Our Big Backyard



Winter 2020



3

Parks and nature bond measure

Voters approve \$475 million for future investments

13

Community partnerships

New program supports communities of color

14

Disposal, recycling, repair options

Learn how to keep gadgets, appliances out of the garbage

TABLE OF CONTENTS

Share your nature	2
Parks and nature news	3
Cover story	4
2018-19 Annual Report	7
Field guide	11
Get involved	12
Parks and nature news	13
Tools for living	14
Regional roundup	15
Color and discover	16

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.

Metro Council President

Lynn Peterson

Metro Councilors

Shirley Craddick, District 1 Christine Lewis, District 2 Craig Dirksen, District 3 Juan Carlos González, District 4 Sam Chase, District 5 Bob Stacey, District 6

Auditor

Brian Evans



If you have a disability and need accommodations, call 503-220-2781, or call Metro's TDD line at 503-797-1804. If you require a sign language interpreter, call at least 48 hours in advance. Activities marked with this symbol are wheelchair accessible:

Bus and MAX information

503-238-RIDE (7433) or trimet.org

Stay in touch with news, stories and things to do.

oregonmetro.gov/parksandnaturenews facebook.com/oregonmetro twitter.com/oregonmetro instagram.com/oregonmetro

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.

Share your nature and win!



Winner: Donna Weare, Clackamas Orenco Woods Nature Park

We recently visited Orenco Woods Nature Park for the first time. The walk was relaxing and the fall colors were beautiful, but the highlight of our visit was coming across three deer eating apples that had fallen from the old apple trees in the park.



Finalist: Ginny Carlson Blue Lake Regional Park

I work with adults with disabilities, and we send out three groups five days a week on adventures. I am a stage 4 lymphoma survivor and without all this beauty, not sure I would've made it. Every place fills our lives with joy.



Finalist: Paige Wallace Willamette River

I arrived in Oregon City a little early for my client meeting, so I decided to take a chilly morning walk along the Willamette River. Just as the sun broke through and the fog began to lift, these Canada geese swam by. I thought they created a lovely winter vignette.

Submit your photo

Win an annual parks pass, a full-day picnic shelter reservation at Graham Oaks or Scouters Mountain nature parks, 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

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: During the prescribed burn at Quamash Prairie Natural Area, a member of the fire crew walks across the prairie, lighting plants with a driptorch. *Photo by Cory Eldridge*

Greater Portland voters approve \$475 million Metro parks and nature bond measure

Story by Yuxing Zheng. Photography by C. Bruce Forster and renderings by Walker Macy and Snøhetta



Voters across greater Portland on Nov. 5 approved a renewal of Metro's parks and nature bond measure, which will raise \$475 million to protect clean water, restore fish and wildlife habitat and provide opportunities for people to enjoy nature close to home.

Measure 26-203 passed 67% to 33%, according to election results from Clackamas, Multnomah and Washington counties. When early results were announced on election night, a crowd of about 75 people cheered and hugged each other at a celebration at the Southeast Portland headquarters of the Asian Pacific American Network of Oregon.

"We are grateful for the support of voters throughout the region who recognize the value of these investments in our water quality, parks and open space, and the opportunity we have to improve equity and access for all the people of our region," Metro Council President Lynn Peterson told the crowd.

The measure does not raise taxes and instead renews the current property tax rate of \$0.19 per \$1,000 of assessed value. It costs about \$4 a month for a home assessed at \$250,000.

Money from the bond measure will support six program areas: land purchase and restoration, improvements at Metro parks, Nature in Neighborhoods capital grants, "local share" money for local park providers, walking and biking trails, and complex community projects.

All projects supported with bond money are required to prioritize community engagement, racial equity and climate resiliency. People of color, Indigenous community members and other people historically left out of parks and nature work shared their input to shape the development of the bond measure.

"Like so many people in this neighborhood, I grew up in an immigrant family. We never went camping and we weren't able to vote," said Duncan Hwang, associate director of APANO. "Because of this campaign, those families have the same opportunities I never had. Because of this measure and Metro's other programs, local Chinese and Vietnamese youth have had the opportunity to go camping the last couple of summers and had a really great time."

The centering of racial equity extended throughout the campaign, he said.

APANO hosted a get-out-the-vote canvas the weekend before the election, and advocates reached out to ethnic press like the Portland Chinese Times.

Community engagement started in summer 2018, with a 25-member stakeholder table representing conservation, recreation, agricultural, nonprofit, business, local government, neighborhood association, Indigenous and culturally specific interests. An online survey in April collected input from more than 700 community members across greater Portland.

Climate resiliency also emerged as a top priority during the development of the bond measure.

"The Metro Council showed great leadership in including climate resiliency in this," said Kathleen Brennan-Hunter, president of the Intertwine Alliance's Board of Directors and director of conservation programs at The Nature Conservancy's Oregon office. "If we take care of nature, nature will be better able to take care of us."

Voters approved Metro parks and nature bond measures in 1995 and 2006, and localoption levies in 2013 and 2016 to help care for the land. Today, Metro cares for more than 17,000 acres of parks, trails, natural areas and historic cemeteries.

As with previous bond measures, all spending with the 2019 bond will be monitored by a community oversight committee and subject to annual audits.

With the passing of the 2019 bond measure, the work is just starting. Parks and nature staff will spend late 2019 and early 2020 to connect with community members and develop a work plan to implement the bond measure.

"The work that we do is important for now and future generations," Jonathan Blasher, parks and nature director, said after the election. "We will take good care of the voters' dollars, and we'll do everything we can to keep their trust now and in the future."

To learn more about voter investments, visit **oregonmetro.gov/nature**





Where the money will go

Land purchase and restoration, \$155 million

Metro will purchase land from willing sellers and restore it to improve water quality, fish and wildlife habitat.

