



Executive Summary: USHE Water Conservation

HB121, *Water Conservation Modifications*, requires FY20 baseline data for the 2023 legislative session. Utah's Division of Facilities Construction and Management (DFCM) has collected preliminary data that is included in this brief. Many institutions were able to provide additional detail, but we have an incomplete look at systemwide water reduction and cost savings at this time. We expect to have a full picture of usage and cost savings no later than October 1, 2023, as listed in HB121.

Below is a summary of USHE water usage by year (in gallons), conservation efforts, and cost savings.

University of Utah

- Square feet — 19,306,825
- FY20 usage — 376,575,118
- FY21 usage — 399,178,484
- FY22 usage — 335,091,949
- The U cut irrigation water use by 13% since FY20, exceeding HB121 requirements.
- Reduced total water use by 15% since 2018.

Utah State University (Logan)

- Square feet — 7,677,681
- FY20 usage — 259,742,595
- FY21 usage — 181,000,000
- FY22 usage — 230,000,000

Utah State University (Eastern)

- Square feet — 10,225
- FY20 usage — not reported
- FY21 usage — not reported
- FY22 usage — not reported

Weber State University

- Square feet —
 - FY20: 3,109,721
 - FY21: 3,072,262
 - FY22: 2,883,180
- FY20 usage — 146,078,638
- FY21 usage — 95,303,846
- FY22 usage — 96,687,593

Southern Utah University

- Square feet — 1,823,484
- FY20 usage — 94,321
- FY21 usage — 100,872
- FY22 usage — 56,861

Snow College (Ephraim)

- Square feet — 1,220,085
- FY20 usage — 32,229,853
- FY21 usage — 35,032,789
 - Usage went up because of something reading in the "other" section for more than 2M gallons. The campus is still investigating the cause of this extra usage.
- FY22 usage — 19,604,178

Snow College (Richfield)

- Square feet — 784,080
- FY20 usage — 32,272,000
- FY21 usage — 32,511,000
- FY22 usage — 26,587,000

Utah Tech University

- Square feet – 1,563,808
- FY20 usage – 40,756,000
- FY21 usage – 30,756,287
- FY22 usage – 28,306,768
- Utah Tech has reduced irrigation water use by 24% from 2020 to 2022. This is a savings of 12,449,232 gallons of irrigating (untreated) water.
- The university removed 243,696 square feet of turf grass areas.
- The university also implemented better maintenance of irrigation systems, including changing out clocks and adding filters.

Utah Valley University

- Square feet – 3,420,162
- FY20 usage – 100,126,522
- FY21 usage – 75,502,052 (-24.6%)
- FY22 usage – 68,852,023 (-8.8%)
- Estimated 22.85M gallons of water saved by 2023-24

Salt Lake Community College

- Square feet – 2,990,698.92
- FY20 usage – 119,056,400
- FY21 usage – 114,934,500
- FY22 usage – 79,295,800
- Total annual savings of 39.7m gallons (\$200k).
- Installed artificial turf soccer field and additional xeriscaping.

Bridgerland Technical College

- Square feet – 313,210
- FY20 usage – 14,064,000
- FY21 usage – 12,941,000
- FY22 usage – 7,540,000
- 7.98% water reduction from FY20
- -41.74% water reduction from FY21

Davis Technical College

- Square feet – 391,431
- FY20 usage – 13,800,000
- FY21 usage – 9,500,000
- FY22 usage – 7,000,000
- FY21: Saved 4.3M gallons of irrigation water.
- FY22: Saved an additional 2.4M gallons of irrigation water (26% less water used than the prior year).
- Converted 10K sq. ft. of grass to no-water xeriscape.

Dixie Technical College

- Square feet – 173,650
- FY20 usage – 4,014,790
- FY21 usage – 4,724,890
- FY22 usage – 4,360,970

Mountainland Technical College

- Square feet – 297,395
- FY20 usage – 4,412,650
- FY21 usage – 14,321,529
- FY22 usage – 9,711,914
- Conservation of water and related provisions regarding lawn or turf is underway. The college's overall goal is to reduce irrigation water usage by 5% by 2023 and 25% by 2026.
- The college has reduced its irrigation water use and implemented the following:
 - Adjusted existing irrigation controls and installed additional flow metering devices. This provides analytical information to manage the irrigation systems and also implements forecasting measures to automate adjustments to watering using highly accurate, internet-sourced weather data.
 - Utilized the incentives provided by HB121 to replace lawn or turf with xeriscape drought-resistant landscaping on existing facilities grounds and incorporate this design into future facilities that are underway.

Ogden-Weber Technical College

- Square feet — 1,742,400
- FY20 usage — 24,182,657
- FY21 usage — 9,422,729
- FY22 usage — 8,182,245
- Over the past 3-4 years, the college has upgraded/replaced the campus steam distribution system. This reduced their culinary water usage from 5,000 - 7,000 gallons of water used daily to 400 - 500 gallons used daily. This, on average, saved the college from using 1,800,000 - 2,520,000 gallons of water used per year, down to 144,000 - 180,000 gallons of water used per year.

Southwest Technical College

- Square feet — 117,471
- FY20 usage — 1,254,000
- FY21 usage — 110,946
- FY22 usage — 101,488
- In compliance with HB121, 1,100 sq.ft. of turf (7%) was removed in 2022 and another 6,300 sq.ft. will be removed in 2023. This will be a total of 46% of turf reduction.

Tooele Technical College

- Square feet — 75,148
- FY20 usage — 3,960,000
- FY21 usage — 4,266,000
- FY22 usage — 3,216,750
- The college is focusing on having a small footprint by using native grasses and limiting the watering of outdoor plants.
- The college reduced water consumption by:
 - Upgrading irrigation control systems.
 - Planning to reduce grass and replace it with decorative rock.

Uintah Basin Technical College

- Square feet — 386,050
- FY20 usage — 11,815,000
- FY21 usage — 14,947,000
- FY22 usage — 11,558,000
- The college has an eight-year plan for environmental sustainability.
 - Xeriscaping landscaping: 61% complete

Utah Board of Higher Education (Commissioner's Office)/State Board of Regents

- Square feet — 81,794
- FY20 usage — 36,652
- FY21 usage — 51,812
- FY22 usage — 22,440

