

Attachment C: Denton WWTF Reasonable Potential Analysis - 2018

			<u>N+N</u>	<u>Iron, Chronic</u>
<u>Flow</u>				
	critical stream flow (7Q10 or seasonal 14Q5)	mgd	0.15	0.15
	% of 7Q10 being provided (as decimal, e.g. - .10 for 10%)	%	0%	0%
Qs	resulting critical stream flow (7Q10 * % dilution granted)	mgd	0.00	0.00
Qd	critical effluent flow (ave daily design flow)	mgd	0.044	0.044
Qr	downstream flow (Qs + Qd)	mgd	0.04	0.04
<u>Concentrations</u>				
Cmax	maximum effluent concentration for POR (from application or DMR data)	mg/L	2.73	0.09
n	number of samples in effluent data set		3	3
CV	coefficient of variation for effluent data (if n<10, use 0.6)		0.6	0.46
TSD	calculated TSD multiplier (should be close to Table 3-2 value)		3.00	2.37
Cd	critical effluent concentration - 95%tile (max. effluent concentration * TSD multiplier)	mg/L	8.2	0.213
Cs	critical instream concentration (75%tile if n<=30, 95% UCL if n>30)	mg/L	0.0	0.0
Cr	resulting or downstream pollutant concentration (term to solve for)	mg/L	8.189	0.213
WQS	water quality standard	mg/L	10	1
	RP?		no	no