

**Cache County Water Master Plan
Addendum #1
Updated Municipal and Industrial Water Supply Shortage Projections
November 13, 2014**

The following report section (4.2.7) is added to the Cache County Water Master in order to provide an updated and more in depth evaluation of the future municipal and industrial (M&I) water supply shortages that are projected for Cache County. This addendum is added to the master plan because:

- The Utah Division of Water Resources (DWRe) has made updates to the water supply and demand projections since the original report was written. The supply and demand numbers have not changed greatly, but DWRe and the County have changed how they are reported by summing the deficit (shortage) in each community in Cache County in each evaluated year. The total water deficit takes into account the geographic and municipal boundaries that may limit the water supply moving from one end of the county to the other.
- Bear River development plans require a more detailed understanding of the future M&I water needs in Cache County.
- The original master plan only included projections through year 2060. An estimate of the projected build out water demands provides added understanding of the future water needs.

4.2.7 Future M&I Water Shortage Evaluation

DWRe has prepared updated water supply and demand projections for all of the Utah water systems in the Bear River Basin. These projections are included in the attached tables for years 2010, 2020, 2025, 2030, 2040, 2050 and 2060. The projections in the tables are based on the assumption that the state per capita water conservation goal of 25% will be reached by the year 2025 in Cache County.

The updated projections have been used to estimate when Cache County will have annual supply shortages. Water improvement projects need to be started long before annual water shortages occur in a water system. This is true because water demands vary during any given year. Even though a system may have enough reliable water supply for a year, it may not have enough reliable water supply during high water use days. In addition, water supply projects require a great deal of planning and preparation time prior to construction. Because of these facts, a table has been created to identify M&I water supply shortages based on projected demands that are greater than 75% of the current annual reliable supply.

The DWRe has factored the annual water supplies based on input from system operators. It is based on how often they use their wells and variations in flows from springs. These factors help account for seasonal supply variations. Water systems also need to provide enough supply for peak days during the summer months. The specific value of 75% used to factor the current annual reliable supply was chosen based on past evaluations of daily summertime flow records that J-U-B ENGINEERS Inc. has completed for municipal water systems.

As mentioned above, water development projects take time to plan, permit and construct. Water source improvement projects can take five to ten years to complete. In Cache County, the total water demands are projected to increase by 18% between year 2050 and year 2060. The 75% factor on the annual reliable supply will also help in this regard as water system managers need time to make source improvements or to improve water conservation.

Table 4.3.A identifies and quantifies system supply shortages at years 2010, 2025, 2040, and 2060. The shortages are shown in red for each system. The numbers in the table are based on the assumption that the 25% water conservation goal will be reached by year 2025 and on utilization of 75% of the existing annual reliable supply.

Table 4.3.A: Projected Water Shortages

| CACHE COUNTY -PROJECTED MUNICIPAL AND INDUSTRIAL (M&I) WATER SHORTAGES (Assuming State Per Capita Conservation Goal of 25% is Reached by Year 2025 in Cache County) | | | | | | | | | | |
|--|-------------------------|--------------------------------|-----------------------|---|-----------------------|---|-----------------------|---|-----------------------|---|
| City | SUPPLY | | 2010 DEMANDS | | 2025 DEMANDS | | 2040 DEMANDS | | 2060 DEMANDS | |
| | Existing Supply (ac-ft) | 75% of Existing Supply (ac-ft) | M&I Demand (ac-ft) | Water Surplus Based on 75% of Existing Supply (ac-ft) | M&I Demand (ac-ft) | Water Surplus Based on 75% of Existing Supply (ac-ft) | M&I Demand (ac-ft) | Water Surplus Based on 75% of Existing Supply (ac-ft) | M&I Demand (ac-ft) | Water Surplus Based on 75% of Existing Supply (ac-ft) |
| Amalga | 691 | 518 | 666 | -148 | 662 | -144 | 714 | -196 | 1,286 | -768 |
| Benson | 398 | 298 | 219 | 79 | 533 | -235 | 979 | -681 | 1,857 | -1,559 |
| Clarkston | 1,132 | 849 | 293 | 555 | 256 | 592 | 329 | 519 | 456 | 392 |
| Cornish | 186 | 140 | 136 | 3 | 122 | 18 | 135 | 4 | 192 | -53 |
| Goaslind Spring | 406 | 305 | 18 | 286 | 11 | 293 | 11 | 293 | 11 | 293 |
| High Creek | 68 | 51 | 51 | 0 | 43 | 8 | 44 | 7 | 43 | 8 |
| Hyde Park | 1,757 | 1,318 | 1,052 | 266 | 1,133 | 184 | 1,543 | -225 | 1,720 | -402 |
| Hyrum | 7,782 | 5,837 | 5,678 | 158 | 5,866 | -30 | 7,396 | -1,559 | 10,930 | -5,094 |
| Lewiston | 1,708 | 1,281 | 807 | 473 | 742 | 539 | 963 | 318 | 1,434 | -154 |
| Logan | 18,472 | 13,854 | 10,777 | 3,077 | 10,826 | 3,028 | 13,803 | 51 | 19,986 | -6,132 |
| Mendon | 546 | 409 | 361 | 48 | 368 | 41 | 479 | -70 | 616 | -207 |
| Millville | 879 | 659 | 498 | 162 | 536 | 123 | 665 | -6 | 1,045 | -386 |
| Newton | 433 | 325 | 406 | -81 | 297 | 28 | 349 | -25 | 486 | -161 |
| Nibley | 2,799 | 2,099 | 1,136 | 964 | 1,829 | 270 | 2,521 | -422 | 3,494 | -1,395 |
| North Logan | 1,962 | 1,472 | 1,670 | -198 | 2,177 | -706 | 2,752 | -1,281 | 3,584 | -2,113 |
| Paradise | 787 | 590 | 401 | 189 | 321 | 269 | 405 | 185 | 586 | 4 |
| Providence | 4,176 | 3,132 | 2,169 | 962 | 2,701 | 430 | 3,597 | -465 | 4,971 | -1,839 |
| Richmond | 1,688 | 1,266 | 1,000 | 266 | 882 | 384 | 1,019 | 247 | 1,580 | -314 |
| River Heights | 2,133 | 1,599 | 550 | 1,049 | 565 | 1,034 | 607 | 993 | 803 | 797 |
| Smithfield | 7,381 | 5,536 | 3,090 | 2,446 | 3,064 | 2,472 | 4,133 | 1,403 | 4,785 | 750 |
| South Cove | 219 | 164 | 29 | 135 | 17 | 148 | 17 | 148 | 17 | 148 |
| Trenton | 273 | 205 | 213 | -8 | 220 | -15 | 283 | -78 | 392 | -187 |
| Wellsville | 5,750 | 4,313 | 1,493 | 2,819 | 1,718 | 2,595 | 2,195 | 2,117 | 3,153 | 1,160 |
| | | | Total Shortage | -436 | Total Shortage | -1,129 | Total Shortage | -5,008 | Total Shortage | -20,761 |
| Note: Negative red values indicate water supply shortages based on the communities that will have demands greater than 75% of the current annual reliable supply. | | | | | | | | | | |

