

EcoBuilding Times

Summer 2008

A Newsletter of the Northwest EcoBuilding Guild

The Silver Lining is Green

We've heard a lot in the news lately about climate change worries, extreme weather events like flooding, and forecasts for a weakened housing market. Interestingly enough, all this bad news has a silver lining.

According to the US Green Building Council, "There is a growing market for green homebuilding and green renovation, even amid a downturn in the housing market at large – and maybe even largely because of that downturn." Amid predictions of rising energy costs and concern over carbon emissions, green design has entered the mainstream. It may turn out that 2008 will be remembered as "The Year America Went Green"

Green design, also known as ecological design, is really nothing new. For centuries, people in the northern hemisphere have been planting deciduous shade trees on the south and west sides of homes and buildings to fend off the worst of the summer sun. A thoughtfully sited structure with good insulation and windows in the right places will retain heat in winter and stay cool in summer. Limiting hard outdoor surfaces, being conservative about water use, and allowing rainwater to soak into the ground will naturally re-charge the aquifer, insuring a permanent supply of clean water.

More recently, communities across the country have come to terms with the drawbacks of ignoring ecological design principles. De-centralized development has increased commute times and parking lot sizes, polluting air and water and increasing flooding risks, while converting downtowns into dead zones. It is clear that the time has come to recognize the intricate interdependencies between economic, social and ecological systems.

Ecological design is more than a way for individual homeowners to save dollars and energy. On a neighborhood or community scale, green design can protect watershed health, reduce carbon emissions, create more enjoyable places and build locally sustainable economies. In many cities across the nation, improved alternative transportation and recreation networks coupled with revitalized commercial/residential districts has resulted in vibrant live-work-play communities. Landscape architect Cathleen Corlett of Habitats, Inc. is enthusiastic about the current trend toward ecological design. "More and more people are factoring in long-term ecological and economic costs when they think about where and how to live, which is making cities and the ecology healthier, not to mention more fun and livable."

Habitats, a Eugene firm specializing in ecological design and green building construction, is riding a wave of interest in green design and construction. General contractor Aaron Whitney describes the growth of the firm as having evolved a great deal over the last 11 years into an interdisciplinary ecological planning, design and construction firm. "Our story is interesting because the firm's pursuit of sustainable principles has guided us to grow organically to become involved throughout a project's lifecycle, from de-construction to planning, design, construction and maintenance".

Habitats' process-based approach means they offer a breadth of integrated services under one roof, with specialists on staff including a registered landscape architect, building designer, general contractor, and biologist. It is truly a multidisciplinary firm, applying sustainable principles in the way the firm is structured, and in the materials and methods used.

Vegetated roofs have been in the news lately, and it looks like the trend is here to stay. According to some sources, the green building industry in the United States stands to grow by about 10 billion dollars over the next five years. More and more municipal governments and commercial enterprises are seeing the benefits.

In Eugene, a vegetated roof is in the planning stages for the municipal wastewater treatment plant. This project is intended to demonstrate sustainable stormwater management techniques.

When water falls on the roof, it is slowed, filtered and at least partially absorbed by the plants' root systems, thereby helping in a small but important way, to prevent stormwater pollution and downstream flooding. This project is but one example of how to create beauty while decreasing the amount of rainwater that immediately flows into local storm drains during heavy rains. 2

"The Silver Lining is Green" cont'd

"Ultimately, the health of the Willamette River, and all riparian habitats, depends upon finding ways to delay and filter rainwater that would otherwise wash pollutants and topsoil into our waterways", says project manager Jeff Ard.

Another noteworthy vegetated roof is located on the SeQuential Biofuels Station near the 30th Avenue exit off of I-5, which converted an EPA brownfield site into the first all-BIOFUEL and BIOFUEL blend fueling station in the Pacific Northwest. Habitats, Inc. managed the project through the design and permitting process and designed the site and stormwater management features.

The site design allows for all stormwater that lands on the retail station property to be slowed, cooled and cleaned through the vegetated roof, bioswales and detention pond. Bioswales and detention ponds are a simple alternative to piping stormwater runoff directly into the storm sewers. This is a cost effective way to help to purify and delay runoff, while recharging precious groundwater, and helping to replace wildlife habitat that has been lost to development.

According to some sources, the green building industry in the United States stands to grow by about 10 billion dollars over the next five years. Although the costs of ecological design and construction are admittedly a bit higher than conventional approaches, the long-term payoffs are priceless. When communities embrace ecological design, the result is cleaner air and water, richer wildlife habitat, a more enjoyable human environment, and happier people.

So, remember this next time you hear dire news about climate change, and the slump in the conventional housing market – ecological design actually helps people, wildlife and the environment, and it never looked more attractive!

