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Portland's first vegetated roof was installed in 1999

PROJECTS

PORTLAND'S FIRST VEGETATED ROOF WAS CONSTRUCTED IN 1999

Before the first LEED pilot projects certified in March 2000, Otak had designed and construction was complete on Hamilton West in September 1999. Located in downtown Portland in the University District, this nine-story, 74,000 SF mixed-use building provides affordable multifamily dwelling units as well as street-level retail. Constructed on a 13,000 SF lot previously used as a surface parking lot, it increased the urban density, with easy access to the Portland Street Car line. Capping the building is the first eco-roof permitted in the City of Portland. Designed by Otak for stormwater quality management, this vegetated roof covers 5,100 SF of an 8,700 SF surface, with two different substrate depths: 3" and 5". Planted in sedums, delosperma, sempervivum, and native and non-native wildflowers, it has also been colonized by other grasses and weeds. It requires relatively low maintenance: irrigation during the summer and weeding once a year. After several years of use, the data collected on stormwater quality, detention, and attenuation showed that the roof out-performed expectations. This eco-roof was found to have 100 percent stormwater retention for summer storm events, and 53.5 percent over a 27-month period. To read about this and other strategies for low impact development in the City of Portland click here. To read a brochure on eco-roof tours in Portland click here. For help with your eco-roof project email us.

BRIDGE FACILITATES SAFER PEDESTRIAN & BIKE TRAFFIC ON TRAIL

The Aurora Interurban Bridge (Photo courtesy City of Shoreline)

As part of Otak's ongoing work with the City of Shoreline, WA's, Interurban Trail project, a bridge we designed to cross over Aurora Avenue (SR 99) is almost complete. When finished, the entire trail will be a three-mile

nonmotorized transportation system that follows the former Interurban Rail Line. Owned by Seattle City Light and used as an electrical power transmission strip, the 100-foot-wide corridor runs from Seattle to Everett, WA, roughly parallel to Aurora Avenue. One of the goals for sustainability in this urban area is to provide access to safe bicycle and pedestrian pathways that help remove congestion on roadways. The Interurban Trail traverses through or over the maze of vehicle-clogged arterials and intersections in the city, and still provides access to the economic core of Shoreline which includes nearby shopping, services, employment, transit centers, and a park-and-ride. The trail will eventually include rest stops, trailheads, interpretive historical and natural features, and directional signs. For help on your bridge or trail project email us. Shoreline Interurban Trail Map

PEOPLE

DOUG DIGS DIRT (AND PLANTS AND OTHER STUFF)

What does a wetlands scientist do on his day off? He has a busman's holiday of working with native plant restorations, of course. Doug Gresham, a wetland ecologist in Otak's Kirkland office, has volunteered a lot of time at Carkeek Park in Seattle and with the Washington Native Plant Society (WNPS). At Carkeek Park, Doug volunteers to build hiking trails, remove invasive plants, and plant native species, and is a member of the park's Advisory Council that provides park management recommendations. He helps implement the forest management plan for Carkeek Park, which is part of the Green Seattle Partnership for sustainable management of city parks. He's also worked at the park professionally restoring salmon habitat in Pipers Creek, monitoring water quality and flow rates, and correcting erosion problems caused by stormwater runoff.

Left Photo-Venema Creek in Carkeek Park shows a typical channel.
Right Photo-Venema Creek in Carkeek Park shows a bank erosion problem.

As part of Doug's volunteer work with WNPS, he offers garden consultations for people who want to add native plants to their gardens. Known as Growing Wild, this WNPS program is dedicated to spreading knowledge about northwest native plants and helping gardeners incorporate more native plants in their yards and gardens. Growing Wild offers an on-site garden consultation for people interested in native plant gardening, low maintenance gardening, and landscaping for wildlife, in return for a donation to WNPS. He has conducted six site visits and prepared reports for residential properties as well as public open space areas. Check out WNPS's Native Plant Appreciation Week through May 5.

READING

GREEN SMART

In May, the first issue of GreenSmart will hit 10,000 design and construction industry mailboxes in Washington and Oregon. Lucy Bodilly, editor of Northwest Construction and this new quarterly magazine, had envisioned a publication dedicated to sustainable building in the Pacific Northwest, and this will be it! For more information contact the editor via email or call 206-378-4716.

