.2	280.2	258.2	236.2	214.2	192.2	170.2	148.2	126.2	104.2	82.2	60.2	38.2	16.2	0.2	200.2	190.2	180.2	170.2	160.2																									
560.0	561.6	539.6	517.6	495.6	473.6	451.6	429.6	407.6	385.6	363.6	341.6	319.6	297.6	275.6	253.6	231.6	209.6	187.6	165.6	143.6	121.6	99.6	77.6	55.6	33.6	11.6	0.6	0.0	0.0	0.0	0.0																									
575.0	571.7	549.7	527.7	505.7	483.7	461.7	439.7	417.7	395.7	373.7	351.7	329.7	307.7	285.7	263.7	241.7	219.7	197.7	175.7	153.7	131.7	109.7	87.7	65.7	43.7	21.7	9.7	7.7	5.7	3.7	1.7	0.7																								
590.0	581.8	559.8	537.8	515.8	493.8	471.8	449.8	427.8	405.8	383.8	361.8	339.8	317.8	295.8	273.8	251.8	229.8	207.8	185.8	163.8	141.8	119.8	97.8	75.8	53.8	31.8	9.8	7.8	5.8	3.8	1.8	0.8	0.0																							
605.0	602.9	580.9	558.9	536.9	514.9	492.9	470.9	448.9	426.9	404.9	382.9	360.9	338.9	316.9	294.9	272.9	250.9	228.9	206.9	184.9	162.9	140.9	118.9	96.9	74.9	52.9	30.9	9.9	7.9	5.9	3.9	1.9	0.9	0.0																						
620.0	623.0	601.0	578.0	556.0	534.0	512.0	490.0	468.0	446.0	424.0	402.0	380.0	358.0	336.0	314.0	292.0	270.0	248.0	226.0	204.0	182.0	160.0	138.0	116.0	94.0	72.0	50.0	28.0	6.0	4.0	2.0	0.0	0.0	0.0																						
635.0	636.0	614.0	591.0	568.0	545.0	522.0	500.0	477.0	455.0	432.0	410.0	388.0	366.0	344.0	322.0	300.0	278.0	256.0	234.0	212.0	190.0	168.0	146.0	124.0	102.0	80.0	58.0	36.0	14.0	2.0	0.0	0.0	0.0	0.0																						
650.0	650.0	628.0	605.0	582.0	559.0	536.0	513.0	490.0	467.0	444.0	421.0	398.0	375.0	352.0	329.0	306.0	283.0	260.0	237.0	214.0	191.0	168.0	145.0	122.0	99.0	76.0	53.0	30.0	7.0	0.0	0.0	0.0	0.0	0.0	0.0																					
665.0	666.0	644.0	621.0	598.0	575.0	552.0	529.0	506.0	483.0	460.0	437.0	414.0	391.0	368.0	345.0	322.0	300.0	277.0	254.0	231.0	208.0	185.0	162.0	139.0	116.0	93.0	70.0	47.0	24.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0																				
680.0	680.0	658.0	635.0	612.0	589.0	566.0	543.0	520.0	497.0	474.0	451.0	428.0	405.0	382.0	359.0	336.0	313.0	290.0	267.0	244.0	221.0	198.0	175.0	152.0	129.0	106.0	83.0	60.0	37.0	14.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0																			
695.0	696.0	674.0	651.0	628.0	605.0	582.0	559.0	536.0	513.0	490.0	467.0	444.0	421.0	398.0	375.0	352.0	329.0	306.0	283.0	260.0	237.0	214.0	191.0	168.0	145.0	122.0	99.0	76.0	53.0	30.0	7.0	0.0	0.0	0.0	0.0	0.0	0.0																			