By Cathleen Corlett, Registered Landscape Architect - Habitats, Inc., <u>www.habitatsinc.com</u>

~ 503.823.5431 ~

Portland's *Green Development Resource* now has a caller Hotline! The Hotline provides information about green building strategies, resources and incentives for new and existing commercial and residential projects in the region (Clackamas, Multnomah and Washington counties). Also visit www.buildgreen411.com.

EcoBuilding Times

Preserving Healthy Soil On Building Sites

The Washington Organic Recycling Council has launched a new website, <u>www.BuildingSoil.org</u>, and outreach program to help builders and developers preserve and restore healthy soil on building sites.

These "soil best management practices" (BMPs) will soon be required by local governments around western Washington, as they update local codes to comply with the Department of Ecology Stormwater Manual (which is required in the next two years by their municipal stormwater permits).

Soil BMPs include preserving site topsoil and vegetation where possible, correcting soil compaction, and amending soils that are disturbed during construction with compost. This helps preserve and restore healthy soil functions like stormwater infiltration and healthy, deep-rooted, vibrant plant growth that requires less water and chemicals.

"Home buyers around our region are increasingly demanding low-impact landscapes which are beautiful, low-maintenance, and healthy for families and our precious Northwest environment," said David McDonald of Seattle Public Utilities.

"No one wants a lawn or plants that die in the first year, or that takes tons of water, fertilizer, and weed-killer to keep alive. Healthy soil saves builders money in quicker planting, better plant survival, and easier erosion control, and it satisfies customers in the long term."

"The good news is that these soil best practices are easy to implement, easy to sell, and will help developers and builders stay ahead of the curve on both new regulations and home buyers' growing "green" ethic." WORC created a Homeowner Flyer to help builders sell their healthy soil practices.

Learn more at <u>www.BuildingSoil.org</u>. Please contact David McDonald at david.mcdonald@seattle.gov, if your building professional group would like to have a presentation on soil and site development best practices.

The Washington Organic Recycling Council unites local governments, the organics recycling industry, agriculture, forestry, scientists and citizens in "returning to the soil, the harvests from the earth."

A Green House Will Grow in Felida

Reprint from the *Columbian*, by staff writer **ERIK ROBINSON**

Imagine a house that generates its own energy, captures and treats all of its water, and provides as much value for wildlife as it does for its human inhabitants.

Those are among the goals for a single-family house in Felida that could become North America's first home to meet the Cascadia Region Green Building Council's "Living Building Challenge."

A Vancouver builder and a La Center nonprofit organization have agreed to build the supergreen house north of Vancouver in 2008.

Fazzolari Custom Homes is working with La Centerbased Project Green Build to design and build the sustainable house as part of a new subdivision in Felida called The Bungalows at Messner Estates. Timothy Buckley, owner of Greenstone Architecture, is the architect.

"This is extreme green building," said John Fazzolari, adding that the challenge has reinvigorated his passion for house-building.

Brandon Tauscher, the former high school teacher who founded Project Green Build, sees the project as an opportunity to showcase how to build a truly sustainable house while educating builders and the general public about the benefits.

"When you talk 20 to 30 years down the road, this is going to be more mainstream," Fazzolari said.

The Living Building Challenge leaves it to building designers to find ways to meet six broad ideals. For example, the house must generate at least as much energy as it uses. Fazzolari and Tauscher anticipate including solar panels along with a solar water heater. The house would be linked to the energy grid, but a meter would track how much power the panels generate compared to how much electricity the house consumes. The Green -Building Council would certify the house only after tracking 12 months of utility bills.

Eden Brukman, research director for the Cascadia Region Green Building Council in Portland, said roughly 60 building projects across the country are currently being designed or built to meet the Green Building Challenge. She applauded Fazzolari and Tauscher for taking up the challenge. "They might be the first in Washington, and they might be the first single-family home," she said.

Suburban living is not the standard template devised by sustainability advocates, who tend to prefer homes with smaller footprints where residents can walk or ride transit to shop, work or play. As suburbanites begin to embrace green building practices, Brukman said, they are likely to look for other areas where they can promote sustainability.

"It does seem to be contagious," she said. "The more you do, the more you want to do."

"We were also given a full print and online arrangement with the newspaper that they will cover the story from conception through completion, including them shooting video of the construction and moving into the materials manufacturing processes going in. I wanted to let the Guild know that this project is in part a result of me attending my firstever Guild retreat and in being part of the Guild board regionally and in Portland, so thank you all for the opportunity and inspiration."

Brandon Tauscher Project Green Build www.projectgreenbuild.org

The Northwest Green Home Primer By Kathleen O'Brien & Kathleen Smith



Seattle authors Kathleen O'Brien, an award-winning sustainable design and building consultant, and Kathleen Smith, an architectural designer and sustainability consultant, have put together a helpful guide brimming with ideas, inspiration and instruction.

