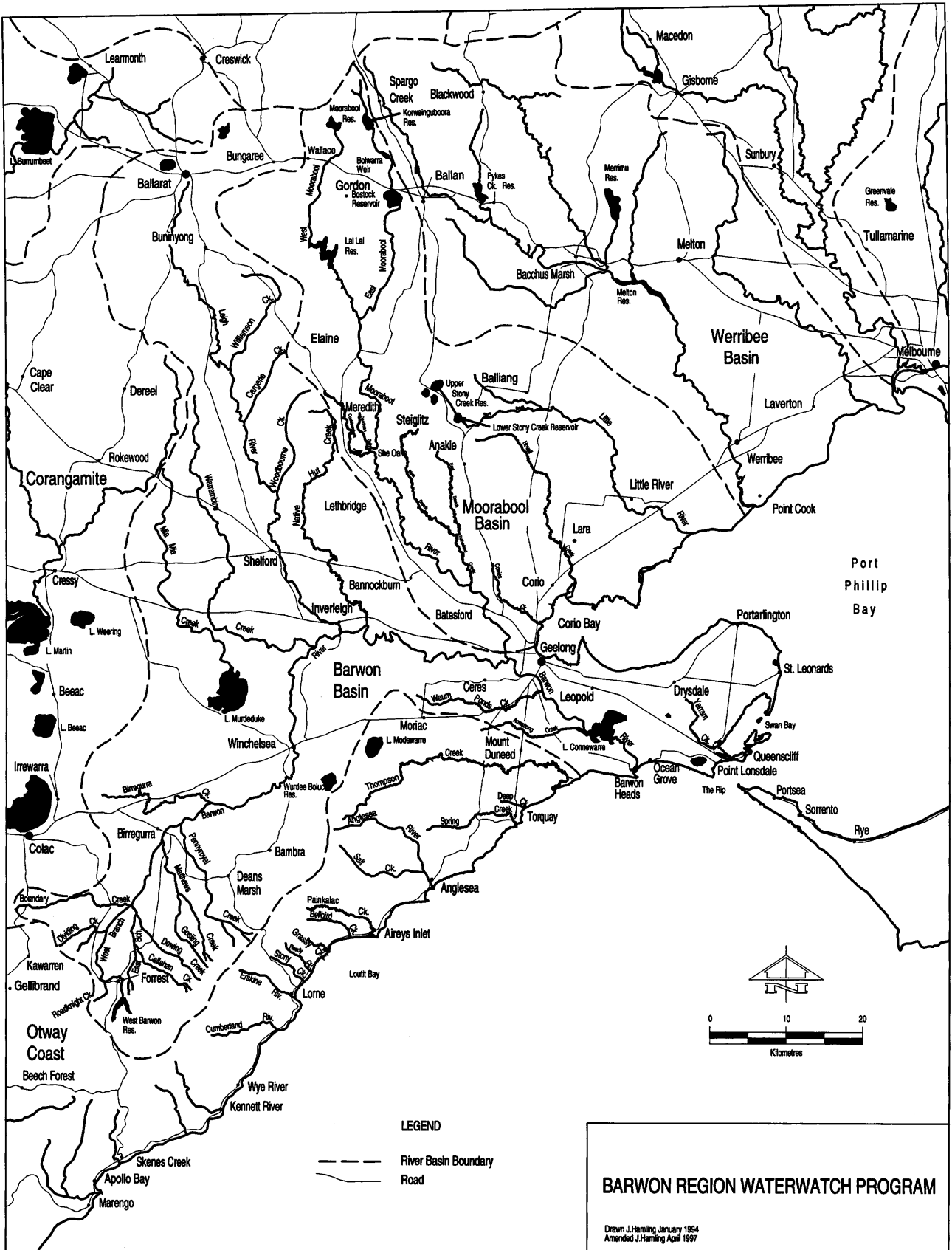
