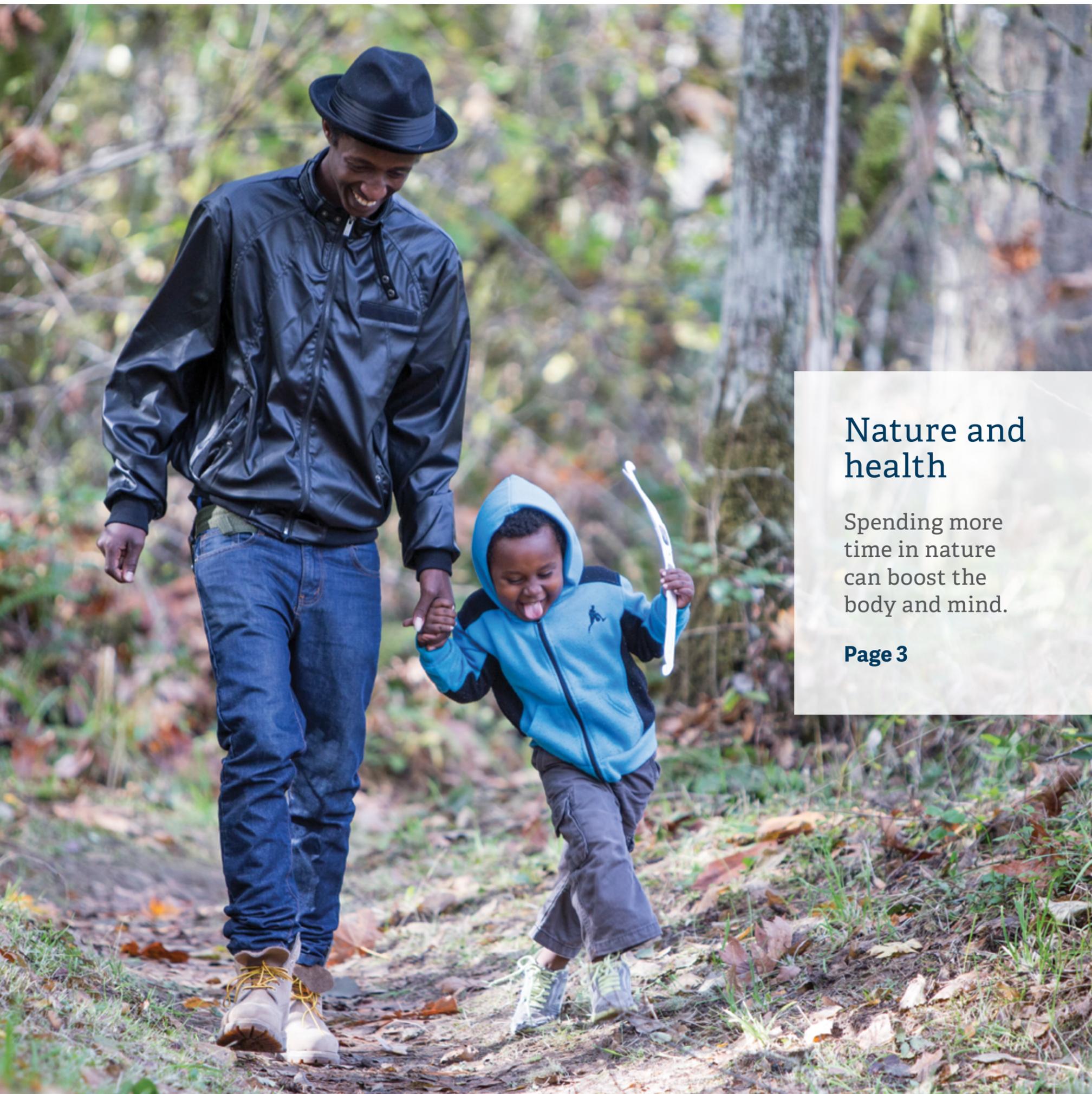


Our Big Backyard



Winter 2017



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If you picnic at Blue Lake or take your kids to the Oregon Zoo, enjoy symphonies at the Schnitz or auto shows at the convention center, put out your trash or drive your car – we've already crossed paths.

So, hello. We're Metro – nice to meet you.

In a metropolitan area as big as Portland, we can do a lot of things better together. Join us to help the region prepare for a happy, healthy future.

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Tom Hughes

Metro Councilors

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Kathryn Harrington, District 4
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Pets policy

To protect plants, wildlife and people, Metro does not allow pets at most regional parks and natural areas. Pets can damage sensitive habitat and threaten wildlife the region has worked to protect. In natural areas where pets are not allowed, people see more wildlife and get closer to it. Seeing-eye dogs or other service animals are allowed. Please bring cleanup materials.



Voters renew Metro parks and natural areas levy

By Yuxing Zheng

Photography by Sofia Basto

Voters in the greater Portland metro region on Nov. 8 overwhelmingly approved a renewal of Metro's parks and natural areas levy, securing an additional five years of funding for restoration, maintenance, park operations and opportunities for people to access nature.

Measure 26-178 passed with 74 percent support, according to the Oregon Secretary of State's Office.

"The region won. Nature won," said Metro Councilor Kathryn Harrington, who campaigned for the levy. "I think people really understand the importance of protecting clean water, restoring fish and wildlife habitat and their opportunities to be out in nature and experience it."

The renewal extends the end date of levy funding from June 2018 to June 2023 and is projected to raise about \$81 million over the course of those five years.

About half of the money will go toward restoring and maintaining natural areas to improve water quality and fish and wildlife habitat. About 20 to 30 percent will go toward regional parks operations. The rest will go toward improving parks and natural areas for people, grants for community nature projects, and nature education and volunteer programs.

Levy money will also be aimed at diversifying the contractors that Metro hires, as well as

improving programs and facilities for underserved communities such as communities of color, low-income communities and youths.

The levy costs 9.6 cents per \$1,000 in assessed home value – about \$20 a year for the owner of a home with \$200,000 in assessed value.

Metro manages more than 17,000 acres of parks, trails and natural areas. Much of the land was acquired with money from natural areas bond measures that voters approved in 1995 and 2006.

Money from the 2006 bond measure is winding down. Bond money goes toward land acquisition, nature grants for capital projects and local parks providers.

This year's levy renewal will buy Metro time to secure more permanent funding for the program's long-term future, Metro Council President Tom Hughes said.

"It allows for more long-range planning and an opportunity for us to work with our partners to see if there's a more permanent funding source," he said.

Strong voter support for the renewal signals that Metro's parks and nature work resonates with the community, Hughes said.

"It's consistent with the core values most voters have: clean water, restoring habitat and connecting with nature in urban areas," he said.

Like what you see?

Sign up for the print edition of the quarterly magazine, change your address or save paper by switching to a digital subscription. Email ourbigbackyard@oregonmetro.gov or call 503-797-1545.

On the cover: Brothers Patrick Iyamuremye and Etienne Byiringiro walk to the Sandy River at Oxbow Regional Park. The brothers, the oldest and youngest of nine siblings, are on their way to look at spawning salmon during Salmon Homecoming in the fall. Photo by Cory Eldridge

Nature and health



Looking to get fit? Stressed out and need a break? Spending more time in nature can boost mental and physical health. Learn how two Portland-area residents experience nature and its health benefits, then find tips to get outside more.

Many people start the new year with resolutions to improve their health, and nature can play a key role in achieving that goal.

Spending more time in nature provides a variety of benefits for the mind and body, multiple scientific studies show. The health benefits of the outdoors are typically associated with exercise – running, hiking and biking are all popular in the Portland area. But you don't need to raise your heartbeat to reap the health benefits of being outdoors.

People who live in close proximity to green spaces are more likely to be healthier than those who do not, a 2009 study from the Netherlands found.

The greatest difference nature made was with the residents' mental health. Those who lived near the most amount of greenspace were a third less likely to be treated for anxiety and 20 percent less likely to be treated for depression than those who lived near the least amount of green space.

These findings ring true for Michelle Lewis, a mental health counselor in Portland.

Lewis, who practices at Akili Counseling Services, said she often recommends simple activities outdoors to people who suffer from anxiety and depression. The trick, she says, is being mindful of the various stimuli of nature.

"It reduces stress. It's calming. Natural sounds are calming," Lewis said. "So you take a walk in the wilderness, and it's like it insulates you. It's like a buffer. You can block out a lot of the environmental stressors, like people screaming, cars."

Lewis recommends walking 10 to 15 minutes per day and practicing mindfulness, like feeling the grass, smelling flowers, listening to water flowing and focusing on birdsongs.

"We think 15 minutes isn't enough time to do anything," Lewis said. "You can do a lot in 15 minutes."

Story by Saerom Yoo England
Photography by Saerom Yoo England,
C. Bruce Forster, Fred Joe and Kent Derek



Michael Barton

Michael Barton and his wife, Catherine McMullen, were talking a few years ago about their daughter Afton's seizures.

What was triggering them? How could they minimize her risk of seizures?

Afton, who was diagnosed with epilepsy when she was 1, was having seizures in the car, in her sleep and at the dinner table. Her parents couldn't identify a cause, but they noticed a pattern: Afton was much less likely to have seizures if she was outside. When Afton was outside, she was calmer and had fewer behavioral problems.

At this point, the outdoors were already a big part of the family's lives. In fall 2010, shortly after the family moved to Portland from Montana, Barton started a blog, "Exploring Portland's Nature Areas," to share his family's outings with other parents seeking kid-friendly activities.

But when Barton, a stay-at-home dad, realized these outdoors activities also helped minimize Afton's seizures, he became a lot more deliberate about spending time outdoors with his two children. His eldest, Patrick, is 10.

The online community now has a Facebook group, "PDX Kids in Nature," which began in early 2016 and has about 300 members.

On a short walk at Maricara Natural Area in Southwest Portland, Afton, now 4, sought out slugs and Patrick looked for tree branches to whittle with his pocket knife.

