

C&O Canal Quarters Interpretive Program: A Case Study

Angela Sirna, West Virginia University

The C&O Canal Quarters Interpretive Program at the Chesapeake & Ohio Canal National Historical Park is changing how the National Park Service is utilizing its historic buildings. The program, which opened November 2009, invites visitors to spend the night in one of the park's historic lockhouses. Three historic lockhouses have been rehabilitated and furnished appropriately to convey the bygone American canal era. Lockhouse 28 is being rehabilitated and will soon join the program. Visitors have the opportunity to learn about canal life in a very intimate atmosphere never before afforded to visitors.

The Canal Quarters Program answers two critical needs: preserving the park's historic buildings and creating a unique interpretive experience for visitors. An unfortunate reality facing the National Park Service at the Chesapeake & Ohio Canal National Historical Park is the deterioration of the park's historic buildings. Of the approximate 70 buildings the park owns, nearly 60 remain vacant and unused. Most of these buildings are on the National Register, but face irreparable deterioration from benign neglect. Management strategy has been to mothball the buildings—focusing on the exteriors, but leaving interior treatments for a later time. Extended over 184.5 miles, it is difficult to keep track of changing structural conditions. Many of these buildings are at risk of further deterioration. Additionally, the interpretive use of the buildings is very limited for visitors. These buildings have only served as contributors to the park's cultural landscape, and offer little in regard to a meaningful interpretive experience. The Canal Quarters Program answers both of these critical needs. The program provides a unique interpretive experience while adaptively reusing historic buildings.

Development of the Canal Quarters Program began in full force December 2008 as a partnership between C&O Canal National Historical Park and C&O Canal Trust with the aggressive timetable to launch the program that Memorial Day. The list of tasks to be completed before opening was daunting: four historic lockhouses must be rehabilitated, the compliance process must be approved, the legal authority must be procured, furnishings must be selected and purchased, interpretive media must be designed and implemented, a volunteer program must be established, a registration system must be designed, along with a million other small but important tasks—all while nourishing a fledgling partnership. Not surprisingly, the deadline for opening was pushed from Memorial Day to November 2009. However, the program reached several milestones before the November opening: the cooperative agreement was executed in June and three of the four lockhouses were rehabilitated with furnishings and interpretive media staged.

The concept of using the park's historic lockhouses as respites for hikers and bikers traveling the towpath is not a recent invention. During the popular movement to designate the historic canal into a national park, Irston B. Arnes President of the Audubon Society of Washington DC, wrote in the *Washington Post* in 1953, "Let the towpath become a country lane for hikers and cyclists. Restore the canal and its locks and lockhouses to their

nineteenth-century usefulness... Prepare the lockhouses as hostels for winter use.” The essential premise of the Canal Quarters Program was not new.

Nor is the Canal Quarters Program new to environmental tourism in general. Designers of the program looked towards a variety of other programs directed towards recreational enthusiasts. The 10th Mountain Division operates a hut to hut program in the Colorado Rocky Mountains. The Appalachian Mountain Club has managed a program in New Hampshire’s White Mountains for the past century. These programs serve recreationists in back country environments, where there are few if any accommodations available. Most huts are communal and offer meals. It offers the convenience of recreating without the burden of equipment or supplies. Another program, managed by the Potomac Appalachian Trail Club (PATC), has a cooperative agreement with the National Park Service. The PATC manages an extensive cabin rental program that is available to its members. Cabins built by PATC members actually predate the formation of Shenandoah National Park. The two organizations entered into a cooperative agreement so the PATC could incorporate six of these primitive cabins into their existing cabin program. Since the goal of the Canal Quarters Program is to create a meaningful interpretive experience, this PATC agreement was used as a model for the program. As the program developed, however, it became apparent that it was too different for even this model.

The C&O Canal National Historical Park hosts over three million visitors each year, many of which come to hike and bike the 184.5 mile long towpath. The C&O Canal is gaining even more usage thanks to the opening of the Great Allegheny Passage, which connects directly to the C&O Canal in Cumberland, Maryland. This new linkage allows hikers and bikers to travel from Pittsburgh all the way to Washington DC, totaling 320 miles of trail. This program serves both through-hikers and bikers, as well as those visitors using the park as a site destination.

The beginning of the three year pilot phase of the Canal Quarters Program began with the signing of the cooperative agreement in June 2009. The purpose of the pilot program is to gather data for an environmental assessment, which will determine the feasibility of continuing and/or expanding the program. During the pilot phase other lockhouses will be brought into the program. Lockhouse 28 remains to be completed. Lockhouse 37 near Dargan, Maryland has been listed in the cooperative agreement to be included in the program. One other building yet to be identified will also be included in the pilot phase of the program.

In coming months, the park will undertake an environmental assessment for the Canal Quarters Program in which sustainable rehabilitation practices will be assessed. The Program is already pretty “green,” by adaptively reusing historic buildings for a new visitor program without the addition of parking lots, restrooms, or exhibits. No additional amenities have been added to the buildings; meaning that some buildings, such as Lockhouse 22, remain without electricity or plumbing. The furnishings provided by the C&O Canal Trust are mostly vintage pieces, thereby recycling furnishings rather than buying new, reproduction pieces. The Park has used LEEDS standards in other rehabilitation efforts, but not for this program. Further recommendations from the working group to make the program more “green” would be welcome.

