

From State of Idaho Parks & Recreation website  
(<http://www.idahoparks.org/parks/bearlake.aspx>):

47 individual campsites  
up to 8 campers/site

Estimated 13 faucets

3 group campsites

1 site - up to 100 campers

200 campers

2 sites - up to 50 campers

Reservations required from May 24 - Sept 4 (104 days)

Open camping mid-April - May 23 and Sept 5 - Nov 30.

Assume 90% full under reservations, 50% full under open camping

From "Planning guide for water use"

Parks: Trailers with individual bath units, no sewer connection:

25 gal/day·trailer

Dwellings: Boardinghouse: Kitchen requirements

10 gal/day·person

From original permit:

Season of use May 1 - Sept 30

For individual campsites:

47 sites \* 1 trailer/site \* 25 gal/day·trailer \* 104 days \* 90%

= 109,980 gal

May 1 - May 23 = 23 days

September 5 - September 30 = 26 days

49 days

47 sites \* 1 trailer/site \* 25 gal/day·trailer \* 49 days \* 50%

= 28,788 gal

For group campsites:

200 people \* 10 gal/day·person \* 104 days \* 90%

= 187,200 gal

200 people \* 10 gal/day·person \* 49 days \* 50%

= 49,000 gal

Total: 109,980 + 28,788 + 187,200 + 49,000 = 374,968 gal = 1.15 afy

$$0.2 \frac{\text{ft}^3}{\text{s}} \left( \frac{3600 \text{s}}{\text{h}} \right) \left( \frac{24 \text{h}}{\text{day}} \right) \left( \frac{154 \text{ days}}{\text{year}} \right) \left( \frac{\text{acre}}{43560 \text{ft}^2} \right) = 61 \text{ afy}$$

$$13,000 \frac{\text{gal}}{\text{day}} \left( \frac{154 \text{ days}}{\text{year}} \right) \left( \frac{\text{af}}{325850 \text{ gal}} \right) = 6.14 \text{ afy}$$

$$47 \text{ sites} * \frac{8 \text{ people}}{\text{site}} * \frac{10 \text{ gal}}{\text{day person}} * \frac{154 \text{ days}}{\text{year}} * \frac{\text{af}}{325850 \text{ gal}} = 1.78 \text{ afy}$$

$$200 \text{ people} * \frac{10 \text{ gal}}{\text{day person}} * \frac{154 \text{ days}}{\text{year}} * \frac{\text{af}}{325850 \text{ gal}} = 0.95 \text{ afy}$$

$$\underline{2.73 \text{ afy}}$$

2500 GPD @ .04 CFS  $\cdot 18 \times 60 = 1080$   
 $2500 \cdot 1080 = 2.31$  hrs of constant use

GPD/HPD/60/450 = CFS

TABLE 1. PLANNING GUIDE FOR WATER USE  
Type of Establishment

Gallons per day

|                                                                        |         |
|------------------------------------------------------------------------|---------|
| Airports (per passenger)                                               | 3-5     |
| Apartments, multiple family (per resident)                             | 60      |
| Bath Houses (per bather)                                               | 10      |
| Camps:                                                                 |         |
| Construction, semipermanent (per worker)                               | 50      |
| Day, with no meals served (per camper)                                 | 15      |
| Luxury (per camper)                                                    | 100-150 |
| Resorts, day and night, with limited plumbing (per camper)             | 50      |
| Tourist with central bath and toilet facilities (per person)           | 50      |
| Churches (per person)                                                  | 35      |
| Cottages with seasonal occupancy (per resident)                        | 5       |
| Courts, tourist with individual bath units (per person)                | 50      |
| Clubs:                                                                 |         |
| Country (per resident member)                                          | 100     |
| Country (per nonresident member present)                               | 25      |
| Dwellings:                                                             |         |
| Boardinghouses (per boarder)                                           | 50      |
| Additional kitchen requirements for nonresident boarders               | 10      |
| Luxury (per person)                                                    | 100-150 |
| Multiple-family apartments (per resident)                              | 40      |
| Rooming houses (per resident)                                          | 60      |
| Single family (per resident)                                           | 50-75   |
| Estates (per resident)                                                 | 100-150 |
| Factories (per person per shift)                                       | 15-35   |
| Highway rest area (per person)                                         | 5       |
| Hotels:                                                                |         |
| With private baths (2 persons per room)                                | 60      |
| Without private bath (per person)                                      | 50      |
| Hospitals (per bed)                                                    | 250-400 |
| Institutions other than hospitals (per person)                         | 75-125  |
| Laundries, self-serviced (gallons per washing, i.e., per customer)     | 50      |
| Motels:                                                                |         |
| With bath, toilet and kitchen facilities (per bed space)               | 50      |
| With bed and toilet (per bed space)                                    | 40      |
| Parks:                                                                 |         |
| Overnight with flush toilets (per camper)                              | 25      |
| Trailers with individual bath units, no sewer connection (per trailer) | 25      |
| Trailers with individual bath units, connected to sewer (per person)   | 50      |
| Picnic:                                                                |         |
| With bathhouses, showers and flush toilets (per picknicker)            | 20      |
| With toilet facilities only (per picknicker)                           | 10      |