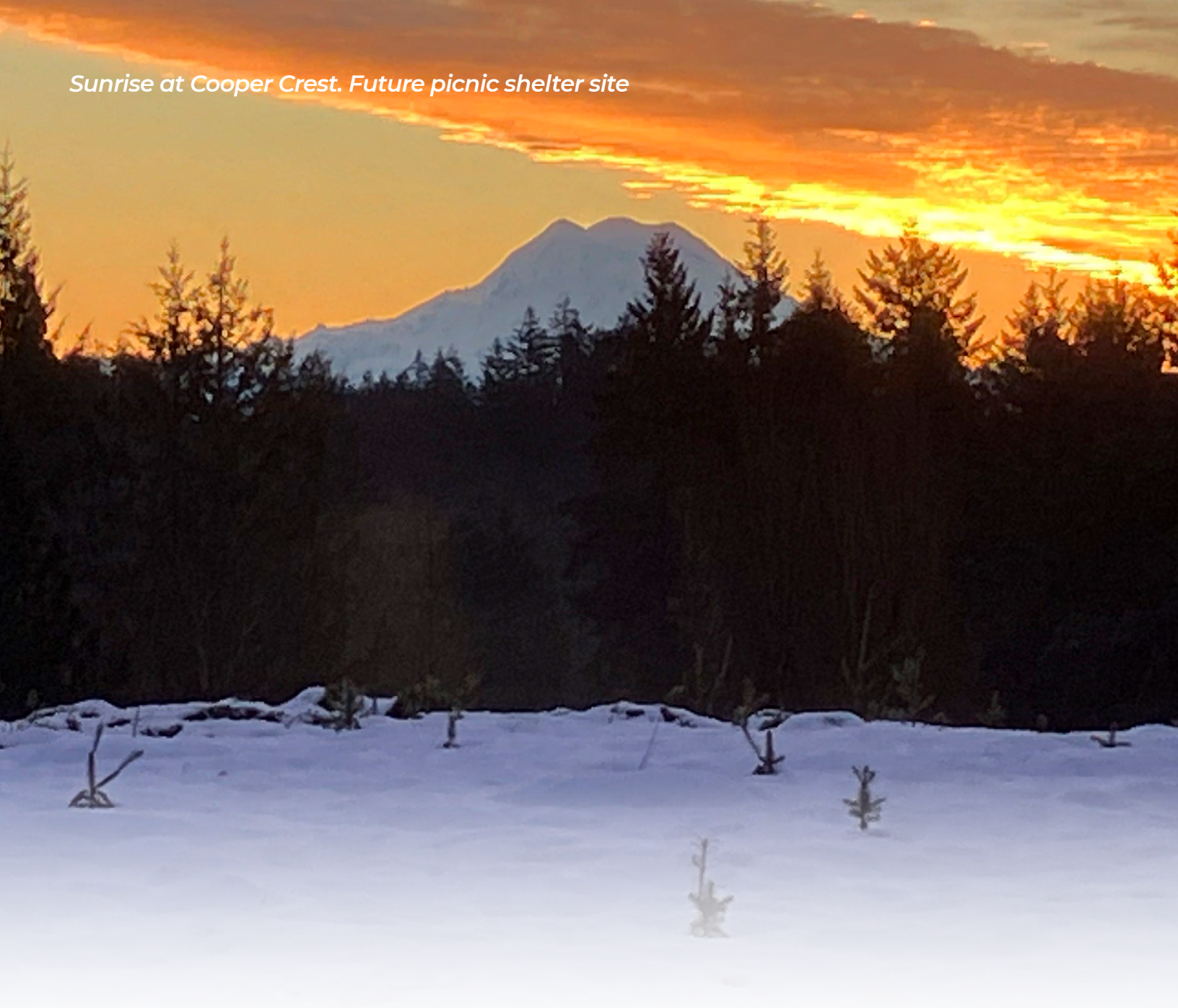
2024-2030
Habitat Conservation & Land Protection Plan

Adopted by the Olympia Ecosystems
Board of Directors on February 28, 2024

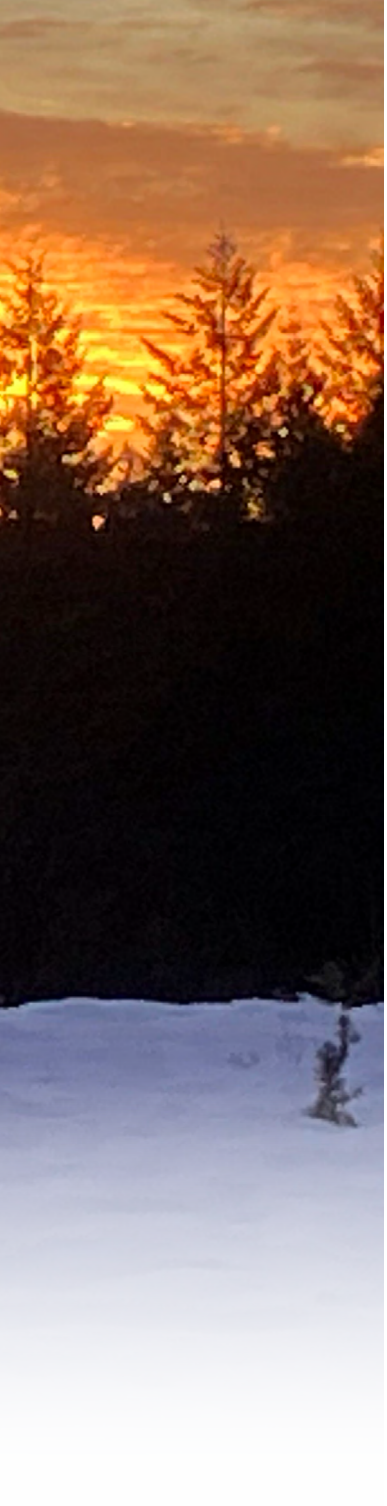
OLY ecosystems



Sunrise at Cooper Crest. Future picnic shelter site

Olympia Ecosystems

Protect.
Preserve.
Restore.



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SECTION 1: OVERVIEW

Introduction

Olympia Ecosystems (OE) works to protect, preserve, and restore key ecosystems in and around the City of Olympia, Washington, for the benefit of wildlife and the public, with a major emphasis on water quality to benefit locally threatened and endangered aquatic species. We work to conserve intact ecosystems, but we also work to restore ecosystem structure and function to degraded areas that have the potential to improve and connect wildlife habitat. Our vision is one that enables community access to nature while caring for South Puget Sound. We have carried out our mission and delivered on that vision since 2014, permanently protecting lands and waters by purchasing and accepting donations of fee lands and conservation easements from willing, private owners.

Many of the properties we conserve include degraded habitats in urban or semi-urban areas within our region. Our urban focus stems from the recognition that sustainable cities are an important element of renewal in the greater Puget Sound region. Preserving and restoring forests, grasslands, wetlands, riparian, and nearshore ecosystems in and around densely populated areas generates ecosystem services for people and connected habitat for wildlife. These refugia are increasingly important amidst continuing decline in ecosystem health in urban areas. Thus, Olympia Ecosystems dedicates itself to renewal.

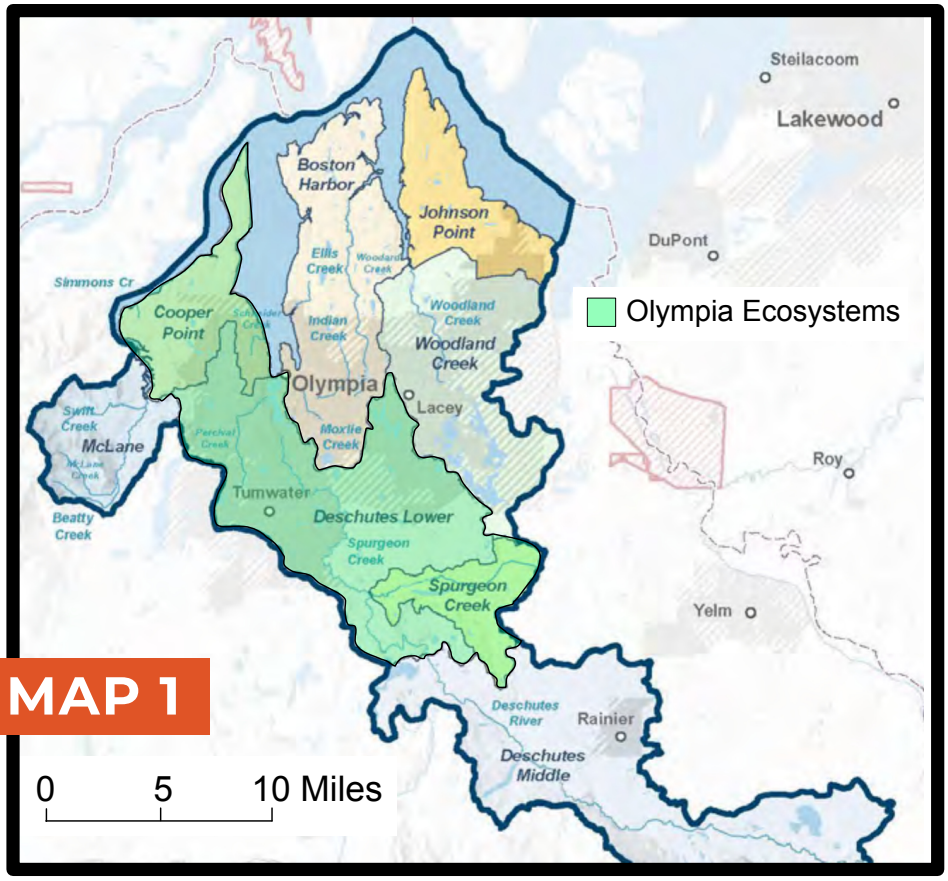
Our focus comes with both unique challenges and unique opportunities in and around our state's capital city. We seek to integrate conservation and restoration within our rapidly growing urban areas, while providing access and education to the public to foster the well-documented mental and physical benefits of a personal connection to nature.

The cities of Olympia and Tumwater are built around the once biologically diverse, species-rich estuary of the Deschutes River, currently dammed at Fifth Avenue. State and local agencies have turned their attention to the removal of the dam and restoration of the estuary, both to meet mandated water quality metrics and to recover populations of Coho and Chinook salmon in the Deschutes watershed. This recovery requires the restoration and rewilding of areas that were formerly industrial or developed with little concern for estuarine ecology.

To support this recovery, Olympia Ecosystems (OE) conserved and is actively restoring the degraded West Bay Woods that serve as a filter for untreated stormwater runoff from the city's northwest neighborhood. Cooper Crest, another of our preserves, is the site of a recent clearcut. It also contains a portion of the headwaters of Green Cove Creek, where the County is investing significant resources to replace a fish-blocking culvert. A clearcut is not typically

the object of conservation for a land trust, but we believe that repairing degraded properties is often essential. Our Deschutes River Preserve is a former dairy farm with tremendous ecosystem potential. However, it also contains a creek that has the lowest dissolved oxygen of any known tributary to the Deschutes River. Restoration of this sensitive and important area, thus, will positively impact ecosystem services on the preserve as well as downstream.

Geographically, OE's conservation and restoration focus is a subset of the Water Resource Inventory Area (WRIA) 13. More specifically, it is on the lower, urbanized and degraded watershed of the Deschutes River, its estuary, Budd Inlet and its tributaries, as well as on the rapidly urbanizing Green Cove Creek (Map 1). Some areas we conserve are ecologically intact, others are not; both are part of a mosaic of ecosystems essential to a more livable South Sound for wildlife and for people.



MAP 1

OE is overseen by a highly active, working Board of Directors. Until recently, OE was an all-volunteer conservation land trust; in September 2023, OE hired its first staff member, our Land Conservation Director, and several Washington State Work Study employees. The Board currently has five active committees (Executive, Conservation, Finance, Restoration, and Communications). Each committee is chaired by a board member and may include at-large community members. With the board's support, staff will continue to restore OE's current properties, as well as collaboratively identify high-priority lands and areas for further conservation.

To date, OE has created four preserves: 1) West Bay Woods Preserve just uphill from the West Bay shoreline of Budd Inlet, 2) Cooper Crest Preserve in northwest Olympia, 3) Green Cove Creek Preserve in Thurston County, just outside of the city of Olympia, and 4) Deschutes River Preserve in Thurston County and in the city of Tumwater (Map 2).

MAP 2

Planning

OE has taken a proactive and strategic approach to land conservation and intends to continue doing so into the future. To date, our conservation efforts have been organized around internal strategic plans, wherein strategic focus has been balanced with opportunity. This is, however, our first formal, public comprehensive plan, and will serve as a strategic guide to enable OE to carry out and implement our goals in the coming years, while still enabling OE to remain nimble and open to opportunity where it intersects with our mission.

This comprehensive plan informs several other plans that help us to organize our strategic goals. Examples are annual strategic plans and budgets, board committee and staff annual work plans and our Lands Management Plans for specific preserves. Our Annual Work Plan is developed in tandem with the organization's annual budget.

