



“In greater Portland, the most visible effect of climate change is trees dying off from drought and heat.”



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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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Bus and MAX information

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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.

Share your nature and win!



Winner: Amanda Ulrich, Canby

On a sunny but chilly February afternoon, Adam and I enjoyed a beautiful hike at Scouters Mountain Nature Park. The clouds burned off and Mount Hood stood, aglow, as Adam took in the scene.



Finalist: Pamela Slaughter

At Oxbow Park during a People of Color Outdoors outing we enjoyed a ranger-led walk and celebrated Estella Ehelebe, the first and only Black woman to lead Multnomah County Parks.



Finalist: Amy Aldrete

My daughter, Ivy, and I explored Jenkins Estate Park with friends. We looked down to see that several garter snakes had come up to enjoy the warmth of the February sun! Big ones (two-feet long), and tiny ones too (like the one seen here) came to say hello.

Submit your photo

Win an annual parking 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 greater Portland – 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 May 15 to: [ourbigbackyard@oregonmetro.gov](mailto:ourbigbackyard@oregonmetro.gov)

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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](mailto:ourbigbackyard@oregonmetro.gov) or call 503-797-1545.

On the cover: A stand of dead red alders at Metro’s Grant Butte Wetlands in Gresham. Mass die offs of red alders are among the most visible signs of climate change in greater Portland. Photo by Cory Eldridge



# Metro invests in a more diverse restoration workforce

Story and photography by Yuxing Zheng



On a surprisingly clear January morning after days of showers, Rosario Franco drives an ATV down a muddy path along Multnomah Channel across from Sauvie Island.

After a couple of minutes, he reaches a clearing where several crews are spread out busily planting red-osier dogwood, Douglas spirea, Pacific ninebark, hawthorne, Pacific willow, ash and more into the wetlands and fields. Over several days, the crews will plant 35,000 native plants, part of the 175,000 plants that went into the ground over the course of the fall and winter at Metro’s Multnomah Channel Marsh Natural Area.

It’s been 20 years since Franco first started working at the site. Franco and his family are originally from Mexico, and after working alongside his father for a decade in Oregon, he opened his own firm in 1996. Crews from R. Franco Restoration have been working at Metro natural areas since 1997.

“The water, habitat, wildlife – there are so many benefits,” said Franco, looking around at plants he and his crews planted over the years. “I really enjoy being outside and seeing how the projects change. Every year I come here there are changes, and you see different birds.”

Diversifying the region’s restoration workforce has grown increasingly important in recent years as Metro and other organizations in greater Portland invest more in businesses owned by people of color, women and veterans and emerging small businesses. Parks and nature has historically been a predominantly white career field, and investing more resources in economic equity is one of the primary goals of Metro’s Parks and Nature Racial Equity, Diversity and Inclusion Action Plan.

With the latest round of restoration contracts, Metro natural resources scientist Curt Zonick and natural resource specialist Kristina Prosser worked with the Parks and Nature Equity Advisory Committee to make the bureaucratic process of government contracts more accessible to diverse business owners. This year’s process included conducting in-person interviews with potential contractors so people could talk more freely rather than relying on the traditional request-for-proposals process that emphasizes writing skills.



**From top:** A crew from R. Franco Restoration plants native wetland species in Multnomah Channel, across from Sauvie Island. Rosario Franco, center, instructs his staff during a restoration project to plant 35,000 plants in the marsh by the channel

“We’ve learned in the past that some of our best-performing contractors gave us poor proposals,” said Zonick. “Several firms this year took the time to say they appreciated the interview process.”

Similarly, workforce development has emerged as a main theme in Metro’s community investments. About a third of the Nature in Neighborhoods community grants currently support workforce development programs, including ones at Voz, Wisdom of the Elders, Forest Park Conservancy and Verde Landscape, Tualatin Hill Park & Recreation District, and Portland Opportunities Industrialization Center and Rosemary Anderson High School.

“When you’re looking at the current restoration workforce and where you want to be in 10 years, you have to look at education and training programs so people from diverse backgrounds can have those jobs in the future,” said Crista Gardner, who manages Nature in Neighborhoods community grants.