Check out the lockhouses at the program's website at www.canalquarters.org.

Personal Background

I received my BA in December 2008 from West Virginia University, where I am currently in my first year of graduate school. I have worked at the C&O Canal for the past three years, first as a Student Conservation Association intern at Great Falls and then as an interpretive ranger in Cumberland. I worked as a National Council for Preservation Education intern in the park's Resources Division from January to August 2009. During this time, I assisted Sam Tamburro, the park's Cultural Resource Program Manager, in the development and implementation of the C&O Canal Quarters Interpretive Program. My concentration for my master's degree is in public history and I am interested in a career in Cultural Resource Management.

Vicki Myers

What could be more environmentally friendly than maintaining a current structure, with some eco-friendly modern upgrades (which are designed to be sympathetic to the historic character of the building) rather than tearing it down in favor of completely new construction? Too often, old structures are demolished (or even just remodeled) and the materials wind up in landfills, negating any environmental good a new "green" structure would have. Many historians and architects have been able to convince the general public and developers about how preservation can economically benefit a community. We now need to incorporate environmentalism into our discussions – which can also be framed in economics for developers and city officials.

The major questions historic preservation committees/commissions will soon face are preservation projects that want to incorporate modern "eco-friendly" materials into renovations and restorations – especially from people who live in historic homes. While this has not been a "hot button" issue in Mississippi, my colleagues and I feel that it is on the horizon and would like to be pro-active in creating avenues for education and discussion of this topic for our communities.

The Historic Preservation Commissions in Oxford, MS became the first Mississippi community to receive a request from an historic homeowner wanting to make their house more energy-efficient by installing solar panels. Nothing in Oxford's Design Review Guidelines addressed this topic directly. The homeowner's plans were to place the panels on a side of the building that would not be seen from the street, so as not to distract from the look of the historic district, and installed in way that they could be removed in the future without causing significant damage to the historic fabric of the building. Because the homeowner's plans followed guidelines previously established for other modern additions – such as satellite dishes – and would not detract from the historic character of the

streetscape of the district, the commissioners approved the Certificate of Appropriateness and amended their design guidelines to include solar panels.

Oxford embracing solar power in their historic districts is just the start of environmentalism entering into historic preservation discussions in Mississippi. The Mississippi Department of Archives and History (MDAH), where I started working in October, is working to help lead the way in educating the public about how these two movements can and should work together. Sustainability is the theme for an annual State-Wide Historic Preservation Conference this spring, which MDAH co-sponsors Mississippi Heritage Trust, the leading non-profit preservation organization in the state. We have been able to encourage preservation across the state as we educate elected officials and the general public about how it benefits communities financially – in fact – many focus on heritage tourism as a major source of income for their communities. As the State Historic Preservation Office in Mississippi, we are in a position to further educate these same groups about what they can do to make their historic properties energy efficient without compromising the historic fabric and integrity of their buildings. We just need to make sure builders, developers, and architects who work around the state also get this information.

We as preservationists should work with builders, developers, and structural engineers to develop standards for how to sympathetically make historic buildings energy efficient without compromising the integrity of the historic fabric of the structure. It is also important that we, as public historians, make sure that any techniques and standards are available to the public. Historic homeowners, for example, should have easy access to information on what they can do to preserve their home as well as make it environmentally friendly. We should also better communicate property owners about places which salvage materials from restoration and renovation projects, as well as the unfortunate demolition projects, in order for the materials to be used in future preservation projects. Property owners might be able to recycle pieces of other old buildings without having to recreate historic detail with newer materials (even if the new materials are deemed as eco-friendly). We should also better educate homeowners about how to repair and maintain windows – as that is probably the feature most property owners want to replace with modern, more efficient, products in order to lower heating and cooling costs.

Besides using established methods for educating the public about historic preservation and how it is part of establishing a “green economy” – the established methods being the way the three-way partnership that federal, state, and local laws create through the National Park Service, State Historic Preservation Offices, and local Historic Preservation Commissions – preservationists should work on curriculum so that new professionals come to the field already thinking about environmentalism and preservation and the way they interact. There should also be opportunities for students to work on projects that combine preservation and environmental factors.

Biographical info:

I completed my MA in Public History from the University of Houston in August 2009 with a thesis on the role of adaptive reuse preservation techniques in the redevelopment of

downtown Houston. In October 2009, I began working for the Historic Preservation division of MDAH as an Architectural Historian. I am one of three Local Preservation Coordinators, which means I work with communities looking to develop historic preservation ordinances as well as working with communities who have established ordinances and have gone through the process required to be a Certified Local Government. We hold regional and state-wide trainings for local officials, historic preservation commissions, and interested members of the public on a variety of preservation topics. I am also responsible for one of MDAH's preservation grants programs.

