**Figure S1**

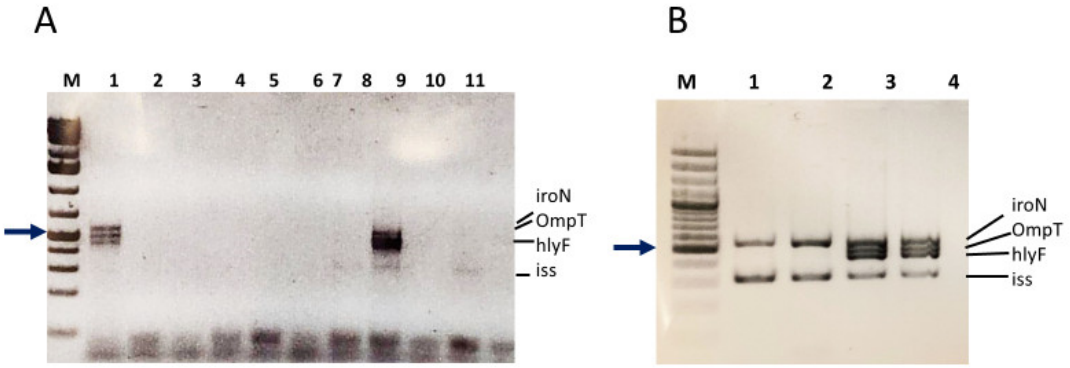
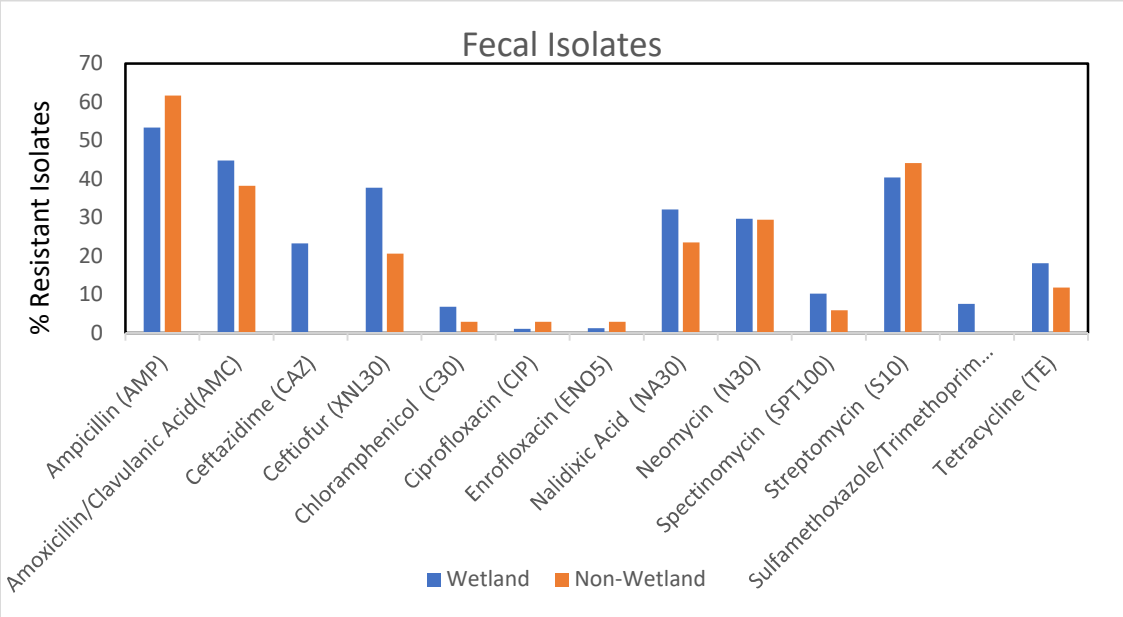



**Figure S1.** PCR products of quadruplex performed with primers for *iroN, hlyA, OmpT and iss* on water and fecal (F) isolates. Samples were run on 2 % gel **A**. Lane 1-11 Products from positive control (PC), NC1.2 (10/4/16), SW2.4 (5/16), RS 2.2 (10/4/16), RS2.3 (10/4/16), F41.1 (2/15), RS1.1 (1/17), RS2.3 (1/17). SW8.3 (7/16), F35.2 (2/15), F20.3 (1/15), respectively. Water isolates are indicated by the sites: SW2, SW8, RS or NC they were isolated from, and dates of isolation (indicated in brackets) **B.** PCR products of quadruplex for water isolate NC $6.4_{ctx}$ (9/14 or R2) (lane1) and F46.2 (lane 4), and from transconjugants obtained from mating NC $6.4_{ctx}$ (9/14) (lane2) and F46.2 (lane 4) with *E. coli* K12 $^{NA}$, respectively. M is the GeneRuler 100 bp Plus DNA ladder (Thermoscientific) with the arrow pointing to 500 bp.

