R20E
R21E
R21E
R22E
R22E
R23E
R23E
R24E
BADAMI UNIT
T10N
T9N
Point Hopson
Point Sweeney
Point Thomson
MARY SACHS ISLAND
MARY SACHS ENTRANCE
FLAXMAN ISLAND
T10N
T9N
STAINES RIVER
T9N
T8N
R20E
R21E
R21E
R22E
R22E
R23E
PT. THOMSON UNIT
R23E
R24E
T9N
T8N
SLUGGER UNIT
R20E
R21E
R21E
R22E
R22E
R23E
R23E
R24E

Wetland Classification Cross Reference Table

	Level C Classification					
Major Vegetation Types	Level C Code	Level C Type	Map Color	NWI Subtypes not broken out inLevel C classification	NWI Code(s)	NWI Description
Water	Ia	Water (ponds, lakes, rivers, streams, saltwater)	Lt. Blue			
	Ia			Bays, lagoons, inlets, subtidal rivers	E1UBL	Estuarine subtidal
	Ia			Rivers and streams (including tidally influenced rivers upstream from ocean derived salinity)	R1UBV, R2UBH, R3UBH	Riverine, permanently and tidally influenced (R1UBV, R2UBH, R3UBH).
	Ia			Lakes/Ponds	L1UBH, L2UBH, PUBH	Lacustrine (L1UBH, L2UBH) and Palustrine (PUBH) waterbodies.
Salt Marsh	IIIb	Wet Graminoid Tundra (wet saline tundra, saltmarsh)	Yellow		E2EM1N, E2EM1P	Estuarine emergent intertidal (E2EM1N, E2EM1P).
	IXh	Wet Barren/Wet Sedge Tundra Complex (barren/saline tundra complex, saltmarsh)	Yellow		E2USN, E2USP, E2EM1P	Estuarine intertidal, regularly flooded mud flats (E2USN, E2USP) with emergent intertidal (E2EM1P).
	IXi	Dry Barren/Forb, Graminoid Complex (saline coastal barrens)	Orange		Unknown, PSS/EM1B	Unknown (original vegetation salt-killed); possibly was saturated scrub shrub emergent wetlands (PSS/EM1B).
Aquatic Graminoid Tundra	IIb	Aquatic Graminoid Tundra (emergent vegetation)	Purple		L2EM2H, PEM1H	Lacustrine (L2EM2H) and Palustrine (PEM1H) permanently flooded emergent marshes.
Water/Tundra Complex	IId	Water/Tundra Complex (interconnected ponds wih emergent vegetation)	Purple		L2UB/EM2H, PUB/EM2H, PUB/EM1H	Lacustrine (L2UB/EM2H) and Palustrine (PUB/EM2H, PUB/EM1H) complexes of open water and emergent vegetation.
Wet Sedge Tundra	IIIa	Wet Sedge Tundra	Green		PEM1B, PEM1E, PEM1H, PEM1F	Palustrine PEM1B, PEM1E saturated wet sedge meadows. Some wet sedge meadows also may be permanently or semi-permanently flooded (PEM1H, PEM1F).
Wet SedgeTundra/Water Complex	IIIc	Wet SedgeTundra/Water Complex (interconnected ponds with no emergent vegetation)	Green		L2EM2/UBH, PEM1/UBH	Lacustrine (L2EM2/UBH) and Palustrine (PEM1/UBH) complexes of emergent vegetation and open water.
Moist Sedge, Dwarf Shrub Tundra/ Wet Sedge Tundra Complex	IIId	Wet Sedge/Moist Sedge, Dwarf Shrub Tundra Complex (wet patterned ground complex)	Green		PSS/EM1B, PEM1B, PEM1E, PEM1H, PEM1F	Complexes of palustrine scrub shrub, wet sedge meadows (PSS/EM1B) and saturated wet sedge meadows (PEM1B, PEM1E). Some wet sedge meadows also may be permanently or semi-permanently flooded (PEM1H, PEM1F).
