Supplementary Table S2. Antibiotic resistances of *E. coli* Mur river water and sediment isolates in comparison between upstream and downstream of the WWTP. The proportions, and in parentheses, the number of isolates resistant to each antibiotic and for all classes of antimicrobial resistance are given with the corresponding p-values of the statistical tests. Isolates were classified as wildtype when showing no resistance to the tested antibiotics. Isolates with resistance to one or two classes of the tested antibiotics were classified as resistant. Resistance to three or more classes of the tested antibiotics was classified as multi-resistant. P-values < 0.05 were considered as statistically significant. P-values with more than four decimal places containing a value of nine were rounded to one. us – upstream of the WWTP; ds – downstream of the WWTP

	Mur water us (144 isolates)	**Mur water ds** (117 isolates)	**p-value**	**Mur sediment us** (113 isolates)	**Mur sediment ds** (195 isolates)	**p-value**
β-Lactams						
Ampicillin	13.89 % (20)	6.84 % (8)	0.07	12.39 % (14)	16.92 % (33)	0.33
Amoxicillin/ clavulanic acid	3.47 % (5)	4.27 % (5)	0.76	0.88 % (1)	7.69 % (15)	< 0.01
Cefalexin	4.17 % (6)	2.56 % (3)	0.74	3.54 % (4)	3.08 % (6)	1
Cefuroxime	4.17 % (6)	1.71 % (2)	0.3	3.54 % (4)	2.56 % (5)	0.73
Cefoxitin	1.39 % (2)	0.85 % (1)	1	1.77 % (2)	0.51 % (1)	0.56
Cefotaxime	3.47 % (5)	1.71 % (2)	0.46	4.42 % (5)	2.05 % (4)	0.3
Piperacillin/ Tazobactam	1.39 % (2)	1.71 % (2)	1	0 % (0)	2.56 % (5)	0.16
Ceftazidime	2.78 % (4)	1.71 % (2)	0.69	3.54 % (4)	2.05 % (4)	0.47
Cefepime	2.78 % (4)	2.56 % (3)	1	5.31 % (6)	2.05 % (4)	0.18
Imipenem	0 % (0)	0 % (0)	1	0 % (0)	0.51 % (1)	1
Meropenem	0 % (0)	0 % (0)	1	0 % (0)	0.51 % (1)	1
Quinolones						
Moxifloxacin	4.17 % (6)	7.69 % (9)	0.29	4.42 % (5)	4.1 % (8)	1
Ciprofloxacin	4.86 % (7)	7.69 % (9)	0.44	5.31 % (6)	6.15 % (12)	1
Nalidixic acid	11.81 % (17)	8.55 % (10)	0.42	24.78 % (28)	10.77 % (21)	< 0.01
Tetracyclines						
Tetracycline	10.42 % (15)	10.26 % (12)	1	8.85 % (10)	11.28 % (22)	0.57
Tigecycline	0 % (0)	0 % (0)	1	0 % (0)	0 % (0)	1
Aminoglycosides						
Gentamicin	0.69 % (1)	0 % (0)	1	0 % (0)	4.1 % (8)	0.03
Amikacin	0 % (0)	0 % (0)	1	0 % (0)	0 % (0)	1
Antifolate						
Trimethoprim/ sulfamethoxazole	9.72 % (14)	6.84 % (8)	0.5	5.31 % (6)	7.69 % (15)	0.49
Polymyxins						
Colistin	0 % (0)	0 % (0)	1	0 % (0)	0 % (0)	1
Chloramphenicols						
Chloramphenicol	2.08 % (3)	2.56 % (3)	1	1.77 % (2)	4.1 % (8)	0.33