

EVERGREEN CARBON CAPTURE

2020-2021 ANNUAL REPORT

FORTERRA
LAND FOR GOOD



**EVERGREEN
CARBON CAPTURE**
A FORTERRA ECOSERVICE

EVERGREEN CARBON CAPTURE

2020-2021 ANNUAL REPORT

Climate change is one of the most pressing issues facing our generation.

We're already seeing the impacts of climate change on a regular basis in the form of increases in average global sea levels, retreating glaciers, oceans acidifying, more intense weather patterns, extreme heat and drought and worsening wildfires here in the Western United States.

The Washington State Department of Ecology cites climate models that indicate the Pacific Northwest could see up to 1.1 million acres lost per year to wildfires by the 2040s. Indeed the number of acres lost has been steadily increasing in recent years. In 2020, alone, Washington lost 750,000 acres to wildfire.



We're at a critical point and human action is urgently needed. Investing in our own community improves our region's resiliency against climate change.

At Forterra, we created Evergreen Carbon Capture (ECC) to provide a local option to address climate change through native tree planting. Forterra plants and maintains ECC trees for carbon sequestration in cities and rural lands throughout Western Washington. Tree planting is part of our comprehensive habitat restoration efforts, so these actions not only mitigate carbon impacts but also help develop healthy, resilient forested parks and natural areas for future generations. We plant trees on lands we own or steward with our partners and provide trees to local stewardship organizations for their restoration efforts. Since 2010, we have planted 50,000 trees in more than 100 locations. These trees will sequester greater than 338,000 tons of carbon dioxide (CO₂) over their lifetimes.

We're thankful that, even with the challenges of a difficult past year due to the ongoing COVID-19 pandemic, a cohort of companies and individuals was able to continue supporting climate action here in the Puget Sound. With their commitments, we were able to support local forest restoration by planting 4,867 native evergreen trees to offset carbon emissions.

In addition to sequestering carbon, healthy local forests provide many other benefits such as improving air quality, reducing soil erosion and water pollution, cooling cities and dampening noise pollution, recharging groundwater and sustaining stream flows, providing native wildlife habitat and outdoor recreation.