They stopped by some thimbleberry leaves and felt their soft, smooth surface.

"It's edible," Patrick said. "It's definitely edible."

After undergoing brain surgery recently, Afton has yet to have another seizure. The outdoors has been helpful to her recovery and behavioral issues that stem from her epilepsy, Barton said.



Top left: Michael Barton and his children, Patrick, 10, and Afton, 4, take a walk in Maricara Natural Area in Southwest Portland. Barton writes a blog about his family's outings to encourage other parents to spend time outdoors.

Barton hopes that other families can use his blog and the Facebook group to spend more time outside.

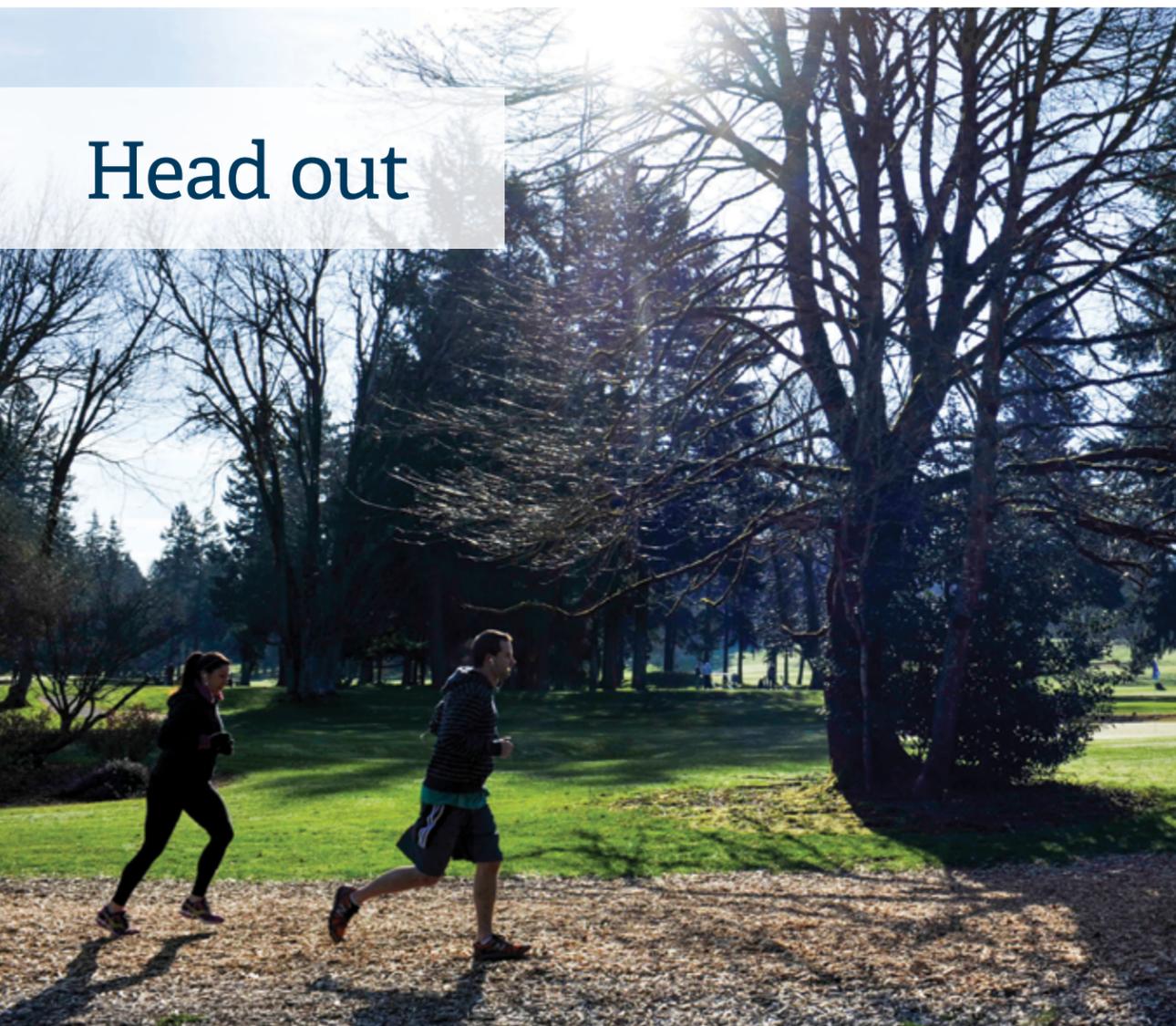
For Patrick, nature provides an educational experience, where he can learn outdoor survival skills and more. Barton often takes the children on guided outings with naturalists and other experts.

"It's valuable for kids to experience being around people who have chosen nature as a basis for their career," Barton said.

As the three wrapped up their walk, Barton mused about the chilly and cloudy weather, though it didn't deter him or his kids.

"We'll still go outside on the cold days," he said. "Sometimes that's when you see things."

Head out



Spending more time in nature doesn't have to be hard. Here are a few tips:

- Sit quietly outside, and pay attention to the smells, sights and sounds of nature.
- Walk 15-20 minutes per day.
- Seek out community groups to tag along with on outdoor activities.
- If you aren't able to get outside, play nature sounds that can be found on apps or online.
- Plan an outing with a friend – it's more fun and safe.
- Instead of eating at your desk or in front of the TV, eat in a courtyard or on a porch.
- Use apps like eBird and help scientists collect nature data.
- Sign up for an outdoor volunteer activity, such as maintaining parks.

To learn more about volunteer opportunities, such as caring for native plants and natural areas, visit oregonmetro.gov/volunteer



Tricia Tillman

Tricia Tillman grew up in Portland, but it wasn't until she returned after years away that she truly appreciated the lush greenery and easy access to nature.

Tillman hiked the Eagle Creek Trail in the Columbia River Gorge with some high school friends when she returned after college, and she discovered her inner outdoors enthusiast.

"I decided that I really liked it," she said. "It's so beautiful."

But even as Tillman took in the scenery at Eagle Creek, she couldn't help noticing that no one else on that trail looked like her, a black woman.

This is a common observation among people of color in the Portland region, she said.

"What I hear over and over again is when people go hiking on their own, they feel isolated because they don't see people out on the trails who look like them," Tillman said.

So more than a decade ago, Tillman and a friend, Greg Wolley, founded the African American Outdoor Association. The group organizes monthly outings for black residents in the Portland area, providing a safe environment to explore parks and natural areas that could otherwise feel intimidating.

They've gone hiking, kayaking, biking, horseback riding, snowshoeing and on an overnight camping trip.

Tillman's day job is public health director for Multnomah County Health Department, so she's also knowledgeable about the health benefits of being outdoors.

"It's beneficial to your whole nervous system, your mental health and your physical health," Tillman said.

She hopes that exposing black residents to the outdoors will not only improve their health but also change the way they connect with nature.

"In some ways, it's about reclaiming the space and breaking through barriers, as well as mental barriers, to create more of a welcoming environment," Tillman said.

Many participants use the outings organized by Tillman's group as training wheels to their outdoors explorations.

Tillman has witnessed on countless occasions the spiritual connections participants experience. The joy and wonder they feel when they are outdoors are palpable, she said. She'll frequently hear people say, "God is so good," and "God is so amazing," as participants are emotionally moved by the beauty that surrounds them.

The outings have also connected participants with their ancestors, who navigated and survived the outdoors to escape slavery, Tillman said.

"In some ways, it's about reclaiming the space and breaking through barriers, as well as mental barriers, to create more of a welcoming environment."

"People reframe how they think of the woods," she said. "It goes from scary to safe and liberating."

And once hearts and minds are changed by the experience of nature, health benefits can begin to kick in. That's how Tillman describes her own history with the outdoors.

"The enjoyment came first. Understanding the health benefits came later," she said. "I think that's what we want to do for other people: foster the fun and wonder. Maybe somewhere along the line, they can start thinking about their health."



Did you know?

A growing body of scientific studies shows that spending time in nature has widespread benefits.

- Just five minutes of activity in nature can improve self-esteem and mood, a 2010 analysis of 10 British studies found.
- Walking in nature for 50 minutes prior helped participants perform better on memory-related tasks compared to those who walked in urban environments, a University of Michigan study found.
- Exercising outside has greater benefits than exercising inside. People who engage in "green exercise" have lower blood pressure, higher self esteem and improved mood compared to those who exercise indoors, research shows.
- Patients with access to nature have a speedier recovery from surgery, according to a 1984 study published in Science magazine.
- Diabetic patients who take nature walks have lower blood glucose levels.
- Children diagnosed with attention deficit hyperactivity disorder experience a reduction of symptoms after exposure to the outdoors, according to researchers at the University of Illinois Urbana-Champaign.
- Exposure to as little as 20 minutes of nature can make people feel more alive, a researcher from the University of Rochester found. The researcher said this method could be a better way to get energized than a cup of coffee.
- Older adults who spend time outdoors every day have fewer health problems, like aching bones or sleep problems, than those who do not, according to research published in the Journal of Aging Health.
- Spending more time outside is associated with a lower prevalence of nearsightedness in school children, according to a study done in Australia.



Explore

Find a place to play oregonmetro.gov/parks



2 questions with Carol Mayer-Reed

Story by Lisa Shishido Konkola

Along the banks of the Willamette River in Oregon City, a vision is taking shape to reconnect Oregonians with one of the state's most spectacular – and hidden – natural treasures: Willamette Falls.

Oregon City, Clackamas County, Metro and the State of Oregon have teamed up to help transform a former industrial site into an iconic destination, beginning with a public riverwalk. The partners are working with a world-class design team: Snøhetta, Mayer/Reed and DIALOG. Carol Mayer-Reed of Portland design firm Mayer/Reed shares her inspirations for the riverwalk project.