	IIIe	Wet Graminoid, Dwarf Shrub Tundra/Barren Complex (frost-scar tundra complex)	Green		PSS/EM1B, PEM1B, PEM1E, PEM1H, PEM1F	Complexes of palustrine scrub shrub, wet sedge meadows (PSS/EM1B) and saturated wet sedge meadows (PEM1B, PEM1E). Some wet sedge meadows also may be permanently or semi-permanently flooded (PEM1H, PEM1F).
	IVa	Moist Sedge, Dwarf Shrub/Wet Graminoid Tundra Complex (moist patterned ground complex)	Light Green		PSS/EM1B, PEM1B, PEM1E, PEM1H, PEM1F	Complexes of palustrine scrub shrub, wet sedge meadows (PSS/EM1B) and saturated wet sedge meadows (PEM1B, PEM1E). Some wet sedge meadows also may be permanently or semi-permanently flooded (PEM1H, PEM1F).
Moist Sedge, Dwarf Shrub Tundra	Va	Moist Sedge, Dwarf Shrub Tundra	Brown/Green		PSS/EM1B	Palustrine saturated scrub shrub emergent wetlands (PSS/EM1B).
	Ve	Moist Graminoid, Dwarf Shrub Tundra/Barren Complex (frost-scar tundra complex)	Brown/Green		PSS/EM1B	Palustrine saturated scrub shrub emergent wetlands (PSS/EM1B).
Moist Tussock Sedge, Dwarf Shrub Tundra	Vb	Moist Tussock Sedge, Dwarf Shrub Tundra	Brown/Green		PEM/SS1B	Palustrine saturated emergent and scrub shrub wetlands (PEM/SS1B).
Dry Dwarf Shrub, Crustose Lichen Tundra	Vc	Dry Dwarf Shrub, Crustose Lichen Tundra (Dryas tundra, pingos)	Brown/Green		Upland	Upland
Dry Dwarf Shrub, Fruticose Lichen Tundra	Vd	Dry Dwarf Shrub, Fruticose Lichen Tundra (dry acidic tundra)	Brown/Green		Upland, PEM1B, PEM1E, PEM1H, PEM1F	Upland and palustrine emergent moist/wet sedge meadows (PEM1B, PEM1E). Some wet sedge meadows also may be permanently or semi-permanently flooded (PEM1H, PEM1F).
Dry Barren/Dwarf Shrub, Forb Grass Complex	IXb	Dry Barren/Dwarf Shrub, Forb Grass Complex (forb-rich river bars)	Pink		Upland, PSS/EM1A	Upland and palustrine, temporarily flooded riparian open shrub (PSS/EM1A)
Dry Barren/Forb Complex	IXc	Dry Barren/Forb Complex (river bars in active channels)	Pink		PEM1/USD	Palustrine partially vegetated emergent persistent well drained (PEM1/USD)
Dry Barren/Grass Complex	IXe	Dry Barren/Grass Complex	Pink		Upland	Upland
Dry Barren/Dwarf Shrub, Grass Complex	IXf	Dry Barren/Dwarf Shrub, Grass Complex (sand dune steppe)	Dark Brown		Upland	Upland
River Gravels and Outcrops	Xa	River Gravels	Gray		R2USC, R3USC	Riverine, seasonally flooded areas (R2USC, R3USC).
	Xc	Barren Gravel Outcrops	Gray		Upland/Unknown	Upland/Unknown
Gravel Roads and Pads	Xe	Gravel Roads and Pads	Grey/green		Upland/Unknown	Upland/Unknown
Bare Peat, Wet Mud	XIa	Wet Mud	Black		L2USD, PUSD	Exposed Lacustrine (L2USD) and Palustrine (PUSD) peat and sediments.
	XIc	Bare Peat	Black		L2USD, PUSD	Exposed Lacustrine (L2USD) and Palustrine (PUSD) peat and sediments.

