EXECUTIVE SUMMARY

Reach Environs

The condition of the reach environs for the Mooloolah River catchment ranged from very poor to very good, with 53% of stream length rated as moderate (Map 3). Very good condition ratings were recorded around Mooloolah River National Park and the area surrounding Ewen Maddock Dam. Poor and very poor reach environs condition ratings were recorded from the intensively developed coastal strip. Land use was predominantly urban, rural residential or agricultural. Disturbances that were commonly listed included river crossings, roads, dredging and grazing. Local vegetation communities were predominantly rainforest, eucalypt forest and melaleuca forest.

Bank Stability

Bank stability was rated as stable or very stable for 95% of stream length within the catchment (Map 4). Erosion was the dominant bank process identified, often recorded all along the stream lengths.

Factors commonly identified as affecting bank stability were flow and waves, vegetation clearance, ford or bridge structures and runoff.

Bed and Bar Stability

Ratings for bed and bar stability ranged from moderate to very stable, with 40% of stream length considered very stable (Map 5). Erosion was the dominant process recorded within the stream bed, and bars were recorded at 18% of survey sites. Sediment characteristics were highly variable, but predominantly consisted of sand and fines.

Channel Diversity and Habitat Types

Channel habitat diversity was generally very poor, with 68% of stream length receiving very low condition ratings, 19% low and 13% moderate (Map 6). Moderate condition ratings were given to streams located in the upper reaches of the catchment.

Riparian Vegetation

Condition ratings for riparian vegetation ranged from very poor (48% of stream length), poor (15%), moderate (20%), good (13%) to very good (4%) (Map 7). Very good riparian vegetation condition ratings were recorded on Sippy Creek and on an unnamed tributary of Addington Creek. Very poor riparian condition ratings were mostly found close to the urban developments of Mooloolah, Buddina and Warana. Most riparian zones were narrower than the width of the upper bank, indicating that clearing has extended to within the river banks. Lantana and groundsel bush were the mostly commonly recorded weeds within the riparian zone.

Aquatic Vegetation

Aquatic vegetation condition ratings were very poor for 91% of stream lengths within the catchment (Map 8). It appears that low levels of aquatic vegetation are a natural feature of the catchment, with more aquatic vegetation found in areas of intensive development.

Aquatic Habitat

Aquatic habitat condition ratings ranged from good to very poor, with 59% of stream length rated as poor and 25% as very poor (Map 9). Very poor aquatic habitat condition ratings were found in areas of intensive urban development, and reflect the removal of instream and bank habitat, such as large woody debris. A wide variety of habitat components were recorded, but overall their coverage as a proportion of the stream bed was very low.

Passage of fish and other aquatic organisms was found to be restricted at water mark at 51% of sites. The most common obstruction restricting passage was a low weir, pipe culvert, ford or bridge. Flows of between one-third and two-thirds bank full were required to bypass most of these obstructions.

Recreation and Conservation Values

Most survey sites were classified as developed rural, undeveloped rural, or urban. Common recreational activities recorded at sites included bird watching, dog walking and barbecues or picnics.

Water Quality

Visual assessment of water quality recorded unusual water quality features at over half the sites surveyed. The most common feature noted was the presence of algae or algal scums (36% of sites). Foams were noted at 18% of sites and slime on rocks at 11% of sites.

Overall Condition

Overall condition ratings ranged from very poor to good, with 42% of stream length receiving a rating of poor (Map 10). The areas with poor and very poor overall condition ratings were found on the coast and along the reaches of the Mooloolah River. Tributaries such as Mountain Creek and Sippy Creek received better overall condition ratings, as did the area around Mooloolah River National Park.