Q. What do you think is the key to designing successful public spaces?

A. We are keen observers of context and try to understand how our design assignment is connected to other places. How can projects be catalytic forces that enable something else to happen? We always keep an eye toward what is outside the boundaries of a project, knowing that urban waterfronts and other linear projects are by nature especially dynamic and catalytic.

Q. What are you most excited about on the riverwalk project?

A. Three aspects excite me most about the Willamette Falls Riverwalk: its past, present and future. Stories of the falls, along with its natural and human history make it unique. I first laid eyes on the falls in 1978 and hoped that one day I would be in a position to alter its future. So personally, this is very rewarding.

The present post-industrial state of the site is poised to be transformed into something that is, at times, hard to imagine. It's a very complex, captivating site that's ripe with possibilities.

We expect the future riverwalk will reveal rich, sensual experiences that are guaranteed to delight and surprise. We see this incredible moment in time to restore critical habitat and create an entirely new layer of history. And beyond the site, we expect to see many changes in the communities on both sides of the river. The riverwalk project is truly one of those catalytic moments!

To see proposed designs for the riverwalk and learn about upcoming community events, visit [rediscoverthefalls.com](https://www.rediscoverthefalls.com)

Parks and nature news



Can dead wood be useful? In habitat restoration, yes

Story by Rebecca Koffman

Photography by Brian Vaughn and Yuxing Zheng

To most people, the term “dead wood” means “useless.”

But there's a lot of life in dead trees. In the world of ecology, dead wood provides immense value in healthy habitats.

“Besides growing trees and other plants, if you had to pick one other thing that was key in the forest, it would be dead wood,” said Lori Hennings, a senior natural resources scientist at Metro.

Snags – standing dead trees – downed logs and woody debris in forests and streams provide food, shelter and habitat for mammals, birds, fish, insects, plants, fungi and lichens. Lightning, fire and old age create dead wood in healthy habitats, but younger forests and land cleared for farming, logging and development often lack a healthy supply. Sometimes land managers and scientists create snags and downed logs to kick-start habitat restoration.

Elaine Stewart, natural resources scientist at Metro, recalls placing downed Douglas fir logs from a project in rural West Linn onto an adjoining piece of cleared land. Crews placed one trunk upright to create a snag.

“We were using Douglas fir stems to jumpstart the wood cycle,” Stewart said. “There was a red-tailed hawk circling above. The instant the snag was in place, it came and perched on it.”

Snags make great perches. Owls and raptors survey the terrain from their bare branches. Flycatcher birds use them as a base to survey insects before jumping out and catching them, Hennings said.

Woodpeckers excavate nest cavities in snags. Once they're done using them as nests, a whole

host of other birds that can't excavate their own nests move in. These secondary cavity nesters include native western bluebirds and white-breasted nuthatches. Raccoons, northern flying squirrels and bats also sometimes shelter in abandoned woodpecker nests.

“No snags, no nesting,” Hennings said.

Dead wood on the ground also serves as shelter. Small rodents such as mice and voles use downed logs to hide from predators. Salamanders and other amphibians, which don't have waterproof skin, shelter under logs so that they don't dry out.

And dead wood is a source of food. Birds feed on the beetles, ants and other bugs that eat dead wood.

“Birds undress the log,” drilling or pulling the bark off, looking for insects, Hennings said. This allows in water and fungus and speeds decay. Other bugs eat the fungus. The nutrients in the decaying wood then feed the soil.

Dead wood is important for rivers and streams, too. Historically, rivers were cleared of wood to make navigation easier, but this resulted in wide, shallow stretches of warm water that was deadly for fish.

To restore natural areas along the Clackamas River last summer, Metro placed logs in the floodplain and created log jams, said Peter Guillozet, a senior natural resources scientist at Metro.

“Wood is important in creating channel diversity,” Guillozet said.

The wood adds complexity to the flow of water and improves fish habitat. Water that cascades over the logs forms fast-moving, oxygen-rich riffles that attract invertebrates that many fish feed on. Behind the logs, water collects in cool, deep pools where fish like to rest. The sediment at the bottom of these pools is important for salmon spawning.

From dead wood, it seems, springs new life in rivers and forests.

Mt. Hood Community College students inspire restoration of South Beaver Creek Natural Area

Story and photography by Kate Holleran, Metro senior natural resources scientist



“Teacher Kate, you must help us do a project to give back to the Gresham community.” Jose Abel Martinez from Honduras stood in my Mt. Hood Community College office door in 2000 and insisted that the international students in the natural resources program needed to clear the invasive blackberries from the riparian area along Beaver Creek next to the college.

Soon 40 students from Central America and the Caribbean were swinging machetes and using loppers to cut blackberries and prepare the land for native plants.

It would take 16 years and an ongoing partnership between Metro and the college for the restoration work to be completed. Students gathered data helping us understand the natural area more fully. Hard work by student volunteers reduced litter and weeds. And voter investments provided the money we needed to improve habitat across the entire site.

South Beaver Creek Natural Area is a 62-acre site bordered on the east and west by the college. Long ago the land surrounding the forested canyon was cleared for farming. But the steep slopes and wetlands along the stream made the canyon unsuitable for farming. Large old Douglas fir, western red cedar and black cottonwood trees were scattered along the stream, and big leaf maples and red alder sprung up after an earlier timber harvest.

In 2004, Metro purchased the riparian canyon from the college using money from the 1995 natural areas bond measure. Soon after the purchase, I left the college to become a natural resources scientist at Metro, and Beaver Creek became part of my portfolio.

For decades this forest has been a refuge for wildlife as Gresham and Troutdale grew. The part of Beaver Creek that flows through the natural area provides some of the best salmon

Clockwise from top: Students celebrate a hard day of work. Student Ariel Rodriguez shares a weed map with Kate Holleran, a Metro senior natural resources scientist. Student Douglas Garcia Lopez plants Oregon grape. Students install native plants in the floodplain of Beaver Creek.

habitat in the stream, with areas of deep shade and large wood jams for hiding. Wildlife is abundant and includes bobcat, beavers, great blue herons and pygmy owls.

Though patches of native salmonberry, willows and sedges survived under the tree canopy, many of the stream banks were blanketed with Himalayan blackberries and reed canarygrass. These two invasive plants offer very limited wildlife habitat, aren't effective at holding the soil in place and provide little shade for the fish in the creek. It was these wide swaths of invasive plants that the students started cutting away 16 years ago.

Progress was slow and much of the land cleared by the students was reclaimed by blackberries by the next summer.

Throughout the years, international students in the college's natural resources program continued small-scale restoration around the wetland at the north end of the natural area. But without more aggressive weed control, the goal of improving the three-quarters of a mile of stream side forests would not be completed.

Thanks to money from the 2013 parks and natural areas levy, Metro is now able to complete the restoration the students started. We are just wrapping up levy-funded work to clear most of the remaining blackberries and install tens of thousands of native plants.

South Beaver Creek Natural Area is full of good things for wildlife and with a little tender, loving care every year, it should stay that way.



Prescribed burn at Cooper Mountain boosts native wildflowers

Story by Guadalupe Triana

Photography by Dan Moeller

For the first time in five years, parts of Cooper Mountain Nature Park were set on fire – all in the name of nature.

Through a collaboration between Metro, Tualatin Hills Park & Recreation and Tualatin Valley Fire & Rescue, officials conducted a prescribed burn in the Beaverton-area nature park as part of the park's management plan.

The burn was intended to keep the hilltop prairies and surrounding areas throughout the park healthy. In total, 28 acres were burned Sept. 28 and 29.

The burns, which have been conducted every few years for almost 20 years, help control prairie grasses that start to smother out native wildflowers, said Curt Zonick, a Metro natural resources scientist.

“Wildflowers are really important because that's what attracts all the bugs, and bugs are the base of the food chain,” Zonick said. “The diversity of the prairie all starts with the wildflowers.”

Without periodically disturbing the prairie, the park simply turns into a grass field. The fire helps eliminate invasive plants, he said.

“In addition to managing fuels, the burn creates a perfect bed for adding seeds, so we'll be following up with a native seeding,” Zonick said. “A lot of what will be greening up over the six months after the burn will be new native plants that we've planted and seeded. So by next spring, you won't even know it was burned.”

Prescribed burns have often been used as learning opportunities.

“Anytime we have a prescription, or a restoration of this size, we use it as an opportunity to educate our public,” said Tualatin Hills Park & Recreation District park ranger Scott Wagner. “With each burn, we're learning something new. Each time we're getting better and more efficient.”

The park closed for three days to ensure maximum safety of the surrounding neighborhoods. The burn was under control the entire time, due in large part to extensive preparation, Zonick said.

Historically, prescribed burns were used by native inhabitants to manage the oak savannas in the Willamette Valley. In the last 20 years, there have been five controlled burns at Cooper Mountain.

“There isn't necessarily a silver bullet. Fire is one element that can help and enhance the area,” Wagner said. “In many ways, the Willamette Valley was formed by fires. Fires were a very important part of these systems.”



Discovering nature and finding home

Muwafaq Alkattan helps Iraqi refugees set roots in Oregon

By Cory Eldridge

Photography by Muwafaq Alkattan and Cory Eldridge

Muwafaq Alkattan sits at a picnic table under an awning at Cooper Mountain Nature Park near Beaverton and watches a fall shower roll off the Coast Range and across the Tualatin Valley.

“This is the tax you pay for evergreen,” he says.

He arrived here from Iraq only four years ago, but he’s already adopted a resigned appreciation for the region’s weather. He says Iraq has similar low-rising mountains, even if they don’t have the same density of greenery. Cooper Mountain, he says, is one of his favorite places on earth.

When Alkattan arrived here with his wife, Lubna, and their four grown daughters, Alaa, Saran, Dana and Reem, they had to learn not just a new city but a new culture, new pretty much everything.