Included are case studies of Northwest homes that exhibit green projects, both old and new, showing varying levels of environmental features. Plus, abundant photos and helpful illustrations making this an interesting and easy book to flip through and use, even for a novice.

Find it online at <u>www.greenhomeprimer.com</u>.

Community Through Thoughtful Design + Construction

Many Friday afternoons in the soon to be finished "urban canyon" of 1911 E Pine St in Seattle, the crew is having too much fun. There, with builder developer Graham Black of gProjects and architect Brad Khouri of b9 architects, they make some of the best tacos in town on the home made "asadaria". The grill is made from extra pieces of sculptural grade steel used in staircases from prior projects. This fusion of community through good food, and inventive use and reuse of quality materials, are 2 pillars of gProjects. Together they show that for these companies, community starts right from construction.

As described by Lawrence W. Cheek in the Seattle P.I., this canyon or courtyard space of this project has "the intrigue of not knowing what you'll see around the next corner". The courtyard ebbs and flows through the clustered development of 7 homes, averaging 2,000 finished sq. ft., and warms you with a variety of textures and spaces. These textures are from materials such as reclaimed 100 year old bricks, now used as pavers, and 70 year old wood slat siding from Ft. Lewis. Used with clean, modern lines and skillful finishing, these materials play off each other in variations that keep the eye guessing through the canyon.

At the Pine Street entrance, there is a generous brick patio where one can easily imagine strings of light overhead with a summer party below. From there you wander through, past the centrally located mailboxes, to the P-Patch nestled into beds formed by reclaimed cement walls with views through the trees to the lake below. This is a classic gProjects development; intentionally designed for spontaneous interaction at every step.



A sense of community does not end at the front door of each luxuriously sustainable home. One important item that is both an element of privacy and community is the placement of windows. By using a careful interplay of levels in the structural design in each unique home, Brad uses windows to maximize light, air, views of courtyard, sky and Lake Washington, while retaining privacy rarely experienced in urban density. After drywall, gProjects finishes every home with "in-house" labor, allowing for custom details and quality craftsmanship. Graham, Brad and the crew work together to achieve a level of thoughtful detailing for the interiors, resulting in homes with spacious intimacy only achieved by intentional design.

As with window design, the top floor maximizes utility while giving a surprising added effect. Each home has one or more semi-private deck that engages the canyon space. Importantly, these decks reduce the building's scale with one and a half and two story walls in and around the canyon. This brings more daylight into the heart of the project and into the individual homes, makes the canyon a useable enjoyable space, all the while creating unexpected community space above the ground.

With green roof patches, the decks sponsor interaction between neighbors in the friendly way community planners' dream of. Unique roofline pitches maximize the placement of photovoltaic solar outside, and natural light on the inside of each master suite, while adding to the playful interaction of this rooftop micro neighborhood.



The collection of homes here, oriented around this urban canyon are designed for interaction. From brick pavers below to green decks above, that sense of community promises to sustain as long into the future as the time tested materials of its construction.

gProjects.net b9architects.com

First LEED Certified Home on Bainbridge Island

When Lisa Martin, owner of Rolling Bay Land Co, was searching for property for her company's next construction project she found a little more than the usual vacant lot. Located in the Rolling Bay neighborhood of Bainbridge Island sits Valley Road Farm. An idyllic expanse of sunny acreage, blueberry fields, native forests and grassy pastures.

With two ecologically sensitive homes already on site and two more buildable lots, Valley Road Farm isn't really a farm at all, but a subdivision with a purpose, and it's a very sustainable one at that.

Valley Road Farm - Vision Statement

As a response to the rapid suburban development and loss of agricultural lands on Bainbridge Island, the founders of the Valley Road Farm have chosen to create a place which values sustainable living and farming practices. In order to create this place, they purchased five acres of land where four modest houses will be built using energy efficient design principles and the wise use of resources.

These houses will be built in a cluster preserving the majority of the property for small scale organic farming and gardening. During the site planning process, the founders commit to thoughtfully consider the character of the land, the needs of wildlife, and the value of this project in the larger community. The founders intent is to create a small community that provides ongoing sustainability and affordability on Bainbridge Island.

Lisa founded Rolling Bay Land Co. in 2006 with a very similar goal in mind. "Let's build beautiful houses that are a pleasure to live in, require less resources to build and less resources to operate." She wanted to offer the Bainbridge Island market a new type of housing that utilized the latest building technologies, architectural design and engineering. Together with AIA Architect Russel Hamlet of Studio Hamlet, whose design philosophy is to build homes that "touch lightly on the earth", Rolling Bay Land Co has accomplished just that on Valley Road Farm.

