



November 2014

## **SALVAGED MATERIALS HELP BRING THE BROCK ENVIRONMENTAL CENTER TO LIFE**

The Chesapeake Bay Foundation's Brock Environmental Center, located at Pleasure House Point in Virginia Beach, is one of the most energy efficient, environmentally smart buildings in the world. With its solar panels, wind turbines, geothermal wells, rain cisterns, waterless toilets, and natural landscaping, the center is an international model for energy and water efficiency. Elevated almost 14 feet above sea level, it is also a prototype for coping with climate change in a region increasingly prone to flooding.

The Brock Environmental Center is designed to gain the U.S. Green Building Council's LEED Platinum designation and to meet the strict standards of the Living Building Challenge. One requirement of these stringent sustainability standards is to use as many recycled or salvaged construction materials as possible. Fortunately, the Hampton Roads' community has been very generous in supplying reusable items for the center. From local schools and governments to businesses and private citizens, those contributing the salvaged materials for the Brock Environmental Center reflect the community ideal the facility seeks to embrace.

### **School Contributions**

Art tables from the former Virginia Beach Old Donation Center School have a new life as counter tops in the center's copy room. Storage cabinets and storage shelves from that school have found a new home in the lobby closet. The butcher block island in the center's warming kitchen also is from the Old Donation Center. Lockers at the old Kellam High School in Virginia Beach get a new life in the staff shower and locker room.

Throughout the building, trim for windows, doors jams, and floorboards may look familiar: they are all milled from reclaimed bleachers in Virginia Beach's Salem Middle School that were scheduled for replacement. In summer 2013, CBF staff and volunteers battled heat and old bubble gum to dismantle the bleachers and save them from the landfill. The former Campostella Elementary School in Norfolk was the source for nearly all of the maple floors in the center; in summer 2014, CBF retrieved nearly 4,000-square-feet of flooring that was slated to be removed and sent to the landfill.



*Bleachers from Virginia Beach's Salem Middle School (left) were reused as trim for doors and windows in CBF's Brock Environmental Center (right).*



*Gymnasium flooring from the former Campostella Elementary School in Norfolk (left) was salvaged and repurposed in the Brock Environmental Center (right).*

## Business Contributions

Many of the materials used for the exterior of the Brock Environmental Center were salvaged from local businesses. Century Concrete provided the parking stops on the public road and the exterior metal benches were contributed by Amerigroup (now Anthem/WellPoint). After WellPoint consolidated office space, they generously offered CBF the opportunity to gather many items that would have been demolished or sent to a landfill: salvaged glass doors are now in the meeting rooms; granite countertops are in the Blue Crab Café staff kitchen; and poplar wall paneling now makes up cabinet fronts in the staff kitchen, copy room, and warming kitchen—all from the Amerigroup office. Additional poplar paneling from Amerigroup was used for shelving and the tops of doors.

Salvaged materials make up the majority of the restroom construction, including sinks, mirrors, and soap dispensers from the renovation on Lake Taylor Health Center in Norfolk. Also able to be salvaged from Lake Taylor were fire extinguisher casings and the mop sink that can be found in the warming kitchen. VIRTEXCO facilitated the reuse of the materials that were at Lake Taylor before their renovation.



*Sinks from the former Lake Taylor Health Center in Norfolk have been reused in the Brock Environmental Center.*

Tile for the conference room and education field experience bathrooms are remainders from the Philip Merrill Center, CBF's LEED Platinum-certified headquarters in Annapolis, Maryland.

## Government Contributions

The Hampton Roads Sanitation District (HRSD) allowed CBF to cull through one of its old buildings for materials that found new life as wood doors in the Brock Environmental Center. The Virginia Beach Department of Parks and Recreation donated used bike racks, now placed on the center's property. These racks are especially important as the Brock Environmental Center is a car-free site. Except for ADA and bicycle parking, all visitors and staff park on nearby public streets and walk to the center on a low-impact path through Pleasure House Point's natural landscape.

## Citizen Contributions

CBF partnered with citizens and several local schools and businesses, including Cape Henry Collegiate School, Norfolk Academy, Taste Unlimited, Starbucks and Whole Foods Market, to set up collection bins throughout Hampton Roads for citizens to drop off champagne bottle corks. The corks were reused as knobs for desk and cabinet drawers in the Brock Environmental Center.



*Families at Cape Henry Collegiate School in Virginia Beach collected these bags of champagne corks to be reused at the Brock Environmental Center as drawer handles.*

## Look What We Found!

CBF also was able to take advantage of "found" materials throughout the watershed. For example, a salvaged pickle barrel from Annapolis, Maryland was used as a large rain barrel adjacent to the entrance ramp, and cypress pickle barrel wood from a pickle barrel factory on Maryland's Eastern Shore was used for the reception desk counter top in the lobby. Salvaged redwood from a Pennsylvania water barrel made the Brock Environmental Center's entrance

sign, and reclaimed oak from a West Virginia farm made up the flooring in the Goode Oyster Conference Room and the adjacent hallway.