Projects will be selected from 24 distinct geographic areas based on attributes such as the potential to restore stream banks, oak and prairie habitat, or their cultural significance.

Metro park improvements, \$98 million

Metro will complete nature parks such as Chehalem Ridge in Washington County, increase access for people with disabilities and maintain water systems, trails, bathrooms and other amenities at parks such as Oxbow and Blue Lake.

Nature in Neighborhoods grants, \$40 million

Metro will award grants for capital projects to purchase land, restore fish and wildlife habitat, or provide access to nature. Priority will be given to projects that reduce the impacts of climate change and implement Metro's Strategic Plan to Advance Racial Equity, Diversity and Inclusion.

Local parks and nature projects, \$92 million

Metro will distribute money to cities, counties and park providers across greater Portland to purchase land, restore fish and wildlife habitat, and build and maintain parks in local communities.

Walking and biking trails, \$40 million

Metro will secure rights to build new trails and construct missing sections, completing projects identified in a regional plan for a network of walking and biking paths.

Complex community projects, \$50 million

Metro will provide funding for public projects that also address other community issues such as jobs, housing and transportation. This program area will include \$20 million to help provide public access to Willamette Falls in downtown Oregon City.

At Quamash Prairie, fire tells a story

Story and photography by Cory Eldridge

Since time immemorial until the arrival of white colonists, fires regularly burned the area that became greater Portland. Lightning-made fires would spark up in overgrown places, clearing out excess fuel like dead bushes and down branches over a few acres.

The region's Indigenous people used fire extensively. Tribes, bands and families burned prairies to harvest tarweed seeds and woodlands to gather acorns, shaping and molding the ecosystem to favor habitats and plants that sustained their diverse societies and cultures. Sustained – and still sustain.

Early last fall, a wildland fire team from the Confederated Tribes of Grand Ronde led a prescribed burn of Quamash Prairie Natural Area west of Tigard. For several years, Metro has worked at the prairie with members of the region's Indigenous community, which includes members of more than 380 tribes and bands from across North America. Community members have advised on conservation practices, held ceremonies at the prairie, harvested foods, and gathered plants for basketry and ink-making.

Bringing fire back to the prairie has been critical. Here's how fire works.







Story and photography by Cory Eldridge

A year ago, Colby Drake had never heard of Quamash Prairie, a low-lying property that winds alongside the Tualatin River near Southwest Scholls Ferry Road. Now, on a clear, cool fall day, he knows more about it than nearly anyone. He knows its contours and topography. He knows how much of the prairie is tender grass and flowers and how much is woody shrubs and saplings. He knows its moisture level.

And he knows how much of it will burn when his crew lights it on fire.

It's a particular kind of knowledge: Scientific, built on numbers and models, paired with 22 years of experience fighting wildfires and setting controlled fires. It's the knowledge of a burn boss, a position Drake has held with the Confederated Tribes of Grand Ronde for two years. It's the knowledge needed to safely burn 32 acres of the 254-acre prairie to help restore it. But it's paired with another knowledge, an ancestral knowledge of the importance of fire in the traditional land practices of Indigenous peoples.

When Curt Zonick, a conservation scientist at Metro, approached Drake about managing a prescribed burn at Quamash, the burn boss knew he wanted to work on the project.

"With our ceded lands up and down the I-5 corridor," Drake said, "why wouldn't we want to participate in these projects that restore fire to these natural areas?"

Like nearly every acre of ground in greater Portland, Quamash Prairie is ceded land. When white colonists arrived in Oregon, they used violence and murder to push Native people off their ancestral lands. In the mid-1850s, the U.S. government formalized this takeover through a series of treaties with tribes and bands in the region.

The federal government forced tribes and bands to cede their homelands in exchange for removal to sometimes far-flung reservations. Many of the Indigenous people in what is now greater Portland became part of the Confederated Tribes of Grand Ronde. In 1954, the United States terminated the Confederated Tribes of the Grand Ronde,

dissolving the tribal government, dismantling the reservation and relocating tribal members to urban centers like Portland.

This colonial process frayed – though never broke – the tribes' and bands' connections to the land. The fraying was a cultural and spiritual violence against Indigenous people, but it also damaged the fabric of the ecosystem. Prairies, forests and wetlands shaped by Indigenous people since time immemorial became cities or farms or were overgrown by plants – native plants like Douglas firs as well as invasive plants – that had been held back by controlled fires set by Native people.

By the 1990s, when Metro started acquiring the land now known as Quamash Prairie, the site had been a farm for decades. During this time, the tribe was rebuilding. In 1983, the Grand Ronde was restored as a federally recognized tribe, and it began the process of reestablishing its government, membership and connections to its ceded lands.

During this rebuilding, Drake learned he is Grand Ronde, beginning his own reconnection to his tribe and his ancestral lands.

"For me, I sometimes struggle with the cultural side of being Indigenous. I wasn't raised with it. I sometimes feel uncomfortable taking part in these practices. Sometimes I'm asked to introduce myself in my native language, but I don't know any," he said. "So I think about my personal ancestors. I think about what they were doing, and what they were doing was agriculture. They were using fire to keep down weeds, to flush out game, to create shooting lanes."

Drake's science-based, fire-boss knowledge provides him a way to connect to the land, to remember his ancestors. And it helps other Indigenous community members in the region, both Grand Ronde members and the thousands of others connected with other places across the country, to do the same. Some of them bring the cultural knowledge Drake is still learning.