2021 EVERGREEN CARBON CAPTURE

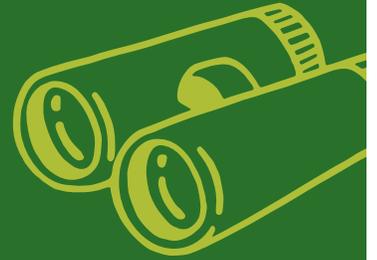
BY THE NUMBERS

5



field
partners

26



corporate &
nonprofit partners
+ dozens of individuals

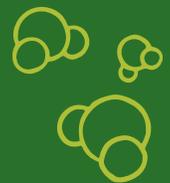
4,867



trees planted
at 21 sites

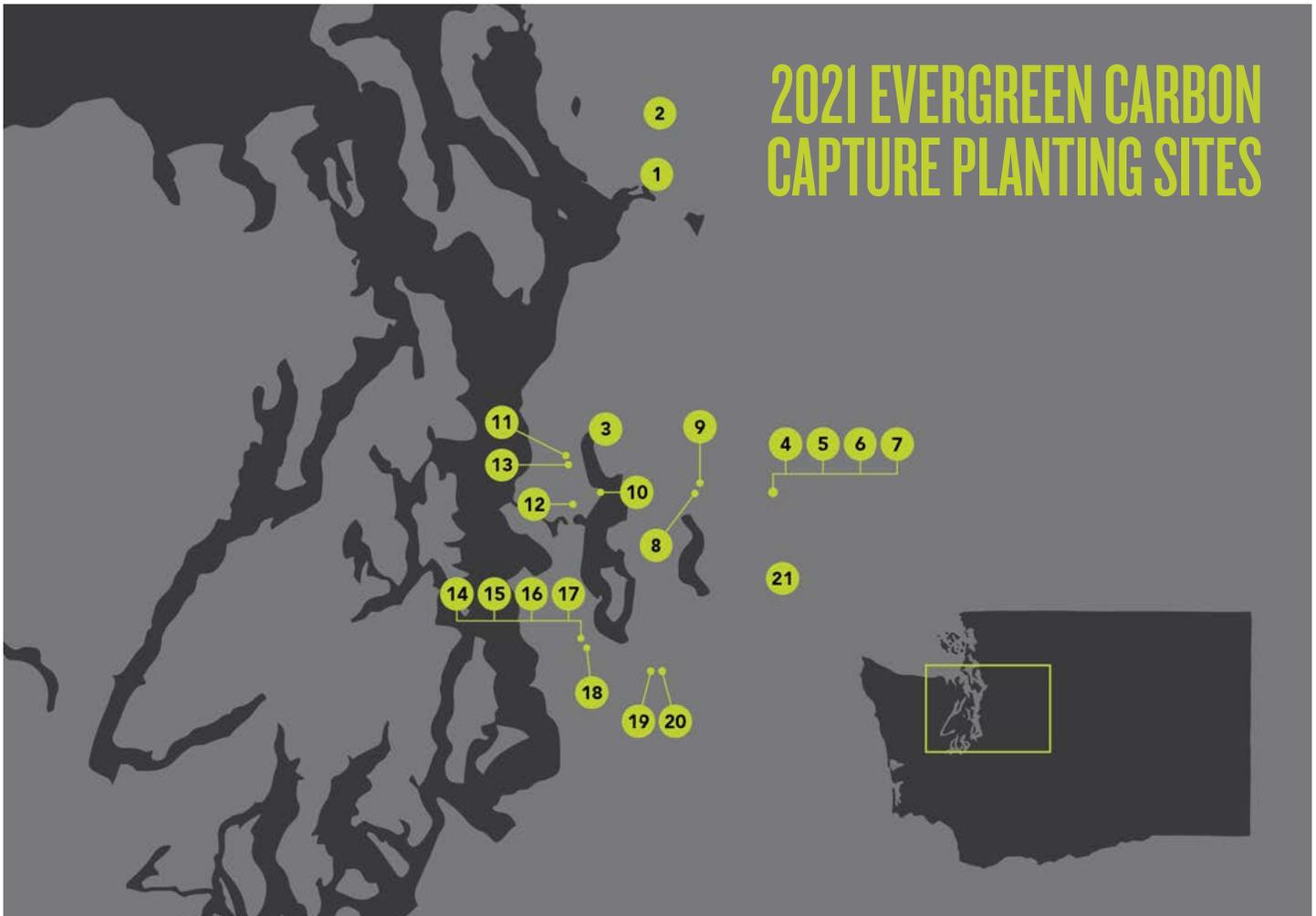
24,335

tons of CO₂
sequestered*



* Assuming 100-year average lifespan for trees planted

2021 EVERGREEN CARBON CAPTURE PLANTING SITES



FIELD PARTNERS AND TREE PLANTING SITES:

ECC provides trees to support restoration efforts through our Green Cities Partnerships, Riparian Restoration program, on Forterra-owned and managed lands, and to support other local stewardship organizations in their restoration programs. In a typical year, the Evergreen Carbon Capture program relies heavily on the support of our corporate partner volunteers to help plant trees throughout the Puget Sound Region. This year, things looked different due to COVID-19 restrictions. Rather than hosting hundreds of volunteers, in 2021 we worked primarily with five field partners and professional crews for getting the trees in the ground. The 4,867 trees were planted at 21 sites throughout the Puget Sound.

