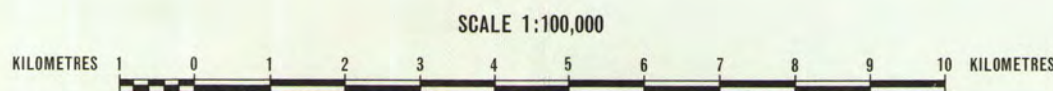
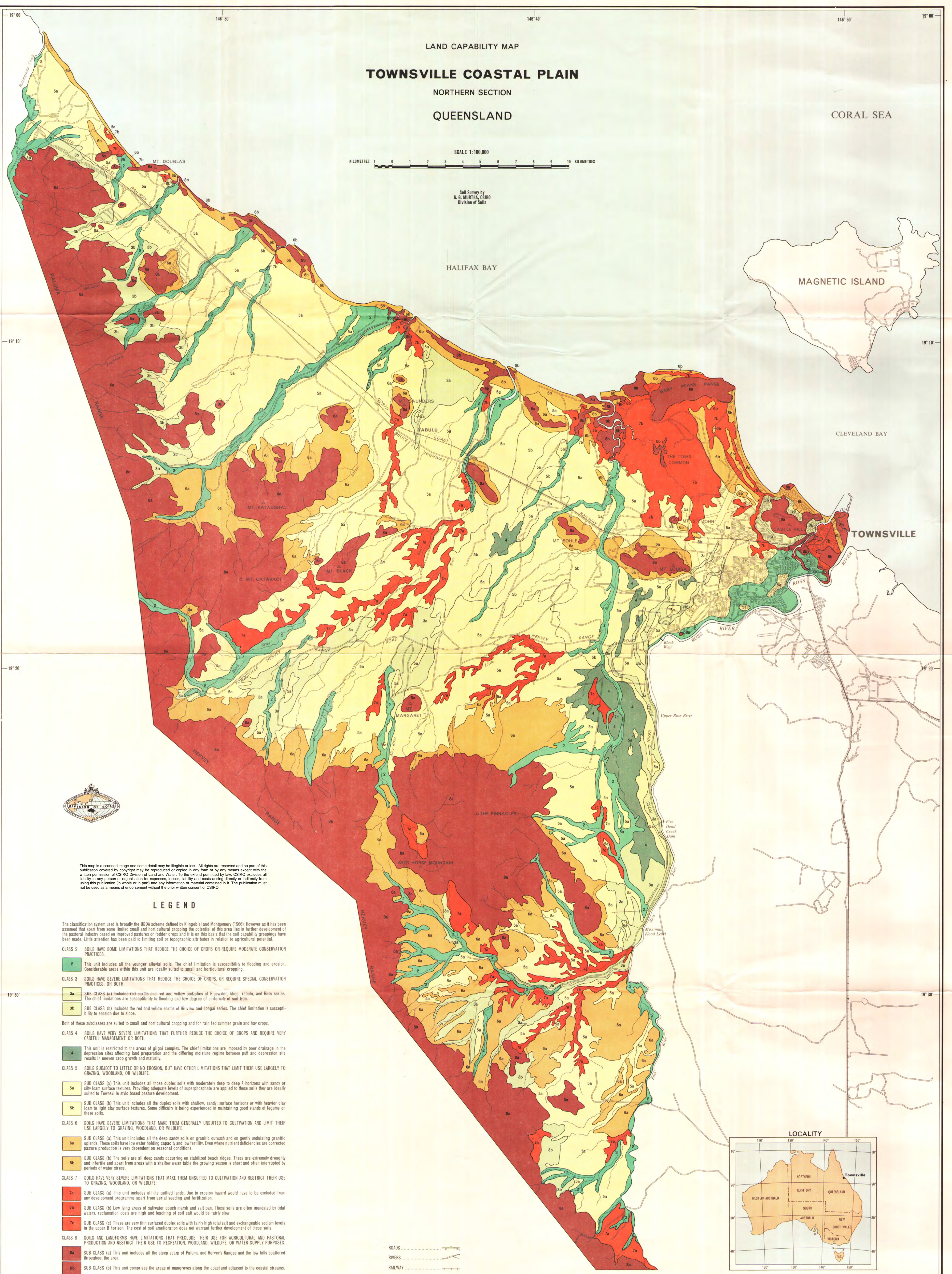