Management and restoration plans are developed for our conserved lands. We do not currently hold any conservation easements, but planning is in place to guide future conservation easements, acquired through either purchase or donation. OE has also developed a Forest Management Plan for the West Bay Woods and it is currently developing a Forest Management plan for the Deschutes River Preserve, in collaboration with NRCS and the Thurston Conservation District. We have also successfully applied for funding to develop restoration plans within the wetlands and riparian habitats at the Deschutes River Preserve. In addition to focusing on enhancing ecosystem services such as improving water quality, storing water for increased summer baseline flows, mitigating flood risk, and enhancing habitat for salmon and other aquatic species, OE is also developing plans for public access and public involvement.

SECTION 2: PUBLIC INVOLVEMENT

OE is a grassroots, community-based land trust that relies on community building and involvement, including public outreach and volunteerism. We have an up-to-date and active website through which we post events and job announcements, and often interact with the public, responding to inquiries via our oft-used contact form within 24 hours. To accomplish our goals, we regularly employ social media such as Facebook (2600 followers), Instagram (1000 followers), and an e-newsletter (1000 subscribers) to keep supporters informed about our work, and to advertise volunteer opportunities, such as volunteer work parties. We take pride in attending several public outreach events each year. In addition, work parties on our preserves are an effective tool for outreach through a strategy we call "Advocacy through Restoration." In short, participation fosters a personal investment.

Crew members building the staircase

OE also has an ongoing partnership with Marshall Middle School's Citizen Science Institute (CSI). Students from Marshall's Natural Resources and Horticulture classes grow hundreds of native plants every year in their nursery, which OE then purchases for restoration work on our preserves. Students are also involved in planting. This is not just a good source of enthusiastic and hard-working volunteers, but it also instills in young people the values, experience, and skills that it takes to become leaders in conservation and restoration in the next generation.

OE also supports several undergraduate and graduate projects through The Evergreen State College. We routinely involve graduate students enrolled in Restoration Ecology and in Geospatial Information Systems (GIS) courses in meaningful projects on our preserves. These projects vary from creating restoration plans for specific habitats to identifying invasive species from high-resolution drone images. The OE Board of Directors is also currently considering defining board and committee roles for students as part of our focus on diversity, equity, and inclusion.

Students from Marshall Middle Schools CSI program planting in the West Bay Woods.

Bioswale in the West Bay Woods

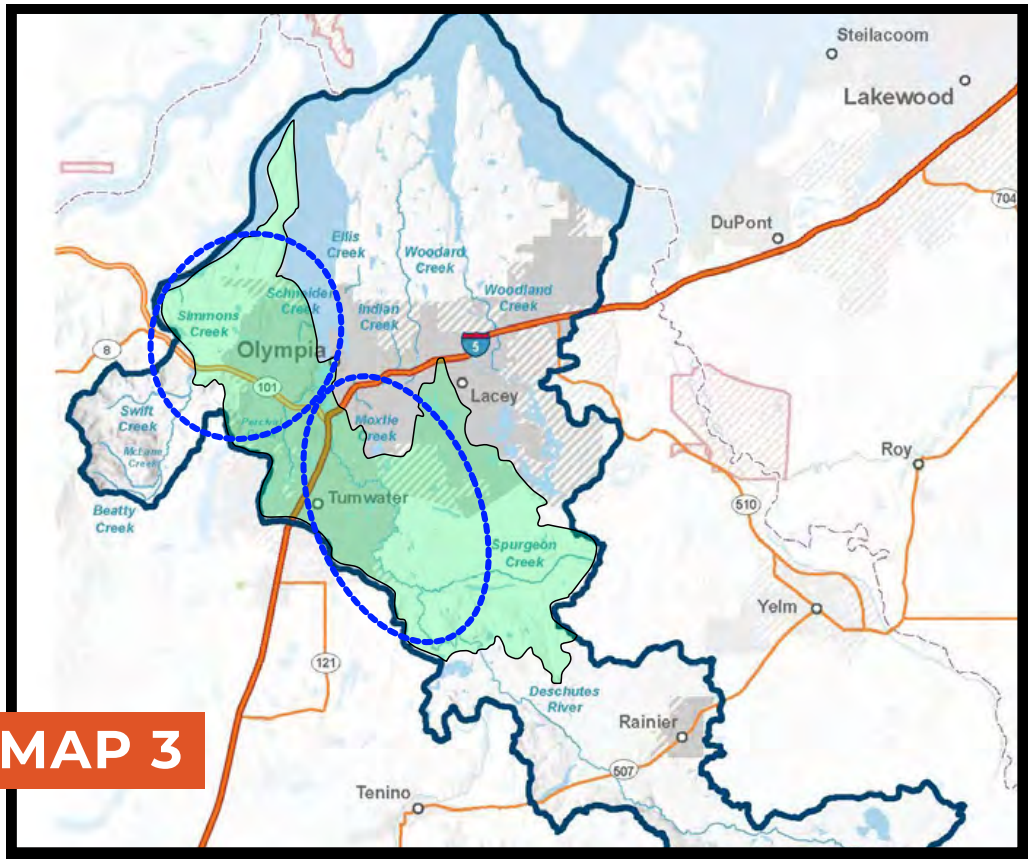
In the process of developing our comprehensive plan, OE solicited public input through an online survey. The survey was carefully designed to be reliable and valid, accessible to all users, and available in other languages through Qualtrics XM. The survey assessed community desires for habitat protection, conservation, and low-impact recreation, as well as ranked priorities (actions) for acquisition, development, preservation, enhancement and management. Priorities that emerge from the survey are shown in Map 3.

Public access is straightforward on some of our preserves (e.g. West Bay Woods and Cooper Crest Preserves) and more nuanced on others (e.g. Green Cove Creek and Deschutes River Preserves), due to legal and physical constraints. On those properties where open public access is limited, we strive to accommodate field trips both for students and for adults. For example, we continue to host field trips for Evergreen State College students and field surveys by the local Audubon chapter. We also accommodate field studies by local biologists. Constructing public amenities and improving our visitors' experiences while honoring our stewardship responsibilities is a high priority for OE.

SECTION 3: INVENTORY

Overview of Our Region

Our region of interest includes portions of Olympia, Tumwater, and Thurston County that comprise the watersheds of the Deschutes River and Green Cove Creek. In the Deschutes watershed, we focus on the lower reach of the Deschutes River, including the Deschutes Estuary and Budd Inlet, and all of their tributaries. Both watersheds are threatened and degraded, yet both represent significant opportunities for ecosystem recovery integrated into a rapidly urbanizing and critical corner of Puget Sound.



MAP 3

The city of Olympia is located at the southern end of Puget Sound on Budd Inlet, where the Deschutes River enters Puget Sound at the Deschutes Estuary. The City has municipal jurisdiction over the southern extent of Budd Inlet, including portions of the historical Deschutes estuary and sections of its tributaries (and their watersheds) such as Percival Creek, Schneider Creek, West Bay Creek, the southern parts of Butler Cove, Mission Creek, and Indian-Moxlie Creek. In addition, the City manages the eastern half of the Green Cove Creek watershed as well as portions of the Henderson Inlet ecosystem, specifically the headwaters of Woodard Creek.

The City of Tumwater is aligned along the western bank of the Lower Deschutes Reach and the southernmost extent of the Deschutes Estuary, and both sides of the northern section of the Deschutes River, just south of Tumwater Falls. Tumwater also has jurisdiction over most of the watershed of Percival Creek, and some smaller unnamed tributaries to the Deschutes River.

Thurston County has jurisdiction over much of the Green Cove Creek and Butler Creek watersheds, west of Budd Inlet, as well parts of Indian and Ellis Creeks and most of Woodard and Woodland Creeks east of Budd Inlet. Thurston County also has jurisdiction over the east side of the Deschutes River from approximately the confluence of Chambers Creek south to Offut Lake, the southernmost extent of the Lower Reach of the Deschutes River. Thurston County's jurisdiction also includes Spurgeon Creek and the Deschutes River Watershed from the Olympia Airport to Offut Lake.

Natural Systems

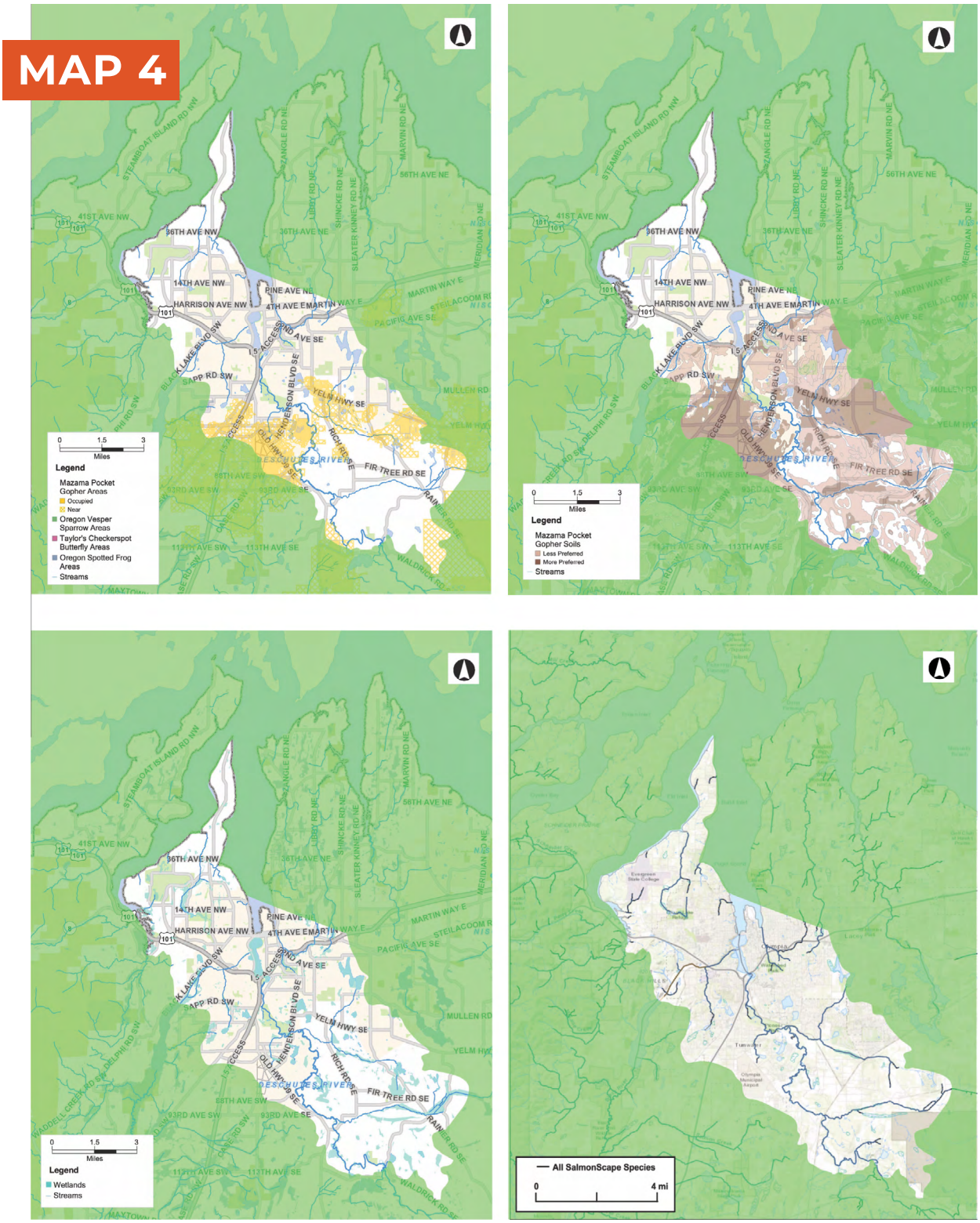
The Deschutes Watershed extends over 270 square miles from the base on Budd Inlet in South Puget Sound to the Gifford Pinchot National Forest in Lewis County. The watershed includes the cities of Tumwater and Olympia, and portions of Lacey and Rainier. Approximately 26% of the watershed sits within a city or designated urban growth area. A range of limiting factors contribute to poor survival of salmon in the Deschutes River system, including water quality impairments that affect pH, dissolved oxygen, water temperature, and turbidity. Prairie and oak woodland habitat within the Lower Deschutes Reach is mostly threatened by development and past agricultural use.

Land cover in the lower watershed is dominated by dense urban and residential areas that have contributed to a loss of off-channel habitat, erosion of mainstem riverbanks and incised channels, and water pollution from stormwater runoff. Throughout the watershed, the loss of off-channel refugia, riparian cover, and the inputs of sediment and other pollutants resulted in the exceedance of the total maximum daily load (TMDL) for the river. Nonetheless, the river and tributaries support important anadromous fish species including Puget Sound Chinook (ESA Threatened), coho (ESA Species of concern), chum (not listed), and winter steelhead (ESA Threatened). State-sensitive Olympic Mudminnow inhabit some of the wetlands and low-gradient streams in the watershed. Historically the Tumwater Falls presented a natural barrier to anadromy, but construction of a fish ladder in 1954 allowed salmonids and other fish species to access upstream habitat.

