

Access to Potable Drinking Water in the Wonderfonteinspruit Catchment

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ABSTRACT The Wonderfonteinspruit catchment has been extensively studied from various academic angles due to the pollution from mining activities. Though extensive, the existing research on the catchment has neglected the plight of informal settlements next to the river, which lack adequate potable drinking water. This study was aimed at identifying the water sources and uses for the informal and formal settlements, investigating the challenges in accessing potable drinking water, the health risks thereof and establishing community perceptions. Questionnaires were administered to residents from systematically selected four settlements in the catchment to determine their water sources and uses, issues of water quality and community perception, health risks and awareness. Results indicate various challenges of water access and quality across different settlement types. The study developed new measures of community perceptions regarding water management namely; the drinking water suitability index, and the municipality effectiveness index. These indices are useful in assessing the effectiveness in the implementation of institutional set-up for water resources management in the area and also because community perceptions are useful reflectors of water resource management goals.