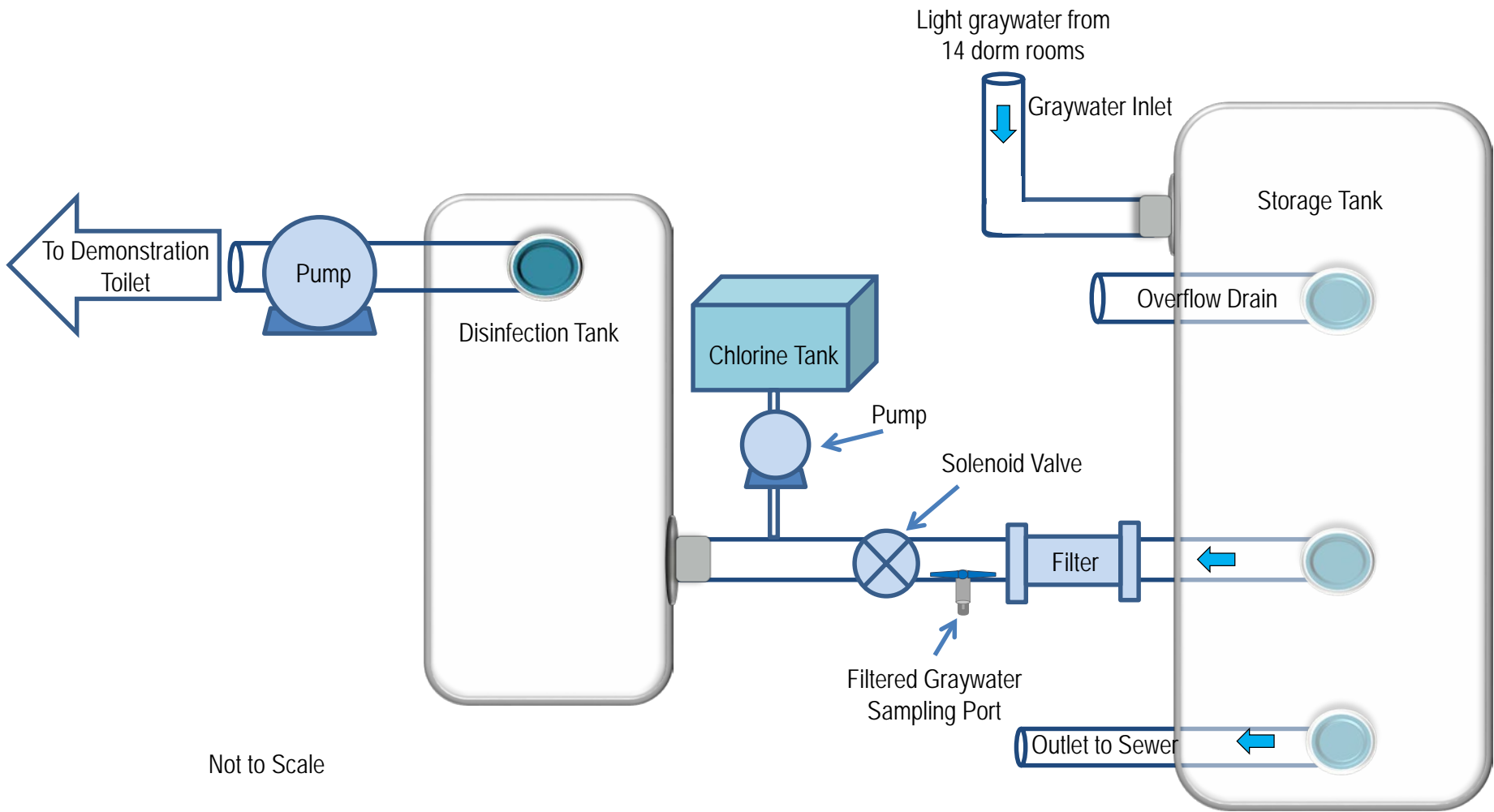


Supplemental Files

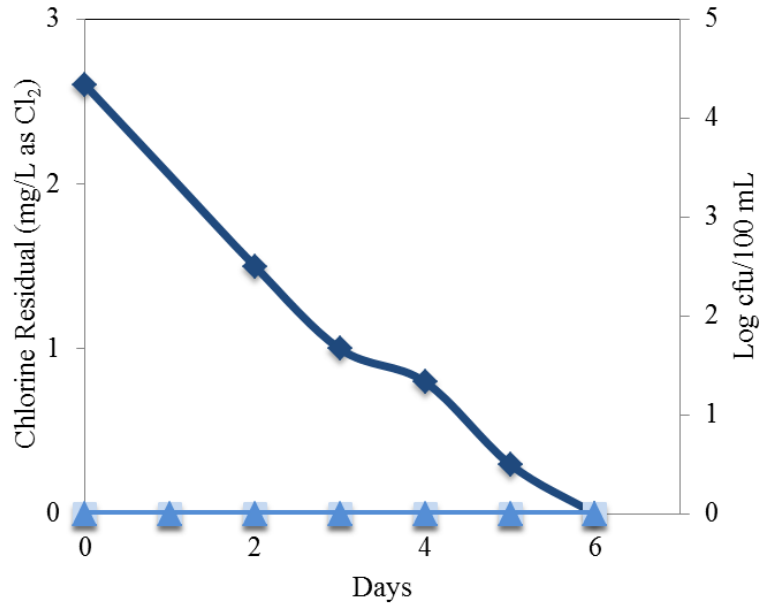
for

**Investigation of pathogen disinfection and regrowth in a simple graywater
recycling system for toilet flushing**

Kristen M. Ekeren, Brock A. Hodgson, Sybil E. Sharvelle, Susan K. De Long



Supplemental Figure S1. Demonstration graywater treatment system process diagram.



Supplemental Fig. 2. Regrowth study conducted in a 19-L bucket. (◆) chlorine residual, (▲) total coliforms, (■) *E. coli*. This regrowth test is shown separately because it was performed with approximately 3 gallons of graywater in a 5-gallon bucket. TOC of the graywater used in this experiment was 27.5 mg/L. Note that both *E. coli* and total coliforms were below the detection limit for the whole test.

Supplemental Table S1. Chlorine disinfection of pathogens after 15 minutes of contact time

Filter and Organism		Log Reduction
Coarse Matala Filter	<i>E. coli</i>	7.1
	<i>P. aeruginosa</i>	NQ
	<i>S. enterica</i>	8.0
	MS2	NQ
	Total Coliforms	4.1
Sand Filter	<i>E. coli</i>	5.7
	<i>P. aeruginosa</i>	5.7
	<i>S. enterica</i>	7.8
	MS2	1.7
	Total Coliforms	5.9
Cartridge Filter	<i>E. coli</i>	NQ
	<i>P. aeruginosa</i>	NQ
	<i>S. enterica</i>	0.4
	MS2	NQ
	Total Coliforms	NQ

NQ indicates not quantified

Supplemental Table S2. Chlorine disinfection of total coliforms after 60 minutes of contact time

Filter and Disinfectant		Log Reduction of Total Coliforms
Coarse Matala Filter	Chlorine	6.4
	UV	5.5
	Ozone	NQ
Sand Filter	Chlorine	6.7
	UV	5.8
	Ozone	0.7
Cartridge Filter	Chlorine	4.7
	UV	5.2
	Ozone	3.5

NQ indicates not quantified