

GREEN STORMWATER INFRASTRUCTURE: A NOVEL FLORA OF MULTNOMAH CO., OREGON

LIAM M. GERRY

liam.gerry.uvm@gmail.com

ABSTRACT

A catalog is presented for plant species deemed to be naturally pioneering the right-of-way stormwater facilities of Multnomah Co., Oregon. This excludes species intentionally planted or judged to have been seeded anthropogenically, or the offspring thereof. During a two-year period between March 2022 until March 2024, 266 herbarium specimens were collected that qualify for inclusion within the confines of this study. This includes 248 vascular plants, 16 bryophytes, and 2 green algae. These collections represent 213 unique species within 53 plant families. Of species collected, only 14% are considered to be native in the region.

Right-of-way stormwater facilities are an unusual habitat in Multnomah Co., Oregon, but a ubiquitous one in heavily developed areas of the county. They are property of the respective municipalities and the general public is discouraged from interfering with them. Many species are intentionally planted by agencies with an approved planting list, and through quarterly maintenance, the soils are often disturbed, bare, and ripe for weedy seed germination. Any species that is not on an agency approved stormwater planting list is conspicuous and can reasonably be qualified. This report presents an account of plant species deemed to be naturally pioneering these right-of-way facilities.

METHODS

During a two-year period between March 2022 until March 2024, 266 herbarium specimens were collected that qualify for inclusion within the confines of this study. Collected material included roots, stem and leaf material, and reproductive parts of each plant. Initial identifications were made using social applications such as iNaturalist or through published keys or descriptions found in the second edition of *Flora of the Pacific Northwest*, the ninth edition of *Weeds of the West*, the *Field Guide to the Grasses of Oregon and Washington*, and *Common Mosses of Western Oregon and Washington*. Several moss specimens were sent for identification at the University of Louisville. The bulk of the voucher specimens have been donated to the Portland State University Herbarium (HPSU), while some have been retained within the reference collection of Sound Native Plants.

Specimens were collected during routine maintenance visits to stormwater facilities in Portland and Gresham. Facilities surveyed were largely east of 15th Avenue (with outliers on Lombard Street in St. Johns) and west of 162nd Avenue (with outliers on NE 185th Avenue) in Portland. Collections in Gresham were centered around new housing developments near SE 190th Avenue and SW Butler Road. Facilities were irregularly visited year-round. As this is a diversity study, species were only intended to be collected once, and multiple collections of a species are not indicative of increased abundance.

Most of the guidelines for inclusion established in Christy et al. (2009) are applicable for this study, whereby the species must have “naturally or spontaneously” arose in the targeted habitat and originated “independently from seeds or vegetative fragments not connected to the parent specimen by shoots or suckers.” Vouchers in the form of pressed and mounted herbarium specimens are required in order for a species to be included in this catalog.

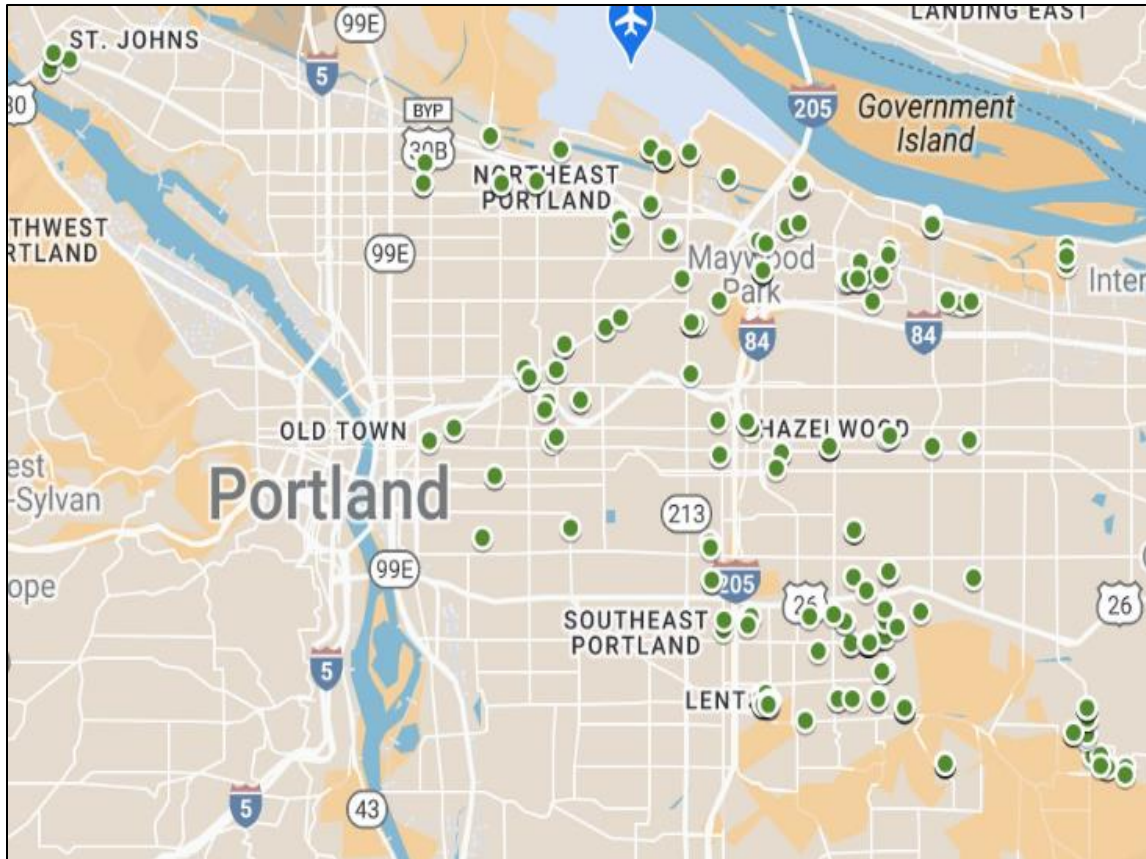


Figure 1. Map of qualifying collections.

To qualify for collection, a species must have been rooted in the substrate of the facility, on accumulated road sediment around an inlet, or on the concrete structure itself. Each species must also have exhibited a reproductive stage. Exemptions were made for species that do not flower the first year of growth, provided a voucher could be taken from a nearby reproductive individual. For example, an *Acer platanoides* sapling would qualify if a cutting was procured from a flowering tree that could reasonably be the parent. Both the sapling and the cutting from the mature plant would then be included with the voucher. Collections that predate this project are eligible for inclusion, provided the label specifies that it was found in a qualifying facility. One such collection (*D. Maze 1108*, HPSU) has been considered.

Green stormwater infrastructure

Green stormwater facilities are engineered bioswales or vegetated planters that are designed to catch precipitation runoff, settle out contaminated road sediments, and prevent stormwater from ending up in the municipal sewer system. Bioswales are beneficial in reducing polluted water from entering rivers and streams and allows stormwater to naturally filter before it reaches the water table. Water flows into the facility through inlets, carrying road debris, residuum, and seeds, before percolating through the substrate. The installed vegetation serves to slow the flow rate of the water, accumulate pollutants, and to aesthetically enhance the area.

These collections are from public right-of-way stormwater planters administered by the Portland Bureau of Environmental Services (BES) and the Gresham Department of Environmental Services (DES). In Portland, the program is referred to as *Green Streets*. The types of facilities surveyed include “flat basins”, which have a flat bottom and sloping sides planted with vegetation, “flat planters”, which have a flat bottom with vertical walls composed of concrete, and “sloped facilities”,

which have a sloped bottom with sloped or vertical sides. Depending on type, location, and year of construction, soil types within facilities may differ. Most facilities are planted with a mix of shrubs, trees, groundcover, and accent plants. Some facilities, designated as “grassy swales,” are thoroughly seeded with an herbaceous mix.

Portland has been a nationwide pioneer for the implementation of such stormwater facilities. BES began their Green Streets program as a pilot in 2003. In 2007, Portland city council agreed to promote and incorporate Green Streets as a city-wide measure. The City of Gresham began implementing their right-of-way green stormwater infrastructure the same year, with surrounding municipalities following suit.

INSTALLED FLORA

To understand what species are naturally pioneering an area, it is necessary to understand what flora is expected to be in the habitat. Plants are considered to be “installed” in a facility if the species has been intentionally planted or seeded. The benefit to studying an artificial ecotype is the publication of plant lists. In Portland, these plant lists are published by the Bureau of Environmental Services within their Stormwater Management Manuals (SWMM). Gresham’s Department of Environmental Services also publishes a SWMM and maintains a Stormwater Facility Plant List.

Revisions happen occasionally as the agencies assess plant survivorship and maintenance concerns. For example, pests such as the emerald ash borer have contributed to the elimination of *Fraxinus pennsylvanica* from current lists, and diseases such as black knot have deterred the installation of new *Prunus virginiana*.

Roadside bioswales are hostile environments for plants. Stormwater facilities in Multnomah County experience extreme weather gradients, amplified by the exposed environment of urban right-of-ways. A heat dome in June 2021 broke the City of Portland’s all time heat record, as temperatures reached 116°F. In winter, subfreezing temperatures are irregular but occurrent. Additionally, plants are required to survive total inundation for at least 48 hours, while also being robust enough to endure weeks of drought. For example, in 2022, there was a 67-day streak with no measurable precipitation. In Portland, streetside facilities are only irrigated for two growing seasons after they are planted. Once considered established, they receive no supplemental water. This heavily restricts the species of plants suitable for installation.

Portland

The City of Portland Auditor’s Office has archived SWMMs published in 1999, 2004, 2008, 2010, 2016, and 2020. Each has a list of recommended species for installation within stormwater facilities. Internally, BES also maintains a “trial plant” list for experimental species (see Appendix A), which was updated between 2008 and 2012, and again in 2022. With this included the number of installed species that may be encountered within right-of-way stormwater facilities in the municipality potentially exceeds 200. However, the vast majority of these species are rarely utilized, and the city prefers planting a restricted palette that includes hardy plants such as *Carex obnupta*, *Juncus patens*, *Mahonia repens*, and *Spiraea japonica*.

1999 and 2004

The 1999 and 2004 manuals refer to lists too lengthy to reproduce here. The 1999 manual specifies only to use “native plants in the landscaping of public (BES-maintained) facilities” and that “native plant materials shall be obtained from regional sources”.

The 2004 manual does recommend specific species to be installed in stormwater planter boxes, swales, and filter strips. However, this list consists of approximately 100 species of qualifying native shrubs, graminoids, groundcovers, ferns, and trees (see Appendix B). As the Green Streets program was still in its infancy, many of these species may only have been planted in the earliest versions of

right-of-way stormwater infrastructure, if at all. Some species not found on subsequent lists, such as *Symphoricarpos albus* or *Spiraea douglasii*, persist in the odd facility. Large shrubs of this kind are no longer planted, as they block line-of-sight and pose a hazard for pedestrians and traffic.

In addition to installing potted plants, BES utilizes seed mixes to create grassy swales. The acceptable species mix was revised in the 2004 manual and has stayed consistent since. The species currently included are *Agrostis exarata*, *Alopecurus geniculatus*, *Bromus carinatus*, *Danthonia californica*, *Deschampsia cespitosa*, *Deschampsia elongata*, *Elymus glaucus*, *Festuca roemerii*, and *Hordeum brachyantherum*. BES permits the use of other seed mixes, and occasionally trials new ones, such as wildflower mixes including *Achillea millefolium*, *Clarkia amoena*, *Eriophyllum lanatum*, *Gilia capitata*, *Prunella vulgaris*, and *Sidalcea campestris*.

2008

The first iteration of a Green Street specific plant list was published in the 2008 manual. This list was categorized into herbaceous plants, shrubs, groundcovers, and street trees. There was a push to keep roughly half of the plants native, as 17 of the 38 species (45%) are considered indigenous to the Pacific Northwest. The 2010 reissue saw no change to this list.

Herbaceous	Shrubs	Groundcovers	Street Trees
<i>Camassia leichtlinii</i>	<i>Cornus sericea</i>	<i>Arctostaphylos uva-ursi</i>	<i>Acer campestre</i>
<i>Camassia quamash</i>	<i>Euonymus japonicus</i>	<i>Fragaria chiloensis</i>	<i>Betula jacquemontii</i>
<i>Carex comans</i>	<i>Gaultheria shallon</i>	<i>Fragaria vesca</i>	<i>Carpinus caroliniana</i>
<i>Carex densa</i>	<i>Lavandula angustifolia</i>	<i>Fragaria virginiana</i>	<i>Celtis occidentalis</i>
<i>Carex obnupta</i>	<i>Mahonia nervosa</i>	<i>Helictotrichon sempervirens</i>	<i>Fraxinus pennsylvanica</i>
<i>Carex stipata</i>	<i>Spiraea betulifolia</i>	<i>Mahonia repens</i>	<i>Gleditsia triacanthos</i>
<i>Carex testacea</i>	<i>Spiraea densiflora</i>		<i>Koeleria paniculata</i>
<i>Deschampsia cespitosa</i>	<i>Rosmarinus officinalis</i>		<i>Nyssa sylvatica</i>
<i>Iris douglasiana</i>	<i>Viburnum opulus</i>		<i>Prunus virginiana</i>
<i>Iris tenax</i>			<i>Quercus shumardii</i>
<i>Juncus patens</i>			<i>Rhamnus purshiana</i>
<i>Polystichum munitum</i>			

Table 1. "Greenstreet Plant List" published in the 2008 Stormwater Management Manual. Cultivar names have been omitted.

2014

In the 2014 manual, the number of acceptable species in the Green Street specific plant list was pared down. The Bureau revised their categories, publishing herbaceous plants, accent plants, shrubs, groundcovers, and street trees. In this revision, there are 28 species. Of these, 14 (50%) are considered native.

