

'Let's just go extreme.'

Tom Elliott and Barbara Scott are setting out to build an extremely green home - but just how green is yet to be determined. "We thought, 'We have this incredible opportunity,' and it kind of grew from there; it snowballed."

By Erin Golden / *The Bulletin*

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The towering ponderosa pine poses a problem for Tom Elliott and Barbara Scott.

Four weeks into the deconstruction phase of a project they hope will end with the construction of one of Bend's greenest homes, the couple isn't sure what to do with the stately tree near the center of their property.

If felled, the pine could be milled and possibly used in the new house, and the area once shaded by its branches could be utilized for solar energy. But Scott, who is particularly fond of the tree, worries about negative impacts to the environment and overall character of the property.

There's no simple answer for the couple's dilemma. Like so many aspects of the project, it's a balancing act.

With many people in Central Oregon and around the country looking for new ways to cut costs and reduce their impact on the environment with sustainable and energy-efficient building and design, the couple is trying to take the green concept to a new level.

Guided by challenging environmental building standards, with plans to use reclaimed building materials, solar panels, wind turbines and a host of other green features, Elliott and Scott know the project will be tough, and acknowledge that people will disagree about the greenest ways to build and live. But they want the process to be a learning experience for themselves and others, a chance to let people look at their home and come to their own conclusions about what works and what doesn't.

"This is about exploration — it's not that we have all the answers,"



Barbara Scott hugs a ponderosa pine on the site of her new home in Bend. To make way for the construction, the tree may have to be removed. But Scott and her husband would mill the wood from the tree into lumber that could be used to build the new house.



Photos by Dean Guernsey / The Bulletin

Barbara Scott and Tom Elliott, on Tuesday at the Bend property where they will build their new home, plan to have the project completed by spring 2011. Their goal? An approximately 3,000-square-foot, two-story home using reclaimed building materials, solar panels, wind

Elliott said. "We're certainly learning as we go through the process."

Getting started

The couple started thinking about building a green home about two years ago, after moving to Bend from Montana.

Elliott, 58, worked for years in the ranching industry. His work was focused primarily in genetics, selling bull semen and embryos. Elliott said the business introduced him to the idea of sustainable agriculture.

Scott, 50, worked as a home economics teacher in Montana before moving to Tumalo in 1992. She spent a decade in Central Oregon, working in special education, before moving back to Montana in 2002. The couple met shortly after and went into the real estate business, managing several properties and building two homes that used some green techniques, though not to the level of their current project.

By the time Elliott and Scott married and moved to Bend about three years ago, they were starting to think bigger about green and sustainable living. They bought a house in northwest Bend but planned to look around for other options. After a few tours of homes and neighborhoods, the couple decided to build something of their own.

When two houses went up for sale on Northwest Shasta Place, just southwest of downtown Bend, Elliott and Scott decided they'd found the site for their new home.

After meeting with contractors, designers and landscapers, the couple's interest in green building grew, and before they knew it, Elliott and Scott were discussing solar heating, compost toilets and high-efficiency insulation.

"We thought, 'We have this incredible opportunity,' and it kind of grew from there; it snowballed," Scott said. "And we said, 'Let's just go extreme.'"

Kristian Willman, the owner of Timberline Construction of Bend and the project's general contractor, said the couple came to him with an unusually long list of ideas and some big goals.

"Most people use bits and pieces of what they're doing, just to kind of make them feel good inside," he said. "They're going full

turbines and other green features.



Photos by Dean Guernsey / The Bulletin

Tom Elliott and Barbara Scott, above, look through newspapers from the early 1900s that they recovered from a house being deconstructed on their property in northwest Bend.



Adam Walton, of Bend, takes down roof trusses Sept. 30 on one of the houses at Northwest Shasta Place, where Elliott and Scott plan to build their new home. Materials from the two existing houses will be used in the construction of the new home. The second house, left, will be deconstructed later.



on. ... They're going to take account of where all the materials come from, where they're manufactured. It's going to have an array of (solar) panels, solar hot water panels — and they're doing a lot of it, so the house should net zero (energy use), no problem. The amount of actual solar panel products we're going to be using is quite extraordinary compared to most houses.”

The plans

Elliott and Scott have assembled a team of builders, designers and other green-building experts, and they are already meeting regularly to talk about everything from floor plans to color schemes.

