

Water System Capacity Calculation Scenario 4 – **Spirited Away Campground**

PWS Type: Community, NTNC, or TNC? TNC

This campground has 20 camp sites and 4 flush toilets.

Each campsite can accommodate 10 people.

1. Indoor Water Use

Number of Residential Connections = 0

Number of other connection = 200 campers during peak day (Table 510-1 Camp b.)

=> peak day demand = 20 gpd/person

=> Total peak day demand = 40,000 gallons per day = 5 equivalent residential connections (ERCs)

$20 \text{ gpd per person} \times 200 \text{ campers} = 4,000 \text{ gpd}$

$4,000 \text{ gpd} / 800 \text{ gpd per ERC} \Rightarrow 5 \text{ ERCs}$

2. Outdoor Water Use

Located in Wasatch County near Wallsburg => Map Zone 2

Total irrigated acreage = 0 acre

3. Fire Flow Requirements

Fire suppression flow is not required.

Local fire authority name _____ Contact Info _____

4. Existing source capacity = 10 gpm (from a gravity fed spring)

5. Existing storage capacity = 300 gallons (assuming ten pressure tanks, each 60-gallons with 50% bladder capacity)

$60 \text{ gallons} \times 50\% = 30 \text{ gallons each pressure tank}$

$30 \text{ gallons per tank} \times 10 \text{ tanks} = 300 \text{ gallons total storage}$

*** This water system may want to consider exception request (source 10 gpm >> peak day demand 2.8 gpm).**