



Quality of local control for simple sewer networks

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Combined sewer networks, where both foul water and storm water are transported through the same system, tend to develop into complex networks due to expansion of towns and villages. The transport capacity of these systems is always limited, so occasional controlled spills into surface water, combined sewer overflows (CSO), are part of the normal operating procedure. Occasionally the ideas and rules present in the original design are not respected when the system is extended to cover a larger area. One way to deal with this problem is to implement central control. Another is to add pipes and hardware to bring the extended system into line with the original rules and ideas. We show that for a design rule often followed in the Netherlands, local control does quite well as long as the rule is respected and there are no large variations in precipitation intensity over the area covered by the system.