Pesticide Use Justification Form – South Fork Preserve August 29, 2022

Applicant Information:

Chris Gardner, Open Space Land Manager

Community Development and Sustainability

530-681-8789, cgardner@cityofdavis.org

Pesticide:

Proposed Dates of Use: As conditions and time permit between 9/01 through 10/31, 2022.

Products (with active ingredients): Vastlan (Triclopyr choline: 2-[(3,5,6-trichloro-

2-pyridinyl)oxyacetic acid, choline salt); Round Up Custom (Isopropylamine salt of glyphosate)

EPA Reg #: 62719-687, 524-343

Pesticide Type: Herbicide

City Use Type: Vastlan - Tier II Limited-Use, more restrictive, Round Up Custom - Tier 1, most restricted, may not be used in areas with high public use –

Use Location:

Street Address/Site Name: South Fork Preserve

Detailed Location of Application Site: Around the newly constructed overlook feature

Posting and Notification: Site notifications will be posted at least 48 hours before application via the pesticide application electronic notification system and at site entrances, remaining 24 hours after.

Justification:

Target Pests: Himalaya Blackberry (*Rubus armeniacus*)

Justification for Use: This is the second year of a multi-year project to control blackberry along the banks of the South Fork Preserve. The project is in coordination with the Yolo County Resource Conservation District and will be part of the Preserve management program for the next two years. This timeline will allow us to protect critical habitat and infrastructure through weed removal and native revegetation. The herbicides proposed allow for immediate re-planting, where appropriate. The

application is justified due to size of infestation and proximity to new infrastructure. The Open Space program completed a grant funded trail construction project and the target stand of blackberry threatens the integrity and usability of the features over time. The current infestation is largely a result of changing conditions from the construction. The blackberry is spreading due to low flows in Putah Creek, as well as disturbance from the construction project. The conditions present an opportunity to access and control the stand to prevent conflicts in the future and help re-establish native plants in the area.

Himalayan blackberry is highly invasive species that can completely transform landscapes and consume structures if left unchecked. The species grows larger and denser than native blackberries, out-competing all native species. They can also grow up and through structures, making them inaccessible to users with thick, spiked canes.

This target species is a perennial vine. It grows from seed, from root rhizomes and by broken vegetative materials. These strategies make the species hard to control. Mechanical control or pruning can actually spread the infestation unless all biomass is completely removed from site and this is nearly impossible to ensure. New vines will grow from large roots underground and cannot be dug out from a delicate creek bank near concrete footings.

To achieve control we will use targeted application of approved herbicides via backpack sprayers. We must spray exposed vegetation to ensure maximum uptake of the herbicides. The timing of the application late in the growing season will help ensure the plant translocates the chemicals to its significant root structure. Professional applicators from the RCD will take care to avoid overspray on existing native species.

All work will be done in coordination with the City's Wildlife Biologist to ensure no impacts to avian or other species.

Species info and control methods taken from multiple sources, mainly from - https://kingcounty.gov/services/environment/animals-and-plants/noxious-weeds/weed-identification/blackberry.aspx

Explanation of IPM Methods Used: This proposed application is part of our overall integrated pest management of the site. As mentioned before, the current weed infestation is largely the result of changing conditions from new construction. Going forward, we intend to combine highly targeted herbicide application with the establishment of desirable native species.

Strategies to Prevent Future Applications: This will be a multi-year effort to remove the majority of invasive blackberry in the area. Open Space staff will follow up control and removal of blackberry with the seeding and planting of native trees, shrubs, forbs and grasses. We have established volunteers who work on the site and can include professional partners to help complete these tasks.

Additional comments: I have 14 years of experience controlling weeds in natural areas and was hired by the City to provide this expertise to our Open Space site management. I believe the proposed application is appropriate and will increase the habitat value of the site

ERD Approval: Richard Tsai Date: 8/31/22

City Manager Approval:  Date: 8/31/22