Franco is similarly invested in sharing information and the lessons he has learned during his decades in the restoration business. For the project at Multnomah Channel Marsh, Zonick paired Franco with a newer, emerging small business so Franco could help mentor them.

“I don’t think of it as competition,” Franco said. “If I do a good job, I’ll always have work. The more we help each other and teach each other, the better it’ll be for everybody. I think it’s very rewarding when you help other people.”



**From left:** Hattie Redmond and Esther Pohl Lovejoy are two suffragists buried at Lone Fir Cemetery.

## Historic Cemeteries program receives grant to research notable women

**Story by Megan Zabel Holmes. Photography courtesy of Oregon Historical Society**

Who are the remarkable women buried in Metro’s historic cemeteries? A new grant will help uncover their stories.

The \$9,997 grant from Oregon Heritage Commission, which was matched by Metro to provide the program just under \$20,000, makes it possible for a researcher to comb through thousands of records to fill gaps in information.

“There are periods of time when the records weren’t kept well,” said Quinn Spencer, Metro cemetery researcher. “This is the first step to bring attention to these women’s lives and honor them in some way.”

Their stories will be shared throughout the year to mark the 100th anniversary of the ratification of the 19th Amendment. While the amendment outlawed discrimination to vote based on sex, in most of the country it applied only to white women. The fight for suffrage took four more decades to secure the right to vote for Black women, Chinese-American women, Indigenous women, Latinx women and more women of color. It’s a fight that continues.

“Native American women weren’t given the right to vote in 1920,” said Emma Williams, a cemetery program coordinator at Metro. “There’s history that we need to talk about, and that people should be made aware of.”

The grant allows time and resources to find these stories. Decades-old death certificates and memorials often don’t include comprehensive information. Lax record-keeping disproportionately affects women, whose documents and headstones often only referred to them by their husbands’ names.

“Most of the stories we know are focused on prominent white men,” said Williams. “This is an opportunity to find and share stories that exist but are rarely told.”

Spencer also hopes the research yields stories that have been previously glossed over.

“We want to be on people’s radar as a historical resource,” he said. “I want to make sure that we do that responsibly — through which stories we tell, and how we choose to tell them.”

Information gathered through this project will go into Metro’s new cemetery database, which will be accessible by the public for genealogy and research in the future.

Do you know about a woman buried at a Metro’s cemetery whose story should be told? Contact the cemetery office at 503-797-1709 or [cemetery@oregonmetro.gov](mailto:cemetery@oregonmetro.gov)



# Get involved

## CLASSES AND EVENTS



SAT. APRIL 18

### Earth Day at Oxbow


Volunteer to help native plants thrive in the forest and along the Sandy River. Volunteers planted more than 1,500 plants last winter. Now volunteers are needed to weed and mulch around the plants and to cage small trees to protect them from browsing deer. No experience is needed. Gloves, tools and snacks are provided. Please bring family and friends and a water bottle. Rain or shine.

Oxbow Regional Park  
10 a.m. to 1 p.m.  
Free parking for volunteers. All ages.  
Registration required. Difficulty: easy

SAT. APRIL 25

### Spring cleaning: household hazardous waste collection

Not sure what to do with old batteries, light bulbs, pesticides, paint, solvents, medical sharps, cleaners, and other household chemicals? Pack them up and bring them to us! Take away a free native plant and information on natural gardening and green cleaning.

Blue Lake Regional Park  
9 a.m. to 2 p.m.  
Free event; free parking. All ages.  
Registration not required. Difficulty: easy.   
For a complete list of items to bring visit:  
[oregonmetro.gov/tools-living-garbage-and-recycling/neighborhood-collection-events](https://oregonmetro.gov/tools-living-garbage-and-recycling/neighborhood-collection-events)



### 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 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. APRIL 8	SAT. APRIL 11
WED. MAY 6	SAT. MAY 9

### Free kids golf and tennis clinics

Is your child interested in tennis or golf? Sign them up for a free beginner lesson taught by an instructor. No tennis racquets or golf clubs required.

Glendoveer Golf and Tennis Center  
Golf clinics: 4 to 5 p.m. April 8, May 6  
Tennis clinics: 1 to 2 p.m. April 11, May 9  
Free. Ages 6 to 13.  
Registration required: [playglendoveer.com/events/event-registration](https://playglendoveer.com/events/event-registration)  
Difficulty: moderate.