Herbaceous	Shrubs	Groundcovers	Street Trees
<i>Camassia leichtlinii</i>	<i>Cornus sericea</i>	<i>Arctostaphylos uva-ursi</i>	<i>Acer campestre</i>
<i>Camassia quamash</i>	<i>Euonymus japonicus</i>	<i>Fragaria chiloensis</i>	<i>Betula jacquemontii</i>
<i>Carex densa</i>	<i>Mahonia nervosa</i>	<i>Helictotrichon sempervirens</i>	<i>Celtis occidentalis</i>
<i>Carex morrowii</i>	<i>Spiraea betulifolia</i>	<i>Mahonia repens</i>	<i>Koelreuteria paniculata</i>
<i>Carex obnupta</i>	<i>Spiraea densiflora</i>	<i>Rubus calycinooides</i>	<i>Nyssa sylvatica</i>
<i>Deschampsia cespitosa</i>	<i>Spiraea japonica</i>		<i>Prunus virginiana</i>
<i>Iris douglasiana</i>			<i>Quercus shumardii</i>
<i>Iris tenax</i>			<i>Rhamnus purshiana</i>
<i>Juncus patens</i>			

Table 2. “Greenstreet Plant List” published in the 2014 Stormwater Management Manual. Cultivar names have been omitted. New additions are shown in bold, and the “herbaceous plants” and “accent plants” categories have been merged. *Rubus calycinooides* is referred to as *Rubus pentalobus*.

Compared to 2008, 13 species have been removed (*Carex comans*, *C. stipata*, *C. testacea*, *Carpinus caroliniana*, *Fragaria vesca*, *F. virginiana*, *Fraxinus pennsylvanica*, *Gleditsia triacanthos*, *Gaultheria shallon*, *Lavandula angustifolia*, *Polystichum munitum*, *Rosmarinus officinalis*, *Viburnum opulus*), and 3 new species have been added.

Ferns such as *Polystichum munitum* were removed due to the difficulty of establishing them in exposed facilities. *Carex testacea* was removed due to the plants having a short lifespan. *Fraxinus pennsylvanica* is no longer planted in the county due to the threat of emerald ash borer.

2016

In the 2016 manual, the Bureau again reduced the list of acceptable species. This list includes herbaceous plants, accent plants, small shrubs, groundcovers, and trees. In this revision, there are 21 species. Of these, 7 (33%) are considered native.

Herbaceous	Small Shrubs	Groundcovers	Trees
<i>Carex morrowii</i>	<i>Cornus sericea</i>	<i>Arctostaphylos uva-ursi</i>	<i>Celtis occidentalis</i>
<i>Carex obnupta</i>	<i>Lavandula angustifolia</i>	<i>Fragaria chiloensis</i>	<i>Gleditsia triacanthos</i> var. <i>inermis</i>
<i>Iris douglasiana</i>	<i>Nandina domestica</i>	<i>Mahonia repens</i>	<i>Nyssa sylvatica</i>
<i>Juncus patens</i>	<i>Spiraea japonica</i>	<i>Rubus calycinoides</i>	<i>Prunus virginiana</i>
<i>Liriope muscari</i>			<i>Quercus bicolor</i>
			<i>Quercus shumardii</i>
			<i>Rhamnus purshiana</i>
			<i>Zelkova serrata</i>

Table 3. “Public Stormwater Facility Plant List (including Green Streets and Basins)” published in the 2016 Stormwater Management Manual. Cultivar names have been omitted. New additions are shown in bold, and the “herbaceous plants” and “accent plants” categories have been merged.

Compared to 2014, 13 species have been removed (*Acer campestre*, *Betula jacquemontii*, *Camassia leichtlinii*, *C. quamash*, *Carex densa*, *Deschampsia cespitosa*, *Euonymus japonicus*, *Helictotrichon sempervirens*, *Iris tenax*, *Koelreuteria paniculata*, *Mahonia nervosa*, *Spiraea betulifolia*, *S. densiflora*), and 6 have been added (with *Lavandula angustifolia* and *Gleditsia triacanthos* returning to the list).

Maples such as *Acer campestre* are no longer approved for planting in right-of-way facilities due to their overrepresentation in the urban forests of Portland. *Helictotrichon sempervirens* was removed after the species was found to be temperamental and short-lived. It was also found that some cultivars of *Deschampsia cespitosa* do not thrive with inundation, and ornamental grasses may be confused with weedy invasive species and accidentally removed by maintenance crews. As of this revision, no grasses remain on the list.

2020

The 2020 manual has a slightly longer plant list than the 2016 revision. It contains herbaceous plants (4 species), accent plants (4 species), small shrubs (5 species), groundcovers (3 species), and trees (7 species). Of the 23 species approved in 2020, 39% are considered native.

Herbaceous	Small Shrubs	Groundcovers	Trees
<i>Camassia leichtlinii</i>	<i>Cornus sericea</i>	<i>Arctostaphylos uva-ursi</i>	<i>Celtis occidentalis</i>
<i>Camassia quamash</i>	<i>Lavandula angustifolia</i>	<i>Fragaria chiloensis</i>	<i>Gleditsia triacanthos</i> var. <i>inermis</i>

<i>Carex morrowii</i>	<i>Mahonia repens</i>	<i>Rubus calycinoides</i>	<i>Nyssa sylvatica</i>
<i>Carex obnupta</i>	<i>Nandina domestica</i>		<i>Quercus bicolor</i>
<i>Iris douglasiana</i>	<i>Spiraea japonica</i>		<i>Quercus shumardii</i>
<i>Juncus patens</i>			<i>Rhamnus purshiana</i>
<i>Liriope muscari</i>			<i>Zelkova serrata</i>
<i>Narcissus spp.</i>			

Table 4. “Plant List for Vegetated Stormwater Facilities (Green Streets)” published in the 2020 Stormwater Management Manual. Cultivar names have been omitted. New additions are shown in bold, and the “herbaceous plants” and “accent plants” categories have been merged.

One species was eliminated from the list (*Prunus virginiana*), and three were added (with *Camassia leichtlinii* and *Camassia quamash* returning to the list). *Prunus virginiana* was removed due to maintenance concerns around black knot fungus.

Gresham

According to Karen Bromley, Environmental Specialist of the DES Watershed Division, the most commonly planted species within right-of-way stormwater facilities include *Carex obnupta*, *Juncus patens*, *Liriope muscari*, *Mahonia aquifolium*, *Mahonia repens*, and *Spiraea bumalda* (*S. japonica*). There have been additional experiments with species such as *Pennisetum alopecuroides*, *Rudbeckia fulgida*, and *Salix purpurea*.

The City of Gresham’s SWMM was collated in 2018. Their right-of-way species list includes 22 species of herbaceous plants, small shrubs/groundcovers, and trees. Of the 19 species, 10 (53%) are native.

Herbaceous	Small Shrubs/Groundcover	Trees
<i>Camassia leichtlinii</i>	<i>Arctostaphylos uva-ursi</i>	<i>Acer campestre</i>
<i>Camassia quamash</i>	<i>Fragaria chiloensis</i>	<i>Celtis occidentalis</i>
<i>Carex densa</i>	<i>Mahonia aquifolium</i>	<i>Ginkgo biloba</i>
<i>Carex glauca</i>	<i>Mahonia nervosa</i>	<i>Nyssa sylvatica</i>
<i>Carex morrowii</i>	<i>Mahonia repens</i>	<i>Quercus shumardii</i>
<i>Carex obnupta</i>	<i>Spiraea japonica</i>	
<i>Juncus patens</i>		
<i>Liriope muscari</i>		

Table 5. “Stormwater Facility Plant List (ROW Public Improvements)” published by the City of Gresham. Cultivar names have been omitted.

Other Municipalities

There are no collections taken from facilities within other municipalities of Multnomah County, as they were not visited by contributors to this study. However, Troutdale builds and maintains vegetated right-of-way stormwater facilities in areas with newer construction. Troutdale follows the planting list featured in the Stormwater Management Manual published by the City of Portland.

Fairview also constructs vegetated right-of-way stormwater facilities in the form of “street-level stormwater planters.” Fairview originally planted according to the Portland SWMM but switched to the Gresham planting list sometime before 2021.

DISCUSSION

In total, a baseline of 55 species have been regularly seeded or planted within right-of-way stormwater facilities in Portland since 2008. Further, 22 species are regularly planted in similar facilities within Gresham. These numbers are mirrored by the smaller municipalities of the county. However, the number of species that have been purposefully placed in right-of-way stormwater facilities is far higher when considering plantings that predate established lists, or species installed through small-scale agency experimentation.

Plants installed by the community or local homeowners cannot be discounted. Although infrequent and discouraged, neighboring residents may express a sense of ownership of these facilities and landscape them to suit their aesthetics. Woody species installed by homeowners are usually conspicuous and can be easily disqualified. However, forb species may be more difficult to distinguish. For instance, when a forb is discovered in both a facility and an adjacent garden, determining whether the species migrated from the garden into the facility, or if both locations were seeded simultaneously, can pose a challenge.

Overall, there may be hundreds of such installed species that are extant within right-of-way stormwater facilities. As a result, it may be difficult to determine if an individual plant within a facility is a true pioneer. The collector must use context clues, such as the composition of neighboring gardens or natural areas, and the exact placement and size of the individual, in their judgment. These variables are useful when discerning anthropogenic placement.

CATALOG OF WEEDY AND PIONEERING FLORA

Stormwater facility asset tags have been included for locality purposes. iNaturalist observation identification numbers have been added if there is a corresponding entry. Species marked with an asterisk (*) are cases where qualification may be questionable, and the “Notes” section should be consulted. Classification as “native” or “introduced” follows Christy et al. (2009) when applicable.

Herbaria where the specimens have been deposited are noted. These abbreviations are as follows: HPSU = Portland State University; SNP = Sound Native Plants

VASCULAR PLANTS

Name	Collection	Notes
Aizoaceae		1 species
<i>Delosperma cooperi</i> * Pink trailing iceplant	L. M. Gerry 428 10/16/2022 iNat: 139084385 Asset: ANV449 ANV450 Herbaria: HPSU	Introduced. Species known from two streetside facilities. One flowering specimen collected. Potentially planted but surmised by Smith to have colonized by cutting or seed from an adjacent yard.

Amaranthaceae		4 species
<i>Amaranthus caudatus</i> Love-lies bleeding	L. M. Gerry 500 8/9/2023 Asset: APA715 APA714 iNat: 177519205 Herbaria: HPSU	Introduced. Species known from one streetside facility, where two individuals were noted to be growing near the edge of the swale. Certainly an ornamental cultivar. One flowering specimen collected.
<i>Amaranthus retroflexus</i> Redroot pigweed	L. M. Gerry 505 8/17/2023 Asset: APQ630 APQ631 Herbaria: HPSU	Native. Species exceedingly common in streetside facilities. Ubiquitous in summer. One flowering specimen collected.
<i>Amaranthus cruentus</i> Red amaranth	L. M. Gerry 504 8/15/2023 Asset: AQZ249 AQZ250 iNat: 178530070 Herbaria: HPSU	Introduced. Species known from one streetside facility, located between semi-permanent encampments on a highly trafficked part of SE Foster Road. One fruiting specimen collected.
<i>Chenopodium album</i> Lamb's quarters	L. M. Gerry 331 7/21/2022 Asset: AQS596 AQS597 Herbaria: HPSU	Introduced. Species very common in streetside facilities, particularly in summer. One flowering specimen collected.
Amaryllidaceae		4 species
<i>Allium cepa</i> Onion	L. M. Gerry 493 7/22/2023 Asset: ASK926 ASK925 Herbaria: HPSU	Introduced. Species known from one streetside facility. One individual was found growing at the base of an installed tree, probably disseminated from a nearby garden. One flowering specimen collected.
<i>Allium cristophii</i> Star of Persia	L. M. Gerry 466 5/8/2023 Asset: APZ308 APZ307 iNat: 160625119 Herbaria: HPSU	Introduced. Species known from one streetside facility, where three individuals were noted. One specimen collected with immature flowers.
<i>Allium vineale</i> Wild garlic	L. M. Gerry 471 6/5/2023 Asset: ANN424 ANN423 iNat: 165769059 Herbaria: HPSU	Introduced. Species occasional in streetside facilities. One specimen collected with immature flowers.
<i>Galanthus nivalis</i> Common snowdrop	L. M. Gerry 457 3/21/2023 Asset: ANK582 ANK581 iNat: 151872632 Herbaria: HPSU	Introduced. Species known from one streetside facility where three individuals were noted. One flowering specimen collected.

Apiaceae		3 species
<i>Anthriscus caucalis</i> Burr chervil	L. M. Gerry 240 4/19/2022 Collected near 6600 NE Alderwood Rd. Herbaria: HPSU	Introduced. Species very common in streetside facilities, specifically in spring. One flowering specimen collected.
<i>Daucus carota</i> Wild carrot	L. M. Gerry 320 7/11/2022 Asset: AQM126 AQM127 Herbaria: HPSU	Introduced. Species exceedingly common in streetside facilities. One flowering specimen collected.
<i>Foeniculum vulgare</i> Wild fennel	L. M. Gerry 410 9/9/2022 Asset: APY520 APY521 iNat: 134367833 Herbaria: SNP	Introduced. Species uncommon in streetside facilities. One flowering specimen collected.
Asparagaceae		2 species
<i>Hyacinthoides hispanica</i> Spanish bluebells	E. Savoy 1 4/8/2022 Asset: ANT838 ANT841 iNat: 110693675 Herbaria: HPSU - L. M. Gerry 261 5/19/2022 Asset: ANN218 ANN219 Herbaria: HPSU	Introduced. Species common in streetside facilities. Two flowering specimens were collected: one with white flowers (Savoy), and one with dark purple (Gerry). These are likely hybrid cultivars.
<i>Muscari armeniacum</i> Grape hyacinth	L. M. Gerry 229 4/12/2022 Collected near 6339 NE Sandy Blvd. Herbaria: HPSU	Introduced. Species uncommon in streetside facilities, but specifically known from this area of Sandy Boulevard. One flowering specimen collected, likely a hybrid cultivar.
Asteraceae		36 species
<i>Achille millefolium</i> Yarrow	L. M. Gerry 360 7/28/2022 Asset: ARQ014 ARQ013 Herbaria: HPSU	Native. Species common in streetside facilities where it is probably disseminated through native seed mixes. It often persists as the species is not targeted for removal during weed maintenance. One flowering specimen collected.