On the day of the burn at Quamash Prairie, as the last of the smoke goes out, Drake and Zonick, the Metro scientist, walk onto the charred field with Greg Archuleta and Christine and Clifton Bruno. Archuleta and the



Top, from left: Colby Drake and Greg Archuleta of the Confederated Tribes of Grand Ronde inspect a plant after a prescribed burn at Quamash Prairie while Metro scientist Curt Zonick talks with Clifton and Christine Bruno, Wasco. A few weeks after the fire, a burned plant sprouts new growth.

Brunos, along with dozens of other Indigenous community members, have worked with Metro for more than 15 years at the prairie, bringing their expertise in traditional ecological knowledge and Indigenous practices in the region to the process of restoring the prairieturned-field-returned-prairie.

Archuleta and the Brunos don't see the burned field as something sad and destroyed. They see the return of a normal stage of prairie life: the post-burn, a chance for regrowth. They see what the prairie can provide now and how it can be healed to provide more to future generations.

A few weeks later, Archuleta, who is a Grand Ronde member and employee, is walking across the prairie with Gerardo Rodriguez, a member of Portland's urban Indigenous community who is Yaqui and Nahua. The prairie is still black and ashy. Archuleta sees more.

The work of Drake and his crews has allowed Archuleta and Rodriguez to harvest tarweed seed. Tarweed gets its name from the sappy coating that covers its seed pods. As Archuleta pops open the pods and threshes the seeds in his palm, he explains that the Kalapuya and Tualatin people who lived along the Tualatin River used fire to burn off the tar, allowing the harvest of the nutrient-rich seeds.

As Archuleta picks out the seeds and deposits them in a Ziploc bag, the past tense "used" soon shifts to "use" and on to "will use." Fire is back at Quamash Prairie.



Continued investments strengthen unique parks and nature system in greater Portland

When greater Portland voters first approved a natural areas bond measure in 1995, they helped put into action a vision of clean water, restored fish and wildlife habitat and opportunities for people to connect with nature close to home. Voters sent a clear message that parks and natural areas, just like housing and transportation, are an integral part of healthy, livable communities.

Today, Metro manages more than 17,000 acres of parks, trails, natural areas and historic cemeteries as part of a unique system with nature at its heart. This is possible thanks to voter support for the 1995 and 2006 bond measures and two subsequent levies to help care for the land. Funding from the second levy kicked in July 2018.

November 2019 marked another milestone, with voters approving a \$475 million bond measure to support land purchase and restoration, Metro park improvements, Nature in Neighborhoods capital grants, local parks

and nature projects, walking and biking trails and complex community projects.

While continuing to build on past investments, projects supported with bond money will include an emphasis on advancing racial equity, deepening community engagement and reducing the impacts of climate change.

"We are grateful for the support of voters throughout the region who recognize the value of these investments in our water quality, parks and open space, and the opportunity we have to improve equity and access for all the people of our region," Metro Council President Lynn Peterson said on election night after results showed the bond had passed.

The work is guided by the Parks and Nature System Plan, a long-term strategic plan and framework, and the Parks and Nature Department's Racial Equity, Diversity and Inclusion Action Plan. The action plan, completed in late 2018, comprises more than

80 actions aimed at improving economic, environmental and cultural equity.

With the passing of the 2019 bond measure, the work is just starting. Parks and nature staff will spend late 2019 and early 2020 to connect with community members and develop a work plan to implement the bond measure.

"The work that we do is important for now and future generations," Jonathan Blasher, parks and nature director, said after the election. "We will take good care of the voters' dollars, and we'll do everything we can to keep their trust now and in the future."

The impacts of current investments can be seen on the ground, with cleaner water, healthier habitats and new opportunities to enjoy parks and nature, like the popular new nature play areas at Oxbow Regional Park.

Learn more about how your tax dollars were spent from July 2018 to June 2019 and stay tuned for more.

Improving, planning access to nature

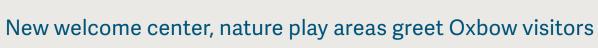
New parks provide more opportunities for people to connect with nature close to home, including Killin Wetlands Nature Park, which opened in September 2018. Projects begin with reviewing the scientific and cultural resources at a site and mapping areas compatible with access and areas where sensitive habitat and cultural resources would be unsuitable for development. Extensive conversations with

community members, partners and others ensure that access improvements provide the nature experiences and visitor amenities the community wants. After a thoughtful planning process, the Metro Council needs to approve a formal "master plan" before design, engineering and construction drawings can be completed. Land-use permits and funding must be secured before construction begins.









Visitors to Oxbow Regional Park can't miss the new welcome center at the park entrance that opened in January 2019. It's a hub for visitors to find maps and general information, and the center's educational elements are designed to spark curiosity about nature.

Children can follow 11 sets of wildlife tracks imprinted in the ground to discover the animal

that made them, a floor-to-ceiling engraved metal panel with hidden animals, a display of seasonal plant and wildlife cards and more. The 2,600-square-foot modernist timber frame building also houses staff offices, public restrooms, a locker room and a multipurpose room. Money for the new building came from voter-approved levies and revenue generated from prior salmon festivals at Oxbow.



Children of varying abilities are now able to enjoy two nature play areas at Oxbow that opened in May 2019. One features climbing structures and water and sand play stations. The other is a kids "adventure camp" with a nature lab and small camp kitchen. Planners worked with FACT Oregon, an organization that provides resources and support to families experiencing disabilities.

Because of parent insight, play area designers were better able to accommodate how children could transfer from wheelchairs to play equipment. They planned accessible paths from parking areas, designed fencing around the play areas and chose building materials that won't interfere with the use of cochlear implants. The two nature play areas cost \$565,000. About \$375,000 came from the levies, with additional money from a federal Land and Water Conservation Fund grant.