Green Cove Watershed is the largest watershed on Cooper Point (Map 1) in unincorporated Thurston County and straddles the western boundary of the City of Olympia. The headwaters of Green Cove Creek are a large relatively intact wetland complex with areas protected by conservation easements, land trust acquisitions, and a City of Olympia natural area at Grass Lake. The riparian corridor is comprised of mixed conifer and deciduous forests with only a few sites warranting improvement.

Because it is relatively intact, Green Cove Creek is among Olympia's priorities for salmon habitat protection measures. The Green Cove Creek Comprehensive Drainage Basin Plan (1998) recommended minimum canopy cover of 60% within the watershed to prevent

excessive stormwater impacts. The City of Olympia has down-zoned the upper Basin and instituted more stringent development standards to maintain the forest cover and protect the creek. Although the City has instituted these standards, significant residential development pressures exist in this area, especially new home construction.



Map 4 – Habitat types in our area of interest. Clockwise from top: 1) Federally listed endangered species; 2) Mazama pocket gopher soils; 3) documented salmon presence; 4) wetlands

Geology

Olympia, Tumwater, Lacey, and surrounding areas of Thurston County are located near the southern edge of the Fraser Glaciation, where topography formed from glaciers includes drumlins, subglacial channels, and kettle lakes. The area includes former lake beds and alluvial deposits, Vashon glaciation till and outwash deposits. Much of downtown Olympia sits on reclaimed land. Tidewater areas were filled as early as the 1870s. Placement of the Carlyon Fill, the largest fill event that covered the Swantown slough, occurred in 1910–1911. Over two million cubic yards of sediment were dredged, creating a shipping channel for the port of Olympia. The dredged material was used to fill tidelands; a large portion of downtown is located directly on fill. Interstate 5 crosses the lake on a bridge and fill, and Deschutes Parkway lies on fill on the west side of Capitol Lake.

The Percival Creek Estuary, where Percival Creek discharged into Budd Inlet, was lost with the construction of Capitol Lake in 1951. Surrounded by urban development, Percival Creek was highly altered by a system of stormwater ponds and pipes conveying surface water throughout the basin. Percival Creek empties into Percival Cove, adjacent to Capitol Lake. Percival Creek is fed by Black Lake Drainage Ditch, an artificial drainage ditch originating from Black Lake, constructed in 1922. The ditch captures stormwater discharge from many commercial districts in West Olympia, including the Yauger Park stormwater pond. Black Lake Meadows refers to an adjacent city-owned stormwater facility and natural area.

The other lesser tributaries to Budd Inlet and to the Lower Deschutes Reach have been degraded by untreated stormwater that has reduced water quality and increased erosion and bank incision from the flashy flow associated with stormwater. Examples include Chambers Creek, Mission Creek, Woodard Creek, Woodland Creek and Schneider Creek. Indian-Moxlie Creek represents an extreme case in which over one mile of the section of the Creek from Watershed Park to East Bay is conveyed by a stormwater pipe with additional stormwater inputs from the surrounding impervious surfaces.

Despite being highly transformed, Budd Inlet includes several critical areas and critical saltwater habitats. The highest levels of intact critical areas and saltwater habitat are found at Squaxin Park. Habitats at the park include salt marsh, riparian shoreline, estuarine conditions, steep slopes, beach sediment, and a salmon-bearing stream. Salmon have been confirmed in Mission, Moxlie, and Schneider Creeks, which empty into Budd Inlet. Forage fish spawning grounds and habitat are found along the Squaxin Park shoreline and along small areas on the west shoreline.

Restoring the clearcut at Cooper Crest (collage)

Resilience at Cooper Crest

One mile of gravel paths were installed at Cooper Crest

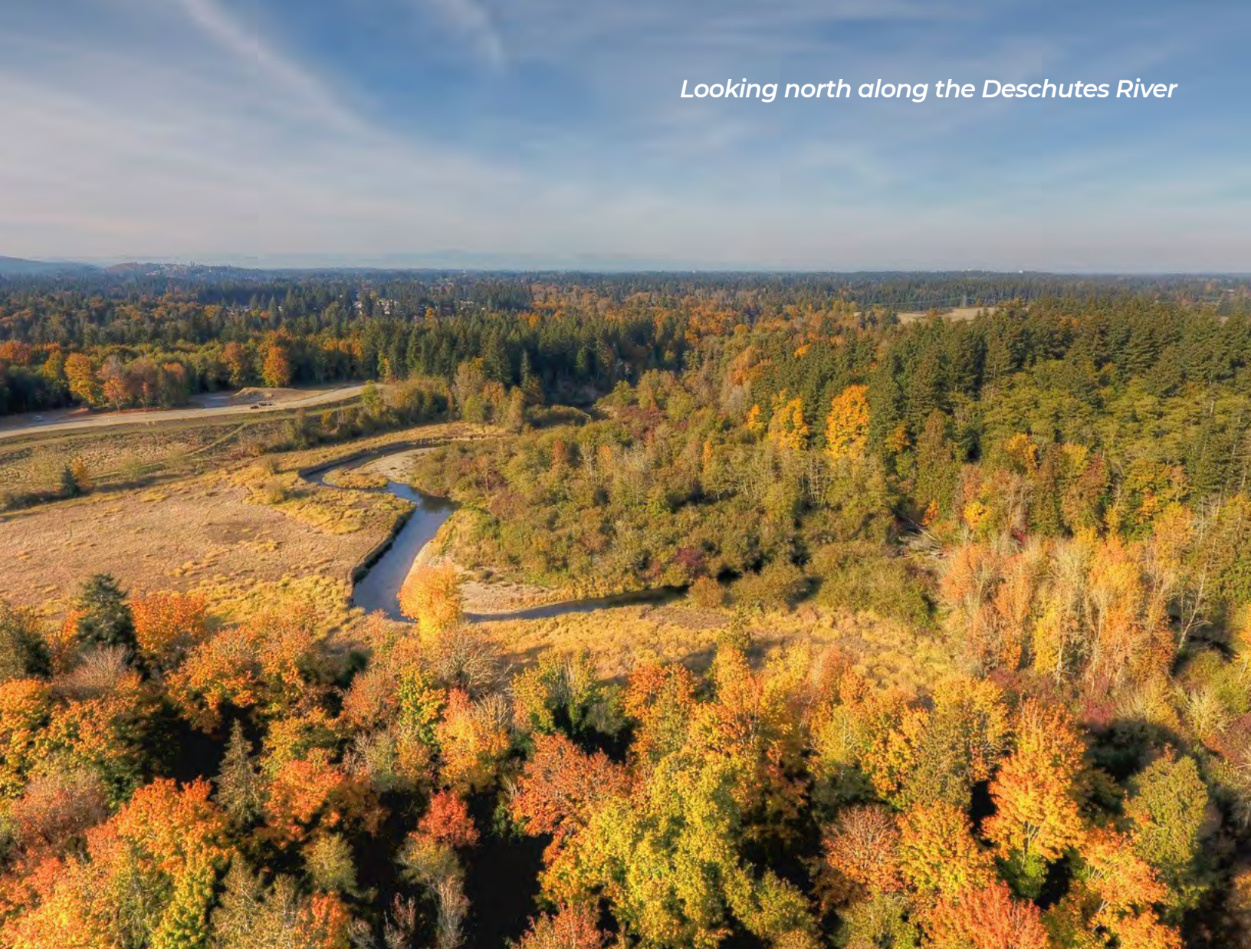
New spring growth at Cooper Crest

Protected Properties

To date, OE has created four preserves (Map 2): the West Bay Woods Preserve and Cooper Crest Preserve, both in the city of Olympia, the Green Cove Creek Preserve in Thurston County, just outside of the city of Olympia, and the Deschutes River Preserve in Thurston County and in the city of Tumwater. These four preserves are made up of 35 individual parcels totaling approximately 480 acres. Out of these, 473 acres are actively being restored.

1. Cooper Crest Preserve:

Cooper Crest is the highest ridge in Olympia. Artesian springs near its peak feed into the two main branches of Green Cove Creek northward into the forested wetlands between Cooper Point Road NW and Kaiser Road NW. Until recently, this legacy forest was intact, with a diverse and mature understory; it provided abundant clean and cool water for the Creek's native salmon runs. Unfortunately, 23 acres of this 25-acre site was clear cut in the summer of 2022, increasing the risk of erosion, imperiling the water quality in Green Cove Creek with fine sediment loading, increasing stream temperatures, reducing summer base flows and exposing the area to a wave of invasive species migration. Soon after the clearcut, OE conserved the property and got to work. Today, after close to $200K in restoration work, soils have been stabilized, the entire area has been replanted and staircases and accessible trails wind through active restoration sites. Students from local public schools including Hansen Elementary School, Marshall Middle School, Capital High School, and the Evergreen State College come to study reforestation and restoration here. More work needs to be done to improve public access, amenities, and education, and years of intense stewardship remain.



Looking north along the Deschutes River

2. Deschutes River Preserve

The Deschutes River Preserve is the largest contiguous conserved natural area in the lower reach of the Deschutes River. The 428-acre preserve includes Douglas fir forests, forested floodplains, upland prairie grasslands, and an extensive network of wetlands that support a wide range of fish, plant, and wildlife species. Over 65% of the property is considered riparian, consisting of mainstem floodplain and more than 180 acres of emergent and open-water wetlands.

To date, the preserve is made up of a former dairy on the eastern side of the river, totaling 367 acres and conserved in late 2022, and the 61-acre floodplain on the western side of the river conserved in early 2024. In total, the preserve includes 1.5 miles of Deschutes River shoreline and the entire 1.24 miles of Ayer/Elwanger Creek from headwaters to confluence, approximately 100 acres of forest and 70 acres of former hayfields, some of which contain prairie soils.

Ayer Spring at Deschutes River Preserve

This area presents a unique opportunity to provide major flood storage and off-channel habitat in the lower watershed. Specifically, it contains nearly 300-acres of floodplain habitat and wetlands. Working with watershed partners, OE is developing restoration designs for these riparian areas. Restoration goals are threefold: enhancing aquatic habitat, improving water quality, and increasing onsite storage to augment onsite and downstream summer base flows to assist with salmon migration and rearing. Specific strategies include enhancing beaver habitat in order to flood the historically drained wetlands, reintroducing sinuosity, revegetation to increase shade, and reconnecting the floodplain to increase available off-channel habitat in a reach of the Deschutes River that is extremely lacking in this habitat type. Floodplain reconnection also serves to give the river an area to dissipate velocities, replenish groundwater, and deposit fine sediments before they reach Tumwater, Olympia, and ultimately the future restored Deschutes River estuary. The approach is multidisciplinary, looking at the needs and benefits for not only salmonids but also humans, infrastructure, and water quality and quantity. The goal is to achieve a result that is as close to natural processes as possible.

There are four primary forest habitat types on the property.

1. **Former dairy farm pastures, which include wetlands and a tributary stream to restore and manage. These areas are almost wholly lacking in woody vegetation, a condition that has contributed significantly to poor water quality in the Elwanger Creek basin.**

2. **Mixed middle-aged forests, dominated by alder and big leaf maple, with a few understory hemlock and cedar. Some larger trees occur in the forest immediately adjacent to the Deschutes River.**

3. **A recent (2019) clearcut in the middle of this stand that has not been replanted.**

4. **An approximately 27-year-old Douglas fir plantation moving into stem-exclusion phase.**

Demolition of derelict farm structures at Deschutes River Preserve

Olympia Ecosystems intends to manage these forests for habitat diversity and to support other onsite ecological objectives. OE is currently working with NRCS and the Thurston Conservation District to develop Forest Management and Pasture Renovation Plans. The pastures (approximately 70 acres total) have been poorly managed over the past decade and need to be restored and maintained as a bridge to more long-term restoration goals, i.e. re-establishment of prairie habitat and a forested wetland.

In addition to salmon and other amphibian species, the Deschutes River Preserve has a resident herd of about 12 Roosevelt elk (a rare feature in an urban landscape), black-tailed deer, coyote, possum, beavers, otters, raccoons, weasel, cougar, and black bear. Over 65 species of birds have been sighted on the property.

At this time, Deschutes River Preserve has no facilities or amenities and is not open to the public. Public access is limited on both sides of the river. On the east side of the river, access to farm roads may only be achieved through a private neighborhood on private roads, across which Olympia Ecosystems has an easement. Currently, OE accommodates arranged trips with the public in coordination with the homeowners' association that owns the access roads. On the west side of the river, adjacent roads are owned by the City of Tumwater, but facilities – in particular a driveway and parking lot – would not be permittable within the 100-year floodplain.

Road access for restoration on the east side of the river is adequate for reaching the old farm areas, but within the forested zone, there are basically no functional forest roads. A bridge across Elwanger Creek was washed out in a recent flood event, leaving areas adjacent to the river currently unreachable by vehicles or equipment. In contrast, restoration access to the east side of the river is adequate.

