

## Water System Capacity Calculation Scenario 1 – Fable Haven Town

PWS Type: Community, NTNC, or TNC? Community

### 1. Indoor Water Use

Number of Residential Connections = 600

Number of other connections = 3 (peak day demand 32,000 gallons, 4,000 gallons, and 24,000 gallons each.)

=> Total peak day demand = 60,000 gallons per day = 75 equivalent residential connections (ERCs)

$60,000 \text{ gpd} / 800 \text{ gpd per ERC} \Rightarrow 75 \text{ ERCs}$

### 2. Outdoor Water Use

Located in Weber County near Huntsville => Map Zone 3

40 % of residential connections are connected to the secondary irrigation system.

=> 60 % of residential connections uses drinking water system for outdoor irrigation.

=> 360 residential connections uses drinking water system for outdoor irrigation.

$600 \text{ connections} \times 60\% = 360 \text{ connections}$

Typically residential lot size has approximately 0.05 acres of irrigated area.

Town Park has 10 acres of irrigated area. Three Fable Haven schools have a total of 20 acres of irrigated area. Town cemetery has 5 acres of irrigated area. => Total irrigated acreage of other connections = 35 acres

$10 + 20 + 5 = 35 \text{ acres total}$

### 3. Fire Flow Requirements

Required fire flow = 1,500 gpm & duration = 2 hours

Local fire authority name \_\_\_\_\_ Contact Info \_\_\_\_\_

**4. Existing source capacity = 560 gpm**

**5. Existing storage capacity = 520,000 gallons**