Direct investments in local communities in the form of Nature in Neighborhoods grants continue to be one of the most popular programs. Summer 2018 marked the first round of grants awarded from the levy renewal, and the Metro Council awarded 14 nature education and outdoor experiences grants totaling \$800,000 to support ecology education, scholarships for nature-focused bike camps, urban

forestry job training programs and more. The Center for Diversity & the Environment received a \$60,000 grant for its Environment 2042 Emerging Leaders program, which identifies and develops people ages 18 to 25 to help build a more diverse, equitable and inclusive environmental movement in greater Portland. The grants emphasize building cultural, environmental and economic equity.

A focus on equity

In fall 2018, Metro released the Parks and Nature Racial Equity, Diversity and Inclusion Action Plan. The plan brings together Metro's work to protect clean air and water and connect people to nature with its commitments to improve racial equity in the region.

The document sets down dozens of specific actions Metro will undertake over the next five years to increase racial equity, diversity and inclusion in its parks and nature work.

For Metro, achieving racial equity in greater Portland means that race would no longer be a reliable way to predict a person's life outcomes on measurements like education level, health or wealth, which are currently very closely related to race. In the process of creating racial equity, every group and community in greater Portland would see its well-being improve.

"It's important work that we have to take on individually and collectively," said Jonathan Blasher, director of Metro's Parks and Nature Department. "What gets me excited is seeing the small successes people have...
People see that this isn't some big magical or
mystical work. It's about treating people with
respect and integrity and acknowledging
historic wrongs."

This means making sure that people of color feel welcome and safe when they visit Metro destinations. It means creating job training and mentoring for people of color so that the department's workforce looks like the people it serves, which isn't true now. It means that Indigenous people, both those with close historical ties to the region and those with tribal roots in other parts of the country, will have meaningful and easier access to cultural resources on properties that Metro protects and manages, all of which are land ceded by regional tribes in the early years of colonization. It means contracting with more minority-owned, women-owned and emerging small businesses.

Through these and other efforts, Metro is working to ensure that more people of color will gain the benefits of parks and natural areas.



Connect with Nature: As part of planning for the future East Council Creek and Gabbert Butte nature parks, Metro tried a different approach in an effort to encourage the participation of new and culturally diverse voices. Staff played a supporting role, giving control to community partners and empowering members from African-American, Latinx, Asian, Indigenous, and immigrant and refugee communities to sit in the planner's seat, help facilitate community

conversations, and guide the park design process and outcomes. For many, the series of workshops were a long overdue opportunity for people of color to take a more active role in the parks planning process and a chance for their ideas, critiques and aspirations to be heard. The lessons learned as part of the Connect with Nature initiative are now being turned into a resource guide for other park providers to use when they create a new public park space.



Restoration and maintenance

Protecting clean water and restoring fish and wildlife habitat remain at the core of Metro's parks and nature mission.

Restoration and maintenance work includes controlling invasive weeds, planting native trees and shrubs, removing unnecessary or harmful culverts and roads, maintaining existing roads and infrastructure, decommissioning unauthorized trails, improving connections between streams and wetlands, and improving habitat for fish and wildlife.

The first levy provided money to complete weed assessments across Metro's entire portfolio, and crews treated weeds across the vast majority of parks and natural areas. That important work continues.

After Metro acquires a property, a stabilization plan is drawn up, invasive weeds start getting treated, and dilapidated buildings, septic systems and other structures are removed. This initial work is paid for with money from the 2006 natural areas bond measure.

After a site is stable, a site conservation plan is developed to identify the most important actions to improve water quality and fish and wildlife habitat. A site stewardship plan is also developed to detail weed treatments and maintenance of fence lines, signage and more. Restoration work can take years or even decades to complete, after which a site transitions to long-term maintenance.

Metro last year participated in nine regional conservation partnerships, such as efforts to protect oak prairies. In the Clackamas River Basin, an initiative now in its third year coordinates efforts between federal, state, regional, and local partners and private landowners in managing invasive species and preventing the introduction or spread of new species.

The Clackamas River Invasive Species
Partnership, or CRISP, grew out of
conversations between the nonprofit Clackamas
River Basin Council, the Clackamas Soil and
Water Conservation District and Metro in late
2015 and now includes 13 public and nonprofit
partners. The partnership brings everyone
together to identify and prioritize the weed
infestations that pose the greatest threat to the
watershed and focus limited resources where
they would be most effective.

By the numbers

81 projects to restore habitat and protect clean water

1,500 acres of completed restoration work

48 planting projects

79 weed treatment projects

Land acquisition with 2006 bond (CUMULATIVE)

The biggest portion of the 2006 bond measure earmarked \$168 million for land acquisition from willing sellers. More than 6,000 acres have been acquired and protected – significantly surpassing the original goal. Thanks to voters, Metro has been able to conserve some of the last swathes of native prairies, wetlands and other valuable habitat – home to rare plants and endangered or threatened fish and wildlife. Other properties fill gaps in regional trails, providing key connections for commuters, bicyclists and joggers.

Nature education FY 2019

7,141 Youth participants in nature education Sites where nature education programs

took place

Volunteers FY 2019

programs

Total volunteer hours at parks and natural areas

Sites where volunteers worked Target = 33 sites

Promises made, promises kept

Metro's system of parks, trails, natural areas and historic cemeteries is the result of a more than a quarter century of commitment, action and investment by the region. It exists because of voter support for three bond measures and two levies.

Spending from the 2006 natural areas bond measure is winding down, and voters in November 2019 approved a new \$475 million bond measure to continue investments to protect land, improve parks and natural areas, support community projects and more.

The final year of funding from the original levy expired in June 2018, and money from the levy renewal kicked in the following month. Continued funding from the levy renewal builds upon the successes in the first levy. More sites are being restored to provide healthy habitat. New nature parks are welcoming visitors. And popular parks continue to see improvements with new facilities and more programming.

