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A framework to determine the true cost of centralised waste water systems on the economies of South African Cities

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Abstract

Green Drop data indicates that South African metropolitan areas are particularly poor at ensuring that the effluent quality released by their wastewater treatment plants meets the required national standards. The impact of the poor performance of wastewater plants, although known, is not quantified in terms of real impact on the South African economy. This research report identifies the health, environmental and economic externalities associated with the pollution of water bodies by untreated or partially treated wastewater, and determines economic methods through which these externalities can be monetised. As these methodologies should ideally be incorporated into existing wastewater evaluation approaches, the feasibility and method in which to incorporate externality evaluation into the existing Green Drop system is investigated and through key informant interviews the resulting recommendations contextualised. The research report concludes with recommendations as to how the approach to South African wastewater treatment evaluations can be improved through the incorporation of economic externalities

Key words: *Ineffective wastewater treatment, water pollution, externalities, economic impact, Green Drop SA*