Dubbed the EcoModern Farmhouse, this 3 BR, 2.5 BA, 1878sf home is the first to be LEED certified on Bainbridge Island. While the USGBC's LEED rating system has long been focused on commercial construction (Seattle has over 20 LEED certified buildings in its downtown core alone), the LEED for Homes rating is relatively new. The nationwide pilot program was completed just last year, and Seattle saw it's first LEED certified homes with projects like Pryde & Johnson's Ashworth Cottages and Cascade Built's Jackson Place Townhomes.

With Seattle's O'Brien & Company verifying the project, Lisa Martin's home was awarded LEED Gold, and was very close to obtaining the highest rating of LEED Platinum. While this certification makes the techniques, building materials and systems used by Rolling Bay Land Co. very transparent and acts as a "guarantee of greenness" for the future homeowner, it's only one of this home's green attributes. Check out the rest!



Passive Solar Design - Takes optimal advantage of a southern orientation and ideal sun exposure.

Photovoltaics (PVs) - 40 Sanyo, 8 Kilowatt PV array, grid-tied to Puget Sound Energy (PSE) for Net Metering.

Solar Hot Water - The 30 Tube Thermomax system provides hot water for domestic use. Both solar systems were installed by Puget Sound Solar.

Heat Recovery Ventilator (HRV) - The Venmar Hepa 3000 provides whole house ventilation and optimal indoor air quality.

Electric Boiler - A Slant/Fin Monitron on-demand electric boiler heats the water for the radiant floor system.

Radiant Floor Heating - With a weather responsive WIRSBO (Uponor) temperature control.

For more information about this great home, projected to be Net Zero Energy, please visit <u>www.rollingbaylandco.com/new/homes.htm</u>. This home is currently listed for sale with GreenWorks Realty.

The Park Cottages Example

Couple develops moderately priced rentals in high-end North Idaho resort town

Reprint from BUILDING Magazine, by Cate Huisman

Steve Lockwood and Molly O'Reilly enjoy being able to walk most places they need to go from their small home near the center of Sandpoint. But as the town's rising home prices have forced many working people out of its home market, the couple have been dismayed that fewer and fewer others can enjoy the benefits of living close in.

So when they sold their old home in Portland and had some money to invest, they decided to find a lot in town where they could develop what Lockwood calls "an example of a place that would be pleasant to live, moderately priced and a part of the community." Working with architect Bruce Millard of the Studio of Sustainable Design, they created Park Cottages, a 16-unit development that won an award from Idaho Smart Growth for "providing compact, affordable and high-quality housing in a close-in location."



Several factors help residents live within modest means at Park Cottages. Although natural light and high-quality finishes make each apartment a pleasant place, the space is small—most units have between 450 square feet and 800 square feet of living space. Heating costs are kept to a minimum through the use of radiant heat in the floors and high-efficiency boilers—one per building instead of one per unit—an efficient approach made possible by including heating costs in the rent. Thick walls built of RASTRA, a lightweight mixture of recycled Styrofoam and cement, provide good insulation.

Beyond the buildings, other factors that contribute to keeping costs down are the location and the landscaping. Residents' use of cars is minimal because their homes are close to most of Sandpoint's amenities and services. Water use and costs are kept low by using xeriscaping on most of the lot, except for the small portion used for a vegetable garden. O'Reilly and a resident tend the garden and leave the fruits of their labor in the common laundry room for tenants to take what they need.

"It was an enormous harvest," notes resident Michael Franklin, who particularly appreciated last summer's tomatoes. "Several tenants have said that it really helped with their food bills over the summer," mentions O'Reilly.



The homes are designed with porches and patios facing the street or courtyards to help residents develop a sense of community both among themselves and with others in the neighborhood. In addition to the laundry room, they share a common barbecue area, and a neighboring park provides open space at no direct cost.

The market for such accommodations is diverse. Brooke Deccio lived at Park Cottages while she worked at her first job out of college at Coldwater Creek. "I wanted something with character," Deccio says, and "there's so much more".

Residents include several such young people starting out on careers, as well as those in the midst of life transitions and a few with special needs. At the other end of the age spectrum are the Franklins, Phil and Michael, who were looking to move into town from their place in the country. "We're in our 80s, and this just seemed to suit our needs ideally," Phil Franklin says.

The investment has made sense for Lockwood and O'Reilly, who are confident that it will continue to provide them with the return they need in retirement. "Economically it has worked out well for us," says Lockwood, noting that the apartments "were occupied the day they were available, all of them, and have been since." But Park Cottages provides them with more than a financial return. It's "something we could feel good about," Lockwood adds. "We get a lot of satisfaction out of it."