NATURAL CAPITALISM

Ever wonder how your business can be both sustainable and profitable? Natural Capitalism: Creating the Next Industrial Revolution, by Paul Hawken, Amory Lovins, and L. Hunter Lovins, explores the potential for lucrative business in an era of approaching environmental limits. Read excerpts here.

RESOURCES

MONETARY GRANTS FOR BUILT GREEN RESIDENTIAL PROJECTS

The King County/Seattle Built Green™ incentive provides funding for single-family residential and community development projects to help offset the cost of certifying and designing innovative green projects throughout Seattle and King County. Eligible projects may receive up to $15,000. Grants are funded through the Department of Natural Resources and Parks, Water and Land Resource Division, and Seattle Public Utilities. Projects that certify to the highest four- and five-star level of Built Green qualify with some additional requirements. For a copy of the new Built Green checklist for single-family projects click here. For more information on King County's green building programs click here.

CASCADE AGENDA DEVELOPS TDR PROGRAM

Transfer of Development Rights (TDR) is a market-based mechanism that promotes responsible growth, while conserving areas such as prime agricultural and environmentally sensitive lands. It is designed to redirect growth-not to limit or stop development. TDR is the exchange of zoning privileges from areas with low population needs, such as farmland, to areas of high population needs, such as downtown areas. These

transfers allow for preservation of open space and historic landmarks, while providing urban areas with opportunity for continued growth. The Cascade Agenda has developed a TDR program to promote the growing use of TDRs in Washington State. There are two bills dealing with Transfer of Development Rights in the Washington legislature: Bill # 1998 and Bill # 1636. Test your knowledge of TDR with an online survey. For more information about TDR from the CLC click here. Find Washington TDR programs here. Read all about TDR on the Realtor.org website.

Transfer of development helps preserve working farms, forests, and natural areas.

ANIMAL SOUNDS RINGTONES

A free website allows you to listen to wildlife ringtones and have your favorites sent directly to your phone with one easy click. Find animals including the blue-throated macaw, beluga whale, band-bellied owl, mountain yellow-legged frog, Yosemite toad, or any one of 40 other endangered wildlife species. To listen click here

Photograph by SeaWorld

AN ONLINE GREEN HOME BUILDING RESOURCE

For information on green homebuilding in Washington State, check the online information portal at www.builtgreenwashington.org. Built Green™ Washington is incorporated as a 501(C)(3) that promotes green home building through education and training, and provides connections to local and statewide resources.

WHAT MAKES IT GREEN?

NATIVE PLANTS

Blue Anemone Copyright © 2003 Donna Franklin (WNPS)

Native plant ecosystems are critical to sustaining Washington's (and other regions) wildlife and the quality of our environment, and are a cornerstone of biological diversity. Native plants do the best job of providing food and shelter for native wild animals and have been used in the development of new foods, medicines and industrial products. Native vegetation evolved to live with the local climate, soil types, and animals, and bring with them natural advantages such as: they save water because many native plants require no irrigation beyond normal rainfall; they are low maintenance because they are already adapted to the local environment and therefore require little to no fertilizer, little to no pesticides, less pruning, and less of your time to maintain; they don't need pesticides because they've developed their own defenses against pests and diseases; they provide wildlife habitat and food for animals such as birds, butterflies, beneficial insects, and other interesting creatures; they support local ecology and therefore natural habitats and plantings can provide a "bridge" between developed areas and remaining wild places. In Washington State alone there are more than 3,000 native plant species that range in habitat from the desert to the rain forest to the high alpine environment. Extending through May 5 is Native Plant Appreciation Week all across Washington State, with native plant garden tours on May 5 & 6 in King and Snohomish Counties, WA. For more information on these activities and many, many more, contact the Washington Native Plant Society at 206-527-3210 or visit the website.

NEWS

WHAT'S NEWSWORTHY @ OTAK

GREENING TEMPE

Cady Mall

Otak's Tempe office will participate in and invites you to attend the Green Summit 2007. Hosted by Arizona State University at its Tempe campus, it will be held April 19 from 3 pm to 7 pm on the Student Services Lawn and Cady Mall. This student-led event will feature a green product showcase, a career fair, and will highlight ASU's sustainability offerings. For further information email Chris Samila.