<p><i>Anthemis cotula</i> Stinking chamomile</p>	<p>L. M. Gerry 328 7/11/2022 Asset: AQM124 AQM125 Herbaria: HPSU - L. M. Gerry 479 6/26/2023 Asset: ATL657 ATL633 iNat: 169528151 Herbaria: HPSU</p>	<p>Introduced. Species uncommon in streetside facilities. Two flowering specimens collected.</p>
<p><i>Arctium minus</i> Lesser burdock</p>	<p>L. M. Gerry 513 9/11/2023 Asset: ARC356 ARC357 iNat: 187446885 Herbaria: HPSU</p>	<p>Introduced. Species known from one streetside facility. One fruiting specimen collected.</p>
<p><i>Artemisia vulgaris*</i> Common mugwort</p>	<p>L. M. Gerry 526 10/26/2023 Asset: ANV224 ANV225 Herbaria: HPSU - L. M. Gerry 533 11/21/2023 Asset: ARQ238 ARQ239 iNat: 191730026 Herbaria: HPSU</p>	<p>Introduced. Species uncommon in streetside facilities. Specimen 526 was a small plant with immature buds and was not considered to have been cultivated.</p> <p>Specimen 533 was collected from a facility overrun with mugwort. and may have been planted initially as other obvious ornamentals (such as <i>Tagetes erecta</i>) were observed in the same facility.</p>
<p><i>Bellis perennis</i> Lawn daisy</p>	<p>L. M. Gerry 463 5/4/2023 Asset: ANL599 ANL598 iNat: 159716506 Herbaria: HPSU</p>	<p>Introduced. Species known from one streetside grassy swale. One flowering specimen collected.</p>
<p><i>Centaurea ×moncktonii</i> Meadow knapweed</p>	<p>L. M. Gerry 419 9/27/2022 Asset: ANS029 ANS015 Herbaria: HPSU</p>	<p>Introduced. Species known from one streetside facility. The plant was deeply rooted in the concrete seam from where the facility meets the sidewalk. One flowering specimen collected.</p> <p>Oregon Noxious Weed, List B.</p>
<p><i>Centaurea stoebe</i> Spotted knapweed</p>	<p>L. M. Gerry 417 9/19/2022 Asset: ARQ014 ARQ013 iNat: 135695801 Herbaria: SNP</p>	<p>Introduced. Species known from one streetside facility. One flowering specimen collected.</p> <p>Oregon Noxious Weed, Lists B and T.</p>

<i>Chondrilla juncea</i> Rush skeletonweed	L. M. Gerry 403 8/31/2022 Asset: ANQ762 ANQ764 iNat: 133140160 Herbaria: SNP	Introduced. Species known from two streetside facilities. One flowering specimen collected. Oregon Noxious Weed, Lists B and T.
<i>Cichorium intybus</i> Common chicory	L. M. Gerry 319 7/11/2022 Asset: AQM126 AQM127 Herbaria: HPSU	Introduced. Species exceedingly common in streetside facilities, as deep roots persist through maintenance cycles. One flowering specimen collected.
<i>Cirsium arvense</i> Canada thistle	L. M. Gerry 339 7/21/2022 Collected near NE 147th Ave. and Fremont St. Herbaria: SNP	Introduced. Species common in streetside facilities, but populations are specifically targeted for removal. However, deep rhizomes persist through maintenance. One flowering specimen collected. Oregon Noxious Weed, List B.
<i>Cirsium vulgare</i> Bull thistle	L. M. Gerry 371 8/4/2022 Collected near SW 41st St. and SW Eastwood Ave. iNat: 129510345 Herbaria: SNP	Introduced. Species uncommon in streetside facilities. One flowering specimen collected. Oregon Noxious Weed, List B.
<i>Coreopsis lanceolata</i> * Lanceleaf coreopsis	L. M. Gerry 434 10/25/2022 Asset: APZ101 APZ100 iNat: 140001883 Herbaria: HPSU	Native. Species known from two streetside facilities. These are likely waif populations that were intentionally disseminated through seed, as both observations were found in association with other species known from wildflower seed mixes (such as <i>Gaillardia pulchella</i> , see <i>L. M. Gerry 433</i>). One specimen collected with an immature bud and desiccated flowers.
<i>Coreopsis tinctoria</i> * Plains coreopsis	L. M. Gerry 368 8/2/2022 Collected near NE 112th Ave. and NE Holman St. iNat: 129227866 Herbaria: HPSU	Native. Species uncommon in streetside facilities, and it is specifically known from the assets around Candlewood Suites. These are likely waif populations that were intentionally disseminated through seed. One flowering specimen collected.
<i>Crepis setosa</i> Bristly hawksbeard	L. M. Gerry 326 7/11/2022 Asset: ANN415 ANN416 iNat: 125853520 Herbaria: HPSU	Introduced. Species occasional in stormwater facilities. One flowering specimen collected. Other <i>Crepis</i> species may be overlooked.

<p><i>Echinops bannaticus*</i> Blue globe-thistle</p>	<p>L. M. Gerry 533 11/21/2023 Asset: ANS041 ANS042 iNat: 190751366 Herbaria: HPSU</p>	<p>Introduced. Species only known from one streetside facility, where Wood first observed the population in August 2022. Plants were flowering and common in neighboring yard, with 3-4 occurring within the facility. Uncollected at time of initial observation.</p> <p>The population was later visited and found to be extant, but no longer within facility. Representative collection taken from right-of-way. Flowering stems senesced at time of collection.</p>
<p><i>Erigeron canadensis</i> Horseweed</p>	<p>L. M. Gerry 369a/369b 8/2/2022 Asset: ANK956 ANK943 Herbaria: HPSU</p>	<p>Native. Species very common in streetside facilities during summer. Two flowering specimens collected.</p>
<p><i>Gaillardia pulchella*</i> Indian blanket</p>	<p>L. M. Gerry 386 8/18/2022 Asset: APM581 APM582 iNat: 131404641 Herbaria: HPSU - L. M. Gerry 433 10/25/2022 Asset: APZ101 APZ100 iNat: 140001682 Herbaria: HPSU</p>	<p>Native. Species uncommon in streetside facilities. Specimen 433 was found in association <i>Coreopsis lanceolata</i> (L. M. Gerry 434), which suggests it was disseminated in a wildflower seed mix.</p> <p>Specimen 386, however, was judged to perhaps be naturally pioneering from the neighboring property.</p>
<p><i>Gnaphalium uliginosum</i> Marsh cudweed</p>	<p>L. M. Gerry 362a/362b 8/1/2022 iNat: 129076147 Herbaria: HPSU</p>	<p>Introduced. Species uncommon in streetside facilities. Two flowering specimens collected.</p>
<p><i>Helianthus annuus</i> Common sunflower</p>	<p>L. M. Gerry 404 9/1/2022 Asset: APN407 APN406 Herbaria: HPSU</p>	<p>Native. Species uncommon in streetside facilities. The collected specimen was likely germinated from birdseed due to proximity of <i>Panicum miliaceum</i> (L. M. Gerry 374). One flowering specimen collected.</p>
<p><i>Hypochaeris glabra</i> Smooth cat's-ear</p>	<p>L. M. Gerry 254 4/29/2022 Asset: ANW215 ANL166 iNat: 113558044 Herbaria: HPSU</p>	<p>Introduced. Species known from one streetside facility, but likely overlooked and conflated with the more common <i>H. radicata</i>. One flowering specimen collected.</p>

<i>Hypochaeris radicata</i> Hairy cat's-ear	L. M. Gerry 271 5/24/2022 Collected near NE 100th Ave. and NE Glisan St. Herbaria: HPSU	Introduced. Species ubiquitous in streetside facilities, and one of the most commonly encountered weeds. One flowering specimen collected.
<i>Jacobaea vulgaris</i> Tansy ragwort	L. M. Gerry 323 7/11/2022 Asset: AQM126 AQM127 Herbaria: SNP	Introduced. Species occasional in streetside facilities, but rarely persists to flower. One flowering specimen collected. Oregon Noxious Weed, Lists B and T.
<i>Lactuca serriola</i> Prickly lettuce	L. M. Gerry 373 8/10/2022 Asset: APV007 APV008 Herbaria: HPSU	Introduced. Species exceedingly common in streetside facilities. Ubiquitous in summer. One flowering specimen collected.
<i>Lapsana communis</i> Nipplewort	L. M. Gerry 287 6/8/2022 Asset: APA842 APA841 Herbaria: SNP	Introduced. Species ubiquitous in streetside facilities, and a candidate for the most commonly encountered weed. One flowering specimen collected.
<i>Leontodon saxatilis</i> Hairy hawkbit	L. M. Gerry 294 6/17/2022 (subsp. <i>saxatilis</i>) Collected near 3082 SW Royal Ave. iNat: 122213978 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities, but perhaps overlooked. One flowering specimen collected.
<i>Leucanthemum vulgare</i> Oxeye daisy	L. M. Gerry 325a/325b 7/11/2022 Asset: AQM124 AQM125 Herbaria: HPSU	Introduced. Species common in streetside facilities. Two flowering specimens collected.
<i>Mycelis muralis</i> Wall lettuce	L. M. Gerry 389 8/18/2022 Asset: AQS596 AQS597 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities. One flowering specimen collected.
<i>Pseudognaphalium luteoalbum</i> Jersey cudweed	L. M. Gerry 380a/380b 8/7/2022 Asset: AQS596 AQS597 iNat: 129886124 Herbaria: HPSU	Introduced. Species common in streetside facilities during summer. Two flowering specimens collected.
<i>Pseudognaphalium stramineum</i> Cottonbatting plant	L. M. Gerry 340 7/21/2022 Asset: APV065 APV066 iNat: 127296175 Herbaria: HPSU	Native. Species uncommon in streetside facilities. One flowering specimen collected.

<i>Senecio vulgaris</i> Common groundsel	L. M. Gerry 227 4/8/2022 Collected near 3900 NE Sandy Blvd. Herbaria: HPSU	Introduced. Species ubiquitous in streetside facilities, and one of the most encountered weeds. One flowering specimen collected.
<i>Sonchus asper</i> Prickly sow-thistle	L. M. Gerry 259 5/19/2022 Collected near 13345 SE Ramona St. Herbaria: HPSU	Introduced. Species common in streetside facilities. One flowering specimen collected. <i>Sonchus arvensis</i> is perhaps overlooked.
<i>Sonchus oleraceus</i> Common sow-thistle	L. M. Gerry 376a/376b 8/10/2022 Asset: APN407 APN406 Herbaria: HPSU	Introduced. Species common in streetside facilities. Two flowering specimens collected.
<i>Tanacetum parthenium</i> Feverfew	L. M. Gerry 356 7/28/2022 Asset: APV667 APV668 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities. One flowering specimen collected.
<i>Tanacetum vulgare</i> Common tansy	L. M. Gerry 402 8/31/2022 Asset: ANQ734 ANQ733 iNat: 133140132 Herbaria: SNP	Introduced. Species uncommon in streetside facilities. One flowering specimen collected.
<i>Taraxacum officianale</i> Dandelion	L. M. Gerry 219 3/29/2022 Collected near 8257 NE Schuyler St. Herbaria: HPSU	Introduced. Species ubiquitous in streetside facilities, and one of the most encountered weeds. One flowering specimen collected.
<i>Tragopogon pratensis</i> Meadow salsify	L. M. Gerry 247 4/26/2022 Collected near 11200 NE Holman St. iNat: 112977539 Herbaria: HPSU	Introduced. Species occasional in streetside facilities. One flowering specimen collected. Perhaps <i>Tragopogon dubius</i> is overlooked.
Boraginaceae		2 species
<i>Borago officinalis</i> Borage	L. M. Gerry 494 7/22/2023 Asset: ASK926 ASK925 iNat: 175312689 Herbaria: HPSU	Introduced. Species only known from one streetside facility. One flowering specimen collected.

<i>Myosotis discolor</i> Changing forget-me-not	L. M. Gerry 231a/231b 4/19/2022 iNat: 112059953 Herbaria: HPSU	Introduced. Species occasionally found in streetside facilities during spring. Two flowering specimens collected.
Brassicaceae		13 species
<i>Arabidopsis thaliana</i> Mouse-ear cress	L. M. Gerry 459 3/22/2023 Asset: ARV850 ARV851 iNat: 151941527 Herbaria: HPSU	Introduced. Species exceedingly common in streetside facilities during spring. One flowering specimen collected.
<i>Barbarea vulgaris</i> Wintercress	L. M. Gerry 257 5/3/2022 Collected near 13600 NE Whitaker Way Herbaria: HPSU	Introduced. Species uncommon in streetside facilities. One flowering specimen collected.
<i>Brassica rapa</i> Field mustard	L. M. Gerry 239 4/19/2022 Collected near 6600 NE Alderwood Rd. Herbaria: HPSU - L. M. Gerry 427 10/10/2023 Collected near SW Tegart Ave. and SW 38th St. iNat: 138319179 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities. Two flowering specimens collected. <i>Brassica nigra</i> may be overlooked.
<i>Capsella bursa-pastoris</i> Shepherd's purse	L. M. Gerry 223 4/8/2022 Asset: ANU021 ANU020 Herbaria: HPSU	Introduced. Species very common in streetside facilities during spring. One flowering specimen collected.
<i>Cardamine hirsuta</i> Hairy bittercress	L. M. Gerry 226 4/8/2022 Collected near 3900 NE Sandy Blvd. Herbaria: HPSU - L. M. Gerry 395a/395b 9/27/2022 Collected near SW Pleasant View Dr. and SW 28th Ter. Herbaria: HPSU	Introduced. Species ubiquitous in streetside facilities, and one of the most encountered weeds during spring. Three flowering specimens collected. Perhaps the native <i>Cardamine oligosperma</i> is overlooked.

