

EXHIBIT 3  
DATE 2-2-09  
HB HJ 13



LINDA THOMPSON/Missoulian

# EFFICIENCY ON A BUDGET

First-time homeowner discovers that green is cheap



LINDA THOMPSON/

**OVE:** Sisters Rachael Caldwell and Lauren Caldwell, from left, plan to share a 100-year-old railroad house with Lauren's Samoyed Nell once the renovations are complete. Owner Lauren Caldwell wanted to implement green practices in the remodel. "building green doesn't have to cost more," she says. **TOP:** Once identical neighboring house on the right, Caldwell's home is now a two-story, three-bedroom home.

# Eager builders, sustainable practices made remodel affordable

*Editor's note: This is the second in a two-part report on green building in western Montana.*

**By BETSY COHEN**  
of the Missoulian

Lauren Caldwell was worried she had jumped into homeownership at the wrong time.

With all the economic horror stories emerging each day, why chance taking on significant personal debt?

Even more worrisome to the 26-year-old, the \$168,000 Missoula fixer-upper she could afford would need major renovations.

"I had my doubts, but I loved this old railroad house," said Caldwell, who decided to buy the 680-square-foot home on East

Alder Street.

Her next challenge was how to make her modest home larger to accommodate a renter – her sister, Rachael – while maintaining the historical integrity of the 100-year-old house.

As contractor bids came in, she learned several unexpected truths of these dark economic times: Builders are hungry for work, and they are eager to give her project their full attention and commit to her tight budget.

After assessing her many choices, Caldwell hired Steve Loken's company, Loken Builders, which specializes in sustainable building and remodeling practices.

"I've always thought that building 'green' means it will be really expensive," Caldwell said. "But that's just not true. Steve's bids were

among the lowest bids that came in."

"I was pleasantly surprised because that's the direction I wanted to go in," she said. "I try to live with sustainability in mind, from how I get around to what I eat. And with this project – a remodel – I thought if I'm going to do something so massive and spend money and resources, it's a good chance to do it with sustainability in mind.

"What I'm finding out, is that green is actually less expensive and the smarter thing to do when it comes to remodeling."

**Caldwell is just one** among a swelling tide of western Montana homeowners and

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# Remodel

Continued

business owners who are choosing green and keeping local contractors busy who specialize or advocate sustainable building practices.

In what is generally considered a bleak time in the construction industry, where many builders are without work and there's little in the pipeline, those like Loken and Missoula contractors Doug Jackson and Kevin Gordon are busy.

At a time when most firms are at a standstill and laying off people, these contractors and their crews are booked out through 2009 and early 2010.

Jackson Contractor Group is in the midst of expanding its footprint to take on jobs around the region and is hiring people to add to its already expanding work force of 50 people.

Driving that growth, Doug Jackson explained, is the shift in consumer expectations.

Nearly 20 percent of his contracts are "green" – ones that require Leadership in Energy and Environmental Design practices, and Jackson fully expects the demand for these kind of projects will only increase.

"More people are understanding that it makes good sense to try and reduce your impact on the environment and reduce your financial impact by being more energy efficient with the buildings we build," Jackson said. "As far as I'm concerned, one of the bullet points for growth in this industry is if you don't believe in LEED and don't get the licensing education you will be left behind."

"Green" is more than a trend or fad, said Kevin Gordon, whose Gordon Construction Co. celebrates its 75th anniversary this year and is responsible for constructing Missoula's example-setting LEED projects, the Missoula Federal Credit Union branch on Russell Street and First Interstate Bank's new downtown high-rise.

"You need to be efficient with energy costs – it's not a question of doing it for the feel-good factor," Gordon said. "In the 1960s and '70s, energy costs were so low they didn't even insulate a lot of buildings, now the operation costs of a building over its lifetime is many times more than its original construction cost."

"If you spend \$3 million today on a building and you think it's going to last 50 or 70 years, you will spend more than \$3 million in energy costs in that time period," he said. "The trick is to get operation costs down, and that's where a lot of this green building comes into play."

Loken, a longtime advocate for sustainable building practices, gets the most satisfaction from home remodel projects.