1. Adopt-A-Stream Foundation — Allen Creek, Marysville

Allen Creek is located in the City of Marysville in Snohomish County, and is listed as critical and impaired habitat by the Washington Department of Ecology. Much of the land around Allen Creek is used for agriculture. The lack of native plants along the creek has led to the takeover of invasive species, such as reed canary grass, as well as increased erosion of riverbanks, which has decreased oxygen levels and destroyed native fish habitat. Additionally, invasive species replace native plants, some of which would otherwise grow into shade trees and help lower water temperatures. The lack of shade trees on riverbanks has increased water temperatures to unsuitable levels for wildlife.

Trees were planted by the Adopt-A-Stream Foundation, and placed within 150 feet of Allen Creek, a wildlife habitat buffer area. In these areas it is illegal to cut down or remove native vegetation, ensuring protection of the trees for the next 100 or more years. These trees will add shade along the creek for wildlife and lower water temperatures, as well as shade out the invasive species. Additionally, their root systems will help reduce erosion and runoff from nearby agriculture areas, helping restore the area's previous ecological functions and providing valuable wildlife habitat once again.

2. Adopt-A-Stream Foundation — Strawberry Fields, Marysville

Strawberry Fields is a public park in Marysville that offers many recreational opportunities for Marysville residents, including sports fields, walking trails and natural open space to explore. Quilceda Creek runs through this park, which historically was the most productive coho salmon tributary of the Snohomish River. Over the years, development, loss of vegetation and increased pollutants in Quilceda Creek have damaged this significant waterway. Adopt-a-Stream Foundation has made significant strides in restoring habitat along Quilceda Creek, in hopes of one day seeing salmon return to their historic levels. Adopt-A-Stream has been working with landowners along Quilceda Creek to plant more native vegetation in order to make their properties more stream-friendly. This is the third year that we have planted ECC trees at Strawberry Fields as a means to increase habitat health within the park itself, as well as along Quilceda Creek.

3. Adopt-A-Stream Foundation — Wildcliffe Shores, Kenmore

This year, Adopt-A-Stream Foundation planted a portion of their ECC trees throughout the Wildcliffe Shores property in Kenmore. This parcel of land borders the Sammamish River, and the ECC trees planted here will create an important habitat buffer as they reach maturity. The Sammamish River serves as a migratory corridor for Chinook,

coho, sockeye, and kokanee salmon. Increasing canopy to shade the river, providing more abundant food sources for wildlife, and stabilizing the riverbanks are just some of the few benefits these trees will provide over their lifetime. These trees will also aid in increasing the overall health of this greenspace, which serves as a place for natural respite for residents in nearby neighborhoods.

4-7. Stewardship Partners — Sinemma Farms, Wallace Acres, Changing Seasons Farm, and Carnation Farms, Carnation

Stewardship Partners, who has partnered with the ECC program for many years, planted at four private farms in the City of Carnation. All four of these sites are riparian corridor vegetation buffers along the Snoqualmie River, with minimal to moderate invasive vegetation growth. The sites are dominated mainly by two invasive species, Himalayan blackberry and reed canary grass, which are mitigated annually. These sites, as well as others, have been planted before, and these new trees will add to the layers of forest over time.

The trees planted will help to shade out the invasive species, allowing the riparian zone to be replaced with native plants, while restoring fish and wildlife habitat. As these sites are on private farmland, the planting also engages local landowners in stewardship, to build and empower the local community in a way that will last into the future.

8. Green Redmond Partnership — Bear Creek Park, Redmond

Bear Creek has the largest wild Chinook salmon runs in the Sammamish population. A key component of restoring Chinook (and other salmon runs in the Bear Creek system) is enhancing the lower reach of Bear Creek. This project is a high priority for Chinook salmon recovery in the Lake Washington/Cedar/Sammamish Watershed (WRIA 8) Chinook Salmon Conservation Plan and benefits coho and sockeye salmon, as well as other wildlife.