<i>Diploaxis tenuifolia</i> Perennial wall-rocket	L. M. Gerry 435 10/25/2022 Collected near NE Alberta St. and NE 78th Ave. Herbaria: HPSU	Introduced. Species known from only one streetside facility, but perhaps overlooked. One flowering specimen collected.
<i>Iberis umbellata</i> Globe candytuft	E. Slebodnik 1 8/2/2023 Collected on NE 47th Ave between NE Columbia Blvd. and NE Crystal Ln. Herbaria: HPSU	Introduced. Species known from only one streetside facility, where it was surmised by the collector to have escaped cultivation. One flowering specimen collected.
<i>Lepidium campestre</i> Field pepperweed	L. M. Gerry 321 7/22/2022 Asset: AQM126 AQM127 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities. One flowering specimen collected.
<i>Lepidium virginicum</i> Virginia pepperweed	L. M. Gerry 531 11/19/2023 Asset: AST731 AST732 Herbaria: HPSU - L. M. Gerry 534 12/5/2023 Asset: ARQ412 ARQ411 Herbaria: HPSU	Native. Species uncommon in streetside facilities. Two flowering specimens collected.
<i>Lobularia maritima</i> Sweet alyssum	L. M. Gerry 241 4/19/2022 Collected near 6600 NE Alderwood Rd. iNat: 112171352 Herbaria: HPSU	Introduced. Species known from only one streetside facility, where it was gregarious. Perhaps the population was initially seeded. One flowering specimen collected.
<i>Lunaria annua</i> Annual honesty	L. M. Gerry 414 9/12/2022 Asset: APY510 APY511 Herbaria: HPSU	Introduced. Species known from only one streetside facility. One fruiting specimen collected.
<i>Raphinus sativus</i> Wild radish	L. M. Gerry 387/388 8/18/2022 Asset: AQP098 AQP097 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities. Two flowering specimens collected.

<i>Sisymbrium officianale</i> Hedge mustard	L. M. Gerry 256 5/3/2022 Collected near 13600 NE Whitaker Way Herbaria: HPSU - L. M. Gerry 436 10/25/2022 Asset: APN228 APN227 iNat: 140022128 Herbaria: HPSU	Introduced. Species common in streetside facilities. Two flowering specimens collected.
Cannabaceae		1 species
<i>Cannabis sativa*</i> Marijuana	L. M. Gerry 273 5/27/2022 Collected near 4014 NE 134th Ave. iNat: 118949001 Herbaria: HPSU	Introduced. Species known from only one streetside facility where one small plant was growing amongst common weeds. This is the sole specimen in the collection taken without reproductive features.
Caprifoliaceae		1 species
<i>Dipsacus fullonum</i> Common teasel	L. M. Gerry 361 7/28/2022 Asset: ARQ014 ARQ013 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities, and rare to flower. One flowering specimen collected.
Caryophyllaceae		6 species
<i>Cerastium fontanum</i> Mouse-ear chickweed	L. M. Gerry 250 4/29/2022 Collected near 5417 NE 148th Ave. iNat: 113538257 Herbaria: HPSU	Introduced. Species exceedingly common in streetside facilities. One flowering specimen collected.
<i>Sagina procumbens</i> Procumbent pearlwort	L. M. Gerry 265 5/21/2022 Collected near 8195 N Lombard St. iNat: 118052668 Herbaria: HPSU	Introduced. Species common in streetside facilities. One flowering specimen collected.
<i>Silene coronaria</i> Rose campion	L. M. Gerry 357a/357b 7/28/2022 Asset: APV662 APV661 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities. Two flowering specimens collected.

<i>Silene latifolia</i> White campion	L. M. Gerry 324 7/11/2022 Asset: AQM124 AQM125 Herbaria: HPSU - L. M. Gerry 438 10/26/2022 Asset: ANV216 ANV215 iNat: 140074788 Herbaria: HPSU	Introduced. Species occasional in streetside facilities. Two flowering specimens collected. <i>Silene vulgaris</i> is probably overlooked.
<i>Spergularia rubra</i> Red sandspurry	L. M. Gerry 495 7/25/2023 Asset: ANN489 ANN488 iNat: 174910292 Herbaria: HPSU	Introduced. Species known from only one streetside facility. Due to its small size, it is likely overlooked. One flowering specimen collected.
<i>Stellaria media</i> Chickweed	L. M. Gerry 255 4/28/2022 Collected near 4525 NE 136th Ave. iNat: 113569150 Herbaria: HPSU	Introduced. Species very common in streetside facilities. One flowering specimen collected.
Convolvulaceae		2 species
<i>Calystegia sepium</i> * Hedge bindweed	L. M. Gerry s.n. 7/28/2022 Asset: ARQ014 ARQ013 - R. Kosugi 69 8/8/2023 Collected at BES Stormwater Management Facility near 2777 NE Fremont Dr. Herbaria: HPSU	Introduced. Species uncommon in streetside facilities, but deep rhizomes persist in facilities where it is present. The original specimen was lost before accession. The representative collection by Kosugi was taken from an unqualifying facility.
<i>Convolvulus arvensis</i> Field bindweed	L. M. Gerry 300 6/17/2022 Collected near SW 25th Ct. and SE 190th Dr. Herbaria: SNP	Introduced. Species common in streetside facilities, and deep rhizomes persist through maintenance cycles. One flowering specimen collected. Oregon Noxious Weed, List B.
Crassulaceae		1 species

<i>Sedum spectabile</i> Showy stonecrop	L. M. Gerry 537 12/5/2023 Asset: ANR160 ANR159 Herbaria: HPSU	Introduced. Species known from only one streetside facility, where a single seedling was found growing near the inlet. Certainly seeded from the neighboring succulent garden. A mature inflorescence collected from outside of the facility is included with the specimen. Other ornamental <i>Sedum</i> species have also been observed, but not flowering.
Cucurbitaceae		1 species
<i>Cucurbita pepo</i> Squash	J. Manson 4a/4b 8/25/2023 Asset: AQY028 AQY029 iNat: 180393527 Herbaria: HPSU	Introduced. Species known from only one streetside facility, where it was perhaps growing from a discarded gourd. Two flowering specimens collected.
Cyperaceae		1 species
<i>Cyperus esculentus</i> Yellow nutsedge	L. M. Gerry 412/413 9/9/2022 Asset: APY522 APY523 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities. Two flowering specimens collected.
Euphorbiaceae		4 species
<i>Euphorbia characias</i> Mediterranean spurge	L. M. Gerry 222 4/6/2022 Collected near 4367 Hazelfern Pl. iNat: 110578856 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities. As a popular landscape plant, source populations are almost always visible nearby. One flowering specimen collected.
<i>Euphorbia maculata</i> Spotted spurge	L. M. Gerry 334 7/21/2022 Asset: ARQ422 ARQ421 Herbaria: HPSU	Native. Species exceedingly common in streetside facilities during summer. One flowering specimen collected. <i>Euphorbia glyptosperma</i> is perhaps overlooked.
<i>Euphorbia myrsinites</i> Myrtle spurge	L. M. Gerry 538 2/24/2023 Asset: ANR160 ANR159 Herbaria: HPSU	Introduced. Species known from only one streetside facility, where a single seedling was found growing near the inlet. Certainly seeded from neighboring succulent garden. A mature inflorescence collected from outside of the facility is included with the specimen. Oregon Noxious Weed, List B.
<i>Euphorbia peplus</i> Petty spurge	L. M. Gerry 283 5/31/2022 Asset: ANK518 ANK519 Herbaria: HPSU	Introduced. Species common in streetside facilities. One flowering specimen collected.

Fabaceae		13 species
<i>Acmispon americanus</i> Spanish clover	L. M. Gerry 397 8/30/2022 Collected near NE Holman St. and NE 112th Ave. iNat: 133016028 Herbaria: HPSU	Native. Species uncommon in streetside facilities. One flowering specimen collected.
<i>Lathyrus latifolius</i> Everlasting pea	L. M. Gerry 359 7/28/2022 Asset: ARQ014 ARQ013 Herbaria: SNP	Introduced. Species common in streetside facilities as deep rhizomes persist through maintenance cycles. One flowering specimen collected. Oregon Noxious Weed, List B.
<i>Lotus corniculatus</i> Common bird's-foot-trefoil	L. M. Gerry 364 8/1/2022 Asset: ANM223 ANM224 iNat: 129076054 Herbaria: HPSU	Introduced. Species common in streetside facilities. One flowering specimen collected.
<i>Lotus pedunculatus</i> Greater bird's-foot-trefoil	L. M. Gerry 295 6/17/2022 Collected near 3082 SW Royal Ave. iNat: 122198528 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities, but perhaps conflated with <i>Lotus corniculatus</i> . One flowering specimen collected.
<i>Medicago lupulina</i> Black medick	L. M. Gerry 523 10/16/2023 Asset: AQK340 AQK341 iNat: 187834340 Herbaria: HPSU	Introduced. Species occasional in streetside facilities. One flowering specimen collected.
<i>Melilotus albus</i> White sweet clover	L. M. Gerry 358 7/27/2022 Asset: APT934 ANH470 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities. One flowering specimen collected.
<i>Trifolium arvense</i> Rabbitfoot clover	L. M. Gerry 350 7/25/2022 Asset: AQB017 AQB019 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities. One flowering specimen collected.
<i>Trifolium campestre</i> Hop trefoil	L. M. Gerry 297 6/17/2022 Collected near SW 25th Ct. and SE 190th Dr. iNat: 122235005 Herbaria: HPSU	Introduced. Species occasional in streetside facilities. One flowering specimen collected.

<i>Trifolium pratense</i> Red clover	L. M. Gerry 286 6/8/2022 Asset: APA842 APA841 iNat: 120836876 Herbaria: HPSU	Introduced. Species occasional in streetside facilities. One flowering specimen collected.
<i>Trifolium repens</i> White clover	L. M. Gerry 260 5/19/2022 Asset: ANN218 ANN219 iNat: 117781784 Herbaria: HPSU	Introduced. Species occasional in streetside facilities. One flowering specimen collected. <i>Trifolium hybridum</i> is possibly overlooked.
<i>Vicia americana</i> American vetch	L. M. Gerry 298 6/17/2022 Collected near SW 25th Ct. and SE 190th Dr. iNat: 122235152 Herbaria: HPSU	Native. Species uncommon in streetside facilities. One flowering specimen collected.
<i>Vicia hirsuta</i> Hairy tare	L. M. Gerry 248 4/27/2022 Collected near SW 42nd St. and Tegart Ln. iNat: 113119925 Herbaria: HPSU	Introduced. Species occasional in streetside facilities. One flowering specimen collected.
<i>Vicia sativa</i> Common vetch	L. M. Gerry 252 4/29/2022 Collected near 5417 NE 148th Ave. iNat: 113544055 Herbaria: HPSU	Introduced. Species common in streetside facilities. One flowering specimen collected.
Gentianaceae		1 species
<i>Centaurium erythraea</i> Common centaury	L. M. Gerry 541 12/15/2023 Asset: ANR357 ANR356 iNat: 194044459 Herbaria: HPSU	Introduced. Species known from only one streetside facility. One flowering specimen collected.
Geraniaceae		6 species
<i>Erodium cicutarium</i> Common stork's-bill	L. M. Gerry 235 4/19/2022 Collected near 6600 NE Alderwood Rd. Herbaria: HPSU	Introduced. Species exceedingly common in streetside facilities. One flowering specimen collected.

<i>Erodium moschatum</i> Musk stork's-bill	L. M. Gerry 530 11/14/2023 Collected near NE Shaver ST and NE 131st Pl. iNat: 191037498 Herbaria: HPSU	Introduced. Species known from facilities in the Argay Terrace neighborhood, where it is ubiquitous. One flowering specimen collected.
<i>Geranium dissectum</i> Cut-leaved crane's-bill	L. M. Gerry 236 4/19/2022 Collected near 6600 NE Alderwood Rd. Herbaria: HPSU	Introduced. Species common in streetside facilities. One flowering specimen collected. Perhaps other <i>Geranium</i> species that exhibit similarly dissected leaves are overlooked.
<i>Geranium lucidum</i> Shining geranium	L. M. Gerry 284 6/23/2022 Asset: ARQ262 ARQ263 Herbaria: SNP	Introduced. Species uncommon in streetside facilities. One flowering specimen collected. Oregon Noxious Weed, List B.
<i>Geranium molle</i> Dove's-foot crane's-bill	L. M. Gerry 234 4/19/2022 Collected near 6600 NE Alderwood Rd. Herbaria: HPSU	Introduced. Species common in streetside facilities. One flowering specimen collected.
<i>Geranium robertianum</i> Herb Robert	E. Savoy 2 Collected in Portland 11/16/2023 Herbaria: HPSU	Introduced. Species common in streetside facilities. One flowering specimen collected. Oregon Noxious Weed, List B.
Hypericaceae		1 species
<i>Hypericum perforatum</i> St. John's wort	L. M. Gerry 327 7/11/2022 Asset: ANN415 ANN416 Herbaria: SNP	Introduced. Species occasional in streetside facilities. One flowering specimen collected. Oregon Noxious Weed, List B.
Iridaceae		1 species
<i>Crocus tommasinianus</i> Early crocus	L. M. Gerry 549 2/24/2024 Asset: ANQ730 ANQ729 iNat: 200328902 Herbaria: HPSU	Introduced. Species known from the margin of one streetside facility, where it is certainly spreading from the neighboring garden. One flowering specimen collected.
Juncaceae		1 species
<i>Juncus bufonius</i> Toad rush	L. M. Gerry 309 6/27/2022 Asset: ANK968 ANK969 Herbaria: HPSU	Native. Species uncommon in streetside facilities. One flowering specimen collected.

