

# **SITUATION STATEMENTS**

## **12. LANDHOLDER SURVEY RESULTS**

### **12.1 INTRODUCTION**

Part 3 of this report is a series of "Situation Statements" that review the current situation, activities and future trends for a range of natural resource management issues.

These issues were raised by the landholders, local government staff and agency officers from across the catchment. Over the course of preparing this report, numerous people were contacted, and some were interviewed to ensure that current information was accessed and to provide an opportunity for stakeholders to express their concerns.

A number of methods were used to gain information about the issues and concerns of the people within the Little River catchment. These included workshops with landholders throughout the catchment. See Appendix 8 for the issues identified at each subcatchment workshop.

At the end of the workshops, the participants were asked to complete a survey form to provide information about the extent of land degradation on their own properties. A summary of the results follows.

### **12.2 SURVEY RESULTS**

A survey was designed and distributed in April 1999 to gather information from local landholders. Forty-four surveys were returned. Information was sort from landholders on the following natural resource management areas: soil degradation, native vegetation, pest and vegetation problems, water quality issues and weed problems. They were asked to assess these problems in light of how they affected the production on their own properties, rather than how they saw them in relation to the whole catchment. See Appendix 7 for a copy of the survey and analysis of the responses. These results are the perceptions of the landholders.

#### **12.2.1 Changes in Landuse**

Overall, most people use their land for cropping or improved pastures and reported little change in recent times in the relative proportions of the different enterprises. The area of native pastures appears to be decreasing slightly, probably due to an increase in improved pastures or cropping. The area under cropping and timber appears to be increasing slightly. Poor returns in the livestock industries, especially in wool, have most likely resulted in more cropping.

#### **12.2.2 Native Vegetation**

Only about 10% of all remaining vegetation is reported as being largely unchanged since settlement i.e. remnant vegetation in good condition. Smaller properties tend to have the highest percentage of native vegetation, which raises some equity issues in terms of vegetation conservation. Tree dieback is an issue of concern to some landholders, and thought to be increasing. This is often thought to be due to the spread of mistletoe.

Generally, farmers are not concerned about the condition of riparian vegetation. Only the people in the area of the Middlearm landcare group reported riparian vegetation as an issue.

### **12.2.3 Soil Degradation**

Acidity is perceived by landholders as the biggest soil degradation problem in the Little River Catchment. The majority of respondents indicated this was a moderate to serious problem and was increasing. Salinity rated as the next biggest problem. Aluminium and manganese toxicity is directly related to acidity and is also of concern to farmers. Toxicity and the expansion of dryland salinity are likely to be secondary impacts of falling pH levels. These problems were thought to be increasing in both severity and extent.

Soil fertility and waterlogging rated higher than compaction and crusting, and were thought to be increasing in severity and extent. The perception that soil structural problems are unimportant is concerning but not surprising, due to its insidious nature. Soil structure governs infiltration, growth and runoff, and hence has a very significant impact on erosion and soil water balance.

#### **12.2.3.1 Salinity**

Most respondents rated salinity as only a slight to moderate problem, which is either static or increasing. Salinity is a localized problem, and residents of the Hervey Ranges, Yeoval and Myrangle Landcare Groups appear to be the worst affected. Only moderate impacts were being felt by most respondents, with only some small parts of properties being seriously affected by salinity. Ivey ATP, during their work in determining the costs of dryland salinity, felt that there was considerable under-reporting of the impact of salinity. (Richard Ivey pers. comm.)

#### **12.2.3.2 Acidity**

The area affected by soil acidification in the Little River Catchment is reportedly increasing. Some large areas of the catchment are seriously affected by acidity, notably the Yahoo Peaks and Hervey Ranges Landcare group areas. Of the 44 surveys returned, about 3600 hectares was reported as seriously affected. The majority of farmers feel that acidity is having a moderate impact on their production.

#### **12.2.3.3 Erosion**

Gully erosion is common on duplex soils, and its expansion is a concern to a number of landholders in the catchment. Sheet erosion was not listed as an area of concern. This may also be due to the insidious nature of the problem and difficulty in observing it. However, every 1 mm lost equals 12 tonnes of soil, often into the drainage system. With this soil goes large quantities of natural and artificial fertilizers, as most nutrients are held in the top few centimetres. Streambank erosion is also increasing, with occurrences reported in the Burgoon, Obley and Yeoval landcare groups.

### **12.2.4 Pests**

Rabbits and wild pigs are reported as a slight but constant problem. Rabbits affect the Suntop area, and the Hervey Ranges and Arthurville area have the highest reported incidence of wild pigs. Native pests such as kangaroos were identified as an increasing problem across the catchment, particularly in the Yeoval area. Proximity to the National Park was seen as being a factor in increasing impacts from pest animals.

### **12.2.5 Water Quality**

Problems with water quality seem to be quite specific to location. Groundwater quality, especially the increasing saltiness of the bore water, is a concern to the people in the Myrangle, Buckinbah and Yahoo Peaks landcare groups. Declining access to groundwater above the ridge around Arthurville is a worry to the local farmers, while high iron content in the water is a problem in the Hervey Ranges.

There are isolated areas where surface water quality is perceived as a problem. This was reported from the Hervey Ranges and the Myrangle landcare group members. The lack of concern in other areas may be due to limited awareness of the severity of the problem e.g. the high salt loads being carried in the Little River and its tributaries.

### **12.2.6 Weed Problems**

Woody weeds are only considered to be a minimal problem, with blackberry and boxthorn the two main species mentioned. Approximately 700 hectares of land was reported as being seriously affected by these weeds by the 44 farmers surveyed.

Crop weeds are seen as a moderate problem over the entire catchment. They are generally regarded as being part of the farming system, and not really regarded as a natural resource management issue. Crop weeds include grasses and thistles, as well as turnips and other broadleaf weeds, which are increasing.

A variety of weeds have invaded pasture, which is related to pasture degradation generally. Broadleaf weeds and thistles occur widely, but are not really perceived as a major concern. Eurimbla and Yeoval landcare groups report burrs as an issue. Unpalatable grasses such as spiny burr grass are a problem in some areas, particularly in the Middlearm Landcare group area, while vulpia is thought to be increasing in the Hervey Ranges. Obley reports production impacts due to Heliotrope, St Johns Wort and Horehound.