This park is overseen by forest stewards with the Green Redmond Partnership, a partnership

between the City of Redmond and Forterra that focuses on community-building and environmental stewardship work. The forest stewards for this park are employees from GLY Construction. GLY has been a long-standing corporate partner of ECC, and after looking for more opportunities to care for their ECC trees, they chose to steward all of Bear Creek Park, taking on additional activities at the site including watering their trees, removing invasive plants, and planting understory plants. GLY led the planting for the ECC trees, and will monitor them in the future to ensure their lasting health and function. This planting is one of several that have taken place at the park over the years, as the volunteers and partnership seek to rebuild the ecosystem and restore the ecological function of the river and surrounding area.

9. Green Redmond Partnership — Farrel-McWhirter Park, Redmond

Redmond's Farrel-McWhirter Park sees a great deal of visitors on a regular basis: from families visiting the park's animal farm, to horseback riders using the park's horse arena, to walkers and runners enjoying the park's forested trails. At 68 acres, Farrel-McWhirter Park has much to offer Redmond residents.

The forests here are dominated by towering conifer trees, and you can spot some noteworthy nurselogs and unique native plants while walking along the park's trails. The Green Redmond Partnership, its forest stewards, volunteers, and city crews have been stewarding Farrel-McWhirter's forest for many years. A focus on removing invasive plants, preserving the park's existing tree canopy, and planting the next generation of forest have been the primary restoration goals. This year, ECC trees were planted throughout the understory of the park, specifically in places where there are gaps in the canopy and lack of conifer regeneration, in order to ensure that as the existing tree canopy ages, there will be the next generation of forest ready to grow in its place.



Photo by Nicole Marcotte

10. Green Seattle Partnership — Magnuson Park, Seattle

Magnuson Park is Seattle's largest park, nestled against Lake Washington in northeast Seattle. It consists of several miles of trails, open grassland, wetland habitat, and forests undergoing restoration from volunteers and local university students. The park provides a wide variety of habitat for wildlife, and recreational activities for visitors, as well as serving as a valuable shoreline ecosystem.

Two sites (Magnuson Sports Meadow North Edge and North Shore Zones) are being transitioned to native habitat after the removal of invasive blackberry. They include mostly sandy soils (with some clay and gravel) amended with arborist chips one year or more prior to planting, to help build up the soil. ECC trees were planted by forest stewards with the Green Seattle Partnership, who have a long history of stewarding the sites. The new trees will serve to build up the tree canopy in the park, add to wetland bird habitat and shade out invasive species.

11. Green Seattle Partnership — Northacres Park, Seattle

Northacres Park, located in Seattle, plays an important role to urban wildlife, as well as serving as a buffer from the adjacent I-5 freeway. It contains a notable Douglas fir forest which is currently being stewarded by the Green Seattle Partnership. Northacres Park serves a wide variety of user needs and is a large hub of human activity throughout the year.

Northacres Park sites are existing forest sites (containing 80-90% native species) that contain silky/clay/loam soil conditions. The focus at these sites are primarily invasive plant removal and maintenance, with an emphasis on adding next-generation saplings for tree canopy regeneration. Local forest steward volunteers dedicate many hours each year to remove invasive species, and plant native species in their place. The trees from the ECC program are vital in building a sustainable forest that will last long into the future.



Photo by Jim Avery

12. Green Seattle Partnership — Burke-Gilman Trail, Seattle

The Burke-Gilman trail stretches for 18 miles from South Ballard in Seattle, north through Bothell. The trail is widely used by residents for running, biking and other recreation. The trail travels through numerous parks, neighborhoods, and business areas on its route. Several sections of the trail are dominated on either side by invasive species, and dedicated forest stewards with the Green Seattle Partnership have spent many years dedicated to removing invasive species and site maintenance.

This ECC site lies between the University of Washington and Seattle Children's Hospital, and the stretch of trail is heavily used by commuters throughout the year. The stewardship work and planting of the ECC trees will build up the tree canopy of the area and improve shade coverage, as well as provide economic and social benefits to the neighborhood. Additionally, the trees will shade out invasive species and reduce flooding and erosion on the trail.