Lamiaceae		7 species
<i>Lamium amplexicaule</i> Henbit deadnettle	L. M. Gerry 542 1/3/2024 Asset: ANL423 ANL424 iNat: 195790716 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities. One specimen collected with immature flowers.
<i>Lamium purpureum</i> Red deadnettle	L. M. Gerry 228a/228b 4/12/2022 Collected near 6007 NE Stanton St. Herbaria: HPSU	Introduced. Species exceedingly common in streetside facilities during spring. Two flowering specimens collected.
<i>Melissa officianalis</i> Lemon balm	L. M. Gerry 390 8/18/2022 Asset: AQS596 AQS597 Herbaria: HPSU	Introduced. Species occasional in streetside facilities. One flowering specimen collected.
<i>Mentha spicata</i> Spearmint	L. M. Gerry 407/408 9/9/2022 Asset: APY520 APY521 iNat: 134367823	Introduced. Species uncommon in streetside facilities. Two flowering specimens collected. Other exotic mint species are probably overlooked.
<i>Monarda citriodora</i> Lemon beebalm	J. Manson 6 9/19/2023 Asset: ARZ791 ARZ792 iNat: 187724913 Herbaria: HPSU	Introduced. Species only known from one facility. One flowering specimen collected.
<i>Origanum vulgare</i> Oregano	L. M. Gerry 511 8/28/2023 Asset: ANN839 ANN838 Herbaria: HPSU	Introduced. Species known from facilities in the Grant Park neighborhood, where it is relatively common. One seedling was collected from within a facility. A mature inflorescence taken from outside of the facility is included with the specimen.
<i>Prunella vulgaris</i> Common self-heal	L. M. Gerry 307 6/27/2022 Asset: ANK968 ANK969 iNat: 123755287 Herbaria: HPSU	Native. Species uncommon in streetside facilities, but subsp. <i>lanceolata</i> may occasionally be disseminated through native seed mixes. The introduced subsp. <i>vulgaris</i> is also likely present. One flowering specimen collected. Subspecies undetermined.
Malvaceae		1 species

<i>Malva neglecta</i> Dwarf mallow	L. M. Gerry 394 8/18/2022 Asset: AQS601 AQS602 Herbaria: HPSU	Introduced. Species very common in streetside facilities. One flowering specimen collected. Perhaps <i>Malva parviflora</i> is overlooked.
Montiaceae		2 species
<i>Claytonia parviflora</i> Indian lettuce	L. M. Gerry 258 5/12/2022 Collected near 1308 Dekum St. Herbaria: HPSU	Native. Species uncommon in streetside facilities. One flowering specimen collected.
<i>Claytonia perfoliata</i> Spanish lettuce	L. M. Gerry 455 3/20/2023 Asset: ANK555 ANK554 iNat: 151795703 Herbaria: HPSU	Native. Species uncommon in streetside facilities. One flowering specimen collected.
Onagraceae		5 species
<i>Chamaenerion angustifolium</i> Fireweed	L. M. Gerry 416 9/9/2022 Asset: APW144 APW143 Herbaria: HPSU	Native. Species uncommon in streetside facilities. One fruiting specimen collected.
<i>Clarkia amoena</i> Farewell-to-spring	L. M. Gerry 514 9/11/2023 Asset: ANY406 ANY405 iNat: 182861557 Herbaria: HPSU	Native. Species known from only one facility. Two individuals were growing near the inlet, which suggests unintentional seed dissemination. One flowering specimen collected.
<i>Epilobium ciliatum</i> Fringed willowherb	L. M. Gerry 291 6/8/2022 Asset: APA842 APA841 Herbaria: HPSU	Native. Species exceedingly common in facilities during the summer. One flowering specimen collected.
<i>Ludwigia palustris</i> Water purslane	L. M. Gerry 385 8/17/2022 Collected near 3272 SW 33rd St. iNat: 131261420 Herbaria: HPSU	Native. Species known from only one facility. One flowering specimen collected.
<i>Oenothera biennis</i> Common evening primrose	L. M. Gerry 365 8/2/2022 iNat: 129228048 Herbaria: HPSU	Native. Species occasional in streetside facilities. One flowering specimen collected. Perhaps <i>Oenothera villosa</i> is overlooked.
Orobanchaceae		2 species

<i>Orobanche minor</i> Common broomrape	L. M. Gerry 441 11/1/2022 Asset: ANZ692 ANZ693 iNat: 140939065 Herbaria: HPSU	Introduced. Species known from only one facility where a single desiccated specimen was collected. Oregon Noxious Weed, List B.
<i>Parentucellia viscosa</i> Yellow glandweed	L. M. Gerry 322 7/11/2022 Asset: AQM124 AQM125 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities, but particularly found in grassy swales. One flowering specimen collected.
Oxalidaceae		2 species
<i>Oxalis corniculata</i> Creeping woodsorrel	L. M. Gerry 312 6/27/2022 Asset: ANK968 ANK969 Herbaria: HPSU	Introduced. Species common in streetside facilities. One flowering specimen collected.
<i>Oxalis dillenii</i> Slender yellow woodsorrel	L. M. Gerry 302a/302b 6/17/2022 Collected near 3082 SW Royal Ave. Herbaria: HPSU	Introduced. Species common in streetside facilities. Two flowering specimens collected. <i>Oxalis stricta</i> is certainly overlooked.
Papaveraceae		2 species
<i>Eschscholzia californica</i> * California poppy	K. Howarth 1 7/25/2022 Asset: ANV692 ANV691 Herbaria: HPSU	Native. Occasional in streetside facilities where it is probably disseminated through native seed mixes. Populations are probably naturalizing. It often persists as it is not targeted for removal during weed maintenance. One flowering specimen collected.
<i>Papaver rhoeas</i> * Common poppy	K. Howarth 2 7/25/2022 Asset: ANV692 ANV691 iNat: 127911317 Herbaria: HPSU	Introduced. Species known from only one facility, but likely an occasional garden escapee. The representative specimen was found in the same facility as the above collection, possibly indicating dissemination through ornamental wildflower mix. One flowering specimen collected.
Phytolaccaceae		1 species

<i>Phytolacca americana</i> Pokeweed	L. M. Gerry 392 8/19/2022 Asset: APU753 APU754 iNat: 131538230 Herbaria: HPSU - L. M. Gerry 440 10/31/2022 Asset: ARE961 ARE960 Herbaria: SNP	Introduced. Species occasional in streetside facilities, and deep taproots persist through maintenance cycles. Two specimens were collected; specimen 392 was collected with immature buds, specimen 440 with open flowers.
Plantaginaceae		8 species
<i>Antirrhinum majus</i> Common snapdragon	L. M. Gerry 400 8/31/2022 Asset: ARV830 ARV831 iNat: 133140053 Herbaria: HPSU	Introduced. Species only known from one streetside facility, where it was likely seeded from the neighboring community garden. One flowering specimen collected.
<i>Kickxia elatine</i> Sharpleaf cancerwort	L. M. Gerry 399 8/20/2022 Collected near NE Fremont St. and NE 158th Ave. iNat: 133016344 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities. One fruiting specimen collected.
<i>Linaria purpurea</i> Purple toadflax	L. M. Gerry 329 7/21/2022 Asset: APB103 APB104 Herbaria: HPSU - J. Manson 5 9/8/2023 Asset: APN588 APN589 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities. Two flowering specimens collected.
<i>Misopates orontium</i> Weasel's-snout	L. M. Gerry 442/443 11/1/2022 Asset: ANZ700 ANZ701 iNat: 140794115 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities. Two fruiting specimens collected.
<i>Plantago lanceolata</i> Narrowleaf plantain	L. M. Gerry 336 7/21/2022 Asset: ARQ434 ARQ433 Herbaria: HPSU	Introduced. Species ubiquitous in streetside facilities. One flowering specimen collected.

<i>Plantago major</i> Broadleaf plantain	L. M. Gerry 372 8/10/2022 Collected in the Hazelwood neighborhood. Herbaria: HPSU	Introduced. Species occasional in streetside facilities. One flowering specimen collected.
<i>Veronica arvensis</i> Corn speedwell	L. M. Gerry 251 4/29/2022 Asset: ANW213 ANW214 iNat: 113538661 Herbaria: HPSU	Introduced. Species occasional in streetside facilities. One flowering specimen collected.
<i>Veronica perisica</i> Bird's-eye speedwell	L. M. Gerry 249a/249b 4/29/2022 Asset: ANW213 ANW214 iNat: 113536170 Herbaria: HPSU	Introduced. Species occasional in streetside facilities. Two flowering specimens collected.
Poaceae		31 species
<i>Agrostis exarata</i> Spike bentgrass	L. M. Gerry 296 6/17/2022 Collected near SW 25th Ct. and SE 190th Dr. Herbaria: HPSU - L. M. Gerry s.n. 7/2023 Collected in Portland Herbaria: HPSU	Native. Species uncommon in streetside facilities, where it may be disseminated through native seed mixes. Two flowering specimens collected.
<i>Agrostis stolonifera</i> Creeping bent	L. M. Gerry 483 7/5/2023 Asset: ANP042 ANP043 Herbaria: SNP	Introduced. Species common in streetside facilities. One flowering specimen collected.
<i>Aira caryophyllea</i> Silver hairgrass	L. M. Gerry 282a/282b 5/31/2022 Collected near 5937 SE 104th Ave. Herbaria: HPSU	Introduced. Species common in streetside facilities. Two flowering specimens collected.
<i>Alopecurus geniculatus</i> Water foxtail	L. M. Gerry 266 5/23/2022 Collected near 4104 SW Mawcrest Ave. iNat: 118455946 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities. One flowering specimen collected. This species is included in the BES seed mix; however, the representative specimen was collected in Gresham.

<p><i>Alopecurus pratensis</i> Meadow foxtail</p>	<p>L. M. Gerry 232 4/19/2022 Collected near 7001 82nd Ave. iNat: 112059790 Herbaria: SNP</p>	<p>Introduced. Species uncommon in streetside facilities. One flowering specimen collected.</p>
<p><i>Anthoxanthum odoratum</i> Sweet vernal grass</p>	<p>L. M. Gerry 267 5/23/2022 Collected near 4104 SW Mawrcrest Ave. iNat:118432180 Herbaria: HPSU</p>	<p>Introduced. Species occasional in streetside facilities. One flowering specimen collected.</p>
<p><i>Arrhenatherum elatius</i> Tall oatgrass</p>	<p>L. M. Gerry 484 7/5/2023 Asset: ANP042 ANP043 Herbaria: HPSU</p>	<p>Introduced. Species uncommon in streetside facilities. One flowering specimen collected.</p>
<p><i>Avena fatua</i> Wild oats</p>	<p>L. M. Gerry 292 6/8/2022 Asset: APA842 APA841 Herbaria: HPSU</p>	<p>Introduced. Species uncommon in streetside facilities. One flowering specimen collected.</p>
<p><i>Bromus diandrus</i> Ripgut brome</p>	<p>L. M. Gerry 225 4/8/2022 Collected near 3900 NE Sandy Blvd. Herbaria: HPSU</p>	<p>Introduced. Species common in streetside facilities. One flowering specimen collected.</p>
<p><i>Bromus hordeaceus</i> Soft chess</p>	<p>L. M. Gerry 295a/295b 6/17/2022 Collected near SW 25th Ct. and SE 190th Dr. Herbaria: HPSU - L. M. Gerry 375a/375b 8/10/2022 Asset: APN407 APN406 Herbaria: HPSU</p>	<p>Introduced. Species common in streetside facilities. Four flowering specimens collected. Perhaps conflated with <i>Bromus commutatus</i>.</p>

<i>Bromus sitchensis</i> Alaska brome	L. M. Gerry 280 5/31/2022 (var. <i>carinatus</i>) Asset: ANK518 ANK519 iNat: 119603696 Herbaria: HPSU - L. M. Gerry 432 10/21/2022 Asset: APN237 APN238 Herbaria: HPSU	Native. Species occasional in streetside facilities. Two flowering specimens collected.
<i>Bromus sterilis</i> Poverty brome	L. M. Gerry 294 6/17/2022 Collected near SW 25th Ct. and SE 190th Dr. Herbaria: HPSU	Introduced. Species common in streetside facilities. One flowering specimen collected.
<i>Bromus tectorum</i> Cheatgrass	L. M. Gerry 270 5/24/2022 Asset: ANM216 ANM217 iNat: 118546179 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities. One flowering specimen collected.
<i>Dactylis glomerata</i> Orchard grass	L. M. Gerry 237 4/19/2022 Collected near 6600 NE Alderwood Rd. iNat: 112567150 Herbaria: HPSU	Introduced. Species common in streetside facilities. One flowering specimen collected.
<i>Digitaria sanguinalis</i> Hairy crabgrass	L. M. Gerry 333 7/21/2022 Asset: ARQ422 ARQ421 Herbaria: HPSU	Introduced. Species exceedingly common in streetside facilities during summer. One flowering specimen collected.
<i>Echinochloa crus-galli</i> Barnyard grass	J. Savoie 1 7/21/2022 Asset: ARQ434 ARQ433 Herbaria: HPSU	Introduced. Species common in streetside facilities during summer. One flowering specimen collected.
<i>Elymus repens</i> Quackgrass	L. M. Gerry 415 9/12/2022 Asset: APX321 APX324 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities. One flowering specimen collected.
<i>Festuca rubra</i> Red fescue	L. M. Gerry 482 7/5/2023 Asset: ANP042 ANP043 iNat: 171227217 Herbaria: HPSU	Native. Species uncommon in streetside facilities. One flowering specimen collected.

