

The lightly undulating plains of the Peel Plateau contrast sharply with the very steep slopes of the Wernecke Mountains further to the south. [RR]

# enduring features

**Alluvium:** Sediments, including sand, gravel, and silt, deposited by a stream

**Colluvium:** A mixture of weathered rock, soil, and other material on a slope

**Glaciolacustrine:** Sediments deposited in a glacial lake during deglaciation and subsequent lake drainage

**Lacustrine:** Sediments deposited in lakes under nonglacial conditions and remaining at or below the present lake level

**Moraine:** A pile of unsorted rock debris left behind by glaciers

**Morainal:** Formed by a moraine

**Till:** Mix of clay, silt, sand, gravel, and boulders deposited by and beneath a glacier

*Sources for definitions: Bates and Jackson, 1980; Oswald and Senyk, 1977; Strahler and Strahler, 1983.*

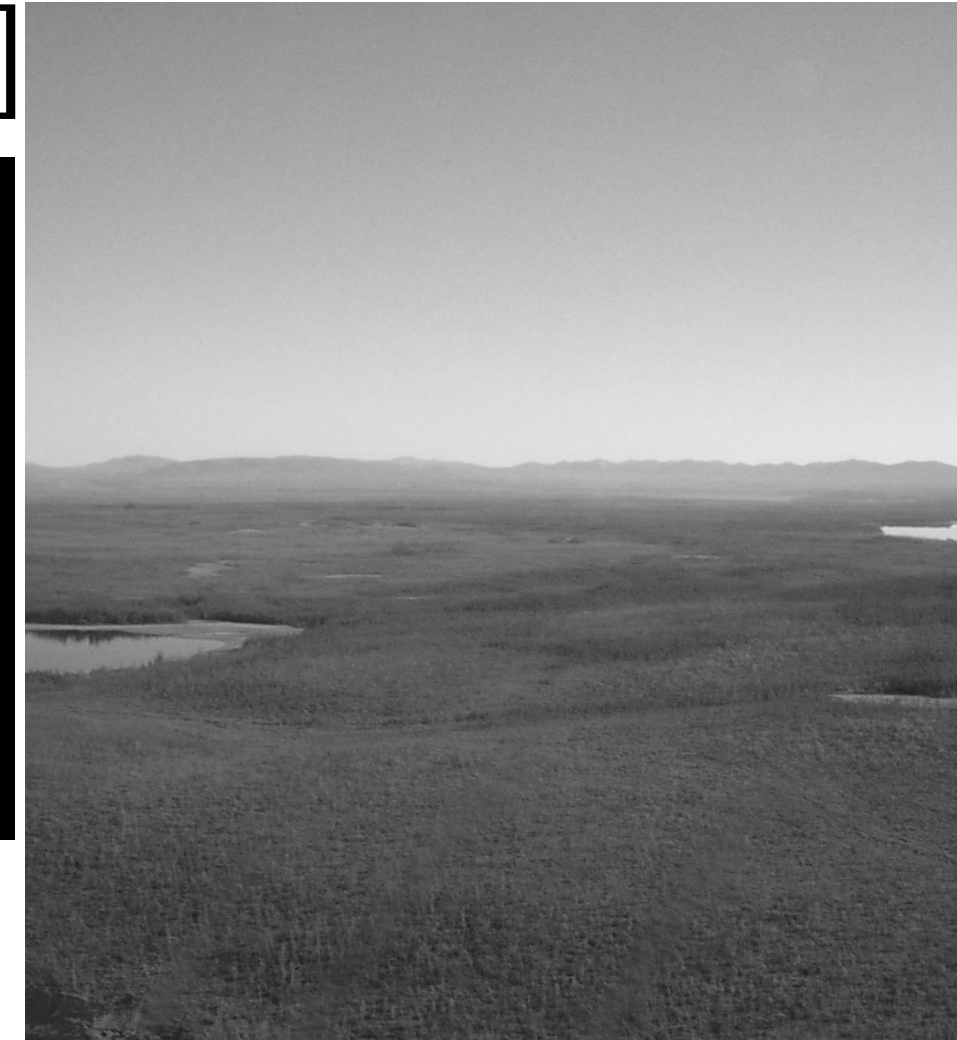
The Wernecke Mountains are the dominant enduring features in the eastern headwaters region of the Peel. [JP]



