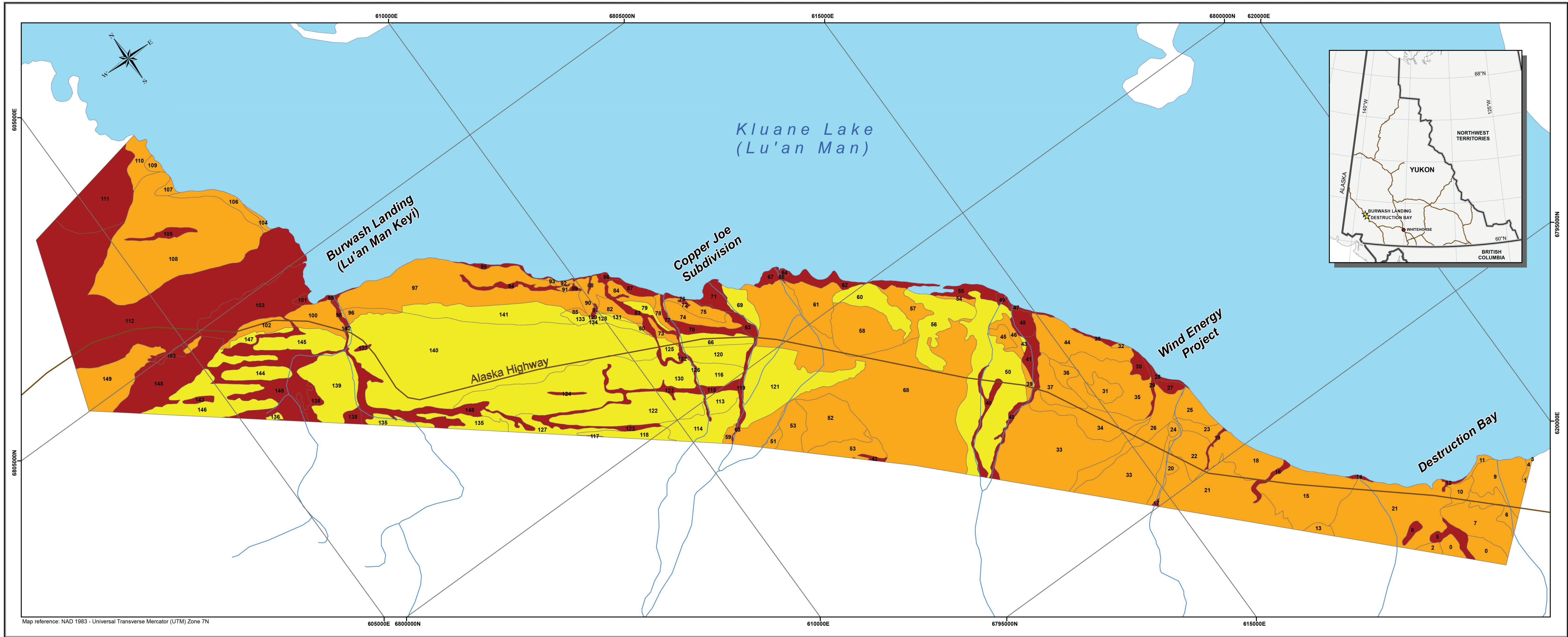




Hazards Classification Map Burwash Landing and Destruction Bay, Yukon (1:25 000 scale)

The qualitative approach used to produce this hazards classification map involved identifying and compiling the key contemporary and potential future geological, permafrost and hydrology-related hazards presenting a risk for future development in the map area. These elements were evaluated in the context of climate change projections for the coming decades.

In classifying polygons, a precautionary approach was used and a category of higher risk was applied where confidence in lower categories was lacking. However, every polygon will contain zones of lower and higher risk than the overall polygon classification. This has resulted in a projected risk ranking that will require geotechnical and/or engineering analyses to quantify. This map should serve only as an initial guide for planning purposes, and detailed site investigations should be carried out before development takes place. See the report "Burwash Landing and Destruction Bay Landscape Hazards: Geological Mapping for Climate Change Adaptation Planning" for more details about hazards classification.

Hazards classification categories

- No risk of permafrost degradation, no risk of geologic hazards**
- Moderate risk of permafrost degradation (i.e., moderate thaw settlement) or moderate risk of geologic hazards**
- Moderate to high risk of permafrost degradation (i.e., moderate thaw settlement on flat terrain, poor drainage, slow mass movement on slopes due to high pore water pressure) and moderate risk of geologic hazards**
- Moderate to high risk of permafrost degradation (i.e., high thaw settlement, water ponding, slow to rapid mass movement on slopes due to excess pore water pressure) and/or high risk of geologic hazards**