SAT. APRIL 11	SAT. APRIL 19
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### Mushroom discovery hike

Discover the fascinating and weird world of mushrooms! Join local mushroom guide Leah Bendlin on this woodland hike. Learn about the ecological roles of fungi, their forms, and how they eat and reproduce. Enjoy hands-on exercises and learn how to identify mushrooms. Field guides will be provided.

April 11: Oxbow Regional Park  
9:30 a.m. to noon or 1 to 3:30 p.m.  
\$6/person, \$11/family; \$5/car, \$7/bus.  
All ages but geared towards adults.  
Registration required. Difficulty: moderate.

April 19: Smith and Bybee Wetlands Natural Area  
9:30 a.m. to noon  
\$6/person, \$11/family.  
All ages but geared towards adults.  
Registration required. Difficulty: moderate.

SAT. APRIL 18	SAT. MAY 16
SAT. JUNE 20	

### Volunteer ventures

Help care for rare native plants that support regional restoration projects. Spring activities include planting bulbs and seeds and maintaining wildflower seed production beds. 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.

### Registration, accessibility information

Unless otherwise noted, register and pay at [oregonmetro.gov/calendar](https://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 interpretation, 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](https://oregonmetro.gov/calendar)

MON. MAY 25

### Memorial Day at Lone Fir Cemetery

Spend the day walking the grounds learning about the veterans, firefighters and police officers buried on the historic property. Join a guide from Friends of Lone Fir Cemetery to discover the past and present on a historic or veteran’s tour. Retired firefighter Don Porth will share the stories of Portland’s early firefighters. Self-guided tours, available on-site and at [oregonmetro.gov/lonefir](https://oregonmetro.gov/lonefir), will allow visitors to learn about Portland’s early police officers. In the morning, the crew of Portland Fire & Rescue Engine 9 will raise the flag in the Firefighters’ Section, followed by a short program with an honor guard and the chance to see a fire engine up close. Refreshments provided.

Lone Fir Cemetery  
10 a.m. to 5 p.m.  
Free. All ages.  
Registration not required. Difficulty: easy. 



### Support Metro’s Native Plant Center

Native plants serve a crucial role in Metro’s efforts to restore wetlands, oak woodlands and other habitats. The plants provide shelter for fish and wildlife and are an important food source. With the help of volunteers, Native Plant Center staff collect seeds and bulbs from the wild, grow them, and coordinate their planting at regional parks and natural areas to support restoration efforts. Year-round volunteer opportunities at the Native Plant Center include center assistants, office assistant and volunteer ventures.

To learn more, visit [oregonmetro.gov/volunteer](https://oregonmetro.gov/volunteer) or contact volunteer services at 503-815-7505.



# Global change, local effects

## Climate change is altering the lives of people, plants and animals in greater Portland.

**Story by Jonathan Soll, Metro science and stewardship manager**  
**Photography by Cory Eldridge, Cristle Jose and Peter Guillozet**

The world's climate is changing, that is for sure. The 20 hottest years ever recorded happened during the last 22. As if to underline this fact, on Feb. 8, 2020, it was 65 degrees in Antarctica, the warmest temperature ever recorded there.

Higher temperatures aren't all there is to worry about, however. A warming world changes regional climate and local weather in surprising ways, especially in the frequency of unusual or extreme weather events. Some make the news: record freezes, killer heat waves, massive hurricanes, catastrophic floods and giant wildfires (hello Columbia River Gorge, Australia, California). Other impacts are subtle, such as out-of-season rain affecting crop production or your favorite sporting event.

Passively accepting change as inevitable may be easiest in the short run, but the costs of inaction are astronomical. There's plenty people can do to limit the damage caused by climate change and ensure greater Portland's communities are ready for the impacts.

Reducing climate change and investing in preparedness is a fairness and equity issue. Across the world, the people most affected by climate change did the least to cause it and have the fewest resources to adjust. This especially includes people with low incomes and the politically disempowered.