The work continues. Stay tuned for next year's annual report to track how your tax dollars are spent to improve parks and nature.



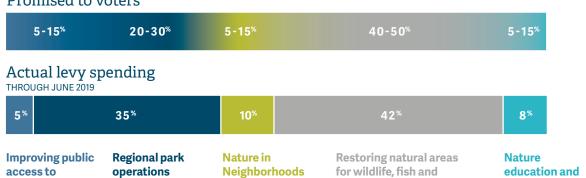
Parks and Nature spending*

	General fund	2018 parks and natural areas levy	2006 natural areas bond	Total
Restoration/maintenance of parks and natural areas	\$2,564,761	\$4,386,330	\$0	\$6,951,091
Access to nature	\$663,216	\$563,742	\$1,349,230	\$2,576,188
Park improvements and operations	\$5,727,651	\$3,604,233	\$0	\$9,331,884
Cemeteries	\$892,200	\$0	\$0	\$892,200
Nature education and volunteer programs	\$265,384	\$787,870	\$0	\$1,053,254
Community investments	\$61,054	\$1,052,454	\$912,748	\$2,026,256
Land acquisition/ stabilization	\$0	\$0	\$6,090,342	\$6,090,342
Administration**	\$4,136,642	\$4,672,456	\$4,013,635	\$12,822,733
Total	\$14,310,908	\$15,067,085	\$12,365,955	\$41,743,948

2018 parks and natural areas levy

Promised to voters

natural areas



water quality

grants

Metro

volunteers

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



Story by Nicole Lewis Photography by Cristle Jose

Opened to the public in 1926, the Glendoveer Golf and Tennis property continues to serve as a center of community in northeast Portland.

Since time immemorial, the area where Glendoveer and greater Portland now sit has been home to the Multnomah, Wasco, Cowlitz, Kathlamet, Clackamas, bands of Chinook, Tualatin Kalapuya, Molalla and many other tribes who make their homes along the Columbia and Willamette rivers.

Today, this cherished resource attracts more than 250,000 visitors annually, and offers new and fun ways to experience a place that reaches a far broader community than the golf and tennis crowd alone.

Year-round, visitors of all ages enjoy a quiet walk or run along Glendoveer's 2.2 mile nature trail around the site. This wood-chipped path provides a safe place to exercise and experience nature close to home. Lose yourself among the sequoias, big-leaf maples, cedars and Douglas firs, including a heritage tree that started growing when the U.S. became a nation.

Free community events attracted nearly 6,000 people last year. Glendoveer hosts and sponsors blood and clothing drives, charity tournaments, community events, and golf programs that integrate life skills, mentoring and support for local children in foster care.

For five years running, Glendoveer has hosted the prestigious Nike Cross Nationals, where the top high school cross-country runners compete for the national title. The event also includes a community run open to the public.



Gendoveer Golf Course and Nature Trail

ADDRESS

14015 NE Glisan St., Portland

DIRECTIONS

TriMet buses 25 and 77 stop by Glendoveer. MAX Blue Line stops at East 122nd or East 148th avenues are a mile away.

KNOW WHEN YOU GO

Glendoveer trail open sunrise to sunset. No pets, please. Pro shop and tennis facility open daily 6:30 a.m. to 9:45 p.m. year-round. Available tee times for golf vary by season. For golf, FootGolf and tennis reservations: 503-253-7507

AMENITIES

Two 18-hole golf courses, driving range, indoor tennis, pro shop. Two-mile, wood-chipped loop trail with restrooms, picnic table, drinking fountain.
Von Ebert Brewing.

oregonmetro.gov/glendoveer

In the neighborhood Grab lunch or a local brew at Von Ebert Brewing, located at Glendoveer. Nadaka Nature Park at Northeast 176th Avenue and Northeast Glisan Street features a nature play area, meadow and short loop trail. Visit Ventura Park at Southeast 115th and Southeast Stark Street, where bicyclists can practice their skills at the pump track built and maintained by the Northwest Trail Alliance. Metro's Blue Lake Regional Park and Chinook Landing Marine Park are just a 15-minute drive away. For more information, visit playglendoveer.com

From wildlife habitat to solar energy, Metro's commitment to a healthy environment comes to life across the property. Recent course improvements save 31 million gallons of water a year. Glendoveer's lush greenery serves as an island oasis of nature among the busy city streets.

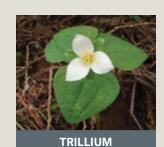
For more details about all 19 Metro destinations, visit oregonmetro.gov/parks

Be on the lookout!









Season-by-season highlights

WINTER: Donating to the on-site holiday charity drives is a fulfilling and accessible way to support the community. For those who go stir crazy during the winter, don't forget: the four tennis courts are indoors and the driving range is covered and – more importantly – the latter is partially heated.

SPRING: Look for the beautiful, white trillium blossoms along the trail, and rufous hummingbirds in early spring. If you're out at dusk, you may see a western screech owl. Free kids golf and tennis clinics are offered winter and spring.

SUMMER: Play a round of golf on one of Glendoveer's two 18-hole courses, try out FootGolf (a combination of soccer and golf)

or enjoy the cool shade along the nature trail. Tour the course on a GolfBoard and see what it's like to "skateboard" over the grass. Sign up the kids for weeklong golf and tennis camps. Enjoy family movie night with "Big Screen on the Green" and learn about the constellations at Star Party. Be on the lookout for twilight walks with a naturalist – explore the natural side of Glendoveer at a unique time of day.

