



A new 1:250k scale unified legend for Precambrian rocks in Manitoba

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Summary

The Manitoba Geological Survey (MGS) identified the need for a revised 1:250k scale bedrock geology legend that is applicable to the entire province of Manitoba.

Most MGS field mapping programs are carried out at scales of around 1:20k or 1:50k. In order to display this type of information at 1:250k scale, unit shapes must be simplified and assigned to regionally representative rock units. Using the previous 1:250k legend (Figure 1) for this purpose presented several problems. For example, some unit names were not consistently applied throughout the province, and some names had connotations that were not appropriate for all regions in which they occur.

The revised 1:250k bedrock geology legend (Figure 2) imposes a more logical and consistent simplification of regional bedrock geology that can be applied province-wide and updated at the end of each geoscientific field program or compilation project. Some compromise was necessary in producing the revised legend. For example, overly simplified unit names (such as "metasedimentary rocks") were retained for regions lacking more detailed information or interpreted geophysically (such as in areas below Paleozoic cover).

Some effects of applying the revised legend are illustrated in Figures 3 and 4. Both maps show regional bedrock geology in the Flin Flon - Athapapuskow Lake region. The legend beside Figure 3 comprises units mapped in the Flin Flon domain, including subdivisions by assemblages and other information relevant at the original 1:62,500 scale (note that the legends in Figures 1 and 3 are not equivalent). The legend applied to the same map area in Figure 4 has been simplified according to the revised 1:250k common legend.

Note that MGS adoption of the new 1:250k bedrock geology legend **does not**:

- 1) Delete previous information. A user interested in a particular area may choose to view the original polygon metadata to see previous descriptors or legend assignments, or view other compilations such as the map shown in Figure 3.
- 2) Modify more detailed geoscience data. For example, units mapped at 1:20k or 1:50k scale are not restricted to the common 1:250k legend.
- 3) Remove the option to highlight local features. For example, ultramafic units too small to display at 1:250k scale will continue to be marked with point features wherever relevant.

Figure 1: Previous 1:250k scale bedrock geology legend



Figure 2: Revised 1:250k scale bedrock geology legend (draft)

