

August, 2008 By: Amy Novotney

As executive director of the Herring Run Watershed Association (HRWA), Mary Sloan Roby spends most of her time planning stream clean-ups, tree plantings, and educational programs that focus on improving the environmental and aesthetic qualities of the forty-four-square-mile Herring Run watershed. This month, she'll get some additional assistance from her refurbished Belair-Edison office space, a former bakery building at the end of a group of rowhouses that HRWA has transformed into its new green headquarters.

Located at the corner of Belair Road and Pelham Avenue, less than half a mile from Herring Run Park, the 2,800-square-foot Watershed Center manifests the organization's watershed restoration mission, which involves water conservation and stormwater management. Nearly 65 percent of the rain that falls on the building's green roof is retained by hardy, low-maintenance plants and soil, with the remaining 35 percent being diverted to a 350-gallon cistern in the building's basement. Unless there's a prolonged drought, the building's two dual-flush toilets draw all of their water from that cistern. On the second floor, a composting toilet collects and processes waste, which is used to fertilize the green roof, and stormwater planters outside the building's new handicap-accessible entrance treat rainwater before sending it downstream. "Being that we're a watershed organization, I really wanted our new building to focus on water management," Roby says.

Staff offices are scattered throughout the building, and there's classroom space on the first floor, plus a kitchen and conference room on the second level that are available for visitors and neighborhood residents to rent out for meetings. The \$622,000 redevelopment project—completed by Hampden-based Baltimore Green Construction—incorporated a host of environmentally friendly materials and appliances, including double-paned windows, motion-detector lighting, an on-demand tankless water heater, ecologically responsible lumber, and insulation materials made from soybeans, corn, and recycled denim. These green technologies should reduce the building's overall energy use by at least 30 percent.

The refurbished building—one of the first in Baltimore City to achieve a silver Leadership in Energy and Environmental Design (LEED) rating from the U.S. Green Building Council—is proof that going green doesn't require unlimited resources or a large amount of space, says Darragh Brady, a senior associate with the Baltimore architecture firm Ziger/Snead and the Center's project manager and architect. "We took a simple urban building and renovated it under a tight budget, in a way that was much more sustainable and that really fit with the organization's mission," she says. Had its budget been larger, HRWA might have considered adding photovoltaic panels to the roof and installing a more efficient HVAC system to reduce energy use even further, but the group did the best with the resources it had, Brady says.

To keep costs down, HRWA had to get creative at times: When the group found out that renting a crane to load dirt onto the building's green roof would eat up half the budget, green roof subcontractor Michael Furbish had the dirt delivered to the sidewalk outside the center, and used a ladder hoist and buckets—plus lots of able-bodied helpers—to move the dirt instead. "Every project has its own story," says Furbish, founder of Baltimore green building firm Furbish Company. "This organization wanted to speak [to] respect for the waterways, so we worked to make it as affordable as possible for them."

The building will enable HRWA to better educate and engage residents from the fifty-plus Baltimore City and Baltimore County neighborhoods it serves, says HRWA board member Sarah Bur. The new classroom, offices, and meeting rooms will allow the group to add staff and attract more volunteers to the organization, plus offer lessons in environmental stewardship to Northeast Baltimore public school students. "There's been a hole in terms of environmental education centers on the northeast side of the city," Bur says. "We're hopeful that this new center will allow urban kids to get more exposure to nature and [learn] how to take better care of it."

This fall, the group also plans to host an environmental lecture series for local builders and residents on topics such as greening one's home, building a rain barrel, and reducing energy use. And HRWA will occasionally open the building to area homeowners who are curious about energy-saving, affordable green-building techniques. "It's our hope to make sustainability a household word in the Herring Run watershed and beyond," says Roby.

—Amy Novotney wrote about sprawl and smart growth in Maryland in the *January 2007* issue.

Full photo captions:

1- Under construction: The new Herring Run Watershed Center, scheduled to open this month near Herring Run Park in Belair-Edison, is one of the first buildings in Baltimore City to achieve silver Leadership in Energy and Environmental Design (LEED) certification.

2- Executive director Mary Sloan Roby (left) and project manager Darragh Brady on the green roof. A percentage of the rain that falls on the roof is funneled into a storage tank, sterilized, and used in two of the building's toilets.

3- Stormwater planters, shown here during construction, have since been filled with gravel and soil to treat rainwater before it rushes downstream.