BRING's New Green Office Building Open for Tours

After more than six years in the making, BRING Recycling moved into our flagship office building at the Planet Improvement Center in January 2008. Completely transformed from a run-down, 50s-era commercial building, our comfortable new office now serves as an attractive showplace of reuse and sustainable building techniques and a popular meeting place for community groups and gatherings.

The office is the first stop on a tour of the Planet Improvement Center. Guests are delighted at the natural light and airiness of the spacious interior and continually amazed at the variety of reused materials we've gleaned from familiar spots around town: ceiling beams from the Springfield Planing Mill floor; windows from Auto Craft (torn down to make way for the Federal Courthouse); metal siding from Babe's Cabaret in Springfield; glass doors from a florist shop at 29th and Willamette (where Oregon Community Credit Union now stands).

The office makes a great case for sustainable building on a scale that most folks can achieve. It features:

• *passive solar design* – original roof pitched for solar gain.

• *lowE glazing* – window seconds salvaged from the manufacturer.

• *hydronic radiant heating system* – solar hot water-assisted hybrid system, featuring innovative radiant heaters (made from culverts) and standard concrete radiant floor.

• *high-fly ash concrete in the floor* – fly ash, a by-product of coal burned for electricity generation, replaces a portion of the highly energy-intensive cement and makes the concrete more durable.

• *extensive natural day-lighting* – via extensive, shaded south glazing, and north-facing roof monitors.

• *natural cooling via night-flush ventilation* – using operable windows, timer-controlled exhaust fans and operable roof monitor windows.

• *higher insulation R-values* – about twice the Oregon Energy Code requirement.

• *high-efficiency (refurbished) lighting* – 50% more efficient than code requires.

• *outdoor mural in front entryway* – made from recycled tiles and bottles.

This summer, we'll complete the green roof, installing the root barrier (repurposed landfill liner) and planting sedums which are now growing in trays throughout the Center. Along with our bioswale, the green roof will clean and cool our storm water before it seeps into the nearby Willamette River.

EcoBuilding Guild members were among the cast of thousands who made this building possible. We hope you'll stop by and see what we've done. Guided tours and casual visits are welcomed. We rent out the office for meetings too.

The Planet Improvement Center is located at 4446 Franklin Blvd. in Glenwood. The office is open Monday-Friday, 9-5. Please call BRING for more information: 746-3023.



Before: Burkett's Trailer Sales retail store, a Glenwood fixture for more than 50 years, as it looked when we began the extensive remodel in 2001.



After: BRING's new office building, a complete remodel with roof pitched for solar gain, a new solar hydronic heating system, natural day-lighting and ventilation, energy efficient lighting and nearly all reused materials.

Bring Recycling

Planet Improvement Center Used Building Materials Warehouse 4446 Franklin Boulevard, Glenwood (between Eugene & Springfield), OR www.bringrecycling.org

The Reese Home - Simply Elegant!

by Erica Merrill of Fugate Residential Design

When designing the Reese house, Sandra Fugate attempted to blend the serenity and awe of a Japanese temple with the simplicity and warmth of a craftsman bungalow. This one story home was designed for *aging-in place*, using *Universal Design* principles as well as *Green* building techniques in every aspect of the home. The open-plan kitchen, dining, and living areas invite you out to the large covered patio. The bright halls are lined with storage closets and lead to two bedrooms, two tiled baths, an office, sewing room, utility room, and a two-car garage.

In keeping with Japanese tradition, the home is nestled into its site, creating a graceful transition between the indoor and outdoor environment. French doors from the dining area allow for scenic views of the beautifully designed waterfall/pond and landscaped yard and garden which are filled with native plants. The covered patio extends from the dining area to create ample, low maintenance outdoor living space. Large windows throughout the house maximize natural light and create the feeling of being close to nature.



The interior lines of the house are clean, uncluttered and simple. The natural wood trim, cabinets, and millwork create a warm and welcoming atmosphere. This home features reclaimed fir millwork, custom cherry and maple cabinets, paperstone counter tops, wood clad windows, "solatubes" and a custom box-beam ceiling. The exterior stucco finish was chosen for low maintenance and durability.

This home is a **5-Star Built-Green** home. To attain any level, 1-5, in the *Built Green* program the home must exceed current building code requirements in energy efficiency, resource conservation, indoor air quality, and building science application. To reach levels 4 or 5, the home needs to be independently evaluated by a certified *Built Green* verifier. The Reese project was a collaboration between the owners, Adele & Owen Reese, and a number of NWEBG members from the South Sound Chapter: Designer Sandra Fugate of *Fugate Residential Design*, Builder Barrett Burr of *Polar Bear Construction*, HVAC installation by Wayne Medrud of *Smart Energy Systems*, Cabinets by Nic James of *Beech Tree Building Company*, Wood Trim from *Windfall Lumber* and Built Green Verifier Luke Howard.



