

OPEN SPACE CONSERVANCY TRUST Item (3) October 17, 2024 STAFF REPORT

Regular Business

AGENDA ITEM INFORMATION TITLE: Annual Herbicide Application Report 2024 Discussion Only □ Action Needed: RECOMMENDED Receive report. □ Motion ACTION: □ Ordinance □ Resolution STAFF: Lizzy Stone, Natural Resources Program Manager **COUNCIL LIAISON:** Jake Jacobson 1. 2023 Herbicide Application Map **EXHIBITS:** 2. 2024 Monitoring and Herbicide Treatment Map

SUMMARY

In May 2010, the Open Space Conservancy Trust adopted the Herbicide Use Protocol which prescribes the situations in which herbicide may be used on Trust properties. The protocol is updated periodically to reflect changes to best practices, which are driven by research on treatment effectiveness, environmental impact, and other factors. The protocol requires City staff to report to the Trust annually on the recent use and planned uses of herbicides for the year.

2023 REPORT

In 2023, Mercer Island Natural Resources and King County Noxious Weed Program staff conducted monitoring for yellow archangel (Lamiastrum galeobdolon), knotweed (Polygonum spp.), yellow flag iris (Iris pseudacorus), spotted jewelweed (Impatiens capensis), and shiny geranium (Geranium lucidum).in Pioneer Park or Engstrom Open Space. Yellow archangel populations were found in the Northwest quadrant and the Southeast quadrant. Yellow archangel was treated in the spring with a formulation of 1.5% triclopyr, 2.5% glyphosate, and 2% adjuvant. Exhibit 1 shows points where yellow archangel was found and treated in 2023.

Professional contractors conducted the first year of Comprehensive Weed Removal in 2.9 acres of Pioneer Park SE, 4.0 acres of Pioneer Park NE, and 1.7 acres of Engstrom Open Space. This first pass of weed removal was completed with only manual removal methods, not requiring the use of any herbicide.

2024 PLAN

In spring and summer of 2024, the Natural Resources team again monitored noxious weed populations in Pioneer Park and Engstrom Open Space. The crew surveyed for yellow archangel, knotweed, yellow flag iris, spotted jewelweed, and shiny geranium. Yellow archangel was the only of those species found on Trust property.

Yellow archangel was first identified and treated in Pioneer Park in 2010. This initial treatment was largely successful and eradicated approximately 90-95% of the infestation. Regular monitoring of the area has

resulted in subsequent treatments to manage remaining infestations. In 2024, lingering patches of yellow archangel were identified along the north edge of the NW quadrant, as well as in the south edge of the SE quadrant. Both populations were treated in the spring and the fall with a formulation of 1.5% triclopyr, 2.5% glyphosate, and 2% adjuvant. All products used were aquatic-approved formulations. Adjacent neighbors were contacted and resources were shared about the weed, with the goal of developing a collaborative approach to eliminating the populations.

While conducting Comprehensive Weed Removal and Invasive Removal Maintenance on over 23 acres of Trust property, contractors removed or treated any invasive trees that were found throughout these sites. Where invasive trees were found, seedlings were manually removed, smaller trees were cut and the cut stem was painted with triclopyr, and larger trees were injected using an EZ-Ject lance Copperhead shells containing the herbicide imazapyr. Trees that were included in these treatments are: English holly (*Ilex aquifolium*), English laurel (*Prunus laurocerasus*), English hawthorn (*Crataegus monogyna*), and Portugal laurel (*Prunus lusitanica*).

Additionally, contractors removed all herbaceous weeds from areas receiving Comprehensive Weed Removal and Invasive Removal Maintenance work. The vast majority of this work was manual removal of English ivy and non-native blackberry. In select patches of non-native blackberry where the roots could not be manually removed without disturbing an adjacent native plant, contractors painted cut stems with the herbicide triclopyr. This was needed in situations where blackberry is growing through, or directly next to, a native plant. A cut-paint herbicide application involves cutting stems to approximately 6-inches tall and immediately applying herbicide to the cut stem using a paint brush or dropper. This approach allows for targeted control of a species, without risking off-target spray to nearby desirable species.

Exhibit 2 shows points where yellow archangel was found and treated, as well as contractor zones where surveys found at least some invasive trees or non-native blackberry populations that required herbicide treatment. This map does not represent a full survey of all non-native trees and blackberry on Trust property.

RECOMMENDED ACTION

Receive report.