Cache County will continue to develop after year 2060 and will require more M&I water supply. In the Bear River Pipeline Concept Report Volume I prepared by Bowen Collins & Associates Inc., an ultimate M&I water demand estimate for Cache County is provided based on developable area. Two estimates are given, one based on a lower potential development density and one for a higher development density. The estimates are shown below in Table 4.3.B as given in Part 2 of the Bear River Pipeline Report Appendix.

Table 4.3.B: Ultimate M&I Water Demand

| Projected M&I Water Demand for Cache County at Ultimate Development | |
|---|---------------------------|
| Demand Range | Water Demand (acre-ft/yr) |
| ¹ Lower Density | 302,000 |
| ² Higher Density | 423,000 |
| ¹ 2.0 acre/ft per gross developable acre | |
| ² 2.8 acre/ft per gross developable acre | |

(Bowen, Collins & Associates, 2014)

Cache County will need water from new sources prior to ultimate build out. The current total reliable M&I water supply in the County as estimated by DWRe is 61,623 acre feet per year. Based on the evaluation of historic annual agricultural irrigation water diversions in Section 3.3.2 of this report, approximately 200,000 acre-feet of water is currently diverted for irrigation purposes. A future M&I supply of approximately 260,000 acre-feet could be available if all of the agricultural irrigation water was converted for M&I use. Approximately 40,000 to 163,000 acre feet of additional water will be needed for ultimate M&I build out.

GPCD Projections and Use to 2060

Model run as of 11/12/14 and is subject to change

| System | 2010 | | | | | | | | | | |
|-----------------------------------|---------------|--------------|---------------|----------------|-------------------|------------|----------------|----------------|------------------|-----------------------|----------|
| | Potable Use | Potable GPCD | Secondary Use | Secondary GPCD | Total Use (ac-ft) | Total GPCD | Population | Potable Supply | Secondary Supply | Total Reliable Supply | Deficit |
| Cache County | | | | | | | | | | | |
| Amalga Town Culinary Water System | 661 | 1,114 | 5 | 8 | 666 | 1,122 | 530 | 686 | 5 | 691 | 25 |
| Benson Water Culinary District | 169 | 202 | 50 | 60 | 219 | 261 | 750 | 348 | 50 | 398 | 178 |
| Clarkston Town Culinary Water | 211 | 235 | 83 | 92 | 293 | 327 | 800 | 1,049 | 83 | 1,132 | 838 |
| Cornish Town Water | 92 | 284 | 44 | 135 | 136 | 420 | 290 | 142 | 44 | 186 | 50 |
| Goaslind Spring Water Works Co. | 6 | 91 | 12 | 179 | 18 | 269 | 60 | 394 | 12 | 406 | 388 |
| High Creek Culinary Water System | 49 | 336 | 2 | 14 | 51 | 350 | 130 | 66 | 2 | 68 | 17 |
| Hyde Park City | 712 | 166 | 340 | 79 | 1,052 | 245 | 3,830 | 1,417 | 340 | 1,757 | 706 |
| Hyrum City | 4,278 | 506 | 1,400 | 166 | 5,678 | 671 | 7,550 | 6,382 | 1,400 | 7,782 | 2,104 |
| Lewiston City | 711 | 359 | 96 | 48 | 807 | 407 | 1,770 | 1,612 | 96 | 1,708 | 900 |
| Logan City | 8,957 | 167 | 1,820 | 34 | 10,777 | 200 | 48,000 | 16,652 | 1,820 | 18,472 | 7,695 |
| Mendon City Culinary Water System | 171 | 109 | 190 | 121 | 361 | 230 | 1,400 | 356 | 190 | 546 | 184 |
| Millville City Water | 444 | 208 | 54 | 25 | 498 | 234 | 1,900 | 825 | 54 | 879 | 382 |
| Newton Town Water | 219 | 244 | 187 | 209 | 406 | 453 | 800 | 246 | 187 | 433 | 27 |
| Nibley City | 836 | 138 | 300 | 50 | 1,136 | 188 | 5,400 | 2,499 | 300 | 2,799 | 1,663 |
| North Logan Water | 1,435 | 155 | 235 | 25 | 1,670 | 181 | 8,250 | 1,727 | 235 | 1,962 | 292 |
| Paradise Town | 111 | 110 | 290 | 288 | 401 | 397 | 900 | 497 | 290 | 787 | 386 |
| Providence Town Water System | 2,069 | 264 | 100 | 13 | 2,169 | 277 | 7,000 | 4,076 | 100 | 4,176 | 2,006 |
| Richmond City Corp. | 700 | 253 | 300 | 108 | 1,000 | 361 | 2,470 | 1,388 | 300 | 1,688 | 688 |
| River Heights City | 516 | 239 | 34 | 16 | 550 | 254 | 1,930 | 2,099 | 34 | 2,133 | 1,582 |
| Smithfield City | 1,685 | 157 | 1,405 | 131 | 3,090 | 287 | 9,600 | 5,976 | 1,405 | 7,381 | 4,291 |
| South Cove Water Works Co., Inc. | 7 | 88 | 22 | 281 | 29 | 369 | 70 | 197 | 22 | 219 | 190 |
| Trenton Town Corp. Water | 165 | 295 | 48 | 86 | 213 | 381 | 500 | 225 | 48 | 273 | 60 |
| Wellsville City Corp. | 1,473 | 387 | 20 | 5 | 1,493 | 392 | 3,400 | 5,730 | 20 | 5,750 | 4,257 |
| Cache Total | 25,677 | 214 | 7,037 | 59 | 32,713 | 272 | 107,330 | 54,586 | 7,037 | 61,623 | 0 |