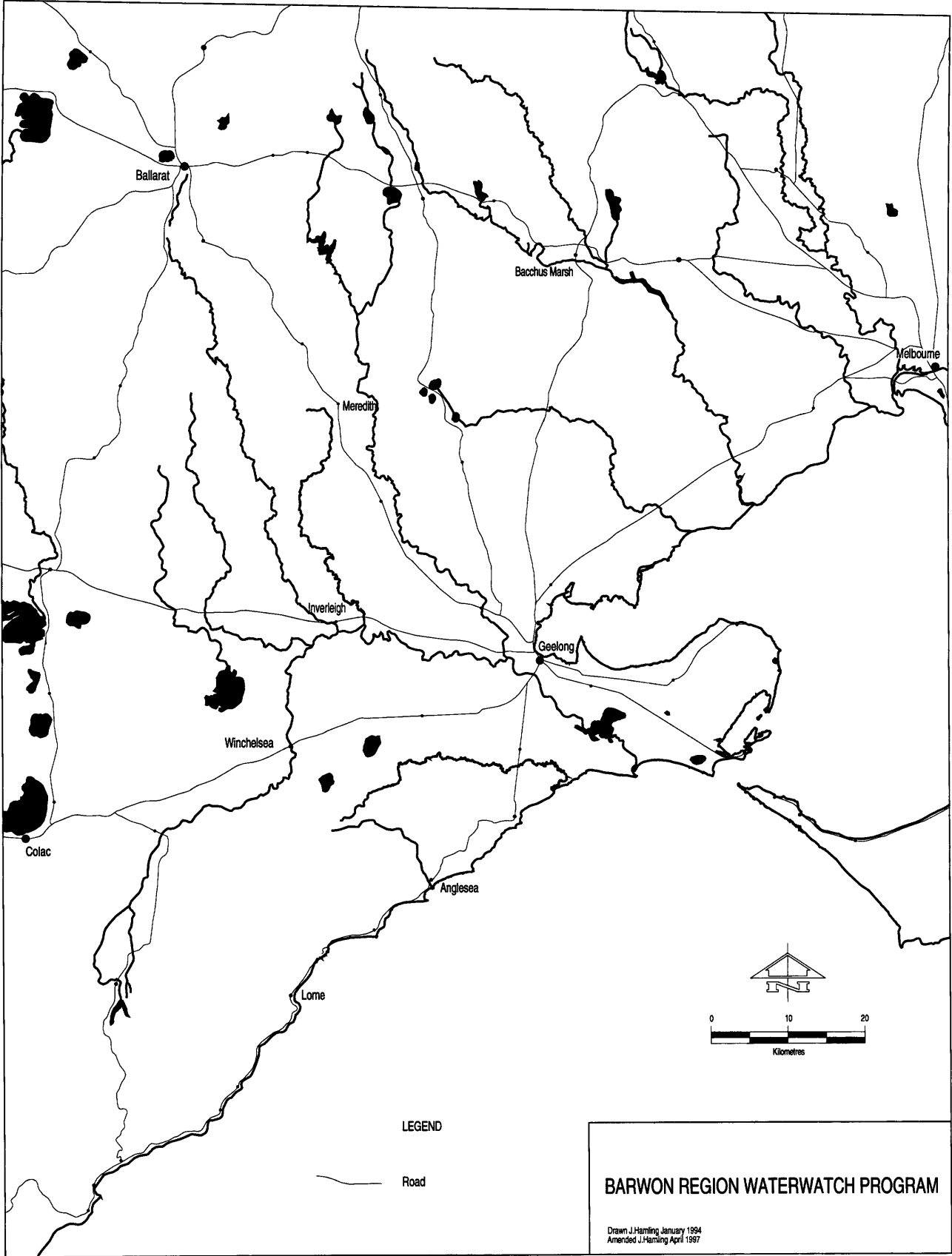