Key to Vegetation Types[1]

Level B Land Cover Units		Level C Photo-interpreted Map Units
I. Water	Ia	Ia. Water (ponds, lakes, rivers, streams, saltwater). Estuarine Subtidal (E1UBL), Riverine, Permanently, and Tidally Influenced (R1UBV, R2UBH, R2UBH), and Lacustrine (L1UBH, L2UBH) and Palustrine Water Bodies (PUBH).
II. Very Wet Tundra	IIb	IIb. Aquatic Graminoid Tundra (emergent vegetation). Lacustrine (L2EM2H) and Palustrine (PEM1H) Permanently Flooded Emergent Marshes.
	IId	IId. Water/Tundra Complex (inter-connected ponds with emergent vegetation). Lacustrine (L2UB/EM2H) and Palustrine (PUB/EM2H) Complexes of Open Water and Emergent Vegetation.
III. Wet Tundra	IIIa	IIIa. Wet Sedge Tundra Palustrine (PEM1B, PEM1E) Saturated Wet Sedge Meadows. Wet Sedge Meadows may be permanently or Semi-Permanently Flooded (PEM1H, PEM1F).
	IIIb	IIIb. Wet Graminoid Tundra (wet saline tundra, salt marsh). Estuarine Emergent Intertidal (E2EM1N, E2EM1P).
	IIIc	IIIc. Wet Sedge Tundra/Water Complex (inter-connected ponds with no emergent vegetation). Lacustrine (L2EM2/UBH) and Palustrine (PEM1/UBH) Complexes of Emergent Vegetation and Open Water.
	IIId	IIId. Wet Sedge/Moist Sedge, Dwarf Shrub Tundra Complex (wet patterned-ground complex). Palustrine Scrub Shrub Complexes, Wet Sedge Meadows (PSS/EM1B) and Saturated Wet Sedge Meadows (PEM1B, PEM1E). Wet Sedge Meadows May be Permanently or Semi-permanently Flooded (PEM1H, PEM1F).
	IIIe	IIIe. Wet Graminoid, Dwarf Shrub Tundra/Barren Complex (frost-scar tundra complex). Palustrine Scrub Shrub Complexes, Wet Sedge Meadows (PSS/EM1B) and Saturated Wet Sedge Meadows (PEM1B, PEM1E). Wet Sedge Meadows May Be Permanently or Semi-permanently Flooded (PEM1H, PEM1F).
IV. Moist/Wet Tundra	IVa	IVa. Moist Sedge, Dwarf Shrub/Wet Graminoid Tundra Complex (moist patterned-ground complex). Palustrine Scrub Shrub Complex, Wet Sedge Meadows (PSS/EM1B) and Saturated Wet Sedge Meadows (PEM1E). Wet Sedge Meadows May Be Permanently or Semi-permanently Flooded (PEM1H, PEM1F).
V. Moist or Dry Tundra	Va	Va. Moist Sedge, Dwarf Shrub Tundra. Palustrine Saturated Shrub Emergent Wetlands (PSS/EM1B).
	Vb	Vb. Moist Tussock Sedge, Dwarf Shrub Tundra. Palustrine Saturated Emergent and Scrub Shrub Wetlands (PEM/SS1B).
	Vc	Vc. Dry Dwarf Shrub, Crustose Lichen Tundra (Dryas tundra, pingos). Uplands.
	Vd	Vd. Dry Dwarf Shrub, Fruticose Lichen Tundra (dry acidic tundra). Upland and Palustrine Emergent Moist/Wet Sedge Meadows. (PEM1B, PEM1E) Wet Sedge Meadows May Be Permanently or Semi-permanently Flooded (PEM1H, PEM1F).
	Ve	Ve. Moist Graminoid, Dwarf Shrub Tundra/Barren Complex (frost-scar tundra complex). Palustrine Saturated Scrub Shrub Emergent Wetlands (PSS/EM1B).
IX. Partially Vegetated	IXb	IXb. Dry Barren/Dwarf Shrub, Forb Grass Complex (forb-rich river bars) Upland and Palustrine, Temporarily Flooded Riparian Open Shrub (PSS/EM1A).
	IXc	IXc. Dry Barren/Forb Complex (river bars in active channels) Palustrine Partially Vegetated Emergent Persistent Well Drained (PEM1/USD).
	IXe	IXe. Dry Barren/Grass Complex. Upland
	IXf	IXf. Dry Barren/Dwarf Shrub, Grass Complex (sand dune steppe). Upland.
	IXh	IXh. Wet Barren/Wet Sedge Tundra Complex (barren/saline tundra complex, saltmarsh). Estuarine Intertidal, Regularly Flooded Mud Flats (E2USN, E2USP) with Emergent Intertidal (E2EM1P).
	IXi	IXi. Dry Barren/Forb, Graminoid Complex (saline coastal barrens). Unknown (Original Vegetation Salt-Killed); Possibly was Saturated Scrub Shrub Emergent Wetlands (PSS/EM1B).
X. Light Colored Barrens (ground cover <30%)	Xa	Xa. River Gravels. Riverine, Seasonally Flooded Areas (R2USC, R3USC).
	Xc	Xc. Barren Gravel Outcrops. Upland/Unknown.
	Xe	Xe. Gravel Roads and Pads. Upland/Unknown.
XI. Dark Colored Barrens (ground cover <30%)	XIa	XIa. Wet Mud (drained lakes and ponds). Exposed Lacustrine (L2USD) and Palustrine Peat (PUSD) and Sediments.
	XIc	XIc. Bare Peat. Exposed Lacustrine (L2USD) and Palustrine Peat (PUSD) and Sediments.