710.0	711.1	689.1	666.1	643.1	620.1	597.1	574.1	551.1	528.1	505.1	482.1	459.1	436.1	413.1	390.1	367.1	344.1	321.1	298.1	275.1	252.1	229.1	206.1	183.1	160.1	137.1	114.1	91.1	68.1	45.1	22.1	9.1	6.1	3.1	0.1	0.0	0.0	0.0	0.0	0.0																
725.0	726.0	714.0	691.0	668.0	645.0	622.0	599.0	576.0	553.0	530.0	507.0	484.0	461.0	438.0	415.0	392.0	369.0	346.0	323.0	300.0	277.0	254.0	231.0	208.0	185.0	162.0	139.0	116.0	93.0	70.0	47.0	24.0	11.0	8.0	5.0	2.0	0.0	0.0	0.0	0.0	0.0															
740.0	741.2	729.2	706.2	683.2	660.2	637.2	614.2	591.2	568.2	545.2	522.2	499.2	476.2	453.2	430.2	407.2	384.2	361.2	338.2	315.2	292.2	269.2	246.2	223.2	200.2	177.2	154.2	131.2	108.2	85.2	62.2	39.2	16.2	3.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
755.0	756.0	743.0	720.0	697.0	674.0	651.0	628.0	605.0	582.0	559.0	536.0	513.0	490.0	467.0	444.0	421.0	398.0	375.0	352.0	329.0	306.0	283.0	260.0	237.0	214.0	191.0	168.0	145.0	122.0	99.0	76.0	53.0	30.0	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0														
770.0	771.1	759.1	736.1	713.1	690.1	667.1	644.1	621.1	598.1	575.1	552.1	529.1	506.1	483.1	460.1	437.1	414.1	391.1	368.1	345.1	322.1	300.1	277.1	254.1	231.1	208.1	185.1	162.1	139.1	116.1	93.1	70.1	47.1	24.1	11.1	8.1	5.1	2.1	0.1	0.0	0.0	0.0	0.0	0.0												
785.0	786.0	774.0	751.0	728.0	705.0	682.0	659.0	636.0	613.0	590.0	567.0	544.0	521.0	498.0	475.0	452.0	429.0	406.0	383.0	360.0	337.0	314.0	291.0	268.0	245.0	222.0	200.0	177.0	154.0	131.0	108.0	85.0	62.0	39.0	16.0	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0											
800.0	801.6	789.6	766.6	743.6	720.6	697.6	674.6	651.6	628.6	605.6	582.6	559.6	536.6	513.6	490.6	467.6	444.6	421.6	398.6	375.6	352.6	329.6	306.6	283.6	260.6	237.6	214.6	191.6	168.6	145.6	122.6	99.6	76.6	53.6	30.6	7.6	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
815.0	816.0	803.0	780.0	757.0	734.0	711.0	688.0	665.0	642.0	619.0	596.0	573.0	550.0	527.0	504.0	481.0	458.0	435.0	412.0	389.0	366.0	343.0	320.0	297.0	274.0	251.0	228.0	205.0	182.0	159.0	136.0	113.0	90.0	67.0	44.0	21.0	8.0	5.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
830.0	831.0	818.0	795.0	772.0	749.0	726.0	703.0	680.0	657.0	634.0	611.0	588.0	565.0	542.0	519.0	496.0	473.0	450.0	427.0	404.0	381.0	358.0	335.0	312.0	289.0	266.0	243.0	220.0	197.0	174.0	151.0	128.0	105.0	82.0	59.0	36.0	13.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
845.0	846.0	833.0	810.0	787.0	764.0	741.0	718.0	695.0	672.0	649.0	626.0</																																													