<i>Holcus lanatus</i> Common velvet grass	L. M. Gerry 303 6/17/2022 Collected near SW 25th Ct. and SE 190th Dr. Herbaria: HPSU	Introduced. Species common in streetside facilities. One flowering specimen collected.
<i>Hordeum murinum</i> Wall barley	L. M. Gerry 269 5/24/2022 Asset: ANM216 ANM217 Herbaria: HPSU - L. M. Gerry 279 5/31/2022 Asset: ANK518 ANK519 iNat: 119624995 Herbaria: HPSU	Introduced. Species common in streetside facilities. Two flowering specimens collected.
<i>Lolium perenne</i> Annual ryegrass	L. M. Gerry 268 5/24/2022 (subsp. <i>multiflorum</i>) Asset: ANM216 ANM217 iNat: 118545926 Herbaria: HPSU - L. M. Gerry 379 8/14/2022 (subsp. <i>perenne</i>) Collected near 10421 SE Knight St. iNat: 131013246 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities. Two flowering specimens collected. Both subsp. <i>multiflorum</i> and subsp. <i>perenne</i> have been collected.
<i>Nassella tenuissima</i> Mexican feathergrass	L. M. Gerry 508 8/28/2023 Asset: AQY195 AQY194 iNat: 180640608 Herbaria: HPSU	Introduced. Species known from one streetside facility. One immature specimen was collected growing out of the concrete curb of the facility. A mature inflorescence taken from outside of the facility is included with the specimen.
<i>Panicum capillare</i> Witchgrass	L. M. Gerry 338 7/14/2022 Asset: APV007 APV008 iNat: 126300360 Herbaria: HPSU	Introduced. Species exceedingly common in streetside facilities during summer. One flowering specimen collected.
<i>Panicum miliaceum</i> Proso millet	L. M. Gerry 374 8/10/2022 Asset: APN407 APN406 iNat: 130314659 Herbaria: HPSU	Introduced. Species known from one streetside facility. Specimen likely germinated from birdseed due to proximity of <i>Helianthus annuus</i> (L. M. Gerry 404). One flowering specimen collected.

<i>Poa annua</i> Annual bluegrass	L. M. Gerry 224 4/8/2022 Asset: ANU021 ANU020 Herbaria: HPSU	Introduced. Species ubiquitous in streetside facilities during spring. One flowering specimen collected.
<i>Poa bulbosa</i> Bulbous bluegrass	L. M. Gerry 253 4/29/2022 Asset: ANW213 ANW214 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities. One flowering specimen collected.
<i>Poa compressa</i> Canada bluegrass	L. M. Gerry 487a/487b 7/5/2023 iNat: 171256412 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities. Two flowering specimens collected. Specimens rooted in concrete curb between the facility and the sidewalk.
<i>Poa pratensis</i> Kentucky bluegrass	L. M. Gerry 233 4/19/2022 Collected near 7001 82nd Ave. iNat: 112059902 Herbaria: HPSU	Introduced. Species common in streetside facilities. One flowering specimen collected.
<i>Setaria viridis</i> Green foxtail	L. M. Gerry 370 8/4/2022 Collected near SW 38th St. and SW Snowberry Ave. iNat: 129510311 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities. One flowering specimen collected.
<i>Vulpia bromoides</i> Brome fescue	J. Manson 3 7/5/2023 Asset: ANP042 ANP043 iNat: 171227078 Herbaria: HPSU	Introduced. Species common in streetside facilities. One flowering specimen collected.
<i>Vulpia myuros</i> Rattail fescue	L. M. Gerry 278a/278b 5/24/2022 Asset: ANK518 ANK519 Herbaria: HPSU - L. M. Gerry s.n. 5/2023 Collected in Portland Herbaria: HPSU	Introduced. Species common in streetside facilities. Three flowering specimens collected.
Polemoniaceae		1 species

<i>Gilia capitata</i> Bluehead gilia	L. M. Gerry 354/355 6/27/2022 Collected near SE Ramona St. and 122nd Ave. iNat: 128244053 Herbaria: HPSU	Native. Species uncommon in streetside facilities, where it is possibly disseminated through native seed mixes. Two flowering specimens collected.
Polygonaceae		6 species
<i>Fallopia convolvulus</i> Black-bindweed	L. M. Gerry 492 7/17/2023 Asset: ASN599 ASN601 iNat: 173514795 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities. One fruiting specimen collected.
<i>Persicaria maculosa</i> Lady's thumb	L. M. Gerry 332 7/21/2022 Asset: AQS596 AQS597 Herbaria: HPSU - L. M. Gerry 337 7/21/2022 Asset: ARQ434 ARQ433 Herbaria: HPSU - L. M. Gerry 532 11/19/2023 Asset: AST731 AST732 iNat: 191518011 Herbaria: HPSU	Introduced. Species occasional to common in streetside facilities. Three flowering specimens collected. <i>Persicaria lapathifolia</i> is perhaps overlooked.
<i>Polygonum aviculare</i> Prostrate knotweed	L. M. Gerry 274 5/27/2022 Collected near 4014 NE 134th Ave. iNat: 118967052 Herbaria: HPSU - L. M. Gerry 384 8/17/2022 Collected near 4273 SW Mawcrest Ave. iNat: 131261305 Herbaria: HPSU	Introduced. Species very common in streetside facilities. Two flowering specimens collected.
<i>Rumex acetosella</i> Sheep's sorrel	L. M. Gerry 238 4/19/2022 Collected near 6600 NE Alderwood Rd. Herbaria: HPSU	Introduced. Species common in streetside facilities. Deep rhizomes persist through maintenance cycles. One flowering specimen collected.

<i>Rumex crispus</i> Curly dock	L. M. Gerry 289 6/8/2022 Asset: APA842 APA841 Herbaria: HPSU - L. M. Gerry 308a/308b 6/27/2022 Asset: ANK968 ANK969 Herbaria: HPSU	Introduced. Species common in streetside facilities. Deep taproots persist through maintenance cycles. Three flowering specimens collected.
<i>Rumex obtusifolius</i> Broadleaf dock	L. M. Gerry 529 11/14/2023 Asset: ARQ451 ARQ450 iNat: 191037006 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities. Deep taproots persist through maintenance cycles. One flowering specimen collected.
Portulacaceae		1 species
<i>Portulaca oleracea</i> Common purslane	L. M. Gerry 382/383 8/18/2022 Asset: APG761 APG921 Herbaria: HPSU	Introduced. Species occasional to common in streetside facilities. Two fruiting specimens collected.
Primulaceae		1 species
<i>Lysimachia arvensis</i> Scarlet pimpernel	L. M. Gerry 306a/306b 6/27/2022 Asset: ANK968 ANK969 Herbaria: HPSU	Introduced. Species common in streetside facilities. Two flowering specimens collected.
Ranunculaceae		5 species
<i>Clematis vitalba</i> Old man's beard	L. M. Gerry 409 9/9/2022 Asset: APY520 APY521 Herbaria: SNP	Introduced. Species uncommon in streetside facilities. One flowering specimen collected. Oregon Noxious Weed, List B.
<i>Ficaria verna</i> Lesser celandine	Michael Smith 1 3/22/2023 Asset: ANK614 ANK615 Herbaria: HPSU, SNP	Introduced. Species uncommon in streetside facilities. One flowering specimen collected. Oregon Noxious Weed, List B.
<i>Potentilla recta</i> Sulfur cinquefoil	L. M. Gerry 490 7/10/2023 Asset: AQM126 AQM127 iNat: 172621990 Herbaria: SNP	Introduced. Species known from only one streetside facility, where it is spreading from the neighboring lawn. One fruiting specimen collected. Oregon Noxious Weed, List B.

<i>Ranunculus acris</i> Tall buttercup	L. M. Gerry 536 12/5/2023 iNat: 193177693 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities. One flowering specimen collected.
<i>Ranunculus repens</i> Creeping buttercup	L. M. Gerry 299 6/17/2022 Collected near SW 25th Ct. and SE 190th Dr. iNat: 122235058 Herbaria: HPSU	Introduced. Species common in streetside facilities. One flowering specimen collected.
Rosaceae		3 species
<i>Crataegus monogyna</i> Common hawthorn	L. M. Gerry 469 5/15/2023 Asset: ANU082 ANU083 iNat: 161903345 Herbaria: SNP	Introduced. Species uncommon in streetside facilities. The specimen includes an immature sapling collected from within a facility. A flowering branch was taken from a nearby mature tree, likely the mother. Oregon Noxious Weed, List B.
<i>Geum urbanum</i> Wood avens	L. M. Gerry 510 8/28/2023 Asset: AQY195 AQY194 iNat: 180652348 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities. One fruiting specimen collected.
<i>Rubus armeniacus</i> Armenian blackberry	L. M. Gerry 486 7/5/2023 Asset: ANP042 ANP043 Herbaria: SNP	Introduced. Species occasional in streetside facilities. Specimen includes an immature cane collected from within a facility, with a flowering branch taken from a mature, overhanging plant. Oregon Noxious Weed, List B.
Rubiaceae		2 species
<i>Galium aparine</i> Cleavers	L. M. Gerry 288 6/8/2022 Asset: APA842 APA841 Herbaria: HPSU	Native. Species common in streetside facilities. One flowering specimen collected.
<i>Galium parisiense</i> Wall bedstraw	L. M. Gerry 345 7/25/2022 Asset: ARQ238 ARQ239 iNat: 127911244 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities. One flowering specimen collected.
Sapindaceae		1 species

<i>Acer platanoides</i> Norway maple	L. M. Gerry 521 10/16/2023 Collected near SE 139th Ave. and Gladstone St. iNat: 187824602	Introduced. Species uncommon in streetside facilities. Specimen includes an immature sapling growing within a facility, with a flowering branch taken from a neighboring individual, likely the mother tree.
Saxifragaceae		1 species
<i>Tellima grandiflora</i> Fringecups	L. M. Gerry 488 7/5/2023 Asset: APN688 APN687 Herbaria: HPSU	Native. Species known from only one streetside facility. One flowering specimen collected.
Scrophulariaceae		3 species
<i>Buddleja davidii</i> Butterfly bush	L. M. Gerry 398 8/30/2022 iNat: 133016328 Herbaria: SNP	Introduced. Species known from only one streetside facility. One flowering specimen collected. Oregon Noxious Weed, List B.
<i>Verbascum blattaria</i> Moth mullein	L. M. Gerry 401 8/31/2022 Asset: ARV830 ARV831 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities. One flowering specimen collected.
<i>Verbascum thapsus</i> Great mullein	L. M. Gerry 377 8/10/2022 Asset: ASA529 ASA530 iNat: 130314771 Herbaria: HPSU	Introduced. Species known from only one streetside facility. One flowering specimen collected.
Solanaceae		5 species
<i>Physalis philadelphica</i> Tomatillo	L. M. Gerry 406 8/31/2022 Asset: ARV830 ARV831 Herbaria: HPSU	Introduced. Species only known from one streetside facility, where it was likely seeded from the neighboring community garden. One flowering specimen collected.
<i>Solanum dulcamara</i> Bittersweet nightshade	L. M. Gerry 367 8/2/2022 Collected near NE 112th Ave. and NE Holman St. iNat: 129227893 Herbaria: HPSU	Introduced. Species occasional in streetside facilities, often vining around established sedges. One flowering specimen collected.
<i>Solanum lycopersicum</i> Tomato	L. M. Gerry 480 6/26/2023 Asset: ATL657 ATL633 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities. One flowering specimen collected.

<i>Solanum nigrum</i> European black nightshade	L. M. Gerry 386 8/2/2022 Collected near NE 103rd Ave. and NE Wygant St. Herbaria: HPSU - E. Goodwin 1 8/23/2022 Collected near 3142 SW 33rd St. Herbaria: HPSU	Introduced. Species common in streetside facilities. Two flowering specimens collected. Perhaps <i>Solanum americanum</i> is overlooked.
<i>Solanum rostratum</i> Buffalobur	E. Slebodnik 2a/2b 8/23/2023 Asset: AQL348 AQL349 Herbaria: SNP	Introduced. Species known from only one streetside facility. Two flowering specimens collected. Oregon Noxious Weed, List B.
Verbenaceae		1 species
<i>Verbena bonariensis</i> Tall verbena	L. M. Gerry 363a/363b 8/1/2022 Asset: ANN488 ANN489 iNat: 129075869 Herbaria: HPSU	Introduced. Species uncommon in streetside facilities. Two flowering specimens collected.
Violaceae		2 species
<i>Viola riviniana</i> European dog violet	L. M. Gerry 285 6/23/2022 Asset: ARQ262 ARQ263 Herbaria: HPSU	Introduced. Species occasional in streetside facilities. One flowering specimen collected.
<i>Viola odorata</i> Sweet violet	L. M. Gerry 535 12/5/2023 Asset: ANR166 ANR165 iNat: 193177537 Herbaria: HPSU	Introduced. Species occasional in streetside facilities. One flowering specimen collected.