GPCD Projections and Use to 2060

| System | 2020 | | | | | | | | | | | |
|-----------------------------------|---------------|--------------|---------------|----------------|-------------------|------------|----------------|----------------|------------------|------------|-----------------------|------------|
| | Potable Use | Potable GPCD | Secondary Use | Secondary GPCD | Total Use (ac-ft) | Total GPCD | Population | Potable Supply | Secondary Supply | New Supply | Total Reliable Supply | Deficit |
| Cache County | | | | | | | | | | | | |
| Amalga Town Culinary Water System | 650 | 989 | 3 | 4 | 653 | 994 | 587 | 686 | 5 | 0 | 691 | 38 |
| Benson Water Culinary District | 333 | 179 | 56 | 30 | 389 | 209 | 1,659 | 348 | 50 | 0 | 398 | 8 |
| Clarkston Town Culinary Water | 196 | 209 | 44 | 47 | 239 | 255 | 836 | 1,049 | 83 | 0 | 1,132 | 892 |
| Cornish Town Water | 94 | 252 | 26 | 69 | 120 | 321 | 334 | 142 | 44 | 0 | 186 | 66 |
| Goaslind Spring Water Works Co. | 5 | 81 | 6 | 90 | 11 | 171 | 60 | 394 | 12 | 0 | 406 | 395 |
| High Creek Culinary Water System | 43 | 298 | 1 | 7 | 44 | 305 | 130 | 66 | 2 | 0 | 68 | 24 |
| Hyde Park City | 813 | 147 | 221 | 40 | 1,034 | 187 | 4,926 | 1,417 | 340 | 0 | 1,757 | 723 |
| Hyrum City | 4,660 | 449 | 868 | 84 | 5,528 | 533 | 9,255 | 6,382 | 1,400 | 0 | 7,782 | 2254 |
| Lewiston City | 636 | 319 | 49 | 24 | 685 | 343 | 1,781 | 1,612 | 96 | 0 | 1,708 | 1023 |
| Logan City | 9,427 | 148 | 1,090 | 17 | 10,517 | 165 | 56,851 | 16,652 | 1,820 | 0 | 18,472 | 7955 |
| Mendon City Culinary Water System | 200 | 97 | 127 | 61 | 327 | 158 | 1,844 | 356 | 190 | 0 | 546 | 218 |
| Millville City Water | 473 | 185 | 33 | 13 | 506 | 198 | 2,281 | 825 | 54 | 0 | 879 | 373 |
| Newton Town Water | 206 | 217 | 100 | 106 | 306 | 322 | 847 | 246 | 187 | 0 | 433 | 127 |
| Nibley City | 1,201 | 123 | 245 | 25 | 1,446 | 148 | 8,734 | 2,499 | 300 | 0 | 2,799 | 1353 |
| North Logan Water | 1,795 | 138 | 167 | 13 | 1,962 | 151 | 11,614 | 1,727 | 235 | 0 | 1,962 | (0) |
| Paradise Town | 122 | 98 | 182 | 146 | 304 | 243 | 1,118 | 497 | 290 | 0 | 787 | 482 |
| Providence Town Water System | 2,352 | 234 | 65 | 6 | 2,417 | 241 | 8,954 | 4,076 | 100 | 0 | 4,176 | 1759 |
| Richmond City Corp. | 701 | 225 | 171 | 55 | 872 | 280 | 2,785 | 1,388 | 300 | 0 | 1,688 | 816 |
| River Heights City | 552 | 212 | 21 | 8 | 573 | 220 | 2,324 | 2,099 | 34 | 0 | 2,133 | 1559 |
| Smithfield City | 1,901 | 139 | 902 | 66 | 2,803 | 205 | 12,184 | 5,976 | 1,405 | 0 | 7,381 | 4578 |
| South Cove Water Works Co., Inc. | 6 | 78 | 11 | 142 | 17 | 220 | 70 | 197 | 22 | 0 | 219 | 202 |
| Trenton Town Corp. Water | 176 | 262 | 29 | 43 | 205 | 305 | 600 | 225 | 48 | 0 | 273 | 68 |
| Wellsville City Corp. | 1,587 | 344 | 12 | 3 | 1,599 | 346 | 4,121 | 5,730 | 20 | 0 | 5,750 | 4151 |
| Cache Total | 28,463 | 190 | 4,441 | 30 | 32,560 | 219 | 133,898 | 54,586 | 7,037 | 0 | 61,623 | (0) |