INITIAL SPECIFIC CONDUCTANCE  $\mu\text{mhos/cm}$

**Table A (cont'd) -CONDUCTIVITY – TDS CONVERSION CHART**

March 1992

**APPENDIX C.**

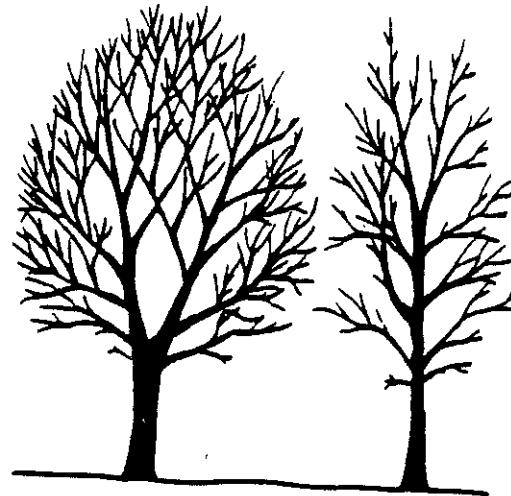
## LEGEND

— — Cutline	— — — Drainage Ditch	11 Open Low Shrub Scrub
D Disturbed	D Developed	a Sweetgale-Sphagnum Bog
 Summer 1982 Development		b Ericaceous Shrub-Sphagnum Bog
UF Upland Forest		c Ericaceous Shrub-Sedge-Sphagnum Bog
1 Closed Needleleaf Forest		d Sweetgale Sedge Fen
2 Open Needleleaf Forest		e Cinquefoil-Sphagnum Bog
3 Closed Broadleaf Forest		f Dwarf Birch-Ericaceous Shrub-Sphagnum Bog
4 Broadleaf Woodland		g Sweetgale-Sedge-Fen Moss Fen
5 Closed Mixed Forest		h Cinquefoil-Sweetgale-Ericaceous Shrub-Feathermoss Bog
6 Needleleaf Woodland		i Willow-Bluejoint Grass Moss Bog
7 Dwarf Tree Scrub Woodland		j Low Willow Bog
8 Open Dwarf Tree Scrub		12 Open Dwarf Shrub Scrub
9 Closed Tall Shrub Scrub		Ericaceous Shrub-Sphagnum Bog
a Alder Willow		13 Wet Graminoid Herbaceous
b Alder		a Sedge Tuftcock-Mixed Shrub-Sphagnum Bog
10 Open Tall Shrub Scrub		b Subarctic Lowland-Sedge-Bog Meadow
a Shrub Swamp		c Subarctic Lowland-Sedge-Moss-Bog Meadow
b Alder		d Subarctic Lowland-Sedge-Wet Meadow
		14 Bryoid Moss Wet Moss
		15 Freshwater Aquatic Herbaceous Pond Lily
		OW Open Water

NOTE: Identify only numbered plant communities; e.g., if subject wetlands has community #11 g, it should be identified as #11 only. Some areas may not fit into these communities, in which case extrapolation will be necessary to match subject community to the nearest identifier in this list.

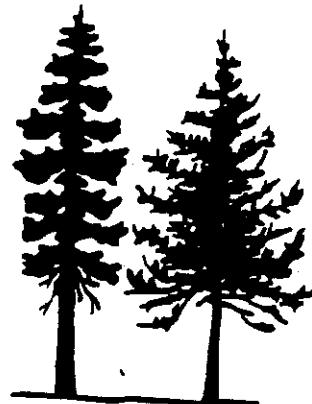
**APPENDIX D.**

# Wetland Vegetation Forms (and Symbols)



Deciduous Trees  
(Broad-leaved)

h



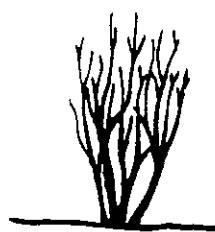
Coniferous Trees  
(Needle-leaved)

