



ZONE

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ARCHITECTURE • ENGINEERING • LANDSCAPE ARCHITECTURE • PLANNING • ENVIRONMENTAL • SURVEY



More tadpoles this year at Seattle's Magnuson Park

PROJECTS

FROG DAY AFTERNOON

By [Kevin O'Brien, Ph. D.](#), Otak Wildlife Biologist



Stephanie Smith catches frogs

The May sunshine warms the air at Seattle's [Warren G. Magnuson Park](#), revealing a woman knee-deep in a small pond and peering intently at the water. Net in hand, Otak biologist [Stephanie Smith](#) is in the process of capturing and counting frog larvae. "These are [Pacific chorus frog](#) larvae -you know, tadpoles," explains Stephanie. "These little guys are the most common frogs in Washington-you can find them all over the state. Right now, we're just netting for the larvae. The adult frogs have finished their breeding for the year." Stephanie dumps her net, with its cluster of wriggling tadpoles, into a bucket full of pond water. "We'll identify and count these guys a little bit later," she says as she moves the bucket into a shady spot beneath some dogwood bushes. "We'll also count and identify some of the other animals in our samples-dragonfly and mayfly larvae, aquatic snails, beetles, that sort of thing," she adds.

Stephanie and I are conducting the tadpole survey as part of a Seattle Parks and Recreation project to install wetlands and athletic fields at Magnuson Park. A small wetland in the park, locally known as Frog Pond, has provided breeding habitat for Pacific chorus frogs for many years.

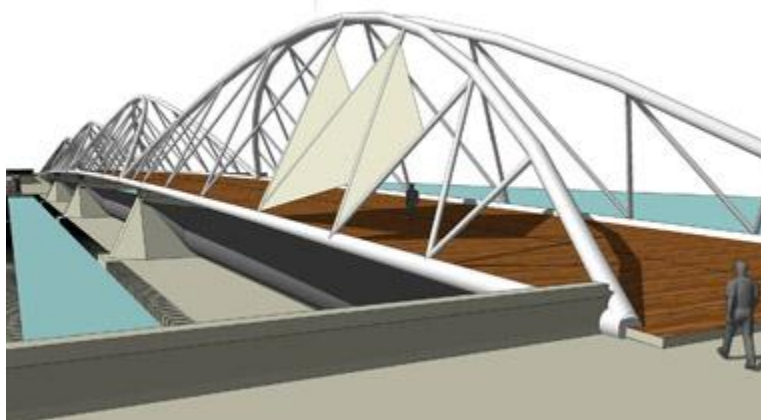
Although Frog Pond is outside the Park's project footprint, grading and athletic field installation occurred nearby during 2006. There was some concern about the frog population last year, with construction occurring relatively close to their breeding pond. Our team did a survey in May 2006 to get a sense of the population numbers and we're back this year to do the same thing.

We finish sweeping the nets through the little pond and then retire to the shore to count, identify, and then release the catch back into the pond. Stephanie sits hunched over the plastic sorting tray, carefully counting the frog tadpoles and other captured denizens of the pond. "Lots of tadpoles this year," she says. "Way more than last year." At the end of the survey count, I tally the total tadpole capture numbers as Stephanie releases the captured animals. I observe that the 2007 survey picked up about ten times more tadpoles compared to 2006-the pond definitely appears to be more densely populated with larvae this year.

The Magnuson wetland and athletic field project is ongoing and moving into its second phase in 2007. Otak will continue to provide wetland and environmental support and monitoring for the project. The amphibian monitoring work will be expanded to include the installed wetlands once they are constructed. As Stephanie notes while we stow our gear in her vehicle at the end of the day, "We'll be back out here next year and looking at more than just the Frog Pond once the new wetlands are built."

For further information about how Otak can help with your environmental or wetlands monitoring [email us](#) or call (425) 822-4446.

BRIDGE OVER PUDDLED WATERS



The City of Tempe, AZ, and Otak are making it easier for walkers and bicyclists to get across [Tempe Town Lake](#), one of the area's most popular outdoor destinations. Otak's [Tempe](#) office, along with [T.Y. LIN International](#), is designing a unique new pedestrian bridge over the Town Lake Downstream Dam. City officials want a bridge that blends art, architecture, and engineering in what it hopes will become a new icon for the city. When complete, the bridge will connect bike and pedestrian paths on the north and south sides of the lake, as well as provide a link both to Scottsdale's Indian Bend Wash path system and to Tempe's downtown Mill Avenue District. Preliminary designs are for four 240-foot spans, constructed on the existing piers of an inflatable rubber dam. The 16-foot wide walking/biking surface will be at least 16 feet across, enabling multiple bikers, runners, walkers or sightseers to pass each other simultaneously. Part of the long-term goal is to create a complete loop around Tempe Town Lake. Otak is providing architectural design, landscape architecture, civil engineering, public outreach and survey services. As with many Otak projects, the overall design will also incorporate public art. This pedestrian bridge is one part of the improvements planned for the area. For information on how Otak can help with your project design [email us](#).

PEOPLE

NICK ALLMENDINGER ROCKS!!



