# Division of Drinking Water Water System Capacity Calculation Sheet (revised June 23, 2011)

*Enter the green cells only.*

System Name: Taylor-West Weber WID March 11, 2015 System Number: 29019

## 1. Indoor Water Use

Number of residential connections: 1,952

Number of other connections: 19

ERCs of other connections: 19.0 (Example: water use of a factory is equivalent to 30 homes.)

Total Equivalent Residential Connections (ERCs): 1,971

| MINIMUM REQUIREMENTS FOR INDOOR WATER USE | | | | | |
|---|---|---|---|---|---|
| Source | | Storage | | Water Rights | |
| Per ERC (gpd/ERC) | Total (gpm) | Per ERC (gallons/ERC) | Total (gallons) | Per ERC (ac-ft/yr) | Total (ac-ft/yr) |
| 800 | 1,095.0 | 400 | 788,400 | 0.45 | 886.95 |

## 2. Outdoor Water Use

Is the drinking water used for outdoor irrigation? ☑ Yes ☐ No

Residential ERCs using drinking water for irrigation: 470

Percentage of Residential ERCs using DW for irrigation: 24%

Average irrigated acreage per residential connection: 0.75

Total irrigated acreage of other connections: 6.00

Irrigation zone: 4

*Based on information from Water System Manager during 2013 Sanitary Survey*

| MINIMUM REQUIREMENTS FOR OUTDOOR WATER USE | | | | | |
|---|---|---|---|---|---|
| Source | | Storage | | Water Rights | |
| Per ERC (gpd/ERC) | Total (gpm) | Per ERC (gallons/ERC) | Total (gallons) | Per ERC (ac-ft/yr) | Total (ac-ft/yr) |
| 4,277 | 1,419.7 | 2,136 | 1,021,008 | 1.40 | 670.40 |

## 3. Fire Flow Requirement

Does the water system provide fire protection? ☑ Yes ☐ No

Maximum fire suppression **demand** for *water system* or *pressure zone* (gpm): 1,000

Maximum fire suppression **duration** for *water system* or *pressure zone* (hours): 2

Required Fire Suppression Storage (gallons): 120,000

*Weber Fire District has adopted Appendix B of the Fire Code which requires a minimum of 1000 gpm for two hours for fire flow.*

## Total Water System Requirements (= Indoor use + outdoor use + fire flow demand)

| MINIMUM REQUIREMENTS FOR WATER SYSTEM | | | | | |
|---|---|---|---|---|---|
| Source | | Storage | | Water Rights | |
| Per ERC (gpd/ERC) | Total (gpm) | Per ERC (gallons/ERC) | Total (gallons) | Per ERC (ac-ft/yr) | Total (ac-ft/yr) |
| 5,077 | 2,514.7 | 2,536 | 1,929,408 | 1.85 | 1,557.35 |

## Does this system have adequate source capacity per R309-510-7?

IPS points may be assessed for lacking adequate source capacity to meet peak day and/or average yearly flow requirements.

| | | |
|---|---|---|
| *Existing Sources:* | 3,400.0 | gpm |
| *Required Source Capacity:* | 2,514.7 | gpm |
| *% of Req'd Capacity:* | 135.2% | |
| *Difference:* | 885 | gpm |

***Does this system have adequate storage capacity per R309-510-8?***

IPS points may be assessed for lacking adequate storage capacity.

| | | |
|---|---|---|
| *Existing Storage:* | 3,250,000 | gal |
| *Required Storage Capacity:* | 1,929,408 | gal |
| *% of Req'd Capacity:* | 168.4% | |
| *Difference:* | 1,320,592 | gal |

[redacted]

**Non-Community Water Systems, ERCs for Indoor Water Use** (*See R309-510, Tables 510-1, 2, and 4, for other facility type calc.)

| Facility Type | MINIMUM REQUIREMENTS FOR INDOOR USE: Source GPD/person* | Source Calculated GPD/site or pad | Storage GPD/person | Storage Gallon/site or pad | ERC/site or pad | # of Sites or pads | ERCs |
|---|---|---|---|---|---|---|---|
| Modern Recreation Camp | 60 | 240 | 30 | 120 | 0.30 | 8 | 2.4 |
| Semi-Developed Camp *w/ flush toilets* | 20 | 80 | 10 | 40 | 0.10 | 25 | 2.5 |
| Semi-Developed Camp *w/o flush toilets* | 5 | 20 | 2.5 | 10 | 0.03 | 20 | 0.5 |
| RV Park | N/A | 100 | N/A | 50 | 0.13 | 15 | 1.9 |
| *Number of people per camp site | 4 | | | | | | |

| Facility Type | Source (GPD/vehicle) | Storage (Gal./vehicle) | ERC/1000 vehicles served | # of Vehicles served | ERCs |
|---|---|---|---|---|---|
| Roadway Rest Stop *w/ flushometer valves* | 7 | 3.5 | 8.75 | 800 | 7.00 |

***Taylor-West Weber WID March 11, 2015***

[redacted]

| Equivalent Residential Connection Calc. | |
|---|---|
| Existing Residential Connections | 1,962 |
| Number of Obligated Future ERCs | 83 |
| *Blue Acres Subdivision* | *9* |
| *Winslow Farr Jr Farm Subdivision* | *74* |
| Total Projected Number of ERCs | 2,035 |

[redacted]

| Source | | (in gallons per minute) |
|---|---|---|
| *WS001* | *Big Well* | *900* |
| *WS002* | *Small Well* | *500* |
| *WS003* | *Weber Basin WCD CC* | *2000* |
| Total Source Capacity | | 3400 |
| *Max. ERC allowed (for indoor use only)* | | *6120* |

| Storage | | (in gallons) |
|---|---|---|
| *ST001* | *Million Gallon Tank* | *1,000,000* |
| *ST002* | *2 Million Gallon Tank* | *2,000,000* |
| *ST003* | *250 K Gallon Tank* | *250,000* |
| Total Storage Capacity | | 3,250,000 |

[redacted]

[redacted]

*(Enter notes here if needed.)*