Total square footage:	2200
Bedrooms:	2-3
Baths:	2
Location:	Thurston County, WA
Features:	
Certified 5-Star Built Gree	en
Open floor plan "Great Roo	m"
Slab-on-grade polished cor	ncrete floor
Radiant heat	
Ground source heat pump	
Indoor air quality system	
Insulated Concrete Form (I	CF) exterior walls
Low-E/Argon high perform	ance windows
Landscaping with native pl	ants

Two New Additions to the City of Seattle Green Home Guide Series

Check out the **Green Home Buyer's Guide** and the **Do-It-Yourself Home Energy Guide**, two great new additions to the City of Seattle's **Green Home Guide Series**, and a must have for all green home enthusiasts. Find them under 'Building Tools' at www.seattle.gov/dpd/GreenBuilding/.





The Top Ten Misconceptions About Solar Hot Water in Western WA

And the Truths that Pave the Road to Energy Independence

1. **Misconception-** It's cloudy, so solar hot water systems won't work.

Truth- Seattle receives a "Good" rating from FindSolar.com meaning that enough solar energy is available on a typical day to provide for solar hot water needs. Seattle has about 30% more sun per year than Germany- the current world leader in solar installations.

2. **Misconception-** Solar hot water systems are not cost effective in Western Washington.

Truth- Solar hot water systems pay for themselves in as little as eight years according to Larry Owens of the non-profit Shoreline Solar Project. Properly maintained hot water systems can have an operational life of 20-40 years and can help save an additional 15% on your electric bill when combined with a tankless hot water heater.

3. **Misconception-** I will have less hot water if I switch to solar power.

Truth- Solar hot water systems can be designed to support any quantity of hot water needs. Even in situations where the solar hot water system needs to be combined with a conventional system to provide for all of your hot water, it can save money by helping the conventional system operate more efficiently.

4. **Misconception-** Solar Hot water doesn't work at night.

Truth- Solar hot water systems work throughout the day to offset your energy usage and costs by heating and maintaining the temperature of your hot water. Even if you use your hot water at night, the energy collected during the day is stored to be used when you need it.

5. **Misconception-** It's too cold in the winter for solar hot water.

Truth- Even in sub zero temperatures, solar hot water collectors can reach temperatures greater than the cold water introduced to your domestic water system, meaning there is less energy needed to heat it to the desired level and you are saving money.

6. **Misconception-** Solar hot water systems are expensive to install.

Truth- There is no sales tax charged on solar hot water equipment in Washington State until 2011. There is also a federal tax credit of 30% of the cost of your system or \$2,000, whichever is less, available to home owners who switch to solar hot water. An average system for a home or business can be installed for an average of about \$7,000 in Western Washington, making it far more affordable than most kitchen and some bathroom upgrades.

7. **Misconception**- Solar hot water systems do not make a big impact on the environment.

Truth- Hot water heating is the second largest component of a homes energy use accounting for between 15 and 25 percent of the energy consumed. Switching to solar how water can eliminate carbon emissions created when fossil fuels are used to create energy.

8. **Misconception-** Solar hot water systems are ugly.

Truth- Modern solar hot water systems are usually mounted flush with the roof and resemble a skylight. Solar hot waters systems have also become a status symbol as concerns about our country's energy needs and environment have become front page news.

9. **Misconception-** Solar hot water takes up a lot of space.

Truth- Most solar hot water systems can be implemented without using much more space than is currently being handled by your current hot water system. Working with a knowledgeable design team can help you create the system that is right for your space.

10. **Misconception-** It takes a long time to install a solar hot water system.

Truth- Most solar hot water systems can be installed in three to four work days depending on the system and the installation team.

A&R Solar Northwest Solar Blog www.aandrsolar.blogspot.com

Building & Selling Affordable Green Homes

For the past three years, Remax Realtor Kellene Richards and her son, Jonathan, have built affordable, green homes in the Olympia area as an Earthconscious solution for the entry-level buyer. Their company, Prodigy Homes LLC, uses third-party verified programs, such as Built Green and Energy Star.

At the core of Richards' purpose for promoting the lifestyle is her belief in value-driven green versus retail-driven green. "I believe green is not a fad - it's the future," Richards says. "I want to promote a minimalist lifestyle and show my clients how to embrace best-building practices that lend nature a hand.

"The nice thing about our area is there's a core group of builders and Realtors involved in the green community through Built Green. This group isn't as concerned with the retail-driven marketing aspect. They know it's about finding clients a low-cost, high-quality product that's environmentally friendly.