MAP SOURCE INFORMATION:

BETWEEN POINT THOMSON AREA & BADAMI AREA
(East Badami Creek to Point Hopson)

Vegetation was classified by Lynn E. Noel and Dale W. Funk (LGL Alaska Research Associates, Inc.) based on color infrared aerial photography taken on July 19, 1997 and July 2, 1994, supplemented by natural color aerial photography taken on July 1, 1993. The interpretation follows the Walker (1983) vegetation classification scheme. All vegetation types were mapped at Level C, and all polygons contain a Level C classification as an attribute.

POINT THOMSON AREA
(Point Hopson to Staines River)

Vegetation was classified by Lynn E. Noel and Dale W. Funk (LGL Alaska Research Associates, Inc.) from July 19, 1997 photography based on the Walker (1983) vegetation classification scheme. The interpretation was completed from 1"=600' color infrared aerial photography supplemented by July 1, 1993, 1"=1500' natural color aerial photography and from field observations during the summer of 1998. All vegetation types were mapped at Level C, and all polygons contain a Level C classification as an attribute.

The vegetation class polygons were digitized and rectified to a digital 1"=500' topographic base map which was prepared from 1993 photography. LGL AK project: P423, file: sdvfinal, 26 May 1999

BADAMI AREA
(No Name River to East Badami Creek)

Vegetation was classified by Charles T. Schick and Lynn E. Noel (LGL Alaska Research Associates, Inc.) from July 1, 1993 photography according to the Walker (1983) vegetation classification scheme. The interpretation was done from 1"=500' photo enlargements of the July 1, 1993, 1"=1500' natural color photography and supplemented from field observations during the summer of 1994. All vegetation types were mapped at Level C. The vegetation class polygons were digitized and rectified to a 1"=500' topographic digital base map which was prepared from 1993 photography.

REFERENCE:

[1] Walker, D.A. 1983. A hierarchical tundra vegetation classification especially designed for mapping in northern Alaska. Pages 1332-1337 in Proceedings, Permafrost Fourth International Conference. July 17-22, 1983, Fairbanks, AK.

Proposed Facility or Road

Proposed Sales Pipeline

Proposed Infield Pipeline

VEGETATION MAP
POINT THOMSON GAS
CYCLING PROJECT

DATE:	SCALE:
July 2001	1" = 2000'

tr14123.dgn