GPCD Projections and Use to 2060

| System | 2025 | | | | | | | | | | | | | | |
|-----------------------------------|---------------|--------------|-----------------|---------------|----------------|-----------------|-------------------|------------|-----------------------|----------------|----------------|---------------|------------|-----------------|--------------|
| | Potable Use | Potable GPCD | POT % Reduction | Secondary Use | Secondary GPCD | SEC % Reduction | Total Use (ac-ft) | Total GPCD | % Reduction from 2000 | Population | Potable Supply | Secondary Use | New Supply | Reliable Supply | Deficit |
| Cache County | | | | | | | | | | | | | | | |
| Amalga Town Culinary Water System | 660 | 962 | 24% | 3 | 4 | 26% | 662 | 966 | 24% | 612 | 686 | 5 | 0 | 691 | 29 |
| Benson Water Culinary District | 457 | 174 | 24% | 76 | 29 | 26% | 533 | 203 | 24% | 2,342 | 348 | 50 | 0 | 398 | (135) |
| Clarkston Town Culinary Water | 210 | 203 | 24% | 46 | 45 | 26% | 256 | 248 | 24% | 923 | 1,049 | 83 | 0 | 1,132 | 875 |
| Cornish Town Water | 96 | 245 | 24% | 26 | 66 | 26% | 122 | 311 | 24% | 349 | 142 | 44 | 0 | 186 | 64 |
| Goaslind Spring Water Works Co. | 5 | 78 | 24% | 6 | 87 | 26% | 11 | 165 | 25% | 60 | 394 | 12 | 0 | 406 | 395 |
| High Creek Culinary Water System | 42 | 290 | 24% | 1 | 7 | 26% | 43 | 297 | 24% | 130 | 66 | 2 | 0 | 68 | 25 |
| Hyde Park City | 893 | 143 | 24% | 240 | 38 | 26% | 1,133 | 182 | 24% | 5,568 | 1,417 | 340 | 0 | 1,757 | 624 |
| Hyrum City | 4,955 | 437 | 24% | 911 | 80 | 26% | 5,866 | 517 | 24% | 10,124 | 6,382 | 1,400 | 0 | 7,782 | 1916 |
| Lewiston City | 689 | 310 | 24% | 52 | 23 | 26% | 742 | 333 | 24% | 1,986 | 1,612 | 96 | 0 | 1,708 | 966 |
| Logan City | 9,717 | 144 | 24% | 1,109 | 16 | 26% | 10,826 | 160 | 24% | 60,281 | 16,652 | 1,820 | 0 | 18,472 | 7646 |
| Mendon City Culinary Water System | 227 | 94 | 24% | 141 | 59 | 26% | 368 | 153 | 25% | 2,145 | 356 | 190 | 0 | 546 | 178 |
| Millville City Water | 502 | 180 | 24% | 34 | 12 | 26% | 536 | 192 | 24% | 2,487 | 825 | 54 | 0 | 879 | 343 |
| Newton Town Water | 201 | 211 | 24% | 96 | 101 | 26% | 297 | 312 | 24% | 850 | 246 | 187 | 0 | 433 | 136 |
| Nibley City | 1,522 | 119 | 24% | 307 | 24 | 26% | 1,829 | 143 | 24% | 11,386 | 2,499 | 300 | 0 | 2,799 | 970 |
| North Logan Water | 1,994 | 134 | 24% | 183 | 12 | 26% | 2,177 | 146 | 24% | 13,272 | 1,727 | 235 | 0 | 1,962 | (215) |
| Paradise Town | 130 | 95 | 24% | 191 | 140 | 26% | 321 | 234 | 25% | 1,223 | 497 | 290 | 0 | 787 | 465 |
| Providence Town Water System | 2,630 | 228 | 24% | 71 | 6 | 26% | 2,701 | 234 | 24% | 10,299 | 4,076 | 100 | 0 | 4,176 | 1474 |
| Richmond City Corp. | 711 | 218 | 24% | 171 | 53 | 26% | 882 | 271 | 24% | 2,906 | 1,388 | 300 | 0 | 1,688 | 806 |
| River Heights City | 545 | 206 | 24% | 20 | 8 | 26% | 565 | 214 | 24% | 2,360 | 2,099 | 34 | 0 | 2,133 | 1567 |
| Smithfield City | 2,087 | 135 | 24% | 977 | 63 | 26% | 3,064 | 199 | 24% | 13,761 | 5,976 | 1,405 | 0 | 7,381 | 4317 |
| South Cove Water Works Co., Inc. | 6 | 76 | 24% | 11 | 136 | 26% | 17 | 212 | 25% | 70 | 197 | 22 | 0 | 219 | 202 |
| Trenton Town Corp. Water | 189 | 255 | 24% | 31 | 42 | 26% | 220 | 296 | 24% | 662 | 225 | 48 | 0 | 273 | 53 |
| Wellsville City Corp. | 1,705 | 334 | 24% | 13 | 3 | 26% | 1,718 | 337 | 24% | 4,555 | 5,730 | 20 | 0 | 5,750 | 4032 |
| Cache Total | 30,172 | 182 | 25% | 4,717 | 28 | 26% | 34,889 | 210 | 25% | 148,352 | 54,586 | 7,037 | 0 | 61,623 | (350) |