Alkattan didn’t have to learn or translate nature. Cooper Mountain became a respite, a place he didn’t have to strive to understand but could just enjoy. Now, four years later, he’s brought many fellow Iraqis to parks across the greater Portland region, helping them connect to nature, discover a favorite place and make this more of a home.

“Nature is part of my life,” he says.

Alkattan was born in Iraq in 1948 and worked as a civil engineer. In 1999, he began working for UNICEF, the United Nations’ children’s relief agency, building schools, health clinics and orphanages. After the U.S. invasion in 2003 he kept working for UNICEF, but that became dangerous.

During the war, anyone associated with a foreign organization was at risk. At the end of 2007 a coworker and friend was killed by al-Qaida. The Alkattans fled to Jordan, joining tens of thousands of Iraqi refugees. They applied for refuge in the United States in 2008.

While he waited, he continued his work for the U.N. and for Iraq. By the time he left, he’d built 50 new schools and rehabilitated and rebuilt 1,300 more. He’d built health centers, orphanages, water and sanitation projects, and Iraq’s first solid waste facility. He worked across sectarian and ethnic lines in a country where few did.

“I learned how to deal with different communities,” he says. “I found I am able to do intercultural work. I enjoy that.”

In 2012 the Alkattans were approved to come to America and settled in Tualatin.

Most refugees have little control of where they are settled.



The Alkattans, luckily, were able to choose Portland because a coworker at UNICEF living here sponsored them. Alkattan quickly connected with the newly formed Iraqi Society of Oregon and became a board member. Not long after, he participated in leadership development programs at Unite Oregon, a nonprofit based in Portland that advocates for multicultural social justice issues. That led to an internship with Metro.

Sheilagh Diez, Metro’s community partnerships project manager, says the plan was for Alkattan to support the logistics for Metro’s outdoor programs. Alkattan wanted to share the parks with other Iraqis, especially newly arrived refugees in the first, tough months of connecting to their new home. “It was a really great project that we just wouldn’t have thought of,” Diez says.

He began photographing Metro’s parks, showing the trails, views, picnic and play areas, and posting the images to the Iraqi Society of Oregon’s Facebook page. Then he organized outings, taking fellow Iraqis to parks across the region, introducing them to special places in their new home they might not have connected to without him.

Outreach within a refugee’s own community is a major goal of leadership training, says Zack Mohamed, who came to the U.S. as a refugee from Somalia when he was 11 and is now Unite Oregon’s leadership development coordinator.

Clockwise from top left: Muwafaq Alkattan walks along a trail at Cooper Mountain Nature Park, one of the Iraqi refugee’s favorite places. Alkattan photographed the view from Cooper Mountain as part of his project to share Metro’s parks with the region’s Iraqi refugee community. Alkattan’s other photos include birthday celebrations at Blue Lake Regional Park, Metro scientist Katy Weil leading a tour through Smith and Bybee Wetlands Natural Area and an Iraqi family canoeing on the Tualatin River.

“It definitely takes a village – people being guides for each other, helping each other out, being there for one another,” he says.

Four years after arriving here, the Alkattans have made the region their home. His daughters have jobs and are in college, as is Lubna. He says he reminds them – and himself – to “imagine where you were four years ago.”

Imagine where they’ll be in four more years. Imagine how many others Alkattan will help make this place home.

To learn more about Partners in Nature, Metro’s program to better connect diverse communities to nature, visit oregonmetro.gov/partnersinnature



Metro

Parks and Nature

2015–16 Annual Report



Building on Metro's unique park system – with nature at its heart

Ask anybody in the greater Portland region what makes this place special, and many people will mention nature and opportunities to enjoy the outdoors.

Metro operates a unique park system, one with nature at its heart. Thanks to two decades of voter investments, Metro manages 17,000 acres of parks, trails and natural areas across every community in the region – from Chehalem Ridge on the west to the Sandy River Gorge on the east, from Blue Lake and Smith and Bybee Wetlands on the north to Graham Oaks on the south.

In 2015, Metro celebrated its 25th year as a parks provider. After creating a world-class regional parks and nature system, the natural next step was to develop a long-term strategic plan to guide the future of the treasured regional network.

The Parks and Nature System Plan, approved by the Metro Council in February 2016, lays out Metro's mission and role, the state of the portfolio, trends that will shape this work and a slate of strategies to guide the future. By providing clarity on Metro's direction, the plan is intended to support Metro's partners and strengthen relationships – complementing the broader regional network of parks, trails and natural areas.

Since the plan was approved, Metro has been working to bring it to life, focusing on conserving natural resources, developing and operating welcoming and inclusive parks and incorporating equity across the Parks and Nature portfolio.

The plan also provides strategic direction in investing the money that voters have approved through two regional bond

measures and a levy – more than \$400 million to date – to protect water quality, fish and wildlife habitat, and provide people with opportunities to experience nature close to home.

To see the impact of these investments and the opportunities ahead, listen to the stories from people on the ground. Learn more about how your tax dollars were spent from July 2015 to June 2016 to return a former gravel mine to its wild roots, provide opportunities for diverse communities to access nature, make much-needed improvements to popular parks – and much more.

Get the whole report online with more photos, stories and details at oregonmetro.gov/parksandnature2016

Access to nature

Metro is expanding opportunities to hike, explore, see wildlife and learn about the landscape at voter-protected natural areas. From Newell Creek Canyon to Killin Wetlands, new destinations are taking shape.

Work is also underway to improve parks and facilities that more than 1.3 million visitors a year already enjoy. Projects focus on upgrading aging facilities, improving sustainability, and enhancing safety and security – such as new

boat docks at Chinook Landing, new restrooms and entryway at Blue Lake and a safe, scenic overlook at Canemah Bluff.



Diversity, equity and inclusion

Metro's park system will be truly successful only if everybody in the community feels welcome in the outdoors and can reap the health rewards and other benefits of nature.

Thanks in particular to money from the 2013 levy, Metro is providing more nature programming to underrepresented communities, planning more inclusive parks, working to support more minority-owned, women-owned and emerging small businesses – and more.

In the first year of the levy, a new effort called Partners in Nature piloted projects with several groups to co-create relevant programming tailored to each community. These programs provided guided opportunities for diverse community members to enjoy the outdoors, introduced young people to potential careers in conservation, and nurtured a growing comfort and passion for nature. Partners in Nature continues to grow, with several new partnerships kicking off during 2015 and 2016.

Another initiative called Connect to Nature is contracting with Verde, a community-based organization, to develop a new approach to designing parks that are welcoming to diverse communities. It's getting a tryout starting in 2016 as Metro and the City of Gresham launch an effort to plan for public access at Gabbert Butte.



Partnership with Centro Cultural helps shape Chehalem Ridge, connect Latinos with nature

On Chehalem Ridge, high above Gaston, nine people stand in tall grass. Their eyes are closed, palms raised and fingers outspread. Each time they hear a sound, they fold one finger down. After 10 sounds they open their eyes and gaze at the blue hills in the distance.

Finally, their tour guide, Juan Carlos Gonzalez, breaks the silence. "What did you hear?"

Three different kinds of bird. The wind through the grass. Someone cracking their knuckles.

Gonzalez is development director at Centro Cultural de Washington County, an education, social services and economic development nonprofit that is helping Metro bring the Latino community into the planning process

for a future nature park at Chehalem Ridge, a 1,200-acre site 15 minutes south of Forest Grove. In summer and fall 2016, Centro leaders are offering bilingual tours of the site and leading other outreach efforts with the Latino community.

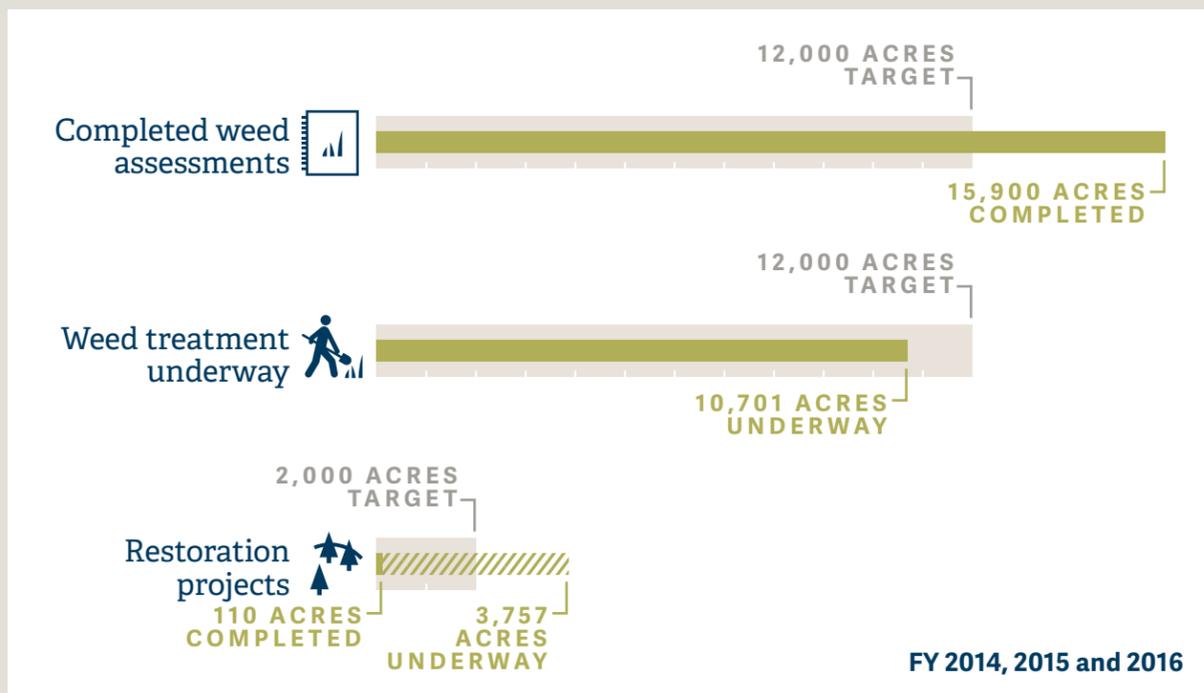
The work with Centro Cultural is just one of a number of collaborations through Partners in Nature, Metro's program with culturally specific organizations throughout the region to better connect diverse communities with nature. The partnership will help make Chehalem Ridge more welcoming to the region's increasingly diverse residents. At the same time, it will help Centro Cultural build capacity and allow staff to gain experience and expertise in engaging the community.

