

Water resources survey — Brid, Little Forester and Little Pipers rivers

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These comments have been prepared from general local knowledge and from the Pipers River Sheet No. 31 of the Geological Survey of Tasmania. Visits have not been made explicitly to examine the sites.

Brid River

Site 1

The rocks in this area are massive, largely unjointed granodiorite. Some weathering to a clayey or sandy material and the formation of 'tors' is apparent on hill slopes but valley bottoms are usually eroded and the rock is fresh. A shallow cover of gravel, sand and organic material (peat) is present along the river banks. Geologically this appears to be a good site.

Site 2

This site is very similar to Site 1 with abutments in solid granodiorite and is a good site.

Site 3

This site lies on the contact zone of the granodiorite with the Mathinna Beds, here metamorphosed siltstone and sandstone. The contact zone is often disturbed, and in this instance the left abutment appears to consist of Mathinna Beds talus, a loosely consolidated and deeply weathered mass of broken siltstone and sandstone. The right abutment is little better for it occurs at a point where the granodiorite is overlain by unconsolidated Tertiary sand and clay and is likely itself to be deeply weathered. River deposits of sand, clay and organic material overlie the bedrock in the river valley.

This is geologically a poor site, but detailed investigation could show whether a dam would be feasible or not.

Site 4

The abutments here are in silt-sandstone Mathinna Beds which have been indurated by contact metamorphism and are therefore somewhat harder and more resistant to weathering than usual. Nevertheless outcrops in the area are few and mapping has been done mostly on the evidence of loose surface material.

The flooded area will encroach on Tertiary sand and clay which could slump when the reservoir is drawn down, and the valley bottom is as usual concealed by clay, sand and organic material.

The site is acceptable at this stage.

Site 5

This site is in silt-sandstone type Mathinna Beds which is seen in outcrops nearby. Other than the usual deep weathering profile no difficulties are apparent and at this stage the site is acceptable.

Little Forester River

Site 1

This site is in silt-sandstone Mathinna Beds at a point where there are outcrops, and where the valley is floored by alluvial sand, clay and organic deposits.

At this stage it is acceptable.

Site 2

This site is very similar to 1, again with a wide spread of alluvial deposits, overlying silt-sandstone Mathinna Beds. It is acceptable.

Site 3

This site is in a region of contact-metamorphosed and therefore hardened sandy Mathinna Beds. The flooded area upstream will involve areas of Mathinna talus, younger valley sandstone and conglomerate which are probably irregularly cemented, as well as the usual recent valley alluvium, so that the dam wall will need careful location, but it appears to be a good site.

Site 4

This site again lies in the silt-sandstone phase of the Mathinna Beds which here dips steeply downstream. The usual deep weathering may be expected but otherwise this site is acceptable.

Site 5

This site resembles 4, although no outcrops are indicated on the map and the attitude of the rocks is unknown. It appears to be acceptable.

Site 6

This site is again in silt-sandstone Mathinna Beds dipping obliquely upstream at a high angle and again deep weathering is present, as well as valley alluvium. Acceptable.

Site 7

The abutments of this site are in weathered silt-sandstone Mathinna Beds and a wide and possibly deep spread of alluvial deposits is present. Some blown sand is mapped nearby and both it and soft Tertiary rocks are possibly present at the site.

Not a good site but acceptable at this stage.

Little Pipers River

Site 1

This site lies entirely in silt-sandstone Mathinna Beds which are here apparently poorly exposed, probably due to deep weathering. No alluvium has been mapped but is very likely to be present. The site is acceptable.

Site 2

This is exactly the same geologically as Site 1.

Site 3

No solid rocks are visible at this site, which is mapped as a blown sand area with patches of rounded gravel and is floored by valley sand, clay and organics.

It would require very detailed investigation and can only be regarded as poor at this stage.

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