Revitalizing Historic Preservation for a Lifetime **Alex Bethke**

While historic preservation largely is, and has been, the purview of local, state, and federal regulations, its future as a sustainable discipline lies in its relevance to the general public. In fact, historic preservation is most potent and enduring when a resource's historical significance is explained to the public in an interactive and engaging manner - an undertaking that boosts an appreciation of local historic resources and the stories they tell. The question then becomes, how do we make the built environment relevant to the local (and visiting) community? Many municipalities incorporate preserved buildings into special events, commerce, and passive interpretation like signage, but few make it their mission to truly explain the "historical significance" of these resources. One solution is the integration of local historic buildings and their stories into the local K-12 curriculum as a method of illustrating the broader patterns in national, state, and/or local history.

Even though preservation is the "curatorial management of the built world", a phrase that implies an instructive and even museum-like purpose, few municipalities integrate education with preservation planning. This transition to a more sustainable model of historic preservation is currently taking place through the realization of a Delaware County Public History Feasibility Study and Implementation Plan. Their project is exploring the viability of creating a centralized organization responsible for facilitating further research, identification, presentation, and preservation of the county's historical resources for educational purposes in and outside the classroom.

Delaware County represents one of the most diverse places in the State of Pennsylvania, but it too neglects to educate the local public about its own comprehensive past. Like many communities throughout America, the county contains a large number of publicly accessible historic sites, house museums, and historical societies, many of which are floundering without a stable, let alone growing income and membership. As a whole, however, the county enjoys a favorable cultural atmosphere, one ripe for organizational partnerships that could promote sustainability through education.

The idea for a public history plan was conceived as I assisted small historical organizations develop or lobby for preservation ordinances. I witnessed the struggles of these stewards as they fought to remain operational, attract new membership, and conduct their

educational mission with vigor. Without a doubt, the community desperately wanted to promote and celebrate its history, but the involvement of the broader community simply waned over the years. The same could be said of the support for preservation ordinances, which were seen only as an infringement on property rights and not for their benefits to the community. Looking past the fact that historic preservation was misunderstood (as is often the case), I better understood the cultural environment of Delaware County as an economy of scale. In total, the county is home to twenty-seven independent historical sites/house museums, eleven private historical groups, twenty-four municipal (non-profit) historical societies, and nineteen municipal historic preservation commissions, almost all of them run by volunteers.

The result was a collection of valuable, but small and inexperienced organizations that remained isolated in their operation. Nevertheless, I viewed each historical society, museum, and commission as an invaluable educational entity that had an important role to fill and story to tell. Without a doubt, few, if any were utilized to their greatest capacity. As they currently existed, each entity operated almost wholly independent of each other, regardless of proximity or historical relevance. Even political gaming played a significant role in hindering the cooperation and continuity among historic sites.

Using the assumption that each historical site still had value, a centralized public history program would be able to see the global interpretive picture and facilitate the production of a broader context in which each individual organization would provide a different piece of the historical landscape puzzle. This would be accomplished through fundraising and grant writing, helping educators integrate local history into the Pennsylvania Academic Standards for History in all grade levels, partnering with other cultural and commercial entities, and working with tourism boards at the local level to boost the county's heritage and civic tourism.

Among other roles, the primary function of a defined municipal public history program would be to provide the leadership needed for coordinating the interpretation of the county's past as told through existing public sites. By re-framing the county's diverse history into a more inclusive analysis of the past and reorganizing the history that each site tells, public historians would be able to physically utilize each place as an enduring educational experience that reflects preservation's curatorial purpose. In effect, this reorganization would serve to renew the public's interest in each site as diverse themes are incorporated into the K-12 curriculum across the county. As children become familiar with the already compelling stories that define a museum, site, or historic-district's significance, a greater appreciation for that place and its continued preservation would begin a lifelong legacy to be passed down from generation to generation.

Biography:

I am currently a Historian and Cultural Resource Manager for the Naval Facilities Engineering Command in San Diego, California. In this capacity, I am responsible for providing technical support to Navy and Marine Corps installations throughout the Southwest as they comply with federal regulations. I am a member of the San Diego Historical Resources Board and have also just completed consulting for The Flanders Hotel

in Ocean City, New Jersey, which included completing the NRHP nomination for the hotel. After graduating with an M.A. from Arizona State University's Public History Program, I worked as a Preservation Planner for the Delaware County Planning Department, where I gained the experiences described above. While not administering the County-wide Public History Feasibility Study and Implementation Plan, I wrote the scope of work, garnered public support, and obtained more than \$70,000 in grants used to begin the project. As was the case in Delaware County, I remain interested in integrating public education with historic preservation, a purpose that I believe has the capacity to reinvigorate preservation.

Leah S. Glaser, Assistant Professor, Public History Program, History Department

At the end of November, the *New York Times* ran a story on the "Brad Pitt's neighborhood" in post-Katrina New Orleans (<http://travel.nytimes.com/2009/11/29/travel/29cultured.html>). Pitt has funded really funky affordable green housing to rebuild neighborhoods. But the reporter points out:

Indeed, the houses seem better suited to an exhibition of avant-garde architecture than to a neighborhood struggling to recover. A number of designers I talked to, some of whom had visited the neighborhood, lamented the absence of familiar forms that would have comforted returning residents.