GPCD Projections and Use to 2060

| System | 2030 | | | | | | | | | | | | | | |
|-----------------------------------|---------------|--------------|-----------------|---------------|----------------|-----------------|-------------------|------------|-----------------------|----------------|----------------|---------------|------------|-----------------|--------------|
| | Potable Use | Potable GPCD | POT % Reduction | Secondary Use | Secondary GPCD | SEC % Reduction | Total Use (ac-ft) | Total GPCD | % Reduction from 2000 | Population | Potable Supply | Secondary Use | New Supply | Reliable Supply | Deficit |
| Cache County | | | | | | | | | | | | | | | |
| Amalga Town Culinary Water System | 688 | 964 | 24% | 3 | 4 | 26% | 691 | 968 | 24% | 637 | 686 | 5 | 0 | 691 | 0 |
| Benson Water Culinary District | 591 | 174 | 24% | 98 | 29 | 26% | 689 | 203 | 24% | 3,025 | 348 | 50 | 0 | 398 | (291) |
| Clarkston Town Culinary Water | 230 | 203 | 24% | 50 | 45 | 26% | 281 | 248 | 24% | 1,010 | 1,049 | 83 | 0 | 1,132 | 851 |
| Cornish Town Water | 100 | 246 | 24% | 27 | 66 | 26% | 127 | 311 | 24% | 364 | 142 | 44 | 0 | 186 | 59 |
| Goaslind Spring Water Works Co. | 5 | 79 | 24% | 6 | 86 | 26% | 11 | 165 | 25% | 60 | 394 | 12 | 0 | 406 | 395 |
| High Creek Culinary Water System | 42 | 291 | 24% | 1 | 7 | 26% | 43 | 297 | 24% | 130 | 66 | 2 | 0 | 68 | 25 |
| Hyde Park City | 998 | 144 | 24% | 267 | 38 | 26% | 1,265 | 182 | 24% | 6,209 | 1,417 | 340 | 0 | 1,757 | 492 |
| Hyrum City | 5,390 | 438 | 24% | 986 | 80 | 26% | 6,377 | 518 | 24% | 10,993 | 6,382 | 1,400 | 0 | 7,782 | 1405 |
| Lewiston City | 762 | 310 | 24% | 58 | 23 | 26% | 819 | 334 | 24% | 2,191 | 1,612 | 96 | 0 | 1,708 | 888 |
| Logan City | 10,288 | 144 | 24% | 1,169 | 16 | 26% | 11,457 | 161 | 24% | 63,712 | 16,652 | 1,820 | 0 | 18,472 | 7015 |
| Mendon City Culinary Water System | 259 | 94 | 24% | 161 | 59 | 26% | 419 | 153 | 25% | 2,445 | 356 | 190 | 0 | 546 | 126 |
| Millville City Water | 544 | 180 | 24% | 37 | 12 | 26% | 581 | 193 | 24% | 2,694 | 825 | 54 | 0 | 879 | 298 |
| Newton Town Water | 202 | 211 | 24% | 96 | 101 | 26% | 298 | 312 | 24% | 852 | 246 | 187 | 0 | 433 | 135 |
| Nibley City | 1,880 | 120 | 24% | 377 | 24 | 26% | 2,257 | 144 | 24% | 14,038 | 2,499 | 300 | 0 | 2,799 | 542 |
| North Logan Water | 2,247 | 134 | 24% | 206 | 12 | 26% | 2,453 | 147 | 24% | 14,930 | 1,727 | 235 | 0 | 1,962 | (491) |
| Paradise Town | 141 | 95 | 24% | 207 | 139 | 26% | 348 | 234 | 25% | 1,328 | 497 | 290 | 0 | 787 | 438 |
| Providence Town Water System | 2,979 | 228 | 24% | 81 | 6 | 26% | 3,059 | 235 | 24% | 11,645 | 4,076 | 100 | 0 | 4,176 | 1116 |
| Richmond City Corp. | 742 | 219 | 24% | 178 | 52 | 26% | 920 | 271 | 24% | 3,026 | 1,388 | 300 | 0 | 1,688 | 768 |
| River Heights City | 554 | 207 | 24% | 20 | 8 | 26% | 575 | 214 | 24% | 2,395 | 2,099 | 34 | 0 | 2,133 | 1558 |
| Smithfield City | 2,330 | 136 | 24% | 1,086 | 63 | 26% | 3,416 | 199 | 24% | 15,338 | 5,976 | 1,405 | 0 | 7,381 | 3965 |
| South Cove Water Works Co., Inc. | 6 | 76 | 24% | 11 | 136 | 26% | 17 | 212 | 25% | 70 | 197 | 22 | 0 | 219 | 202 |
| Trenton Town Corp. Water | 207 | 255 | 24% | 34 | 41 | 26% | 241 | 297 | 24% | 725 | 225 | 48 | 0 | 273 | 32 |
| Wellsville City Corp. | 1,871 | 335 | 24% | 14 | 3 | 26% | 1,885 | 337 | 24% | 4,989 | 5,730 | 20 | 0 | 5,750 | 3865 |
| Cache Total | 33,057 | 181 | 25% | 5,172 | 28 | 26% | 38,229 | 210 | 25% | 162,806 | 54,586 | 7,037 | 0 | 61,623 | (782) |