Map 1 of Corangamite Region

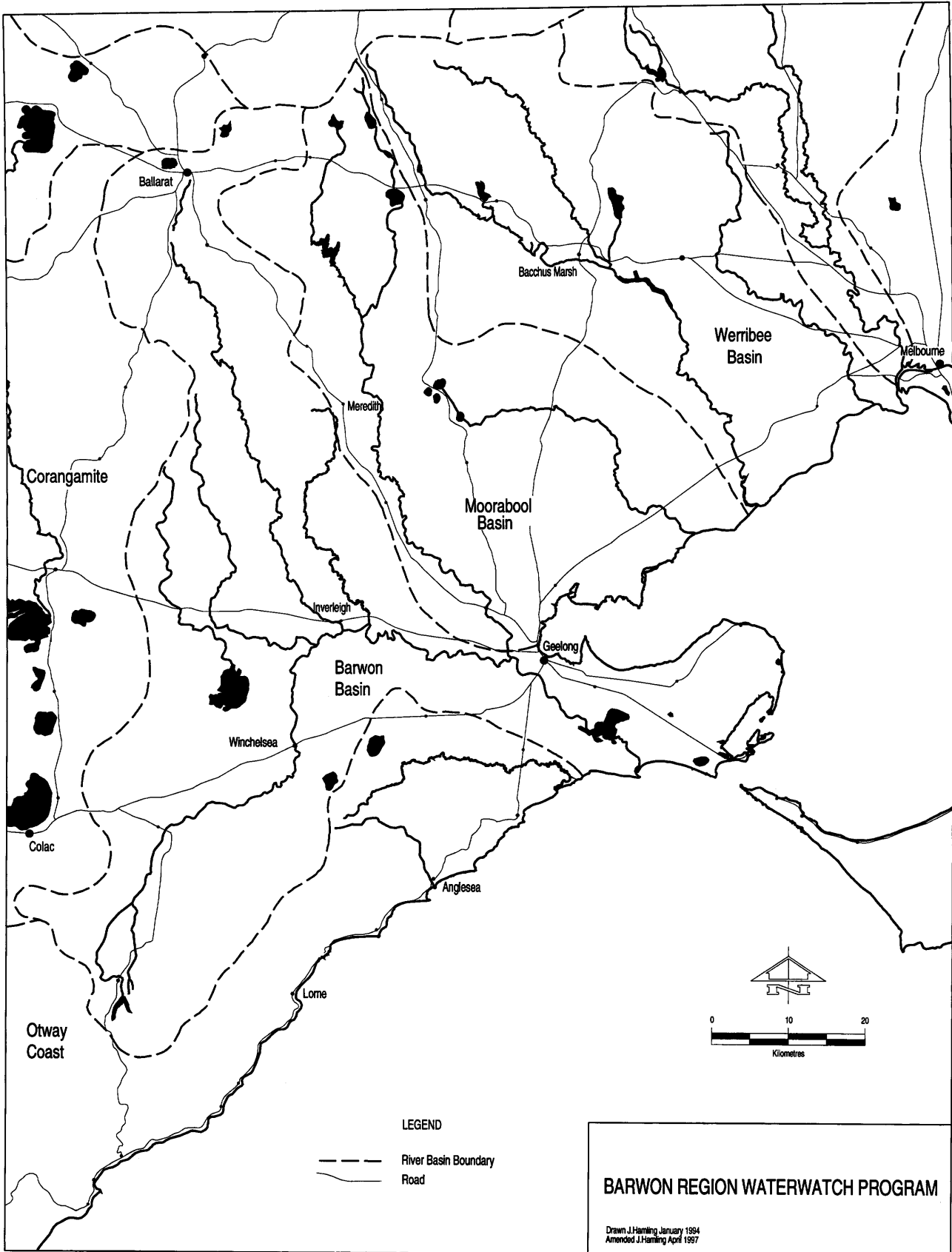




Map 2A of Corangamite Region

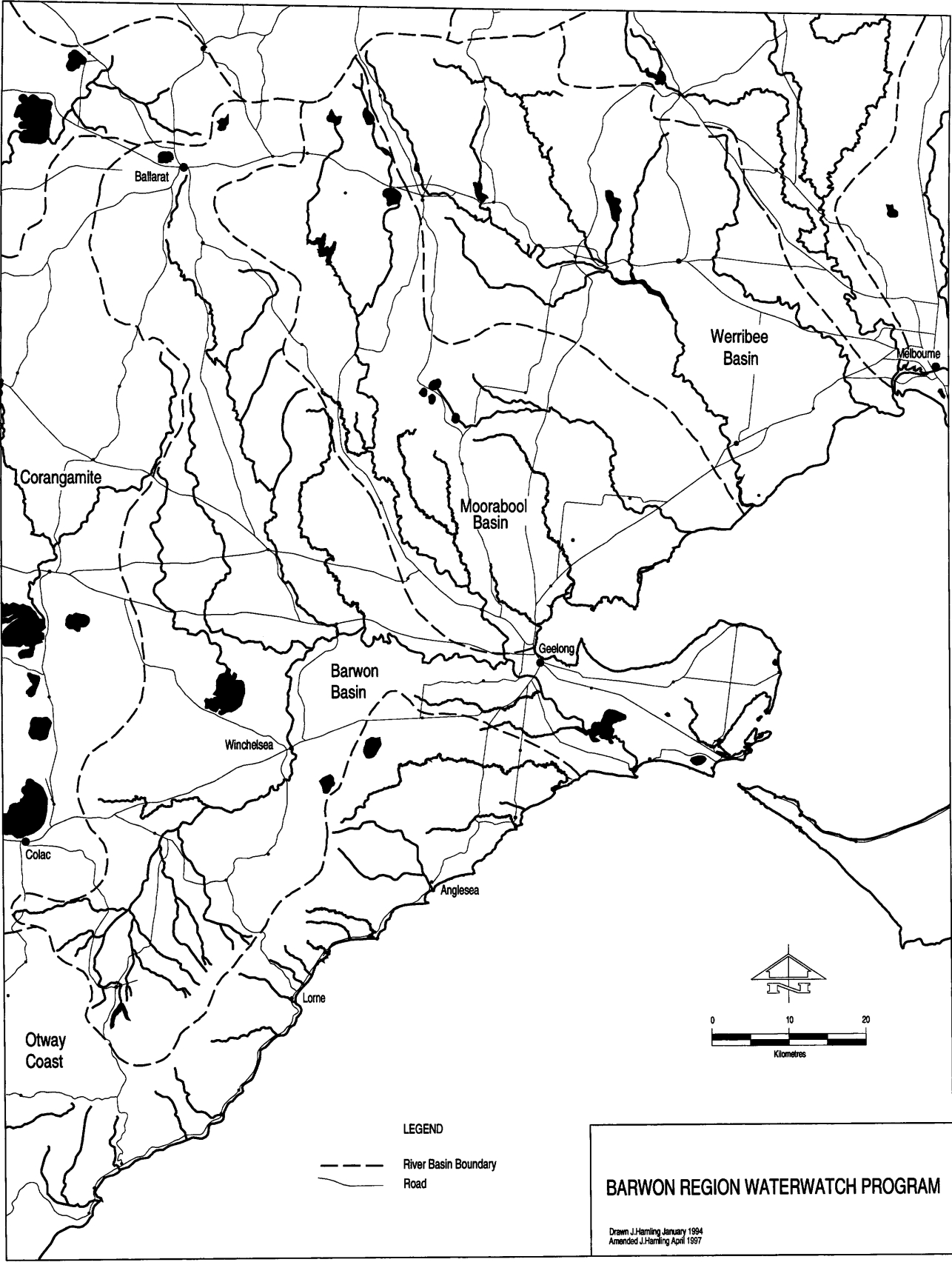


Map 2B of Corangamite Region

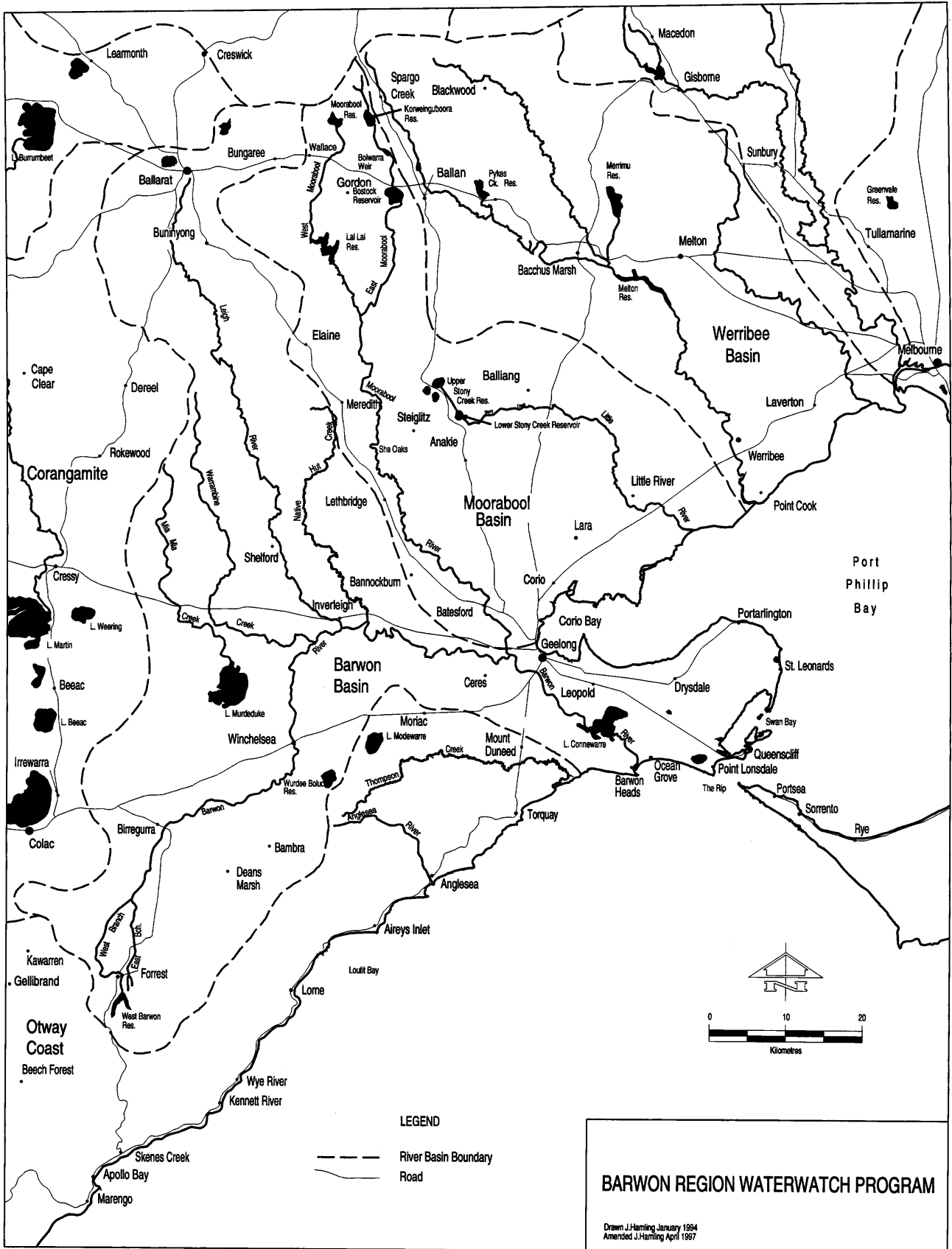
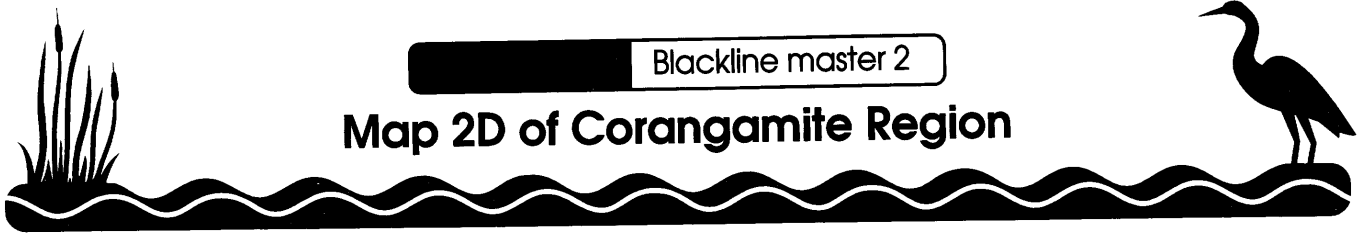




Map 2C of Corangamite Region



Map 2D of Corangamite Region



Corangamite Catchment Region



For the purposes of managing water resources, information on a river basin or catchment basis is needed. The Corangamite Catchment Region contains 4 major river catchments or drainage basins, i.e. all of Barwon Basin, Otway Coast Basin and Lake Corangamite Basin, and the Moorabool Basin.

[For more information about catchments, refer to the Statewide section of this Kit, Teacher sheet 18: Mapping your catchment, and Getting Started section, pages 3-6 in *A Community Water Quality Monitoring Manual* for Victoria.]



The **Barwon Basin** covers 390,000 ha. It contains two major river systems:

- the Barwon River
- the Leigh (or Yarrowee) River

Four wetlands within this Basin are listed on the Ramsar Convention as wetlands of international significance: Swan Bay, Lake Connewarre, Reedy Lake and Lake Murdeduke.

Other waterways and wetland sites include:

- Waurn Ponds Creek
- Lake Victoria
- Native Hut Creek
- Yarram Creek
- Bergola Wetlands



The Lake Corangamite Basin is not covered in detail in this edition.

