

Aldo Leopold Legacy Center

Location: Baraboo, WI Architect: The Kubala Washatko Architects, Inc.



Overview

The Cesar Chavez Library is integrated into a park made of mounded earth adjacent to a large constructed lake—a remnant from mid-20th century water attitudes. Unlike climates that will have rain every week, the desert is a unique circumstance that requires special consideration of water as well as energy conservation. The limitations imposed by the site, and these values, developed the innovations to be discussed in later measures.

SUSTAINABILITY SNAPSHOT

- Percent of total building area that is daylight: **89**
- Percent of building that can be ventilated or cooled with operable windows: **89**
- Precipitation managed on site: **100**
- EPA Energy Reduction: **96**
- Percent total energy savings: **59**
- Lighting Load after Controls (W/sf): **1.39**

Jury Comments:

“We should expect nothing less from environmental education centers—performance that goes far beyond any preexisting green criteria.” – **Rebecca Henn**

“From a energy performance standpoint, this is a great project.” – **Jason McLennan**

“There is admirable use of the typical sustainable design vocabulary that we know today, and this achieved stellar performance.” – **Susan Rodriguez**

“This project represents a stellar response to conventional metrics.” – **Marvin Malecha**

“This building’s performance is impressive, asnd is achieved by utilizing a combination of low technology with more contemporary innovations. With public education as an important mission of this project, the wide range of design strategies and technologies are made visible to the users of the building, so they could serve as precedents either individually or in their entirety.” – **Gail Brager**



Sustainable Design Intent & Innovation

The Foundation located the project on a previously disturbed site, which it is restoring to native ecosystems. The project team used crushed gravel in place of blacktop or concrete paving, increasing rainwater infiltration and blending the developed areas into the surrounding landscape.

The native landscaping requires no irrigation. Waterless urinals, dual-flush toilets, and efficient faucets reduce water consumption by 65%. An on-site well provides potable water, and an existing septic system treats wastewater.

Thinning the Leopold forests improved forest health while providing 90,000 board feet of wood for use in the project. More than 75% of all wood used in the project was certified to Forest Stewardship Council standards, and 60% of all materials were manufactured within 500 miles of the project site.

The Legacy Center was designed to use 70% less energy than a comparable conventional building. A 39.6-kW rooftop photovoltaic array produces more than 110% of the project's annual electricity needs. This excess renewable energy, along with on-site carbon sequestration, offsets the greenhouse gas emissions resulting from the project's operations.

Daylighting eliminates the need for electric lighting during most of the day. Ground-source heat pumps connected to a radiant slab provide heating and cooling, and an earth-tube system provides tempered fresh air.

Primary Design Team Members

Joel Krueger	Andrew Bangert
Allen Washatko	Brady Farrell
Tom Kubala	Chip Plummer
Mike Utzinger	Bob Hines
Buddy Huffaker	Bob Gilomen
Steve Swenson	Bob Eliopolous
Theresa Lehman	Tom Pfefferkorn
The Boldt Company	Mark Schoeff
Ron Perkins	Missy Inoue
David Bradley	Marcy Hufaker
Fred Bachmann	

Full project profile:

www.aiatopten.org/hpb/overview.cfm?ProjectID=946

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