The approximately 3,000-square-foot, two-story home will have three bedrooms, 2½ bathrooms, and plenty of outdoor deck and patio space. The home's north and south wings will form a U-shape around a central garden courtyard and the property also will have a detached two-car garage and a separate guesthouse.

But before anything can start going up, the couple's team has to take on one of the most challenging aspects of the project: taking apart the two small, early 20th-century homes that sit on the site. The homes are not within a Bend historic district.

Instead of razing the houses and taking the materials to the landfill — the cheapest and most traditional option — Elliott and Scott decided to disassemble the houses piece by piece and try to save as many of the materials as possible for use in the new home.

Figuring out what could be saved and what it could be used for takes time and plenty of additional labor. Nails have to be removed from boards, which are then sanded and planed.

“If we were to just bulldoze them down, we could have done it in two weeks and filled up the landfill,” Willman said. “But we're on week four in just one house. It will probably add 10 weeks to deconstruction.”

Willman estimates the entire project will be completed in spring 2011.

Wood from the large ponderosa pine and other trees that might have to be cut will likely be used in the house, but the couple must get experts to assess the condition of the wood. Other materials used in the house will be reused or come from local sources or companies that get their wood from sustainable forests.

To help decide which materials to use and how to use them, the couple plans to take suggestions from different sets of



Photos by Dean Guernsey / The Bulletin

The couple is planning to build a house that incorporates a variety of green-building techniques, including using building materials salvaged from the site's old houses.



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Editor's note: Tom Elliott and Barbara Scott invited The Bulletin to follow their green-building project from start to finish to share their goals, decisions, costs, concerns, problems and achievements, and to be an open book on what it takes to build such a home.

The Bulletin will follow the couple's project through periodic stories. Today, meet Elliott and Scott as they embark on their green-building project.

guidelines, including the Leadership in Energy and Environmental Design system developed by the U.S. Green Building Council.

Elliott and Scott aren't sure yet if they want to strictly adhere to LEED guidelines, which provide ratings based on a point system for everything from the materials used in the home's foundation to the type of moisture-control system installed for a clothes dryer.

The couple hired M.L. Vidas, owner of Sustainable Design Services, to serve as the project's LEED consultant. Vidas' own house, which was completed last year, was the first in the area to receive platinum LEED certification — the system's highest rating for homes.

Vidas said LEED can help guide a project, and often provides builders and designers with ideas they might not otherwise have considered. But, in some cases, she said people might still be able to design something green without following every single rule.

"It will be up to (Elliott and Scott) to determine if this fits for them," Vidas said. "It's a rating system. It's not the be-all and end-all. It happens to be a very good, very stringent rating system, but sometimes it doesn't fit a particular project."

The big picture

Despite all the additional considerations, Vidas and Al Tozer, owner of Tozer Design Studio and the project's lead designer, said going green doesn't always equate to more complex or more expensive.

But with such a broad focus on green techniques and materials, it's likely the Elliott-Scott house will cost more than a typical project of the same scale.

"I think you could say (green building) could be more time-consuming, but I don't think it will necessarily be more expensive," Tozer said. "Will this home be more expensive? It might be. That's a hard one. ... We might end up less expensive than some of the homes in Broken Top that are very high-end homes but not very green. It so often depends on what the finish materials will be, and the fixtures and the lighting scheme, the cabinetry and floorings."

The couple is estimating they'll spend about \$350 per square foot, or about \$1 million for the entire house, Elliott said. The total price excludes the guesthouse and garage, which also will be built green.

Current construction prices for custom homes in the area average about \$200 to \$250 per square foot, according to the Central Oregon Builders Association.

Elliott and Scott said they consider their budget on every decision about the house, but they're also willing to make investments on materials and techniques they believe are important. Both said they see the project as a chance to contribute to the development of green building — by experimenting with ideas that come at a higher cost, they might help find solutions that will one day be cheaper and more accessible to more people.

It's an approach Vidas sup- ports.

"The more that people have the knowledge base and the education, the more they'll be able to make good decisions and also assess what someone else has done, what a product is, to be able to determine, 'Is this a good method? It's an innovative thing, but is it good?'" Vidas said.

They know some people might question their decision to build the home or use particular materials, but Elliott and Scott said

they're excited about the project, and the conversation and innovation it may spark.

"It's a personal experience," Elliott said. "It's a personal process, and it's not that we're holding ourselves forth as being experts in this area. It's just something we've chosen to explore, and it follows some of our lifelong passions. And if that coincides with someone else's interests and passions, that's great, and we're interested in sharing."

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