NON-VASCULAR PLANTS

Name	Collection	Notes
Brachytheciaceae		2 species

<i>Homalothecium fulgescens</i> Tree mat homalothecium	L. M. Gerry 534 11/21/2023 Asset: APA851 APA850 iNat: 191690440 Herbaria: HPSU - L. M. Gerry 545 1/30/2024 Asset: APU684 APU683 iNat: 198344899 Herbaria: HPSU	Species commonly found growing on a variety of substrates within streetside facilities. Two fertile specimens collected. A small amount of <i>Scleropodium obtusifolium</i> was collected in association with specimen 534.
<i>Scleropodium cespitans</i> Tufted feather-moss	L. M. Gerry 543 1/23/2024 Asset: APU646 APU645 iNat: 197417085 Herbaria: HPSU	Species less common on rock within streetside facilities. One fertile specimen collected. Other species of <i>Scleropodium</i> are certainly overlooked (such as <i>S. obtusifolium</i> , see above).
Bryaceae		2 species
<i>Bryum argenteum</i> Silvery thread-moss	L. M. Gerry 418 9/23/2022 Collected near 18383 NE Riverside Pkwy. Herbaria: HPSU	Species found ubiquitously growing on concrete within streetside facilities. One fertile specimen collected.
<i>Ptychostomum compactum</i> Drooping thread-moss	L. M. Gerry 452 3/10/2023 Asset: ANW213 ANW214 iNat: 150999685 Herbaria: HPSU	Species commonly found growing within streetside facilities. One fertile specimen collected. <i>Ptychostomum capillare</i> is likely overlooked.
Funariaceae		1 species
<i>Funaria hygrometrica</i> Bonfire moss	L. M. Gerry 551 3/11/2024 Asset: ANL551 ANL550 iNat: 202069977 Herbaria: HPSU	Species occasional on soil within streetside facilities. One fertile specimen collected.
Grimmiaceae		1 species

<i>Grimmia pulvinata</i> Grey-cushioned grimmia	L. M. Gerry 552 3/11/2024 Asset: ANL551 ANL550 iNat: 202121834 Herbaria: HPSU - J. Manson 7 3/8/2024 Asset: ANT061 ANT062 Herbaria: HPSU	Species found ubiquitously growing on concrete within streetside facilities. Two fertile specimens collected.
Marchantiaceae		1 species
<i>Marchantia polymorpha</i> Common liverwort	L. M. Gerry 451 3/8/2023 Collected near NE 156th Ave. and NE Fremont St. Herbaria: HPSU	Species occasional on soil within streetside facilities. Not observed with sporophytes, but readily producing gemma cups. This is the sole liverwort represented by the collection, but perhaps <i>Lunularia cruciata</i> is overlooked.
Orthotrichaceae		2 species
<i>Orthotrichum consimile</i> Consimilar bristle-moss	L. M. Gerry 456 3/20/2023 Collected near SE 104th Ave. and SE Knight St. Herbaria: HPSU	Species found ubiquitously growing on trees and shrubs within stormwater facilities. One fertile specimen collected. <i>Orthotrichum lyellii</i> is probably overlooked.
<i>Orthotrichum speciosum</i> Showy bristle-moss	L. M. Gerry 450 3/6/2023 Asset: AQC834 AQC833 iNat: 150997936 Herbaria: HPSU	Species common within streetside facilities. One fertile specimen collected. A small amount of <i>Jaffueliobryum wrightii</i> was collected alongside the specimen.
Pottiaceae		4 species
<i>Desmatodon latifolius</i> Wideleaf desmatodon-moss	L. M. Gerry 449 3/6/2023 (var. <i>latifolius</i>) Asset: AQC834 AQC833 Herbaria: HPSU	Species found ubiquitously growing on concrete within streetside facilities. One fertile specimen collected.
<i>Didymodon vinealis</i> Soft-tufted beard moss	L. M. Gerry 553 3/11/2024 Asset: ANL551 ANL550 iNat: 202121834 Herbaria: HPSU	Species very common on concrete within streetside facilities. One fertile specimen collected.

<i>Syntrichia princeps</i> Brown screw-moss	L. M. Gerry 534 3/12/2024 Asset: ANN556 ANN555 iNat: 202228470 Herbaria: HPSU	Species very common on concrete within streetside facilities. One fertile specimen collected.
<i>Tortula muralis</i> Wall screw-moss	F. Shattuck 1 3/12/2024 Asset: AQT261 AQT260 iNat: 202446798 Herbaria: HPSU	Species found ubiquitously growing on concrete within streetside facilities. One fertile specimen collected.
Vaucheriaceae		
<i>Vaucheria</i> * Water felt	L. M. Gerry 246a/246b 4/25/2022 Collected near 4110 SW Eastwood Ave. Herbaria: HPSU	Species only known from a couple facilities that have been inundated for a long time. Green algae are likely underrepresented as a whole, and this specimen could not be identified to species. One blue-green alga of the genus <i>Nostoc</i> was collected in a similar area (<i>L. M. Gerry 396</i> , HPSU), but cyanobacteria are not covered by the scope of this publication.

RESULTS

Over the two-year collection period, 279 herbarium specimens were collected from public right-of-way stormwater facilities. Of the 279 total collections, 252 were taken from Portland and 27 were collected from Gresham. This is indicative only of the amount of time spent surveying in the municipality and not necessarily a representation of differing plant diversity.

Of these, 266 specimens qualified for inclusion within the confines of this study. This includes 248 vascular plants, 16 bryophytes, and 2 green algae. This represents 213 unique species within 53 plant families. Of qualifying collections, the top families represented include Asteraceae (36 species), Poaceae (31 species), Brassicaceae (13 species), Fabaceae (13 species), and Plantaginaceae (8 species). The genus with the largest representation is *Bromus* with 5 unique species. Only 14% of qualifying vascular species are considered to be native in the region.

OMISSIONS AND ANECDOTAL OBSERVATIONS

Installed plants and offspring thereof

Several specimens collected as part of this project are the offspring of plants that were purposely installed in facilities. It can be difficult to assess whether these species are reproducing through seed or by rhizomes, as many species on the planting list readily spread vegetatively.

Some perennial forbs, such as *Camassia quamash*, may quickly spread within a facility and make it impossible to distinguish between the original and subsequent generations. Similarly, there are robust populations of *Asclepias speciosa* in inner Southeast Portland originally seeded by BES. It has occasionally been observed growing in a location that suggests self-establishment, but this cannot be confirmed. These species have remained uncollected. Additionally, Goodwin has observed

Polypodium glycyrrhiza in undisturbed undercuts or crevices within swales, but licorice fern is mentioned in the 2004 SWMM and these are perhaps relics from older BES plantings. This species also remains uncollected.

The following table represents collections which include installed plants and the offspring thereof. Collections marked with an asterisk (*) were vegetatively attached to planted individuals, and would not qualify as a valid collection regardless.

Name	Collection	Notes
<i>Acer macrophyllum</i> Bigleaf maple	L. M. Gerry 467 5/8/2023 Asset: APZ308 APZ307 Herbaria: HPSU	Native. Species on BES stormwater facility planting list through 2004. Collection taken of independently rooted seedling. Reproductive branch taken from mature individual of cultivated origin within facility.
<i>Carex deweyana</i> Dewey's sedge	L. M. Gerry 431 10/21/2022 Asset: APN237 APN238 iNat: 139769862 Herbaria: HPSU	Native. Species was on the BES stormwater planting list prior to 2008 and is occasionally found extant in streetside facilities. Specimen independently rooted near cultivated individual within facility. Likely too small to be part of the original planting and judged to be spontaneous from seed. One flowering specimen collected.
<i>Carex obnupta</i> Slough sedge	L. M. Gerry 509 8/28/2023 Asset: AQY192 AQY190 iNat: 180640683 Herbaria: HPSU	Native. This species is the most common sedge planted in swales and has remained on the BES stormwater planting list since its inception. An immature specimen was found growing between the concrete facility and curb indicating growth from seed. Reproductive stem taken from mature individual of cultivated origin within facility.
<i>Carpinus caroliniana</i> * American hornbeam	L. M. Gerry 522 10/16/2023 Asset: APG413 APG414 iNat: 187834583 Herbaria: HPSU	Introduced. Species was on the 2008 Green Streets planting list. Specimen is a small, immature plant which was likely a root sprout from an adjacently planted individual. A fruiting branch taken from the parent tree is included with the collection.
<i>Gleditsia triacanthos</i> * Thornless honey locust	L. M. Gerry 502 8/10/2023 (f. <i>inermis</i>) Asset: ANN419 ANN420 Herbaria: HPSU	Introduced. Species was on the 2008 Green Streets planting list and was reintroduced for the 2016 and 2020 lists. Specimen is a small, immature plant which was likely a root sprout from an adjacently planted individual. A fruiting branch taken from the parent tree is included with the collection.

<p><i>Iris douglasiana</i> Douglas iris</p>	<p>L. M. Gerry 544 1/30/2024 Asset: APU658 APU659 iNat: 198344863 Herbaria: HPSU</p>	<p>Native. Species has been on the BES stormwater planting list since its inception. Seedling collected near installed individual within facility. A fruiting stem from the parent plant is included with the specimen.</p>
<p><i>Juncus effusus</i> Soft rush</p>	<p>L. M. Gerry 525 10/26/2023 Asset: ANV216 ANV215 Herbaria: HPSU</p>	<p>Native. Species was on the BES stormwater planting list prior to 2008 and is occasionally found extant in streetside facilities. Immature specimen growing between concrete of planter and curb indicating growth from seed. Reproductive stem taken from mature individual of cultivated origin within facility.</p> <p><i>Juncus effusus</i> subsp. <i>pacificus</i> is the native subspecies planted in natural areas and within Green Street facilities. <i>Juncus effusus</i> subsp. <i>effusus</i>, a nuisance plant, has likely been mistakenly installed.</p> <p><i>Juncus patens</i> is also certainly reproducing by seed in facilities as well, but this species remains uncollected.</p>
<p><i>Mahonia repens</i> Creeping Oregon grape</p>	<p>L. M. Gerry 520 10/16/2023 Asset: ANR789 ANR788 Herbaria: HPSU</p>	<p>Native. Species has been on BES Green Streets planting list since 2020. Very common in streetside facilities. Collection taken of independently rooted seedling. Reproductive branch taken from mature individual of cultivated origin within the facility. Other cultivated <i>Mahonia</i> species are likely to be reproducing within facilities, but this has not been directly observed.</p>
<p><i>Narcissus pseudonarcissus</i>* Daffodil</p>	<p>L. M. Gerry 458 3/21/2023 Asset: ANK555 ANK554 Herbaria: HPSU</p>	<p>Introduced. Species common depending on the neighborhood. Daffodils have been on the BES planting list since 2020. Specimen is a flowering individual that was initially judged to be seeded naturally, but probably arose from a planted bulb. Likely a hybrid cultivar.</p>
<p><i>Polystichum munitum</i>* Western sword fern</p>	<p>L. M. Gerry 501 8/9/2023 Asset: APX333 APX334 Herbaria: HPSU</p>	<p>Native. Species was on the BES stormwater planting list prior to 2014, but uncommon in streetside facilities. Plant from which the specimen was taken is possibly of cultivated origin. Fertile leaf collected.</p>

<i>Spiraea</i> × <i>sanssouciana</i> Sanssouci spirea	D. Maze 1108 8/7/2019 Collected near SE 58th Ave. and SE Madison St. Herbaria: HPSU	Hybrid between <i>Spiraea japonica</i> and <i>Spiraea douglasii</i> . Known from one facility, where it appeared to the collector to be a spontaneous hybrid. One flowering specimen collected. This collection record predates the study.
<i>Symphoricarpos</i> <i>albus</i> Common snowberry	L. M. Gerry 485 7/5/2023 Asset: ANP042 ANP043 Herbaria: HPSU	Native. Species was on BES stormwater facility planting list through 2004, but uncommon. Collection taken of independently rooted seedling. Reproductive branch taken from mature individual of cultivated origin within facility.
<i>Symphyotrichum</i> <i>chilense</i> Pacific aster	L. M. Gerry 411 9/9/2022 Asset: APY526 APY527 iNat: 134367812 Herbaria: HPSU	Native. Plants persisting and reproducing in two adjacent facilities. Species on the trial planting list (as <i>Aster chilensis</i>), and this population was intentionally planted by Portland BES in Fall 2012. Unsure if reproducing by seed. One flowering specimen collected.

PIONEERING SPECIES

There are several pioneering species observed to have occurred within right-of-way stormwater infrastructure but have no associated collections. Many of these species went uncollected due to the absence of reproductive features, which, due to the maintenance cycle of streetside facilities, will not develop in slow-to-mature plants.

As above, iNaturalist observation identification numbers of species photographed within facilities have been added where applicable.

Trees, shrubs, and vines

Tree saplings such as *Acer campestre* (iNat: 115163563) and *Acer negundo* (iNat: 110593560) have been observed in addition to other collected maple species. Saplings of *Populus trichocarpa* are not uncommon (iNat: 191730164). One *Umbellularia californica* sapling has been observed (iNat: 109938194). *Ailanthus altissima*, a species listed on the Portland Nuisance Plants List, is occasional in facilities. It has been observed to be pioneering in facilities through both seed germination and through rhizome sprouts from mature trees. *Ilex aquifolium*, another nuisance tree, is uncommon but observed (iNat: 197417205).

Squirrels play a major role in the dissemination of nut-bearing species, and oaks are not an uncommon sapling to find in swales. Goodwin has surmised that *Quercus rubra* is likely the most commonly pioneering oak found in facilities. Similarly, walnut saplings are relatively common in facilities. Smith has confirmed *Juglans nigra*, and it is likely that *Juglans regia* may have also been observed. One *Corylus* sapling has been noted but not identified to species.

Some woody shrubs and vines are included in this category. *Rubus ursinus* has been observed once, but no mature individuals were observed nearby to qualify for collection (iNat: 191730127). Ivy in the genus *Hedera* have been observed a few times, but never reproducing. It is likely that both *Hedera helix* and *H. hibernica* may both be found within facilities.

Forbs

A few common forb species have escaped collection. *Conium maculatum* has been observed several times, but rarely flowering. Howarth observed a qualifying population flowering near Glendoveer, but it was not collected. There is a known population of *Alliaria petiolata* in a facility at NE Siskiyou and 82nd. It was last observed by Kvaalen in July 2023, but uncollected. *Digitalis purpurea* has been observed once, but not reproducing (iNat: 193145629). *Arum italicum* has also been observed multiple times (iNat: 200779491).

Equisetum arvense has been seen multiple times, as deep rhizomes persist through maintenance cycles. However, fertile stems have not been observed or collected. *Trifolium subterraneum* has been collected once in Gresham, but the specimen was lost before accession. It has been observed several times since (iNat: 202228575). Some forbs have colonized facilities vegetatively but have not been known to sexually reproduce within them. For example, *Sedum* species have been observed in facilities immediately underneath overhanging plantings, and *Vinca minor* has been observed once. Potatoes of *Solanum tuberosum* have been observed as discarded waste within swales, and Shannon-Thorn observed one instance of tubers establishing (iNat: 190827156).

Graminoids

It is likely that graminoids are underrepresented in the collection data. Due to the difficulty of field identifying species of sedges and grass, there are undoubtedly specimens that have been passed over for collection. Bromley has noted *Scirpus cyperinus* from one streetside stormwater planter in Gresham, and Smith has observed *Phalaris arundinacea* flowering in one facility. In 2016, it was determined that most of the sedges advertised as *Carex tumulicola* in Portland were actually the invasive *Carex divulsa*. It is known that this species was installed in Green Street facilities and that it has escaped cultivation.