That is, rocks, sediments, water, gases, mud, clay, and other below-ground materials and how they all work together. As a newly-certified Licensed Geologist, Nick Allmendinger in Otak's Kirkland, WA, office merits congratulations! In April, he was notified that he passed the full eight-hour Professional Geologist exam that he had taken in early March. The exam, administered by the Washington State Department of Licensing in Olympia, is given in two parts: one covers fundamentals of all areas of geology, while the other covers professional protocols for practicing geologists. Nick spent at least two days a week studying for the exam during the months leading up to the test, and took time off during the week of the test to prepare. The exams themselves were developed by [ASBOG](#) (Association of

State Boards of Geology), a non-profit organization. The science of geology includes a broad spectrum of specialties in which many geologists might specialize in. Nick's particular areas of expertise include geomorphology and general geological research and field methods, and he is a good contact for questions about general geological issues. He also has expertise in hydrogeology, sedimentology, stratigraphy, and structural geology. Nick can be reached at (425) 739-7957 or via [email](#); he would love the opportunity to help you with your projects!

WHAT MAKES IT GREEN?

ECO-CHIC CLOTHING



What, you may ask? A flooring material that can be worn? [Kathryn Lee](#), a project assistant in Otak's Corvallis office, says, yes, there is such a thing as clothing made from bamboo. In fact, that is the tip of the veritable iceberg in green clothing. From shoes made with recycled rubber to jackets made with recycled plastic bottles, eco is becoming chic as a new wave of fashion designers becomes environmentally conscious and friendly. To read an MSNBC article [click here](#). Renewable, reusable, non-polluting fabrics such as organic cotton and wool, bamboo, corn-based fibers, cashmere, linen, and hemp that are grown with no chemicals or metals, and woven recycled fibers and biopolymers are now transformed into everything from elegant couture to street wear. The clothing manufacturing process is also transforming itself to use non-toxic dyes and conditioners that won't harm fish. [Treehugger.com](#) reports that the biggest environmental cost on clothing is the cleaning of it. To read the article [click here](#). Fashion Week in May revealed many recycled fabric designs as described on the shopping blog [Great Green Goods](#). Others include [Vegan shoes](#); [People Tree](#) fair trade clothes; [Green Loop](#) for finding green fashions online; Eco-fashion sources at [Green Maven](#); Design houses such as New York City's [gominyc](#); Edgier fashions such as [Nature vs. Future](#); [Wildlife Works](#); [Sustaneity](#); [Bahra Shahpar](#); and luxury green clothing lines such as [Linda Loudermilk](#) and [Camilla Norrback](#).

To keep your green clothes clean, there are non-toxic detergents, soaps, and softeners linked in the [Green Guide](#). [Energy Star](#) rates the most energy-efficient, water saving clothes washers with a list of participating manufacturers posted on its [website](#). [Project Laundry List](#) is a non-profit dedicated to helping people find solutions to energy use and clean clothes alternatives. There's also a network of green dry cleaners that use a chemically inert process instead of the typical solvent-based products, called [Green Earth Cleaning](#).

NEWS

WHAT'S NEWSWORTHY @ OTAK

VOLUNTEERS NEEDED FOR WHITE CENTER HEIGHTS PARK JUNE 8 - JUNE 14



Park makeover design created by University of Washington students

King County, WA's, White Center Heights Park is scheduled for a makeover, thanks to the Starbucks Coffee Company's Neighborhood Parks Program, which recently endowed King County Parks with a \$550,000 gift. The park will get the Ultimate Park Makeover courtesy of Starbucks' generosity, plus the hard work of residents, community groups, and staff from King County and Starbucks.

The Starbucks Ultimate Park Makeover of White Center Heights Park will take place from Friday, June 8 through Thursday, June 14. Volunteers will work shifts from 9 a.m. to 12:30 p.m., and 12:30 p.m. to 4 p.m. To participate in this project, please contact Laurie Clinton, King County Parks Volunteer Program Coordinator, at (206) 296-4452 or [email](#). Donations will also be accepted. For information, please contact Jessie Israel at (206) 913-7412 or Val Motley at (206) 390-9059. The renovated park's grand opening is set for Friday, June 15.

Students from the University of Washington's landscape architecture design/build program have designed the park renovation plan based on input from White Center residents. To view the design [click here](#).

Otak has been involved in the Starbucks Ultimate Park Makeover as an adviser in sustainability and planning. Other major stakeholders include the [White Center Community Development Association](#); King County's [Green Building Program](#); the [Southwest Boys & Girls Club](#); and the adjacent [Greenbridge](#) housing community, which is one of King County's original low impact development practices demonstration projects. For more information about White Center Heights Park and the Starbucks Ultimate Park Makeover visit the County's [website](#). For Otak's help on a park project [email us](#).



Oregon State
University in Corvallis,
OSU Photo

CORVALLIS, OREGON, IS A BEST GREEN PLACE

Country Home magazine asked, "Where is it easier to live an eco-friendly life?" Based on research in collaboration with Sperling's BestPlaces, it came up with a big list. Corvallis, OR, came up third on a list of Best Green Place to live in America based on criteria from air and watershed quality, miles of mass transit, and green power to farmers markets, organic producers and groceries. To see how your city rates [click here](#). To find out how our Corvallis office can help you, [email us](#).