c



Dead Trees

dh, dc



Tall Shrubs  
ts



Low Shrubs  
ls



Dead Shrubs  
ds



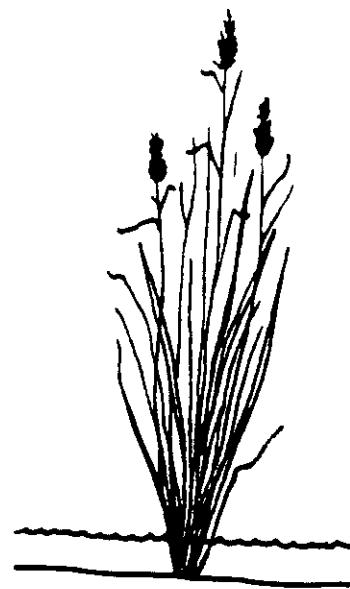
Herbs  
gc



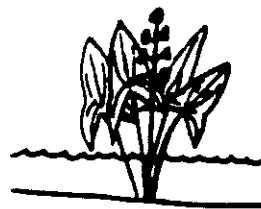
Moss  
m

# Wetland Vegetation Forms (and Symbols)

-2m



Narrow-leaved  
Emergents  
**ne**



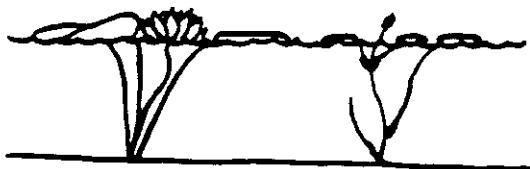
Broad-leaved  
Emergents  
**be**



Robust  
Emergents  
**re**



Free-floating  
Plants  
**ff**



Floating Plants  
(rooted)  
**f**

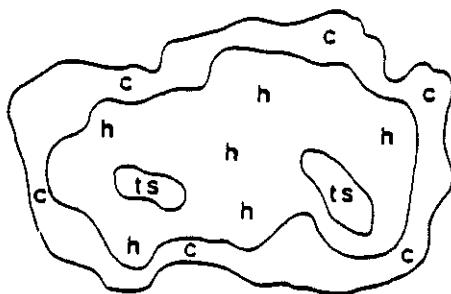


Submerged  
Plants  
**su**

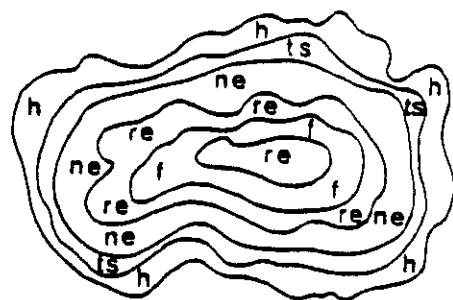
**APPENDIX E.**

# Interspersion Types

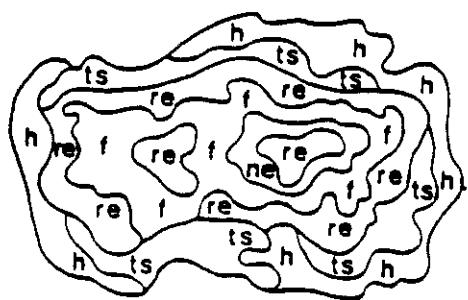
Type 1



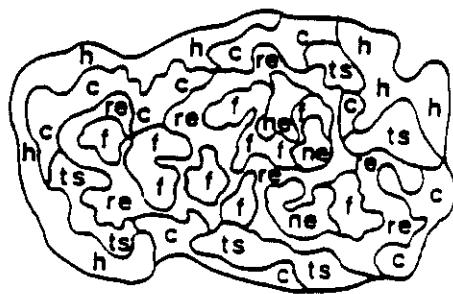
Type 2



Type 3



Type 4



## KEY

- c - Coniferous Trees
- h - Deciduous Trees
- ts - Tall Shrubs
- ne - Narrow-leaved Emergents
- re - Robust Emergents
- f - Floating Plants (rooted)

Source: Adapted from Golet, 1976

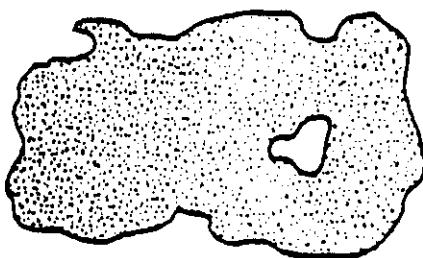
**APPENDIX F.**

FIGURE 9

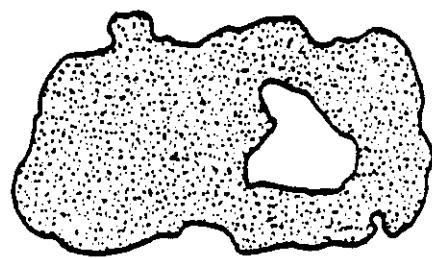
## Open Water Types

White areas indicate open water (including floating and submerged plants).  
Stippled areas indicate emergents, shrubs and trees.