FALL: Every Halloween, Glendoveer transforms into a "Haunted Forest," providing a safe, fun and dry place for trick-or-treating. Fall-themed tennis and golf events are a fun way to enjoy the last of the nice weather. Enjoy a stroll around the nature trail and soak in the vibrant colors. You'll see vine maple, western hazel and red huckleberry, among others.



SAT. JAN. 18, 25 SAT. FEB. 1

Amphibian survey 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 amphibian 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, Clean Water Services, Tualatin Hills Park & Recreation District and the Tualatin National Wildlife Refuge, three trainings will be held. Attendance at one of these trainings is required before volunteering in the field.

Registration, accessibility information

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. For more information or to request communications aids, sign language interpreters and other modifications: Nature education team, 503-220-2782.

For additional nature classes, volunteer opportunities and events, please visit oregonmetro.gov/calendar

JAN. 18: Metro Regional Center 600 NE Grand Ave., Portland 9:30 a.m. to noon.

JAN. 25: Tualatin Soil and Water Conservation 7175 NE Evergreen Parkway #400, Hillsboro

9:30 a.m. to noon.

FEB. 1: Tualatin Hills Nature Park 15655 SW Millikan Way, Beaverton 1 to 4 p.m.

For all trainings:

Free. Ages 16 and older. Registration required. Difficulty: moderate.

SAT. JAN. 4, 25 SAT. FEB. 8, 22

SAT. MARCH 21, 28

Volunteer ventures

Help care for rare native seeds, bulbs and plant materials that support regional restoration projects. Winter activities include transplanting bulbs and plants, maintaining plant beds, mulching and weeding. No experience is needed. Gloves, tools, water and snacks provided.

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

Registration required. Difficulty: easy.



Free Parking Days

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. 1, 16, 20; Feb. 17 and 20; March 19; April 16; May 21; June 18; July 16; Aug. 20; Sept. 17; Oct. 15; Nov. 11, 19 and 27; and Dec. 17.

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

WED. JAN. 29

Oregon Zoo pub talk: discovering youth leadership through advocacy in nature

Portland's Soul River Inc. connects innercity youths and U.S. military veterans to the outdoors. A veteran himself, founder Chad Brown believes that by engaging veterans as mentors for youth, powerful opportunities of healing can authentically happen in Mother Nature. Learn more about Soul River's programs connecting youths and veterans to public lands, wild rivers, fresh waters and beyond, to inspire a new generation of outdoor leader ambassadors. Visit oregonzoo.org/talks for details and to purchase tickets.

Oregon Zoo, Cascade Crest building 7 p.m.

\$15, \$10 for students with ID, free for kids 0-2.

Registration not required. Difficulty: easy.

WED. FEB. 19

Oregon Zoo pub talk: training orangutans in Borneo to improve welfare

The Oregon Zoo's primate keepers recently went to help train staff and orangutans at the Borneo Orangutan Survival Foundation. The team worked with both non-releasable adult orangutans and younger animals who may one day return to their native forests. Hear about the successes and challenges, how this important work promotes improved animal welfare, and how you can support and get involved with future projects. Visit oregonzoo. org/talks for details and to purchase tickets.

Oregon Zoo, Cascade Crest building

\$15, \$10 for students with ID, free for kids 0-2.

Registration not required. Difficulty: easy.



WED. MARCH 25

Oregon Zoo pub talk: up close and personal with cougars and bears

Get to know your wildlife neighbors. Join Rich Beausoleil, the statewide bear and cougar specialist with the Washington Department of Fish and Wildlife, to learn little-known facts about how bears and cougars live, experience their surroundings and interact with each other as well as humans. Visit oregonzoo.org/talks for details and to purchase tickets.

Oregon Zoo, Cascade Crest building

\$15, \$10 for students with ID, free for kids 0-2.

Registration not required. Difficulty: easy.



WED. APRIL 8

Oregon Zoo pub talk: true tall tales from Tanzania

Derek Lee and Monica Bond of the Wild Nature Institute will discuss their long-term conservation research and community education to save giraffes in Tanzania.

Over the past decade, Lee and Bond have been using giraffes' unique spot patterns to recognize and monitor thousands of individuals in some of the world's most iconic national parks and surroundings, to understand how food supply, disease, natural predation, humans, social relationships and even spot types help or hurt these gentle giants. Visit oregonzoo.org/talks for details and to purchase tickets.

Oregon Zoo, Cascade Crest building

\$15, \$10 for students with ID, free for kids 0-2. All ages.

Registration not required. Difficulty: easy. 🔏



Can planting a trillion trees really save our planet?

Story by Jonathan Soll, Metro science and stewardship division manager Photography by Yuxing Zheng and Diego Gioseffi





What Oregonian doesn't love trees? We certainly love them here at Metro. Thanks to voter investments, Metro shows our love by planting native trees and shrubs in our parks and natural areas – more than 4 million since 1995.

Now, for the first time we know about how many trees there actually are to love on Earth and just maybe, how planting trees can help save the planet from climate change. But having the data is just one part of solving a far more complex problem.

There are about 3 trillion trees in the world, according to a 2015 study led by researchers from Yale University and published in the prestigious science journal Nature. While that is a lot, the number has actually fallen by about half since the start of modern human civilization, meaning that 10,000 years ago there were twice as many trees. Worse, we continue to lose 10 billion trees each year.

Where do they all go? Conversion to farms, ranches, cities and loss to drought (desertification) are among the biggest contributors to tree loss.

A 2019 study from the Swiss Institute of Integrative Biology suggested that planting 1 trillion trees would dramatically reduce the amount of carbon in the atmosphere and significantly help stop global climate change.

So should we all get busy planting as many trees as possible, as soon as possible?

Well, yes and no. Among their many amazing qualities, trees absorb carbon dioxide and release oxygen. Planting a lot of them would – eventually – absorb a lot of carbon dioxide from the atmosphere.