LAND CAPABILITY MAP  
**TOWNSVILLE COASTAL PLAIN**  
 NORTHERN SECTION  
 QUEENSLAND



Soil Survey by  
 G. G. MURTHA, CSIRO  
 Division of Soils



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**LEGEND**

- The classification system used is broadly the USDA scheme defined by Kingebini and Montgomery (1966). However as it has been assumed that apart from some limited small horticultural cropping the potential of this area lies in further development of the pastoral industry based on improved pastures or fodder crops and it is on this basis that the soil capability groupings have been made. Little attention has been paid to limiting soil or topographic attributes in relation to agricultural potential.
- CLASS 2 SOILS HAVE SOME LIMITATIONS THAT REDUCE THE CHOICE OF CROPS OR REQUIRE MODERATE CONSERVATION PRACTICES.**
- 2** This unit includes all the younger alluvial soils. The chief limitation is susceptibility to flooding and erosion. Considerable areas within this unit are ideally suited to small and horticultural cropping.
- CLASS 3 SOILS HAVE SEVERE LIMITATIONS THAT REDUCE THE CHOICE OF CROPS, OR REQUIRE SPECIAL CONSERVATION PRACTICES, OR BOTH.**
- 3a** SUB CLASS (a) Includes red earths and red and yellow podzolics of Bluewater, Alice, Yabulu, and Ressa series. The chief limitations are susceptibility to flooding and low degree of uniformity of soil type.
  - 3b** SUB CLASS (b) Includes the red and yellow earths of Hillview and Longai series. The chief limitation is susceptibility to erosion due to slope.
- Both of these subclasses are suited to small and horticultural cropping and for rain fed summer grain and hay crops.
- CLASS 4 SOILS HAVE VERY SEVERE LIMITATIONS THAT FURTHER REDUCE THE CHOICE OF CROPS AND REQUIRE VERY CAREFUL MANAGEMENT OR BOTH.**
- 4** This unit is restricted to the areas of gilgai complex. The chief limitations are imposed by poor drainage in the depression sites affecting land preparation and the differing moisture regime between puff and depression site results in uneven crop growth and maturity.
- CLASS 5 SOILS SUBJECT TO LITTLE OR NO EROSION, BUT HAVE OTHER LIMITATIONS THAT LIMIT THEIR USE LARGELY TO GRAZING, WOODLAND, OR WILDLIFE.**
- 5a** SUB CLASS (a) This unit includes all those duplex soils with moderately deep to deep A horizons with sandy or silty loam surface textures. Providing adequate levels of superphosphate are applied to these soils they are ideally suited to Townsville stylo based pasture development.
  - 5b** SUB CLASS (b) This unit includes all the duplex soils with shallow, sandy, surface horizons or with heavier clay loam to light clay surface textures. Some difficulty is being experienced in maintaining good stands of legume on these soils.
- CLASS 6 SOILS HAVE SEVERE LIMITATIONS THAT MAKE THEM GENERALLY UNSUITED TO CULTIVATION AND LIMIT THEIR USE LARGELY TO GRAZING, WOODLAND, OR WILDLIFE.**
- 6a** SUB CLASS (a) This unit includes all the deep sandy soils on granitic outwash and on gently undulating granitic uplands. These soils have low water holding capacity and low fertility. Even where nutrient deficiencies are corrected pasture production is very dependent on seasonal conditions.
  - 6b** SUB CLASS (b) The soils are all deep sands occurring on stabilized beach ridges. These are extremely droughty and infertile and apart from areas with a shallow water table the growing season is short and often interrupted by periods of water stress.
- CLASS 7 SOILS HAVE VERY SEVERE LIMITATIONS THAT MAKE THEM UNSUITED TO CULTIVATION AND RESTRICT THEIR USE TO GRAZING, WOODLAND, OR WILDLIFE.**
- 7a** SUB CLASS (a) This unit includes all the gullied lands. Due to erosion hazard would have to be excluded from any development programme apart from aerial seeding and fertilization.
  - 7b** SUB CLASS (b) Low lying areas of saltwater couch marsh and salt pan. These soils are often inundated by tidal waters. Reclamation costs are high and leaching of soil salt would be fairly slow.
  - 7c** SUB CLASS (c) These are very thin surfaced duplex soils with fairly high total salt and exchangeable sodium levels in the upper B horizon. The cost of soil amelioration does not warrant further development of these soils.
- CLASS 8 SOILS AND LANDFORMS HAVE LIMITATIONS THAT PRECLUDE THEIR USE FOR AGRICULTURAL AND PASTORAL PRODUCTION AND RESTRICT THEIR USE TO RECREATION, WOODLAND, WILDLIFE, OR WATER SUPPLY PURPOSES.**
- 8a** SUB CLASS (a) This unit includes all the steep scarp of Paluma and Hervey's Ranges and the low hills scattered throughout the area.
  - 8b** SUB CLASS (b) This unit comprises the areas of mangroves along the coast and adjacent to the coastal streams.

