

Owners start moving in to Bend's greenest home

By Rachael Rees • The Bulletin Updated Dec 15, 2013 at 1:51AM - Published Dec 15, 2013 at 1:10AM

Editor's note: Tom Elliott and Barbara Scott invited The Bulletin to follow their attempt to build the ultimate green home in Bend and document the project from start to finish. The couple have started moving in, but aren't sure when they will be able to start the audit process to determine whether their home meets the stringent requirements of the Living Building Challenge.

A week from today, Barbara Scott and Tom Elliott will be welcoming about 100 friends and family into Desert Rain — what they hope will be the greenest home in Bend and the world — for their annual Christmas party.

Instead of cooking her vegetarian chili in a Teflon pan on top of a gas stove, Scott said she'll be making her traditional dish on her new inductive stove that heats pots and pans using a magnetic field.

Guests have been asked to bring slippers to wear inside the home, not so much for cleanliness, but to prevent particulates from contaminating the air quality, Scott said.

Permanent place cards next to toilets and sinks will remind guests to be mindful of the water that they are using. Overnight guests will be challenged to take a three-minute shower, she said. And when the party is over, she'll be able to see just how much water her guests used.

"We committed to more than just building a LBC house," Elliott said. "It's committing to a lifestyle we believe in."

A part of changing her lifestyle, Scott says, is having to downsize.

The Living Building Challenge

For more information on the Living Building Challenge, visit: <http://living-future.org/lbc>

To read more about Desert Rain, visit: <http://desertrainhouse.com> or www.facebook.com/desertrainhouse

"It certainly feels a little overwhelming because we're downsizing and only taking things we really love and have used in the past year," she said. "I like order, beauty ... I love to make a home a nest, so it is feeling a little out of control right now."

And a significant hurdle remains. The couple began moving into their home on Northwest Shasta Place in Bend on Dec. 2 after more than five years of planning, permitting and construction. But they can't start the audit that confirms meeting the Living Building Challenge — a set of green-building standards of the highest order — until their wastewater system for human waste is in place.

The couple has had to design and redesign a system for blackwater — human and dishwasher waste — that would meet city and LBC requirements, as well as their needs, without breaking the bank. That task has proved daunting.

The solution they've arrived at involved the construction of an above-ground structure, named Desert Lookout, that will contain a reliable blackwater system, Elliott said. They have been working closely with the city to address regulatory concerns. And the structure eliminates the need for expensive excavation and meets the city's zoning preference that calls for the creation of a residential compound — multiple residences on a property — he said.

Elliott said he plans to submit the Desert Lookout documentation to the city for final approval this week.

Desert Lookout is a two-story structure that Elliott expects will cost about \$350,000. The upper story will house an 800-square-foot apartment and the downstairs consists of a garage, an exercise room and the blackwater processing facility. The blackwater system includes a vacuum-flush toilet, similar to what is found on cruise ships, which delivers "the goods" to the composting unit, he said. Compost, which can be used to fertilize plants, will be removed about once a year. Liquids are separated and go through an evaporation system. Dishwasher water is also sent directly to the evaporation unit, a solar hot-air system.

If the plans are approved by the city, Elliott said, construction will start immediately. He estimates it will take about three months.

"We're trying to be patient," he said. "We're excited to be bringing this to some closure so we can test our systems fully and begin the audit phase of the Living Building Challenge."

As Scott stood in her new kitchen surrounded by stacks of picture frames and cookware, she said she's not excited for more construction.

"I'm being resistant because I'm ready to be here and not have it be a construction zone," she said. "And the money. I don't want to keep doling out money."

But the biggest challenge, the couple said, will be living a normal life in harmony with Living Building Challenge requirements that range from monitoring electric and water usage to using nontoxic products and purchasing furniture free of toxic materials that could impact air quality.

"We don't know how this works because we've never done it, nor has anyone else," Scott said.

But they are confident they can "figure it out."

"It will be a rehearsal," Elliott said, referring to next Sunday's party. "The acid test will be next year's Christmas party."

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Dean Guernsey / The Bulletin

Barbara Scott and Tom Elliott take a moment in their new home during the moving in process to go over details of Desert Rain.



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Barbara Scott carries a box of miscellaneous items through the garage while moving into her new home, Desert Rain.



Dean Guernsey / The Bulletin

Barbara Scott and Tom Elliott organize the garage during the moving in process at Desert Rain.