APPENDIX A
CONVERSION FACTOR DERIVATION

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Flow (as million gallons per day [mgd]) and concentration values (milligrams per liter [mg/L]) must be multiplied by a conversion factor in order to express the load in units "pounds per day." The following expressions detail how the conversion factor was determined:

TMDL Calculation:

$$Flow\left(mgd\right)\times Concentration\left(\frac{mg}{L}\right)\times ConversionFactor\left(\frac{L-lb}{gal-mg}\right)=Load\left(\frac{lb}{day}\right)$$

Conversion Factor (CF) Derivation:

$$CF = 10^{6}\times\frac{3.785\,L}{gal}\times\frac{1\,lb}{454{,}000\,mg}=8.34\,\frac{L-lb}{gal-mg}$$

Flow (as million gallons per day [mgd]) and concentration values (micrograms per liter [ug/L]) must be multiplied by a conversion factor in order to express the load in units "pounds per day." The following expressions detail how the conversion factor was determined:

TMDL Calculation:

$$Flow\left(mgd\right)\times Concentration\left(\frac{ug}{L}\right)\times ConversionFactor\left(\frac{L-lb}{gal-ug}\right)=Load\left(\frac{lb}{day}\right)$$

Conversion Factor (CF) Derivation:

$$CF = 10^{6}\times\frac{3.785\,L}{gal}\times\frac{1\,lb}{454{,}000{,}000\,ug}=0.00834\,\frac{L-lb}{gal-ug}$$

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