Enduring features are the distinct landforms and climate factors that support the variety of plant and animal communities in each ecoregion. The World Wildlife Fund (through its Endangered Spaces Campaign) and many government jurisdictions have used enduring features as one tool for assessing the representativeness of candidate protected areas. One principal goal of protected areas is to maintain the variety of life and therefore ideally, biological information would be used to assess representativeness. However, often biological information for a region is scarce, and in these cases enduring features, which are more easily inventoried, can be used at a coarse scale to help plan protected areas.

Protecting areas of sufficient size with adequate representation of the enduring features that characterize the ecoregions is one way to help support the long-term survival of the life forms

which depend on those features. However, the information on enduring features must be supplemented with biological information to help achieve this goal. Therefore, in planning protected areas and other conservation lands in the Peel River watershed, consideration should be given to all the various layers of biological information presented in this atlas.





Coal beds alongside the Wind River, overlain by gravels. [FM]

## enduring features

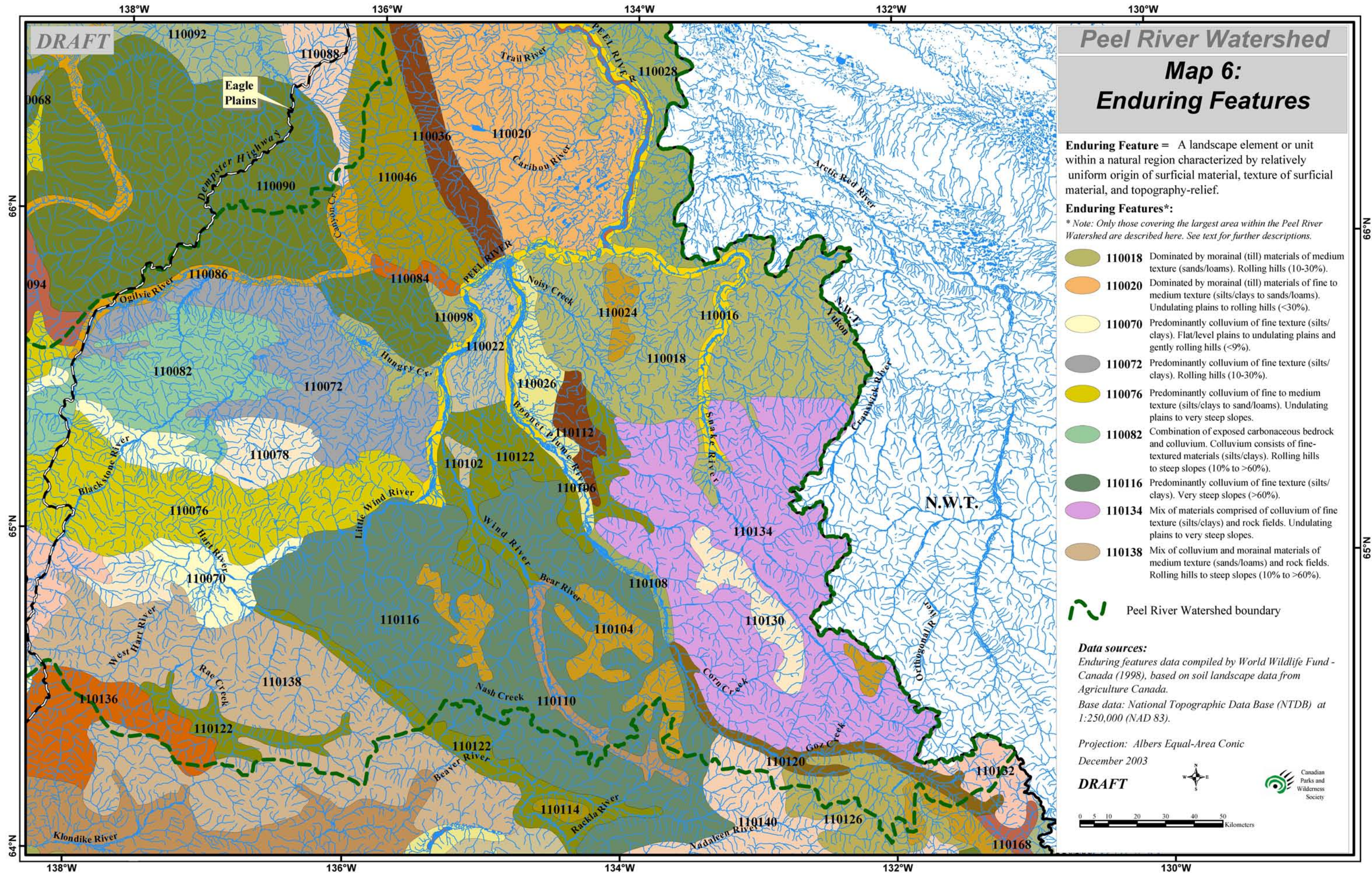
| Label  | Surficial Materials   | Material Texture  | Terrain  |
|--------|---|---|--|
| 110016 | alluvium  | fine (silts/clays)  | flat/level plains (slopes <2%)   |
| 110018 | morainal (till)   | medium (sands/loams)  | rolling hills (slopes 10-30%)  |
| 110020 | morainal (till)   | fine to medium (silts/clays to sands/loams)                                 | undulating plains to rolling hills (slopes<30%)                              |
| 110022 | mix of bog and till   | combination of organic material and medium-textured materials (sands/loams) | flat/level plains to undulating plains and gently rolling hills (slopes <9%) |
