

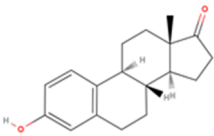
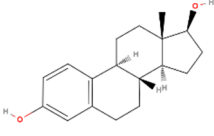
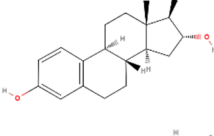
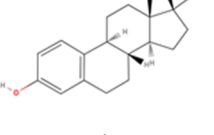
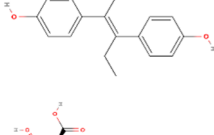
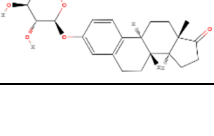
# Occurrence and Degradation of Free and Conjugated Estrogens in a River Receiving Feedlot Animal Discharge

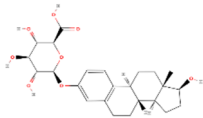
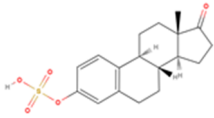
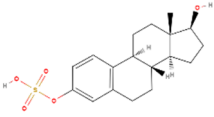
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Table S1. Physicochemical properties of steroid estrogens.

Name		Estrogenic potency				
Abbreviation	Molecular structure	Molecular Formula	Water solubility (mg/L)	Log Kow	E-Screen	YES
E1		C <sub>18</sub> H <sub>22</sub> O <sub>2</sub>	30.0	3.13	2.4	47
E2		C <sub>18</sub> H <sub>24</sub> O <sub>2</sub>	3.9	4.01	100	100
E3		C <sub>18</sub> H <sub>24</sub> O <sub>3</sub>	558.0	2.45	5.4	0.76
EE2		C <sub>20</sub> H <sub>24</sub> O <sub>2</sub>	4.8 <sup>b</sup>	4.14 <sup>b</sup>	-	-
DES		C <sub>18</sub> H <sub>20</sub> O <sub>2</sub>	PRACTICALLY INSOLUBLE	-	-	-
E1-3G		C <sub>24</sub> H <sub>30</sub> O <sub>8</sub>	8471.7	1.14	0.0029	0.053

E2-3G		C <sub>24</sub> H <sub>32</sub> O <sub>8</sub>	8829.8	1.67	0.13	-
E1-3S		C <sub>18</sub> H <sub>22</sub> O <sub>5</sub> S	6328.6	2.81	0.0012	0.14
E2-3S		C <sub>18</sub> H <sub>24</sub> O <sub>5</sub> S	15893.0	3.33	0.26	0.0057

[4]; <sup>b</sup>[65]

Table S2. Quality assurance data for analyzing each target compound in DI water and river water.

	Recovery (%)		MDL
	River water	DI water	ng/L
E1	79	93	0.3
E1-d4	80	94	0.3
E2	89	96	0.5
E2-d5	87	96	0.5
E3	91	99	0.4
E1-3S	92	101	0.4
E1-3S-d4	95	101	0.4
E2-3S	97	100	0.3
E1-3G	87	107	0.3
E2-3G	85	102	0.5
DES	66	75	0.6
EE2	84	92	0.6