A combination of features reduces this facility’s potable water demand by 85-90% of a comparably sized office building.

Living Blue

Demonstrating synergy between terrestrial and space applications, Sustainability Base is beta-testing a NASA-developed grey water recycling system. Once-used soapy water from sinks and showers will be reclaimed in a three-stage process and used secondarily to flush toilets (in our low flow fixtures, which use only 0.8 gal., less than 0.5 L., per flush.) The technology uses both forward and reverse osmosis and relies on specially engineered osmotic membranes. This feature lowers potable water consumption ~60%, and is made possible by the thoughtful incorporation of a double-piping system in Sustainability Base’s design and construction, allowing isolation of both the grey water and reclaimed product. Another instance of “native-to-place” design makes use of our unique location adjacent to a superfund clean-up site. Remediated and tested groundwater from a treatment facility supervised by the Environmental Protection Agency is used for irrigation. You can see the lavender fixtures and utility boxes around the building.

Drought tolerant native plants minimize watering requirements and landscaped bio-swales (undulating basins and hillocks) maximize absorption of rainwater by vegetation, and minimize freshwater run-off while providing natural filtering through soil and vegetation. One of the larger hillocks conceals a 6000 gal. on-site storage tank for reclaimed water.

The combination of these features reduces this facility’s potable water demand by 85-90% of a comparably sized office building.