TOWN of EDINBURGH WATER SYSTEM DESIGN DATA

Current Population: 4,480 (2010 Census)

Design Year and Population: 2022, 6,360

Design Population Equivalent (P.E.): 13,247 (@ 0.17 lb/d/person)

Design Flow: 1.50 MGD average flow

Average Design Peak Flow: 3.0 MGD

Maximum Plant Flow Capacity: 3.00 MGD

Design Waste Strength:

a) BOD: 180 mg/L (2252 lb/d) b) SS: 220 mg/L (2752 lb/d)

c) P: N/A

d) Other: NH3-N 25 mg/L (313 lb/d)

1. NPDES Permit Limitation on Effluent Quality: (Limits are anticipated Monthly Average per Waste load Allocation Letter dated 11/13/00)

a) BOD: 25 mg/L b) SS: 30 mg/L

c) NH₃-N: 10.4 mg/L (summer); 10.4 mg/L (winter)

d) P: N/A

e) Chlorine Residual: 0.02 mg/L (daily maximum); 0.01 mg/L (monthly average)

f) pH: 6 – 9

g) D.O.: 3.0 mg/L (daily minimum)

h) Other: E. coli – count/100 mL: 235 daily, 125 monthly

2. Receiving Stream:

a) Name: Big Blue River b) Tributary to: Driftwood River

c) Stream Uses: Recreation, aquatic life

d) 7 – Day, 1-in-10 – year low flow: 64 cfs