Table 3 – Legend for the Imnavait Creek environmental variables.¹

(Revised, L. Druckenmiller 2014)

Landform (code)

Hill crest
Sideslope
Footslope
Active floodplain
Stabilized floodplain
Alluvial fan
Glaciofluvial outwash
Stream bluff
Small streams and water tracks
Lake basin
Colluvial basin
Water
Disturbed

<u>Terrain Unit (code)</u>

- 1 Bedrock
- 2 Till
- 3 Glaciofluvial outwash
- 4 Meander floodplain
- 5 Non-meander floodplain
- 6 Alluvial fan
- 7 Basin colluvium
- 8 Hillslope deposits (undifferentiated retransported deposits)
- 9 Emergent lake bottom
- 10 Pond or lake
- 11 Stream or river
- 12 Disturbed

Exposure Scale (scalar)

- 1.0 Protected from winds
- 2.0 Moderate exposure to winds
- 3.0 Exposed to winds
- 4.0 Very exposed to winds

Surface Form (code)

- 1 Blockfields and sorted stone stripes
- 2 Non-sorted stone stripes with frost scars
- 3 Hummocky terrain including turf hummocks
- 4 Gelifluction or solifluction features

Surface Form (continued)

- 5 High-centered polygons
- 6 Palsa
- 7 Frost scars
- 8 Strangmoor or aligned hummocks in bogs
- 9 Thermokarst pits
- 10 Weakly defined hillslope water tracks (<1.0 m relief)
- 11 Well defined hillslope water tracks (>1.0 m relief)
- 12 Incised stream drainage
- 13 Active floodplain alluvium
- 14 Irregular relief associated with stream drainages
- 15 Rocky terrain (undifferentiated till and bedrock)
- 16 Featureless ground
- 17 Pond complex
- 18 Water
- 19 Disturbed

Microsite (code)

- 1 Hummock 2 Inter-hummock
- 2 Inter-numme
- 3 Frost scar
- 4 Inter-frost scar
- 5 In water track
- 6 Shrubby edge of water track
- 7 Top of solifluction lobe
- 8 Inter-solifluction lobe

Site Moisture (scalar) (modified from

- Komárková 1983)
 - 1.0 Extremely xeric-almost no moisture; no plant growth
 - 2.0 Very xeric-very little moisture; dry sand dunes
 - 3.0 Xeric-little moisture; stabilized sand dunes, dry ridge tops
 - 4.0 Subxeric-noticeable moisture; welldrained slopes, ridges
 - 5.0 Subxeric to mesic-very noticeable moisture; flat to gently sloping

Site Moisture (continued)

- 6.0 Mesic-moderate moisture; flat or shallow depressions
- 7.0 Mesic to subhygric-considerable moisture; depressions
- 8.0 Subhygric-very considerable moisture; saturated but with <5% standing water <10 cm deep
- 9.0 Hygric-much moisture; up to 100% of surface under water 10 to 50 cm deep; lake margins, shallow ponds, streams
- 10.0 Hydric-very much moisture; 100% of surface under water 50 to150 cm deep; lakes, streams

Estimated Snow Duration (code)

- 1.0 Snow free all year
- 2.0 Snow free most of the winter; some snow cover persists after storms but is blown free soon afterward
- 3.0 Snow free prior to melt out but with snow most of winter
- 4.0 Snow free immediately after melt out
- 5.0 Snow bank persists 1-2 weeks after melt out
- 6.0 Snow bank persists 3-4 weeks after melt out
- 7.0 Snow bank persists 4-8 weeks after melt out
- 8.0 Snow bank persists 8-12 weeks after melt out
- 9.0 Very short snow free period
- 10.0 Deep snow all year

Stability (scalar)

- 1.0 Stable
- 2.0 Subject to occasional disturbance
- 3.0 Subject to prolonged but slow disturbance such as solifluction
- 4.0 Annually disturbed
- 5.0 Disturbed more than once annually

Soil Type (code)

- Blank no soil
- 1 Pergelic Cryaquoll
- 2 Pergelic Cryohemist
- 3 Pergelic Cryofibrist
- 4 Pergelic Cryorthent
- 5 Pergelic Cryumbrept
- 6 Pergelic Cryaquept
- 7 Histic Pergelic Cryaquept
- 8 Ruptic Pergelic Cryaquept
- 9 Hemic Pergelic Sphagnofibrist
- 0 Ranker soil (Pergelic Cryorthent)

Soil Moisture (scalar) (from Komárková 1983)

- 1.0 Very dry-very little moisture; soil does not stick together
- 2.0 Dry-little moisture; soil somewhat sticks together
- 3.0 Damp-noticeable moisture; soil sticks together but crumbles
- 4.0 Damp to moist-very noticeable moisture; soil clumps
- 5.0 Moist-moderate moisture; soil binds but can be broken apart
- 6.0 Moist to wet-considerable moisture; soil binds and sticks to fingers
- 7.0 Wet-very considerable moisture; drops of water can be squeezed out of soil
- 8.0 Very wet-much moisture can be squeezed out of soil
- 9.0 Saturated-very much moisture; water drips out of soil
- 10.0 Very saturated-extreme moisture: soil is more liquid than solid

Animal and Human Disturbance (scalar)

- 0.0 No sign present
- 1.0 Some sign present; no disturbance
- 2.0 Minor disturbance or extensive sign
- 3.0 Moderate disturbance; small dens or light grazing
- 4.0 Major disturbance; multiple dens or noticeable trampling
- 5.0 Very major disturbance; very extensive tunneling or large pit

¹Walker D. A., N. D. Lederer N. D., and M. D. Walker. 1987a. Permanent vegetation plots: Site factors, soil physical and chemical properties and plant species cover. Department of Energy R4D Program. Institute of Arctic and Alpine Research, University of Colorado, Boulder, Colorado, USA.