Wetlands in the Green Cove Creek Preserve

3. Green Cove Creek Preserve

The Green Cove Creek watershed is the largest watershed on Cooper Point. It is designated as an environmentally sensitive area, as it largely consists of critical area wetlands and highly sensitive aquifers. The basin includes Green Cove Creek and Grass Lake wetlands, both of which are relatively intact. Grass Lake Park is one of the most environmentally intact wetland systems in northern Thurston County, just upstream from OE's Green Cove Creek property, which contains its headwaters fed by aquifers.

In 2020, Olympia Ecosystems conserved 8.5 acres of forested and shrub-scrub wetlands across Kaiser Road NW from the City of Olympia's Grass Lake Nature Park. OE is focused on conserving approximately 100 additional acres in the Green Cove watershed through fee acquisition and conservation easements in the coming years. The Green Cove Creek Preserve is hydraulically connected with the Cooper Crest Preserve, but they are separated by residential developments. It has no facilities or trails.

Over 100 bird species and 200 plant species have been sighted in Grass Lake Nature Park and in the wetlands along Kaiser Rd NW. The area surrounding the preserve consists of mixed conifer and deciduous forest and dense willow thickets in riparian areas. The habitat supports a population of beavers, the threatened Olympic mudminnow, Chinook Salmon, Chum, Steelhead and Coho, in addition to a long list of other wildlife.

View of Mt. Rainer from the West Bay Woods

4. West Bay Woods Preserve

The West Bay Woods Preserve is an approximately 22-acre remnant shoreline forest in urban Olympia. Located on the western shoreline of the Deschutes Estuary, the eastern edge of this forest consists of remnant feeder bluffs that once marked the pre-settlement shoreline of West Bay in Budd Inlet. Today, the forest is separated from the tidal waters of the estuary by post-industrial fill and West Bay Drive NW. Though degraded, logged during the early settlement period, and farmed in places, many glimpses remain of the original forest.

Along West Bay Drive NW, a network of habitats includes wetlands, large areas forested with 100-year-old trees (Douglas-fir, Western red cedar, and big-leaf maple), and both permanent and seasonal streams. The West Bay Woods Preserve is home to many species of wildlife including mountain beaver, fox, coyote, Pacific tree frog, and a robust population of black-tailed deer. The forests provide habitat for many kinds of birds: Pacific great blue heron, bald eagles, owls, several species of hawks and falcons, and many others. It is not uncommon to find shells from the shoreline on the forest floor.

Stormwater toxicity and diminished shoreline habitat have contributed to poor water quality in the Deschutes Estuary / Budd Inlet system, which experiences among the lowest dissolved oxygen of any estuarine system in Puget Sound. At West Bay, the majority of the surface runoff that is not treated in the West Bay Woods, flows untreated through stormwater pipes that empty directly into Puget Sound. Among the toxins carried by this runoff is 6-PPD quinone, a tire-derived lethal toxin for Coho salmon. To address these limiting factors, Olympia Ecosystems is currently engaged in three large-scale restoration and stormwater management projects

along West Bay Drive NW: West Bay Park Connector, Stormwater Park North, and Stormwater Park South. Each of these projects also has a significant public access element.

The **West Bay Park Connector**, located at the southeastern corner of the West Bay Woods, this section of the preserve was historically logged and farmed in the early settlement period, then repeatedly cleared to create viewshed for the upland neighbors, resulting in a blackberry- and ivy-infested hillside with no forest cover. After OE acquired this site, foundations, a wellhead, and construction debris from past generations were removed. The site, once cleared of invasive species, was replanted; a trailhead and a graveled footpath now lead up the hillside to a granite council ring with a commanding view of Mt. Rainier, scenic West Bay, and downtown Olympia. A groundwater spring combines with neighborhood runoff in a stormwater rain garden and bioswale. The goal of the bioswale is to detoxify the urban runoff before it reaches Puget Sound. Measurements have verified its effectiveness.

The ultimate connectivity goal of our West Bay Park Connector project is to create a trail between the westside Olympia Food Co-Op, the West Bay Woods, and City of Olympia's West Bay Park along the waterfront. Once the City completes the next phase of improvements at West Bay Park, the woods will also connect to trails in Heritage Park, Tumwater Park, Tumwater Falls, and the State of Washington Capitol Campus.

Stormwater Park North will be the future site of a constructed wetland and associated green infrastructure that will treat 2.24 ac-ft/day (~730,000 gallons per day) of untreated stormwater per day before it enters Puget Sound. This northernmost section of OE's West Bay Woods Preserve has been undergoing extensive restoration in the past year, focusing on removing invasive species and underplanting the predominantly alder forest with conifers and native understory plants. The area has an unobstructed view of Puget Sound and the Olympic Mountains and has high potential for public access and public amenities. Current design plans include building a public boardwalk with community-driven and water-themed art installations, benches, and educational signage.

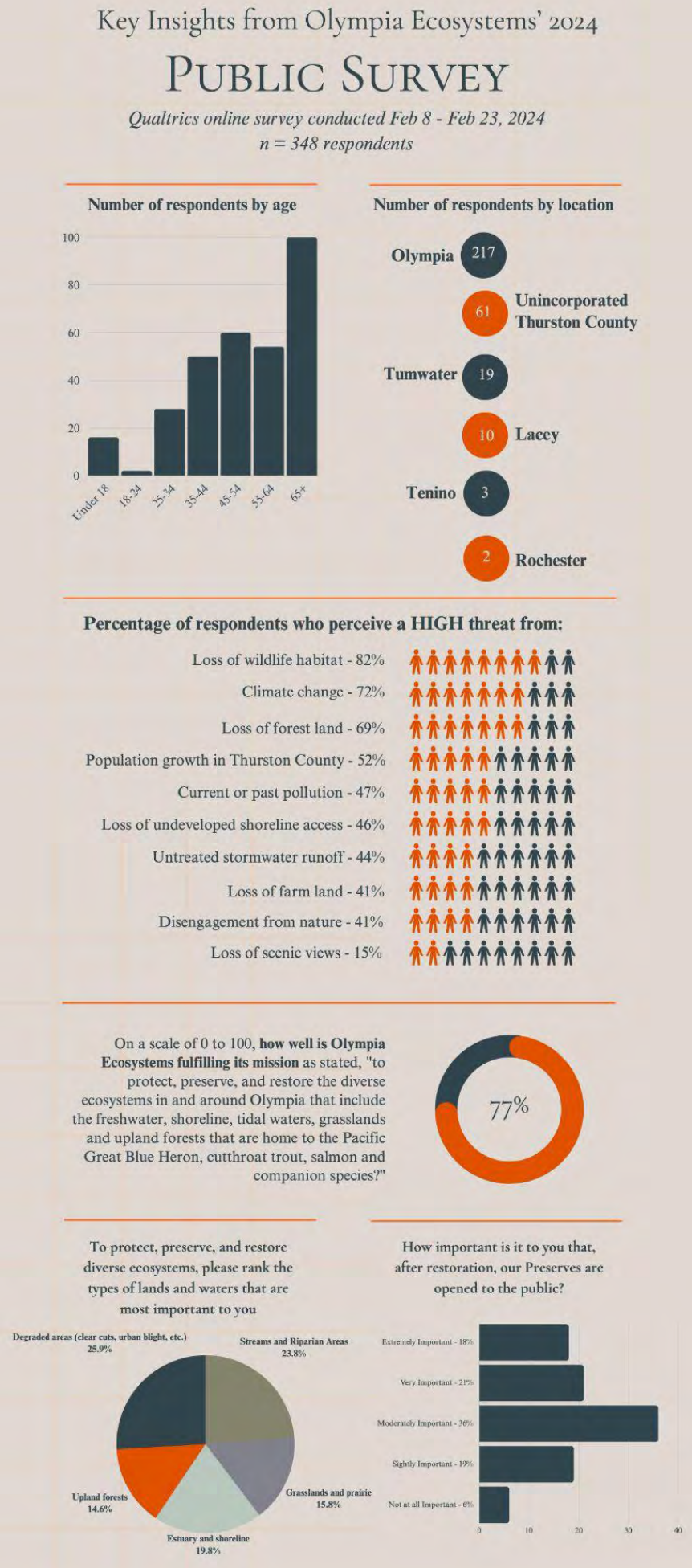
Stormwater Park South is the site of an aborted development and a recent retaining wall project where the City of Olympia removed over 250 trees from historic feeder bluffs, undermining slope stability. OE has been working to restore and revegetate this area and to construct a landscaped stormwater pond that would significantly enhance stormwater treatment of upland flows by increasing capacity and by reducing flow through the adjacent, contaminated, and defunct Reliable Steel (1941-2009) site located on the Budd Inlet shoreline. The area for the proposed pond was once a paved parking lot for the Reliable Steel site before it shut down in 2009. The goals of the stormwater pond are both to improve water quality and to enhance biodiversity in an area heavily degraded by former industrial use. OE plans to create a new trailhead to enter the West Bay Woods, install benches, educational signage, and seating with views of Mt. Rainer, the State Capitol building, and the Olympic Mountains.

SECTION 4: NEEDS ASSESSMENT

Public Outreach

To better understand and include the community's needs, values, and priorities, OE actively sought public input as part of the development of this Plan by administering a public survey in February 2024. The survey was advertised by e-newsletter and social media and distributed to neighborhood groups near our preserves. 348 people participated in the survey. The survey sought to understand the community's priorities for conservation and restoration and how important respondents saw the need to balance habitat conservation with public access. Key insights from the survey results as shown (right); survey questions and raw results may be found in the Appendix.

The survey collected demographic data such as residence, age, level of education, and proximity to our preserves. It also asked whether respondents were donors, volunteers, subscribers to our newsletter, followers on social media, and whether they had included Olympia Ecosystems in their estate planning. To assess community priorities for habitat protection and conservation, respondents were asked to evaluate how well we are fulfilling our mission and to rank the types of habitat most important to them. They were also asked to rate from low threat



to high threat various current challenges to our local ecosystems (e.g. climate change, untreated stormwater, population growth, etc.). The next question sought to get at the question of public access by asking respondents how important it was to them that our preserves are opened to the public after restoration. Finally, respondents were asked if OE was focusing its conservation efforts at places most important to them personally.

Of the 348 participants, the majority were 45 years of age and older, with the largest segment being 65 or older. The majority lived in the City of Olympia, with the second largest segment being from unincorporated Thurston County. This is not surprising since these two areas are where our existing preserves are located.

Threats to the environment that respondents indicated were of HIGH concern included: loss of wildlife habitat (82%), climate change (72%) and loss of forest land (69%). To a lesser extent, participants viewed population growth as a high threat (52%). Following those perceived threats, a sizable minority perceived high threats to the environment from current or past pollution (47%), loss of undeveloped shoreline (46%), untreated stormwater (44%), and loss of farmland (41%). These priorities helped us to focus our conservation and restoration efforts.

In the same question, 41% said disengagement with nature was a high threat. We read these results as implying that, while the majority of respondents value conservation of key habitats and forests as more important than public access, engagement with nature is still important for motivating future conservationists. We followed up by asking participants to rank how important public access was to them. Results were skewed towards public access, but the largest group ranked public access as moderately important (36%), as opposed to very important (21%) or extremely important (18%). About the same fraction (19%), considered public access only slightly important. We interpret these results as suggesting that though the public views public access as important, they generally understand that there is a balance between public access and habitat integrity.

To parse which types of habitat were important to the 82% and 69% who considered loss of wildlife habitat and loss of forest land to be high threats to the environment, we asked respondents to rank the five categories that we focus on: 1) streams and riparian areas; 2) grasslands and prairie; 3) estuary and shoreline; 4) upland forests; and 5) degraded areas.

Interestingly, we found that the largest group (25.9%) ranked conservation and restoration of degraded areas as being the most important. This is likely a reflection of the characteristics of Olympia and surrounding areas, where past industrial use and resource extraction and present development have severely compromised ecosystem health. The visibility to the public of these key degraded areas likely contributed to their selection as the type of land most important to the most survey respondents.

The next largest ranked type of lands and waters were riparian areas (23.8%) and

Salmon in the Green Cove Creek

estuarine areas and shorelines (19.8%), followed by grasslands (15.8%) and upland forests (14.6%). That riparian areas and estuarine areas and shorelines would rank second and third is not surprising. Olympia is built on an estuary that has inputs from the Deschutes River and half a dozen creeks, most of which are at risk of no longer supporting fish populations, a situation that the public is acutely aware of following years of environmental education campaigns. Moreover, Olympia is at risk of seeing its post-industrial marine shoreline intensively redeveloped with little concern for ecological well being. The public also understands that the window of opportunity for changing that situation is closing.

It is important to note that between the highest ranking (25.9%) and the lowest ranking (14.6%) type of lands and waters there was a difference of just slightly over ten percentage points. These are not big differences. Two surprises though were the relatively low ranking of upland forests and the relatively high ranking of grasslands. Given that nearly 70% of respondents said that loss of forest land was the biggest threat to the environment, it is surprising that conservation of upland forests was ranked so low. One possible explanation consistent with the data is that respondents see conservation of riparian forests as being more important. The second surprise was the ranking of grasslands. To date, our conservation of grasslands has been incidental. Clearly, the public sees importance in the endangered prairie habitat in the southern region of our working area, an area that also overlaps with working lands along the Deschutes River.