In Portland, hotter areas of the city, called urban heat islands disproportionately occur in neighborhoods that were redlined – a decades-long housing policy to restrict people of color, especially Black residents, to specific neighborhoods and deny access to loans and public investments. Portland's redlined neighborhoods are almost 13 degrees hotter than wealthier, whiter, non-redlined neighborhoods because these have more parks and trees, according to a recent study from Portland State University and the Science Museum of Virginia. Portland had the highest discrepancy in temperature found in 108 American cities.

Metro has prioritized climate change resilience for greater Portland through a racial equity lens. The regional government is working with partners and community members to build climate resilience into all of its programs.



**From top:** Climate change is a hidden crisis. Even the most massive effects, like glaciers melting or ice sheets breaking, happen slowly. In greater Portland, the most visible effect of climate change is trees dying from drought and heat. These red alders at Grant Butte Wetlands in Gresham are part of a large stand that died off following multiple years of drought. Amphibians are a key indicator of climate change. Metro closely monitors amphibian egg masses in the region because sensitive species respond quickly to changes in their environment.

*Across the world, the people most affected by climate change did the least to cause it and have the fewest resources to adjust.*

*Continued on page 6*





**Clockwise from top:** Computer models predict that climate change will cause greater Portland to have fewer but harsher storms, which will cause floods. Less rain over the year paired with higher temperatures will increase the risk of wildfires. Increased temperatures will worsen greater Portland’s heat islands, urban areas with fewer trees and therefore higher temperatures. Portland has the worst disparities in heat islands in the country.

*Plants and animals will have to adapt their ranges, moving uphill or northward to survive. Some won’t survive.*

Continued from page 5

Thanks in part to voter support of the parks and nature bond measure in November 2019, Metro is working to create a future in which the community and nature is protected from the most harmful effects of climate change.

It’s true that the climate has always changed. However, nearly all climate scientists believe the dramatic changes in the past 20 years are because humans have increased carbon dioxide and other greenhouse gases in the atmosphere by nearly 50% in the last century by burning fossil fuels (oil, coal and natural gas). There is now one-third more carbon dioxide in the atmosphere than at any time during the last 400,000 years.

So, what does that mean for climate here? The future is always uncertain, but computer models of future climate in the Pacific Northwest are remarkably consistent. These models predict it will be warmer; there will be more precipitation during winter; the mountains will have more rain and less snow; and there will be fewer but stronger storms. Warmer summers mean it will be harder for people to stay cool and will cost more to do so.

These same impacts also affect plants and animals. Scientists are already seeing die-offs of tree species that are part of the fabric of nature here, such as red alder, western red cedar, and even Oregon’s state tree, Douglas fir. Drought combined with dead trees equals fires. More fire means more chances for old and new invasive species to displace those that have been here for millennia. Plants and animals will have to adapt their ranges, moving uphill or northward to survive. Some won’t survive.

Bigger storms in winter means more flooding, especially when mountain snow gets rained on, like what caused the devastating 1996 floods. More flooding means more erosion, more property damage and more need for healthy river systems that can withstand it.

What’s Metro doing to reduce the impacts? A lot.

One of the best ways to help nature adjust to a changing climate is to protect and maintain a connected system of natural areas to allow plants and animals to adapt on their own, whether the actual changes match

the computer models or not. Protecting and restoring headwaters, wetlands and floodplains ensures rain is absorbed, stored, cooled, cleaned and slowly released to streams, so high-quality water is available when and where it’s needed.

Connecting floodplains to streams means that when there is too much rain, the water can go somewhere other than homes, businesses and streets. This approach is working along Johnson Creek, and it can work elsewhere. Beyond improving the natural water system, we need to protect healthy examples of native ecosystems. The species making up our forests, oak savanna, wetlands and prairies are counting on us.

*Warmer summers mean it will be harder for people to stay cool. Planting and maintaining the urban forest will help keep everybody happier and cooler.*

Last but not least, urban forests, including street trees, reduce the heat island effect caused by buildings and streets absorbing heat. Planting and maintaining the urban forest will help keep everybody happier and cooler.

Thanks to the support of voters, Metro has the opportunity to help bring climate resilience to the natural world and the region’s communities.



# Changing climate, changing ecosystems

Text by Marsha Holt-Kingsley, Katy Weil and Jonathan Soll

Photo composite by Cory Eldridge

Across local ecosystems, fish and wildlife are already experiencing the impacts of climate change.