James Dart, a Manhattan-based architect who was born and raised in New Orleans, described the houses as "alien, sometimes even insulting," adding, "the biggest problem is that they are not grounded in the history of New Orleans architecture." But, like other architects I spoke to, he expressed admiration for Mr. Pitt. "He deserves a great deal of credit," Mr. Dart said, adding that Mr. Pitt had "done more for New Orleans" than any government agency.

Jennifer Pearl, a broker who has several houses for sale in the Lower Ninth, has a practical view. "Brad has the very best intentions," she said. "However, had he come here with houses that looked like what had been here before, he probably could have had four times, five times as many houses up by now."

Articles like this make me both excited and frustrated. This one brings up several issues. It reflects the idea that green buildings and old buildings are at odds with one another. It also makes the point that beyond the energy and cost-savings, sense of place is pretty important too. Architects seem to have been the leaders in advocating "building recycling," but the statement about being "grounded in the history of New Orleans architecture" gives me hope that historians can and should take a role in the green building movement. And I have been struggling to come up with an effective way to do that.

A former independent public historian, I am now an assistant professor in an MA Public History program at Central Connecticut State University where I among other courses, I teach historic preservation. In my job talk, I managed to convince my then future colleagues that they needed to broaden their program to include historic preservation, that the state would provide work opportunities for students with a background in historic preservation, and that I was the person to make this happen. At the time, I explained that this was because historic preservation could be an important tool for responsible growth planning for which the state had recently passed supporting legislation. I planned to focus my classes around this idea.

Starting in the classroom, I have tried various ways of framing historic preservation into bigger ideas about urban planning, landscape preservation, and environmental/sustainability issues. Until last year, the students in my preservation classes were not all that interested in the topic at least as a career choice. Most were teachers or interested in museum work. The last year and a half I have had better luck with a handful of students who hope to do work and preservation consultants in Connecticut. I have placed them in urban and environmental planning courses through the Geography department to supplement their History classes. I truly feel this background will give them a very strong set of skills.

I have asked my students to be critical in how they thought of historic preservation. My goal has been to think of a way to move historic preservation beyond “a nice thing to do.” Amidst class discussions of historically significant buildings and how to examine and evaluate their historical significance, we discussed why we should preserve certain parts of the built environment over others and evaluating the meaning and nature of historical significance. Training future preservationists to think beyond aesthetics when preserving buildings is one way to broaden the conversation about preservation, but at the same time, people who are not part of my class or a preservation organization, also need to be convinced about why and how to invest in older buildings.

I was a little surprised about what a challenge it has been to convey to the general public or even a campus community that historic preservation is a tool even to an apparently sympathetic group of open-minded academics. I decided to join my campus interdisciplinary sustainability group. For the past couple of years, I have been exploring various strategies to insert “my area” into this conversation. I have found it has been difficult convincing even the “sustainability people” how integral preservation is to this conversation. Most people in New England appreciate old buildings, but they can’t move much past nostalgia and the field is hindered by a not altogether inaccurate stereotype that historic preservation is an elitist passion and hobby.

Moving beyond the classroom in the last couple of years, I have organized panels in various venues including a Smart Growth Conference for Connecticut entitled “Historic preservation IS Smart Growth) and another for a symposium about renewable energy on my campus entitled “Recycling Buildings?” In both cases, I gathered together several of Connecticut’s historic preservation professionals, most of whom seem to understand the possibilities of preserving buildings and the relevance of historic preservation to city planning, sustainability, controlling sprawl, energy savings, open space preservation, and lower income housing.

These panels have gone well and yielded fine discussions, but no action has resulted. We all seem to be in agreement that historic preservation is a valuable tool for creating sustainable communities, albeit for different reasons. But how do you get the public, and in particular legislators and city planners seriously consider preservation as a tool? I had a modest goal of awareness, but I am wondering where to go from here. What other interdisciplinary forums should this conversation occur? I am hope to continue converting

students and future professionals into thinking along these practical lines, but at the same time I am hoping to reach out to the sustainability community and people for whom history and historic preservation do not even register as relevant. As a historian, I have tried to join interdisciplinary groups and programs on my campus. I hope that I can learn more from other disciplines.

What else can public historians do? I do believe that designing specific preservation and restoration projects and educational models is one way to do this. In addition to exploring all the ways historic preservation' compatibility with initiatives of sustainability, how do we promote such ideas and projects? Is there a way that we as a group can create interdisciplinary forums for discussion? Is there a way to work with existing, multidisciplinary groups to make homeowners, builders, developers, and planners aware of the challenges, benefits, and incentives for investing in existing infrastructure?