DECONSTRUCTOR OF THE YEAR

Dave Bennink, one of Otak's partners in working with King County, WA's, [sustainable building program](#) is one of the top deconstructors of the country. Bennink, president of [Re-Use Consulting](#), was selected last month as one of the top three contenders for the national Deconstructor of the Year Award, by the [Building Materials Reuse Association's](#) (BMRA) at its national conference in Madison, WI. Deconstruction is a method of dismantling buildings and other structures to reuse the component parts and materials.

SMALLER IS NOT AUTOMATICALLY CHEAPER



Small homes. Photo Credit The Cottage Company

After winning a national housing award from the American Institute of Architects, Seattle-area builder/architect team [The Cottage Company](#) was asked why its small, cottage-style homes are not cheaper since they're smaller. They respond with, "Do you buy a car by the pound?" Their reasoning includes: smaller and well engineered is more expensive; expensive fixed elements, such as utilities, bathrooms, and kitchens, are needed in every house no matter what the size; unlike larger homes, the cottages don't have the less-expensive extras such as hallways, dens, and foyers; cost per square foot doesn't take into account the 'livability quotient' of a house-theirs include built-ins like desks and reading nooks, and double-duty spaces like family rooms that increase the livability quotient; craftsman details such as handmade glass tile also increase the cost; and their communities feature common gardens and a community center. Their Danielson Grove community sells briskly for around \$175 to \$250 per square foot. Some green home building programs, such as Vermont Builds Greener (VBG), offer advantages to smaller homes by awarding points. On Page 15 of its [checklist](#), VBG provides a house size matrix that gives extra credit for smaller homes - the more bedrooms in a smaller space, the better in its program.

READING

ONLINE GREEN GUIDANCE FOR LIVING



National Geographic Society acquired the online ["Green Guide"](#) in March this year as part of its mission to encourage people to care about the planet. Within the [green homes](#) section of the site), you will discover tools that allow you to calculate your CO2 footprint, along with tips on how to alter your lifestyle to improve the numbers, and many other features.

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FROM THE EDITOR

GRAVITY: IT'S THE LAW

Some of my family live in a rural area of Virginia where rolling hills, by necessity, transfer water from properties above to lower elevations via gravity. The property on which my family resides receives its water from a spring - for drinking, bathing, cleaning, and irrigating. The graywater flows almost directly from my family's home and land into the neighbor's land and spring house. From there, the water flows into a small stream, then into the Hardware River, then into the James River, and finally to the [Chesapeake Bay](#) -- the largest estuary in the U.S., almost two hundred miles away. (Estuaries are where rivers meet the sea.)



Chesapeake Bay
satellite Landsat photo
circa 2000, NASA

My family will not use toxic pesticides, herbicides and fertilizers, toxic cleaners, and otherwise harmful chemicals because they are concerned about the degradation of the Chesapeake Bay (as well as their neighbors' well being). They are not typical environmentalists, treehuggers, or radical in any sense -- they simply appreciate the natural world and what it has to offer and they know that they have the opportunity to quietly make a difference.

They have benefited from a promotional campaign designed to help residents understand the consequences of their actions on the larger watershed into which their residual and expended water flows. Since 1983 the non-profit [Chesapeake Bay Program](#) regional partnership has been working to protect and restore the bay, as well as educate the public in the multi-state watershed that affects the Bay. This group's work led to the creation of a national estuaries program (<http://www.epa.gov/owow/estuaries/>) that identifies [28 separate areas](#) around our coastlines.

In the Pacific Northwest, we have three main estuaries: [Tillamook Bay](#), the [Columbia River](#) and [Puget Sound](#). The watersheds that feed these can be huge; for example, the watershed for Puget Sound covers some 16,525 square miles (as compared to Chesapeake Bay that drains 64,299 square miles).

Several groups local to the Pacific Northwest are working to protect our estuaries here: Oregon's [coastal estuaries](#); [Puget Sound Restoration Fund](#); Puget Sound Nearshore Project is a large-scale initiative working on habitat restoration needs in the [Puget Sound basin](#); and the [Puget Sound Partnership](#), formerly the Puget Sound Action Team, among others.

We all live in some kind of a watershed. You can find your watershed in the EPA Locate-Your-Watershed [database](#) by zip code, county, city, or other designations. If you're interested in stewardship, EPA has an [Adopt-a-Watershed program](#). If you just want to know the water quality of your watershed, you can check the EPA's [National Assessment Database](#). EPA also maintains the [EnviroMapper for Water](#), an interactive map that allows the user to search anywhere in the U.S. for impaired waters and other information. The U.S. Geological Survey also allows searches by state to find out more about the water wherever you are in the U.S. at its [website](#).



Tillamook Bay, Oregon-Photo Credit Gary Wilson USDA

[Robin Rogers](#)

Otak is a member of:



PARTING SHOT by Charline Fox



Sunset at Deer Harbor, Orcas Island, Washington