

OPEN SPACE CONSERVANCY TRUST Item 2 October 20, 2022 STAFF REPORT Regular Business

AGENDA ITEM INFORMATION

TITLE:	Annual Herbicide Application Report	□ Discussion Only
		\square Action Needed:
RECOMMENDED	Receive report.	☐ Motion
ACTION:		☐ Ordinance
		☐ Resolution
STAFF:	Lizzy Stone, Natural Resources Project Manager	
COUNCIL LIAISON:	Lisa Anderl	
EVIUDITO	1. 2021 Herbicide Application Map	
EXHIBITS:	2. 2022 Monitoring and Planned 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.

2021 REPORT

In 2021, Mercer Island Natural Resources and King County Noxious Weed Program staff conducted monitoring for knotweed, yellow flag iris, spotted jewelweed, yellow archangel, and shiny geranium in Pioneer Park or Engstrom Open Space. Only yellow archangel and shiny geranium populations were found. All yellow archangel patches were removed manually.

King County Noxious Weed Program staff located shiny geranium (*Geranium lucidum*) populations on the north edge of the SE quadrant. Two small infestations were treated with a formulation of 1% triclopyr and 0.1% Gallery. Additional monitoring showed the treatment successfully controlled the majority of the plants.

Professional contractors conducted invasive tree treatment along the northern edge of Pioneer Park NE. Trees included in these treatments are: English holly (*Ilex aquifolium*), English laurel (*Prunus laurocerasus*), bird cherry (*Prunus avium*), European mountain ash (*Sorbus aucuparia*), English hawthorn (*Crataegus monogyna*), cherry plum (*Prunus cerasifera*), and Portugal laurel (*Prunus lusitanica*). Invasive tree treatment was performed using the EZ-Ject lance, with Copperhead shells containing the herbicide imazapyr, which were inserted into the trunks of invasive trees. Smaller trees were cut and painted with glyphosate.

2022 PLAN

Throughout the spring and summer of 2022, the Mercer Island Natural Resources crew monitored noxious weed populations in Pioneer Park and Engstrom Open Space. The crew surveyed for yellow archangel (Lamiastrum galeobdolon), knotweed (Polygonum spp.), yellow flag iris (Iris pseudacorus), spotted jewelweed (Impatiens capensis), and shiny geranium (Geranium lucidum). Yellow archangel and yellow flag iris populations were found on Trust property. A few shiny geranium plants were found and removed manually. No knotweed or jewelweed was found.

Yellow archangel was first identified and treated in Pioneer Park in 2010. This initial treatment was very successful and eradicated approximately 90-95% of the infestation. Regular monitoring of the area has resulted in subsequent treatments to manage remaining infestations. In 2022, patches of yellow archangel were identified along the north edge of the NW quadrant and one small patch was identified in the SE quadrant. The patch in the SE quadrant was small enough to be dug up by hand, while the larger patches in the NW quadrant were treated with the following formulation: 2.5% percent glyphosate and 2% AgriDex adjuvant. This aquatic-approved formulation reduces harm to amphibians. All adjacent neighbors were notified of the treatment and informed about yellow archangel identification and management.

The patch of knotweed that has been monitored in the SE quadrant since 2013 was again surveyed in 2022. No stems of knotweed were found. Similarly, spotted jewelweed populations that had been previously identified in the SE quadrant were monitored and no plants were found.

RECOMMENDED ACTION

Receive report.