Carol Palmer, Palmer Research, LLC (and Arizona State University Doctoral Program)

Most Recent Project: Community History, Surprise Arizona

When he moved to Surprise, Arizona in the late 1940s William Simmons bought five acres on Nash Street and divided it into eight lots, one for each of his children. Having experienced the financial hardships of the Great Depression and faced with the shortages produced by World War II and the subsequent construction boom, Simmons and his neighbors used creative resourcefulness to build their homes. His son, Russell Simmons, bought an existing farmhouse and moved it to his lot. Russell's son, Larry, went to work for a demolition business so he could collect the material needed to finish the family home. In the 1950s, their new neighbor, Floyd Gaines, moved a two-room home from Marinette Ranch to his home site. Some early Surprise residents chose to build rather than relocate an existing structure, which meant creative use of available materials. For lumber, they used surplus barracks and ammunition crates from the U.S. Army's Luke Field. This imaginative recycling resulted in a community of unique homes that became ongoing remodeling projects as residents added rooms or made energy-saving modifications. In many respects, these residences serve as historic models of sustainable practice and demonstrate that history, in particular historic preservation, is a natural partner that can inform and enhance local sustainability initiatives on multiple levels.¹

Unfortunately, the City of Surprise is not leveraging this legacy. The managers of its Green Surprise program, unaware of the recycling strategies of the first residents, have failed to make the connection between past practices and present initiatives. At the City's 2009

¹ Larry and Retha Simmons, interviewed by Sherry Aguilar, February 9, 2009, Surprise, Arizona, audio tape, City of Surprise Archives. Rosetta Gaines, interviewed by Sherry Aguilar, March 4, 2009, Surprise, Arizona, City of Surprise Archives. Mike Jackson, "Building A Culture that Sustains Design," *APT Bulletin: Journal of Preservation Technology* 36, no. 4 (2005): 2. Jackson remarks on the "natural alliance" between sustainability and preservation. Walter Sedovic and Jill H. Gotthelf, "What Replacement Windows Can't Replace: The Real Cost of Removing Historic Windows," *APT Bulletin: Journal of Preservation Technology* 36, no. 4 (2005): 25. Sedovic and Gotthelf argue "[s]ustainability and historic preservation are a natural marriage."

Going Green Fair, a variety of booths offered visitors information on products, services, and practices, but none educated residents on the environmental impact of preserving historic structures or the adaptive reuse tactics of the city's first families.² The community's history remains unknown, hence, unavailable to the Green Surprise team, because the stories of the first residents vanished in a decade of exponential growth that transformed the town. A 1995 population of 10,737 exploded to 110,000 by 2008. The small, rural, isolated community first occupied by families who made their living chopping cotton, picking citrus, and working in rose fields, erupted into a landscape of subdivisions, shopping malls, and thoroughfares. For recent arrivals, Surprise is a new city without a history; some view the original town site, which stands in sharp contrast to the planned uniformity found in new neighborhoods, as irrelevant. A community history project, initiated by the City in 2008 may stimulate an interest in the legacy of the first residents and a change in the Green Surprise program. However, if the City integrated its history and historic preservation projects with its sustainability program, it would be breaking new ground. A review of the literature on sustainability reveals that historians rarely participate.³

Another complication may hinder attempts to link the city's history with its green program. A recent cultural resource survey of eligible structures in the original town site concluded that none qualified for the State or National Historic Register due to modifications such as upgraded windows, leaving these structures vulnerable to demolition.⁴ According to Donald Rypkema, razing one small structure equates to failing to recycle 1,344,000 aluminum cans.⁵ The cans represent a structure's "embodied energy," or "the sum of all the energy required to extract, process, deliver, and install the materials needed to construct a building."⁶ In sum, an energy saving practice could negate historic preservation designation, resulting in building demolition and energy waste.

What is sustainability? The term entered the green lexicon in the 1980s, when the first international environmental efforts revealed conflict between developing and developed nations.⁷ Seeking to reframe the discussion, environmentalists looked to the language and ideas of sustainability that emerged from a conference sponsored by the World Council of Churches. In 1987, the United Nations World Commission on Environment and

² City of Surprise website, "Green Surprise, Arizona," <http://www.surpriseaz.com/index.aspx?nid=1644>.

³ Diana Nanez, "Surprise families recall migrant roots," *Surprise Republic*, July 9, 2006. Lyn Truitt, interview by Carol Palmer, February 11, 2009, Surprise, Arizona, audio tape, City of Surprise Archives, Surprise Arizona. City of Surprise website, "Surprise is Turning 50!" <http://www.surpriseaz.com/index.aspx?NID=1844>.

⁴ Kirsten Erickson and A.E.(Gene) Rogge, URS Corporation, "Records Review of Historic-Age Properties Within the Original Surprise Townsite, Maricopa County, Arizona," prepared for the City of Surprise Neighborhood Services Department, April, 2008, Appendix E, City of Surprise Archives, Surprise Arizona.

⁵ Donovan D. Rypkema, *The Economics of Historic Preservation*, (Keynote Address at Alexandria Historic Preservation Conference and Town Meeting, May 5, 2007 First Baptist Church, Alexandria, Virginia).

⁶ Jackson, "Building a Culture that Sustains Design," 3. Mike Jackson, "Embodied Energy and Historic Preservation: A Needed Reassessment," *APT Bulletin: Journal of Preservation Technology* 36, no. 4 (2005): 47.