The **Moorabool Basin** covers 217,000 ha and contains three major systems:

- Moorabool River
- Little River
- Hovells Creek

Minor creeks include:

- Cowies Creek
- Coolebarghurk Creek
- Sutherlands Creek

Limeburner's Lagoon at Hovells Creek estuary is listed on the Ramsar Convention as a wetland of international significance.

The Moorabool River flows into the Barwon River at Geelong and discharges into Bass Strait at Barwon Heads. Little River and Hovells Creek discharge into Port Phillip Bay via Corio Bay.



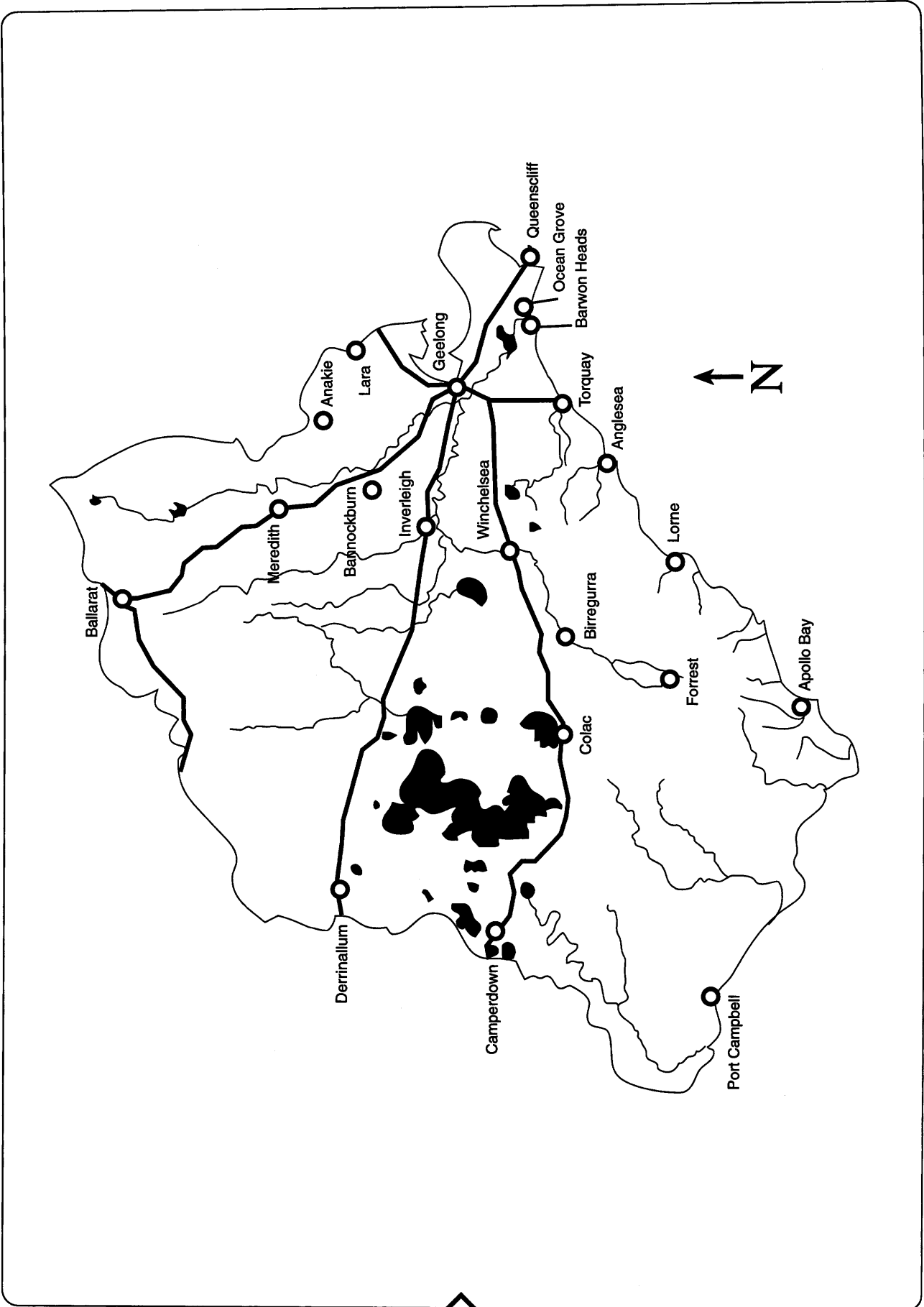
The **Otway Coast Basin** drains an area of 390,000 ha of the southern slopes of the Otway Ranges. Major streams in this basin include:

- Thompson Creek
- Anglesea River
- Painkalac Creek
- Erskine River
- Cumberland River
- Gellibrand River
- Aire River

The Otway Basin contains the headwaters of the Barwon River. Its other waterways discharge into the ocean.