## Tree deaths

Over the last several years, summer droughts have led to an increase in tree mortality. Recent summers have been hotter and drier than typical. For trees growing in marginal areas with thin, rocky soils on south-facing slopes, these hotter droughts are very stressful. Both insects and diseases take advantage of drought-weakened trees, contributing to further decline and death.

## Birds

At Metro natural areas, wildlife monitors have observed resident birds nesting one to three weeks earlier than 20 years ago. Some insects hatch earlier as well. This can impact migrating birds, who count on insects for their nestling birds.

## Insects

Insects are the majority of species most affected by climate change, studies show. Insects are cold-blooded species and must live where temperatures are suitable for reproduction and survival. Scientists are predicting large shifts in insect populations in both abundance and geographic ranges. Insect reactions to warming can include altered foraging, body size and life span – changes that could affect the pollination success of flowering plants and the feeding habits of other animals.

## Fish

Bad news for salmon and other cold-water fish. Longer droughts during already dry summers and less mountain snow means less water – and warmer water – in rivers. That's especially true in summer and early fall, when fish need places to hide, and people need drinking and irrigation water and places to swim. Warm water or not enough water can all be fatal for fish.

## Amphibians

Many amphibians in the region live in forests on hills and come down to seasonal ponds to breed. But scientists have observed that when water levels are low from lack of rain, fewer frogs and salamanders make the trek because there are fewer viable sites to lay eggs (like the egg mass below). When droughts are rare, that response works, but if those conditions become the norm, it will pressure these already climate-sensitive species.



# 6 ways you can build climate resiliency

Story by Kate Holleran, Metro senior natural resources scientist



**From top left:** Young students from Club Aves, an after-school program run by Hacienda Community Development Corporation, learn about the ecology of Smith and Bybee Wetlands Natural Area. A black-tailed bumblebee pollinates a lupine flower. Cyclists ride on the East Bank Esplanade.

Many of the actions needed to address climate change and create healthy ecosystems and communities require large actions by government and industry. Insisting your elected representatives take the issue seriously is one of the most important things you can do. Yet every person can also make everyday choices that support climate change solutions and reduce our personal contribution to climate change.

**Support groups led by Black, Indigenous, people of color and youth in our communities who are taking action** for climate solutions that create community health and resilience. Black, Indigenous and people of color are disproportionately affected by the adverse impacts of climate change. The youth of today are organizing for real climate change solutions because their futures depend on it. Give these groups your voice, time and money.

**Eat more plants, less meat and reduce food waste.** Livestock production creates a significant amount of greenhouse gases that contribute to the warming of the climate. I am an omnivore and am rebalancing my plant and meat consumption because it’s an easy step in support of climate health.

**Walk, bike and take public transit more often.** This is a way to reduce your carbon footprint daily. With more bike lanes and transit routes opening regularly, it’s becoming easier and easier to get where you need to be without using gas. There is a positive cycle to transit where more users spurs more options which encourages more users. This makes public transit an easy choice.

Do you have a yard or garden plot? **Take care of your soil.** Soil is especially adapted to storing carbon. Build up the carbon- and water-storing ability of the soil by preventing erosion and mulching around plants. Compost your food waste and add it to the soil or garden.

**Plant drought-resistant native trees and shrubs.** Ponderosa pine is a long-lived tree that can store carbon for decades, even centuries. It is drought resistant and was more common in the northern Willamette Valley before widespread development. If trees are too big for your space, consider shrubs like Oregon grape (tall or low-growing), oceanspray (a magnet for birds feeding on the insects that feed on its seeds), kinnikinnik (great ground cover) or snowbrush (improves soil by taking in nitrogen from the atmosphere). All these native plants provide the additional benefit of habitat for wildlife.

**Support green power.** Many power companies, including Portland General Electric and Pacific Power, allow ratepayers to easily enroll in renewable options based largely on wind and solar energy, and to support habitat projects.

**Consider native plants from the southern parts of the Willamette Valley.** On a small scale, in your backyard, this is appropriate. After all, many people already include non-native species in their landscaping. Adding in West Coast drought-tolerant native plants may create a more resilient backyard.