**Figure S2**




| | AMP | AMC | CAZ | XNL 30 | C30 | CIP | ENO5 | NA30 | N30 | SPT100 | S10 | SXT | TE |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| p-value | 0.545 | 0.685 | 0.00072 | 0.061 | 0.664 | 0.468 | 0.502 | 0.508 | 1 | 0.721 | 0.684 | 0.104 | 0.586 |

**Figure S2.** Percentage of fecal *E. coli* isolates from non-wetland (n = 34) and wetland (n = 71), showing antimicrobial resistance to 13 selected antimicrobials. Table indicates significant differences in antibiotic resistance between fecal isolates of the 2 groups for an antibiotic according to Fisher's Exact test. The antibiotic resistance data of wetland isolates (indicated in blue ) was taken from the previous study (19)

**Figure S3**

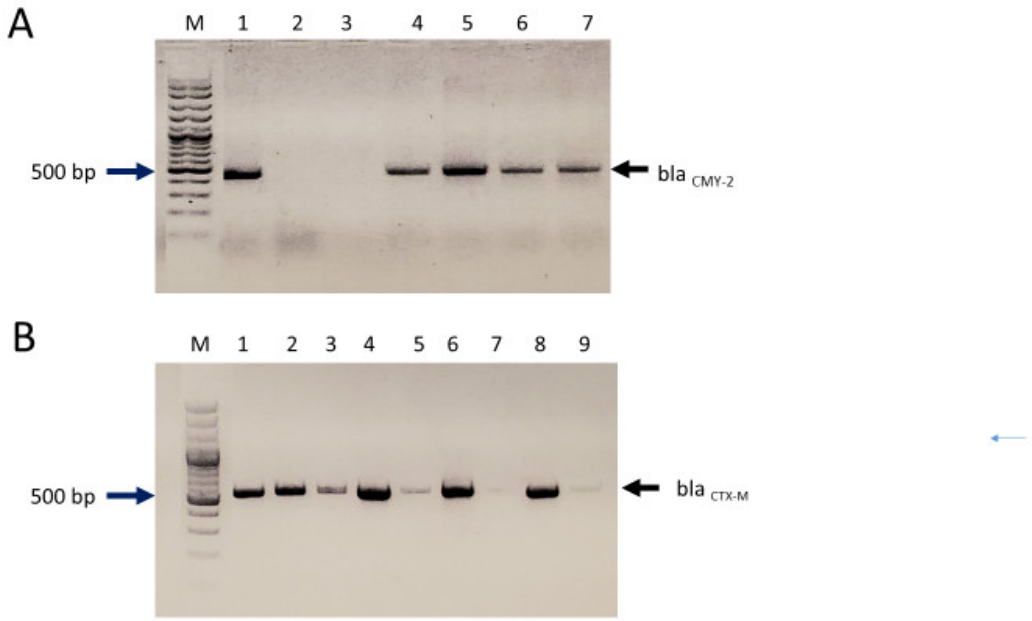



**Figure S3.** PCR products for bla-$_{CMY-2}$, 454 bp (**A**) or bla-$_{ctx-M}$, 554 bp (**B**), obtained from donor (D) ExPEC/APEC strains and corresponding trans-conjugants(Tc) following mating with *E. coli* K12$^{NA}$ . **A.** Lanes 1-7 correspond to Positive Control (PC), F16.2 (D), F16.2 (Tc), F42.2 (D), F42.2 (Tc), F53.1 (D), F 53.1 (Tc), respectively. All trans-conjugants were selected on NA+Amp+Str **B.** Lanes 1-10 correspond to PC, F11.1 (D), F11.1 (Tc selected on NA+Str), F11.1(Tc selected on NA +Str+Amp), F15.2 (D), F15.2 (Tc from NA+ Amp), F15.2 (Tc from NA+Str+Amp), F16.2 (D), F16.2 (Tc), respectively. M is the GeneRuler 100 bp Plus DNA ladder (Thermoscientific).