⁷ Simon Dresner, *The Principles of Sustainability*, 2nd ed. (London: Earthscan, 2008), 1.

Development formally embraced these concepts in its report, *Our Common Future*.⁸ While experts continue to debate the details, all agree that natural resources are finite, and present consumption rates pose a threat to future generations. The former head of the Global Environment Facility, opines, “[h]umanity, greater in number and more economically active with each passing day, is increasingly playing havoc with the earth’s natural systems.”⁹ In response, state and local governments across the country, like the City of Surprise, have implemented programs to reduce their carbon footprint. As noted earlier, historians are rarely included.

Sustainable design differs from other segments of sustainability in that experts have reached a level of agreement on standards and metrics. Beginning in 1993, the US Green Building Council (USGBC) developed Leadership in Energy and Environmental Design or LEED, an “internationally recognized green building certification system.”¹⁰ Later, recognizing the value of historic structures, the USGBC issued LEED standards for existing structures. Comprised of 78 chapters, 20,000 member companies, and 100,000 accredited professionals, the USGBC is a leader in implementing sustainable practices, and, would likely endorse the recycling tactics of Russell Simmons, Floyd Gaines, and other early Surprise residents.¹¹

At first glance, the connection between historic preservation and sustainability seems obvious. The editor of the *APT Bulletin*, argues that “the intersection of preservation and sustainability, cover both practical and theoretical aspects.”¹² Both originate from the same intellectual framework. Historic preservation is part of the larger discipline of cultural resource management; sustainability emerged from the field of natural resource management. Each focuses on leaving a legacy for future generations. Practitioners in both fields agree that saving and reusing elements of the built environment benefits society today and in the future, and recognize “the importance of embodied energy.”¹³ A partnership between historic preservation and sustainability, in particular sustainable design, would marry the unique strengths of each discipline. The USGBC, a non-profit organization with strong support in the private sector and the professional community, could benefit from an alliance that added state, local, and federal agency connections. Historic preservation has broad-based support in cultural institutions and organizations,

⁸ Dresner, *The Principles of Sustainability*, 34. Bryan Husted, Sanjay Sharma, and Mark Starik, eds. *Organizations and the Sustainability Mosaic: Crafting Long-Term Ecological and Societal Solutions* (Northampton: Edward Elgar, 2007), 1.

⁹ Mohamed T. El-Ashry, “The Global Challenge of Sustainable Development,” in *Foundations of Environmental Sustainability: The Coevolution of Science and Policy*, eds. Thomas Dietz, Larry L. Rockwood, and Ronald E. Stewart (New York: Oxford University Press, 2008), 257.

¹⁰ Jason McLennan, *The Philosophy of Sustainable Design: The Future of Architecture*. (Kansas City: Ecotone, 2004), 4, 31.

¹¹ McLennan, *The Philosophy of Sustainable Design*: 4, 31-2. USGBC Website, “Intro – What LEED is,” <http://www.usgbc.org/DisplayPage.aspx?CMSPageID=1988>. USGBC Website. “FAQ – LEED for existing Buildings: Operations and Maintenance,” <http://www.usgbc.org/ShowFile.aspx?DocumentID=3353>.

¹² Diana S. White, “Editor’s Note,” *APT Bulletin: Journal of Preservation Technology* 36, no.4 (2005): 2.

¹³ *Ibid.*

another potential source of allies for sustainability advocates. From a technical perspective, “[t]he skills of preservationists in understanding the value and durability of the built environment and their ability to extend a building’s future are some of the strongest contributions preservationists can make to the rapidly evolving field of sustainable design.”¹⁴ Additionally, historians can provide context and historical insight that enhances sustainability planning and implementation. The recycling stories of Surprise’s early residents provide information about past reuse tactics, connect present efforts to the city’s history, and provide texture and compelling narratives that make sustainability more meaningful.

Some experts in the field of historic preservation have initiated a dialogue on the intersection of their practice and green initiatives. In 2005, the Association for Preservation Technology sponsored a symposium on sustainability and historic preservation at its annual meeting and dedicated an entire issue of its journal to the topic.¹⁵ Mike Jackson argues that the two disciplines “need to find their common ground, identify any potential conflicts, and develop complementary programs.”¹⁶ Potter and Ross argue, “[a]dvocates of cultural-heritage onservation must become informed and must contribute to the sustainability dialogue.”¹⁷ Fortunately, many sustainability experts recognize the value of an interdisciplinary approach. Jason McLennan maintains, “[s]ustainable design requires a commitment to breaking down the barriers” between disciplines, and “design teams must embrace the knowledge that can be found in all professions.”¹⁸

An academic venue may be the appropriate forum for connecting historians and sustainability professionals. For example, Arizona State University, with a School of Sustainability and a nationally recognized public history program, could partner with a local municipality to create a model community project that joins historians, ecologists, and local activists in the design and implementation of a green program that demonstrates the value of an interdisciplinary alliance.

Kathryn R. Merlino, Department of Architecture, University of Washington

Last Spring, ex-Mayor Greg Mayor Nickels kicked off a campaign in Seattle he calls "Choose

¹⁴ Jackson, “Building a Culture that Sustains Design,” 2.