Bryophytes

Bryophytes are similarly underrepresented due to the difficulty of distinguishing related species in the field. In this regard, a separate study could be conducted on bryophyte ecology within these facilities. There are likely dozens of species overlooked. Not all bryophyte species have been observed to produce sporophytes in facilities which has limited the number collected. For example, *Homalothecium nuttallii* is a common species on concrete within facilities but has not been observed with sporophytes.

ACKNOWLEDGEMENTS

I wish to acknowledge my co-collectors and surveyors who helped with the completion of this project, including Edie Goodwin, Kyrie Howarth, Rebecca Kosugi, Lars Kvaalen, Jackie Manson, Jacob Savoie, Erin Savoy, Anthony Shannon-Thorn, Finn Shattuck, Michael Smith, Emily Slebodnik, and Toren Wood. Their contributions are noted. My appreciation extends to the rest of my colleagues at Sound Native Plants, including Jade Jones-Hawk, Stephen Langdon, Chad Stemm, Connor Stewart, and Savannah Thomas.

Information on green infrastructure was provided through correspondence with Jackson Hayden of the Portland Bureau of Environmental Services, Karen Bromley of the Gresham Department of Environmental Services, Shawn Anderson and Travis Hultin of Troutdale Public Works, and Miguel Sanchez of Fairview Public Works.

Identification of vascular plants was aided through correspondence with Dominic Maze of the Portland Bureau of Environmental Services, Angie Kimpo of the Portland Water Bureau, and various contributors on iNaturalist. Bryophytes were identified with the help of Morghan McCool at the University of Louisville. One algal specimen was identified through correspondence with Dr. Miriam Steinitz-Kannan at Northern Kentucky University.

LITERATURE CITED

- Aiona, A., Coker, A., Dunlap, I., Simpson, A., Stevens, H. December 2020. City of Portland Stormwater Management Manual. Portland, Oregon.
- Christy, J.A., A. Kimpo, V. Marttala, P.K. Gaddis & N.L. Christy. 2009. Urbanizing flora of Portland, Oregon, 1806-2008. Native Plant Society of Oregon Occasional Paper 3: 1–319.
- City of Gresham Department of Environmental Services, Water Resources Division. January 2023. Stormwater Management Manual: An Implementation Guide for Development Projects. Gresham, Oregon.
- City of Portland. “Street Tree Planting List FAQs.” <www.portland.gov/trees/street-tree-planting-lists/street-tree-planting-list-faqs>. Accessed November 8, 2023.
- City Parks Alliance. December 13, 2019. “Portland’s Green Street Program.” <www.cityparksalliance.org/resource/portland-green-street-program/>. Accessed 3 Feb. 2024.
- Fairview Public Works Department. November 2022. City of Fairview Storm Water Management Plan. Fairview, Oregon.
- Hitchcock, Charles Leo, et al. 2018. Flora of the Pacific Northwest: An Illustrated Manual. Edited by David Giblin et al., University of Washington Press.
- KATU ABC 2. September 12, 2022. “Portland’s Second Longest Dry Streak Comes to an End, Five Days Short of New Record”. <www.katu.com/news/local/portlands-second-longest-dry-streak-comes-to-an-end-five-days-short-of-new-record-airport-national-weather-servicemeteorology>. Accessed 21 Jan. 2024.
- Portland Bureau of Environmental Services. “About Green Streets.” Portland, Oregon. <www.portland.gov/bes/stormwater/about-green-streets>. Accessed January 21, 2024.
- Portland Bureau of Environmental Services. August 2008. Stormwater Management Manual, Revision 4. Portland, Oregon.
- Portland Bureau of Environmental Services. August 2016. City of Portland Stormwater Management Manual. Portland, Oregon.
- Portland Bureau of Environmental Services. January 2014. Portland Stormwater Management Manual. Portland, Oregon.
- Portland Bureau of Environmental Services. July 1999. Stormwater Management Manual, Manual 7. Portland, Oregon.
- Portland Bureau of Environmental Services. September 2004. Stormwater Management Manual, Revision 3. Portland, Oregon.
- Portland Bureau of Environmental Services and Portland Parks and Recreation. May 2016. “Check Before You Accept it!: *Carex tumulicola* vs. *Carex divulsa*.” Portland, Oregon.
- Portland Bureau of Environmental Services and Portland Parks and Recreation. November 2016. “Check Before You Accept it!: Native *Juncus effusus* vs. non-native subspecies.” Portland, Oregon.
- Oregon Department of Agriculture. “Oregon Noxious Weed Profiles.” <www.oregon.gov/ODA/programs/Weeds/OregonNoxiousWeeds/Pages/AboutOregonWeeds.aspx>. Accessed 3 Feb. 2024.
- Oregon Live. “Portland Temperatures, 1938-2024”. <www.projects.oregonlive.com/weather/temps/>. Accessed 21 Jan. 2024.
- Roché, C.T. et al. 2019. Field Guide to the Grasses of Oregon and Washington. Oregon State Univ. Press, Corvallis.

Appendix A. Trial Plants in Green Streets, 2008–2012, 2022

<i>Abelia grandiflora</i> 'Rose Creek'	<i>Euonymus japonicus</i> 'Microphyllus'
<i>Acanthus spinosus</i>	<i>Festuca idahoensis</i>
<i>Acer griseum</i>	<i>Festuca roemerii</i>
<i>Acorus americanus</i>	<i>Geranium oreganum</i>
<i>Acorus gramineus</i>	<i>Ginkgo biloba</i> 'Halka'
<i>Adiantum pedatum</i>	<i>Ginkgo biloba</i> 'Saratoga'
<i>Aquilegia formosa</i>	<i>Helianthemum nummularium</i>
<i>Arctostaphylos edmundsii</i>	<i>Helictotrichon sempervirens</i>
'Big Sur'	<i>Heuchera cylindrica</i>
<i>Arctostaphylos hookeri</i> 'James Roof'	<i>Heuchera micrantha</i>
<i>Arctostaphylos nummerlaria</i> 'Select Form'	<i>Iberis sempervirens</i>
<i>Arctostaphylos</i> × 'Rosy Dawn'	<i>Iris douglasiana</i>
<i>Arctostaphylos</i> × <i>media</i> 'Martha Ewan'	<i>Juncus effusus</i> var. <i>pacificus</i>
<i>Arctostaphylos</i> × <i>media</i> 'Xera Pacific'	<i>Juncus patens</i> 'Carmen's Gray'
<i>Aster chilensis</i>	<i>Juncus patens</i> 'Elk Blue'
<i>Aster novae-angliae</i> 'Purple Dome'	<i>Juncus spiralis</i>
<i>Baccharis pilularis</i>	<i>Juncus tenuis</i>
<i>Blechnum spicant</i>	<i>Kalmia microphylla</i>
<i>Calocedrus decurrens</i>	<i>Kniphofia</i> 'Bressingham Comet'
<i>Carex buchananii</i>	<i>Koeleria macrantha</i>
<i>Carex buchananii</i> 'Red Rooster'	<i>Lavandula angustifolia</i> 'Hidcote Blue'
<i>Carex dolichostachya</i> 'Gold Fountains'	<i>Lavandula angustifolia</i> 'Munstead'
<i>Carex elata</i> 'Bowles Golden'	<i>Liriope muscari</i> 'Big Blue'
<i>Carex glauca</i>	<i>Lonicera nitida</i>
<i>Carex morrowii</i> 'Ice Dance'	<i>Lonicera nitida</i> 'Red Tips'
<i>Carex muskingumensis</i> 'Oehme'	<i>Mahonia aquifolium</i> 'Compacta'
<i>Carex oshimensis</i> 'Evergold'	<i>Malus fusca</i>
<i>Carex pachystachya</i>	<i>Mimulus guttatus</i>
<i>Carex stipata</i>	<i>Oxydendron arboreum</i>
<i>Carex testacea</i>	<i>Paxistima myrsinites</i>
<i>Carex tumulicola</i>	<i>Pinus ponderosa</i> var. <i>benthamiana</i>
<i>Caryopteris</i> × <i>clandonensis</i>	<i>Pistacia chinensis</i>
<i>Ceanothus gloriosus</i>	<i>Potentilla fruticosa</i>
<i>Ceanothus thyrsiflorus</i> var. <i>repens</i>	<i>Prunella laciniata</i>
<i>Cistus</i> 'Doris Hibberson'	<i>Prunella vulgaris</i>
<i>Cistus</i> 'Grayswood Pink'	<i>Quercus imbricaria</i>
<i>Cistus</i> 'Little Gem'	<i>Quercus macrocarpa</i>
<i>Cistus</i> 'Sunset'	<i>Quercus phellos</i>
<i>Coreopsis verticillata</i> 'Zagreb'	<i>Rhaphiolepis umbellata</i> 'Blueberry Muffin'
<i>Cornus mas</i>	<i>Rhaphiolepis umbellata</i> 'Emerald Waves'
<i>Danthonia californica</i>	<i>Rhaphiolepis umbellata</i> var. <i>minor</i>
<i>Delphinium trolliifolium</i>	<i>Rhaphiolepis indica</i>
<i>Deschampsia cespitosa</i> 'Northern Lights'	<i>Rhaphiolepis umbellata</i>
<i>Dryopteris erythrosora</i>	<i>Rosa gymnocarpa</i>
<i>Echinacea purpurea</i>	<i>Rudbeckia occidentalis</i>
<i>Eleocharis palustris</i>	<i>Sarcococca hookeriana</i> var. <i>humilis</i>
<i>Erigeron glaucus</i>	<i>Sedum oreganum</i>
<i>Eriophyllum lanatum</i>	<i>Sisyrinchium bellum</i>
<i>Escallonia</i> 'Red Elf'	<i>Sisyrinchium californicum</i>

<i>Spiraea betulifolia</i>	<i>Taxodium distichum</i>
<i>Spiraea densiflora</i>	<i>Thymus serpyllum</i>
<i>Spiraea japonica</i> 'Alpina'	<i>Viburnum davidii</i>
<i>Spiraea japonica</i> 'Nana'	<i>Viburnum opulus</i> 'Nanum'
<i>Styrax japonica</i>	<i>Viola sempervirens</i>
<i>Symphoricarpos mollis</i>	<i>Zauschneria californica</i>

Appendix B. Species Listed in the 2004 SWMM Recommended plants for Contained Planter Boxes, Infiltration Planter Boxes, Flow-Through Planter Boxes, Vegetated Swales, and Vegetated Filter Strips

<i>Abies grandis</i>	<i>Iris douglasiana</i>	<i>Sambucus racemosa</i>
<i>Acer circinatum</i>	<i>Iris tenax</i>	<i>Scirpus acutus</i>
<i>Acer macrophyllum</i>	<i>Juncus effusus</i> var. <i>gracilis</i>	<i>Scirpus microcarpus</i>
<i>Alnus rubra</i>	<i>Juncus effusus</i> var. <i>pacificus</i>	<i>Sedum oreganum</i>
<i>Amelanchier alnifolia</i>	<i>Juncus ensifolius</i>	<i>Sisyrinchium angustifolium</i>
<i>Arbutus menziesii</i>	<i>Juncus oxymeres</i>	<i>Sisyrinchium bellum</i>
<i>Arctostaphylos uva-ursi</i>	<i>Juncus patens</i>	<i>Sisyrinchium douglasii</i>
<i>Aster subspicatus</i>	<i>Juncus tenuis</i>	<i>Sisyrinchium idahoense</i>
<i>Athyrium felix-femina</i>	<i>Lupinus micranthus</i>	<i>Spiraea betulifolia</i>
<i>Beckmannia syzigachne</i>	<i>Mahonia aquifolium</i>	<i>Spiraea douglasii</i>
<i>Blechnum spicant</i>	<i>Mahonia nervosa</i>	<i>Symphoricarpos albus</i>
<i>Bromus carinatus</i>	<i>Malus fusca</i>	<i>Thuja plicata</i>
<i>Bromus sitchensis</i>	<i>Oemleria cerasiformis</i>	<i>Tsuga heterophylla</i>
<i>Bromus vulgaris</i>	<i>Philadelphus lewisii</i>	<i>Viburnum edule</i>
<i>Camassia quamash</i>	<i>Physocarpus capitatus</i>	
<i>Carex aperta</i>	<i>Pinus monticola</i>	
<i>Carex deweyana</i>	<i>Pinus ponderosa</i>	
<i>Carex obnupta</i>	<i>Polypodium glycyrrhiza</i>	
<i>Carex stipata</i>	<i>Polystichum munitum</i>	
<i>Ceanothus sanguineus</i>	<i>Populus balsamifera</i>	
<i>Ceanothus velutinus</i>	<i>Prunus emarginata</i>	
<i>Cornus nuttallii</i>	<i>Prunus virginiana</i>	
<i>Cornus sericea</i>	<i>Pseudotsuga menziesii</i>	
<i>Corylus cornuta</i>	<i>Pteridium aquilinum</i>	
<i>Crataegus douglasii</i>	<i>Quercus chrysolepis</i>	
<i>Crataegus suksdorfii</i>	<i>Quercus garryana</i>	
<i>Deschampsia cespitosa</i>	<i>Rhamnus purshiana</i>	
<i>Eleocharis acicularis</i>	<i>Ribes sanguineum</i>	
<i>Eleocharis ovata</i>	<i>Rosa gymnocarpa</i>	
<i>Eleocharis palustris</i>	<i>Rosa nutkana</i>	
<i>Elymus glaucus</i>	<i>Rosa pisocarpa</i>	
<i>Festuca occidentalis</i>	<i>Rubus parviflorus</i>	
<i>Festuca rubra</i> var. <i>commutata</i>	<i>Salix fluviatilis</i>	
<i>Fragaria vesca</i>	<i>Salix hookeriana</i>	
<i>Fragaria virginiana</i>	<i>Salix lasiandra</i>	
<i>Fraxinus latifolia</i>	<i>Salix lucida</i>	
<i>Gaultheria shallon</i>	<i>Salix scouleriana</i>	
<i>Glycera occidentalis</i>	<i>Salix sessilifolia</i>	
<i>Holodiscus discolor</i>	<i>Salix sitchensis</i>	
<i>Hordeum brachyantherum</i>	<i>Sambucus cerulea</i>	