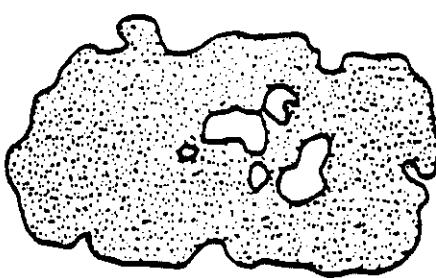
Type 1



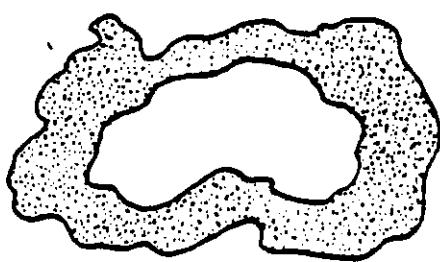
Type 2



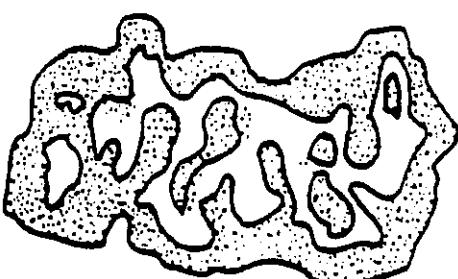
Type 3



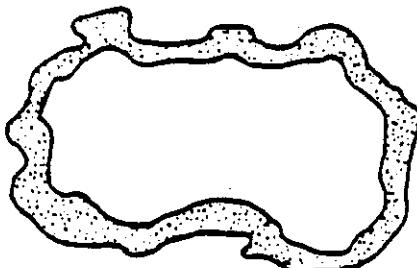
Type 4



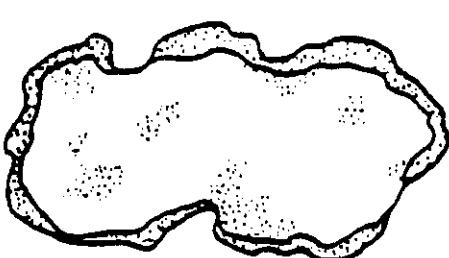
Type 5



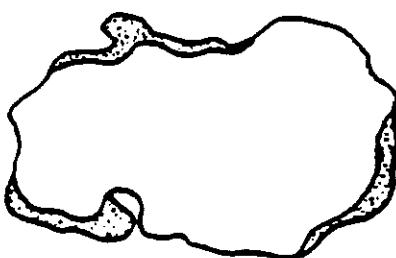
Type 6



Type 7



Type 8



**APPENDIX G.**

**STATEWIDE SIGNIFICANT PLANT SPECIES (That occur in Southcoastal)**

**Note:** Many of these forms are of questionable taxonomic status, or occur typically in non-wetlands conditions.

*Botrychium virginianum*  
*Scheuchzeria palustris*  
*Phalaris arundinacea*  
*Glyceria striata*  
*Carex atrostachya*  
*Carex Preslii*  
*Carex interior*  
*Carex Parrayana*  
*Carex lanuginosa*

*Blysmus rufum*  
*Smilacina stellata*  
*Malaxis monophylla*  
*Hammarbya paludosa*  
*Rannunculus abortivus*  
*Viola Selkirkii*  
*Thlaspi arcticum*  
*Crassula aquatica*  
*Papaver alboroseum*

**PLANTS SIGNIFICANT TO THE MUNICIPALITY OF ANCHORAGE REGION; or of HIGH PUBLIC INTEREST**

*Gymnocarpinium robertianum*  
*Typha latifolia*  
*Sparganium minimum*  
*Potamogeton Friesii*  
*Podagrion Thurberiana*  
*Calamagrostis nutkaensis*  
*Danthonia intermedia*  
*Mitella pentandra*  
*Eriophorum gracile*  
*Eriophorum viridi-carinatum*  
*Scirpus microcarpus*  
*Eleocharis Kamtschiatica*  
*Drosera anglica*

*Rhynchospora alba*  
*Carex phyllomanica*  
*Carex Ramenskii*  
*Carex rariflora*  
*Carex oederi vividula*  
*Juncus oreganus*  
*Cypripedium guttatum*  
*Sanguisorba Menziesii*  
*Cladothamnus pyrolaeiflorus*  
*Lysimachia thyrsiflora*  
*Pedicularis macrodonta*  
*Aster junciformis*

**SIGNIFICANT MUNICIPALITY OF ANCHORAGE BIRD and ANADROMOUS FISH SPECIES--Rare, limited or unique in Southcentral, and especially in the Upper Cook Inlet Region. Species is localized, does not occupy all suitable habitat and/or suitable habitat is limited, or species is extremely sensitive to disturbance. \* = Obligate wetlands species. Include if one or more from this list has used the subject wetlands within the past five years.**

Red-throated Loon \*  
Pacific Loon \*  
Common Loon \*  
Red-necked Grebe \*  
Horned Grebe \*  
Trumpeter Swan \*  
Gadwall \*  
Blue-winged Teal \*  
Canvasback \*  
Redhead \*  
Ring-necked Duck \*

Northern Harrier \*  
Sandhill Crane  
Killdeer  
Solitary Sandpiper \*  
Hudsonian Godwit \*  
Short-billed Dowitcher \*  
Red-necked Phalarope  
Short-eared Owl  
Black-backed Woodpecker  
Belted Kingfisher  
Song Sparrow

**Significant Species**  
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American Dipper \*

American Tree Sparrow  
Red-winged Blackbird \*

Chinook (King) Salmon  
Coho (Silver) Salmon  
Sockeye (Red) Salmon

NOTE: These lists are subject to change based on new or revised information. The plant lists should be updated using the Alaska Heritage Program's Database when that information is available. Mammals were originally considered for these lists but local mammalogists had no data to support inclusion of mammals at this time.