Finally, when asked on a scale of 1-100 how well we were doing in fulfilling the mission statement of Olympia Ecosystems, the average score was 77%! Based on the responses to our survey topics, it was clear that the Land Protection Priority Areas and OE efforts were in line with the public's priorities. Based on the results of this survey, we chose to prioritize the areas indicated in Map 3.

Future attempts at public planning input may involve additional planning surveys, public workshops, or planning meetings.

Volunteers at the West Bay Woods

Core Issues

An inventory of each of OE's four preserves follows with a property-level discussion of each site's current conditions and plans based on an analysis of needs for restoration and infrastructure. Included is an overview of past management for each preserve.

1. Cooper Crest Preserve

Current Condition

In 2022, the Washington State Department of Natural Resources approved a forest practices permit application (FPA) for the logging of the two parcels that comprise the Cooper Crest Preserve. OE acquired the two parcels the month after the area was logged and immediately placed them into conservation status. As the new owner, OE is subject to the conditions of the FPA until 2032. Specifically, OE is obligated to keep the land in forestry, with no obligation to harvest, and must establish 360 merchantable trees per acre, on average, over the first three years, or until 2025. OE has no intention to harvest the timber and gave up its right to do so in a negotiated conservation easement with the City of Olympia in 2023. OE met the replanting density requirements of the permit within the first six months after acquisition and added tens of thousands of additional native trees and shrubs to assure the return of a diverse forest in the future.

Planned Restoration, Development/Infrastructure

OE intends to continue management of the property by recreating natural processes and improving plant biodiversity. Restoration over the next fifteen years will be dominated by invasive weed control, selective thinning for habitat diversity and additional planting to create localized plant and animal communities. Urban sites, such as Cooper Crest Preserve, tend to experience greater invasive weed pressure than more rural areas. Thus, for the next five years,

One mile of gravel paths were installed at Cooper Crest

OE plans to employ Washington Conservation Corps crews for three weeks each in the late spring and fall to maintain control over invasive species. The need for intensive weeding will lessen as trees begin to grow taller and will eventually shade out species such as blackberry and scotch broom. To meet the density requirements of the FPA, OE overplanted, especially with Douglas Fir. These stands will be thinned at or before they reach 8" diameter at breast height (DBH) to allow for larger, more healthy trees and to support a diverse understory. Thinned trees will be girdled, topped or felled without removal to foster a healthy forest floor and create habitat. Over the years, OE will continue to introduce diverse plant species adaptively.

Pending funding, future recreational development will focus on access and public accommodations. OE has set aside an area for a future parking lot that can accommodate 10 vehicles, as specified in the terms of the conservation easement held by the City of Olympia. Currently, parking along 20th Avenue NW can accommodate 7 cars. Bollards will be installed at the current construction entrance to prevent illegal access and dumping and to enable more direct pedestrian access from 20th Ave. NW. Foot bridges will also need to be permitted and constructed to connect the two existing gravel pathways to Cooper Point Road NW: one near the bus stop, near the corner of Cooper Point Road NW and 20th Ave NW, and one at the future trailhead in the north eastern corner of the property.

Our design plans include installing a picnic shelter atop the hill in the southeastern part of the preserve, which has stunning views of Mount Rainier. It is a natural location for a picnic shelter, high and dry with no flooding or other concerns. At the top of the hill, in a relatively flat area, there is already a network of gravel pathways that are firm, stable, and slip-resistant that were constructed to ADA accessibility standards. Cooper Crest Preserve currently has no facilities.

Planting live stakes at the Deschutes River Preserve

Past Management

The forest at Cooper Crest suffered a devastating clearcut in July 2022, shortly before OE conserved the area. In the summer of 2022, the area was logged, including the lower end of the ridge within an area of forested wetlands.

Clearcuts become drier and hotter than natural forests. Were this area to be developed, the inevitable temporary loss of summer in-stream flows in the salmon-bearing Green Cove Creek would become permanent, a severe risk to this important and sensitive area.

In late summer 2022, OE purchased and conserved the 23-acre clearcut, and immediately began urgent restoration. Of particular concern were the risks of flooding and erosion associated with clear-cutting. OE committed significant funds toward mitigation and erosion control measures, racing to complete the work before the winter rains came. With community support, OE also started what will be a multi-year project of replanting the forest. OE also reconnected the City of Olympia's Cooper Crest Open Space trail network, which the logging operations had cut off, to a new firm, stable, and slip-resistant corner-to-corner gravel walking path.

Emergency restoration the property involved: deconstructing and mulching over 60 house-sized slash piles left from the clear-cut; removing over three tons of trash; redistributing mulch and slash to prevent erosion; removing scotch broom and Japanese knotweed, Himalayan blackberry, tansy ragwort, and other invasive plants; building over one mile of trails throughout the property; installing a culvert at the trail crossing of the seasonal stream; planting some 20,000 native shrubs and trees; and supporting two graduate student research projects on GIS mapping and restoration. Bringing this land back to a healthy ecosystem has been and continues to be a huge undertaking and enormous opportunity. Restoration of this area is ongoing, and costs will remain significant for many years to come.

2. Deschutes River Preserve

Current Condition

Previously farmed habitats on the Deschutes River Preserve, including prairies, wetlands, and forest habitats, are being restored. Wetlands, including previously farmed land, are unfortunately colonized by invasive species, primarily reed canary grass and Canada thistle. The prairies have been ill-managed and are overgrown. Nutrients from past agricultural activities have led to poor water quality, resulting in a Total Maximum Daily Load by the Washington Department of Ecology for Elwanger/Ayer Creek for pH, dissolved oxygen, water temperature, and turbidity.

Initial restoration included the demolition of 30,000 square feet of impervious surface and associated barns and outbuildings, including the removal and remediation of a manure and wash water vault within the wetland buffer. Extensive and intensive grazing has left over 200 acres of wetlands and former forested floodplain devoid of woody vegetation and heavily infested with invasive species, particularly reed canary grass and Himalayan blackberry. This past year, OE has introduced over 20,000 live stakes of willow, dogwood, cottonwood, and ninebark to begin to address the critical lack of shade in and around the southern pond. An additional 5000 potted plants were planted where the barns once stood. In addition, over 15 acres of blackberry have been mowed and will need to be treated in the Spring of 2024. Fish passage was also restored to the Elwanger Creek basin by removal of the fish-blocking obstruction of materials from a formerly washed out bridge. Restoration designs, cultural resources studies, wetland delineations, and water quality monitoring are currently being developed.

Elwanger Creek basin at the Deschutes River Preserve

Washington Conservation Corp crew after construction of the staircase along 20th Ave NW at Cooper Crest

Planned Restoration, Development/Infrastructure

Restoration planning is currently underway. OE and its partners submitted over $10M in restoration planning and implementation grants this past year.

Restoration in the Deschutes mainstem will include placement of large woody debris to create shaded pools and side-channel habitat for fish, as well as revegetation of degraded sections of the riverbank. Restoration within the interior will include, beaver habitat enhancement, reforestation of sections of the grazed wetlands, installation of nearly 300 thousand live stakes, bat habitat enhancement, invasive weed management, reforestation of former hayfields, and the rewilding of 150 acres of wetlands that were degraded by a century and a half of lowlands grazing. Our approach within the wetlands will seek to recruit and support the local beaver population in order to create an ever-evolving complex of vegetated wetlands and pools with the goal of maintaining quality salmon-rearing habitat.

Deschutes River Preserve has no facilities. A shelter and outhouse are under consideration. However, the preserve will have limited public availability until the property has improved access through adjacent properties. The preserve also has no water right, which is an additional challenge for restoration and access.

Past Management

Our conservation and restoration efforts at this site began December 30, 2023.

Removing past structures from the West Bay Connector

3. Green Cove Creek Preserve

Current Condition

Because it is comparatively pristine, Green Cove Creek is among Olympia's priority areas for both the City of Olympia and Thurston County for salmon habitat protection measures. While the preserve is relatively intact, there are areas of Japanese knotweed and English ivy that OE is working to carefully control. Adjacent areas that OE plans to conserve do have large sections of scotch broom. Green Cove Creek Preserve has no facilities.

Planned Restoration, Development/Infrastructure

OE's restoration plans for Green Cove Creek, and forested ravines that feed into the creek, include continuing to carefully control Japanese knotweed and remove English ivy, holly, and Himalayan blackberry in preparation for planting more diverse species in the Fall of 2024. OE intends to pursue an additional 100 acres of conservation in the area.

Past Management

In 2022 and 2023, OE managed Japanese knotweed, and removed English ivy, Himalayan blackberry, and English holly, and removed trash from the wetland.

New growth in the bioswale in the West Bay Woods


Planting in the West Bay Woods

4. West Bay Woods Preserve

Current Condition

The West Bay Woods Preserve plays an important role in water quality in the Deschutes Estuary. Untreated stormwater carries many toxins into Budd Inlet, including 6-PPD quinone which is lethal to Coho salmon at an alarmingly low concentration. The woods act as a buffer between the Northwest neighborhood in the rapidly urbanizing Olympia and Puget Sound.

OE is currently working on three large-scale restoration projects in the West Bay Woods: Stormwater Park North, Stormwater Park South, and the West Bay Park Connector.

4a. Stormwater Park North

The Stormwater Park North project consists of a detached remnant shoreline forest that includes the impervious slabs of now demolished out-buildings of a defunct plywood mill. The hillside forest is dominated by big leaf maple, red alder and some second-growth Douglas fir. OE plans to install green infrastructure including an engineered wetland to treat 2.24 acre-feet/day (≈730,000 gallons per day) of urban stormwater runoff.

4b. Stormwater Park South

The Stormwater Park South project focuses on restoring and revegetating an area that was cleared for an aborted development. The project will also construct a landscaped stormwater pond, deal with persistent erosion problems, revegetate approximately two acres and install trails and other amenities.

4c. West Bay Park Connector

This site has been transformed over the past three years from a blackberry- and ivy-infested hillside to a diverse young native forest with a small creek, a rain garden, and a trailhead to a Mt. Rainier viewpoint. The site includes a rain garden, a stormwater swale, and a graveled footpath up to a stone council ring with a beautiful view of Budd Inlet.

Planned Restoration, Development/Infrastructure

OE believes that remediating and restoring the shoreline is urgent, as the entire shoreline is threatened by sea-level rise, is highly contaminated, and is the subject of development proposals that are out of balance with its potential role as an important element of estuarine restoration.

Stormwater Park North presents a meaningful opportunity to address water quality issues with green infrastructure and forest restoration.

The objectives for the Stormwater Park North project are to install neighborhood-scale green infrastructure to treat 2.24 ac-ft/day (~730,000 gallons per day) of urban runoff that flows directly into Budd Inlet. Objectives are also to create a publicly accessible community space that supports education, recreation, and art.

This overall Stormwater Park North project will consist of three phases:

Phase 1: A hydrodynamic separator will remove sediment and other macro-pollutants from stormwater. A flow control structure will divert 40% of the pre-treated stormwater into a constructed 13,000-square-foot wetland. The separator and flow control structure will improve water quality through infiltration, aeration, and vegetative uptake.

Phase I Improvements consist of: 1) a constructed wetland, 2) a man-made creek, 3) a flow control structure.

Phase 2: A filtration unit will treat the remaining 60% of peak stormwater flows, with up to 95% reduction in contaminants. The system immobilizes and volatilizes pollutants, including nutrients, metals, and hydrocarbons. The filtration unit is an engineered high-performance bioretention system, optimized for the treatment of high volume, flow, and high pollutant removal. The system provides a low-impact solution with a small footprint and is thus ideally suited for this project where only 15,000 square feet exist for the engineered wetland.

Phase 3: Phase 3 Improvements consist of an elevated public boardwalk with water-themed art installations to align with the City of Olympia's 'Gateways' project.

Middle school students learn about the connection between the forest and water quality in Puget Sound

Stormwater Park South: Restoration and reforestation of the Stormwater Park South 2-acre project area will serve to stabilize the denuded slopes and, over time, reduce runoff through transpiration and interception. It will also serve to enhance habitat and biodiversity in the recovering West Bay Woods. Construction of a stormwater pond at the site of a former parking lot will also significantly enhance stormwater treatment of the upland neighborhood by increasing capacity and reducing flow over the roadway and through the contaminated Reliable Steel site located across West Bay Drive NW on the Budd Inlet shoreline.

Past Management

The West Bay Woods was the earliest focus of OE, where the land trust worked to preserve and restore a Pacific Great Blue Heron rookery in 2014. The forest was degraded by past misuse and an intense colonization of invasive plant species. OE has removed tons of debris and invasive species, and planted over 30,000 native plants in the woods.