Although any tree absorbs carbon, forests – with their many interwoven elements – provide many other benefits. They clean our air and water, reduce flooding, and provide habitat for other plants and animals. In cities, trees especially help keep things cool, reducing what is called the Urban Heat Island Effect,



Clockwise from top: Ahlam Osman, an intern at Metro, helps plant a native Oregon grape at Oxbow Regional Park. Contracted crews plant trees and shrubs at Clear Creek and North Abbey Creek natural areas.

where human activities, asphalt and the built environment lead to far hotter temperatures than surrounding rural areas. The planet can surely use a lot more of all that trees provide.

Stopping climate change with a trillion trees however, is more complicated than it might seem.

Forests typically have 100 to 200 trees per acre. One trillion trees would require five to 10 billion acres of land, two to four times the entire area of the United States. Where would all those trees be planted? By whom? Who would pay for them? Who would care for them? What species would be planted? Could they be harvested? Who gets to make these decisions? What else could that money be spent on?

Many experts think the best solution for stopping climate change is keeping fossil carbon like oil, coal, natural gas and old-growth forests in the ground in the first place. They fear a focus on planting trees would distract from efforts to reduce carbon emissions.

While trees and forests are wonderful for many reasons, one tree grown in Portland for 10 years stores about the same amount of carbon as 7 gallons of gasoline or reducing one household's annual electricity use by 1%.

The United States has added 20 million acres of trees – approximately 2 billion individual trees – between 1990 and 2010. But the U.S. and our region still contribute to global deforestation and climate change as an importer of forest products and being the world's heaviest user of fossil fuels.

So while restoring habitat by planting the right trees in the right place is always a good thing and can certainly make a difference on the regional scale, if you really want to save the planet, be sure to take the bus. Or carpool on the way to the planting project, and turn off the lights before you leave the house.



Mid-Autumn Festival celebrates Asian communities, cultures

Story and photography by Cristle Jose

On a field at Blue Lake Regional Park, a happy Buddha fans a dancing lion that leads a line of families holding lanterns as part of a ceremony to celebrate the Mid-Autumn Festival. The lantern ceremony leads back to the picnic shelter, with tables set up with desserts and flameless tea light candles painted by attendees.

On Oct. 5, the Asian Immigration and Refugee Youth Council hosted its first Asian Autumn Festival to celebrate both the Moon Festival, a tradition across much of eastern Asia, and Diwali, a Hindu festival.

For the lantern ceremony, participants chose from 200 lanterns that displayed various characters, such as a dragon, a Despicable Me minion and a turtle. One boy was dressed as a Buddha, and two others were the lion.

When participants returned to the shelter, they snacked on moon cakes with taro and red bean fillings to celebrate the Moon Festival, and rasgullas, an Indian desert made of cottage cheese balls in rose water syrup, for Diwali.

Although the holidays have their own customs, Youth Programs Coordinator Dan Le says both have the common theme of light – candles for Diwali and lanterns for Moon Festival – and symbolize different perspectives.

"For the Diwali candles, it means chasing darkness with light," Le explained. "For the Moon Festival, it's more about families coming together to share a meal and enjoy each other's company."

They feasted on Thai and Lao dishes from Lily Market and Indian cuisine from Namaste Indian Bazaar. These dishes included curry, pad see ew, papaya salad and pad thai.

The council is a branch of IRCO, the Immigration and Refugee Community Organization, and made up of 10 high school students in IRCO's youth programs.

"I joined the council because it seemed like a good opportunity to grow socially and academically," said Nhan Luu, a junior at Madison High School in Portland. "What I took from it so far, especially in regards to the festival, is how hard it was to plan an event that big."

Metro sponsored the community-led activity with its community partnerships program. Le estimated 250 to 300 people attended the festival.

"A lot of our Asian communities came together, and a lot of our staff within IRCO, so I think that's what made the event beautiful," Le added.





The dizzying pace of technological advances fuels an equally voracious appetite for the newest electronic features and the latest gadgets.

That means old electronic devices and even household appliances are considered obsolete more quickly. And people toss them out.

Some electronics – like cell phones – are loaded with precious metals that can be reused.

According to the U.S. Environmental Protection Agency, 35,274 pounds of copper, 772 pounds of silver, 75 pounds of gold and 33 pounds of palladium can be recovered from every million smartphones recycled. This reduces the amount of raw materials mined to make new phones.

But many electronic devices also contain hazardous stuff like lead, mercury, beryllium and cadmium.

Although e-waste is a small fraction of what goes into landfills, the EPA estimates that it accounts for 40 percent of lead and 70 percent of other toxics found there.

That's why Oregon's Electronics Recycling Law has banned the trashing of computers, monitors and televisions since 2010.

Patrick Morgan, of Metro's Recycling Information Center, regularly fields questions from folks asking what to do with their used tech. Here are a few of his tips for safe disposal:

What to do with used electronics and appliances

1. Screens and things: Televisions, desktop computers (and their accessories like printers, keyboards and mice), monitors, laptops and tablets.

Morgan says that TVs and computers contribute the most toxicity to landfills. "Luckily those also are very easy to get rid of safely and properly," he says.

The statewide Oregon E-Cycles program is funded by manufacturers. Find a collection site near you by checking the Oregon E-Cycles website: oregon.gov/DEQ/ecycles

2. Handheld electronics: Cell phones and video games.

There are numerous ways to sell your used phone for cash or donate it to an organization to help someone in need. Just make sure your personal data is deleted first.

"Also most mobile phone vendors, whether the big box stores or the corner Sprint store, will have buyback programs or at least a drop-off recycling program," Morgan says. "That's a good, safe way to do it, too, because you have data on your phone that they will usually take care of."