On our large-scale habitat restoration projects, Metro is not yet incorporating plant species from outside of our region. Some ecologists support doing so. Others seek more understanding of how to add new species to restoration projects without unintended consequences. We know our summers will be hotter and drier, and it is tempting to bring in drought-tolerant species growing in Southern Oregon or Northern California. But establishing plants here on a large scale, when the climate is not yet similar enough to where they grow now, may result in dead plants. Metro is still learning how to make climate resilience a part of creating healthy habitats for the future.

Actions for climate solutions and a sustainable future are within reach for all of us. You can make our region more resilient through any of these practices.

**Left:** Metro’s science team protects and restores regional water quality and biodiversity in three main ways: they work in partnership with Metro’s land management team to restore and maintain habitat within Metro’s parks and natural areas system; they provide conservation science guidance to other Metro programs; and they build and maintain conservation oriented partnerships with non-profits and agencies throughout the region. Clockwise from top left: Annie Toledo, Lori Hennings, Jennifer Wilson, Jonathan Soll, Curt Zonick, Marsha Holt-Kingsley, Elaine Stewart, Brian Vaughn, Andrea Berkley, Adrienne St. Clair and Tommy Albo. The science team also includes Kate Holleran and Katy Weil.







# Field guide

## HOWELL TERRITORIAL PARK

Story by Laurie Wulf, Curt Zonick, Isabel LaCourse  
Photography by Fred Joe

As you approach Sauvie Island, Mount Hood, Mount St. Helens, and Mount Adams rise in the distance as farmlands fill the frame with Multnomah Channel running beneath.

Since time immemorial, the Chinookan, Multnomah and Wapato tribes sustained thriving river cultures along the Columbia and Willamette rivers. An estimated 30,000 to 40,000 Chinook lived in the lower Columbia in a complex of villages and trade routes.

When Lewis and Clark passed by, they named it Wapato Island, a fitting title for lands once abundant with wapato, a wetland plant that is an important food to Indigenous people. Wapato thrives in wetlands, but white farmers later drained most of these areas and built levees that destroyed many wapato populations.

The Classical Revival house near the park entrance was completed in 1858 for James and Julia Bybee. The house retains the original nine rooms, six fireplaces, a sweeping staircase and low-hung doorknobs on interior doors. Amelia and John Howell purchased the home in 1873. The house isn't currently open for tours.

Walking through the park, you will find the orchard planted with cuttings from apple and pear trees carried over the Oregon Trail. These cuttings were then grafted onto dwarf rootstock and planted in the orchard. You may also notice the pound pear tree next to the red barn. Be wary when the pears start to fall, as they do weigh over a pound.



### Howell Territorial Park

**ADDRESS**  
13901 NW Howell Park Road, Portland

**DIRECTIONS**  
From Portland, head northwest on U.S. 30. Turn right and cross the Sauvie Island Bridge. Continue on Northwest Sauvie Island Road for about a mile until Howell Park Road on the right. The route is also enjoyable on bike.

**KNOW WHEN YOU GO**  
Open sunrise to sunset.  
No pets, please.

**AMENITIES**  
Port-a-potty, barbecues, picnic tables, fruit orchard

[oregonmetro.gov/howell](https://oregonmetro.gov/howell)

For more details about all 19 Metro destinations, visit [oregonmetro.gov/parks](https://oregonmetro.gov/parks)

**In the neighborhood** Visit Sauvie Island's many farm stands for fresh-picked fruits and vegetables. Paddlers and boaters can use Metro's Sauvie Island boat ramp to access Multnomah Channel, and paddlers can also access Sturgeon Lake on the island's north end. Or relax at one of the island's several beaches, including popular Walton Beach. The island is a birdwatcher's paradise, particularly at the Sauvie Island Wildlife Refuge. For more ideas from the Sauvie Island Community Association, visit [sauvieisland.org](https://sauvieisland.org)

Work in recent years has focused on restoring the site's natural ecology. A newly installed small water control structure allows seasonal flooding and draining of Howell Pond, which supports important wetland native species like wapato, red-legged frogs and painted turtles. Crews restored the oak savanna and prairie to native grasses and

wildflowers, including the endangered golden paintbrush wildflower, which had disappeared from Oregon until being reintroduced in the last decade. After two years, the park's golden paintbrush population became the largest in Oregon, featuring 17,000 plants last year.

