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The aims of the study, as agreed in the original contract between WATERTEK, CSIR and the Water Research Commission were as follows:

1. To integrate information from, and collaborate with, researchers studying the ecological features of five rivers in the Mpumalanga and Northern Provinces that flow through the Kruger National Park (KNP) and one Western Cape river. Existing data and study sites with habitats specific to selected species of fish will be used in order to maximize fishing efforts.
2. To utilize information from completed and presently undertaken catchment studies of the selected rivers, in collaboration with researchers currently working in the field, to determine the point and possible diffuse sources of pesticides and metal pollution. Existing land usage, estimates of the pesticides most commonly used and the specific metal variables associated with the industries in each river catchment will be used to select the specific variables for analysis.
3. To catch selected species of the larger indigenous fish in these rivers, at sites where pesticide and/or metal pollution is expected. Techniques developed by the researcher in charge of this proposal will be used to selected specific species of fish as well as the particular fish tissues in which pesticide and metal levels will be determined.
4. To establish the current body loads of pesticides and metals present in the larger species of indigenous fish in the selected rivers for the period of study.
5. In collaboration with other researchers and the Department of Water Affairs & Forestry, the current fish body loads and monitoring techniques developed in this report will be proposed for the implementation of a National Bioaccumulation River Surveillance Programme for pesticides and metals in South African rivers.

Anticipated benefits

- Factual information on pesticide and metal levels in selected indigenous fish in five rivers that flow through the Kruger National Park and a major Western Cape river.