Photo by Christine Stephens

13. Green Seattle Partnership — Thornton Creek Natural Area, Seattle

Thornton Creek Natural Area is found in north Seattle, and is comprised of a series of smaller natural areas that are open to the public. This space provides valuable habitat to fish and wildlife, as well as recreational and health benefits to humans. It's a part of the Thornton Creek Watershed, located in northwest Seattle and Shoreline, which drains into the Puget Sound. This heavily urbanized area has lost a great deal of natural forest, and now is a patchwork of neighborhoods, wooded lots, busy shopping districts, and occasional parks. I-5 also runs right through the eastern half.

This combination of urban and natural areas, with many impervious surfaces, makes the habitat of Thornton Creek Natural Area valuable. Forest Stewards with the Green Seattle Partnership planted the ECC trees here to help restore the natural buffers along the creek. The trees will clean the runoff from impervious surfaces heading into the stream, reducing flooding risk, storm water pollutant levels, and stabilizing the banks. As the trees grow older, these benefits will increase, providing long-term benefits to the neighborhoods and wildlife.

14-17. DirtCorps — Duwamish River, Tukwila

The Duwamish River is a designated Superfund Site in the Green Duwamish watershed, and many organizations and partnerships are working to restore the shoreline and improve the habitat for waterfowl and fish, such as endangered Chinook salmon. The trees from the ECC program were planted in four public parcels adjacent to the Green River main-stem, including Point Rediscovery and Bicentennial Park. These are areas under restoration through funding from the WRIA9 Flood Control District's Green the Green Grant program, which funds projects focused on restoring the Green Duwamish Watershed.

These stewardship projects seek to clean up the river not just for ecological reasons, but also because of the cultural, economic, and historical significance of the waterway.

18. Forterra: Riparian Restoration Project — Duwamish River, Tukwila

For several years, Forterra has partnered with BECU and additional partners to restore riparian habitat along the Duwamish River, which is a recognized Superfund Site. The focus of this partnership is to restore 1.5 miles of degraded shoreline to improve habitat for native Chinook salmon, and other fish and wildlife. The project focuses on commercial and light industrial areas located along the Green River Trail on the Duwamish River and targets the “transition zone,” where salmon adapt from fresh to salt water. In addition, the restoration project focuses on restoring this culturally, economically and historically significant waterway as a place for community gathering, recreation and enjoyment.

Several sections of this segment of the river have been cleared of invasive species by crews and volunteers, and have been the target of a series of planting projects. These trees were planted in

spaces recently cleared and to supplement previous sites, adding age layers to the young forested sections. This site is a stretch of the Duwamish River shoreline that Forterra has been stewarding for more than 10 years.

19. Forterra: Riparian Restoration Project — Cedar River, Renton

The Cedar River is one of the most valuable natural spaces in the Pacific Northwest. It provides water for millions of residents in Seattle and runs along many parks, natural spaces, and homes, offering economic and recreational value. The river is also host to the largest Chinook salmon migrations in the area, and is important habitat to salmon and other fish and wildlife species. Beyond having value in themselves, salmon have economic, cultural, historical and ecological value. From their central significance in indigenous cultures to ecological value for forests and aquatic systems, salmon are incredibly important to the Pacific Northwest.



The Cedar River — Photo by Stacy Osterman

Forterra has been partnering with King County and other partners to restore sections of the Cedar River to their previous ecological functions. Stretches through Renton have been targeted as highly disturbed yet key areas. The trees from the ECC program were planted at a property that is on a floodplain. The property was purchased by the County, and the home that was on it demolished. Forterra and the County have been working to restore the floodplain, and these ECC trees will help stabilize the riverbank to prevent erosion. Forterra and partners also look at the added benefits these trees provide to help reduce the impacts from climate change along the river, such as providing shade to the river to reduce water temperatures. The trees will provide sustainable benefits not just to residents in Renton, but also wildlife and the riparian ecosystem as a whole.

