Supporting Information

Distribution of antibiotic resistance genes and their association with bacteria and viruses in decentralized sewage treatment facilities

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Figure S1. The percent of bacterial community abundance on phylum level

Table S1. The number of different categories of bacteria-related ARGs and their relative abundance

Table S2. The relative abundance of different virus-related ARGs in samples
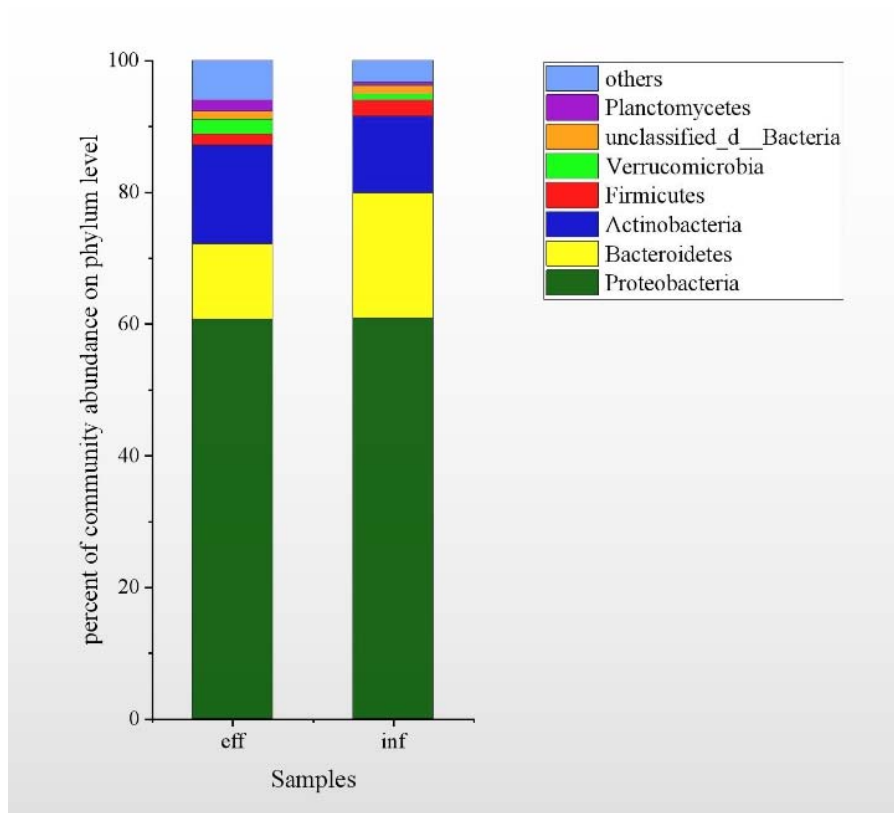
Fig. S1. The percent of bacterial community abundance on phylum level

Table S1. The number of different categories of bacteria-related ARGs and their relative abundance

The categories of ARGs	The number of types of ARGs	The relative abundance of ARGs
AR	667	64.02%
AS	65	26.63%
AR, AT	85	8.12%
ABS	3	1.20%
AT, ABS	5	0.02%

Note: AR, AT means that the ARG belongs to AR and AT categories; AT, ABS mean that the ARG belongs to AT and ABS categories

Table S2. The relative abundance of different virus-related ARGs in samples

ARG	BTC_EFF	BTC_IFF	DDJ_EFF	DDJ_INF	DS_EFF	DS_INF	MA_EFF	MA_INF	TJT_EFF	TJT_INF	WL_EFF	WL_INF
dfrE(trimethoprim)	54%	71%	86%	42%	76%	69%	7.0%	15%	22%	34%	65%	54%
rpoB(rifampin)	20%	1.5%	2.2%	5.7%	19%	12%	0	0	0.4%	0.3%	0.9%	0.5%
gyrB1(aminocomarin)	0.8%	1.1%	0.5%	13%	0.1%	0	34%	1.5%	1.4%	1.4%	19%	13%
gyrB2(fluoroquinlone)	0.5%	0	0	0	0	0	3.1%	46%	4.5%	1.5%	1.7%	17%
gyrB3(fluoroquinlone)	4.0%	13%	2.7%	6.2%	0	0	0	0	0	0	6.4%	8.5%
gyrA and parC(fluoroquinlone)	0.5%	0	0	17%	0	0	0	1.0%	4.0%	32%	0	0.5%
vanTG(glycopeptide)	0.2%	0	2.0%	0	0	15%	0	0	0	3.6%	0	0
parE1(fluoroquinlone)	0	0	0	1.6%	0	0.1%	0	0	43%	11%	0	0
gyrB4(aminoconumarin)	10%	0	0	0	0.2%	0	0	0	0	0	0	0
parE2(aminocoumarin)	7.2%	0	0.2%	0.2%	0	0	0	0	0	0	0	0.1%
rpoC(lipopeptide)	0	0	5.9%	7.9%	0	0	0	0	0	0	0	0.1%
gyrB5(fluoroquinlone)	0.7%	0	0	1.3%	0	0	0	19.30%	0	2.3%	2.0%	2.1%
parC1(fluoroquinlone)	0	7.0%	0	0	0	0	0	10%	0	0	4.5%	3.6%
vatB(streptogramin)	0	0	0	0	3.8%	0.5%	0	0	0	0	0	0
pncA(pyrazinamide)	0	0	0	0	0	0.2%	0	0	12%	11%	0	0
gyrA1(fluoroquinlone)	0	0	0	0	0	0	56%	0.9%	0	0.8%	0	0
parC2(fluoroquinlone)	0	4.8%	0	3.4%	0	0	0	6.1%	1.2%	0	0	0.4%
gyrA2(fluoroquinlone)	0	0	0	0.3%	0	0	0	0	12%	2.3%	0	0
msbA (efflux pump)	0.3%	0	0	0	0	2.1%	0	0	0	0	0	0