OTAK IS A SILVER SPONSOR OF USGBC CASCADIA CHAPTER

Otak has continued its support of the Cascadia Region Green Building Council, the largest green building organization in the Pacific Northwest. Otak is a silver level sponsor as part of the 100 Friends of Cascadia program for this non-profit group. As a cross-border advocacy organization, it takes a bioregional approach to design, construction, and operation of buildings in Oregon, Washington, and British Columbia. The chapter has offices in Portland, Seattle, and Vancouver. The parent organization, the U.S. Green Building Council is the creator of the LEED Green Building Rating System Otak has designed or engineered several LEED-rated projects such as King County Metro's Power Distribution Headquarters and Broadway Housing for Portland State University. Several other projects are underway with planned LEED certifications such as the Tempe Transportation Center and the Desert National Wildlife Refuge Complex in Nevada.

COMMUTERS EXPOSED TO HIGH LEVEL OF DIESEL PARTICLES

Diesel truck exhaust (Photo EPA)

The good news is that a Diesel Particulate Filter (DPF) can reduce tailpipe emissions of diesel particles by up to 90 percent. Several cities, including Seattle, have retrofitted older buses and garbage trucks or purchased new cleaner transit buses with effective emission controls. The bad news is that a recent study confirms that commuters-on car, train, bus, bike, or foot-breathe in up to eight times more diesel soot particles than they would just being in a downtown area, according to a new study by the non-profit Clean Air Task Force. Based on air-quality monitoring on routes through New York City, Boston, Columbus, OH, and Austin, TX, the average person breathes in up to 60 percent of their daily total of lung-attacking particles during the six percent of the day spent commuting. New diesel engines are required by federal law to have emissions-reducing technology, and Congress has authorized subsidies for retrofitting the 13 million heavy trucks on the road. To read the report click here.

EFFICIENT APPLIANCES, USING LESS, HEALTHIER PAINTS

Otak's Amy Florence, marketing specialist in our Kirkland office, found ten tips for greening your home - things that just about anyone can do.

FROM THE EDITOR

BUILDING GREEN MEETS NATURAL CAPITALISM

Our friends in Snohomish County, WA, hosted the largest ever Built Green conference and green homes tour. More than 750 people attended the Everett event. Conference chair Deanna Carveth -- a founder of the Sustainable Development Task Force of Snohomish County and member of the County's Solid Waste Division, a longtime supporter of green building -- successfully oversaw this

alliance between green building and business. Thanks also go to the Master Builders Association for the organization of this event.

As part of the conference, Otak joined with King County, WA's green building program, to co-sponsor the keynote speaker, in a gesture of inter-county collaboration and public-private cooperation. The keynote, Hunter Lovins, described the world as we know it and provided recommendations for business practices to improve both the environment and the bottom line. As founder of the non-profit Natural Capitalism Solutions, Lovins travels the globe speaking to, meeting with and educating powerful decision-makers in business, government and civil society about the principles of sustainability. She left the Everett event to fly to Bentonville, Arkansas, to brief the entire senior management of Wal-Mart.

Now and Then: Hunter Lovins, the Environmental Natural Capitalist Cowgirl

Co-author of Natural Capitalism, the groundbreaking work that describes the next industrial revolution and shows how businesses can increase profits, and solve environmental problems at the same time. Natural Capitalism established three interlinked principles: 1) buying time with radically increased resource productivity; 2) redesigning industry on biological models with closed loops and zero waste; and 3) reinvesting in the natural capital that is the basis of future prosperity. Click here to read the book.

Lovins is the co-founder of TreePeople, RMI, and Natural Capitalism Solutions . Trained as a sociologist and attorney, she has consulted for the Pentagon, U.S. Environmental Protection Agency, Department of Energy, International Finance Corporation, Royal Dutch Shell, Interface, numerous cities, and such countries as Afghanistan, Australia, Canada, Germany, Jamaica, and the U.K.. In 2000 she was named Time Magazine's Hero of the Planet. This whiskey-drinking, barrel-racing, small sports car-driving, business professor has a clear message: We all have one thing in common; our collective future depends on taking care of our little round ball of a planet. The good news is that the changes necessary for environmental health will deliver superior business, healthier people, and stronger communities.

Robin Rogers

Otak is a member of:

PARTING SHOT by Yen Nguyen, intern architect in Otak's Seattle office

Gravina is in the region of Puglia in Southern Italy, and Yen says, "It's Latin for 'It gives grain and wine.'"