



Graph theoretical stable allocation as a tool for central control of sewer systems

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Dutch sewer networks consist of multiple sub-networks that serve both to collect waste water and as a link in the transport chain of waste water to the Waste Water Treatment Plant. Within sub-networks transport is by gravity driven flow. The sub-networks are linked by pumping stations. If the network of pipes also serves to collect precipitation then the system is called a combined system. For some of these networks it may be beneficial to implement central control. We study whether the graph theoretical concept of stable allocations can be used as a basis for the algorithm underlying such a central control system.