GPCD Projections and Use to 2060

| System | 2040 | | | | | | | | | | | | | | |
|-----------------------------------|---------------|--------------|-----------------|---------------|----------------|-----------------|-------------------|------------|-----------------------|----------------|----------------|---------------|------------|-----------------|----------------|
| | Potable Use | Potable GPCD | POT % Reduction | Secondary Use | Secondary GPCD | SEC % Reduction | Total Use (ac-ft) | Total GPCD | % Reduction from 2000 | Population | Potable Supply | Secondary Use | New Supply | Reliable Supply | Deficit |
| Cache County | | | | | | | | | | | | | | | |
| Amalga Town Culinary Water System | 711 | 969 | 23% | 3 | 4 | 26% | 714 | 973 | 23% | 655 | 686 | 5 | 0 | 691 | (23) |
| Benson Water Culinary District | 842 | 176 | 23% | 137 | 29 | 26% | 979 | 204 | 24% | 4,281 | 348 | 50 | 0 | 398 | (582) |
| Clarkston Town Culinary Water | 271 | 205 | 23% | 59 | 44 | 26% | 329 | 249 | 24% | 1,181 | 1,049 | 83 | 0 | 1,132 | 802 |
| Cornish Town Water | 107 | 247 | 23% | 28 | 65 | 26% | 135 | 313 | 24% | 387 | 142 | 44 | 0 | 186 | 51 |
| Goaslind Spring Water Works Co. | 5 | 79 | 23% | 6 | 86 | 26% | 11 | 165 | 25% | 60 | 394 | 12 | 0 | 406 | 395 |
| High Creek Culinary Water System | 43 | 292 | 23% | 1 | 7 | 26% | 44 | 299 | 23% | 130 | 66 | 2 | 0 | 68 | 24 |
| Hyde Park City | 1,220 | 144 | 23% | 323 | 38 | 26% | 1,543 | 183 | 24% | 7,546 | 1,417 | 340 | 0 | 1,757 | 214 |
| Hyrum City | 6,262 | 440 | 23% | 1,134 | 80 | 26% | 7,396 | 520 | 24% | 12,695 | 6,382 | 1,400 | 0 | 7,782 | 386 |
| Lewiston City | 896 | 312 | 23% | 67 | 23 | 26% | 963 | 336 | 24% | 2,561 | 1,612 | 96 | 0 | 1,708 | 745 |
| Logan City | 12,408 | 145 | 23% | 1,395 | 16 | 26% | 13,803 | 161 | 24% | 76,381 | 16,652 | 1,820 | 0 | 18,472 | 4,669 |
| Mendon City Culinary Water System | 297 | 95 | 23% | 182 | 58 | 26% | 479 | 153 | 24% | 2,790 | 356 | 190 | 0 | 546 | 66 |
| Millville City Water | 623 | 181 | 23% | 42 | 12 | 26% | 665 | 194 | 24% | 3,065 | 825 | 54 | 0 | 879 | 214 |
| Newton Town Water | 237 | 212 | 23% | 112 | 100 | 26% | 349 | 313 | 24% | 996 | 246 | 187 | 0 | 433 | 84 |
| Nibley City | 2,103 | 120 | 23% | 418 | 24 | 26% | 2,521 | 144 | 24% | 15,615 | 2,499 | 300 | 0 | 2,799 | 278 |
| North Logan Water | 2,524 | 135 | 23% | 229 | 12 | 26% | 2,752 | 147 | 24% | 16,669 | 1,727 | 235 | 0 | 1,962 | (790) |
| Paradise Town | 165 | 96 | 23% | 240 | 139 | 26% | 405 | 234 | 25% | 1,545 | 497 | 290 | 0 | 787 | 381 |
| Providence Town Water System | 3,503 | 230 | 23% | 94 | 6 | 26% | 3,597 | 236 | 23% | 13,613 | 4,076 | 100 | 0 | 4,176 | 579 |
| Richmond City Corp. | 824 | 220 | 23% | 195 | 52 | 26% | 1,019 | 272 | 24% | 3,342 | 1,388 | 300 | 0 | 1,688 | 669 |
| River Heights City | 585 | 208 | 23% | 21 | 8 | 26% | 607 | 215 | 23% | 2,514 | 2,099 | 34 | 0 | 2,133 | 1,526 |
| Smithfield City | 2,829 | 136 | 23% | 1,304 | 63 | 26% | 4,133 | 199 | 24% | 18,509 | 5,976 | 1,405 | 0 | 7,381 | 3,248 |
| South Cove Water Works Co., Inc. | 6 | 77 | 23% | 11 | 135 | 26% | 17 | 212 | 25% | 70 | 197 | 22 | 0 | 219 | 202 |
| Trenton Town Corp. Water | 244 | 257 | 23% | 39 | 41 | 26% | 283 | 298 | 24% | 847 | 225 | 48 | 0 | 273 | (10) |
| Wellsville City Corp. | 2,179 | 337 | 23% | 16 | 3 | 26% | 2,195 | 339 | 23% | 5,776 | 5,730 | 20 | 0 | 5,750 | 3,555 |
| Cache Total | 38,885 | 182 | 25% | 6,055 | 28 | 26% | 44,940 | 210 | 25% | 191,229 | 54,586 | 7,037 | 0 | 61,623 | (1,405) |