Make sure it's green

Richards says that agents who want to ensure the homes they list, or help buyers find, are built green should follow this checklist:

- 1. If you're working for a seller who wants to market a "green" home, request a list of what constitutes the claim - even if it's a verified program. It should be part of the seller's disclosure documentation.
- 2. If you're working for a buyer, provide a copy of the list ASAP and make sure it's signed off of as part of the feasibility if you can't get it up front. You don't need a buyer who gets the list at closing and realizes that the only green components are a recycling program and meeting local state building codes. The green client usually expects more.
- 3. If the home's "green" status is part of a certified program, make sure that the certification is provided to the buyer as a closing contingency. Most programs only allow builders a certain period of time to request certification. After that time has passed, you won't be able to prove the green home's third-party verification if you don't have the certification letter.

Food Waste Recycling Now Available in Thurston County

Starting May 1, recycling in Thurston County started a whole new chapter. LeMay trash customers may now place all food waste and compostable papers into their yard waste containers. Olympia residents will be able to do the same starting in July. Organic materials such as yard debris, food scraps and compostable papers made up a whopping 22% of the waste that goes to the landfill, according to the Thurston County 2004 Waste Characterization Study.

The common question is what items can and can't go into the organics bin. The easy answer is if it is food (including meat, bones, and dairy) or made of paper, it can go in. It is extremely important that contaminants such as plastics, Styrofoam, glass, and metals do not go into the organics.

If residents use their commingled recycling bin and utilize the new organics collection, there certainly isn't much left for the garbage. LeMay even offers just recycling and yard waste service for those residents that just don't generate enough trash to require regular pickup.

Businesses and schools have been able to subscribe to the "Food Plus" organics recycling program for the past several months. Participating schools now divert approximately 75% of the kitchen and cafeteria waste. Trash service is more expensive than collecting recyclables and organics, so participants can save a significant amount of money while doing their part to protect the environment. Food Plus is provided countywide by LeMay Enterprises at 486-8608. They offer it as a stand alone or as part of their bundled Certified Green recycling program for all materials.

The compostable materials are transported to Silver Springs Organics, (www.silverspringsorganics.com) a new, state-of-the art commercial composting facility near Rainier. Pallets, construction lumber, drywall, and land-clearing debris are also accepted.

Thurston County Solid Waste will provide site set-up assistance, start-up staffing, and suggestions on purchasing changes that may help reduce trash generation. Please contact Terri Thomas at 360-754-2896.

The City of Olympia, at 570-5837, also provides organics collection to city businesses.

Kellene Richards - <u>www.myprodigyhome</u>.com

Chapters and Community Events

Southwest Oregon (Eugene) Contact: Bill Klaverkamp at bigwfk@comcast.net

Western Columbia (Portland)

Contact: Stephen Aiguier at 503.804.1746 or stephen@greenhammerconstruction.com

South Puget Sound (Olympia)

Contact: Chris Van Daalen at 360.789.9669 or cvan@theverdantgroup.com

Central Puget Sound (Seattle)

Contact: Justin Fogle at justin@ecobuilding.org

Central Washington and Central BC

Contact: George Bottcher at 509.929.5050 or ecobuilding@eltell.net

Inland NW & Southeast BC

Contact: Juliet Sinisterra at 509.710.5249 or julietsinisterra@yahoo.com

The Olympic Peninsula Chapter

Contact: The chapter is looking to form a new steering committee. If you are interested, please email president@ecobuilding.org.

Regional Board Update!

We're at the end of an era! Bruce Millard has officially finished his 6 yr term as Regional Board President, after a 3 yr term as the Inland Chapter President. Bruce was an excellent leader who was instrumental in moving the Guild onto a positive track and connecting us with other like-minded groups.

Until a new President is elected in May of 2009, Executive Board members Ben Kaufman, Terry Phelan, and Fiona Douglas-Hamilton will be Acting Co-Chairs. Please call Terry Phelan at 425-427-8643 with any interim issues. E-mails sent to <u>president@ecobuilding.org</u> will go to all 3 co-chairs. If you are interested in stepping into this fulfilling position next spring, please let us know!

NWEBG's New Mission Statement

The Northwest EcoBuilding Guild is an alliance of builders, designers, suppliers, homeowners, and partners concerned with ecological building in the Pacific Northwest. Our mission is to provide leadership in education to transform the built environment and build a sustainable society. We work to: Build Local Living Economies

Safeguard the Ecological Diversity of our Bioregion Champion Human Health and Community

Mitigating Climate Change is the central challenge of our time. Throughout its educational activities and partnerships, the Guild will promote buildings that dramatically reduce carbon emissions.