OE's extensive work in this area over the last few years included installing and maintaining the beginnings of a trail system with three well-used trailheads, three bridges, two rain gardens, and a bioswale. OE co-manages part of the West Bay Woods with the City of Olympia, who conserved the northern section of the woods with funds from the Recreation and Conservation Office. An example joint project was the revegetation of the slope above the retaining wall on West Bay Drive NW.

OE has also supported a number of graduate student research projects in the West Bay Woods and has sponsored well over 20 work parties with the community within the woods, including several with Evergreen State College and Marshall Middle School.

SECTION 5: ANALYSIS

OE's Comprehensive Land Preservation and Habitat Conservation Plan ensures its habitat conservation and restoration efforts are well-organized and responsive to current conditions. The plan also addresses education and public access needs through community outreach to a diverse, equitable and inclusive community of citizens and visitors to the area.

OE is widely regarded for its proactive and strategic approach to land conservation and restoration, which has also proven to be an effective educational tool. The plan identifies needs based on fish and wildlife habitat conditions, trends, and public comments.

Under this strategic plan, OE includes strategic and/or management plans for the following: land protection and restoration, public use, property management, our annual plans, and board committee and annual staff work plans.

Land Protection and Restoration Planning

OE will continue to advance its conservation and restoration goals in parallel. We remain attuned to opportunities to acquire critical or threatened habitat, and we will continue to seek to proactively acquire degraded sites that – if restored – offer significant ecological lift. Our overarching goal is to create a sustainable balance between urban growth and our natural environment. Priority areas are indicated in Map 3. Exceptional opportunities outside these areas will be considered.

Fish and Wildlife Habitat, Climate Resilience

Previous development, logging and other agricultural activities on existing OE preserves has led to habitat fragmentation and habitat degradation. OE has conserved these areas – including forests, wetlands, stream and riverine floodplains, and prairies - to restore them and to reestablish natural processes.

At all four preserves, habitats for native plants and wildlife are being restored, wildlife corridors are being reconnected, and large, protected habitat areas with associated trails are seeing new signs of plant and animal life. Native wildlife species sensitive to fragmentation are using newly established breeding and feeding areas and moving freely through a range of habitats that are integral to their life history.

Protecting both resilient and strategic degraded sites is the primary focus of OE's planning. Restoration and habitat enhancement projects promote ecological resilience to climate change. Restored wetlands, and in particular forested wetlands, provide storage that can attenuate surges associated with the heavy rains flooding forecast for our region. That

storage can also help to increase summer base flows essential to fish survival, as climate change is expected to bring wetter winters and dryer summers. Properties of sufficient size and condition also provide functional wildlife habitat and climate resilience. Strategically located smaller sites offer opportunities for green infrastructure or similar opportunities to mitigate human impacts on the natural environment.

Degraded sites, large and small, at key geographic locations, offer significant ecological lift if restored. We weave these three types of properties into an ecosystem perspective in which we consider whole systems. Based on the best available science, we work with other restoration partners to re-establish natural processes, enhancing the area's ecological value, and improving habitats for native plants and animals.

Land Protection Priority Areas

OE's has two priority areas for future conservation and restoration: the Green Cove Creek watershed and the lower reach of the Deschutes River, approximately from Offut Lake downstream to the Deschutes Estuary. Specifically, OE's priorities are based on:

- Puget Sound Partnership's 2022-2026 Comprehensive Conservation and Management Plan
- Thurston County Flood Hazard Mitigation Plan
- WRIA 13 Freshwater Prioritization Summary
- WDOE Deschutes Watershed Restoration and Enhancement Plan
- WDOE TMDL for the Deschutes River and Tributaries
- Squaxin Island Tribe's Deschutes River Coho Salmon Biological Recovery Plan
- Green Cove Creek Drainage Basin Plan
- WRIA 13 Habitat Protection and Restoration Plan

Priorities for conservation are also based on OE's internal analysis of the real estate market. Thurston County is one of the fastest growing areas in the nation. It is thus both dynamic and competitive. OE's strategy is therefore adaptive.

Our youngest volunteers at the West Bay Woods

Descriptions of Protection Priority Areas

Green Cove Creek Areas

1. Kaiser Wetlands and Adjacent Forest

This area is one of the highest ranked priorities for salmon recovery in WRIA 13. The easiest areas for conservation were protected 15-20 years ago. Since that time, the urban growth area has expanded to the very edge of the wetlands and plans are underway to make Kaiser Rd a major corridor. The threat of conversion here is very high. In fact, the area has already lost more than the 60% forest coverage recommended by the Green Cove Creek Comprehensive Basin Plan. The forested areas that are outside of the required riparian buffer are critical to the hydrology of the creek, which is entirely fed by rainfall retained in its forested areas and from springs.

2. Watershed for the Eastern Arm of the Green Cove Creek

This area consists of forests and forested wetlands along the eastern arm of the Green Cove Creek, including a contaminated gravel mine that has high potential for reforestation, that are at an extreme risk to conversion. This area is important to the State sensitive Olympic mudminnow. It is also critical to the hydrology of the lower Green Cove Creek, where the most important salmon spawning habitat can be found. Loss of forest cover here would result in decreased summer base flows and increased winter scour from stormwater runoff.

3. Areas between OE Deschutes River Preserve and Henderson Boulevard in Tumwater

This area is characterized by forested floodplains and associated upland forests that have experienced severe encroachment over the past 20 years. The whole area is a critical rearing habitat, especially for Coho. Maintenance of a robust riparian buffer here will help the Deschutes River to meet its temperature and water quality goals. The area also includes a 250-acre former gravel mine, whose restoration would have a positive impact on the lower Deschutes River and the estuary. Currently, it is a large source of runoff, fine sediments and temperature stress.

4. Areas Between the Deschutes River Preserve and Rich Rd

Properties potentially available for conservation include 300 acres of timberland along the eastern shore of the Deschutes River and the Deschutes River Ranch. In total, the area is approximately 400 acres. Conservation of this area would enable public access to the Deschutes River Preserve. These areas are at a high level of threat from forest loss and conversion.

5. Farmland Between Rich Rd and Offut Lake

Farmland along the upper sections of the Lower Deschutes Reach, including along Spurgeon Creek, are facing an extreme threat of conversion. Conservation either through fee simple acquisition or conservation easement would allow balanced use between working lands and habitat conservation.

Grand staircase at Cooper Crest

Weeding in the West Bay Woods

SECTION 6: GOALS AND OBJECTIVES, POLICIES

Mission

Olympia Ecosystems' mission is to protect, preserve, and restore diverse ecosystems in and around Olympia, Washington, that include the freshwater, shoreline, tidal waters, grasslands, upland forests, and their associated watersheds that are home to the Pacific Great Blue Heron, cutthroat trout, salmon and companion species. In coordination with community members, local agencies, and other non-profit groups, we will work to ensure that these ecosystems remain vital in perpetuity.

Because OE's region of interest is urban or near-urban and rapidly developing (Thurston County is one of the fastest growing areas in the nation), integration of our conservation areas into the urban landscape is essential. Thus, OE actively involves the community in protecting, restoring, appreciating, and learning about our natural ecosystems that support the diversity of life found in our region.

OE's seven goals are:

Goal 1. Lands and Waters

Goal 2. Biodiversity and Habitat Protection

Goal 3. Acquisition

Goal 4. Stewardship

Goal 5. Outdoor Recreation

Goal 6. Community Engagement

Goal 7. Funding

Loon in West Bay at the Deschutes Estuary

Olympia Ecosystems' Goals and Objectives:

Goal 1. Lands and Waters

1.1 Provide a sustainable system of connected, protected, conserved habitats on lands and waters in and around the City of Olympia in perpetuity.

1.2 Protect key wetlands, other riparian areas and grasslands and their associated watersheds.

1.3 Proactively conserve areas within urban areas that have high value for stormwater treatment through natural processes and the introduction of green infrastructure.

1.4 Proactively conserve and rewild degraded areas within those watersheds that have a high potential for benefitting water quality and salmonid habitat.

Goal 2. Biodiversity and Habitat Protection

2.1 Prioritize habitat preservation and restoration at a landscape scale on OE's protected lands. And focus additional conservation at a landscape scale on lands identified in other federal, state, county, and city-adopted plans.

2.2 Keep the preserves map updated with current resource information and changes in land use.

2.3 Maintain the ability to react to property acquisition opportunities that emerge.

2.4 Focus on using strategic property transactions to conserve networks of essential natural, conserved, and restored areas, including on working lands.

2.5 Focus on protecting and restoring riparian areas, estuaries, and intact nearshore habitat for salmon recovery.

2.6 Protect ecological corridors between protected lands and Puget Sound to promote climate resiliency and allow viable movement of native fish and wildlife. Prioritize potential lands for identified corridor connections, as well as corridor connections in other federal, state, or county-adopted plans.

2.7 Protect and steward lands that support native biodiversity and ecological function and protect ecosystem services, including clean air and water. Lands include forests, fields, nearshore, wetlands, streams and grasslands.

Goal 3. Acquisition

3.1 Focus on acquiring large acreages with higher habitat and/or restoration value and greater resilience. Small properties should have high value for green infrastructure or contain important habitat types and/or provide a wildlife corridor between protected areas and/or where development would negatively impact ecosystems in a significant way.

3.2 Focus on acquiring lands that provide habitat for native wildlife that is easily disturbed by human activity, including neotropical birds (songbirds (such as warblers, thrushes, tanagers, and vireos) raptors, and shorebirds a few species of waterfowl (such as the Cinnamon teal), or that provides specialized habitat for fish, amphibians and reptiles, migratory bird stopover areas and breeding/nesting habitat.

3.3 Prioritize potential lands for acquisition of fee or easement ownership based on alignment with this Plan, as well as other federal, state, or county adopted plans.

3.4 Acquire lands and corridors in configurations that maximize accessibility and minimize conflicts with surrounding land uses.

Goal 4. Stewardship

4.1 Continue to develop a stewardship program that cost-effectively protects OE fee lands and conservation easements with an emphasis on sustainable methods and design, and the protection of habitat quality, conservation value, and resources for current and future generations.

4.2 Increase community stewardship efforts by creating programs with local schools and universities, as well as by creating opportunities for the region's many experienced workers in the natural resource economy.

4.3 Focus on stewardship to conserve and restore networks of essential habitat areas, including on working lands.

4.4 Expand OE's ability to steward and maintain OE preserves by building stewardship networks within the region.

4.5 Continue to grow OE's volunteer program to help maintain and steward our properties and to maintain trails by expanding the volunteer site steward program, holding work parties at different times of the week or month, engaging with neighbors for a "preserve watch" type of program, and partnering with other stewardship organizations.

4.6 Strive to develop management and restoration plans within one year of acquisition of preserves, or to fund the creation of such plans. Update and revise as needed.

4.7 Manage all OE preserves according to approved management and restoration plans.

4.8 Monitor all conservation easements annually for compliance and maintain positive relationships with owners of these lands. At a minimum, traverse the boundaries of conservation easements and update the Baseline Documentation reports and photos for conservation easements every five years.

4.9 Maintain, enhance, and restore native vegetation, habitat functions and processes, and other ecological values on OE preserves.

4.10 Invest in preventative maintenance and restoration to maximize long-term benefits.

4.11 Administer a stewardship fund for work at all OE properties.

Goal 5. Outdoor Recreation

5.1 Provide for appropriate low-impact and passive outdoor recreation opportunities where appropriate and compatible with conservation values and biodiversity.

5.2 Improve public access to the city's freshwater and marine shorelines through acquisition of land and corridors, easements, and other arrangements.

5.3 Construct trails where practicable to link county, city, and regional parks and preserves. Provide ADA accommodation where practical.

5.4 Foster partnerships and county-wide collaboration among park and other habitat providers to improve habitat conservation and provide low-impact outdoor recreation services to the public.

5.5 Promote trail development practices that are respectful of private property owners' rights.

5.6 Routinely monitor public-access on our preserves to identify and address potential or emerging safety risks.

Goal 6. Community Engagement

6.1 Collaborate with local tribes in stewarding the area's biodiversity and natural resources.

6.2 Engage residents and visitors in caring for OE preserves. Provide effective communication to reach a wider audience. Broaden community awareness of OE work and conservation and restoration projects.

6.3 Offer guided and hands-on experiences on OE's conserved lands.

6.4 Continue to develop trails, signage, and infrastructure on OE preserves to ensure public access, safety, and educational purposes. Involve community partners.

6.5 Promote and implement a "Leave No Trace" program and encourage citizens to adopt this ethic.

6.6 Publicize OE successes through a variety of methods including community events, property celebrations, property protection signs, informational kiosks, and print and online media.

6.7 Leverage existing partnerships and build new ones.

6.8 Provide appropriate opportunities for the public to connect with OE-protected properties, including tours and educational opportunities supporting adult, youth development, and Pre-K-12.