Not only is that where he expects to find steady business in coming years as the national economy finds stability, it's the work that is closest to his heart.

Projects like Caldwell's railroad house are the ultimate reuse-recycle efforts, he said, because they improve on something that already exists. Loken gives Caldwell's remodel bonus points for its location – in a dense urban area where she can walk to work.

"I've done quite a bit of training, research and lecturing around the United States and the West over the last 20 years talking about these things," Loken said. "It's been a long time for these ideas to take traction."

"It's been a slow seeping of consciousness into the public mind and it is slowly seeping into the building industry," he said. "Builders never thought anything was broke before, but the public is starting to and is asking for more."

"More of us understand that green is about the future

generations and how we can use resources and energy wisely without wasting things."

**In her new second-story,** Caldwell looks out a new energy-efficient double-paned window that overlooks Alder Street and offers a closeup view of Waterworks Hill.

Smiling, she explained her bird's-eye view was perhaps the most unexpected part of the remodel.

A crew from Home Resource, a Missoula nonprofit that keeps building materials out of the landfill and resells the items, demolished the original roof in a few hours and hauled everything away in three giant truckloads.

After sifting through the material, Home Resource kept three-fourths of the haul and took just one-fourth of it to the landfill.

"To have Home Resource do it was half the cost of

hiring someone else to do it and take it to the dump," Caldwell said. "And I got a tax write-off for hiring them because my old roof was considered a donation."

"That was a big eye-opener for me," she said. "Green doesn't have to be about every newfangled trendy thing on the market – it's really about reusing what you have, and making smart decisions is what matters – and where to put your time and money."



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January 30, 2009

Representative Noonan  
Federal Relations, Energy, & Telecommunications Committee  
Montana State Legislature  
Helena, Montana

Re: Feasibility of Cost-Effectively Implementing 2030 Challenge

Dear Chairman Noonan & Members of the FRET Committee:

We have reviewed and support House Joint Resolution No. 13, which resolves that buildings in the State of Montana will be built or renovated to ultimately be carbon neutral by the year 2030. In our experience, this goal is readily attainable even with current technologies and building budgets.

We have attached a fact sheet that describes how the Home on the Range building in Billings that we designed uses a net 79% less energy than a new building built to the current energy code. The back side of the fact sheet shows how the upfront costs of renovating the derelict 1940s building to a LEED Platinum green building standard were considerably less than constructing a new building to the current energy code.

We believe that adopting the building goals of this resolution will provide the following benefits to Montana:

1. Considerable **utility cost savings** to building owners—utility costs are projected to increase dramatically in the future, and avoided utility costs is money that stays in the local economy rather than being sent out-of-state to distant utility company coffers;
2. Sound, locally-focused **economic development**—provides jobs to architects, engineers, contractors, and suppliers that are Montana residents; and
3. Significantly **reduced global climate change emissions**—Montana must do its fair share to address this monumental environmental challenge.

For all of these reasons, we urge you to support House Joint Resolution No. 13. Thank you for your consideration.

Sincerely,  
High Plains Architects, P.C.

Randy Hafer, A.I.A., LEED AP  
President

Ed Gulick, A.A.I.A., LEED AP



WHEN WE BUILD LET US THINK THAT WE BUILD FOREVER  
LET IT NOT BE FOR PRESENT DELIGHT, NOR FOR PRESENT  
USE ALONE, LET IT BE SUCH WORK AS OUR DESCENDANTS  
WILL THANK US FOR.