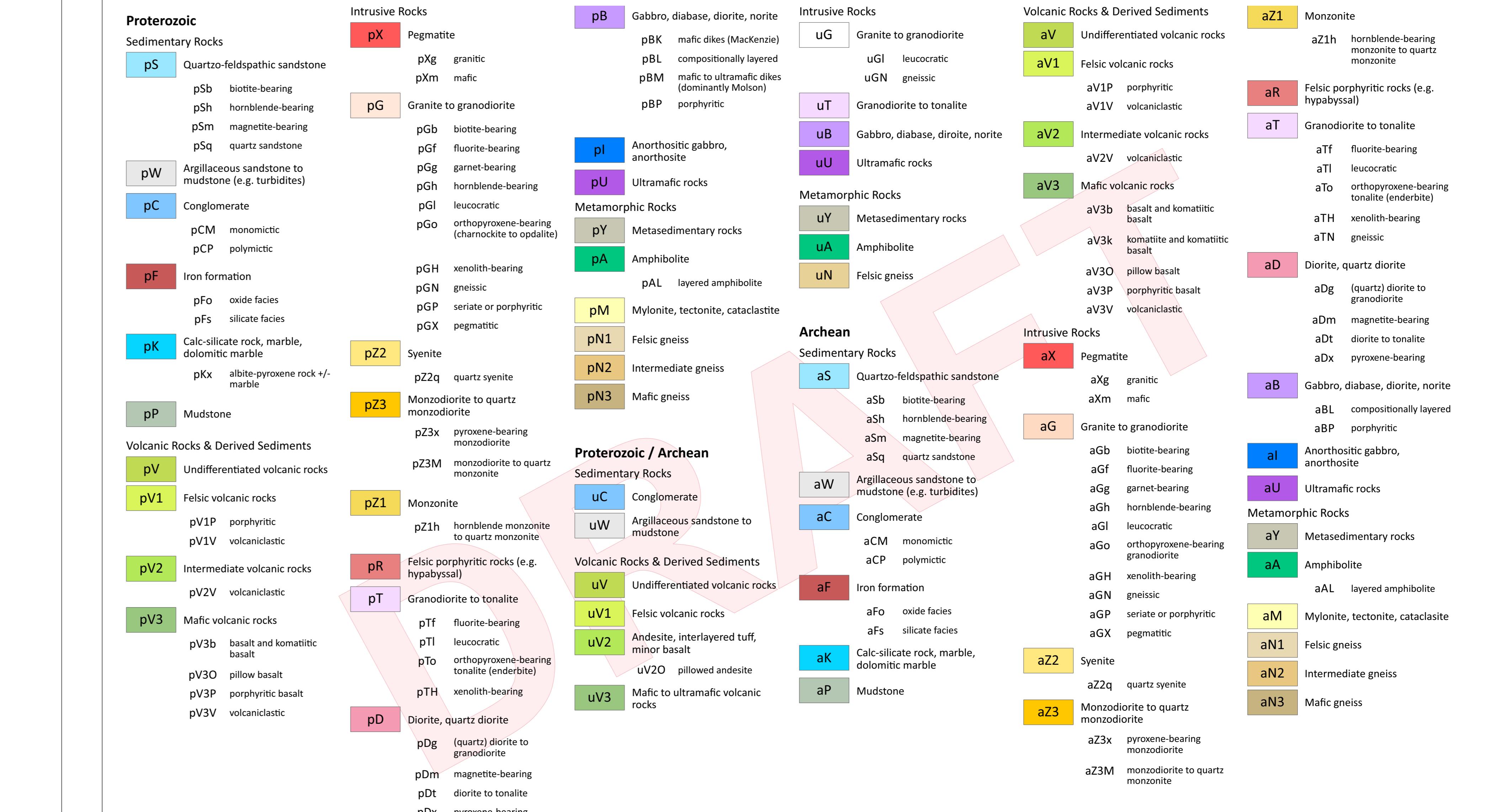


Figure 3: Bedrock geology of the Flin Flon - Athapapuskow Lake region (resized from original map at 1:62,500 scale; for comparison with Figure 4)

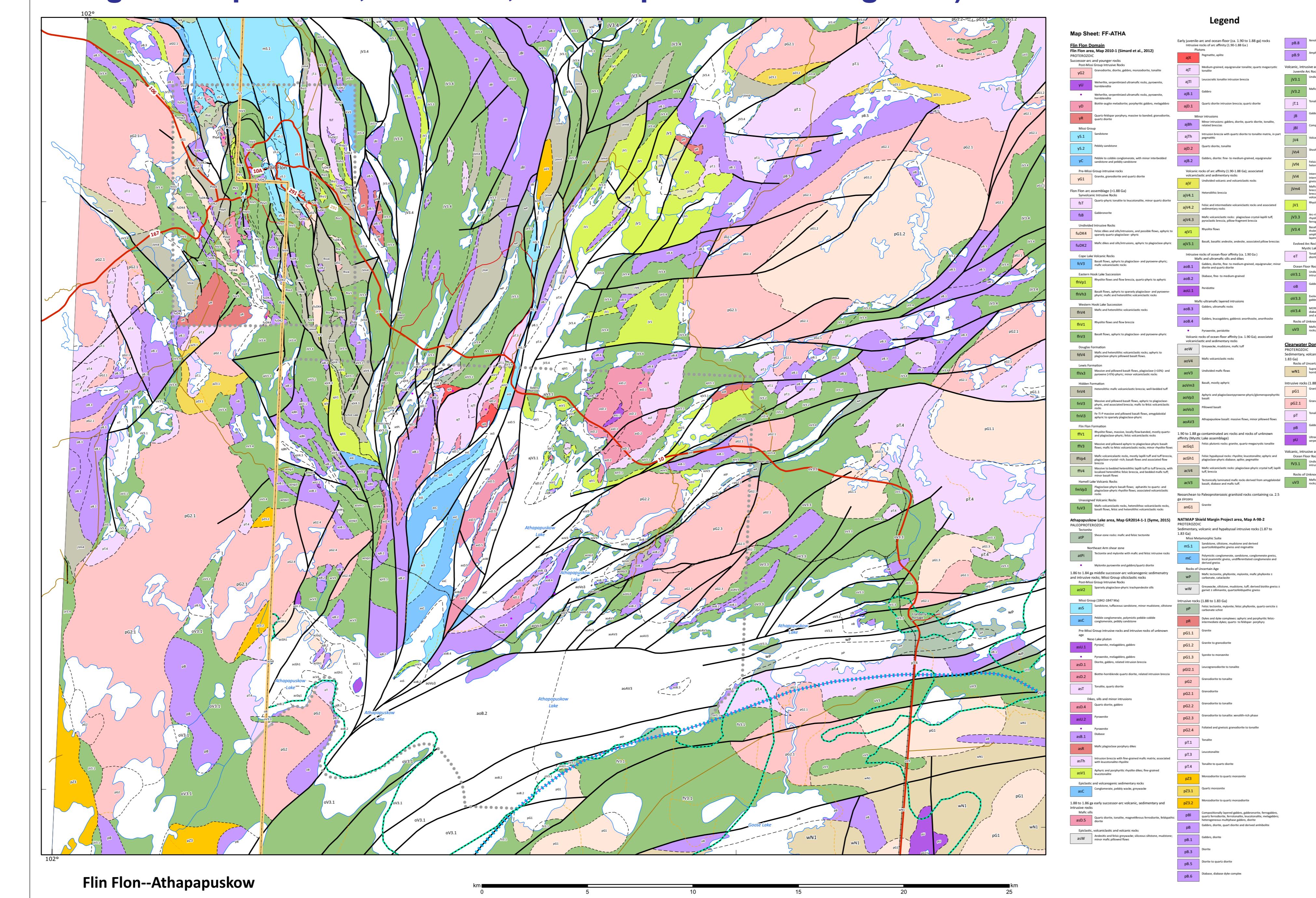


Figure 4: Bedrock geology of the Flin Flon - Athapapuskow Lake region using revised 1:250k legend assignments (resized as in Figure 3)