¹⁵ Waite, “Editor’s Note,” 2.

¹⁶ Jackson, “Building a Culture that Sustains Design,” 2.

¹⁷ Andrew Potter and Susan Ross, “Integrating Environmental and Cultural Sustainability for Heritage Properties,” *APT Bulletin: Journal of Preservation Technology* 36, no.4 (2005): 5

¹⁸ McLennan, *The Philosophy of Sustainable Design*, 88.

Reusable" promoting reusable bags over disposable ones. "Both paper and plastic disposable bags harm our environment, and every year, residents in Seattle throw out 360 million of them. That's simply unsustainable,"ⁱ said Nickels. Thanks to new efforts by the City and Seattleites, we are on our way to our sixth year of improving domestic and commercial recycling and sending less waste to our landfills. We recycle glass, paper, metal and kitchen scraps, and carry reusable totes to the grocery store. It's work, but we do it because it's good for the environment. If we recycle paper, bottles and cans, why don't we recycle our buildings? If we are so concerned with being sustainable, why aren't we considering the environmental consequences of demolishing buildings?

Recently, the City of Seattle and Seattle Parks and Recreation submitted a SEPA Checklist and Determination of Non-Significance in order to prepare all the paperwork to demolish Building 18, the Fire Station Building, at Magnuson Park. In a case to save this building, I'm going to start with an argument that doesn't attempt to prove it's historic significance. I'm going to start with the environment. The U.S. EPA reports that "In 2006, US residents, businesses, and institutions produced more than 251 million tons of municipal solid waste, which is approximately 4.6 pounds of waste per person per day."ⁱⁱ If Building 18 is demolished - a solid brick and steel building of approximately 14,013 square feet - 1212 tons of construction and demolition (c&d) would be put into a landfill. That's as much waste as it would be for a single person putting his or her 4.6 pounds per day into a landfill for 1,444 years! Even if part of the building was recycled, the energy expended to demolish, load, haul and recycle is astounding.

Every building is a storehouse of non-recoverable energy and can be considered by its "embodied energy". This is the energy that has been spent in its construction, manufacture and transportation of materials. When a building is torn down, more is lost than the built resource (and its associated heritage)— embodied energy is lost, and more energy is expended for the demolition, loading and hauling of the debris. The amount of gasoline this represents in a singular building can be helpful to understand the impact - for Building 18 alone the embodied energy is the equivalent of driving your (fuel efficient) car every day, 365 days a year, for over 200 years. Tear down Building 18? We have now wiped out the entire environmental benefit from the last 1,972,830 aluminum cans that were recycled. We've not only wasted perfectly good building, we've wasted months of diligent recycling by the people of Seattle. In addition, it is also equivalent to carbon sequestered by either 427 tree seedlings for a decade or 3.8 acres of pine forest annually.ⁱⁱⁱ

Embodied energy only tells us part of the story. As the National Trust for Historic Preservation says; "while knowing the embodied energy in a building enables us to understand how building construction and demolition compares to other energy intensive activities, such as auto use, it doesn't help with much else. It doesn't tell us anything about toxins that are released as a byproducts of extraction, manufacturing, construction and demolition - or the natural resources consumed in the process."^{iv} Other tools, such as Life Cycle Assessment (LCA) provides a means to do just this. LCA quantifies the energy and materials usage and environmental releases at each stage of a product's life cycle, including extraction of resources, manufacturing of goods, construction, use and disposal.

However, while all this science is extremely useful, there's a point when logic should kick

in. Recycle that wine bottle? Absolutely yes. Now, look at a building like the Fire house. Throw that in a landfill? Preposterous. There has to be a really good reason to do so, and so far, there is none to be found.

It seemed like the City was going in the right direction. Earlier this year on March 25, Nickels announced an alliance with the National Trust for Historic Preservation for the Seattle Green Lab, recognizing the important connection between buildings and climate change. The Lab will be looking at connections between existing buildings and energy savings, and using these measures to promote building reuse and green adaptation. "Our buildings are our history," said Nickels. "We need to preserve our past, but we also need to prepare for the future. By adapting the latest technology, we can renovate our historic buildings without toasting the planet." Perhaps he only meant "historic" buildings - those that are laboriously put through a rigorous process at the City, County, State or National level to get the name "historic" or "landmark" after proven to have historic or architectural value. Landmarking has its place for buildings, and not enough is being done to preserve buildings with characteristics that should be seen for generations to come. And Building 18 is arguably one of these buildings. However, what about those that are on the edge of 'significance'? What about those that have none at all? We need to consider the impact on the environment before tooting our own sustainable horn. Perhaps we need to more tightly regulate what buildings go into our recycling and trash as much as we do our paper, glass and food scraps.