20. Forterra: Riparian Restoration Project — Ron Regis Park, Renton

Ron Regis Park is a 45-acre park bordering the Cedar River and a golf course in eastern Renton. Much of the park is side-channel habitat, which Forterra's Riparian Restoration program has been working to restore by removing blackberry, knotweed and other invasive species. Forterra has been also caring for tree plantings at the site to help them grow to provide shade over the river and support critical habitat to support the recovery of salmon populations.

Several planting projects have taken place over the years with dedicated volunteers, building up the soil and restoring eroded sections of the main river and a section of built river in the forested area. The site sees seasonal flooding and lots of wildlife. Forterra staff and a professional crew planted ECC trees at a site that was formerly a knotweed stand, bringing native species back into the space. The trees will go along the floodplain in the riparian zone, stabilizing the soil and reducing erosion to help shade and clear the river for wildlife.



21. Forterra: Stewarded Lands — Patterson Creek Preserve, Fall City

Patterson Creek Preserve is located just outside of Fall City, Washington. This 120-acre property is mostly forest land, with a small section of prairie. In the 1900s, it was used as timberland and clear-cut and unmanaged for many decades. Forterra purchased the property and now stewards it with King County through active timber management and invasive species removal. There are trails that run through the property that are open to the public. Nearby residents use the site for recreation.

The creek that runs through the property has notably low oxygen levels and is often exceedingly warm in summer. The conserved property serves as buffer around the creek to help mitigate these issues. Trees from ECC were planted in sites recently cleared of deciduous trees and invasive species. The ECC trees consist of softwood evergreen trees, which will shade out returning invasive species and build a stronger year-round canopy, which will provide greater wildlife habitat and help restore the forest for new generations. Many of the trees will be planted in areas dominated with deciduous trees, which will also help increase canopy cover and build layers of succession to create a more sustainable forest.

See where all of the ECC trees were planted at <https://forterra.org/webmaps/>



Photo by Jim Avery

CARBON IMPACTS

The 4,867 ECC trees planted this year will sequester more than 24,335 tons of carbon over their 100 year lifetimes, helping mitigate the carbon footprint of businesses, organizations and individuals. We plant one tree for every five tons of carbon. To ensure we meet carbon mitigation goals, we exceed the standards for carbon sequestration by planting almost three times the required number of trees, and monitor and replace the trees when necessary. This calculation accounts for tree die-off and planting site variability (e.g. soil quality, sunlight available, space). Go online to learn more about the science behind our ECC program (forterra.org/subpage/ecc-carbon-science).

After three years, we check on the planted trees and replant as needed to meet carbon sequestration goals. This year, we provided 155 replacement trees to Field Partners who planted ECC trees in 2017, in order to reach our overall tree survivorship goals.

Thank you participating companies:

1. AssetLab Marketing
2. Bear Mountain Capital
3. BECU
4. Beneficial State Bank
5. Bill & Melinda Gates Foundation
6. Chicken Switch
7. Elemental Cremation & Burial
8. Floral Image
9. Forterra*
10. GLY Construction
11. GoGreen Conference
12. LMN Architects
13. Montessori School of Seattle
14. Mott Holdings
15. The Mountaineers
16. Nordstrom
17. Porter's Pride
18. Seattle Children's Hospital
19. Seattle Sounders FC
20. Stream Real Estate
21. Sub Pop
22. Sustainable Business Consulting
23. Turner Construction
24. Valley Supply
25. Weber Thompson
26. Woodland Park Zoo

We thank Green Diamond Resource Company and King County for generously providing a portion of the trees.

OFFSET CARBON EMISSIONS FOR THE COMING YEAR

To join us for the next planting season, visit our ECC program webpage (where you can calculate your carbon footprint) [Forterra.org/carbon](https://forterra.org/carbon) or email EvergreenCarbon@forterra.org.

*Sponsored by Nordstrom