GPCD Projections and Use to 2060

| System | 2050 | | | | | | | | | | | | | | |
|-----------------------------------|---------------|--------------|-----------------|---------------|----------------|-----------------|-------------------|------------|------------|----------------|---------------|--------------|-----------------|---------------|----------------|
| | Potable Use | Potable GPCD | POT % Reduction | Secondary Use | Secondary GPCD | SEC % Reduction | Total Use (ac-ft) | Total GPCD | Population | Potable Supply | Secondary Use | New Supply | Reliable Supply | Deficit | |
| Cache County | | | | | | | | | | | | | | | |
| Amalga Town Culinary Water System | 1,086 | 960 | 24% | 5 | 4 | 25% | 1,091 | 965 | 24% | 1,010 | 686 | 5 | 0 | 691 | (400) |
| Benson Water Culinary District | 1,347 | 174 | 24% | 224 | 29 | 25% | 1,571 | 203 | 24% | 6,917 | 348 | 50 | 0 | 398 | (1,174) |
| Clarkston Town Culinary Water | 317 | 203 | 24% | 70 | 45 | 25% | 387 | 248 | 24% | 1,396 | 1,049 | 83 | 0 | 1,132 | 744 |
| Cornish Town Water | 129 | 245 | 24% | 35 | 66 | 25% | 163 | 311 | 24% | 468 | 142 | 44 | 0 | 186 | 23 |
| Goaslind Spring Water Works Co. | 5 | 78 | 24% | 6 | 87 | 25% | 11 | 165 | 25% | 60 | 394 | 12 | 0 | 406 | 395 |
| High Creek Culinary Water System | 42 | 290 | 24% | 1 | 7 | 25% | 43 | 296 | 24% | 130 | 66 | 2 | 0 | 68 | 25 |
| Hyde Park City | 1,228 | 143 | 24% | 331 | 38 | 25% | 1,559 | 182 | 24% | 7,667 | 1,417 | 340 | 0 | 1,757 | 198 |
| Hyrum City | 7,687 | 436 | 24% | 1,417 | 80 | 25% | 9,103 | 517 | 24% | 15,729 | 6,382 | 1,400 | 0 | 7,782 | (1,321) |
| Lewiston City | 1,211 | 309 | 24% | 92 | 24 | 25% | 1,303 | 333 | 24% | 3,495 | 1,612 | 96 | 0 | 1,708 | 404 |
| Logan City | 14,912 | 144 | 24% | 1,706 | 16 | 25% | 16,618 | 160 | 24% | 92,651 | 16,652 | 1,820 | 0 | 18,472 | 1,854 |
| Mendon City Culinary Water System | 321 | 94 | 24% | 201 | 59 | 25% | 522 | 153 | 25% | 3,046 | 356 | 190 | 0 | 546 | 23 |
| Millville City Water | 802 | 180 | 24% | 55 | 12 | 25% | 857 | 192 | 24% | 3,983 | 825 | 54 | 0 | 879 | 22 |
| Newton Town Water | 278 | 210 | 24% | 134 | 101 | 25% | 412 | 312 | 25% | 1,179 | 246 | 187 | 0 | 433 | 21 |
| Nibley City | 2,465 | 119 | 24% | 498 | 24 | 25% | 2,963 | 143 | 24% | 18,467 | 2,499 | 300 | 0 | 2,799 | (164) |
| North Logan Water | 2,783 | 134 | 24% | 257 | 12 | 25% | 3,040 | 146 | 24% | 18,555 | 1,727 | 235 | 0 | 1,962 | (1,078) |
| Paradise Town | 198 | 95 | 24% | 293 | 140 | 25% | 491 | 234 | 25% | 1,871 | 497 | 290 | 0 | 787 | 295 |
| Providence Town Water System | 4,105 | 228 | 24% | 112 | 6 | 25% | 4,216 | 234 | 24% | 16,100 | 4,076 | 100 | 0 | 4,176 | (41) |
| Richmond City Corp. | 1,022 | 218 | 24% | 247 | 53 | 25% | 1,269 | 271 | 24% | 4,184 | 1,388 | 300 | 0 | 1,688 | 419 |
| River Heights City | 656 | 206 | 24% | 24 | 8 | 25% | 681 | 214 | 24% | 2,846 | 2,099 | 34 | 0 | 2,133 | 1,452 |
| Smithfield City | 2,919 | 135 | 24% | 1,371 | 63 | 25% | 4,290 | 199 | 25% | 19,280 | 5,976 | 1,405 | 0 | 7,381 | 3,091 |
| South Cove Water Works Co., Inc. | 6 | 76 | 24% | 11 | 136 | 25% | 17 | 212 | 25% | 70 | 197 | 22 | 0 | 219 | 202 |
| Trenton Town Corp. Water | 286 | 254 | 24% | 47 | 42 | 25% | 332 | 296 | 24% | 1,002 | 225 | 48 | 0 | 273 | (59) |
| Wellsville City Corp. | 2,628 | 334 | 24% | 20 | 3 | 25% | 2,648 | 336 | 24% | 7,032 | 5,730 | 20 | 0 | 5,750 | 3,102 |
| Cache Total | 46,434 | 183 | 25% | 7,155 | 28 | 26% | 53,589 | 211 | 25% | 227,138 | 54,586 | 7,037 | 0 | 61,623 | (4,238) |