### Be on the lookout!



WAPATO



SALAL GRAPE



BLACK-HEADED GROSBEAK



RED-BREASTED NUTHATCH

### Season by season

**SPRING:** Pacific chorus and red-legged frogs can be found throughout the park's grassy meadows, damp woodlands or hiding under wood in tight groups and wooded swamps. During mating season, listen for the chorus frog's loud "cre-ee-eeeek" call. Apple blossoms begin to fill the orchard.

**SUMMER:** Pack a picnic and enjoy the cool evening breeze. Grillmasters can bring burgers, hot dogs and vegetables for the park's two barbecues. Hear songs and catch sight of nuthatches, sparrows, swallows, grosbeak or willow flycatcher. Scan flowering plants for myriad bees and butterflies that support both native plant habitats and farms.

**FALL:** With the changing colors and falling leaves, the sounds of geese migrating south for the winter fill the sky. Other migrating birds, that have been spotted at the park in late fall include sandhill cranes, tundra swans and snow geese. Visit nearby pumpkin patches and corn mazes in preparation for Halloween.

**WINTER:** In winter, you might have the park all to yourself. This is a good time to watch birds perched in the old oak trees or fir grove. You might also spot deer, coyote or rabbits, or at least see their tracks in the moist soil. Howell Pond is typically full of ducks and other waterfowl and often attracts flocks of large, vociferous sandhill cranes.





# Tools for living

Q&A: CAN COMPANIES DO MORE TO CARE FOR WHAT YOU TOSS?

Story and photography by Faith Cathcart

Scott Cassel is a man with a vision.

The founder and CEO of the Product Stewardship Institute sees a world where companies share in the responsibility for what happens to products – especially those that contain toxins or are difficult to recycle – when people throw them away.

The institute works with governments, businesses and recyclers to ensure that caring for the environment isn't solely on the shoulders of individual people.

While what you toss in the trash or recycling bin will always matter, Cassel says that companies can do more.

**Q. How do you explain product stewardship to someone who isn't familiar with it?**

**A.** Product stewardship is a way to make it convenient for each consumer to bring products [that they no longer need or use] to a location. It could be a pharmacy for old medications, it could be to a retail store, a Metro depot or another location where it is just easy for them to bring back those products.

And once taken back, they are either disposed of safely or they are returned back into the circular economy and made into new products.

[These takeback programs] are paid for and managed by the producers themselves. So these systems take the burden away from government and taxpayers.

**Q. When it comes to throwing stuff away, many folks are familiar with the concept "reduce, reuse, recycle." Where does product stewardship fit into this?**

**A.** People are confused about the recycling system.

If you go town to town or region to region, it's going to be different in every state. It's all fragmented. And there's added cost.

People understand that waste is a problem. They want to reduce. They don't know how. They want to reuse. They want to recycle.

These extended producer responsibility systems, or product stewardship systems as they're often called, set up systems that are very clear for the consumers.

Local government has a role to educate consumers and provide a collection service. State government provides oversight for the programs that the producers themselves deliver. And then the producers fund and manage those programs.

**Q. A big challenge in recycling right now is the amount of packaging that isn't recyclable. Can product stewardship programs address this ever-evolving problem?**

**A.** These programs exist all over the world actually. They've been in existence over 35 years all across Europe. They've existed all across Canada for over 15 years. So we know these systems work for packaging and for printed paper.

What would take place here would be that the producers would have a much larger role. And those roles can vary depending on the type of product.

There's flexible packaging, there's plastics, there's paper, there's aluminum, there's other metals.

Each of the companies would pay into a system that would have different fees based on how environmental the packages are that they put on the market.

## A snapshot of product stewardship in Oregon

### Bottles



Oregon's bottle bill, passed in 1971, was the first of its kind in the nation. Since then, the bill has expanded to recycle almost all kinds of beverage containers. It also added BottleDrop centers.

### Medications



Oregon's newest product stewardship law requires drug companies to create a way for people to safely dispose of their unused medications.