Map 3 of Corangamite Region

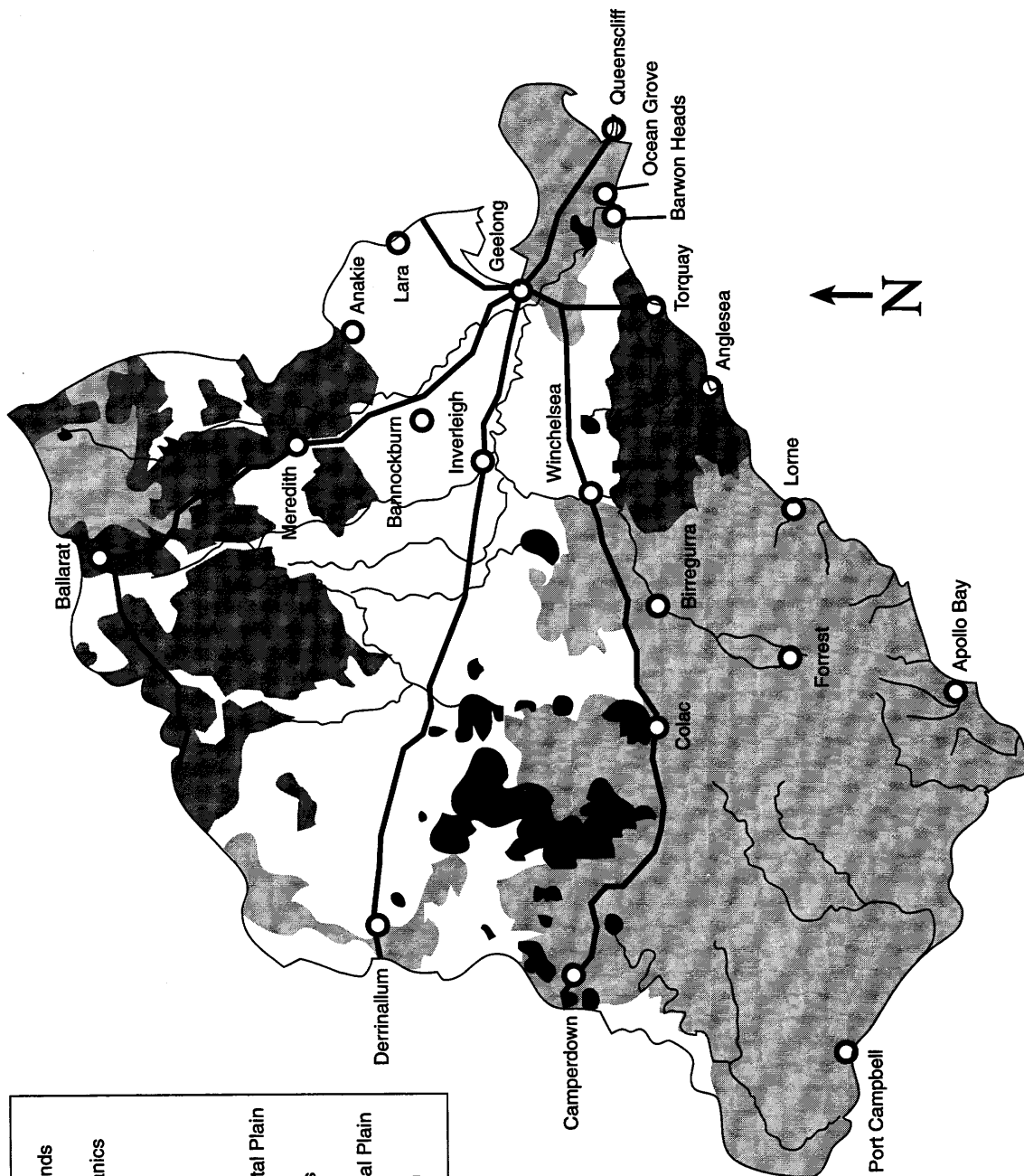


Map 4 of Corangamite Region



Sub-regions

	Central Highlands
	Cropped Volcanics
	Stony Rises
	Basalt Plains
	Western Coastal Plain
	Otway Ranges
	Eastern Coastal Plain
	Bellarine Plain



Corangamite Catchment Region cont.