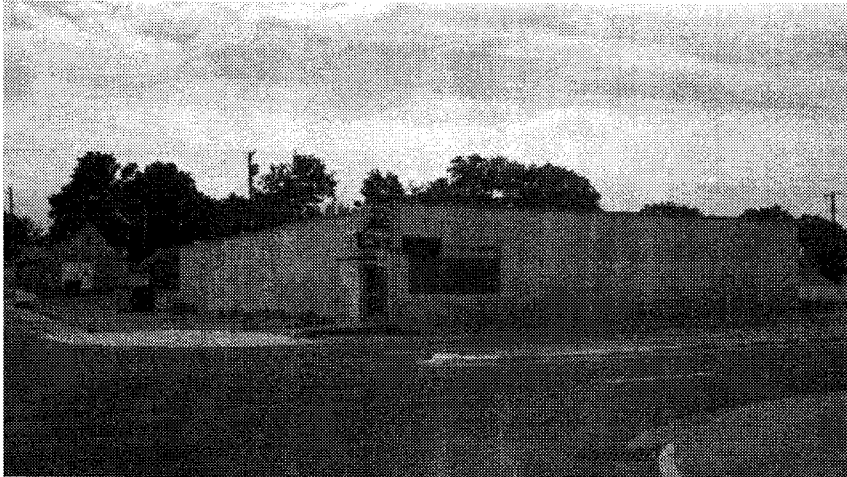
JOHN RUSKIN





## Home on the Range

Offices for Northern Plains Resource Council & Western Organization of Resource Councils  
Billings, MT



Before Renovation



After Renovation

### Sustainable Site

- Provides alternative transportation amenities for bicyclists, carpoolers, & a hybrid vehicle
- 100% of stormwater treated on-site
- Minimizes urban heat island effect

### Water Efficiency

- 50% less irrigation water for landscaping
- 90% less wastewater than code
- 60% less potable water than code

### Energy & Atmosphere

- 79% less energy used (by value) than model energy code!
- 52% of electricity generated on-site
- 100% of remaining electricity from wind sources for one year

### Materials & Resources

- 95% of existing building reused
- 92% of construction & demolition waste diverted from landfill (by weight)
- 16% of materials were salvaged (by value)
- 10% of materials have recycled content (by value)
- 23% of materials from sources within 500 miles (by value)
- 60% of wood from sustainably harvested forests

### Indoor Environmental Quality

- 100% outside air used to cool building
- 100% of materials contain no urea formaldehyde
- All paints, adhesives, and coatings are low-VOC
- 100% of regularly occupied rooms have high levels of daylight and views outside
- Low-VOC, biodegradable cleaning products used



**LEED® PLATINUM CERTIFICATION (57 points)**



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### Costs of a LEED Platinum Building

Home on the Range: offices for Northern Plains Resource Council & Western Organization of Resource Councils  
 Billings, Montana

Conventional Approach*		Green Building Approach (Home on the Range actual costs)	
Property	\$ 182,500	\$ 182,500	Property
Professional Services (10% Const. + Site + Landscaping Cost)	\$ 134,770	\$ 122,000	Professional Services
Demolition (8,300 SF main floor + 1,200 SF basement)	\$ 70,500	\$ 15,000	Deconstruction (partial)
New Construction (8,300 SF main floor @ \$135/SF + 1,200 SF basement @ \$30/SF)	\$1,156,500	\$ 839,200	Renovation (8,300 SF main floor + 1,200 SF basement)
-	-	\$ 66,200	Alternative Energy Systems (PV, solar hot water system)
Parking Lot + other Site Improvements	\$ 116,200	\$ 118,300	Parking Lot + other Site Improvements
Landscaping (25,000 SF @ \$3)	\$ 75,000	\$ 47,400	Landscaping
-	-	\$ 12,800	LEED-related costs & fees

TOTAL CAPITAL COSTS	\$1,735,470	\$1,403,400	TOTAL CAPITAL COSTS
		\$332,070	Capital Savings
10 years of Operation Costs**	\$127,493	\$26,413	10 years of Operation Costs**
		\$101,079	Operating Savings
20 years of Operation Costs**	\$316,213	\$65,512	20 years of Operation Costs**
		\$250,702	Operating Savings
30 years of Operation Costs**	\$595,566	\$123,387	30 years of Operation Costs**
		\$472,179	Operating Savings

\*Capital cost estimates based on RS Means 2006 Square Foot Costs; new construction built to meet current energy code equivalent, ASHRAE 90.1-1999

\*\*Operation Costs based on annual energy escalation rate of 4%, which is regarded as moderately conservative; carbon credits are not considered

Calculations by Ed Gulick, A.A.I.A., LEED AP

Oct-07



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