| 110024 | mix of colluvium and morainal materials   | fine to medium (silts/clays to sands/loams)                                 | rolling hills (slopes 10-30%)  |
| 110026 | mix of lacustrine/glaciolacustrine and morainal (till) materials                                    |   | flat/level plains to undulating plains and gently rolling hills (slopes <9%) |
| 110028 | morainal (till)   | fine to medium(silts/clays to sands/loams)                                  | flat/level plains to undulating plains and gently rolling hills (slopes <9%) |
| 110036 | colluvium   | fine (silts/clays)  | rolling hills (slopes 10-30%)  |
| 110046 | combination of exposed undifferentiated bedrock of unspecified origin and properties) and colluvium | fine (silts/clays) and exposed bedrock (hard rockof slope classes)          | undulating plains to very steep slopes (all ranges                           |
| 110070 | colluvium   | fine (silts/clays)  | flat/level plains to undulating plains and gently rolling hills (slopes <9%) |
| 110072 | colluvium   | fine (silts/clays)  | rolling hills (slopes 10-30%)  |
| 110076 | colluvium   | fine to medium (silts/clays to sands/loams)                                 | undulating plains to very steep slopes (all ranges of slope classes)         |
| 110078 | colluvium   | fine to medium (silts/clays to sands/loams)                                 | rolling hills to steep slopes (slopes 10% to >60%)                           |
| 110082 | combination of exposed carbonaceous bedrock and colluvium   | fine (silts/clays) and exposed bedrock                                      | rolling hills to steep slopes (10% to >60%)                                  |
| 110084 | exposed undifferentiated bedrock (hard rock of unspecified origin and properties)                   | none  | steep slopes (31-60%)  |
| 110086 | alluvium  | fine (silts/clays)  | flat/level plains (slopes<2%)  |
| 110090 | colluvium   | fine (silts/clays)  | rolling hills (slopes 10-30%)  |

Alluvium deposits such as sand are left by moving water. [JP]