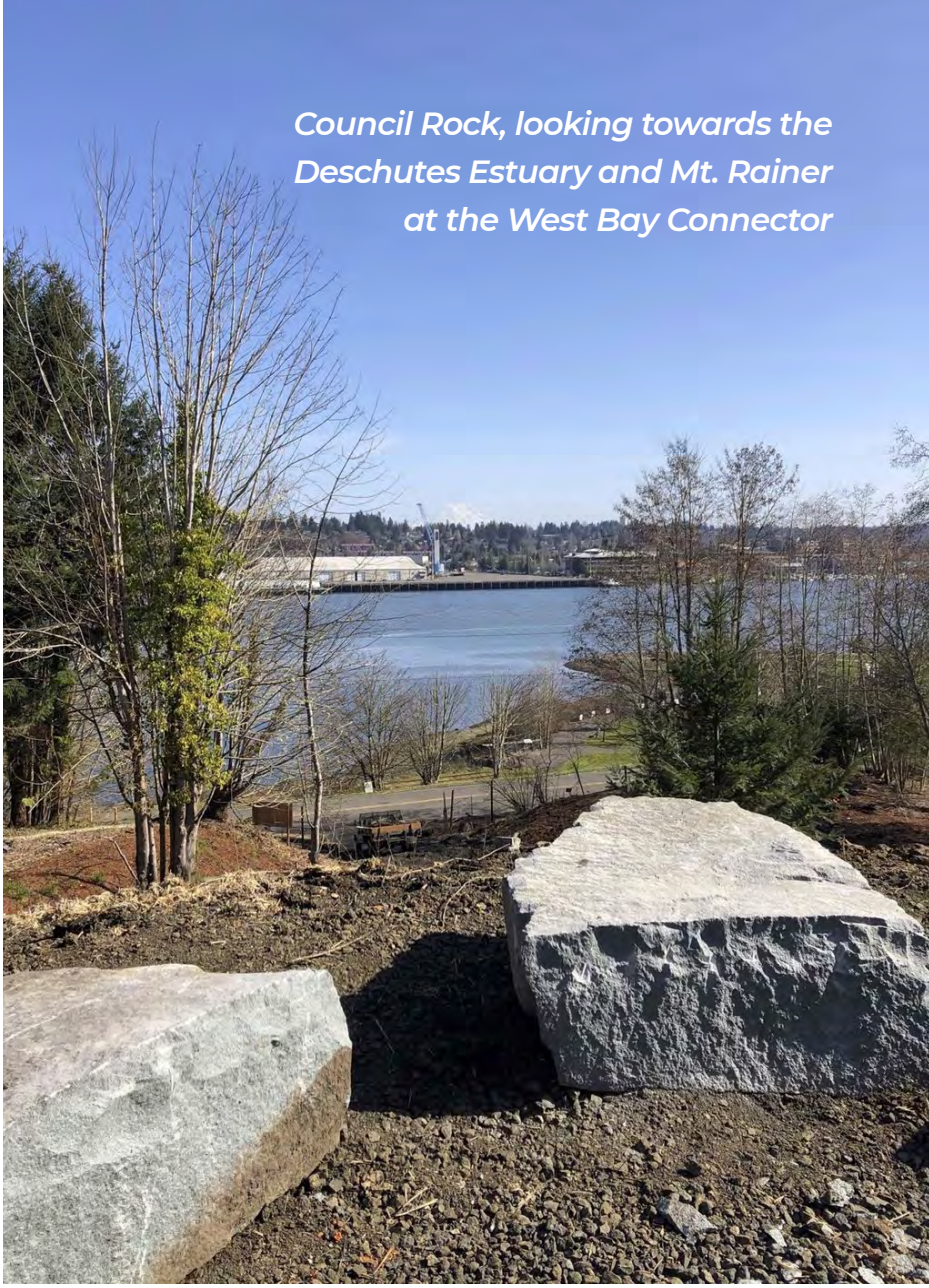
6.9 Continue to build strong partnerships with teachers and school districts, as well as multiple education and science organizations that add depth to our expertise in conservation.

6.10 Collaborate with conservation partners and seek partnership opportunities with other conservation organizations to better leverage OE's limited resources.

6.11 Incorporate equity, inclusivity, and social justice into our conservation mission.

Goal 7. Funding

OE's aim is to secure stable funding to support its programs, to maintain a healthy operating reserve, and to grow its stewardship fund to match its needs and aspirations. It seeks to accomplish this by:



Council Rock, looking towards the Deschutes Estuary and Mt. Rainer at the West Bay Connector

7.1 Actively seeking innovative funding methods to retain financial flexibility and increase OE's ability to steward and restore lands and waters.

7.2 Continuing to prepare and present excellent grant applications to leverage funding to acquire lands and conservation easements and restore lands to ecological health.

7.3 When appropriate and as staff capacity allows, launching capital and "close the gap" campaigns to acquire high-priority preserves and conservation easements and more actively involve the broader community in protection efforts.

7.4 Developing partnerships with public and private organizations and agencies to leverage funding for the support of natural and restored areas.

7.5 Ensuring diverse, long-term organizational financial sustainability through community financial support including donations, pledges, and estate planning.

7.6 Where possible, and at the time of acquisition, adding to the stewardship fund at a level needed to cover anticipated stewardship costs far into the future.

7.7 Maintaining a twelve-month operating reserve, making OE more resilient in case of major unanticipated revenue shortfalls, costs, or losses.

7.8 Practicing the ethical fundraising principles of honesty, respect, integrity, transparency, and responsibility.

SECTION 7: CAPITAL IMPROVEMENT PROGRAMS

Land Acquisition and Protection

The properties listed below were identified in Olympia Ecosystems planning process as properties of the highest importance. Properties are listed with generic names to protect the privacy of the landowners. OE only works with willing landowners.

Property & Type	Fund Sources	2024	2025	2026	2027	2028	2029
Green Cove Creek – Kaiser Wetlands							
Kaiser Fee Lands 1	RCO, TCCF, WDOE, USFWS, NRCS, Foundations, Private	●	●	●			
Kaiser Fee Lands 2	RCO, TCCF, WDOE, Foundations, Private		●	●	●		
Farmland CE 1	RCO, NRCS Foundations, Private		●				
Farmland CE 2	RCO, NRCS, WDOE, Foundations, Private		●				
Residential CE 1	Donation, NRCS				●		
Residential CE 2	Donation, NRCS					●	●
Green Cove Creek – Eastern Watershed							
Undeveloped 1	Foundations			●	●		
Undeveloped 2	Foundations					●	●
Residential CE 1	Foundations, Private					●	
Residential CE 2	Foundations, Private					●	
Lower Deschutes – Downstream							
Camp CE	RCO, WDOE, USFWS, Foundations, Private	●					
Forest 1	RCO, WDNR, Foundations, Private		●	●	●		
Forest 2	RCO, WDNR, Foundations, Private		●	●	●		
Degraded Area	WDOE, USFWS, Foundations, Private		●	●	●		
Farmland Fee	WDOE, USFWS, Foundations, Private	●	●				

Property & Type	Fund Sources	2024	2025	2026	2027	2028	2029
Lower Deschutes – Upstream							
Forest 1	RCO, WDOE, USFWS, Foundations, Private			●	●	●	●
Forest 2	RCO, WDOE, USFWS, Foundations, Private			●	●	●	●
Ranchland 1	RCO, NRCS, WDOE, USFWS, Foundations, Private		●				

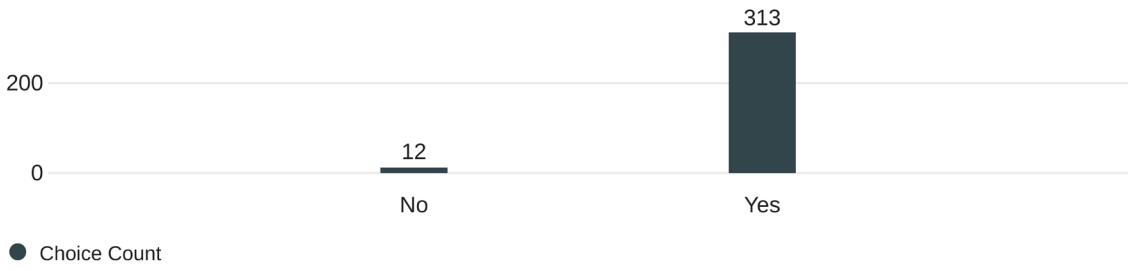
Lower Deschutes – Farmland							
CE 1	NRCS, TCCF, Foundations, Private				●	●	●
CE 2	NRCS, TCCF, Foundations, Private				●	●	●
CE 3	NRCS, TCCF, Foundations, Private				●	●	●

KEY

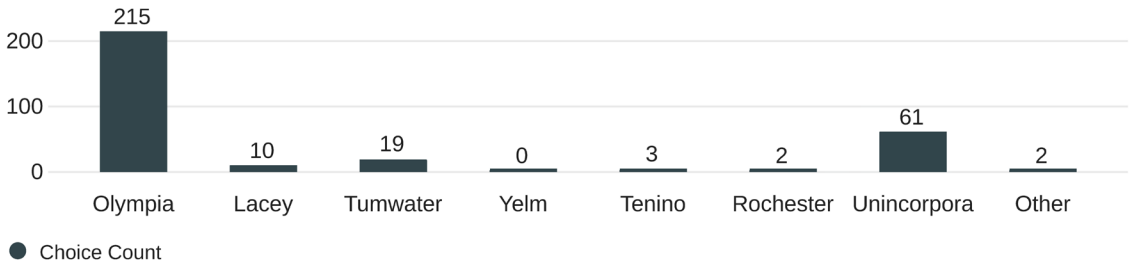
Funding Sources		
TCCF	**WDOE**	**Foundation**
Thurston County Conservation Futures	Washington Department of Ecology	Private Foundations
NRCS	**USFWS**	**Private**
Natural Resources Conservation Service	U.S. Fish & Wildlife Service	Private Fundraising
RCO	**WDNR**	**Donation**
Recreation & Conservation Office	Washington Department of Natural Resources	Landowner Donation

Preserve	Description	Key Features	Proposed Additional Amenities
Cooper Crest	Clearcut legacy forest with forested wetlands undergoing reforestation for diversity and resilience.	Highest ridge in Olympia; Artesian springs feed Green Cove Creek; Stunning views of Mount Rainier	Shelter, picnic table, outhouse, two staircases, parking lot, educational signage
Deschutes River	1.5 miles of river shoreline and associated floodplain, 200 acres of wetlands, second growth forest, prairie and uplands.	Largest intact habitat complex in the lower reaches of the Deschutes River	Shelter with fireplace, picnic tables, bird blinds, trails, equipment storage, electricity, potable water, toilets
Green Cove Creek	Pristine (mostly) beaver assisted wetlands. Shrub-scrub, with areas of 150 year-old trees.	Flows into Grass Lake Nature Reserve; Salmonid rearing and beaver habitat; Olympic mudminnow.	Currently conserved areas are not accessible to public, as they are wetlands. With future acquisitions: boardwalk, shelters, trails, signage.
West Bay Woods	Degraded remnant shoreline forest. 150 year-old trees, surrounded by urban neighborhoods. West Bay Creek	Great Blue Heron rookery; Three trailheads, trail network with three bridges; Three large-scale restoration projects	Trails, benches
WBW Connector	Stunning views of Mt. Rainer and city of Olympia. Connection from trails to West Bay Park, Heritage Park, Tumwater Falls, Capitol Campus to NW neighborhood.	Deep ravines, restored area, rock council ring, wetlands, creek. Connection to West Bay sidewalk.	Restoration of the forested interior, trail connector, educational signage, fencing for surrounding neighbors.
WBW Stormwater Park N	Remnant shoreline forest, and former site of plywood industry buildings and offices.	Feeder bluffs stranded by historical fill. Unobstructed views of Puget Sound. Alder forest. Unique opportunity of green infrastructure. Connection to West Bay sidewalk.	Engineered wetland. Green infrastructure. Elevated public boardwalk with water-themed art installations, educational signage.
WBW Stormwater Park S	Remnant shoreline forest; feeder bluffs stranded by historical fill; Seasonal creek and wetland.	180 degree views of Mt Rainier, Olympic Mountains, State Capitol. Connection to West Bay sidewalk.	Pond at site of former parking lot; enhance biodiversity, trails, council ring, benches, signage.

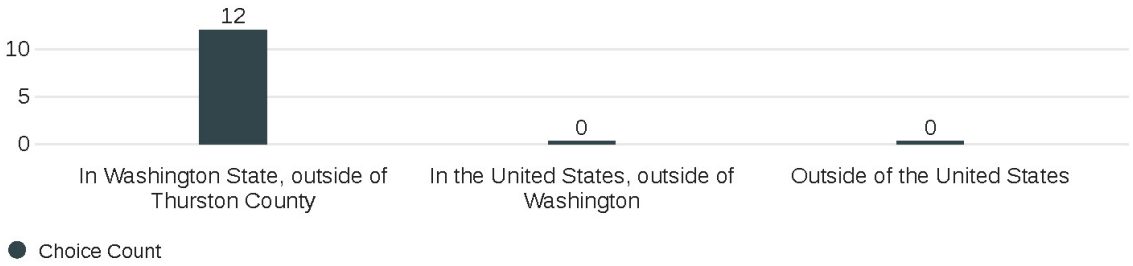
Do you live in Thurston County?



