2.4. SUMMARY AND CONCLUSIONS

Of the 150 potential reference sites identified, 74 were selected for further analyses (Figure 2.2). All the aspects listed in Tables 2.3 and 2.4 were considered and sites were selected on the basis of these aspects, together with ensuring that the greatest number of sites could be sampled within the available time period. For this reason sites on the lower Olifants River were excluded and sampling was focused on the Crocodile, Sabie and Blyde River catchments. The following generalisations and suggestions may be made with respect to selection of reference sites:

- Generally, local knowledge proved to be more valuable than land use maps at selecting reference sites. Sites selected on the basis of such maps were often inaccessible, or were no longer perennial. Modification of the flow pattern through abstraction of water frequently resulted in an expected perennial river being dry. Alteration of riverine habitat through activities such as removal of vegetation, modification of channel and bed etc., is not reflected in land use maps, although this was observed at potential reference sites.
- It is recommended for regions which have already initiated a biomonitoring programme, that existing sites are evaluated in terms of their suitability for use as reference sites.
- The aspects examined during the ground-truthing phase (Figure 2.1, Tables 2.2 and 2.3) may be used as guidelines for evaluating the suitability of existing sites and selecting additional sites.
- Combining this knowledge with knowledge gleaned through liaison with other local experts will result in a list of potential reference sites which can then be evaluated during the ground-truthing phase.
- It should be emphasised that additional time expended during the ground-truthing phase will save time and cost during subsequent phases and will make the value of the sites more reliable.