Salvaged power poles were reused to help in the generation and transmission of the power for the center and to help return surplus clean, renewable energy back to the grid. Driftwood that was found washed up on the shores of the Bay was used to create the beautiful chandeliers in the Clarke Lobby.

The entrance sign poles were made from salvaged wood from a Hourigan Construction project and even the concrete form work used salvaged plywood during construction of the building's foundation.

One of the most interesting stories regarding salvaged materials involves historic trees from Louisiana. Sheathing the exterior walls of the center are planks from "sinker cypress" logs recovered from rivers and bayous in the deep South. The logs are from first-growth cypress trees cut down more than a century ago but lost when they fell off barges and sank on the way to Southern sawmills.

The recently recovered logs—some of which are 500 to 1,000 years old—have been milled and used for the exterior siding of the building. Instead of lying submerged forever in the mud of a Louisiana river bottom, these ancient cypress logs provide beautiful, natural, chemical-free weather-proofing for the center.

CBF is truly thankful to all the contributors who donated materials to make the Brock Environmental Center such an environmentally friendly building. By reusing materials that would otherwise have been discarded, the center used fewer newly fabricated materials, ultimately reducing the carbon footprint of the project and saving landfill space.

#### **About the Brock Environmental Center**

The Brock Environmental Center is an international model for sustainable building and will serve as the regional headquarters for the Chesapeake Bay Foundation and its award-winning environmental education programs in Hampton Roads.

The Center is named in honor of Joan and Macon Brock of Virginia Beach, who generously provided a \$3.6 million leadership gift toward the \$21 million project.

CBF hopes the Brock Environmental Center will serve as motivation for all of us to learn, be challenged, and be inspired to do what is right for the environment, our children, and our future.

To learn more about the Brock Environmental Center, visit [cbf.org/brock](http://cbf.org/brock).



*CBF used "sinker cypress" (cypress logs that have been drowned in rivers for years) like the one pictured above as exterior wall finish at the Brock Environmental Center (pictured below).*



Throughout the Brock Environmental Center, you can find wood from the Hampton Roads Sanitation District and Amerigroup (Anthem) in the doors and caps. Fire extinguisher casings came from the Lake Taylor Health Center. Trim for windows, door jams, and floorboards are made of old bleachers from Virginia Beach's Salem Middle School.

The warming kitchen features cabinets made of poplar wood from an old Amerigroup building, cabinet knobs of recycled champagne corks donated by local citizens, mop sinks from the former Lake Taylor Health Center, and a butcher block island from Virginia Beach School's Old Donation Center.

The lobby closet has storage cabinets from Virginia Beach School's Old Donation Center.

Lockers from Virginia Beach's former Kellam High School are being used in the staff shower and locker room.

The Copy Room features art tables recycled from from the former Virginia Beach Old Donation Center, cabinets made of poplar wood from a former Amerigroup building, and cabinet knobs of recycled champagne corks donated by local citizens.



Flooring in the hallway and the David and Susan Goode Oyster Conference Room are made of reclaimed oak from a West Virginia barn.

Bathrooms have sinks, mirrors, and soap dispensers from the former Lake Taylor Health Center in Norfolk, and tiles from CBF's Phillip Merrill Center in Annapolis.

The reception desk counter top in the George Clarke Lobby is composed of cypress pickle barrel wood from a pickle barrel factory on the Eastern Shore of Maryland. The lobby flooring is the old gym flooring from Norfolk's Campostella Elementary School. Lighting fixtures in the lobby are made of driftwood found washed up on the shores of the Bay.

The glass doors in the Birdsong Peanuts Meeting Room and the JEM Geller Meeting Room are from a former Amerigroup building. The flooring is the old gym flooring from Norfolk's Campostella Elementary School.

The granite countertops in the staff kitchen come from a former Amerigroup credenza. The front of the cabinets in the staff kitchen are made from poplar paneling from a former Amerigroup building, and cabinet knobs are recycled champagne corks donated by Hampton Roads citizens.

The flooring in the office area is the old gym flooring from Norfolk's Campostella Elementary School.

The exterior of the Brock Environmental Center features many salvaged materials, including abandoned "sinker cypress" for the siding, bike racks from the Virginia Beach Department of Parks and Recreation, rain barrels built from salvaged pickle barrel, entrance sign poles constructed from salvaged wood, the entrance sign itself, which is made from the salvaged redwood of a Pennsylvania water barrel, parking stops donated by Century Concrete, exterior metal benches donated by Amerigroup, and power poles that were salvaged when they were no longer needed.