

Visitor Center Green Building Features

Site

- Building is integrated into the hillside, minimized site disturbances
- The building uses an existing parking lot, minimizing new paving
- Alternative transportation — bicycle storage and shower provided
- Site disturbance limited to 40 feet beyond building, 5 feet beyond walkways
- No net increase in rate and quantity of storm water runoff
- BMP implementation for removal of suspended solids and phosphorous in storm water
- 37% of roof is landscaped and 63% is high-reflectance/high emissivity metal roofing, resulting in reduced heat island effect and storm water runoff
- Light pollution reduction — zero direct-beam illumination leaves the building site

Water/Waste

- Rainwater harvesting, via the main section of metal roof is stored in a 10,000-gallon cistern for non-potable uses such as hand washing, mop and lab sinks, and exterior wall hydrants
- Minimal site landscaping reduces water usage
- No sewer-waterless urinals and composting toilets
- Converting Waste to Food — Nitrogen rich liquid from the compost bins will be used with diluted greywater before being fed to a demonstration garden using drip irrigation lines at the root level of the plants
- Centrally located recycling station accessible to the public as well as the building's staff
- Water Conservation Strategies result in a potable water use reduction of 77%

Energy

- Long rectangular shape with the long side facing south and the short ends facing East/West to shape and orientation of building maximizes solar exposure and control
- Earth sheltered construction on the north side of the building
- Energy performance achieving a 34% reduction from the ASHRAE 90.1-1999 Standard
- Design of fenestration for daylighting and control of solar gain
- High insulation values — R-40 roofs, R-19 walls
- Equipment using no HCFC's or halon
- The purchase of green power is being considered for this building

Materials

- Construction waste management — Recycle and/or salvage at least 75% (by weight) construction waste
- Steel structure, framing, and siding contribute to the use of locally manufactured building materials using recycled content
- Masonry stucco and fly-ash concrete increase use of locally manufactured building material

Indoor Environmental Quality

- IAQ management plan during construction and before occupancy
- Low-emitting materials used throughout interior
- Ample clerestory windows along north and south facades provide daylighting
- South facing windows protected from summer sun by sunshades/light shelves