

Poster #3

Intersex and other forms of reproductive disruption in feral white sucker (*Catostomus commersoni*) downstream of wastewater treatment plant effluent in Boulder, Colorado

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Feral white suckers (*Catostomus commersoni*) were collected on Boulder Creek downstream from wastewater treatment plant (WWTP) effluent and from reference sites. This effluent is known to contain endocrine-active compounds including alkylphenols, bisphenol A, and reproductive steroids. We found gonadal intersex and other forms of reproductive disruption in white suckers collected downstream of WWTP effluent but not at reference sites. The male to female ratio was skewed toward females at the downstream site. Abnormalities in gonadal morphology, including smaller ovaries, less developed oocytes, and asynchronous follicular development were noted in female white suckers downstream of the WWTP. We also report elevated plasma vitellogenin in downstream juvenile white suckers. The reproductive potential of native fishes may be compromised in stream reaches of western states where large volumes of treated wastewater are discharged into relatively small-sized streams.

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