GPCD Projections and Use to 2060

| System | 2060 | | | | | | | | | | | | | | |
|-----------------------------------|---------------|--------------|-----------------|---------------|----------------|-----------------|-------------------|------------|-----------------------|----------------|----------------|---------------|------------|-----------------|-----------------|
| | Potable Use | Potable GPCD | POT % Reduction | Secondary Use | Secondary GPCD | SEC % Reduction | Total Use (ac-ft) | Total GPCD | % Reduction from 2000 | Population | Potable Supply | Secondary Use | New Supply | Reliable Supply | Deficit |
| Cache County | | | | | | | | | | | | | | | |
| Amalga Town Culinary Water System | 1,281 | 961 | 24% | 5 | 4 | 25% | 1,286 | 965 | 24% | 1,190 | 686 | 5 | 0 | 691 | (595) |
| Benson Water Culinary District | 1,592 | 174 | 24% | 265 | 29 | 25% | 1,857 | 203 | 24% | 8,164 | 348 | 50 | 0 | 398 | (1,459) |
| Clarkston Town Culinary Water | 374 | 203 | 24% | 83 | 45 | 25% | 456 | 248 | 24% | 1,645 | 1,049 | 83 | 0 | 1,132 | 675 |
| Cornish Town Water | 152 | 245 | 24% | 41 | 66 | 25% | 192 | 311 | 24% | 551 | 142 | 44 | 0 | 186 | (6) |
| Goaslind Spring Water Works Co. | 5 | 78 | 24% | 6 | 87 | 25% | 11 | 165 | 25% | 60 | 394 | 12 | 0 | 406 | 395 |
| High Creek Culinary Water System | 42 | 290 | 24% | 1 | 7 | 25% | 43 | 297 | 24% | 130 | 66 | 2 | 0 | 68 | 25 |
| Hyde Park City | 1,355 | 143 | 24% | 365 | 39 | 25% | 1,720 | 182 | 24% | 8,448 | 1,417 | 340 | 0 | 1,757 | 37 |
| Hyrum City | 9,227 | 437 | 24% | 1,703 | 81 | 25% | 10,930 | 517 | 24% | 18,864 | 6,382 | 1,400 | 0 | 7,782 | (3,148) |
| Lewiston City | 1,333 | 310 | 24% | 101 | 24 | 25% | 1,434 | 333 | 24% | 3,842 | 1,612 | 96 | 0 | 1,708 | 273 |
| Logan City | 17,931 | 144 | 24% | 2,055 | 16 | 25% | 19,986 | 160 | 24% | 111,314 | 16,652 | 1,820 | 0 | 18,472 | (1,514) |
| Mendon City Culinary Water System | 379 | 94 | 24% | 237 | 59 | 25% | 616 | 153 | 25% | 3,588 | 356 | 190 | 0 | 546 | (70) |
| Millville City Water | 978 | 180 | 24% | 67 | 12 | 25% | 1,045 | 192 | 24% | 4,854 | 825 | 54 | 0 | 879 | (166) |
| Newton Town Water | 328 | 211 | 24% | 158 | 102 | 25% | 486 | 312 | 24% | 1,388 | 246 | 187 | 0 | 433 | (53) |
| Nibley City | 2,906 | 119 | 24% | 588 | 24 | 25% | 3,494 | 143 | 24% | 21,752 | 2,499 | 300 | 0 | 2,799 | (695) |
| North Logan Water | 3,281 | 134 | 24% | 303 | 12 | 25% | 3,584 | 146 | 24% | 21,855 | 1,727 | 235 | 0 | 1,962 | (1,622) |
| Paradise Town | 236 | 95 | 24% | 349 | 140 | 25% | 586 | 235 | 25% | 2,226 | 497 | 290 | 0 | 787 | 201 |
| Providence Town Water System | 4,839 | 228 | 24% | 132 | 6 | 25% | 4,971 | 234 | 24% | 18,964 | 4,076 | 100 | 0 | 4,176 | (795) |
| Richmond City Corp. | 1,272 | 218 | 24% | 308 | 53 | 25% | 1,580 | 271 | 24% | 5,203 | 1,388 | 300 | 0 | 1,688 | 108 |
| River Heights City | 774 | 206 | 24% | 29 | 8 | 25% | 803 | 214 | 24% | 3,352 | 2,099 | 34 | 0 | 2,133 | 1,330 |
| Smithfield City | 3,255 | 135 | 24% | 1,531 | 64 | 25% | 4,785 | 199 | 24% | 21,480 | 5,976 | 1,405 | 0 | 7,381 | 2,596 |
| South Cove Water Works Co., Inc. | 6 | 76 | 24% | 11 | 137 | 25% | 17 | 213 | 25% | 70 | 197 | 22 | 0 | 219 | 202 |
| Trenton Town Corp. Water | 337 | 255 | 24% | 55 | 42 | 25% | 392 | 296 | 24% | 1,180 | 225 | 48 | 0 | 273 | (119) |
| Wellsville City Corp. | 3,129 | 334 | 24% | 24 | 3 | 25% | 3,153 | 336 | 24% | 8,365 | 5,730 | 20 | 0 | 5,750 | 2,597 |
| Cache Total | 55,009 | 183 | 25% | 8,417 | 28 | 27% | 63,426 | 211 | 25% | 268,487 | 54,586 | 7,037 | 0 | 61,623 | (10,243) |