However, if the environmental case isn't enough of an argument for saving Building 18, let's talk about things that seem to matter to most people. Money. The City argues the building has had "years of disuse and neglect have left the structure unsound." In 2001, the City had slated 60k to repair the roof that was beginning to fall into disrepair; the money was pulled from the project due to budget constraints or disinterest. An estimate for "roof replacement including basic seismic strengthening improvements to tie roof to building exteriors" was estimated again in 2005, this time at 200k. Either of these acts would have sufficiently upgraded the building to await further improvements, and find interested tenants, but no action was taken. In fact, there were interested tenants, a design in place, but due to lack of movement by the City and increased costs, they fell out of the running and the building sat vacant. Currently, estimates to demolish the building are 200k. If this money was put toward the building in the first place, Building 18 would have a future as a viable, vibrant place in the park rather than looking at demolition as it is today.

In addition, if the building is demolished as planned by the City, the economic effect could be catastrophic to the future of the park. Currently a National Register nomination for a Historic District has been proposed for the significant buildings in the park, including Building 18 (only the City of Seattle has decided it is not significant). If this building is demolished, it could compromise the integrity of the National Register nomination, and as a result, diminish the opportunity for further renovation projects gaining tax incentives gained through the National Register listing. Such a listing could make private-public partnerships an appealing option for underutilized buildings, encouraging tenants to rent in the park, which would add to the already growing activities in the park.

Let's get off the environmental impacts for a moment and look at other reasons why to save and restore this building. The old firehouse, in order to be strategically situated for calls, sits prominently in the center of the park. Building 18 is located off the main entrance of Magnuson Park on NE 74th street. This is where the most people enter Magnuson, by bus, foot, bike or car. The building marks the end of the main street that runs north to south in the historic district, and creates a nice grouping of buildings before the larger open space of grass and parking to the south. Without it a large void would exist and a gap would be exposed (see photo) to the south. The building also acts as a visual buffer in between the historic building cluster and the vast parking lot to the southeast. Without it, park visitors would see a sea of asphalt (see image); hardly the vision of greenery the park is known for. It also acts like a way finder to the activities in the park, for at any given time 5-10 temporary signs are placed in front of the building to communicate events in the park. In fact, this prominent siting is one of the greatest advantages of the building, and one that could be played up in future renovations with creative signage, perhaps even digital, to create a vibrant way finding device for the parks growing activities. The hose tower acts as another marker - it can be seen throughout the park and is often cited as a way to find the entry gate from the large expanses of sports fields, playgrounds, dog runs and other corners of the site.

And then, finally.....historic value. The City argues that Building 18 should not be considered for the National Register of Historic Places nomination because it "does not exhibit Art Deco architectural detailing found on other buildings into the District." It also states that a 1993 Survey concluded that the building "is not significantly associated with the historic events of Sand Point Naval Station; establishment as a reserve base and then conversion to active duties in preparation for World War II." v However, later, it states that the Washington State Officer of Historic Preservation added Building 18 as a Contributing building to the Naval Station Sandpoint Historic District, but does not seem to recognize this in the final decision.

What constitutes 'significant' historic and cultural value in a building is often hotly debated by historians, politicians, community groups and other interested parties. At the end of the day, it is clear that some buildings are more historic due to their architectural style, the activities that occurred there, or the important people associated with the site. In fact, if these things don't exist, then it's practically impossible to 'officially' declare something historic, and suddenly, the building lacks 'value.' This is a very narrow way of measuring cultural and historic worth, but is traditionally the leading argument for anyone who wants to tear down an 'old' building. The word "historic" saves it, but 'old' or 'existing' does not.

In the green building revolution, we have lost the value of repairing what already exists. The value of repair in buildings must be considered as a creative process as much as a practical one; it needs to be considered part of the creative design process. Repair can and must encompass larger ideas of fixing what doesn't work. Structure, program, systems and site design are just some of the issues that can be repaired on an existing building. In the built environment, repairing and adaptive reuse constitutes recycling at it's best: it is the most sustainable and best practice for the environment and for our cities. We need old buildings, not just historic ones. We need texture, age and variety in our cities and parks,

not just new buildings, for as Jane Jacobs wrote in her *Death and Life of Great American Cities*, "newness, and its superficial gloss of well-being is a very perishable commodity."^{vi} Repair and reuse illustrate a new preservation ethic, for as Jacobs also said, "old ideas sometimes can use new buildings; new ideas use old buildings."^{vii}



view east from entrance, with and without Building 18



view south, with and without Building 18

ii City of Seattle, "Mayor and Grocers: Choose Reusable Bags
New Campaign Promotes Reusable Shopping Bags
in Stores and Food Banks," *Office of the Mayor Press Release* 2009.

ii <http://www.epa.gov/epawaste/nonhaz/municipal/index.htm>, (accessed July 14, 2009).

iii <http://www.epa.gov/cleanrgy/energy-resources/calculator.html> These are based on initial calculations of embodied energy from www.thegreenestbuilding.org, (accessed July 14, 2009)..

iv <http://blogs.nationaltrust.org/preservationnation/?p=438> (accessed July 14, 2009).

vv "Determination of Non-Significance, Building 18 Fire Station Demolition," dated May 28, 2009 by Seattle Parks and Recreation.

vi Jane Jacobs, *Death and Life of Great American Cities*. (Random House, Inc. New York, 1961) p. 193.

vii *Ibid*, p. 194.