Restoration and maintenance

At the core of Metro's parks and nature mission is protecting water quality and fish and wildlife habitat.

About half of the money from the 2013 levy is dedicated to protecting water quality and habitat, including controlling invasive weeds, boosting native plants and animals, and improving habitat for fish and wildlife.

After Metro acquires a property, a stabilization plan is drawn up as the first step of the restoration process. Invasive weeds start getting treated. After stabilization, a site conservation plan is developed to restore a site to its natural state. Restoration work can take years to complete, after which a site transitions to long-term maintenance.



River Island restoration helps the Clackamas River heal

Four great blue herons interrupted the stillness of a blazing summer afternoon on the Clackamas River, their giant wings flapping gracefully off into the horizon. A whitetail dragonfly flitted about, dancing and weaving through waist-high grasses.

The scene seemed straight out of a nature documentary, except for two hints suggesting otherwise. The dry, cracked riverbed on one side hearkened to a former life of the river, a life abruptly ended. On the other side of the river, a little ways upstream, came the faint mechanical noises of two excavators, hard at work building a new future for this area.

Decades of gravel mining and devastating floodwaters in 1996 changed the course of the Clackamas River and left their mark on River Island, a 240-acre natural area just upstream from Barton Park. Metro acquired the main part of the site in 1999 and added to it over the years with money from Metro's two voter-approved bond measures. In summer 2015, work began on a two-year, large-scale restoration effort that will return River Island to a more natural, healthier state and help improve water quality in a river that provides drinking water to nearly 400,000 people.

In summer 2015, restoration work on the south side of the river included removing concrete and asphalt from the riverbank, creating

essential habitat for fish and decommissioning two sections of gravel roads close to the water.

Work continued throughout the winter with the planting of native trees and shrubs. In summer 2016, crews began to restore the natural area on the north side of the river.

"This restoration project will not only benefit fish and wildlife, but also people," said Brian Vaughn, a senior natural resources scientist at Metro who is leading the River Island restoration project. "Fish need logs and boulders and places to hide to get away from predators and to find food and shelter. The river is also a scenic corridor, and rafters and boaters who use this section of the river will see an improved shoreline and healthy riparian forest."

River Island also includes significant open water ponds, oak savanna and upland forest habitat that support Western painted turtles, bald eagles, deer, and a variety of birds and wildlife.

Over the years, crews treated invasive weeds and stabilized the site. Metro's voter-approved bond and levy, along with grant funding, have made it possible to pursue a large-scale restoration project.

The project is possible thanks to partnerships with the Clackamas River Basin Council, Oregon Department of Fish and Wildlife, U.S. Forest Service, Portland General Electric and others.



Nature education and volunteering

There's more to parks and nature than just native plants and wildlife – it's the people who make truly special, memorable places. Providing meaningful experiences for people of all races, ages and abilities to connect with nature is critical to nurture the next generation of conservation leaders.

Thanks to money from voter investments, expanded nature education programming has provided groups and individuals more opportunities to learn from Metro naturalists, including school field trips, free guided nature walks, survival skills classes and other activities.

Volunteering also helps people build connections with the nature around them.



Graham Oaks provides habitat for pollinators – and students

Early on a spring morning, first-grade students filed out from Boones Ferry Primary School for a field trip to the park they visit monthly. But for these students, it doesn't take a bus to get there – Graham Oaks Nature Park is located right next to their school.

Because the school and nature park are so close, Metro and the West Linn-Wilsonville School District have partnered to use Graham Oaks as an educational environment for the students, where they can explore and participate in service learning projects regularly.

"We've been doing stuff throughout the year," said Bonnie Shoffner, volunteer coordinator for Metro. "At our last monthly field trip, they planted native shrubs in a hedgerow for pollinators."

On this visit, the students, teachers and parent-helpers gave those pollinators houses.

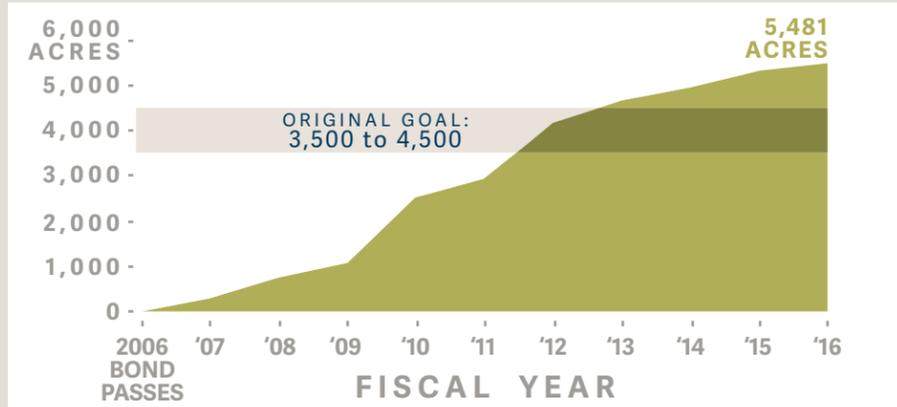
"Mason bees typically would be in hollow stems of bushes and trees," Shoffner said. "But because they need a little help, people put wooden boxes out with holes in them."

As the kids got into groups, the adults nailed the boards and boxes to snags near the hedgerow. The students also learned about the life cycle of plants and sang a song to remember the parts of insects.

Rachael Romanouk, 7, has high hopes for the bees. "They might be cute! I love cute things," she said. Rachael was also pleased to hear that mason bees rarely sting.

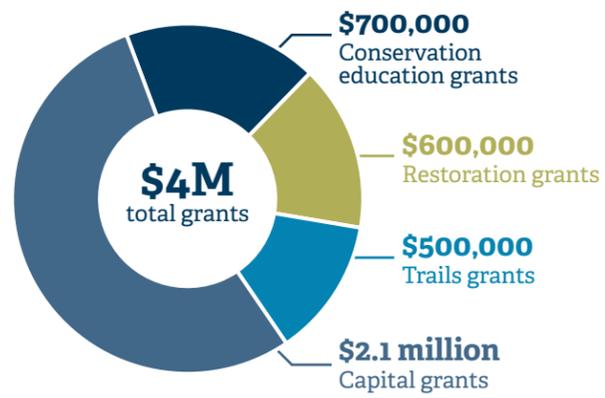
Graham Oaks provides an excellent learning opportunity for the students, who benefit from participating in restoration projects at the park, said Bob Carlson, director of the West Linn-Wilsonville School District's Center for Research in Environmental Sciences and Technologies – which is next to the park.

"The school district really appreciates the partnership and sees it as a really valuable thing," Carlson said.



Land acquisition with 2006 bond measure (CUMULATIVE)

The biggest portion of the 2006 bond measure earmarked \$168 million for land acquisition from willing sellers. More than 5,400 acres have been acquired and protected – significantly surpassing the original goal. Thanks to voters, Metro has been able to conserve some of the last swaths of native prairies, wetlands and other valuable habitat – home to rare plants and endangered or threatened fish and wildlife. Other properties fill key gaps in regional trails, providing connections for commuters, bicyclists and joggers.



Nature in Neighborhoods grants FY 2016

Direct community investments, such as Nature in Neighborhoods grants, are one of the most popular and important parts of the Parks and Nature portfolio. Through the 2006 bond measure and the 2013 levy, four types of grants gave a collective \$4 million boost to innovative projects across the region this year. Partners are restoring salmon habitat, protecting land, improving parks, connecting diverse communities with nature and much more. In 2016, trail grants were awarded for the first time.

Promises made, promises kept

Metro's system of parks, trails and natural areas is the demonstration of a quarter century of commitment, action and investment by the region.

Two decades of voter investments have protected 17,000 acres. These are the places where endangered fish and wildlife are able to thrive, where family outings happen, where memories are made.

Spending from the 2006 natural areas bond measure is winding down, though money remains to acquire and protect more land and support locally significant projects.

The last two years of the 2013 levy will build upon the successes in the first three years. More sites will be restored to their wilder, natural roots. New parks will open while existing ones will see more upgrades. And there will be more opportunities for people to experience nature.

More work remains. Stay tuned for next year's annual report to track improvements in parks and nature throughout the region.



Metro Council at Blue Lake Regional Park's nature play area, from left: Councilors Bob Stacey, Kathryn Harrington, Carlotta Collette, Shirley Craddick, Craig Dirksen and Sam Chase and Metro Council President Tom Hughes

Parks and Nature spending* FY 2016

	General fund	2013 parks and natural areas levy	2006 natural areas bond	Total
Restoration/maintenance of parks and natural areas	\$1,947,065	\$3,720,019	\$3,528,194	\$9,195,278
Access to nature	\$1,058	\$1,135,448	\$266,778	\$1,403,284
Park improvements and operations	\$6,378,634	\$2,636,722	\$0	\$9,015,356
Cemeteries	\$801,431	\$0	\$0	\$801,431
Conservation education and volunteer programs	\$110,255	\$297,582	\$0	\$407,837
Community investments	\$60,410	\$1,288,103	\$1,773,619	\$3,122,132
Land acquisition/stabilization	\$0	\$0	\$6,879,450	\$6,879,450
Administration**	\$810,749	\$4,445,036	\$3,885,965	\$9,141,750
Total	\$10,109,602	\$13,522,910	\$16,334,006	\$39,966,518

* Unaudited
** Administration spending includes expenses for department administration and support services, such as the Office of the Metro Attorney, the Data Resource Center and Communications.