RGBG Bike Tour - July 25th - Aug 25th

Seattle based RIDE GREEN BUILD GREEN is raising awareness and money in support of green affordable housing, and they're doing it with a month long bicycle tour. An estimated \$40,000 will be raised prior to the tour and will be donated to Habitat for Humanity of East King County to cover the cost difference for a LEED certified affordable home.

Visit <u>www.ridegreenbuildgreen.com</u> to learn more.

Mainstream Green Conference - Oct 3rd & 4th

Habitat for Humanity Washington will sponsor a two-day green building conference, Mainstream Green, on implementing the new Washington Evergreen Sustainable Development Standard, in Tacoma, WA at the Greater Tacoma Convention and Trade Center. Sponsorship opportunities are now available.

Contact <u>mainstreamgreenconference@habitatwa.org</u>

LOGIX ICF Installers training comes to Seattle!

June 21st from 8-4 at Homewood Suites at SeaTac for \$64 plus tax. Go to the Smartbuild website for info and to register and pay by credit card or Pay Pal. If you would like to pay by check -email me with your information and put the check in the mail to hold your place. Pre-registration is required and space is limited by the size of the room, so register early. <u>www.smartbuildsolutions.com</u>



Check the Guild website www.ecobuilding.org (click on *Calendar*) regularly to stay abreast of all events sponsored by Guild Chapters and Members!

New Eco-getaway for Snoqualmie Pass

The Dream

Imagine a place where hospitality feels different, where the facility and services are small, locally owned and operated and your journey connects you permanently to the area and its people. A small hotel where you can get an authentic local experience through guided recreation, producer sourced food and drinks, organic spa services and knowledge shared by people that have lived here for what seems forever.

An experience that reinforces a healthy lifestyle of recreation, relaxation and seasonal celebrations, and is conveniently located within an hour of Puget Sound and Central Washington. Inspired by the mountains and enhanced by nature, experience a healthy combination of adventure, discovery and escape connected to the sense of place.

Take this experience and add to it a Built Green certification through focusing on eco-friendly design, energy efficiency, healthy indoor air quality, water quality and conservation, non-toxic material selection, maintenance and operation procedures that reduce, reuse and recycle and you will have Hyak Market.

We are talking about an eco-getaway and local community gathering spot that mirrors who you are and what you hold dear, and inspires you to lead a more mindful life. A place for a healthy and happy day trip, overnight stay or a unique seasonal program that will lead to a new understanding and appreciation of the hidden treasures of Snoqualmie Pass. Hiking, biking, fishing, cross country skiing, snow shoeing, and downhill ski lifts are all within walking distance - so you can play more and drive less, or better yet, skip the drive and catch a shuttle to the mountain.

The Reality

Induced from visits to various ski villages throughout the US and Canada, since 2004 partners Christina Lyons and Greg Craven have worked to make this dream a reality.

Many steps have been taken on their journey. They formed StarGazer Properties, LLC as a real estate development and management company focused on providing sustainable mixed use facilities to visitors and residents of Snoqualmie Pass. The perfect piece of property was purchased and Hyak Market was designed to be a synergy of small sustainable businesses all with dramatic mountain views. Nestled on 2.58 acres next to The Summit at Snoqualmie Summit East ski resort, and located off I-90 Exit 54 Hyak/Gold Creek, the design reflects the rustic and rugged ski and mining history of Kittitas County.

Hyak Market will feature 5 residentially scaled buildings named after Cascade Mountain peaks visible from the site. The project includes a central pedestrian plaza with raised planters and benches, private parking for customers, upscale interiors and amenities, access from the residential area via a foot trail, which will also serve as a wetlands interpretive trail during the non-snow season.

Construction will cover only 31% of the site leaving the rest as protected wetlands, native landscape or restored areas from invasive weeds. Materials will include native stone, vertical board and batten siding, black metal roofs, and heavy timber elements.

Hyak Market will consist of 8 lodge rooms, spa, restaurant, recreation equipment, retail, guide shops, weekend market vendors and community offices. Construction will occur in two to three phases and one of the key marketing strategies will rely on their close alliances with recreation clubs, green building and environmental organizations, and other businesses with an emphasis on sustainability.





StarGazer Properties is looking for businesses that want to be associated with something positive. They have a solid execution plan and security. They are currently taking inquires on leasing, financing and investment opportunities. For details please email <u>chris@stargazerprop.com</u> or call at 425-246-6208.

About Us: The Northwest EcoBuilding Guild is the Pacific Northwest's leading association of residential builders, architects, designers, consultants, and suppliers concerned with ecological building. The Guild's mission is to function as an educational forum to facilitate building practices that protect human health, encourage sustainable resource usage and foster long term economic vitality. To learn more about the Guild and its activities, check out our Web site at www.ecobuilding.org. For membership information go to www.ecobuilding.org membership@ecobuilding.org.