The nature and condition of waterways is influenced by the type of landform, soil, and climate in that particular part of the catchment. These factors form a basis for distinguishing sub-regions within each Catchment region.

Sub-regions

Broadly speaking, the Corangamite Catchment Region consists of highlands to the north (the Central Highlands around Ballarat and Daylesford) and the south (the Otway Ranges), with a broad flat plain in between. Within this broad physiography, differences in geological make-up and geomorphological formation have created different landforms and soils.

Map 4 shows the nine sub-regions which have been distinguished in the Corangamite Catchment region. Each of these sub-units has distinctive landform, soil, landuse and climate conditions which distinguish it from the other sub-regions within the Catchment region.

- Central Highlands
- Basalt Plains
- Otway Ranges
- Stony Rises
- Eastern Coastal Plain
- Western Coastal Plain
- Bellarine Plain
- Cropped Volcanics
- Coastal Fringe

The sub-regions in which most Barwon Water Waterwatch Monitoring Groups currently operate are described below.

Central Highlands

The Central Highlands main east-west ridge forms part of the Great Dividing Range and reaches 740 m. Its landscape features rolling hills with gentle and steep slopes. The northern portions of the Moorabool and Little River catchments lie in the Central Highlands. The Woody Yaloak, Yarrowee/Leigh and Moorabool Rivers have their headwaters in the Central Highlands. The soils, mostly derived from sedimentary rocks and granite, are shallow and have poor structure and nutrient levels. There are isolated tongues of more productive basalt derived soils. Surface water runoff is generally intermittent and often saline.

The Central Highlands sub-region was once extensively forested with Stringybark (*Eucalyptus obliqua*) and Peppermint (*Eucalyptus nitens*) but much of this forested area has been cleared. It now contains the Greater Ballarat urban area and grazing and cropping land. Remaining forests are mainly Crown Land, used for timber production and conservation reserves.

Western Volcanic Plains

The Western District Volcanic (Basalt) Plains are an extensive east-west formation between the Western Highlands and Otway Coast ridges. Soils are heavy clays. These plains have poor surface drainage systems and many fresh to saline lakes and wetlands, most of which have no natural outlet to the sea. The eastern reaches of the Volcanic Plains lies the Moorabool and Barwon catchments.

The extensive native grasslands that originally covered the Western Volcanic Plains have been reduced to scattered remnants (less than 0.01% of native grassland remain, making it rarer than temperate rainforest in the region). Scattered across the grassy plain were woodlands of Drooping Sheoaks (*Allocasuarina verticillata*) and Silver Banksia (*Banksia marginata*) while scattered trees occurred along watercourses and around scoria cones. The small remnants are now mostly in linear reserves. Many Sugar Gums (from South Australia) have been planted.

The Plains are now used mainly for crop production, beef, and to a lesser degree, dairy cattle farming, and sheep farming for both wool and meat. The main crops are barley, wheat and oats. Some irrigation farming occurs on the lower reaches of Little River.

Otway Range

The Otway Ranges reach 650 m and form an east-west ridge between the Volcanic Plains and the sea. The ranges are flanked by an extensive foothill system. The sedimentary soils are unstable and relatively prone to erosion. The soils vary from deep and fertile on the main ridge to infertile on the slopes. Drainage lines are well defined, deep, and generally run north-south. The headwaters of the Barwon River are in these Ranges.

Much of the Otway Range sub-region is forested and publicly owned. Its higher rainfall and areas of more fertile soils support tall eucalypts such Mountain Ash (*Eucalyptus regnans*) and Messmate (*Eucalyptus obliqua*). Significant areas have been protected in the Otways National Park. High rainfall, steep terrain, roads, agriculture and forestry operations all contribute to the relative instability of the area and its land slip and erosion.

Today the Otway Ranges is still mainly forest areas of Crown Land, used for either hardwood production or conservation.

Coastal Plains

Coastal Plains occur on the Bellarine Peninsula and on the gently sloping areas between the Otway Ranges and the Volcanic Plains. The surface waters from these plains flow intermittently and are often highly saline.