2013 Parks and natural areas levy

Promised to voters



Actual levy spending

THROUGH JUNE 2016



Improving public access to natural areas

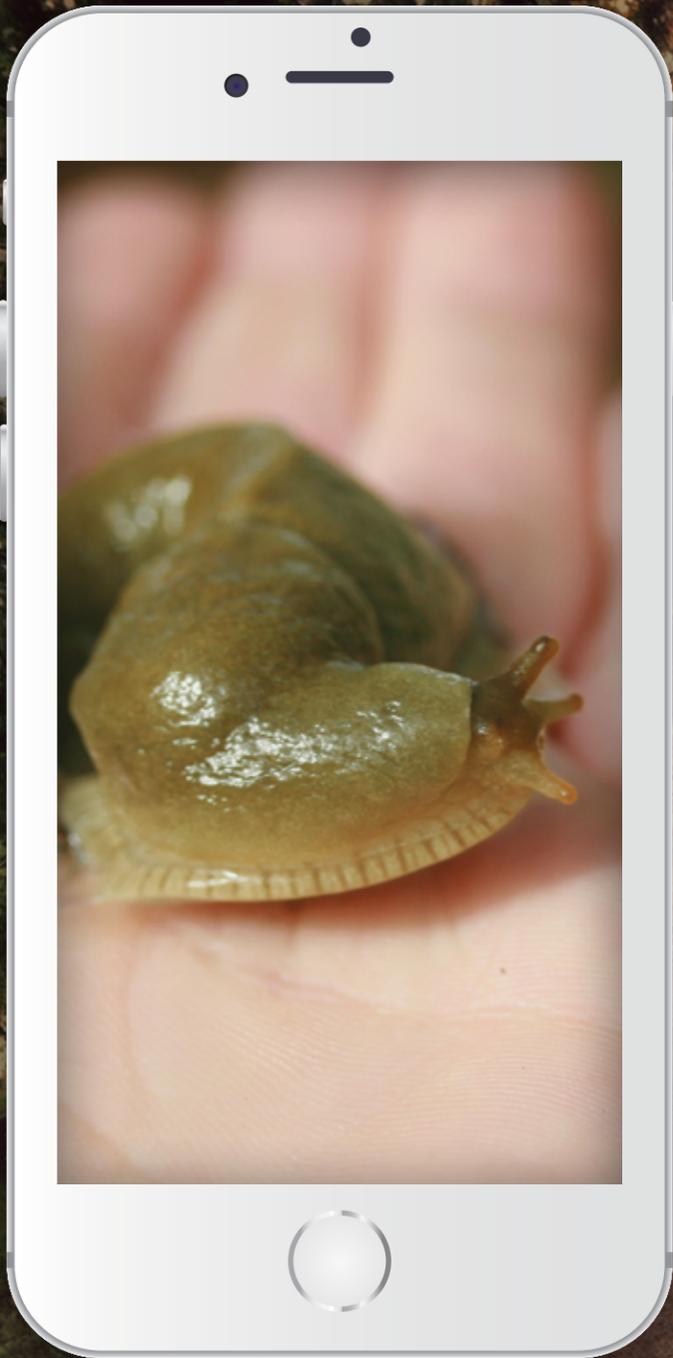
Regional park operations

Nature in Neighborhoods grants

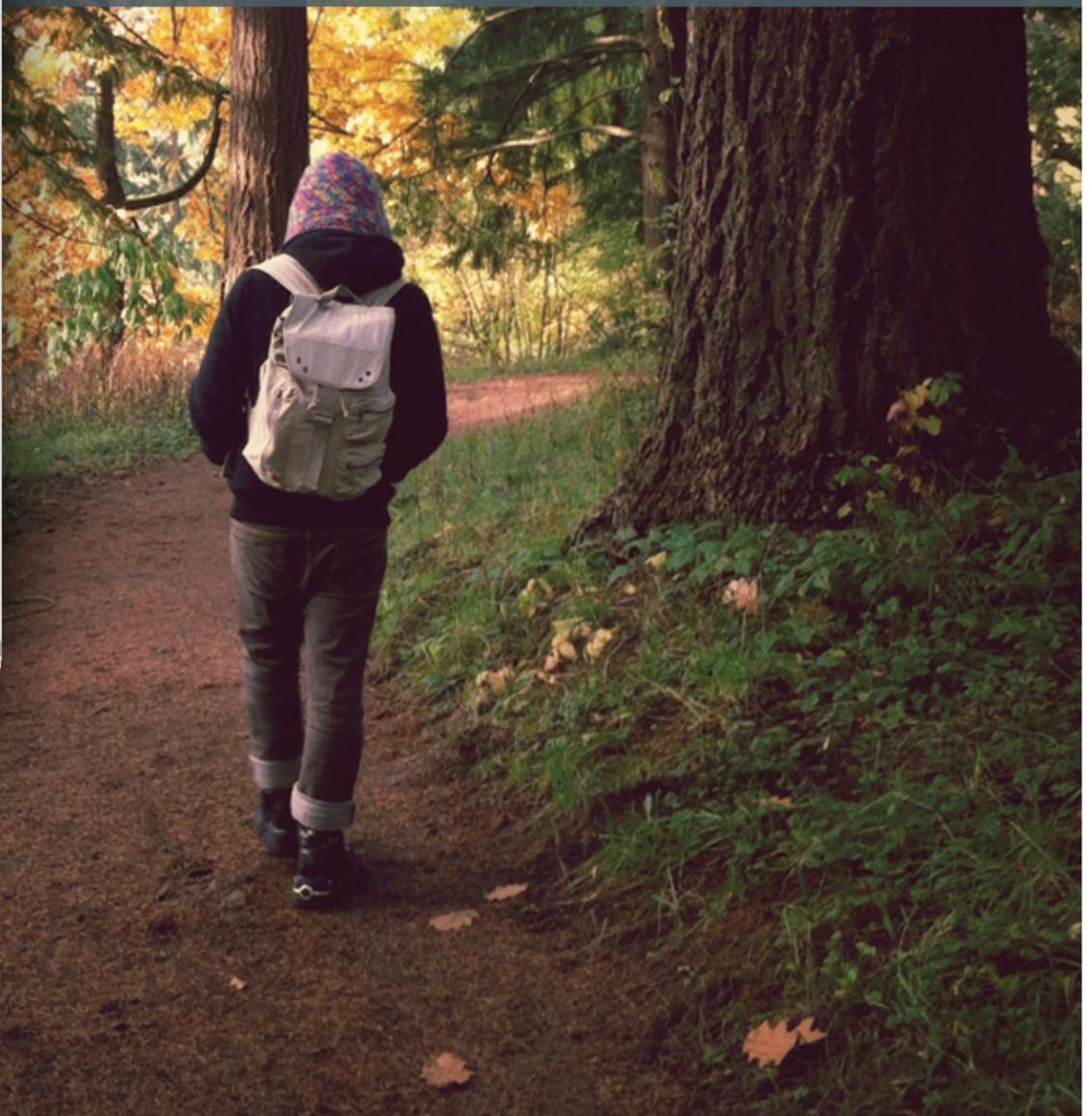
Restoring natural areas for wildlife, fish and water quality

Conservation education and volunteers

theintertwine.org



Over 3,000 square miles of parks, trails and natural areas in the palm of your hand



Hiker/© Cavale Doom, Slug/©Angie Shyrigh



The Intertwine is a **PLACE** to explore and discover the wonders of nature in the Portland-Vancouver Metro Area.

The Intertwine is an **ALLIANCE** of partners working to ensure nature is our common ground—a treasure shared by all—now and into the future.

And now The Intertwine is a reimagined **MOBILE** and **DESKTOP** experience.

theintertwine.org is seriously enhancing your ability to explore the Portland-Vancouver Metro Area with an integrated map that serves up all of the region's parks, natural areas, wildlife refuges and trails in one place.

A robust events calendar will keep you in the know about all the great opportunities to recreate and educate on The Intertwine. **Experience it today!**



Get involved

CLASSES AND EVENTS

SAT. FEB. 4

Raptor Road Trip

Explore Sauvie Island in search of magnificent eagles, hawks and falcons. Naturalists and hawk experts host activities at four sites around the island. Enjoy guided bird viewing, meet live raptors and see hawk identification displays. Free hot drinks and donuts in the morning.

Event check-in is at Kruger's Farm Market. You'll receive a parking permit, event guide, birding map and picture handouts. Dress for the weather. Allow about three hours. Sponsored by the Audubon Society of Portland, Metro, Oregon Department of Fish and Wildlife and Hawk Watch International.

Check-in at Kruger's Farm Market, 17100 NW Sauvie Island Road, Portland 9 a.m. to 2 p.m.

\$10/car, cash only. All ages.

Registration not required. Difficulty: easy.

Photography by Julie Cash

SAT. JAN. 7, 21

SAT. FEB. 4, 18

SAT. MAR. 4, 25

2017 Winter volunteer ventures

Volunteer at Metro's Native Plant Center in Tualatin and help care for rare, native seeds, bulbs and plant materials that support regional restoration projects. Winter activities include harvesting bulbs, maintaining the nursery, and planting seeds and plants into pots and beds. Gloves, tools, water and snack provided. This event is wheelchair accessible with advance arrangements.

Native Plant Center
2661 SW Borland Road, Tualatin
9 a.m. to 1 p.m.

Free. All ages.

Registration required. Difficulty: moderate. ♿

MON. JAN. 16

People and birds of Vanport

North Portland was once home to the city of Vanport, where thousands of shipyard workers, African-Americans and World War II veterans lived before a devastating flood in 1948. On this nature walk on Martin Luther King, Jr. Day, participants will learn about the culture and history of Vanport as well as the birds and habitat of Smith and Bybee Wetlands Natural Area.

Smith and Bybee Wetlands Natural Area
11 a.m. to 1 p.m.