3. Small household gadgets: Alarm clocks, speaker systems, shredders, blenders, microwaves, the list goes on and on.

"If they are in good working condition, donation can be a great option," Morgan says.









A quick Google search will reveal dozens of organizations that will take them off your hands.

But, if your items no longer work, you may be able to fix them. Repair cafes, where volunteer experts fix small appliances and a variety of other things, happen regularly around the region. Check out repairpdx.org

If your gadgets truly are toast, a variety of recycling facilities will take them. And some retailers, such as Best Buy, offer free in-store recycling programs.

4. Large household appliances: Dishwashers, stoves, washing machines, etc.

Many retail stores will haul off and recycle major appliances for free or a small fee when you buy replacement appliances from them. And some organizations, like Habitat for Humanity, offer pick-up services for a small fee for appliances that still work.

"Most options will be free unless it is a refrigerator or other coolant-running appliance," Morgan says. "Those will always have a fee." If you bought your refrigerator, freezer or air conditioner before 2010, it may contain Freon, an ozone-depleting chemical. It needs to be disposed of safely. So do newer appliances, which contain other hazardous materials.

To find a location near you to take your old electronics or appliances, visit oregonmetro.gov/findarecycler





Story and photography by Ambar Espinoza

The gym door at George Middle School swung open on a recent autumn morning as more than a dozen students donning helmets walked their bikes onto the sidewalk.

"Feel free to hop onto your bike," said Lale Santelices, the City of Portland's Safe Routes to School coordinator.

The students formed a single line and mounted their bikes, ready to go.

"We're going to merge into traffic," Santelices said, as she led the group to the surrounding streets in North Portland's St. Johns neighborhood. "So what's something we should do?"

"Look both ways," a student called out.

"Look both ways, absolutely," Santelices said.
"We are going to signal. We're going to look both ways. And we're going to go!"

Sandwiched by adults, students pedaled down the street one after the other, putting into practice bike safety techniques they have learned since the beginning of the school year.

George Middle School is one of five Portland middle schools piloting traffic and bike safety lessons in their health and physical education classes. The Portland Bureau of Transportation historically contracted bike safety educators to guest teach at elementary and middle schools for two weeks per year.

But out of more than 100 schools, "we were only reaching 40 schools," Santelices said during a sit-down interview.

Bike safety education is typically among the first to go as teachers face pressure to spend more time on math and reading to meet rising benchmarks, Santelices said.

"For our program to be sustainable and to be able to reach all students, it needed to be more embedded in the school," she said.

Santelices said PBOT wanted to offer a more comprehensive program that teachers could teach both in health and PE classes with training and technical support from the agency.

Through travel surveys and conversations with families and teachers, PBOT staff homed in on middle school as an important transition time when kids start to learn how to be independent. In addition, not all elementary schools in Portland have a dedicated PE teacher or program that middle schools do.



Last school year, PBOT and a group of middle school teachers designed lessons about traffic safety laws, basic bicycling techniques, and the health benefits of walking, biking and taking the bus.

Now, PBOT is training teachers to teach those lessons directly to students. The agency provides all the bikes and helmets for the students, which schools alone couldn't afford.

Programs like this one are getting support from Metro's new Safe Routes to School program. Metro recently awarded a grant to PBOT to bring this new bike safety curriculum to the Parkrose School District. The program is helping jurisdictions around the region develop innovative approaches that ensure students get to school safely.

PBOT's new approach to teaching bike and traffic safety leverages the state's mandate that public schools increase time spent on physical education.

"When you can integrate the health piece, it goes right along with our curriculum," said Timothy Mitchell, a PE teacher at George Middle School who helped shape the curriculum

Importantly, teachers also share tips on how students can keep themselves safe when traveling to and from school – particularly if they're harassed or bullied.

"The reality is that this is a huge missing hole in health curriculum," said Kayci Murray, who teaches at Harriet Tubman Middle School and also helped shape the curriculum. "Math is important, but navigating a city is really important."

Murray said she's proud Portland is home to many organizations that promote walking, biking and taking transit, and that advocate for street infrastructure improvements.

"And yet we're behind on the educational piece [for kids]," she said. She believes one way to nurture future generations of people who





Clockwise from top: Lale Santelices, the city of Portland's Safe Routes to School coordinator, led a bike ride in October 2019 with George Middle School students. George Middle School students lined up to go back to class after a bike ride around the St. John's neighborhood. Timothy Mitchell, a PE teacher at George Middle School, taught a traffic safety unit during health class at the beginning of the school year. Seventh graders in Kayci Murray's health class at Harriet Tubman Middle School designed traffic safety posters.

support investments in infrastructure is to educate kids through programs like this one.

The program is still in the early stages. PBOT and teachers are still shaping the curriculum.

Back in the St. Johns neighborhood, the sounds of wheels spinning got louder as PE students approached George Middle School. The kids, wearing smiles on their faces, got high-fives from their instructors as they returned to the gym. Inside as the bell rung, a new class arrived to do it all over again.

Read more stories on the journey to school across greater Portland in Metro's latest Regional Snapshot. View maps, charts and videos at oregonmetro.gov/snapshot





Color and discover!



Drawing by Zoe Keller

Nurse log habitat

When a huge tree like a Douglas fir, bigleaf maple or Oregon white oak falls down, it's not the end of the tree. It's the beginning of a new habitat: a nurse log.

Moss and fungi begin to grow on the log. Insects feed on the decaying wood, attracting bug-eaters like long-toed salamanders and Pacific wrens.

As the log breaks down over years and decades, it is transformed into soil that, eventually, nurtures the next great tree in the forest.

Share your coloring creation with Metro! Snap a picture and tag @OregonMetro on Instagram or Facebook.