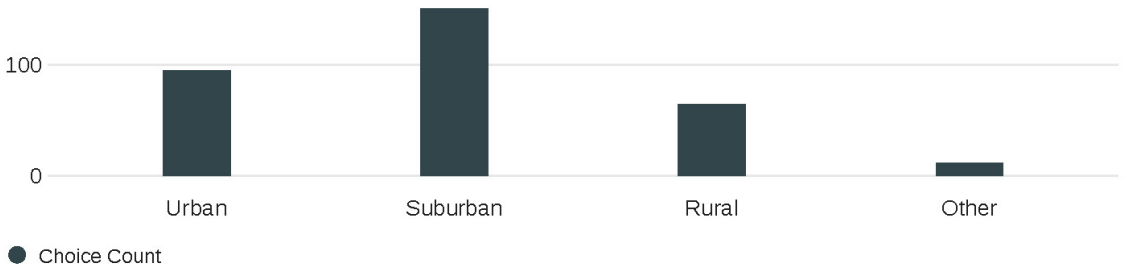
Where in Thurston County do you live?



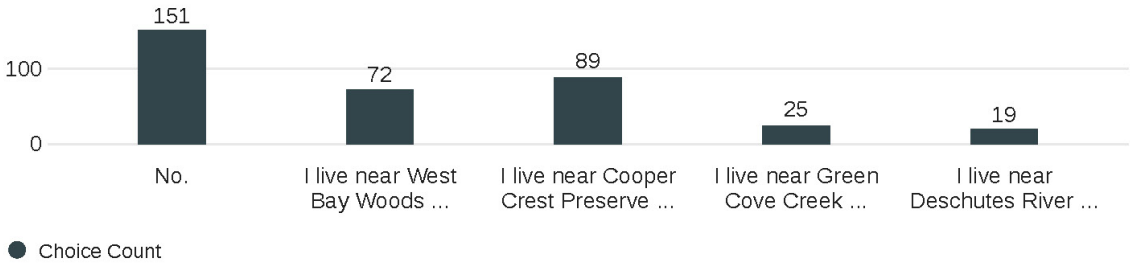
Where do you live? [if outside Thurston County]?



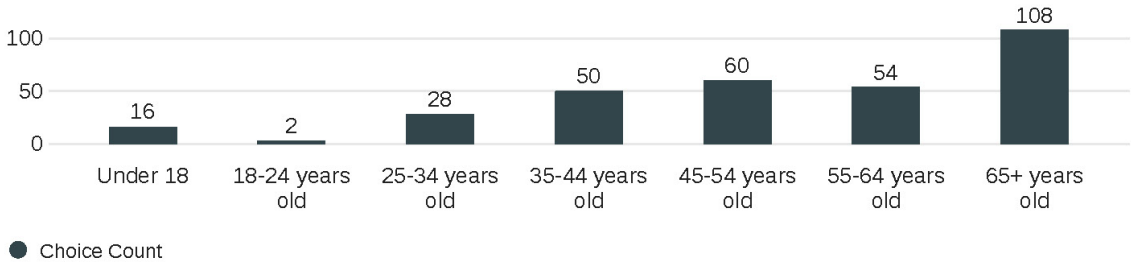
Which of the following best describes the area where you live?



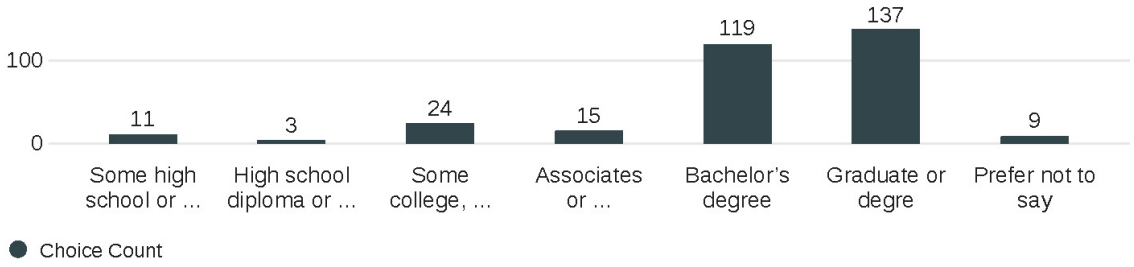
Do you consider yourself a neighbor of one of our Preserves?



How old are you?

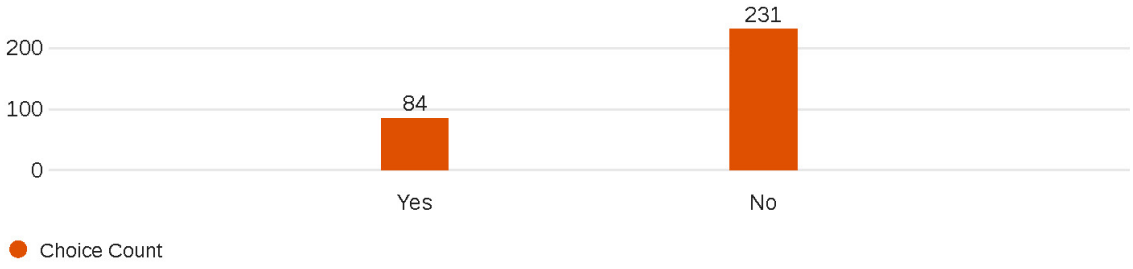


What is the highest level of education you have completed?

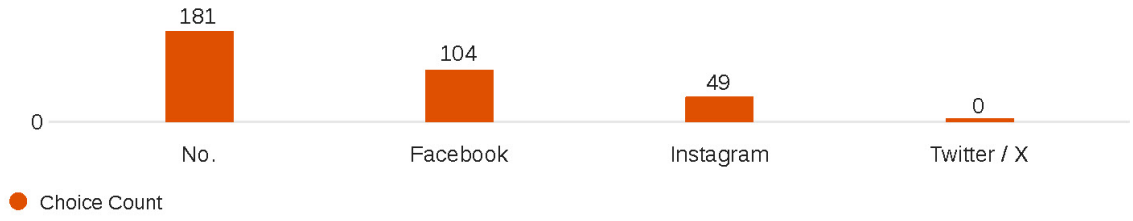


In the past three years, have you volunteered with OlyEcosystems?

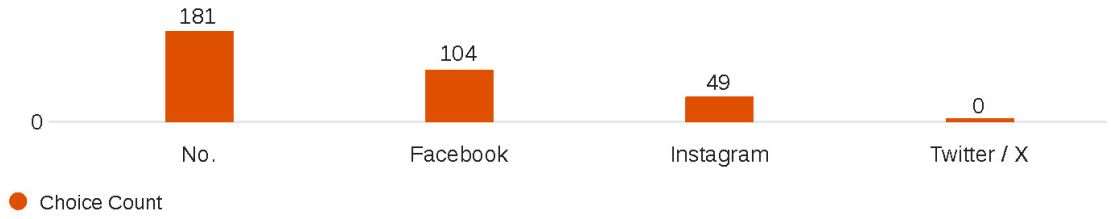
In the past three years, have you donated financially to OlyEcosystems?



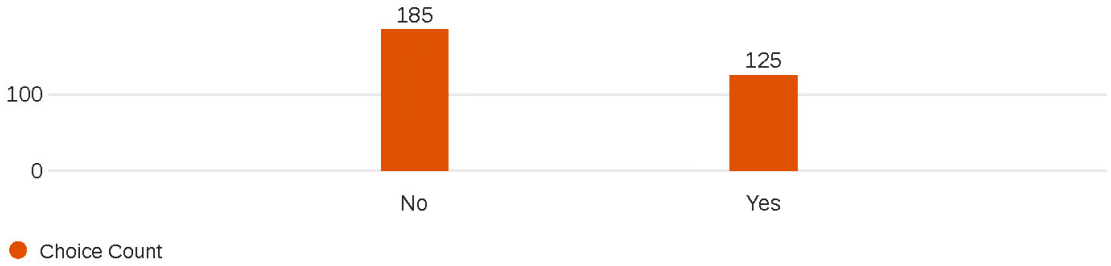
In the past three years, have you followed OlyEcosystems on Social Media?



In the past three years, have you followed OlyEcosystems on Social Media?



Do you receive the OlyEcosystems newsletter via email?



Is Olympia Ecosystems in your will or otherwise involved in your estate planning?

Rate us from 0 to 100

Field	Min	Max	Mean	Standard Deviation	Variance	Responses	Sum
Rate us from 0 to 100	0.00	100.00	76.98	19.61	384.73	275	21170.00

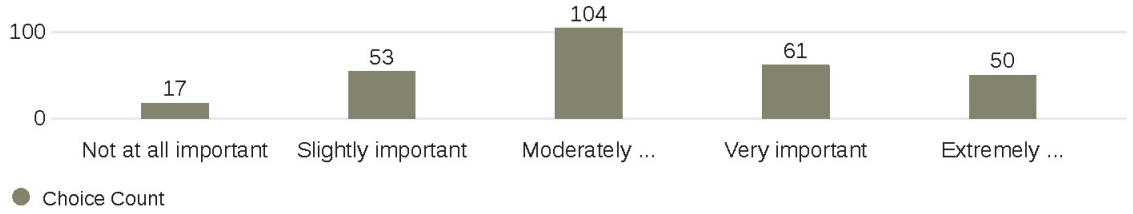
To protect, preserve, and restore the diverse ecosystems in and around Olympia, please rank the types of lands and waters that are most important to you, with 1 as your highest priority and 5 as your lowest priority.

Field	Min	Max	Mean	Standard Deviation	Variance	Responses	Sum
Streams and riparian areas	1.00	5.00	2.73	1.38	1.89	249	680.00
Grasslands and prairie	1.00	5.00	3.18	1.42	2.01	245	778.00
Estuary and shoreline	1.00	5.00	3.00	1.40	1.96	255	766.00
Upland forests	1.00	5.00	3.07	1.24	1.54	255	784.00
Degraded areas (clear cuts, urban blight, etc.)	1.00	5.00	3.11	1.60	2.55	263	818.00

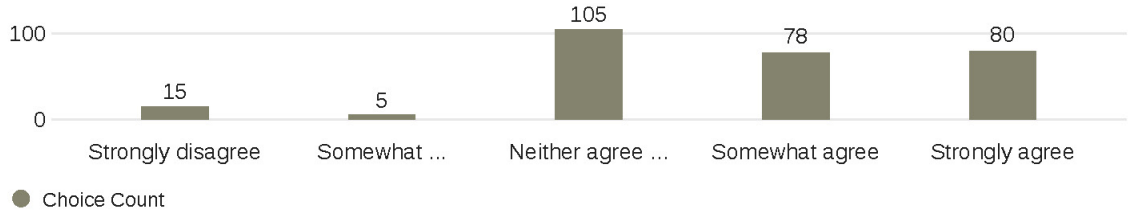
Please indicate the level of threat to the environment you feel is posed by...

Field	Min	Max	Mean	Standard Deviation	Variance	Responses	Sum
Population Growth in Thurston County	1.00	3.00	2.47	0.60	0.36	280	692.00
Climate Change	1.00	3.00	2.67	0.57	0.32	282	753.00
Disengagement from nature	1.00	3.00	2.33	0.64	0.41	279	649.00
Untreated stormwater runoff	1.00	3.00	2.38	0.60	0.36	281	670.00
Current or past pollution	1.00	3.00	2.44	0.56	0.31	281	687.00
Loss of forest land	1.00	3.00	2.67	0.52	0.27	280	748.00
Loss of farm land	1.00	3.00	2.25	0.73	0.54	277	622.00
Loss of wildlife habitat	1.00	3.00	2.82	0.42	0.18	280	789.00
Loss of scenic views	1.00	3.00	1.78	0.70	0.49	276	490.00
Loss of undeveloped shoreline access	1.00	3.00	2.34	0.69	0.48	278	650.00

How important is it to you that, after restoration, our Preserves are opened to the public?



Olympia Ecosystems is focusing conservation efforts in the places of highest priority to you in and around Olympia.



OLYMPIA ECOSYSTEMS BOARD RESOLUTION

Adoption of 2024 Land Protection Plan

Whereas, Olympia Ecosystems is required to meet the planning requirements of WAC 286-27-040 to submit grant applications to the Washington State Recreation and Conservation Office (RCO); and

Whereas, staff and board members have prepared this first Land Protection Plan to meet these criteria; and

Whereas, this information was presented and discussed at the Board of Directors at its February 28th, 2024 meeting.

Now Therefore Be It Resolved that the Board of Directors of Olympia Ecosystems approves the 2024 Land Protection Plan for submission to the Washington State Recreation and Conservation Office.

Dated: February 28th, 2024

Signed: 

Sarah Hamman, President

Attested: 

Heather Grob, Treasurer

NOTES

NOTES

Olympia
Ecosystems

PROTECT · PRESERVE · RESTORE

1107 West Bay Dr NW
Suite 101A
Olympia, WA 98502

olyecosystems.org

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2024-2030
Habitat Conservation & Land Protection Plan