



# University of Colorado Boulder Water Conservation

## Domestic Water

**Fixtures** Water saving, Low-Flow devices are the standard for all new construction and major renovations. Devices like aerators have been installed through out campus facilities in various projects over the years. 1.28 GPF vs. traditional 3.5 GPF toilets are the campus standard.



**Bottle Filling Stations** Even though they don't technically conserve water, bottle filling stations promote sustainability by reducing the number of disposable plastic water bottles thus reducing the amount waste going to the landfill. Less landfill waste equates to reduced emissions.



**Grey Water System** In 2011, The Williams Village North Residence Hall was constructed and includes a greywater system estimated to save 700,000 gallons of water a year. The non-potable water system harvests used water from showers and sinks, treats it, then reuses it for flushing and cooling tower make-up.

## Irrigation

**Centrally Controlled** CU Boulder owns the largest centrally controlled irrigation system West of the Mississippi River with 83 satellites running off a single network computer. Over 50,000 sprinkler heads are controlled with four separate head gates supplying the irrigation system.



**Ditch Water** CU owns water rights from the Anderson Ditch and Smith-Goss Ditch to irrigate 140 acres - 100% of Main Campus, the South Research Park and Newton Court. Over 80,000,000 gallons of ditch water is used in a normal year. By using ditch water, CU saves approximately \$440,000 a year.

**Pond System** Irrigation ponds thru out campus provide roughly a 3 day holding capacity based on irrigation usage / area.



**TurfGuard Sensors** Probes are deployed thru-out campus to monitor infiltration and percolation rates of the soil. This data is then used to determine watering requirements. Weather stations located at GROC, Potts Field and Williams Village provide data on rainfall, solar radiation and evapotranspiration to the control system.

## Lab Process Water

**Research Facilities** Water use in labs is only second to Housing among facilities at CU Boulder. Equipment like condensers and autoclaves use domestic water.



**Green Labs** In an effort to reduce water use in labs, Green Labs works with researchers to replace equipment with water-less versions, or more efficient pieces. Waterless, findensers eliminate the need for water entirely.