### Electronics



Many electronic devices are full of nasty stuff like lead, mercury, beryllium and cadmium. Electronics accepted under the Oregon E-Cycles program are recycled for free.

### Paint



For 20 years, MetroPaint has redirected millions of gallons of leftover paint from landfills and remade them into fresh, new colors that are sold around the region.



Recycling questions?  
Ask your in-house expert.  
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503-234-3000  
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Metro runs free household hazardous waste collection events on Saturdays from March to November. Find an event near you: [oregonmetro.gov/tools-living/garbage-and-recycling](https://oregonmetro.gov/tools-living/garbage-and-recycling)





**Story by Constantino Khalaf**  
**Illustration courtesy of Scott | Edwards Architecture**

The first project funded by Metro’s affordable housing bond, the Mary Ann Apartments, will break ground in Beaverton this spring. The four-story building will have more than 50 apartments, all of them affordable to people making less than 60% of the area median income.

The median income for a family of four in greater Portland is \$87,900.

In November 2018 voters approved a \$652.8 million Metro bond measure to create affordable housing for approximately 12,000 people in greater Portland. The Mary Ann Apartments is one of four projects approved by the Metro Council last year to get the work started.

Rent for many of the apartments at the Mary Ann — including some three-bedroom units — will be set at a level affordable to people earning less than 30% of the area median income. This will make them

accessible to families who might otherwise have trouble finding a stable place to live.

The building is named after Mary Ann Spencer Watts, Beaverton’s first school teacher. Watts taught her students in a log cabin close to her home, near present-day Beaverton High School.

Located in Old Town, the historic downtown core of Beaverton, the Mary Ann Apartments will be within easy walking distance of Beaverton’s library, swim center, farmer’s market and Beaverton High School. Transit will also be easily accessible, with the Beaverton Central MAX station located only half a mile away.

The other projects approved by the Metro Council in 2019 will kick off this year as well. In Tigard, the Housing Authority of Washington County will build a six-story apartment building providing 80 affordable homes. In Northeast Portland, Home Forward will redevelop an existing complex to create 160 new apartments, including several four-bedroom homes. And in Gladstone, the Housing Authority of Clackamas County received Metro

funding to purchase and rehabilitate a building that will be home to 45 residents living in single-occupancy studios.

“Our housing team and partners have been working hard to build all of the structures and systems needed for implementation of the housing bond,” said Emily Lieb, housing bond program manager. “We’ve been happy to have an early round of projects moving forward at the same time that this planning work was underway. And we’re thrilled to be at a stage where we are starting to see some on-the-ground results, just a little more than a year after voters passed the bond measure.”

Addressing the need for affordable housing in greater Portland will take many years, but with more than 300 new apartments underway in only one year, the Metro affordable housing bond is on track to meet its goal of creating 3,900 permanently affordable homes.

“I’m looking forward to celebrating the Mary Ann’s opening later this year,” said Lieb. “These investments are starting to have an impact, providing stability for people and families who have been hit hardest by the housing crisis.”



Read more stories on Metro’s affordable housing bond at: [oregonmetro.gov/housing](https://oregonmetro.gov/housing)

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When everyone is counted in the 2020 Census, our communities get the funding they need for things like health care, public transportation, housing, education, emergency services and more.

Taking the survey early makes space for census officials to focus their outreach on populations that may be harder to reach.

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## Metro

Join the conversation about a potential transportation funding measure to make travel safer and more reliable for everyone in our growing region.  
[getmoving2020.org](https://getmoving2020.org)



# Color and discover!



Drawing by Zoe Keller

To view this publication online or find out more about Metro, please visit:  
[oregonmetro.gov](http://oregonmetro.gov)

## Prairie at Cooper Mountain Nature Park

The prairies that stretch between stands of greater Portland’s iconic forests are critical habitat for a dizzying variety of native plants and animals.

Healthy native prairies have been nurtured with fire by Native Americans since time immemorial. The practice reduces trees and shrubs and fosters native wildflowers, attracting bees, butterflies and other insects, which form the base of the prairie food chain.

Prairies once covered more than 1 million acres in the Willamette Valley. Although only about 2% of those prairies remain, Metro is working to restore many prairies in greater Portland.

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