Hazard classifications for map area

Polygon number	Surficial geology	Hazard ranking	Hazard description	Polygon number	Surficial geology	Hazard ranking	Hazard description
0	Colluvium	permafrost		76	Eolian	flooding	
1	Glaciofluvial	permafrost		77	Fluvial Active	flooding	
2	Morainal	permafrost		78	Fluvial	permafrost	
3	Glaciofluvial	permafrost		79	Morainal	permafrost	
4	Fluvial	permafrost		80	Eolian	permafrost	
5	Organic	poor drainage; permafrost		81	Organic	poor drainage; permafrost	
6	Fluvial	poor drainage; permafrost		82	Eolian	permafrost	
7	Fluvial	permafrost		83	Organic	poor drainage; permafrost	
8	Organic	poor drainage; permafrost		84	Eolian	permafrost	
9	Fluvial	permafrost		85	Eolian	permafrost	
10	Fluvial	poor drainage; permafrost		86	Eolian	flooding	
11	Eolian	flooding; erosion		87	Eolian	shallow water table; permafrost	
12	Fluvial Active	flooding		88	Organic	poor drainage; permafrost	
13	Morainal	permafrost		89	Eolian	poor drainage; permafrost	
14	Fluvial	permafrost		90	Eolian	permafrost	
15	Fluvial	permafrost		91	Glaciofluvial	permafrost	
16	Eolian	poor drainage; permafrost		92	Eolian	permafrost	
17	Morainal	poor drainage; permafrost		93	Eolian	permafrost	
18	Eolian	permafrost		94	Eolian	poor drainage; permafrost	
19	Eolian	poor drainage; permafrost		95	Eolian	permafrost	
20	Morainal	permafrost		96	Morainal	permafrost	
21	Fluvial	permafrost		97	Morainal	permafrost	
22	Fluvial	permafrost		98	Fluvial	poor drainage; permafrost	
23	Glaciofluvial	permafrost		99	Lacustrine	permafrost	
24	Morainal	permafrost		100	Morainal	permafrost	
25	Eolian	permafrost		101	Eolian	shallow water table; permafrost	
26	Fluvial	poor drainage; permafrost		102	Morainal	permafrost	
27	Fluvial	flooding; shallow water table		103	Organic	poor drainage; flooding; shallow water table	
28	Lacustrine	flooding; erosion		104	Eolian	flooding	
29	Colluvium	erosion		105	Organic	poor drainage; permafrost	
30	Eolian	permafrost		106	Eolian	permafrost	
31	Glaciofluvial	permafrost		107	Eolian	flooding	
32	Eolian	permafrost		108	Morainal	permafrost	
33	Fluvial	poor drainage; permafrost		109	Eolian	flooding	
34	Fluvial	permafrost		110	Eolian	permafrost	
35	Eolian	permafrost		111	Eolian	flooding; shallow water table; permafrost	
36	Fluvial	permafrost		112	Eolian	shallow water table; permafrost	
37	Morainal	permafrost		113	Morainal	permafrost*	
38	Lacustrine	flooding; erosion		114	Fluvial	permafrost*	
39	Fluvial	permafrost		115	Organic	poor drainage; permafrost*	
40	Fluvial Active	flooding; permafrost		116	Morainal	permafrost*	
41	Fluvial	flooding; permafrost		117	Organic	poor drainage; permafrost*	
42	Organic	poor drainage; permafrost		118	Morainal	permafrost*	
43	Fluvial	flooding; permafrost		119	Fluvial Active	flooding	
44	Morainal	permafrost		120	Morainal	permafrost*	
45	Eolian	permafrost		121	Fluvial	permafrost*	
46	Eolian	permafrost		122	Morainal	permafrost*	
47	Lacustrine	flooding		123	Organic	poor drainage; permafrost*	
48	Fluvial Active	flooding; permafrost		124	Organic	poor drainage; permafrost*	
49	Fluvial	flooding; permafrost		125	Morainal	permafrost*	
50	Fluvial	flooding; permafrost		126	Fluvial Active	flooding	
51	Fluvial	permafrost		127	Fluvial	permafrost*	
52	Eolian	permafrost		128	Eolian	permafrost*	
53	Morainal	permafrost		129	Organic	poor drainage; permafrost*	
54	Colluvium	permafrost		130	Morainal	permafrost*	
55	Lacustrine	flooding		131	Eolian	permafrost*	
56	Morainal	permafrost		132	Organic	poor drainage; permafrost*	
57	Eolian	permafrost		133	Eolian	permafrost*	
58	Eolian	permafrost		134	Eolian	permafrost*	
59	Fluvial	permafrost		135	Morainal	permafrost*	
60	Morainal	permafrost		136	Morainal	permafrost*	
61	Eolian	permafrost		137	Organic	poor drainage; permafrost*	
62	Eolian	flooding		138	Morainal	poor drainage; permafrost*	
63	Fluvial Active	flooding; permafrost		139	Morainal	permafrost*	
64	Fluvial	flooding		140	Morainal	permafrost*	
65	Fluvial Active	flooding		141	Morainal	permafrost*	
66	Morainal	permafrost		142	Fluvial	poor drainage; permafrost*	
67	Eolian	flooding		143	Organic	poor drainage; permafrost*	
68	Fluvial	permafrost		144	Morainal	permafrost*	
69	Fluvial	flooding; permafrost		145	Morainal	permafrost*	
70	Organic	poor drainage; permafrost		146	Morainal	permafrost*	
71	Fluvial Active	flooding		147	Morainal	permafrost*	
72	Organic	poor drainage; permafrost		148	Organic	poor drainage; flooding; shallow water table; permafrost*	
73	Morainal	permafrost		149	Eolian	shallow water table; permafrost*	
74	Morainal	permafrost					
75	Eolian	permafrost					

*located in a forest fire disturbance area