Free. All Ages.

Registration required. Difficulty: easy. ♿



How to register

Unless otherwise noted, register and pay at oregonmetro.gov/calendar

Registration and payment required at least 48 hours in advance for all classes. Classes with low enrollment will be canceled; registered participants will receive full refunds. For more information: Anna Nandihalli, 503-972-8550.



SAT. JAN. 14

Winter pruning techniques

Join Metro arborist Howard Rasmussen for a hands-on class on winter pruning. Learn about safety, tree diseases and pruning techniques and watch demonstrations. Then practice in the orchards by the popular Bybee-Howell House. Bring gloves and dress accordingly for this rain-or-shine class. Tools will be provided, though participants are free to bring their favorite loppers. Hot drinks provided.

Howell Territorial Park.
9 a.m. to noon.
Free. Ages 16 and older.
Registration required. Difficulty: easy



Free Parks Day

Get out and explore nature!

Enjoy free parking at Oxbow and Blue Lake regional parks, Broughton Beach, Chinook Landing Marine Park and M. James Gleason Memorial Boat Ramp on Jan. 16.

Parking at all other Metro parks and boat ramps is free year-round.

THURS. JAN. 19

Troutdale to Gresham trail workshop

Help plan the route for a six-mile trail that will one day connect Troutdale to Gresham. Where should it go? What should it look like? The Troutdale to Gresham trail master plan will determine the best route for a new off-street biking and walking trail to connect neighborhoods, parks and schools. This workshop will take a closer look at alignment options in Gresham. Visit oregonmetro.gov/troutdale-gresham to learn more about the plan and other upcoming community events.

Gordon Russell Middle School library,
3625 SE Powell Valley Road, Gresham
6:30 to 8:30 p.m.

Free. All ages.

Registration not required. Difficulty: easy. 

SAT. FEB. 25

Bird language for beginners

February marks the beginning of a rapid increase in daylight. Experience how the birds react to the expanding daylight by ramping up their vocal activity and learn how to recognize many of their distinct songs and alarm patterns. Expect an indoor intro to bird language followed by a bird walk in the park.

Cooper Mountain Nature Park
9:30 a.m. to noon.
\$10/person. Ages 8 and older.
Registration required, call Tualatin Hills Park & Recreation District at 503-629-6350.
Difficulty: easy.



SAT. MARCH 11

Ducks and beavers

Some say the ducks and beavers will never get along. Come see for yourself at Blue Lake Regional Park's best-kept secret: a wetland that hosts our rival species. Beavers ramp up territorial marking at this time of year, and the ducks are warming up for a long journey north.

Blue Lake Regional Park
9:30 a.m. to noon.
\$5/car, \$7/bus. All ages.
Registration required. Difficulty: easy.



SAT. JAN. 21

Amphibian egg mass monitoring orientation

Learn the basics to volunteer as an amphibian egg mass monitor. From late January through April, volunteers pull on chest waders and visit wetlands throughout the region to search for four types of frog and salamander egg masses. The four amphibians serve as indicator species, which can be used to help gauge whether regional restoration efforts are helping more native amphibians thrive. It also helps scientists survey their numbers as well as the overall health of wetlands in the region.

No field experience required. The orientation will cover amphibian egg mass identification, survey techniques and field methods. Trained volunteers are then asked to conduct at least four separate surveys throughout the winter totaling approximately 12 to 25 hours. In partnership with the Wetlands Conservancy and Clean Water Services, trainings will also be held Jan. 14 and 28 at other locations. Visit oregonmetro.gov/calendar for details.

Metro Regional Center, council chambers
9:30 a.m. to noon. Free.
Ages 16 and older. Registration required.

SAT. APRIL 1

Stayin' Alive: Winter survival shelters for families

Take shelter! The driving wind and rain can be held at bay with simple skills that every squirrel uses. In this family-oriented class, learn the basics of building a winter survival shelter that can keep you safe and warm without a sleeping bag or a fire. Younger participants will have free time to build forts.

Oxbow Regional Park
11 a.m. to 2:30 p.m.
\$6/person, \$11/family; \$5/car, \$7/bus.
All ages.
Registration required. Difficulty: moderate.

Field guide

ORENCO WOODS



Grand opening Feb. 4, 2017

Story by Ashley Conley

Photography by Yuxing Zheng

The MAX Blue Line whizzes by to the north, traffic flows on Northwest Cornelius Pass Road, and hidden from view nestled between oak savanna and upland forest, Rock Creek continues its southerly flow toward the Tualatin River.

The creek, home to winter steelhead, cutthroat trout and Pacific lamprey, among others, gives life to this 42-acre parcel of land. A partnership between Metro and the city of Hillsboro, Orenco Woods Nature Park includes the Rock Creek Trail, providing neighbors and the surrounding community a wonderful way to connect with nature.

The former town of Orenco is rich with history. The area was historically dominated by white oak savanna and was inhabited by the Kalapuya people. The land was a rich source of acorns, camas, hazelnuts and wildlife.

In 1906, the largest nursery on the west coast, Oregon Nursery Company, moved from Salem to this area. The nursery, co-founded by Malcolm McDonald, was one of the largest employers in the northwest. McDonald's beautiful 1912 Craftsman-style house is now owned by the city, though it is not currently open.

The nursery, from which the town of Orenco's name is derived, developed a versatile and desirable apple used for desserts and ciders. In the 1910s, one million Orenco apple trees were planted with a plan to sell them overseas. The onset of World War I led to setbacks for the



Orenco Woods

GETTING THERE

From U.S. 26, take the Northwest Cornelius Pass Road exit and head south. Take a right on Northeast Cornell Road, then left on Northwest 231st Avenue, which will be renamed Northeast Century Boulevard. Take a left on Northeast Birch Street; the park is at the end of the street. The Orenco stop on the MAX Blue Line is a short distance away.

KNOW WHEN YOU GO

Park open sunrise to sunset. Pets allowed on leash on Rock Creek Trail only. Hillsboro Parks & Recreation Department provides day-to-day management.

AMENITIES

Restrooms, picnic shelter, nature play area, trails

oregonmetro.gov/orencowoods

In the neighborhood After exploring the park, head to nearby Orenco Station, where you can grab a bite at one of several restaurants, shop, enjoy a drink or participate in various community events. In August, enjoy a trip to the Oregon International Air Show, just a few miles down the road at the Hillsboro Airport. For those who want to spend an entire day in nature, go to Jackson Bottom Wetlands and Tualatin Hills Nature Park, both just six miles from Orenco Woods.

nursery. The nursery closed in 1927, and the town of Orenco dissolved in 1938.

From 1953 to 2006, the site was a nine-hole golf course. In 2006 the land was slated for a large housing development. The recession hit and development halted, allowing Metro and the City of Hillsboro to purchase the land and

keep the nature along the creek intact. When the golf greens were removed, historic acorns sprouted from the earth and began growing into oak trees.

Restoration efforts coupled with amazing new bridges, a nature play area, picnic shelter and trails make this a spectacular place to visit.

Be on the lookout!



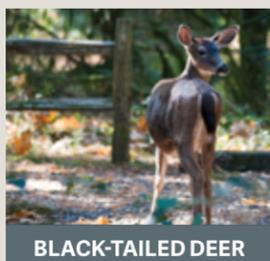
GREAT BLUE HERON



DOUGLAS SPIREA



RED-TAILED HAWK



BLACK-TAILED DEER

Season-by-season highlights

WINTER: Red-tailed hawks can be seen at Orenco Woods throughout the year, and may be nesting in the tall Douglas fir trees. As winter settles in, the hawks start their courtship displays. Look for two or more large raptors effortlessly soaring in wide circles in the winter skies. You may see the big raptors dive or extend their legs in a dazzling display of skill and mastery of flight.

SPRING: With a suite of micro habitats, Orenco Woods offers migrating songbirds a place to rest and feed in the oak savannas, upland forest and riparian edges. Some may even decide to set up shop and nest in the confines of this desirable habitat. Grab your binoculars and tune your ears to the vibrant sounds of spring that echo throughout the landscape.

SUMMER: Summer may have people seeking an escape from the heat, but the insects are

just getting started when the temperatures rise. Insects depend on outside sources for body heat, and, they operate best when the temperatures are warm. Take an evening walk and listen to the hums of the pollinators as they search for delicious nectar meals, and in the process, pollinate the plants. Look for the yellow-faced bumble bee on the south side of the trails that wind through the park.

FALL: As fall settles in and daylight hours quickly fade, the wildlife takes back the park. With leaves falling to the ground along the creek's edge, animals can be more easily spotted. Beavers have left their footprints on the land in the form of old chewed sticks. Dawn and dusk are great times to catch these iconic Oregon creatures in their natural habitat. Black-tailed deer are also known to move through the site and are often in small family groups at this time of year, making them that much easier to spot.

Destination guide

-  Restrooms
-  Picnic facilities
-  Trails
-  Classes events volunteer
-  Playground
-  Camping
-  Wheelchair accessible
-  Cost
\$5/car, \$7/bus
(free with annual pass)

1 Blue Lake Regional Park
Enjoy a fun game of disc golf, or explore a nature-themed playground, a discovery garden, sports facilities and a wetland with a viewing platform and trail.



2 Broughton Beach
Head to one of Portland's best urban beaches and enjoy a picnic, beachcombing, or a stroll along the Columbia River.



3 Canemah Bluff Nature Park
Gaze at the Willamette River below, marvel at oak trees overhead, hike and admire colorful spring wildflowers.



4 Cooper Mountain Nature Park
Hike or jog more than three miles of trails, watch wildlife or enjoy views of the Chehalem Mountains and Tualatin Valley.



5 Farmington Paddle Launch
Opening spring 2017. The launch site accommodates non-motorized watercraft.



6 Glendoveer Golf Course & Nature Trail
Tee time: playglendoveer.com
Play a game of golf, footgolf or indoor tennis, or enjoy a stroll on the two-mile fitness course.