## enduring features

| Label  | Surficial Materials  | Material Texture  | Terrain  |
|--------|--|---|--|
| 110098 | mix of bog and till material   | medium (sands/loams) and organic material                       | flat/level plains to undulating plains and gently rolling hills (slopes <9%) |
| 110102 | predominantly exposed carbonaceous bedrock (i.e. limestone/dolomite)   | none  | steep slopes (31-60%)  |
| 110104 | predominantly exposed undifferentiated bedrock (hard rock of unspecified origin and properties)                  | none  | very steep slopes (slopes >60%)  |
| 110106 | alluvium   | fine (silts/clays)  | flat/level plains (slopes <2%)   |
| 110108 | alluvium   | medium (sands/loams)  | rolling hills (slopes 10-30%)  |
| 110110 | alluvium   | medium (sands/loams)  | very steep slopes (>60%)   |
| 110112 | colluvium  | fine (silts/clays)  | rolling hills (slopes 10-30%)  |
| 110116 | colluvium  | fine (silts/clays)  | very steep slopes (slopes >60%)  |
| 110120 | morainal (till)  | medium (sands/loams)  | flat/level plains to undulating plains and gently rolling hills (slopes <9%) |
| 110122 | morainal (till)  | medium (sands/loams)  | rolling hills (slopes 10-30%)  |
| 110126 | a combination of exposed acidic bedrock and colluvium  | fine (silts/clays) and exposed bedrock                          | steep to very steep (slopes >30%)  |
| 110130 | a combination of exposed undifferentiated bedrock (hard rock of unspecified origin and properties) and colluvium | medium (sands/loams) and exposed bedrock                        | steep to very steep (slopes >30%)  |
| 110132 | a combination of exposed undifferentiated bedrock (hard rock of unspecified origin and properties) and colluvium | fine to medium (silts/clays to sands/loams) and exposed bedrock | rolling hills to steep slopes (slopes 10% to >60%)                           |
| 110134 | mix of colluvium and rock fields   | fine (silts/clays)  | undulating plains to very steep slopes (all ranges of slope classes)         |
| 110136 | colluvium and morainal   | medium (sands/loams)  | undulating plains to very steep slopes (all ranges of slope classes)         |
| 110138 | mix of colluvium and morainal  | medium (sands/loams)  | rolling hills to steep slopes (slopes 10% to >60%)                           |
| 110140 | mix of colluvium and morainal  | fine to medium (silts/clays to sands/loams)                     | undulating plains to very steep slopes (all ranges of slope classes)         |



# Peel River Watershed

## Map 6: Enduring Features

**Enduring Feature** = A landscape element or unit within a natural region characterized by relatively uniform origin of surficial material, texture of surficial material, and topography-relief.

**Enduring Features\*:**  
 \* Note: Only those covering the largest area within the Peel River Watershed are described here. See text for further descriptions.

- 110018** Dominated by morainal (till) materials of medium texture (sands/loams). Rolling hills (10-30%).
- 110020** Dominated by morainal (till) materials of fine to medium texture (silts/clays to sands/loams). Undulating plains to rolling hills (<30%).
- 110070** Predominantly colluvium of fine texture (silts/clays). Flat/level plains to undulating plains and gently rolling hills (<9%).
- 110072** Predominantly colluvium of fine texture (silts/clays). Rolling hills (10-30%).
- 110076** Predominantly colluvium of fine to medium texture (silts/clays to sand/loams). Undulating plains to very steep slopes.
- 110082** Combination of exposed carbonaceous bedrock and colluvium. Colluvium consists of fine-textured materials (silts/clays). Rolling hills to steep slopes (10% to >60%).
- 110116** Predominantly colluvium of fine texture (silts/clays). Very steep slopes (>60%).
- 110134** Mix of materials comprised of colluvium of fine texture (silts/clays) and rock fields. Undulating plains to very steep slopes.
- 110138** Mix of colluvium and morainal materials of medium texture (sands/loams) and rock fields. Rolling hills to steep slopes (10% to >60%).

Peel River Watershed boundary

**Data sources:**  
 Enduring features data compiled by World Wildlife Fund - Canada (1998), based on soil landscape data from Agriculture Canada.  
 Base data: National Topographic Data Base (NTDB) at 1:250,000 (NAD 83).

Projection: Albers Equal-Area Conic  
 December 2003

**DRAFT**

0 5 10 20 30 40 50 Kilometers