

4.3 Irrigated Agriculture Use

The third set of the Guideline Compliance Pie Diagram maps (Maps 9 and 10) relate to the following constituents: Sodium Adsorption Ratio (SAR); pH; Boron (B); Conductivity; and Chloride (Cl), that are important for irrigated agriculture (DWAF, 1996b) and the water quality guidelines are depicted in Table 3.4 (earlier in the document). There are isolated sites where median concentrations may be greater than the Target Water Quality Range (TWQR) (DWAF, 1996b). The sites in Table 3.6 are included in Map 9.

From Map 9 and Table 4.5 it can be seen that it is in the Luvuvhu and Letaba, Crocodile (West) and Marico, Olifants, Usutu to Mhlatuze, Upper Vaal, Mzimvubu to Keiskamma, Upper Orange, Lower Orange, Fish to Tsitsikamma, Gouritz and Breede WMAs that the median concentrations for the constituents reflected in the Irrigated Agriculture constituent set are greater than the TWQR for certain of those constituents at certain sampling sites. Table 3.4 lists the applicable water quality guideline classifications. Table 4.5 contains a list of sample sites for which certain of the constituents had median concentrations that indicate the water as being of *Fair* or *Not Acceptable* quality for irrigation use.

Map 9 Water quality effects on Irrigated Agriculture Use reported at the national assessment sampling sites