7 Graham Oaks Nature Park
Ride bikes through a restored oak woodland, stroll through a conifer forest and spot birds from a wetland overlook.



8 Howell Territorial Park
Watch for birds that flock to the park's wetlands, enjoy a picnic, and explore a piece of the region's natural and cultural history.



9 Lone Fir Cemetery
Enjoy a stroll or jog in this tree-filled community greenspace, one of Oregon's most treasured historic cemeteries.



10 Mason Hill Park
At this charming, one-acre park, bicycle through the rolling hills beyond Forest Park, take in spectacular views of the Tualatin Valley and picnic under the shelter.



11 Mount Talbert Nature Park
Slip into the forested oasis to explore four miles of trails, enjoy gorgeous views, and keep an eye out for deer, pileated and hairy woodpeckers, white-breasted nuthatches and Western tanagers.



12 Orenco Woods Nature Park
Opening February 2017. Enjoy a leisurely jog stroll or bike ride on a network of trails while taking in views of the gently rolling hills, open meadows and forests. Children will have fun exploring the nature play area.



13 Oxbow Regional Park
Explore 15 miles of trails through ancient forests, camp year-round or find the perfect adventure on the Sandy River.



14 Scouters Mountain Nature Park
Climb the steep, fir-lined road to the top of this extinct lava dome to enjoy unrivaled views of Mount Hood.



15 Smith and Bybee Wetlands Natural Area
Take the Interlakes Trail or go by kayak to explore one of America's largest urban wetlands while spotting beavers, otters, deer, osprey, bald eagles and turtles.



Boat ramps oregonmetro.gov/boats

- 16 Chinook Landing Marine Park** 
- 17 M. James Gleason Memorial Boat Ramp** 
- 18 Sauvie Island Boat Ramp**



For more information about each destination, visit oregonmetro.gov/parks

Tools for living

SPOILER ALERT! REDUCE FOOD WASTE AT HOME



Story and photography by Rebecca Koffman

Imagine buying five bags of groceries and then throwing one bag in the trash. In fact, 20 percent of the food Americans buy never gets eaten. And that waste has a variety of impacts.

Food production is resource-intensive, starting with the land and water to grow it. It takes 660 gallons of water, for example, to produce a 1/3 pound hamburger. Then there's the energy to process it and the oil to transport it. That's all before it's even purchased.

Once food becomes garbage, it decomposes in a landfill, creating methane, a powerful contributor to climate change.

Of course, tossing food also has impacts on the wallet. A family of four making small changes in the way they shop for, store and prepare food can save as much as \$1,500 a year.

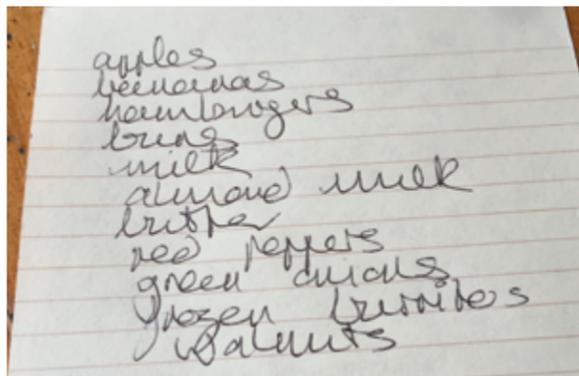
Tips for tossing less food

Planning

Pre-shop at home. Check to see what you have on hand – those apples in the fruit bowl for example. Scan the refrigerator, freezer and cupboards.

Make a list with meals in mind. Be realistic. Will you have time to cook every day? If your week is likely to include take-out or frozen pizza, plan for those. That way you won't be tossing wilted greens along with your good intentions. If it's hard to plan meals for a whole week, try a shorter mid-week shopping trip – with a list, of course.

Don't go to the store hungry. A full stomach makes it easier to resist impulse buys.



Shopping

Buy only what you need. Avoid pre-packaged produce and two-for-one deals. Look for loose fruits and veggies.

Shop the bulk bins. Get exactly the portions of beans, pasta, nuts or grains you need. It's also useful for small quantities of spices.

Storage

Make the food you buy last as long as possible. For example, those mushy apples in the fruit bowl would have stayed crisp in the refrigerator. Potatoes and garlic keep best in a cool, dark cupboard, and bananas and winter squash on the table or counter.

Make an "Eat This First" section in your refrigerator. Label a container or designate one shelf for leftovers or items that need to be eaten soon.

Freeze food you won't be able to eat soon. Chicken breasts you didn't get to? Leftover hamburger buns? Freeze them now instead of buying more later.

Cooking

Prep in advance. You're more likely to eat your greens if they're ready to go straight into the salad bowl or skillet. If you have time, cook several meals at once, or a bigger batch of a single recipe, and then freeze them for easy meals later.

Pay attention to what you throw in the garbage and compost. Could it have been eaten? How much did it cost you? What can you do differently?

Find more tips at eatsmartwasteless.com

Find more online

Find the full story and other multimedia stories about keeping more food out of the landfill at oregonmetro.gov/news

What do I do with old batteries?

Ask Metro whether to toss or recycle.

503-234-3000
oregonmetro.gov/batteries



Starting a remodeling project?

To protect your health and safety, Metro transfer stations require documentation for all loads of construction, remodeling and demolition debris that might contain asbestos. Loads without proper paperwork will be turned away.

For more information: 503-234-3000 or oregonmetro.gov/asbestosrules

Regional roundup

WHERE HOUSING'S HAPPENING



Story by Craig Beebe and Nick Christensen

Photography by Joshua Manus and
courtesy of City of Hillsboro

Another year, another round of breakneck population growth in greater Portland. But supply of new homes – from apartments to detached houses – simply hasn't kept pace.

Although the region's population has been climbing for more than a decade, construction was at a near standstill during the dark days of the recession. And we're still building our way out.

The region's urban growth boundary includes thousands of vacant acres waiting for homes. Other communities have long planned redevelopment that's only recently started. But construction requires more than just land.

So what does it take to make new homes happen? As part of Metro's latest Regional Snapshot, we checked in on a few places around the region where new homes are being built.

Central Eastside

The historic industrial neighborhood is one of several seeing a lot of growth in Portland, which has been leading the region in total units constructed in recent years by a large margin.

How many homes? Since 2010, more than 1,300 apartments have been completed, permitted or begun construction in the Central Eastside. Another 716 were in review this fall. Combined with nearly 1,000 older apartments and houses there, that would bring the total number of homes in the Central Eastside to 3,000 within a few years.

What had to happen? The Central Eastside has also been an urban renewal area for 30 years, focusing city investment in the area's transportation and development. Proximity to downtown Portland and high transit access, plus a vibrant mix of jobs, make it attractive to renters. The challenge going forward: striking a balance between preserving jobs and accommodating new residents.

Villebois

Two decades ago, state officials planned a prison on the west end of Wilsonville, the former site of a state hospital. But persistent lobbying by the city, a second look from state officials and a compromise led instead to the community of Villebois, whose concept plan was approved in 2003.

How many homes? Last year, a record 330 homes were built in Villebois. Another 120 home plans were submitted to city officials this fall. Overall, about 1,700 of the 2,600 homes planned for Villebois have been built, a mix of apartments and single-family houses.

What had to happen? For starters, the city created an urban renewal area, allowing it to issue bonds to upgrade roads to Villebois and the Wilsonville Road interchange at Interstate 5. Urban renewal paid for \$70 million of improvements around Villebois; private developers matched that with improvements in the community.

Happy Valley

Perched atop the list of Oregon's fastest-growing cities for several years running, the Clackamas County city of Happy Valley is seeing rapid housing construction in several places, but especially along its eastern edge.

How many homes? About 340 buildable single-family lots exist throughout the city, with most permitted for construction. Another 2,200 lots are in some stage of the planning process. About 300 apartments were under construction in the fall.

What had to happen? Happy Valley has planned ahead with full comprehensive plans for each growth area; the area now seeing the most construction had a plan adopted in 2009. Since Happy Valley has one of the region's lowest tax rates, the city leans heavily on developers to pay for the basic building blocks of new neighborhoods, from streets to sewers.

South Hillsboro

Construction on greater Portland's newest master-planned community finally got underway last summer. The 1,400-acre area was added to the urban growth boundary in 2011 and has long been sought as a site for more home construction. It could one day have 8,000 homes and 20,000 residents.

How many homes? The first subdivision under construction, called Reed's Crossing, is expected to include 2,800 single-family homes and 930 multifamily units along with commercial areas on 422 acres. The first homes are expected to be available in 2018.

What had to happen? Officials identified nearly a quarter-billion dollars in transportation projects that would be needed, \$44 million in water and sewer pipes, and \$100 million for parks. The city's financial plan does two key things – it makes sure existing Hillsboro residents don't foot the bill for new growth, and gets key infrastructure built quickly.



Learn more about Portland-area housing costs and construction in Metro's latest Regional Snapshot
oregonmetro.gov/snapshot



Share your nature and win!



Piper Hope, Gresham

This was on the river trail at Oxbow Regional Park. We have kids who love looking for where the fairies live, and this spot was deemed highly probable for a fairy house. Oxbow is our favorite park. Most of our summer afternoons are spent on the beach, and we love exploring the trails year round.

Submit your photo

Win an annual parks pass, an overnight camping trip at Oxbow Regional Park, a tennis court session, or a round of golf for four people including cart at Glendoveer Golf and Tennis Center.

To enter, submit a photo taken at a park or natural area in the Portland metro region – your friends and family, a view of wildlife or a sunset, for example. Include a 50-word description of your experience. Where were you? What were you doing? What captured your attention?

The winner will appear in this space. By submitting a photo, you consent to Metro's future use and publication of your photo. Send your photo and description by Feb. 15 to: ourbigbackyard@oregonmetro.gov