



Name of Water Source:

Dorrigo Basalt Groundwater Source

Relevant Water Sharing Plan: Water Sharing Plan for the Dorrigo Plateau Surface Water and the Dorrigo Basalt Groundwater Source gazetted on 21 February 2003 and as amended by order on 1 July 2004.

Description of Water Source Area:

The Dorrigo Basalt Groundwater Source is that area of land within the Upper North Coast Water Management Area and the Mid North Coast Water Management Area as shown in Map 8.

The Dorrigo Basalt Groundwater Source is located between Dorrigo and Ebor approximately 600 km north of Sydney. It is defined by the presence of the Dorrigo Basalt aquifer, and covers an area of approximately 480 km². The largely east- west trending upland basalt aquifer extends from Dorrigo Township east approximately 40 km to Ebor, with a typical width of about 10 km.

The Dorrigo Basalt groundwater source was defined as one geological unit using the basalt geological data component of the Department of Minerals & Resources Geological Map (1:250,000 scale). The boundaries of this aquifer were defined by where the basalt finished and intersected the underlying metasedimentary rocks or igneous rocks at surface.

The Tertiary Basalt Plateau overlies older meta-sedimentary rocks (Nambucca/Coffs/Wollombi Blocks) of various formations and abuts in part at least 3 granite intrusive sequences, that being Round Mountain Leucadamellite to the west of Ebor, the Dundurrabin Granodiorite north of Dorrigo and the Dorrigo Mountain Complex intrusive to the south. The basalt plateau caps the underlying rocks and tends to be elevated above the rest of the landscape, with steep incised valleys at its periphery.

Definition of Waters Included:

The waters in this groundwater source include all water contained within the Dorrigo basalt aquifers.

Groundwater in the water source area is stored in the fractured rock basalt aquifers, known as the Dorrigo Basalt Aquifer. This basalt occurs in the southern half of the water source area and covers most of Zone 2 (Bielsdown River) and the southern parts of Zone 1 (Upper Nymboida River, but particularly the Little Murray River area) and Zone 4 (Blicks River) and extends across the southwest around the Ebor area. (See boundary descriptions for these zones in section on Dorrigo Plateau Surface Water Source)
